IRJSS
International Research Journal of Social Sciences

Patron : Prof. J.A.K. TAREEN
Vice-Chancellor
Pondicherry University

Editor-in-Chief : Prof. T. SUBRAMANYAM NAIDU

EDITORIAL COMMITTEE
D. Sambandhan
K. Rajan
G. Ramathirtham
A. Chellaperumal

EDITORIAL ADVISORY BOARD
Lucinda Beach (USA) Hilde K. Link (Germany)
Robin Oakley (Canada) Ulrike Niklas (Germany)
M.M. Kapoor (India) F.A. Musthafa (Egypt)
B.M. Sharma (India) Pradip Prabhu (India)
C.G. Hussain Khan (India) B.B. Mohanty (India)
M.S.N. Reddy (India) M. Ramachandran (India)
K. Srinivas (India) K. Chandrasekhar Rao (India)
M. Sethuraman (India) Fatma Vasant (India)

IRJSS: International Research Journal of Social Sciences is a bi-annual Journal of School of Social Sciences of the Pondicherry University. The editorial committee would consider for publication any article dealing with significant themes in social sciences based on original research. Contributors are requested to send their text of the articles for publication. Books and journals for reviews as well as other editorial correspondences to Prof. T. Subramanyam Naidu, Editor-in-Chief, International Research Journal of Social Sciences, Society of Social Sciences Puducherry, Pondicherry University, Puducherry, India. Tel: 0091-413-2654373. E-mail: pussjournal@yahoo.co.in / pussjournal@gmail.com. The text of the article may be computerized in Microsoft Word format following the style sheet provided in this Volume of the journal and sent to the Editor. This can also be done through E-mail. However, it is requested that a printout with soft copy may be sent through post.
<table>
<thead>
<tr>
<th>S.No.</th>
<th>Articles</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Identity, Responsibility, Camouflage German Companies in India</strong></td>
<td>1-7</td>
</tr>
<tr>
<td></td>
<td>– <strong>Hilde K. Link</strong></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td><strong>Panchayati Raj Institution and 73rd Constitutional Amendment: The case of Gujarat</strong></td>
<td>9-27</td>
</tr>
<tr>
<td></td>
<td>– <strong>Archana Shukla</strong></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td><strong>Disparities in Maternal and Child Health in India: Present Scenario and Future Options</strong></td>
<td>29-45</td>
</tr>
<tr>
<td></td>
<td>– <strong>K. Gangadharan</strong></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td><strong>Socio-demographic and Clinical correlates of Teenage Pregnancy: A State wide Analysis from India</strong></td>
<td>47-56</td>
</tr>
<tr>
<td></td>
<td>– <strong>Mukul Kumar Saxena</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>– <strong>Vibha Pandey</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>– <strong>Sahoo Saddichha and</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>– <strong>Mithilesh Methuku</strong></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td><strong>Sociological Analysis of the problems of the Oldest Old (A Study Conducted in Kerala)</strong></td>
<td>57-79</td>
</tr>
<tr>
<td></td>
<td>– <strong>R.S. Sandhya</strong></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td><strong>Gender and its manifestations in Rural Areas: A case study of Villianur Locale</strong></td>
<td>81-89</td>
</tr>
<tr>
<td></td>
<td>– <strong>N. Chandra</strong></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td><strong>Human Behaviour towards price and Quality (With A Special reference to buyer behaviour on consumer durable, semi-durable and non-durable products in Puducherry Region)</strong></td>
<td>91-110</td>
</tr>
<tr>
<td></td>
<td>– <strong>P. Ashok Kumar and</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>– <strong>P.S. Velmurugan</strong></td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Articles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>8.</td>
<td>Nutrition and Somatotype of Sports School Boys</td>
<td>111-121</td>
</tr>
<tr>
<td></td>
<td>– D. Sakthignanavel and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– H. Ravikumar</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>The Impact of deprivation on Adjustment among adolescent students</td>
<td>123-132</td>
</tr>
<tr>
<td></td>
<td>– Baburao H. Muddankar</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– R. Venkat Reddy and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– V. Rama Krishna</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– G. Sathis Kumar and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– S. Ramaswamy</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>India in the New Millennium : A Public Health Scenario Cardiovascular</td>
<td>143-153</td>
</tr>
<tr>
<td></td>
<td>diseases: Falout of Urbanization and Modernization of the Society</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– G. Rajesh Babu and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– T. Subramanyam Naidu</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>The Green - Eyed Monster: Understanding the meaning of Jealousy in</td>
<td>155-172</td>
</tr>
<tr>
<td></td>
<td>Romantic Relationship</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– Anindita Chowdhury</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– Shraddha Srivastava</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– Amarnath Tripathi and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– A.R. Prasad</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Articles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td>– V.M. Sarode</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Building Socio-Economic and Political Empowerment through Self Help Groups</td>
<td>201-218</td>
</tr>
<tr>
<td></td>
<td>– Mohan AK and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– Laxmi</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Maternal and Child Health of the Urban Poor in India - Implications for Achieving the MDGS</td>
<td>219-234</td>
</tr>
<tr>
<td></td>
<td>– Siddharath Agarwal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– Aradhana Srivastava and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>– Monish Vaid</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>A Study of Tântric Sculptures of Sri Mûlanâthar Temple, Bâhûr, Pondicherry</td>
<td>235-251</td>
</tr>
<tr>
<td></td>
<td>– R. Ezhilraman</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Displacement and it’s Socio-cultural implications on Health</td>
<td>253-267</td>
</tr>
<tr>
<td></td>
<td>– Somenath Bhattacharjee</td>
<td></td>
</tr>
</tbody>
</table>
IDENTITY, RESPONSIBILITY, CAMOUFLAGE
GERMAN COMPANIES IN INDIA

* Hilde K. Link

Abstract

German companies discover India as a profitable location. But a company as such does not exist. It is always man and his social and cultural environment which is responsible for loss and gain. So the managers of German companies in India have to face habits and traditions of their Indian staff based on different value systems, and vice versa. A German company expects all its members, also the Indian ones, to identify with value systems which are part of a German culture. The individual culture of an employee is expected to be congruent with the company’s culture to maximize gain.

One of the most important values for companies in Germany as well as in India is responsibility. Without responsibility there is no company. It is responsibility which is strongly connected with identity.

I state that managers in India as well as in Germany use one and the same word (responsibility) as a form with different contents.

In India many individuals are not willing - better: are not able to find a congruent pattern with the foreign company’s culture. One of the solutions for Indians working in a German company in India is camouflage: adaption to the foreign cultural system and at the same time hiding the own one and acting in it. A wide field of intercultural conflicts opens which I demonstrate with the example responsibility.

Responsibility and Power

Each and every society deals with power and hierarchy which automatically includes responsibility for individuals or groups. It depends on the society’s culture in which way power and hierarchy are dealt with or what are the basics of responsibility.

Western countries are achievement-oriented societies. How you do the job that counts. If you combine competitiveness, efficiency and productivity with responsibility your performance will be a successful one and your personal and your company’s capacity will improve.
In globalized India nowadays there are the same laws as everywhere on the world. Caste system was yesterday, old hierarchical structures, if any, a matter of remote villages in the middle of nowhere. Individual responsibility can be handed over to a person who has required university degrees, diplomas or other suitable qualifications.

Those above mentioned patterns, both, are seen from the western point of view.

However, is this above mentioned statement concerning India, part of reality? Is it not an assumption which is not questioned anymore because it is taken for granted? In India responsibility and the way how it is dealt with still nowadays depends on the family background. Family is an own hierarchical system with special powers and this system is not necessarily independent from the system ‘company’. So the above mentioned statement for India has to be seen from an emic point of view - from the view of Indian culture.

Socialization, Identification, Company Culture

A German manager is socialized in German culture. The company culture is part of his own culture. An Indian is socialized in Indian culture. The company culture is not part of his own culture.

Both, the German and the Indian, are living in India. So the German lives in a foreign culture the Indian lives in his own culture. Both of them live in a German enclave culture as the company is situated in an Indian environment. So the German has to face Indian culture even if he builds up a parallel culture with other expatriates.

From his Indian employees the German manager expects more than to face German culture inside the company’s compound walls. He expects identification with the company and its value systems so that automatically the company’s success turns into an individual success as this is the case for the German manager himself. He assumes that the Indian employee will be happy about the progress, as he should keep in mind that it was him, the employee, who’s work leaded to success as being part of the company.

So the individual culture of an employee is expected to be congruent with the company’s culture, its value systems, and finally, its success. With ‘individual culture’ I mean the individual’s context of socialization and its value systems in which someone has been brought up.

In other cultural contexts like Japan, for example, each employee due to his social socialization automatically will undergo an identification process with the company he works with. His entire life is subordinated to his job or better:
his life is his job. This is why, among others, in Japan we find the phenomenon of ‘one minute fathers’ which means that a father is able to spend one minute a day for his child and his family only.

This kind of phenomenon, in my opinion, will never occur in India. For an Indian, individual culture and company culture are two different things and they remain two different things.

Let me give an example for what means German company culture. A company culture consists of a value system, of moral concepts, such as responsibility, sustainability, flexibility, reliability, loyalty, solidarity.

Why there is a gap between an Indian and a German working in one and the same company in India?

I stated that individual culture and company culture for Germans are one and the same, but for Indians the company culture and the individual culture are different.

Of course the above mentioned concepts are followed by Indians as well. But are they followed in the same way as Germans do? Are they really filled with the same contents?

**Responsibility and Conflict Situations**

An Indian has clear indicators which signalize power of a person and which show him the hierarchical position. Those signals might be different from the real position of the person.

In a company in Germany there is no discussion about who is the boss because everybody knows and everybody accepts this fact. A boss has power and he is at top of the company’s hierarchy. In a German company in India, however, a boss is not automatically accepted as boss because he is member of the leading management and because he has a certain power over the workers. Because the German manager takes it for granted that his power is accepted by everybody he goes to the workers and speaks with them in a familiar tone making some nice jokes. He is dressed in an informal way with shirt and trousers, he even might take the screwdriver and do some small work which normally is the duty of the worker. Like that the hierarchy disappears for some few moments and the boss demonstrates solidarity and loyalty with any member of the company and in doing so he expects anybody to learn that company is a family where everybody can identify with.

This is how the boss acts from his German point of view. The Indian worker, however, might be confused because the indicators for power are not demonstrated: The boss is not dressed properly and he is doing my work. He is
speaking with me as if he were one of us but this is not true. It is not necessary for me to give him any respect. The consequence will be that if the worker needs leave for any family function, for example, he will take leave without asking. Or if he asks and the boss says no he will ignore. This is a typical conflict situation in German companies in India when power is not demonstrated.

So the Indian worker always remains part of his own culture and he interprets whatever is going on in the company from his own point of view. Of course, everybody in the company knows who is the company’s boss, who is on top of the hierarchy. But for an Indian this does not automatically mean that the same man has the power to interfere, for example, in his own family life. If the worker’s presence is required in the family he will be with his family. If the boss agrees or not. And if the worker gets any sanctions afterwards he will better quit his job than to disappoint his family. An Indian family is huge and usually consists of several hundred members. There is always a reason to overtake duties in the family: funerals, marriages, illness of a child. It is the family with which an Indian identifies even if he is from one of the modern middle class families. His responsibility is with the family above all.

This is why, for example, an Indian Bollywood film manager takes the whole actor group to Switzerland. The travel expenses are cheaper compared with many days where the main actors are attending their family functions.

The German manager assumes that the worker undergoes an identification process with the company. But this does not work out.

An Indian follows his own hierarchical system which the worker transfers into the foreign company. And there is no way to avoid this, not even good salary.

In South India, for example, many companies are situated in the South of Chennai. Workers, secretaries, watchmen, almost everybody comes from the villages nearby. And people from the villages have their own priorities. One might be astonished that a worker in a company who earns good money and who from this money supports many family members - that this man or this lady risks losing his job for a family function where his presence is necessary for several days. He will go if he gets leave or not. And if he loses his job there will be another family member to support him as he did before. It is his responsibility if the soul of the dead grandmother will have a good karma or not, for example, because it is his duty to perform the rituals. His identity is being an Indian firmly embedded in his Indian social hierarchical system of power and responsibility. You can take company members to Thailand or anywhere else on the world for training - No brainwashing will be successful. How to get out of this dilemma?
Camouflage and German Companies

Nobody should think that since 1947 there is no caste system in India. Nobody should think that money, globalization, modernity or education are able to cancel India’s hierarchical social systems. And on top of that nowadays we clearly can observe a revival of Indian traditions based on religious and philosophical systems. Moslems, Christians, Hindus live not always peacefully side by side. But this fact mostly is not made obvious to outside modern world where we find a sometimes perfect adaption of other cultures’ habits. Adaption happens not only with non-resident Indians abroad but also inside foreign companies in India. Anthropologists call this latest social development camouflage: adaption to a foreign cultural system hiding the own one and at the same time acting the own cultural value system. The social identity will be kept under all circumstances. The question is: How to handle camouflage in a German company in India?

First of all we have to know what is going on in Indian society. I stated that nowadays Indian caste system – or call it Indian society structure if you like – is omnipresent. Which are the latest movements? Two examples:

Latest Movements in Indian Society

Backward castes and Dalit (outcaste, ‘the oppressed’) get special benefits from The Government of India. For example they get a reserved amount of seats in the university. A Dalit, for example, has to get 60 from 100 credit points, a Brahmin has to get 90 from 100 credit points to pass the exam. And if a Brahmin is not able to pass with 90 from 100 credit points he will marry a Dalit girl which is possible nowadays as you can marry on the registry office and not only within the two families. Automatically the partner will be downgraded to the lower cast level and like this, as a Dalit, the Brahmin will be able to pass the exams – with 60 from 100 credit points. This is called ‘the Indian solution’.

Apart from that you always should keep in mind that in India you can buy everything, even good exams.

With other words: diploma and other exams are often meaningless and not a suitable indicator to give a job to somebody.

Another movement is concerned with backward-castes and Dalit. The oppressed rise their voices and they are heard by The Government of India. They are no more willing to work in deep subservience. A new self-consciousness arises based on traditional heritages.

What does this mean for a German company which has to choose applicants for certain jobs and which expects taking over responsibility from the applicant?
How to Handle Camouflage?

There are two groups who will take responsibility: Brahmins and other upper cast people – and Dalit. Almost Nobody in between.

Why? In the middle of top and bottom there are people of different castes which are used that others take responsibility for them. In a company they feel that responsibility is the top managers’ duty. It is them to handle conflict situations within the staff it is them to manage absence of workers and the consequences for the company.

Traditionally Brahmins had to take responsibility for others as for the workers on their huge agricultural lands. So you can count on a Brahmin or any other leading caste member taking responsibility in your company. But he might not take exactly that responsibility you expect him to take. So a Brahmin might not tidy up his working place and he might not cooperate with someone from a lower caste within the same office. He and his family are privileged since generations and he will accept only a privileged position in the company where he has at least some power over others.

A Dalit traditionally had to take responsibility for his own family. As a Riksha puller or as a worker on a Brahmin’s field he knows what it means to work. It is the Dalit who nowadays are one of the strongest powers in Indian society. Since generations they have nothing to lose. They are fighters for freedom, for a better life for their children, for education. And it is them who demonstrate against pollution and gene manipulated food. A Dalit on a responsible post might push the company forward. But the problem might be a Brahmin or another high caste person next to him.

Both of them, the Brahmin as well as the Dalit, might adapt in the company in a perfect way so that as a German you are convinced that tradition, caste, religion and so many other things in Indian society, they all are outside the company’s compound walls. – They are not. They are part of camouflage and will lead, among others, to stress and tension or a high fluctuation rate.

References


PANCHAYATI RAJ INSTITUTION AND 73rd CONSTITUTIONAL AMENDMENT: THE CASE OF GUJARAT

* Archana Shukla

**Abstract**

The paper attempts to examine the phases of Panchayati Raj Institution from its formation to present time especially after the enactment of 73rd Constitutional Amendment, 1993. The present study tries to explore the impact of this amendment act on the Padhar women due to which they have got the position as members and Sarpanch in the village Panchayat. The comparison between the traditional power structure as well as statutory Panchayat from its emergence to 73rd constitutional amendment has been explored. The study focuses on the varying degrees of participation in local governance by the Padhar women unfolding the factors underlying it. With respect to women’s active participation in the political process, the role of the family, patriarchy, gender roles, women’s autonomy, form of representation in local governance, access to public resources and participation in decision making process both in private and public life are explored and examined.

**Key words:** governance, participation, aware, negotiates and autonomy.

In the recent past, the political life of tribal communities has gained considerable attention due to factors like rise of communalism, conversion, and legislative measures like 73rd Amendment of constitution, which have affected the role of women in local governance. The present study seeks to explore the participation of women in local governance with special reference to women of Padhar tribe of Gujarat.

Though the constitutional and legal provisions have given them equal political status, but social and cultural conditions do not facilitate their equal participation in Politico-Jural arena. The study of women in public and private arena is still quite relevant to understand their political behavior. Tribal women are not passive stumps of history and they never were. This fact inspires one to look into tribal women as change agents. So the study focuses on the participation of Padhar women in local governance by exploring their role and status in the decision making process both in private and public life are explored and examined.

* Dept. of Anthropology, University of Delhi, Delhi. E-mail: archanashukla_m@yahoo.co.in.
The enforcement of 73rd Amendment has various implications for the empowerment of women. It has created a silent revolution. However, in our view, the reservation itself can only be regarded as the first step in this direction. It is necessary to create proper social, economic and political conditions to enable women to participate effectively in the local government institutions without endangering the positive values of the prevailing family system. Nonetheless, the act has ushered a new era in which the villagers can at least try to decide their own destiny (Mohanty, 1996).

The study on participation of women in local governance plays a pivotal role in the general process of advancement of women. Without the active participation of women and the incorporation of women’s perspective at all level of decision-making, the goals of equality, development and peace cannot be achieved. The changes taking place in the realm of women due to 73rd Amendment in the modern era are important for understanding of the differences between traditional and modern social structure. The study should examine and elucidate that how change in agents i.e. reservation and participation of women in local governance are raising consciousness of women’s issues and bringing about the changes in the institutional structures and processes influencing the governance discourse in itself. So the study of women in local governance is important aspect of the changing society especially women.

In respect of women’s active participation in the political process, the role of the family also needs to be considered. So the impact of patriarchy and gender roles on the participation of women i.e. autonomy, form of representation in local governance, access of public resources and decision making not only in extra domestic domain but in domestic domain should also is explored.

Women’s question in social sciences germinated in the mid-seventies. Declaration of women’s decade by UN from 1975-1985 and report of committee on status of women (1974) added momentum to it. The attention on women’s education, health and participation in decision-making, has helped them to occupy new roles and statuses in society. Many women movements helped to improve the status and empowering women and taking them to the center stage. Along with this the constitutional safeguard like 73rd and 74th amendments of constitution helped in providing them authority in local and urban governance.

Development effectiveness through gender mainstreaming signifies performance in bringing about change in increased productivity, improved social development and enhanced gender equality in rights, resources and political that generally disadvantage women. Kelkar (2005) believes that the gender mainstreaming is a process of achieving greater gender equality and overcome the costs of women’s marginalization. Empowerment of women has to go beyond mere instrumentalism and begin with first addressing questions of women’s agency, their well being and set esteem and than that of their families and communities.

Objectives

The present study seeks to explore the interface between governance and gender among the Padhar of Gujarat. The present study is an attempt to capture the complexity of the structure of governance among the Padhar of western India weaving it against a gendered backdrop.

The major objectives have been enumerated below

1. The study attempts to elucidate the relevance of 73rd constitutional amendment especially identifying the major implications of it for the Padhar at the level of ground realities.

2. It seeks to examine the relationship between the traditional power structure and the statutory Panchayat with special reference to the local politics leading to a kind of governance, which is highly gendered.

3. It tries to understand the women’s agency within the structure for creating and maintaining a ‘space’ within which their autonomy, freedom, and decision-making could be located.

Panchayati Raj: System of Governance

Local self-governance is one of the important dimensions of governance. In recent year, decentralization and devolution are generating pressure for local self-governance. Both the constitutional mandates for Panchayati Raj Institutions and municipalities, it is likely that good governance would become a major concern at local level in these constitutions. Until the 73rd and 74th constitutional Amendments relating to devolution of rural and urban governance respectively were passed in the early 1990, local governance could not be effectively carried out. The essence of local self-governance is to enable a small local community to maintain access and control over their natural and physical resources, to take collective decisions in common public good and to provide resources in priority development actions. In the Indian context, constitutional amendments referred above mandate local bodies called Gram Panchayat in the rural and municipalities in the urban area.
Panchayati Raj Institution

Participatory Approach/Gandhian Approach

The agencies of the system of Panchayati Raj can be traced back to the vision of Mahatma Gandhi, who advocated the revival of the traditional Panchayats so that Gram Swaraj, which had been a part of the social system in India, could become a reality. The Panchayat was for him, an instrument, which would ultimately create the basis for the governance of the country. The Gandhian ideology had a spontaneous appeal to the rural masses, which were threatened with the problems of hunger, disease and poverty. Reordering of composite traditional rural social system through a communitarian Panchayat approach thus becomes an objective of local governance in Independent India. The frames of constitution of India, having examined the various view points on the issue of providing a constitutional status to the Panchayats, finally include it under the directive principles which mandated “the state shall take steps to organize village Panchayats and endow them with such power and authority, as may be necessary to enable them to function as units of self-government.” As a consequence, Panchayats were established in a large number of states under their respective state legislations. They visualized civic and economic activities as the major functions of Panchayats.

The Article 40 of (Part-IV) Indian constitution dealing with the directive principles of state policy stipulates.” The state shall take steps to organize village Panchayats and endow them with such powers and authority as may be necessary to chase them to function as a unit of local self-government. However the leaders in 1950 were not very enthusiastic about Panchayati Raj in India. The Panchayati Raj in India was inaugurated as a consequence of the recommendations of Balwant Rai Mehta Committee set in 1957 to study the community development programme and National Extension Service launched in 1952 and 1953 respectively. The schemes, despite the high objectives failed, because they wouldn’t invite rural participation. Balwant Rai Mehta Committee recommended three- tier system of Panchayati Raj, maintenance of village, the Panchayat Samiti was to be constitutional through indirect elections from village Panchayat, developmental function of Panchayat Samiti, democratic decentralization etc. The National Development Council accepted its recommendations in 1959. The Panchayati Raj was first inaugurated in Rajasthan in October 1959 followed by Andhra Pradesh and Tamil Nadu. But it did not achieve the success that was anticipated at the time of launching due to many reasons.

With the change of Govt. at the center in 1977, there was a revival of interest in Panchayati Raj on the removal of rural poverty and unemployment within a time period of 10 years. The central Govt. appointed a high level committee on Panchayati Raj Institutions in 1977 under the chairmanship of Ashok Mehta.
The committee is popularly known as the Ashok Mehta Committee. This committee has emphasized on the decentralisation of administration. It recommended the creation of two tiers instead of three-tier system of Panchayati Raj, Zila Parishad and Mandal Panchayat. It is also recommended that below the district level were to be Mandal Panchayat comprising a group of village with total population of 15,000 to 20,000 and will be responsible for implementation of the schemes and project assigned by the Zila Parishad. However due to change of govt. in 1980 this recommendation couldn’t implement.

64th Constitutional Amendment Bill

It was introduced by Late Rajeev Gandhi in 1989. The important provisions of the proposed bill were (1) All states would have three tiers Panchayati Raj System, which include village Panchayat. (2) All the seats in Panchayati Raj bodies would be filled through direct elections in every five years under the supervision of chief election commissioner. (3) 30 percent seats for SC and ST would be in proportion to their population in the total population. The bill lapsed due to general elections in 1989 when the national front defeated congress.

74th Constitutional Amendment Bill

The National front Govt. brought this bill in 1990. In this bill there was a provision for Gram Sabha state legislature was to make provisions for its composition. It provided reservation of seats to women, SC and ST and there Backward Classes (OBC). The bill lapsed as the National Front Govt. fell in 1991.

73rd Constitutional Amendment Bill

In 1992 a giant leap forward was achieved when 73rd constitutional Amendment was enacted which gave constitutional status to Panchayati Raj Institutions. On 20th April 1993, the president of India gave his assent. The act was brought in to force by a notification on 24th April 1993. The act defines Panchayat as “an institution of self-government constituted under Article 243 for the rural areas”. The important features of this bill are (1) three-tier structures at village, block and district level. (2) A five years term. (3) Direct elections of the member at all level election commission. (4) Reservation of women as well as to the member of SC and ST not only in membership of Panchayats but also for the post of the chairpersons of Panchayat. (5) Constitutions of state finance commissions for adequate resources to Panchayat. (6) State legislature to make provisions for power and responsibilities. (7) A bar on any interference by courts in electoral matters. The act thus provided sufficient flexivity for individual legislatures to enact their Panchayat legislation within the broad constitutional framework.
**Structure**

The 73rd Amendment provided three-tiers system of Panchayati Raj Institutions. Accordingly, Panchayats are to be established at the village level, intermediate level and district level. However, the states having a population not exceeding 20 lakhs, have been given the option of not having a Panchayat at the intermediate level. The Panchayats of Jammu & Kashmir and Nagaland have one tier structure i.e. Panchayat only at village level. Goa, Meghalaya, Manipur, Mizoram and Sikkim has Panchayat at two levels i.e. village Panchayats and Zilla Panchayat (district). The two tiers of Manipur, Mizoram and Sikkim are sub-divided. While in some states the Panchayat is sub-divided into more than three tiers like Assam and West Bengal where only the district Panchayat is sub-divided into two and three divisions, on the other hand in Tripura all the three tiers are subdivided. The basic three tiers of Panchayati Raj Institution are as follows:

Panchayati Raj at village level is Gram Sabha, it membership varies from state to state. Gram Sabha is a body of people of the village. It elects the members of village Panchayat. Village Panchayat functions are largely related to (1) Civic amenities (2) Social work activities and (3) Developmental works.

Panchayat at intermediate level is known as Panchayat Samiti which functions at block level in all the states. The Panchayat Samiti coordinates and supervises the work of Panchayats. They also implement various developmental programmes such as supply of drinking water, drainage, construction of road etc.

**Panchayat at district level**

At the top of Panchayati Raj is Zila Parishad. The chairperson is known as president. He conducts the meeting of Zila Parishad, inspects the lower tier of PRIs and submits his reports to Zila Parishad. The Zila Parishad has the overall responsibility of planning and implementation of development programmes. It also co-ordinates Panchayat Samiti’s work.

**Phases of Panchayati Raj**

1. **Phase-I (1959-1966):** During this period, Panchayati Raj was established in most of the states.

2. **Phase-II (1967-1976):** As a result of change in the strategy of growth, special programmes for agricultural development were given priority, while limited attention was paid to the growth of Panchayati Raj Institutions.
3. Phase-III (1977-1991): Steps to activate the Panchayati Raj Bodies were taken up by way of institutional reforms in some of the southern states, namely, Andhra Pradesh and Karnataka. These were essentially directed towards reorganizing the structure, so that the lower tiers might become financially and administratively viable and come closer to the people. In other states, the situation remained unchanged.


5. Phase-V (1996-continuing) Panchayati Extension to the Scheduled areas (PESA): Provision of the part IX of the constitution relating to Panchayats are hereby extended to the scheduled Areas. In this the Gram Sabha has been given power to safeguard and preserve traditions and customs of the people, their culture identity, community resources and customary mode of dispute resolution.


The Padhar tribe of Ahmedabad district of Gujarat has selected for the study, they are the small tribe of nearly 25000 people. According to a recent estimate by TRTI, Gujarat Vidyapith, Ahmedabad, the number of the Padhar in 2007 is 24597 with 11662 female and 12995 male (Shukla, 2008).

The Padhar are the only tribe in Gujarat that resides on the plains of Nalkantha region. Only few work have been done on this tribe, that too on economic aspects while politico-jural area is fully untouched. Padhar are concentrated in Bavla taluka and Viramgam taluka of Ahmedabad District. The eleven villages of Padhar are situated in the region of Nal Sarova Kantha, so the area is known as Nalkantha region. The data from primary and secondary sources have been examined and analyzed by using various anthropological techniques and methods. Information on the contested perspective of women, viewpoint of men on women’s participation in local governance have been collected and analyzed.

Caste groups like Bharwad, Koli Patel, Charan, Darbar, Harijan, Kumbhar, Lohar, and even few Brahmans are also staying in the same village. They have their settlement in a separate group in the village. Each community is staying away from other community in a cluster but in the same village. Padhar are not allowed to enter inside the houses that are of higher caste to them like Koli Patel, Bhardwad and Brahmans. It is also believed that the Padhar were formerly Koli and have a mixed blood of Koli and Rajput. However, as they used to eat
the flesh of dead animals, so they were driven to the Nalkantha frontier area (Mastali, 1988). Looking at the legend of the Padhar we can say that they might have originally hailed from Sindh, J.W. Watson, the political agent of that area also recorded that they migrated from Sindh before the fifth or sixth century (Patel, 1982).

Other than these legends, there is a common myth among them is that many people from the caste community, who were ex-communicated, joined their community. It is believed that people from around 18 (aadhar) communities have become Padhar, so the word ‘Padhar’ came, as it sounds similar to aadhar. The main evidence of this kind of process among the Padhar in the beginning of their formation is that they use surnames like Makwana, Parmar, and Solanki etc. for clans, which are common surnames among other caste communities like Bharwad, Rajput, Darbar, Harijan, Kolipatel and so on. To study the Padhar women, three villages have been selected i.e. Shiyal, Durgi and Devadthal. Padhar are in majority in all the twelve villages. In Shiyal village Sarpanch and few ward members are from Padhar group. It is around 10-20 Km from the Bagodra town. Durgi village is 10-15 Km away from Shiyal where the Sarpanch is a woman. So to contrast the village by headship of Panchayat and the role and authority of ‘women as Sarpanch’, this village has been taken for the study. Devadthal village is in between Shiyal and Durgi village. In Devadthal village Padhar practice agriculture, otherwise in all other villages they are landless laborers, so these villages are taken to explore how the occupation or economy affects the position of women not only in domestic domain but in public sphere also. Padhar’s population and total population of all communities and household in three villages are given in Table-1.

Table 1: Household-wise Distribution of Padhar in three Study Villages, 2007

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Villages</th>
<th>Households No.</th>
<th>%</th>
<th>Population</th>
<th>Female</th>
<th>%</th>
<th>Male</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shiyal</td>
<td>616</td>
<td>42.98</td>
<td>1457</td>
<td>43.42</td>
<td>1717</td>
<td>44.83</td>
<td>3174</td>
<td>44.17</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Durgi</td>
<td>696</td>
<td>48.56</td>
<td>1551</td>
<td>46.22</td>
<td>1786</td>
<td>46.63</td>
<td>3337</td>
<td>46.44</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Devadthal</td>
<td>121</td>
<td>8.46</td>
<td>347</td>
<td>10.34</td>
<td>327</td>
<td>8.53</td>
<td>674</td>
<td>9.38</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1433</td>
<td>100</td>
<td>3355</td>
<td>100</td>
<td>3830</td>
<td>100</td>
<td>7185</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

% = Percent

The Padhar are divided into descent groups or clans. The native term for the clan is kutumb. Their community as a whole is known as the Padhar nyati. The principle of division is patrilinealy determined. The kutumb is the largest patrilineal descent group. It is a permanent and continuing unit, constituting the
largest category of men and women descendants from a common male ancestor. There are 16 clans in the study village. Sometimes a clan name is directly used as a surname and the surnames reveals the clan to which he/she belongs. We could trace their history by asking them their surnames like Makwana, Solanki, Vaghela, Parmar, and Maer etc.

The Padhar of Ahmedabad district was identified as primitive tribe in 1982 by the government of Gujarat. In the census of Maharashtra 1951 Padhar’s population is not mentioned. Gujarat separated from Maharashtra in 1960, and Census of 1961 shows Padhar as scheduled tribe of Gujarat. It may be possible that Padhar existed as Koli till 1960. The population of Padhar is constantly increasing shown in table -2.

Table 2: The Population of the Padhar in Census

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The Padhar</td>
<td>--</td>
<td>2909</td>
<td>4578</td>
<td>10578</td>
<td>15896</td>
<td>21180</td>
<td>24597</td>
</tr>
</tbody>
</table>

Traditionally each Padhar village has a *nyati* Panchayat consisting of a *patel* as head and *motiyars* (head of each clan) as members of it. Since the Colonial rule, their traditional Panchayat had two levels i.e. one at the village level and other at the level of larger community including all Padhar villages. They have their own customary law and the *patel* used to arbitrate the cases. The participation of women in their traditional power structure was restricted.

During colonial time, they were under the control of the British rulers, Princes, landholding classes and chiefs of the village. After the independence, the Princely State came under the jurisdiction of the government of Gujarat. Although the traditional Panchayat of the Padhar continued to work side by side in the village, but the actual power of the village came under the ruling caste and class. There used to be a *mukhi/police patel* from the dominant caste community who exercised immense power and all the villagers were bound by his words. The post of Sarpanch of the village Panchayat was introduced after the enactment of the Gujarat Panchayat act in 1961. However, the post of *mukhi* was continued along with the post of Sarpanch of the village Panchayat till 1984. The village Panchayat and Sarpanch came in real power after the cancellation of the position of *mukhi* of the village in 1984. However, the Padhar men have access to village Panchayat from then onwards, but there was no participation of women in village Panchayat until the enactment of 73rd constitutional amendment, 1993.

Although the men are struggling for their rights against the larger socio-political system, but in this process they overlooked the rights of women and oppressed group of their own community. These restrictions and dependency of women on men has made them submissive and subordinated. Thus, the
patriarchal milieu has evident effect on women in both private and public life, which is very much apparent in the community.

The changes in the Padhar society initiated long back in 70’s when they shifted their occupation from fishing and gathering to labour work due to declaration of Nal Lake as bird sanctuary. With the passage of time, they started migrating to the other place like neighbouring town and cities in search of work. For more income, they started migrating to far off places along with the other family members. Many times, they face much more hurdles and insults from the contractors and other outsiders than the men. Gender relations within and beyond the household are highly unequal in all localities and the experience of poverty is particularly harsh for women. To fulfill the needs of the household they take loans mainly from their regular employers or moneylenders from the caste community of the village particularly to meet seasonal consumption needs and often repaid with interest and sometimes by giving free labour instead of cash. These loans often lead to exploitation and oppression for lifetime.

The Padhar have adopted the authority pattern same as the caste group. Though the women do not keep themselves completely in seclusion and are free to go about, as they are equally involved in their main occupation as wage laborers. In the family, the husband is the main authority and he exercises considerable influence on other members of the family. They have patriarchal set up and male used to decide every aspect of life. After marriage the main duties of wife are to look after the house, cook meals for her husband and work as labor in construction work, which is their primary occupation, this way women supplement the family income. The major responsibilities of management of household remain on women. Domestic quarrels are not uncommon, husbands-wives very often abuse each other and wife beating is also common. Excessive drinking is responsible for domestic quarrels. There are many cases when wife runs away with some one else due to more awareness and exposure of women with the outside world during their work outside in different villages and towns.

Case-1: Jassuben (30yrs.) of Durgi Village got married 10 yrs. back with Kalubhai, Kalubhai is a wage labour, and they have one son of 8 yrs. old. Both of them were engaged in earth digging work in nearby town. Since 4-5 yrs., Kalubhai used to come drunked every night and beat his wife Jassuben regularly and blamed her for extramarital relations with the contractors of the town, Jassuben was not involved with any contractors, but she got fed up with his paranoid nature and everyday tortures. One day she ran away with a contractor. Now she is working as wage labour in the same town, but that contractor has exploited her. She does not want to go any where neither to his husband’s house who beats her nor to the contractor who uses her. She is staying alone in that town and happy with his son.
Gradually the earning of women has made them self-dependent. Although this labour work has made their life more difficult, but due to equal income, they become the part of decision making in domestic domain up to a great extent. The labour work has also increased their mobility, freedom, and exposure in public life. The process of change in the entire arena started among them from then onwards. In the process, they come in contact with the other communities, contractors, markets, fairs, and festivals of town. This has resulted in greater mobility and change not only in domestic domain but in decision-making in public sphere also.

In late 90s after the enactment of 73rd constitutional amendment due to reservation, the Padhar, especially women have got the opportunity to be a part of the statutory Panchayat at the local level in village Panchayat. Thus, they have got access to new power structure both as a member and Sarpanch too. In spite of it, many women are not prepared to participate in politics beyond voting. Family responsibilities, women’s preoccupation in the struggle to survive, the prevalence of violence, and the role of money power are reported to be the main constraints. The traditional power structure do not like women to go in public with their problems and women’s reserved position in the modern power structure was not even in their thoughts. In traditional Panchayat the women were even not allowed to attend meetings, decisions on their own case while in modern power structure, they are not only appreciated to attend meetings as a common mass but they have also been given the important position in men-dominated political sphere.

Due to 73rd Amendment women not only got the position in elected village Panchayat but in some villages they are Sarpanch (Head) too. Provision is made for reservation of seats for women. Like two seats where total numbers of seats are seven, while three seats in case where total seats are more than seven but less than eleven. Out of total eleven seats four seats are reserved. Out of this one seat is reserved for ST and SC respectively in every Gram Panchayat, even more seats are allotted on the basis of their population. The seats for women, SC and ST are reserved in accordance with the total number of seats of the members.

In village, the traditional Panchayat and the statutory Panchayat work simultaneously. The traditional Panchayat is only for the Padhar where patel is the head, his job is to look after the affairs of the Padhar and decide the cases, which required. They give their decision in marriage, family problems, quarrel, kin group conflicts and ceremonies. The other members assist the Patel, usually 9-11 in number called motiyars. They together form a group. They hold this position either by inheritance or ability to settle disputes and capable of helping the Padhar as leaders.
Elected legal village Panchayat came into existence along with enforcement of Gujarat Panchayat Act 1963, along with arrival of such elected village Panchayat the traditional Panchayat not fully but in some degree, got paralyzed. The head of both Traditional and Statutory Panchayat is mentioned below:

Table-3: Name, Sex, Age and Education of Head of Traditional and Statutory Panchayat in three Villages

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Villages</th>
<th>Head of Traditional Panchayat Patel</th>
<th>Head of Statutory Panchayat Sarpanch</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Name, Sex, Age, Education</td>
<td>Name, Sex, Age, Education</td>
</tr>
<tr>
<td>1</td>
<td>Durgi</td>
<td>Ramabhai M, 57, Illiterate</td>
<td>Gailiben F, 30, No formal education</td>
</tr>
<tr>
<td>2</td>
<td>Devadthal</td>
<td>Gidabhai M, 50, 3rd passed Jaisingh Bhai M, 40, 2nd passed</td>
<td>Govindbhai M, 40, 2nd passed Jeevabhai Bhai M, 40, 2nd passed</td>
</tr>
<tr>
<td>3</td>
<td>Shiyal</td>
<td>Virsingh M, 50, Illiterate</td>
<td>Tidabhai M, 35, 5th passed Somabhai M, 35, 5th passed</td>
</tr>
</tbody>
</table>

The table shows that since this is the first batch of reservation in village panchayat therefore education has very less role to play in selection of these members, but one important thing came out is that the members of village panchayat are comparatively of young age than traditional Panchayat.

The statutory Panchayat at village level Panchayat is for all the communities of the village. In every village of Padhar due to 73rd Amendment, women not only got the positions in Panchayat but in some village they are Sarpanch (Head) also. The Padhar are the Sarpanch in all the eleven villages, while Padhar women as Sarpanch vary from village to village according to the reservation given by the government. Earlier statutory Panchayat made for both caste and tribe in the village. Koli Patel and Bharwad dominated it, but due to reservation Padhar came into power and factional groups now formed according to power. Koli Patel and Bharward remain together according to their higher caste and fewer opportunities given to them comparatively by the government, while Padhar form one group, as their population is more than any caste group. The caste group like Brahmins, Harijan, or others remains with the group, which is in power to get benefits, or sometimes they remain neutral also according to situation.

Nevertheless, even after the constitutional Amendments were passed to effect changes in the local bodies is still limited in many respects. The reasons are many the differences in the provincial legislations regarding the power and role of Gram Sabha, lack of peoples participation in local administration both in rural and urban areas, and the apathy and resistance of higher administrative
personnel to devolution which emanates from their fear of loosing authority and control over their subordinates as well as on the public. The Gram Sabha, the adult community of the village, which elects the village Panchayat members, in fact, is civil society operating at the village level to monitor the functioning of the local governance institutions and enhances the quality of local governance through their active participation (Tondon and Mohanty, 2002).

The enforcement of 73rd Amendment of constitution has given teeth to the local government, and participation of women in it, although more women are not prepared to participate in politics beyond voting. Family responsibilities, women’s pre-occupation in the struggle to survive, the prevalence of violence, and the role of money power and women’s lack of control or access over monetary resources are reported to be the main constraints.

The identity of a woman is always attached to her father, husband or son i.e. she was given status in according with that or her male partners. Women have always been treated, as subordinate to men is every aspect of life, which denies their entry in political decision-making. Although there is a great social acceptance of women in Panchayat and women as Sarpanch, but in conservative areas they face daily obstacles in their work. In some areas male officials do not hold elected women members or president of Panchayat in high esteem because of their low social status. Women are thus doubly disadvantaged and forced to carry burden of household chores as well as official duties. But even if women representatives have not worked wonder, they have made significant beginnings, although they often had to pay a huge price for them (Mathew, 2004).

Though the 73rd constitutional amendment has given many facilities for women’s upliftment and access to village Panchayat, they still have many constraints in participation, which they negotiate at the family and community level. Women, whose husbands (or men relatives) are part of new power structure, negotiate with them both at the private and political level and thus strengthen their position in society. Similarly, women who are part of statutory Panchayat have also sited negotiating with their husband or kin members for the well-being of women. They are gradually influencing the decisions on the issues of both private and public life indirectly. Sometimes men also negotiate on their behalf especially for the participation in village Panchayat with their family and kin members.

Due to the 73rd Amendment women of Padhar got great participation in Panchayat and lots of changes occurred in their many walk of life due to the authority and opportunity given to them. Padhar women also started approaching to the court directly if they do not get satisfaction and doubt on the decisions made by patel and motiyars in cases of divorce, elopment, remarriage etc.
Case-2 Janakiben daughter of Ramanibhai of Surendranagar got married in Shiyal village in 1995 with Kantibhai. She stayed with her parents till 2001 as her husband did not want to bring her to his house in Shiyal even though they had a son of 4 years. Due to many forceful attempts made by Janaki’s father on Kantibhai to take her along with him, ultimately Kantibhai left with no choice and took Janakiben to Shiyal. After coming to Shiyal she came to know about her husband’s relation with another women staying with him in the village. Kantibhai’s mother was in full support of her son. Janaki faced this situation for about two years but ultimately filed a divorce case on the basis of his extramarital affairs directly in the court. She does not have faith on traditional Panchayat and their members, so she filed case not only in court but also in statutory Panchayat from where she has hope to get best for herself and her son with the help of NGO called Karma Sangh which is working to encourage women to directly go to court and bringing a revolution, by breaking the traditional Panchayat’s dominance.

So gradually the effect of traditional Panchayat is now decreasing and instead of decision making in case of family matters and kin groups its participation has been restricted to only ceremonies and festivals.

Case-3 Rudabhai and Somnaben of Shiyal village used to meet regularly near Nalsarovar for fishing and fall is love with each other. Belonging to same village was big obstacle in their marriage so they decided to run away and got married there. After two months when they came back then traditional Panchayat’s members ordered Ratibhai, father of Rudabhai to pay Rs.1500/- to the father of Somnaben as bride price and Rs. 3500/- as ‘dayo’ (fine for love marriage) to the Padhar council. This way by giving a feast and total Rs.5000/- the matter got settled.

Political organization of Padhar has not remained untouched with the modern forces of change. The authority of tribal Panchayat has been reduced by the impact of external economic and legal forces. With the establishment of educational centers and other such centers aiming to promote the welfare of the tribe there have been changes in the thinking of the people. There is a gradual increase in awareness and literacy and now parents are aware to send their children willingly to schools instead of economic and work problems.

Most of the women who were the ward member and Sarpanch were either the wife or mother of influential man of the community. However, at the same time many women have come in village Panchayat on their own capabilities and knowledge in terms of education, leader of a group of women, capability to participate in politics, vocal or helpful to other women. Although the number, of these kinds of women who achieved the position in local politics on their own awareness and ability is less.
Some of the women are working hard towards the development and empowerment of the women being in the beneficial position as wife, sister, mother, or daughter-in-law. Due to higher social and economic status in society and family, some women are exercising it for the welfare of the women in particular and their community as a whole. As for instance one of the woman ward member Railiben whose husband and relatives are in a powerful position of the statutory Panchayat feels accountable. She tires to resolve the issues of women at her level but many times negotiate with men of her kin group, and solve their problems through village and taluka Panchayat. She is easily accessible for village women as compared to men and effective so even many men approach her with their problems as well.

**Case 4:** Railiben (35 years, illiterate) of Devadthal village is a ward member and wife of Sarpanch of the village Panchayat. Although illiterate, she is able to negotiate. For the first time the Sarpanch’s seat was reserved for the Padhar in which, her husband Govindbhai was selected unanimously. Most of the time, Govindbhai used to go out of the village or was busy in his own work. Being the wife of Sarpanch and as a ward member Railiben feels responsible for the women if not other villagers as a whole. She many a times has solved the problems of water and houses by negotiating with her husband Govindbhai, Sarpanch and her brother-in-law Wahanbhai, who is a delegate in taluka Panchayat and also an active leader of the Padhar. In the afternoon, she generally takes out time only for this kind of meeting and tries to solve their problems. Sometimes she has to listen the blames and tolerate the misbehavior of women of the village if they are angry at any decision of Sarpanch or Panchayat proceeding. She is very tolerant and patient and this quality pays her respect and dignity among villagers. She solves the problems of health, and tries to aware them about the Panchayat meeting, how it functions, about grants, schemes and the house facility provided by government. Recently another 100 houses construction is about to complete, so many women come to tell her the need of a house. She sometime convinced them with the problem and urgent need of some other women. In addition, sometime she understands their problems and urgent need for a house and tells this to Govindbhai.

Railiben is also aware of growth and development of children that is the reason why she has given one of his rooms to employee of Gantar NGO, Udaibhai, for child education and awareness. Although Gantar is unable to give them a room for their activities, but Railiben came forward and has offered them a room for time being. This way Railiben is holding a great responsibility and is accountable for the women, which is an immense work of appreciation and inspiration.

In the process, women are getting more and more aware that, they could also participate actively as member of Panchayat body. Many women feel that
education should be necessary for Panchayat members, so that they could work independently by understanding the proceedings of the institution. These thoughts and their experience in Panchayat body are evidences of their awareness through which they could become independent decision makers and sensitive about the development programs to reduce poverty from their community.

Few educated women although did not took direct part in local politics but with their capability they have tried to form a group which have helped women to make them self sufficient and aware about their surroundings with new avenues. In this context a women’s’ organisation has formed in Durgi village with the effort of women relatives of the Sarpanch, Gailiben of Nana Dharajiya clan. The family of Gailiben is involved actively in the development of village through various programs. Many of her kin groups are members in village Panchayat, her husband Visabhai, himself was delegate of taluka Panchayat for five years. They all are aware about the development programs by the government and now exploring new ways to make their village self-sufficient. Being the dominant clan (Nana Dharajiya) in the village, many women are participating in this group with the encouragement of their family and relatives. They are setting a new trend for the other women of different clans to participate for their own welfare and to battle against the poverty by putting efforts on their own.

**Case 5:** Gailiben (35 years), the Sarpanch of Durgi village, have no formal education but have learnt to sign, do official work and proceedings of the village Panchayat with the help of her husband and daughter in-law. Now she is well aware of the development plans and grants provided to the village. She has also worked towards empowerment of the Padhar women of the village by organizing a Mahila Mandal along with the other women of her family. She is doing a lot of construction and repair work in her five-year duration of headship like repairing of roads, construction of water tanks, cleaning of ponds and streets of the village on which earlier Sarpanch have never given emphasis. She has made complaints to the taluka Panchayat as well as to the municipality about the scarcity of water supply in the village. The municipality is not taking any initiatives for these problems for the last two years. In the mean time, she has also talked to media such as the local newspapers about the supply of water to publicize the problems of the village so that it could be solved in less time and development procedures could be more effective and affirmative.

The Padhar women who are part of the statutory Panchayat are realizing their authority to decide and have access to the mass and media directly and making space for themselves in all the realms. Often women create their space by resistance to the existing norms of the community and exploring the new dimensions where they could negotiate to have access and autonomy.
The community, NGOs, and the State are taking many initiatives for the welfare of the Padhar. Few educated young women, although not participating directly in the political sphere but encouraging women of their family participate actively in the new power structure. They are also helping them in official work and building their confidence in dealing and communicating with the officers. The role of Mahila Mandal in facilitating the women’s autonomy through micro-credit and harnessing the local skills for outside markets in terms of handicrafts is significant in the overall empowerment of women.

All these factors together have been responsible to bring about changes in the traditional culture of Padhar and result of which are visible in different field especially in the participation of women in Panchayat and decision making in public sphere. This is a beginning, and women are coming into the Politico-Jural arena, even though their number is less but to start, this ratio is not at all bad. So it could be said that even if women representatives have not done wonder, at least they have made significant beginnings, which is needed and important.

Acknowledgement

I am thankful to Dr. S. M. Patnaik, Associate Professor, Department of Anthropology, University of Delhi for his valuable comments and suggestions in writing this paper.

References


Census of India, Special Tables for Scheduled Tribes, Series-5: Gujarat, 1981.


DISPARITIES IN MATERNAL AND CHILD HEALTH IN INDIA PRESENT SCENARIO AND FUTURE OPTIONS

* K. Gangadharan

Abstract

The six decades of planned development in the country and also the efforts of Millennium Development goals for the last decade has not resulted in a positive and conducive health care development among the marginalized communities in India. Though the coverage of neonatal, antenatal and post natal care is heading towards a high-level, the pattern has not changed much over the period and the conditions of ST and SC populations are still bleak compared to others. In almost all states that have substantial ST populations, the social gap is quite high. The paper explores the typical features of maternal and child healthcare development among SC/ST communities and the current scenario of disparities in maternal and child health. To examine the objectives the data were collected from the Task Force Report on the Development of SC and ST, Planning Commission, Government of India, Annual report of The Ministry of Health and Family Welfare, Government of India, NFHS Report III and other published secondary sources on the Maternal and child health development in India. Examining the secondary sources of data, the results revealed that 1) the Maternal and child health status of SC/ST communities are very bleak compared that of other communities in India. 2) The study also reveals that the utilization of Maternal and Child health care services by these communities are also very less and poverty and illiteracy are the basic hurdles in attaining the maximum utilization. 3) The malnutrition and associated health problems are also very severe among the marginalized communities in India. The paper also provides options for their healthcare empowerment and the methods for attaining the Millennium Development goals related to Maternal and child health

Key words: Maternal Health, Nutritional Deprivation, Child Health, Maternal Mortality, Morbidity

Introduction

The Millennium Development Goals (MDGs) are Global Agenda aim to cut extreme poverty by half, ensure every child has the chance to go to school
Keeping mothers alive and healthy is good for women, their families and society. Complications during pregnancy and childbirth as well as HIV and AIDS are among the leading causes of death and disability among women of reproductive age in developing countries. The implications of maternal mortality and the complications it causes for the health of infants and children are also very serious. The risk of death of children less than 5 years is doubled if their mothers die in childbirth. It is estimated that 20 per cent of the burden of disease among children under age 5 is attributable to conditions directly associated with poor maternal and reproductive health, nutrition and quality of obstetric and newborn care (World Bank 1999).

**Basic determinants of maternal health**

There are many direct and indirect determinants affecting maternal health. The important are hemorrhage, infection, complications of unsafe abortions, hyper tension and obstructed labour. These complications can occur at any time during pregnancy and often requiring immediate access to emergency obstetric care for their management. (Safe motherhood Technical Consultation Report 1997) Indirect determinants are defined as preexisting diseases or diseases that develop during pregnancy, that are aggravated by the physiological efforts of pregnancy. The principal indirect determinants in many settings include anemia, malaria hepatitis and diabetes (Gelband et al. 2001) In addition to the direct and indirect determinants of health and non health factors, an array of social, cultural, health system and economic factors have profound effect on maternal health and ultimately on maternal mortality. The age below which giving birth is physically risky for a women and it varies significantly depending on general health conditions and access to prenatal care (Islam 1999). In societies women who are too young or too old or who have babies too closely spaced face increased risks of complications not only during and after pregnancy but also during childbirth. Although family planning programmes have made tremendous achievements in expanding access and use of contraceptive methods, it is still not popular in many people of developing countries including India. Multiple and continuous deliveries adversely affect maternal health and results in gynecological morbidities. Nutrition and anemia malnutrition in women contributes to complications and death during pregnancy and childbirth. Anemia is life threatening. Women with severe anemia are particularly at risk and have
3.5 times greater chance of dying than women without anemia (Barbin et al. 2001) Similarly health problems like malaria, hookworm, HIV-AIDS etc. also cause a lot for the adverse maternal health and which will be transferred to the newborns.

I. Household level determinants

Inequalities in the utilization of health services persist even after controlling for potential confounding such as age, religion, ethnicity or place of residence (Ragupathy 1996) Socioeconomic inequality and discrimination make poor women more vulnerable to physical and sexual abuse to unwanted pregnancy and to STDs, HIV-AIDS. Women access to resources such as land, credit and education, limit their engagements in productive work, constrain their ability to seek health care and deny them the power to make decisions that affect their lives.

II. Community Level

Beliefs about health risks and health problems during pregnancy at birth and during postpartum period strongly influence health seeking behavior and health of mothers and infant. Cultural norms also penetrate a strong influence on women ability to regulate her fertility.

III. Health System

Poor quality of care is an important reason for not accepting the MCH services. The distance and time required to reach the health care centre is another obstacle in the way of utilization. The per capita availability of trained health worker in public health centre is an important determinant of maternal health. Public facilities, especially serving poor and geographically remote areas commonly face limited human resources and a shortage of skilled providers to emergency obstetric care. A low level of public expenditure for health services and particularly maternal health services is a major problem for many developing countries.

IV. Cost of healthcare and transport facilities

The high cost of healthcare in private hospitals prevents them from acquiring the services or forced them in availing low quality services. Communication and transport also cause hurdles in attaining better healthcare on the part of mothers as most of the treatment centers located in urban centers. For obstetric care easy access of transport is inevitable.

V. Low investment

Due to low level of investment in the Maternal and child health services the poor are adversely affected. They are not affordable to attain private health care services.
Objectives of the study

1. To examine the regional and socio-economic dimension of disparities in maternal and child health in India.

2. To study the social gap that exists in the utilization of Maternal and child health and also to address the constraints and challenges in achieving maternal and reproductive health.

To elicit the issues connected with this two objectives the paper sheds light on the basic determinants of maternal deaths or threats to maternal and child health, disparities both regional and sectional in the maternal and child health care development in India with special focus on marginalized and vulnerable communities. An assessment of the capacities, vulnerabilities and needs is the first step in formulating appropriate responses targeted at reaching the socially excluded mothers and children. Why there are some communities and regions done better in attaining better maternal and child health. We must first understand the causes for low utilization of maternal and child health by these deprived communities. The major objective of this study is to address these issues which would help the policy makers in using the resources wisely to reduce maternal deaths and infant and child mortality rate. The chart one reveals the constraints and challenges in achieving the maternal and reproductive health.

### Chart 1. Constraints and challenges in achieving maternal and reproductive health

<table>
<thead>
<tr>
<th>Key outcomes: Improved maternal and reproductive health</th>
<th>Individual/ household/communities</th>
<th>Health system related section</th>
<th>Government policies of Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low demand and use of services because of female illiteracy and lack of knowledge and in formation</td>
<td>Health service provision</td>
<td>Lack of political commitment and low priority to maternal and reproductive health</td>
<td></td>
</tr>
<tr>
<td>Law purchasing power inability to raise resources for emergency care</td>
<td>Human Resources shortages and distribution</td>
<td>Centralized government system and poor regulation</td>
<td></td>
</tr>
<tr>
<td>Low community participation in planning and M&amp;E of health intervention</td>
<td>Poor technical quality lack of drugs contraceptives, supplies and equipments</td>
<td>Civil Service rules and remuneration</td>
<td></td>
</tr>
<tr>
<td>Poor communication with providers</td>
<td>Weak referral supervision and management system</td>
<td>Lack of accountability and poor governance</td>
<td></td>
</tr>
<tr>
<td>Poor road infrastructure Lack of transport and sufficient food</td>
<td>Poor coverage and lack of out reach</td>
<td>Inequality issues</td>
<td></td>
</tr>
<tr>
<td>Related sectors</td>
<td>Card séance rules and remuneration</td>
<td>Political instability and conflict</td>
<td></td>
</tr>
<tr>
<td>Lack of accountability, poor governance</td>
<td>Physical environment and poor donor co-ordination on</td>
<td>Inequity issues</td>
<td></td>
</tr>
<tr>
<td>Poor donour coordination poor</td>
<td></td>
<td>Physical environment</td>
<td></td>
</tr>
</tbody>
</table>

32
How serious is disparities in maternal and child health?

The Disparities in Maternal and child health care is a serious challenge in the healthcare segment of India in the sense that the heath status and health problems of Scheduled Caste and Scheduled Tribes popularly known as *dalits* are very bleak in India compared to other castes and communities. There exists regional (Table 2) and gender disparities in the maternal and child health status in India. The country has observed a continuous decline in IMR. It stood at 192 during 1971, 114 in the year 1980 and 60 in 2003.

**Table 1. Infant mortality rate- Gender dimension overtime in India**

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>113</td>
<td>115</td>
<td>114</td>
</tr>
<tr>
<td>1985</td>
<td>96</td>
<td>98</td>
<td>97</td>
</tr>
<tr>
<td>1990</td>
<td>78</td>
<td>81</td>
<td>80</td>
</tr>
<tr>
<td>1996</td>
<td>71</td>
<td>73</td>
<td>72</td>
</tr>
<tr>
<td>2000</td>
<td>67</td>
<td>69</td>
<td>68</td>
</tr>
<tr>
<td>2003</td>
<td>57</td>
<td>64</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: Registrar General, SRS Bulletin, Various Issues

The decline in IMR has been noticed both for male and female during the period. However the rate of decline is more pronounced in the case of male as compared to female (Table 1).

**Table 2. Infant Mortality rate by Rural and Urban**

<table>
<thead>
<tr>
<th>Year</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
<th>Rural urban gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>124</td>
<td>65</td>
<td>114</td>
<td>60</td>
</tr>
<tr>
<td>1985</td>
<td>107</td>
<td>59</td>
<td>97</td>
<td>48</td>
</tr>
<tr>
<td>1990</td>
<td>86</td>
<td>50</td>
<td>80</td>
<td>36</td>
</tr>
<tr>
<td>1996</td>
<td>77</td>
<td>46</td>
<td>72</td>
<td>31</td>
</tr>
<tr>
<td>2000</td>
<td>74</td>
<td>43</td>
<td>68</td>
<td>31</td>
</tr>
<tr>
<td>2003</td>
<td>66</td>
<td>38</td>
<td>60</td>
<td>28</td>
</tr>
</tbody>
</table>

Source: Registrar General, SRS Bulletin, various issues

Historically *dalits* in India widely known as the untouchables were excluded from social, economic and political rights including Right to Education and employment other than forced traditional and customary undignified labour owing to the restrictions imposed on them under the myth of caste system and
the institution of untouchability. But still 1980 there have been sizeable growth and development among these communities. The initiation of economic reforms under the umbrella of liberalization, privatization and globalization reduced their prospects in the social sector development among these communities. The hallmark of liberalization and privatization is cutthroat competition based on efficiency and resource base. These under privileged sections were far behind in social sector development and economic advancement due to limited resource base and economic ambience. The social and economic position of dalits was actually shattered in the era of economic reforms.

Who is a dalit?

Dalit is not a new word. It was used in the 1930s as a Hindi and Marathi translation of depressed classes, the term the British used for what are now called the scheduled castes. The word was also used by B.R. Ambedkar in his Marathi speeches. In ‘Untouchables’ published in 1948 Ambedkar choose the term ‘broken men’ in English translation of dalit, to refer to the original ancestors of the untouchables for reasons which must have been self evident because he did not explain them. The dalit partners received the term and in their 1973 Manifesto expanded its referents to include the scheduled tribes, neo–Buddhists, the working people, the landless and poor peasants, women, and all those who are being exploited politically, economically, and in the name of religion. In this paper the dalits was actually taken into account in the original narrower, caste–based sense.

Socio-Economic background of Scheduled Castes

Indian society is highly stratified with many glaring inequalities among different socio-economic groups. The worst positioned among them are the dalits and tribals. After five and a half decade of planned economic development and all the rhetoric of the socialistic pattern of society, 32 per cent of the urban and 36 per cent of the rural were below poverty line. Out of every bonded labour in the country 66 belongs to the SCs, their share in industrial employment was an abysmally at 5 per cent. As a consequence of all this, the extent of poverty among SCs was as high as 48 per cent as against 29 per cent for the population as a whole.

Maternal and Child Health Care among dalits

Children of women belonging to scheduled caste and scheduled tribes have higher rates of infant and child mortality than children of women belonging to other backward class or other woman.
The Infant and child mortality rates among different communities in India revealed that the conditions of *dalits* are still worse compared to other communities. Table 3 shows that IMR is 60.4 among SCs whereas it is only 43.5 among others. Similarly under five mortalities is 84 among SCs whereas it is 57 among others indicating the deprived situation of *dalits* in the country and needs more attention and allocation for their up liftment.

**Childhood vaccination by *dalits*.**

Vaccination is an important precautionary step taken for preventing acute and chronic illness on the part of children and also for increasing their immunization strength. In the case of vaccination also SCs and STs still lag behind in the utilization of all immunization vaccinations. Similarly in the case of institutional delivery also majority of the dalits are still utilized their home as a safer place of delivery. This is mainly due to their poor economic base as they cannot afford private or public hospital care. It is ashamed that still 72 per cent deliveries of SC mothers are taking place in their home. In the case of nutritional status also SCs and ST children are suffering much compared to their counter parts in other communities. As far as all the anthropometric measurement are concerned (height for age, weight for height and weight for age) the standard of SCs and STs are very poor compared to others in India. Nutritional status is a major determinant of the health and well being of children. Inadequate and unbalanced diets and chronic illness are associated with poor nutrition among children. In the case of morbidity prevalence also the prevalence rate of fever, diarrhoea, cough and cold is too much among the *dalit* children’s in India.
Table 4 Early childhood mortality rates among different States in India

<table>
<thead>
<tr>
<th>Major states</th>
<th>NNMR</th>
<th>PNMR</th>
<th>IMR</th>
<th>CMR</th>
<th>Under fiveMortality rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delhi</td>
<td>29.3</td>
<td>10.5</td>
<td>39.8</td>
<td>7.3</td>
<td>46.7</td>
</tr>
<tr>
<td>Haryana</td>
<td>23.6</td>
<td>18.1</td>
<td>41.7</td>
<td>11.1</td>
<td>52.3</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>27.3</td>
<td>8.9</td>
<td>36.1</td>
<td>5.6</td>
<td>41.5</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>43.9</td>
<td>21.4</td>
<td>65.3</td>
<td>21.5</td>
<td>85.4</td>
</tr>
<tr>
<td>Madhyaprashesh</td>
<td>44.9</td>
<td>24.7</td>
<td>69.5</td>
<td>26.5</td>
<td>94.2</td>
</tr>
<tr>
<td>Uttarpradesh</td>
<td>47.6</td>
<td>25</td>
<td>72.7</td>
<td>25.6</td>
<td>96.4</td>
</tr>
<tr>
<td>Bihar</td>
<td>39.8</td>
<td>21.9</td>
<td>61.7</td>
<td>24.7</td>
<td>84.8</td>
</tr>
<tr>
<td>Orissa</td>
<td>45.4</td>
<td>19.3</td>
<td>64.7</td>
<td>27.6</td>
<td>90.6</td>
</tr>
<tr>
<td>West Bengal</td>
<td>37.6</td>
<td>10.4</td>
<td>48.0</td>
<td>12.2</td>
<td>59.6</td>
</tr>
<tr>
<td>Assam</td>
<td>45.5</td>
<td>20.6</td>
<td>66.1</td>
<td>20.2</td>
<td>85</td>
</tr>
<tr>
<td>Tripura</td>
<td>33.1</td>
<td>18.3</td>
<td>51.5</td>
<td>8.2</td>
<td>59.2</td>
</tr>
<tr>
<td>Gujarat</td>
<td>33.5</td>
<td>16.2</td>
<td>49.7</td>
<td>11.9</td>
<td>60.9</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>31.8</td>
<td>5.7</td>
<td>37.5</td>
<td>9.5</td>
<td>46.7</td>
</tr>
<tr>
<td>Andharaprasr</td>
<td>40.3</td>
<td>13.2</td>
<td>53.5</td>
<td>10.2</td>
<td>63.2</td>
</tr>
<tr>
<td>Karnataka</td>
<td>28.9</td>
<td>14.3</td>
<td>43.2</td>
<td>12.3</td>
<td>54.7</td>
</tr>
<tr>
<td>Kerala</td>
<td>11.5</td>
<td>3.8</td>
<td>15.3</td>
<td>1.0</td>
<td>16.3</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>19.1</td>
<td>11.2</td>
<td>30.4</td>
<td>5.3</td>
<td>35.5</td>
</tr>
<tr>
<td>All India</td>
<td>39</td>
<td>18</td>
<td>57</td>
<td>18.4</td>
<td>74.3</td>
</tr>
</tbody>
</table>

Table 5 Childhood vaccination by dalit children in India. Percentage vaccinated against different immunization

<table>
<thead>
<tr>
<th>Communities</th>
<th>BCG</th>
<th>DPT</th>
<th>DPT</th>
<th>DPT</th>
<th>Polio</th>
<th>Polio</th>
<th>Polio</th>
<th>Measles</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>75.4</td>
<td>74.2</td>
<td>64.6</td>
<td>51.9</td>
<td>92.2</td>
<td>88.6</td>
<td>76.3</td>
<td>56.7</td>
</tr>
<tr>
<td>ST</td>
<td>71.7</td>
<td>65.9</td>
<td>53.2</td>
<td>40.9</td>
<td>86.8</td>
<td>79.8</td>
<td>64.76</td>
<td>46.1</td>
</tr>
<tr>
<td>OBCs</td>
<td>76.4</td>
<td>74.1</td>
<td>63.9</td>
<td>52.6</td>
<td>94.4</td>
<td>90.3</td>
<td>81.4</td>
<td>55.4</td>
</tr>
<tr>
<td>Others</td>
<td>84.1</td>
<td>82.6</td>
<td>75.8</td>
<td>65.4</td>
<td>94.0</td>
<td>89.7</td>
<td>79.6</td>
<td>68.8</td>
</tr>
</tbody>
</table>

Source NFHS :3,2005-06
Table 6 Place of delivery among dalit mothers in India.

**Place of Delivery**

<table>
<thead>
<tr>
<th>Health facility by Institutions</th>
<th>Public</th>
<th>NGO/TRUST</th>
<th>Private</th>
<th>Home</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.C</td>
<td>19.4</td>
<td>0.2</td>
<td>13.4</td>
<td>66.8</td>
<td>0.2</td>
</tr>
<tr>
<td>S.T</td>
<td>11.6</td>
<td>0.3</td>
<td>5.8</td>
<td>81.9</td>
<td>0.2</td>
</tr>
<tr>
<td>O.B.C</td>
<td>16.1</td>
<td>0.5</td>
<td>21.1</td>
<td>61.9</td>
<td>0.2</td>
</tr>
<tr>
<td>Others</td>
<td>21.8</td>
<td>0.6</td>
<td>28.7</td>
<td>48.8</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Source: NFHS 3, 2005-06

Table 7 Nutritional status of children among *dalits* according to three anthropometric norms.

(percentage below -2SD)

<table>
<thead>
<tr>
<th>Community</th>
<th>Weight For age</th>
<th>Height for age</th>
<th>Weight for height</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.C</td>
<td>47.9</td>
<td>53.9</td>
<td>21</td>
</tr>
<tr>
<td>S.T</td>
<td>54.5</td>
<td>53.9</td>
<td>27.6</td>
</tr>
<tr>
<td>O.B.C</td>
<td>43.2</td>
<td>48.8</td>
<td>20.0</td>
</tr>
<tr>
<td>Others</td>
<td>33.7</td>
<td>40.7</td>
<td>16.3</td>
</tr>
</tbody>
</table>

Table 8. Morbidity prevalence among *dalit* children in India

Percentage of children suffering in past two weeks as per NFHS Survey

<table>
<thead>
<tr>
<th></th>
<th>Cough accompanied by fast breathing</th>
<th>Fever</th>
<th>Any diarrhoea</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.C</td>
<td>19.6</td>
<td>29.4</td>
<td>19.8</td>
</tr>
<tr>
<td>S.T</td>
<td>22.4</td>
<td>31.4</td>
<td>21.1</td>
</tr>
<tr>
<td>O.B.C</td>
<td>19.1</td>
<td>28.1</td>
<td>18.3</td>
</tr>
<tr>
<td>Others</td>
<td>18.7</td>
<td>30.4</td>
<td>19.1</td>
</tr>
</tbody>
</table>

Source: NFHS 3

Maternal health includes the provision of ante-natal care (ANC), delivery care, and post-natal care (PNC). In India, ante-natal care is provided in the public sector through the network of primary health centers and urban health posts primarily by female health workers who are expected to visit women in their homes and provide the basic services. In India the National Family Health Survey periodically (every five years) collects information on antenatal, delivery, and post-natal care and so on.
Antenatal Check-up

The coverage of antenatal care in India is heading towards a high level. The NFHS-2 estimates that during the late 1990s ante-natal check-up was conducted by qualified professionals in case of 65 per cent of births. Kerala is the forerunner in this with near universal coverage closely followed by Tamil Nadu which is also nearing the full coverage level. Andhra Pradesh too has translated its effort into good results (93 per cent coverage) followed by Maharashtra and Bengal (90 per cent each). Other states with high coverage by antenatal check-up are Himachal Pradesh, Karnataka, Gujarat, and Jammu and Kashmir. Orissa has shown good achievement in this indicator. However, at the other end Uttar Pradesh and Bihar are two states with a very poor coverage (34 and 36 per cent respectively).

The pattern has not changed much over the period though generally the level has improved between the two NFHS surveys. Kerala remained at the apex and Tamil Nadu had also rank-wise the same position; Rajasthan and Bihar fare poorly. Uttar Pradesh has slipped to a very low level. On the other hand, the level has risen substantially in Orissa.

Overall, the coverage is lower for the SC and the ST populations, compared to Others the deprivation is especially greater for the ST women. This is not unexpected since the ST population is living in relative isolation and often in hilly areas has poor access to health services. On the other hand, though the SCs do not get as much care as the Others, the gap is relatively narrow. The SCs, though generally discriminated against, live in villages along with others and are more successful than the STs in obtaining services.

The relative deprivation of the SCs and the STs is seen in almost all the states. Assam is a notable exception, but this is not due to a good coverage for the scheduled groups in the state, rather on account of poor coverage for all the communities. Since Kerala has reached a near universal coverage, obviously hardly any difference among social groups is seen. In many other states, the gap between the SCs and Others is narrow. However, a few states exhibit large disparity between SCs and Others, Rajasthan, Karnataka, Haryana, and Uttar Pradesh in the two surveys and Bihar, West Bengal and Punjab in at least one round of the NFHS.

In almost all the states that have substantial ST populations, the social gap is quite wide between Others and STs compared to Others and SC. Both the surveys depict this. In some states, the condition of the STs is extremely poor compared to the Others. Andhra Pradesh, Madhya Pradesh, Maharashtra, and Uttar Pradesh are notable in this aspect and in a few other states also the condition of the STs is quite dismal.
TT Injection and IF Supplements

Two tetanus toxoid (TT) injections are recommended to be given during pregnancy. Tamil Nadu leads in TT injection along with Kerala. In all states, 60 per cent or more women are immunized for tetanus as estimated by the NFHS-3. The lowest slabs are the BIMARU states. The pattern closely matches with that of antenatal check-up; however, overall the coverage of TT injections is higher than that of antenatal check-ups by about 10 points. Injections are given on a large scale on fixed days and campaigns improve awareness and accessibility. On the other hand, check-ups are more individually catered and hence presumably have lower coverage. The social disparities in TT coverage are more or less similar to those observed for antenatal check-ups. Wide gap between SCs and Others is seen in a few states like Karnataka, Rajasthan, Uttar Pradesh and Himachal Pradesh in NFHS-1 and Bihar in NFHS-2. By the late 1990s, the practice of taking TT injections was fairly widespread among the SCs as well resulting in only small social gaps. However, the STs do not seem to get the tetanus protection as much as the SCs. Wide gaps are seen in almost all the states. Injection campaigns do not seem to reach the tribal populations that suffer from location disadvantage.

Delivery Care

In India, a majority of deliveries, especially in rural areas, continue to take place at home. Only a small proportion of deliveries take place in health institutions such as hospitals, maternity homes, public or private, primary health centers, and sub-centers. The NFHS-3 reveals that the percentage of deliveries in health institutions is 41 in the year 2005-06. There was some progress during the period 1992-93 and 1998-99 as 26 and 34 percent respectively. There are, however, large inter-state disparities in the practice to seek institutional delivery care. As estimated by the NFHS-3, only 22 percent in Uttar Pradesh and Bihar and 30 percent in Madhya Pradesh and 32 percent in Rajasthan received institutional delivery. Kerala and Tamil Nadu do exceptionally well and are at the top as in the case institutional delivery care.

At the national level, SC women get much less institutional care compared to Others, by about 10 percentage points, and the ST women even less so, by 20 percentage points. In delivery care from the public sector, the gaps are narrower; in fact, the percentage of deliveries taking place in government institutions is almost the same for SC and Other women and it is only marginally lower for ST women according to NFHS-2. Obviously, women from the non-scheduled groups, being financially better off, utilize the private sector substantially more than the scheduled women. The social gap, between SC and Other women in securing institutional delivery is wide in most states. Exceptions are Kerala and Maharashtra where the gap is narrow. In some states like Assam, Himachal
Pradesh and Bihar, the gap is narrow but these have low level of coverage for all the communities. Overall, the STs get much less institutional care than the SCs and the Others. This is true in most of the states with substantial ST populations, the sole exception being Assam. In the matter of deliveries in public institutions, the gaps persist but are narrower. Thus, the STs get poorer delivery care than the SCs and the Others in both public institutions as well as overall. In this manner, a clear contrast is seen between the SCs and the STs. While the SCs are not able to obtain private delivery care as much as the Others, affordability being the main obstacle, the STs do not get either public or private sector service as much as the Others.

Table 9 Status of Key health indicators of SC/ST and Others in India (2005-06) (in percentage)

<table>
<thead>
<tr>
<th>Health indicators</th>
<th>Scheduled Caste</th>
<th>Scheduled Tribe</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNMR</td>
<td>46.3</td>
<td>30.9</td>
<td>34.5</td>
</tr>
<tr>
<td>IMR</td>
<td>66.4</td>
<td>62.1</td>
<td>48.9</td>
</tr>
<tr>
<td>Child Mortality Rate</td>
<td>23.2</td>
<td>35.8</td>
<td>10.8</td>
</tr>
<tr>
<td>Under Five Mortality</td>
<td>88.1</td>
<td>95.7</td>
<td>59.2</td>
</tr>
<tr>
<td>ANC checkup</td>
<td>74</td>
<td>70</td>
<td>84.8</td>
</tr>
<tr>
<td>Percentage institutional deliveries</td>
<td>32.9</td>
<td>17.7</td>
<td>51</td>
</tr>
<tr>
<td>Percentage of women with anemia</td>
<td>41.1</td>
<td>46.6</td>
<td>29.4</td>
</tr>
<tr>
<td>Percentage of children undernourished</td>
<td>53.9</td>
<td>53.9</td>
<td>40.7</td>
</tr>
<tr>
<td>Childhood vaccination</td>
<td>39.7</td>
<td>31.3</td>
<td>53.8</td>
</tr>
</tbody>
</table>

Source: NFHS 3

Low birth weight babies have a high risk of neonatal and infant mortality and hence the proportion of babies with low birth weight is considered as a sensitive index of nations health and development (WHO, 1980). It becomes an indicators of community health and its periodic monitoring helps to estimate the impact of them on preventive health services in the country. The significance and interpretation of low birthweight has recently came into prominence because it indicates the chance of survival, growth and long-term healthy and of impaired cognitive development, diabetes and coronary heart diseases in the later part of their lives (Chase 1969, Blanc and WardLaV 2009). The available data reveals that the proportion of underweight children is high among dalit mothers. India alone accounts for 40 per cent of low birth weight babies in the overall developing world and more than half of them born in Asia. A study based on NFHS data reveals that 70.1 per cent babies were not weighed within 2 days of birth and of these weighed 22.6 per cent were below 2.5 kgm of weight. The RCH survey also reveals the problem of babies not weighed within two days of delivery and
among those weighed the problem of underweight has highest among SC/ST mothers.

**Medical Assistance at Birth/Delivery**

Lack of professional assistance at delivery is a major cause of maternal and neo-natal mortality. Traditionally, village midwives and women at home have been assisting at delivery. Over time, many women have begun to seek the help of doctors or at least trained midwives at the time of delivery. According to the NFHS-3, in India, 48 percent of deliveries have received medical assistant by health personnel and remaining half of new born babies were born without any medical assistance. As seen in many other indicators, the SCs fare poorly compared to the Others, and the STs are even worse-off. The pattern is similar in many states but there is departure from the general pattern in a few states. Kerala shows narrow gaps because professional care is available to nearly all sections including the SCs, and Assam and Bihar show narrow gaps because the coverage is low among all the social groups. It can be seen that there is high level equity in Kerala contrasted to low level in the latter two states. Medical assistance is good in Tamil Nadu, though there is a visible gap between two communities (Others and SCs). The gap between the Scheduled Tribe and Others are quite high in almost all the states except Assam. In few states, Andhra Pradesh, Gujarat, Orissa, and Maharashtra, these are extremely high. The poor coverage for the ST women could be on account of poor access to health professionals but also possibly the continuing trust on traditional midwives.

The importance of maternal health care has been well recognized in India for long. The recent reproductive and child health programme and the NRHM also have placed greater emphasis on this aspect of health. Yet, the recent surveys reveal that the goal of providing professional health care during pregnancy and delivery is far from being achieved. While a few states, notably Kerala and Tamil Nadu, are nearing complete coverage in many aspects of maternal care, the situation is quite poor in states like Uttar Pradesh, Bihar, and Rajasthan; Orissa seems to have improved recently and risen over the latter states. Since maternal health care is provided free of cost by the primary health care network involving Community Health Centres, Primary Health Centres, and Sub-centres, all sections should get this care. Yet the coverage is lower for the scheduled groups, and the deprivation is worse for the ST women than the SC women; reflecting wide disparities is maternal health care.

**Micro nutrient Deficiencies and Anemia**

Deficiencies of key vitamins and minerals continue to be pervasive and overlap considerably with problems of general under nutrition. A recent global progress report states that 35 per cent of the people in the world lack adequate
iodine, 40 per cent of the people in the developing world suffer from iron
deficiency and more than 40 per cent of children are Vitamin A deficient which
increases the risk of early death (World Bank Report, 2006) The vitamin
supplementation of Indian children reveals that the vulnerable communities are
the biggest victims of vitamin supplementation (Table 11) and consumption of
foods with rich in iron contents.

Table 10 Trends in Maternal care Indicators- Urban Rural Gap

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Urban</th>
<th>Rural</th>
<th>Urban Rural Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent who received antenatal care</td>
<td>90.7</td>
<td>86.5</td>
<td>83</td>
</tr>
<tr>
<td>Percent who had at least three antenatal care</td>
<td>73.8</td>
<td>70.1</td>
<td>66.8</td>
</tr>
<tr>
<td>Percent who had received ANC within the first</td>
<td>63.0</td>
<td>55.8</td>
<td>40.9</td>
</tr>
<tr>
<td>Percent of births delivered in a health facility</td>
<td>69.4</td>
<td>65.1</td>
<td>58.4</td>
</tr>
<tr>
<td>Percent of deliveries assisted by health</td>
<td>75.3</td>
<td>73.3</td>
<td>66.4</td>
</tr>
</tbody>
</table>

Source: NFHS 1,2,3

Table 11 Micro Nutrient intake among children

<table>
<thead>
<tr>
<th>Background</th>
<th>Percentage who consumed foods rich in Vitamin A in last 24 hours</th>
<th>Percentage who consumed foods rich in iron in last 24 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S.C</td>
<td>S.T</td>
</tr>
<tr>
<td></td>
<td>46</td>
<td>43.8</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>13.3</td>
</tr>
<tr>
<td></td>
<td>OBC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>45.8</td>
<td>11.3</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50.5</td>
<td>19.7</td>
</tr>
</tbody>
</table>

Source NFHS 3
Table 12. Under nourishment and Anemia among mothers and children in India

<table>
<thead>
<tr>
<th>Indicators</th>
<th>SC</th>
<th>ST</th>
<th>OBC</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of children undernourished (weight for age)</td>
<td>53.5</td>
<td>55.9</td>
<td>47.3</td>
<td>41.1</td>
</tr>
<tr>
<td>% of children with anaemia</td>
<td>78.3</td>
<td>79.8</td>
<td>72.0</td>
<td>72.7</td>
</tr>
<tr>
<td>% of women with anemia</td>
<td>56</td>
<td>64.9</td>
<td>50.7</td>
<td>47.6</td>
</tr>
</tbody>
</table>

Source: Planning Commission Task Group Report on SC

The analysis of data related to the maternal care indicators for the three NFHS period reveals that the disparities in maternal health care development among the rural and urban regions of India are still very high. The urban rural gap is very high in the case of deliveries occurred in institutions followed by percentage of deliveries assisted by health personnel. Similarly in the case of percentage of mothers who received at least three antenatal care visits and also parentage of mothers who received antenatal care within the first trimester of pregnancy also, the urban rural gap is too much (Table 9) Similarly the nutrition intake of children also reveals that deprived and marginalized sections are having less nutrient intake and is below the recommended daily allowance.

Conclusion

The analysis of data related to maternal and child health in India reveals that there exist certain disturbing trends in the accessibility and utilization of these facilities by the deprived and marginalized sections. The recent reproductive and child health programme has placed greater emphasis on this aspect of health. Yet, the recent surveys reveals that the goal of providing professional health care during pregnancy and delivery is far from being achieved and the coverage is lower for the scheduled groups, and the deprivation of maternal health care utilization is worse for both the ST and SC women and the situation is worst for the ST than the SC women; probably a result of the location disadvantages the STs face and also due to lack of trained personnel to cater their needs accessible to them.

So in order to meet the special needs of the SC and tribal communities the health policy should provide extension of primary health infrastructure to cover inaccessible area with relaxed norms for improving access and utilization of health services. Evolving a new strategy of combining the indigenous tribal medicine with that of ISM & H is another suitable package for the healthcare upliftment of these vulnerable groups. As such the health care will be reached in the interior tribal areas and also allow the tribal to contribute their traditional knowledge. Training of motivated tribal youth as village health guides, shorter duration courses of say six months could be devised for training cadre of personnel.
on the pattern of bare foot doctors of China with clear condition of posting in the tribal areas and who could be above the health worker. The field of health coverage needs primary attention. Health development depends on availability of staff in the remote tribal areas. However doctors and paramedical staff are reluctant to serve in the trials areas. As a result even if rudimentary infrastructure is available, the personnel are not available and health centers are becoming a scarecrow. The immediate objective must be to address unmet needs of contraception, healthcare infrastructure and healthy personnel to provide integrated service delivery for basic reproductive and maternal and child healthcare. The recently started NRHM can contribute a lot in this by adopting a synergistic approach relating health to determinants of good health by reducing regional and sectional imbalances in health infrastructure, pooling resources, integration of organizational structures and an array of healthcare management and supervision persons to ensure Indian public health standards in each block of the country and each sections of the society. This must be properly implemented and empowered so that the health of all mothers and children irrespective of caste, colour, culture creed and region can be very well protected so as to meet the M.D. goals of better maternal health and reduced child mortality.

References


SOCIO - DEMOGRAPHIC AND CLINICAL CORRELATES OF TEENAGE PREGNANCY: A STATE WIDE ANALYSIS FROM INDIA

* Mukul Kumar Saxena, ** Vibha Pandey, *** Sahoo Saddichha, **** Mithilesh Methuku

Abstract

Objective

Teenage pregnancies, are known to be associated with significant maternal and fetal complications. Previous studies have either socio-economic variables, or have been hospital based studies. This is first study from India to consider Pre hospital clinical variables, complications and the effect of pre hospital care. Study design: A retrospective analysis of 25176 pregnancy cases from Andhra Pradesh, including 1967 cases of teenage pregnancy. The socio demographic as well as clinical correlates were compared between adult and teenage pregnancies and analyzed statistically.

Teenage Pregnancies reported higher incidence in lower socio-economic strata and had more abnormal presentations and medical conditions complicating pregnancy (p<0.05). Systolic BP revealed significant association (p >0.05). Hypertension and hypotension was more common in adult pregnancies. The Paired sample T-test, was significant for clinical variables at scene and at hospital (p>0.01) for respiration (t-value–5.179 CI (-).299(-).135). The BP (p>0.05) (t-value 3.147) [CI 0.173, .746). SPO2 (p >0.01) (t-value–5.019) [CI -2.914, - 1.277). Pre hospital care was found to be statistically significant (p > 0.05).

Key words: Teenage Pregnancy, Complications, Pre hospital care, Socio-economic factors

Introduction

Teenage Pregnancy, is a clinical problem mired in social-economic inequities especially in developing world. It is estimated by WHO, that About...
16 million women 15–19 years old give birth each year, about 11 per cent of all births in the world. Ninety-five per cent of these births occur in low-and middle-income countries. The average adolescent birth rate in middle-income countries is more than twice as high as that in high-income countries, with the rate in low-income countries being five times as high. The proportion of births that take place during adolescence is about 2 per cent in China, 18 per cent in Latin America and the Caribbean and more than 50 per cent in sub-Saharan Africa. Half of all adolescent births occur in just seven countries: Bangladesh, Brazil, the Democratic Republic of the Congo, Ethiopia, India, Nigeria and the United States. In India the incidence of such pregnancies is reported to vary from 8-14 per cent in different reports. It has been reported that More than 31 per cent of women aged 15 to 19 are married. The average age of marriage of adolescent females in India is 14.7 years. Nearly half of the female adolescents are already mothers and over a tenth are pregnant.

The effect of such pregnancies is deleterious on the teen mother as well as the baby that is delivered. Review of literature leads to a degree of ambiguity on the subject of complications. There are studies, which suggest an increased incidence of complications in Teenage pregnancy, while there are reports which do not substantiate similar association. The complications associated with teenage pregnancy are reported to be pre-term delivery, low birth weight, small for gestation babies have been reported to be associated with teenage pregnancy. However there are certain studies which do not report such association. There is similar ambiguity in literature about greater risk of neonatal mortality in adolescent pregnancy. Different studies support this view point, while there are studies which do not. Ante natal complications reported to be common in Indian settings have been anaemia, pre eclampsia and eclampsia.

The explanation for such differences may be traced to the fact that social, and demographic determinants play an important role in the ante natal care, and the existence of infrastructural differences. Thus differences would be found in developing and developed countries, urban and rural settings and cultural and ethnic differences. India, is an important reference point for such studies, because here the differences on account of urban and rural settings, culture and ethnicity, rich and poor condition and gender bias are more pronounced than most other settings.

Most of these studies are hospital based. This study is unique in that it records parameters and clinical situation in field and pre hospital settings. This is the first such study being presented from India, because no integrated comprehensive EMS (Emergency Medical services) provider existed in India before EMRI (Emergency Management and Research Institute).
Methodology

This is a retrospective study of 25176 cases of pregnancies, managed by GVK_Emergency Management and Research Institute, from January 2008 to December 2008, in state of Andhra Pradesh. Andhra Pradesh is fifth largest state of India, with an area of 2,76,754 sq. km, accounting for 8.4 per cent of India’s territory. The female: male ratio is 978/1000. The population is basically Rural predominant, with 72 per cent population being Rural. GVK_Emergency management and Research Institute, the only comprehensive EMS providing services in India, has been established in 2005, and has covered nine states by now. This is the first Indian study to capture data from the scene to hospital and provides insights which were previously not available, especially with regards to pregnancy cases from Rural areas.

Out of these 25176 pregnancy cases, 1967 cases fell within the class defined as Teenage pregnancy. For the purposes of this study, teenage was considered to be between 13-19 years of age. The socio demographic details and clinical correlates were recorded by a trained paramedic on a PCR (Patient care record) form. These records were subsequently studied and analyzed. The focus of analysis was on whether there are any socio demographic and clinical differences in teenage pregnancies and adult pregnancies.

Statistical analysis was carried out using SPSS version 16.0 and tests of significance (chi-square) were done for associations. Paired Sample T–tests were done to test the significance of changes in vital parameters following pre hospital care rendered during management of patients from scene to hospital.

Results and analysis

Most of the cases handled by EMRI were pregnancies from socially marginalized classes (backward castes and scheduled caste). It may be pertinent to note that these two castes are considered to be low placed on the caste system and social hierarchy. Out of total adult pregnancies these constituted 44.5 per cent of cases, while in case of teenagers they constituted 76.5 per cent of pregnancies. Regarding economic status, patients from lower socio economic status were 98.8 per cent for adult pregnancies and 98.7 per cent for teenagers.

Regarding occupation, students were more in teenage pregnancies as compared to adult pregnancy. The association was considered significant statistically at level of p >0.05. (Table 1. refers)
Table 1. Comparative socio-economic profile: Adult and Teenage Pregnancy

<table>
<thead>
<tr>
<th>S.No</th>
<th>Variable</th>
<th>Teen age (n=1967)</th>
<th>Adult (n=23209)</th>
<th>Chi-Square</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Business</td>
<td>0.40%</td>
<td>0.20%</td>
<td>22.03</td>
<td>0.003*</td>
</tr>
<tr>
<td></td>
<td>Daily wages</td>
<td>33.70%</td>
<td>35.90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employed</td>
<td>1.10%</td>
<td>1.10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>House Maker</td>
<td>49%</td>
<td>48.90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Street child</td>
<td>0.20%</td>
<td>0.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td>0.20%</td>
<td>0.50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>14.60%</td>
<td>13.70%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BC</td>
<td>46.10%</td>
<td>44.50%</td>
<td>5.09</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>OC</td>
<td>11.40%</td>
<td>12.90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SC</td>
<td>30.40%</td>
<td>29.70%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ST</td>
<td>12.20%</td>
<td>12.90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Income</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pink Card</td>
<td>1.30%</td>
<td>1.20%</td>
<td>0.007</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>White Card*</td>
<td>98.70%</td>
<td>98.80%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*P<0.05  
# low income group

Association with complication rates were also considered significant at level of (chi-square: p > 0.05). The complications associated with pregnancies included Abnormal Presentations, Abortions, Bleeding in Pregnancy, Delivery in Ambulance, Eclampsia / Convulsions, Fetal loss, patient attended to, while in labor, Medical conditions complicating pregnancy, Post Caesarian in labor. Abnormal presentations and medical conditions complicating pregnancy were significantly higher in teenage pregnancy. The association was statistically significant at level of p >0.05. (Table 2. Refers)

The study of vital parameters in the pre hospital settings revealed that there was not much of a difference between the adult and teenage pregnancies, as regards respiration at scene and at hospital, except that teenage pregnancy group revealed a higher incidence of tachypnea (RR25-35). \( SPO_2 \) at scene and at hospital and GCS levels. However, systolic BP revealed significant association on chi–square test at level of p >0.05. It was noted that incidence of hypertension as well as hypotension was found to be increased in adult pregnancies as compared to teenage pregnancies (Table 3 refers).

In case of teenage pregnancies, Paired Sample T–tests showed significance at level of p >0.01 for respiration at scene and respiration at hospital (t-value= 5.179 ) [CI-.299 , -.135]. The BP at scene and at hospital was found to be significant at level of p >0.05 (t-value 3.147) [ CI 0.173 - .746]. \( SPO_2 \) at
scene and at Hospital showed significance at level of \( p > 0.01 \) (t-value–5.019) [CI -2.914 , - 1.277]. GCS at scene and at hospital was not considered significance at level of \( p > 0.05 \). (Table 4 refers) This has been reflected in change in condition of patient during transportation and was found to be statistically significant at level of \( p > 0.05 \) (chi-square). There was no significant difference in the pre hospital care provided to both groups.

### Table 2. Complications in pregnancy: Comparative incidence

<table>
<thead>
<tr>
<th>S. No</th>
<th>Complication</th>
<th>Teenage N=1967</th>
<th>Adult N=22903</th>
<th>Chi-square</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Abnormal presentation</td>
<td>2.10%</td>
<td>1.90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Abortions</td>
<td>3.40%</td>
<td>3.40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Bleeding in Pregnancy</td>
<td>4.20%</td>
<td>5.10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Delivery in Ambulance</td>
<td>0.80%</td>
<td>1.60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Eclampsia Convulsions</td>
<td>1.60%</td>
<td>2.10%</td>
<td>26.99</td>
<td>0.003*</td>
</tr>
<tr>
<td>6</td>
<td>Fetal loss</td>
<td>1.20%</td>
<td>1.20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>In Labor</td>
<td>73.20%</td>
<td>72.30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Medical conditions complicating pregnancy</td>
<td>3.80%</td>
<td>2.40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Normal Pregnancy</td>
<td>8.00%</td>
<td>8.20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Post Caesarian in labor</td>
<td>1.50%</td>
<td>1.70%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Not categorized</td>
<td>0.10%</td>
<td>0.20%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 3. Comparative pre hospital clinical correlates: Adult and Teenage Pregnancy

<table>
<thead>
<tr>
<th>S. No</th>
<th>Clinical variable</th>
<th>Teenage</th>
<th>Adult</th>
<th>Chi-Square</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Blood Pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hypotension</td>
<td>0.30%</td>
<td>0.30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Normal</td>
<td>67.20%</td>
<td>65.40%</td>
<td>2.62</td>
<td>0.27</td>
</tr>
<tr>
<td></td>
<td>Hypertension</td>
<td>32.50%</td>
<td>34.30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Respiration Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 to 10</td>
<td>0.20%</td>
<td>0.20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>26 to 35</td>
<td>1.10%</td>
<td>0.90%</td>
<td>1.84</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>11 to 25</td>
<td>98.70%</td>
<td>98.90%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt;35</td>
<td>0.10%</td>
<td>0.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>SPO2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hypoxia</td>
<td>34.60%</td>
<td>34.20%</td>
<td>0.11</td>
<td>0.37</td>
</tr>
<tr>
<td></td>
<td>Normal</td>
<td>65.40%</td>
<td>65.80%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>GCS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 to 8</td>
<td>0.00%</td>
<td>0.00%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9 to 13</td>
<td>1.60%</td>
<td>1.50%</td>
<td>1.23</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>14 to 15</td>
<td>98.40%</td>
<td>98.50%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4. Paired T – test (Teenage Pregnancy)

<table>
<thead>
<tr>
<th>Pair</th>
<th>Comparison</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 1</td>
<td>respirationrate_AtScene -</td>
<td>-0.299</td>
<td>-0.135</td>
<td>-5.18</td>
<td>1966</td>
</tr>
<tr>
<td></td>
<td>respirationrate_AtHosp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 2</td>
<td>BP_AtScene - BP_AtHosp</td>
<td>0.173</td>
<td>0.746</td>
<td>3.147</td>
<td>1966</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 3</td>
<td>spo2_AtScene - spo2_AtHosp</td>
<td>-2.914</td>
<td>-1.277</td>
<td>-5.02</td>
<td>1966</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 4</td>
<td>GCS_Total_scene - GCS_Total_Hospital</td>
<td>-0.00229</td>
<td>0.03686</td>
<td>1.731</td>
<td>1966</td>
</tr>
</tbody>
</table>

Table 5. Paired T test (Adult Pregnancy)

<table>
<thead>
<tr>
<th>Pair</th>
<th>Comparison</th>
<th>95% Confidence Interval of the Difference</th>
<th>t-value</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 1</td>
<td>respirationrate_AtScene -</td>
<td>-0.247</td>
<td>-0.2088449</td>
<td>-23.7</td>
<td>25175</td>
</tr>
<tr>
<td></td>
<td>respirationrate_AtHosp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 2</td>
<td>BP_AtScene - BP_AtHosp</td>
<td>0.0814</td>
<td>0.25176524</td>
<td>3.833</td>
<td>25175</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 3</td>
<td>spo2_AtScene - spo2_AtHosp</td>
<td>-1.967</td>
<td>-1.5167014</td>
<td>-15.17</td>
<td>25175</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 4</td>
<td>GCS_Total_scene - GCS_Total_Hospital</td>
<td>-0.008</td>
<td>0.00375074</td>
<td>-0.73</td>
<td>25175</td>
</tr>
</tbody>
</table>

Discussion

As has been noted earlier in this study, teenage pregnancy constitute a clinical challenge, mired in social inequities. The percentage of teenage pregnancy in our study is 7.8 per cent. This is comparable to various other Indian studies where the range has been 8 per cent -14 per cent. The incidence is much higher in developed countries. In United States for women 15-19 years, mean age at first intercourse is 15.8 years, live births per 1000 are 54.4, abortion rates per thousand is 17.0. Corresponding figures for Netherlands is 17.7, 6.9 and 5.3. and France are 16.8 years, 9.1 and 7. In India, Thirty-four percent of women age 15–19 are already married. Early marriage carries with it proportionate increased incidence of adolescent pregnancy, particularly in rural regions where the rate is much higher than it is in urbanized. National family health survey report revealed median age for in India, the median age at first cohabitation with husband is 17.4 years for women age 20–49. (NFHS2) report. It is also reported that most Indian teenagers lack preliminary sex information as well as about contraception. Worse still, cases outside wedlock lead to social ostracism and fearing it, many parents try abortions by unqualified practitioners leading to increased risk of maternal mortality. This behavior is more prevalent in lower socio-demographic regions.
socio economic strata. The median age of first cohabitation increases steadily with the standard of living, from 16.2 for women living in households with a low standard of living to 19.6 for women living in households with a high standard of living. As per census 2001, the number of ever married women (EMW) below 19 years of age was 13013621. The number of children ever born in same age group was 5286720. The mean number of children (MNB) was 0.73. Rural-urban comparison of MNB makes it clear that the MNB in rural (4.10) is much higher than in urban (3.35) and this is valid for EMW in different social groups also. A decline in MNB from 4.42 to 4.10 in rural and from 3.96 to 3.35 in urban during 1991-01 clearly shows that the rate of decrease in MNB is much faster in urban (15 per cent) as compared to rural area (7 per cent). In case of scheduled castes (SCs) and scheduled tribes (STs), MNB is higher for scheduled castes (4.19) than scheduled tribes (4.11) and the respective figures in 1991 were 4.38 and 4.27 showing a decrease by 4 per cent during 1991-01 for both the groups. A similar pattern is noticeable in our study as well. Thus we find that backward class and Scheduled castes constitute as much as 76.5 per cent of all teenage pregnancies. Similarly, 97.8 per cent of all teenage pregnancies in this study were constituted by White card holders (lower economic status).

The complications of adolescent pregnancies are well recorded. As per WHO, although adolescents aged 10-19 years account for 11 per cent of all births worldwide, they account for 23 per cent of the overall burden of disease (disability-adjusted life years) due to pregnancy and childbirth. Fourteen percent of all unsafe abortions in low-and middle-income countries are among women aged 15–19 years. About 2.5 million adolescents have unsafe abortions every year, and adolescents are more seriously affected by complications than are older women. The present study also records increased incidence of complications in teenage pregnancy, especially abnormal presentations and medical conditions complicating pregnancy.

Institutional deliveries have been found to decrease the risk of maternal complications and maternal mortality. In Indian settings, the incidence of institutional deliveries is very low. EMRI, has been placed in a pivotal role in encouraging and implementing the practice of institutional delivery. It has, for the first time, given a practical option to expectant mothers to go for institutional delivery, even in inaccessible areas. However, since the population belonging to lower socio economic status also suffers from low literacy and awareness, quite often, the requisition for services is delayed. This is reflected in findings of this study which indicate that as many as 73.2 per cent of teenage pregnancy were in labor when attended to. Worse still, an additional 1.5 per cent cases were post caesarian, in labor. It is evident on statistical analysis as well, that the association of complications with teenage pregnancy is significant.
Conclusion

Teenage pregnancies are a challenge in obstetrics, mired in socio-economic inequities, in India. In developed countries, on other hand, it is more of a social and economic challenge for the policy makers and society. However, the clinical correlates of complications, in both the settings are same. The emphasis, that needs to be placed on prevention of teenage pregnancies, remains essentially the same. The present study, for the first time, brings about pre hospital correlates of teenage pregnancy comparing it to those in adult pregnancy and seeks to underline the differences. It is imperative to change the mindset especially in Indian rural settings to raise the age of marriage. It will also help to ensure that teenage mother gets proper ante natal, pre hospital care and facilities for Institutional delivery.

Conflict of Interest: None

References


accessed on 23 May 2009

26. Alan Guttmacher Institute, Into a New World 1998; (3) UNFPA, State of the
World Population 1998

27. National Family health survey 2; Summary of findings Page 2

28. National Secondary Data\Census 2001-part II\India F- Fertility tables
(M00106)\F_series accessed on 23 May 2009

    en/index.htm accessed on 23 May 2009
SOCIOLOGICAL ANALYSIS OF THE PROBLEMS OF THE OLDEST OLD (A STUDY CONDUCTED IN KERALA)

* R.S. Sandhya

Abstract

Ageing of population is a major aspect of the process of demographic transition. Is ageing a Sin? No. But it is a fact that in many ways the aged suffers a lot in the fag end of their life. The reason for the same may be different and many folded. Whatever be the reason for this situation, it is a fact that there are aged persons who are dissatisfied with life. The advance in medical knowledge has lead to an increase in life expectancy and an increase in the number of old people in the society. The rapid increase in the number of old people in the population raises various social, economic and health issues. Many studies all over the world have shown that ill health is one of the most important factors that cause fear in the minds of old people. Of all the states in India, Kerala has the highest proportion of elderly persons above the age of 60. While the overall figure in India is 7.5 per cent, in Kerala the proportion is 10.2 per cent. The oldest old (80+) in Kerala is just 2,90,000 in 1991 and is expected to increase to one million in 2021 and further to 3.3 million by 2051. The study addresses itself to the study of one segment of the ageing population, viz. the oldest old i.e. those who are 80 years and above. The concept of ‘feminization of ageing’ can be most appropriately applied in this segment of the old. The study focuses on the economic, social, psychological and health problems and the needs of this group from a sociological perspective. It was inferred that this age is characterized by a multiplicity of disease, of which some are acute and most of them chronic.

Key words: oldest old, health, feminization of ageing, morbidity, health care.

Introduction

Population ageing indisputably has come to stay and will remain a topic of concern for a long time to come. Ageing is a biological process and experienced by the mankind of all times. Ageing of population is a major aspect of the process of demographic transition. The developed regions of the world being ahead of the developing countries with respect to demographic transition had already experienced its consequences; whereas the developing world has been facing
the consequences only currently. The recent emphasis on studies pertaining to the elderly in the developing world has been attributed to their increasing numbers and deteriorating conditions. While the increasing numbers are attributed to demographic transition, the deteriorating economic and social conditions are the result of the fast-eroding traditional family system in the wake of rapid modernization, urbanization and migration. The combination of high fertility and declining mortality during the twentieth century has resulted in large and rapid increase in elderly populations as successively larger cohorts step into old age (Irudaya Rajan, 2003)

India is now in the third phase of a demographic cycle where the death rate continues to decline, the birth rates tend to fall and the population continues to grow. From only 12 million persons above the age of 60 in 1901, the number crossed from 20 million in 1951 to 57 million in 1991. It is expected that the 100 million mark will be reached in 2013. (GOI, 1999). Within the elderly population, persons aged 70 and above has also grown rapidly; from a mere 8 million in 1961 to 21 million in 1991 and to 29 million in 2001. The proportion of the elderly above 70 years of age and the total population increased from a mere 2.0 percent in 1961 to 2.9 in 2001. In 1961, the Indian Census has reported 99 thousand centenarians. Their number went up to 138 thousand in 1991. The growth rates among the different groups of the elderly, namely 60 years plus, 70 years plus and 80 years plus during the decade 1991-2001, were much higher than that of the general population growth rate of 2 per cent per annum. (Rajan et. al., 2006)

**Number and Proportion of Elderly by Different Age Groups, India, 1961-2001**

<table>
<thead>
<tr>
<th>Age</th>
<th>Number (in Millions)</th>
<th>Percent of elderly to the total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>60+</td>
<td>25</td>
<td>33</td>
</tr>
<tr>
<td>70+</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>80+</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>90+</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>100+</td>
<td>0.01</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Compiled by Irudaya Rajan, Risseeuw and Perra, 2006

India is one of the few countries in the world where males’ out- number females. This phenomenon among the elderly is of prime importance because female life expectancy at ages 60 years and 70 years is slightly higher than that of males. However, at any given age, there are more widows than widowers. (Mari Bhat, 1992)
Sex Ration and Growth Rate among Indian Elderly, 1971-2001

<table>
<thead>
<tr>
<th>Age</th>
<th>Sex ration of Elderly (Males per 1000 Females)</th>
<th>Growth of Elderly (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60+</td>
<td>1066</td>
<td>1042</td>
</tr>
<tr>
<td>70+</td>
<td>1030</td>
<td>1026</td>
</tr>
<tr>
<td>80+</td>
<td>950</td>
<td>990</td>
</tr>
<tr>
<td>90+</td>
<td>897</td>
<td>892</td>
</tr>
<tr>
<td>100+</td>
<td>798</td>
<td>844</td>
</tr>
</tbody>
</table>

Kerala Situation

Of all the states in India, Kerala has the highest proportion of elderly persons above the age of 60. While the overall figure in India is 7.5 per cent, in Kerala the proportion is 10.2 per cent. The proportion of elderly women is 11.5 per cent and elderly men 8.9 per cent (census of India, 2001). According to the 1991 census, there were 25.5 lakhs of elderly persons in the State and they constitute 8.8 per cent of the total population. The estimated number of elderly in the year 2001 was 34.5 lakhs (10.9 per cent) and, this is projected to reach 25 per cent by the year 2031.

In the context of Kerala’s special health scenario, which is often considered at par with those of many industrialized countries, certain factors need special mention. The most important among them are the high degree of health promotion by the rulers even from the days of the princely state of Travancore, the activities focused by Christian missionaries on health and education, especially female education. Investment in health and education by all elected governments in Kerala helped to set a foundation of a well organized primary health care system (Raman Kutty, 2000).

The ageing process is a complex phenomenon and to understand it, it is worthwhile to have an idea of the historical, social, economic and other factors that prevails in the state. Certain relevant changes that occurred in the State over decades and other socio-economic indicators may be summarized as follows:

(i) Abolition of the joint family system and the progressive shift to nuclear families.

(ii) Abolition of “Marumakkathayam” system that was the hallmark of some of the affluent communities in the state.

(iii) The high rate of literacy and the more or less equality in literacy among males and females has induced the eligible to leave their native places in search of jobs to destinations within the country as well as abroad.
(iv) Low birth and death rates

Keralites are known to reside in all parts of the country and abroad. It has been estimated that 14 lakhs Keralites are residing outside the country and many-fold have migrated to other states within the country. Most of these migrants have left their old parents behind to fend for themselves, which is a worrying outcome of this trend. Some of the issues being faced by the old age persons are

a) Lack of acceptance by family members
b) Feeling of loneliness
c) Financial instability
d) Change of lifestyle, forced shift away from native place
e) Lack of involvement in family matters and decision making
f) Health problems
g) Feeling of insecurity
h) Aversion to depend on others
i) Lack of emotional support
j) Isolation from larger society/community etc. (Report on Survey of Aged in Kerala, 2002-03)

Thus the growing concern with the problem of ageing and constant development of services has brought about demands for professionalism in the care of older people through manpower development and training. Yet old people face miserable conditions in their life, as they are family-bonded who are not ready to live in old age homes, and consequently they suffer solitude till their life ends. This is the condition that prevails in the present scenario in most of the rural as well as in urban areas in the country.

Review of Literature

Ageing is a biological process, experienced by mankind at all times. However, concern for ageing population is a relatively new phenomenon, which has risen due to significantly large increase in the number and proportions of aged persons in the society. In the words of Seneca, “Old is an incurable disease,” but more recently, Sir James Sterling Ross commented: “You do not heal old age. You protect it; you promote it; you extend it” (Park K, 2000). As already noted, with the aged population in Kerala constituting 10 per cent (India 7.8 per cent) and moving towards 20 per cent in another 25 years (India 14 per cent), Kerala is swiftly turning into an ‘aged society’.
'Biologically', ageing begins at least as early as puberty and is a continuous process throughout adult life. 'Socially', the characteristics of members of society who are perceived as being old vary with the cultural setting and from generation to generation. 'Economically', the elderly are sometimes defined in terms of retirement from the work force but, especially in societies with a normal or statutory retirement age, many individuals cease economic activity for reasons unrelated to ageing. And many of those who cease to work continue to contribute indirectly to their society’s economy through support to working family members, voluntary work, or deployment of wealth. ‘Chronologically’, for a long time age has been used as an indicator of the expected residual life span. Recent changes in the mortality rates have changed the predictive significance of chronological age, and refinement of care objectives has shifted the emphasis from prolonging life expectancy to increasing life expectancy free of disability. (WHO, 1989)

Inadequate financial resources were indicated as one of the major problems of the Indian elderly. This also seems to be of a higher degree among female elderly compared to their male counterparts (Dak, Sharma, 1987; Nadel, Khatri and Kadian, 1987). Changes in family life patterns become more pronounced by retirement, reduced income, or death of a spouse, changes in social behaviour, relationship with offspring and grand children, and role reversal or parental dependency on offspring. This diminishing support system would influence the disability and subjective well-being of the elderly (Siva Kumar, 1998). The aged population has special health problems that are basically different from those of an adult or young. Most diseases in aged are chronic in nature – cardiovascular arthritis, stroke, cataract etc. Disease processes are usually multiple (Vinod Kumar, 1996). According to Sooryamurthy (1997) in some states, like Kerala the migration of the young is very high, resulting in a crisis in caring older people. There is evidence to suggest that migration of the young is leading to nucleation of the family and thereby adversely affecting inter-generated support (Gangadharan, 1999).

The loss of status of the aged is primarily attributed to lack of positive and creative role of the society after their retirement. The reduction in income and inability to adjust with modern living standard due to retirement creates undue hardship and resentment in the elderly. Studies in India have shown that older people have greater problems in the areas of emotional, social and home adjustment (Mohanty, 1989) in his survey of happiness and unhappiness in old age; Sharma (1971) inferred that happiness, to a great extent, depends on busy life, good health, financial stability and having a spouse and other social contacts. To overcome anxiety, a majority of the elderly read or recite religious books and hymns (D’ Souza, 1982; Jamuna, 1989) Dak and Sharma (1987) observe that the authority and prestige of the elderly person in his family and community is decided by his caste and economic position and with advancing age there is a
shift from a position of domination to that of subordination. Nayar (1987) ascribes a loss in status of the aged with the advent of modernization and industrialization, urbanization, secularization, occupational differentiation, education and growth and individual philosophy that have eroded the traditional values that vested authority with elderly. Mishra (1991) points out that changing social structure, preponderance of individualistic and materialistic values, negative attitude of the younger generation toward the old, are some of the contributory factors leading to the emergence of old age as a social problem.

According to Ramamurti and Jamuna (1984), most elderly people bear a negative self-image and poor self-concept. Changes in looks and likeability and a feeling that others alienate the elderly greatly contribute to the negative self-image. Singh and Gunthey (1983) have found that depression, hyper activity, less control over emotions and thoughts, and dominance of illusions were in higher degrees in old age persons as compared to the adult people.

Old age, in general is associated with multi-dimensional problems. The problems which are associated with old age and the care of elderly are not exclusively the problems of social, cultural and economic ramifications, rather they include health and medical problems also that affect the life of a community as well. Darshan (1987) had reported that among the older persons the most common impairment was visual handicap. Given the prevalence of ill health and disability among the elderly, Vijaya Kumar (1991) found that dissatisfaction existed among the elderly with regard to the provision of medical aid. Paul Wallace (1999) a popular writer dramatically described this phenomenon, the process of senescence as ‘AGE QUAKE’. If we understand the implications of aging, age quake will not descent on us unexpectedly like an earth quake which causes death and destruction all around, instead we will be prepared to face a world converging on the elderly. In his view everyone should be prepared to face later years in life gloriously but within their own limitations.

Methodology

Statement of the Problem

One of the biggest challenges that confront the modern society today is the provision of adequate and effective care to the aged. The unprecedented advancement in medicine and the standard of living has significantly brought down the mortality rate and substantially increased the average life span. Consequently, the census is witnessing a steep increase in the proportion of the old in the general population and this trend is bound to increase in the future.

Ageing is generally defined as population above 60 years of age. Demographers also define the elderly in three categories: young old (60-9 years) old old (70-9 years) and the oldest old (80+ years). Kerala’s population ageing is
quite grave and it is a matter of great concern especially because the state has not yet made any adequate preparation for meeting the grave challenges of ageing.

This study addresses itself to the study of one segment of the ageing population viz. the oldest old i.e. those who are 80 years and above. Though they constitute only a comparatively small population of the old, certain special characteristics differentiate them from young old and old old. The most important among these is the fact that the rate of growth of oldest old is higher than the rate of growth of other segments of the older population and even among general population. Another demographic characteristic is that women outnumber men in this group, and among women the vast majorities are widows. The concept of ‘feminization of ageing’ can be most appropriately applied in this segment of the old. From the economic, social, psychological and health points also the oldest old are different. At this age most people would have retired completely from active life and most of them will be economically dependent upon their kin and this is in a higher degree than in their younger age mates. From the social and psychological point of view also they could be treated as separate groups; social isolation (mostly due to increasing immobility) and depression and other mental problems are the characteristics of this age. An equally important difference is with regard to their health problems. This age is characterized by a multiplicity of diseases; some are acute and most of them chronic. Many of their diseases cannot be cured fully and the treatment is time consuming and expensive.

All these will make the problems and needs of this segment of population quite unique and different. However, the tendency on the part of most of the intellectuals and professionals has been to club them along with other old age groups as though all the elderly constitute a homogenous group. Hence this study took—up oldest old with special focus on the economic, social, psychological and health problems, and the needs of this group from a sociological perspective.

**Objectives**

The objectives of the study are:

1) To find out the social and psychological problems of the oldest old

2) To analyze the economic problems prevalent among them and

3) To explain the health and healthcare needs of the oldest old

**Concepts**

*Oldest Old:* Persons who are 80 years and above.

*Social Problem:* The problems faced by the elderly in the changed social context of family and society.
**Economic Problem:** Those problems related to the difficulties a person would experience for raising resources for day to day existence. Debts, absence of regular and steady income, absence of the primary necessities of life, lack of homes etc. were the problems included.

**Psychological Problem:** This means any severe mental disturbance like depression, feeling of loneliness, diffidence etc.

**Health Problem:** i.e., the different real and imaginary complaints related to the functioning of the body. Constipation, loss of vision, loss of hearing, urinary troubles etc. are some of the complaints listed.

**Design:** The present study is a descriptive one in the sense that it tries to explain the various problems faced by the elderly group in our society.

**Sample Size:** Taking into consideration the geographical area, cultural difference and the demographic structure, three major districts of Kerala viz. Trivandrum, Kottayam and Kozhikode have been selected so that the sample is a cross section of the elderly population of the state. From these three districts, using the voter’s list, the oldest-old were identified. From this entire list, using systematic random sampling method, 100 elderly people were selected from each district, giving equal consideration to both sexes. Thus samples of 300 people belonging to the oldest old group were identified for the study. In Kerala, since the rural-urban difference is hazy as it was pointed out in many studies (Nayar, PKB, 1999) the rural–urban variable was avoided.

**Tools and Techniques:** The data collected are both quantitative and qualitative as the study dealt with a vulnerable section of the population. Using standardized interview schedule, primary data was collected by interviewing the respondents directly at the field. Discussions with family members, health workers, academicians and others working in the field were also held to enrich the study. Secondary data stood collected from books, journals, magazines and research works.

**Analysis:** Analysis was done after the usual procedure of converting the data into qualitative forms.

**Findings of the Study**

**I. Personal Background**

Analyzing the age structure of our respondents, the study found that out of the total respondents 34.77 per cent belongs to the age group of 80-84, 38.0 per cent belongs to 85-89 and 27.3 per cent belongs to 90 and above (Table 1). In Kerala, life expectancy of the elderly has increased owing to medical advancement and other factors favoring it. Better medical facilities, better
nourishment, improved standards of public health, etc have all contributed to a prolonged life. A detailed information on the marital status of the elderly were collected and was found that majority (53.7 per cent) of the population were either widows or widowers (Table 2). Among these most of them were living with their daughter/son in law or son/daughter in law and a minority lived with their relatives. The educational background of the aged showed that only 29 per cent were illiterates (Table 3). The occupation of the aged prior to their retirement has significant bearing on their social life as well as health and psychological needs. The largest single group among the respondents (29.3 per cent) are those engaged in either supervising or handling household affairs (Table 4).

### Table 1: Age Structure

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-84</td>
<td>104</td>
<td>34.7</td>
</tr>
<tr>
<td>85-89</td>
<td>114</td>
<td>38.0</td>
</tr>
<tr>
<td>90 &amp; above</td>
<td>82</td>
<td>27.3</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100.0</td>
</tr>
</tbody>
</table>

### Table 2: Marital Status

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unmarried</td>
<td>16</td>
<td>5.3</td>
</tr>
<tr>
<td>Married</td>
<td>123</td>
<td>41.0</td>
</tr>
<tr>
<td>Widow/widower</td>
<td>161</td>
<td>53.7</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100.0</td>
</tr>
</tbody>
</table>

### Table 3: Educational Status

<table>
<thead>
<tr>
<th>Educational Status</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>87</td>
<td>29.0</td>
</tr>
<tr>
<td>Primary</td>
<td>114</td>
<td>38.0</td>
</tr>
<tr>
<td>Secondary</td>
<td>80</td>
<td>26.7</td>
</tr>
<tr>
<td>Graduate</td>
<td>19</td>
<td>6.3</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4: Occupation during active life

<table>
<thead>
<tr>
<th>Occupation during active life</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farming related activities</td>
<td>30</td>
<td>10.0</td>
</tr>
<tr>
<td>Casual labor</td>
<td>31</td>
<td>10.3</td>
</tr>
<tr>
<td>Other manual work</td>
<td>32</td>
<td>10.7</td>
</tr>
<tr>
<td>Trade or business</td>
<td>48</td>
<td>16.0</td>
</tr>
<tr>
<td>Professional/Technical</td>
<td>11</td>
<td>3.7</td>
</tr>
<tr>
<td>Salaried employment</td>
<td>60</td>
<td>20.0</td>
</tr>
<tr>
<td>Household affairs</td>
<td>88</td>
<td>29.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>300</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

II. Socio – Psychological Problems

The traditional Indian value system used to place a heavy emphasis on the prestige associated with old age. The elderly were the centers of authority and the most respected members of the family. But with the passage of time, the position is gradually undergoing a shift. The process of industrialization, urbanization, social mobility and individualism are the predominant factors involved in transforming the traditional way of life in the community. The younger people migrate to urban areas leaving behind their congenital rural habits. Under such predicament, the old who stay behind cannot be taken care of nor do they have the same prestige and honor that they used to enjoy earlier. These changes lead to their greater alienation and isolation from their family members and from the society at large.

One way of assessing social support is the number of friends and the frequency of mutual visits and interaction with them. Another area is their participation in social activities, including social service and the third aspect is the visits by kins. It may be pointed out that as age advances; there will be severe limitations in the first two activities. Nevertheless it would be interesting to find out the old person’s social network because of its consequences on his personality and quality of life.

As part of the data collection the respondents were asked about their close friends in the neighborhood, and the answers were encouraging. The majority of the respondents (43.3 per cent) had friends numbering 1-3, followed by 37.0 per cent numbering 4-6 persons. Those who had friends of seven and above come 12.0 per cent, whereas 7.7 per cent had no friends at all. In the majority of cases the friends belonged to the same age, sex and community as they lived very near to or within walking distance from the respondent’s place of residence. Asked about the frequency of visit, the study reveals that 56.7 per cent of the respondents visited their friends frequently followed by 22.3 per cent.
undertaking occasional visits. Only a small percentage of respondents (6.3 per cent) visited worshipping centers and 16.3 per cent of them go for walks. Only 1.3 per cent is engaged in outdoor games. However, the respondents’ outdoor activities like visiting places of worship, going for walks or engaging in games etc. were rare in nature; they were more involved in indoor activities like engaging in conversations, doing household works such as looking after grand children, gardening, helping in the kitchen and in keeping the house clean (71.3 per cent). On the enquiry regarding the subject matter discussed with their friends, it was found that majority of the respondents (52.3 per cent) openly discussed all matters with their friends, while only 2.3 per cent discussed personal and intimate matters with their friends while 33.3 per cent of the respondents discussed general matters, while 1.3 per cent were reluctant to discuss any personal matters.

To the majority of the respondents both male and female, friends were their source of strength; especially to the female ones (58.0 per cent and 64.7 per cent respectively), (Table 5). When asked about the adequacy of the facilities available in the house, majority of the male respondents (47.3 per cent) feel that the facilities available in the house were quite adequate. Generally the female respondents feels that their household facilities were not adequate perhaps they being responsible for proper maintenance of the house had more awareness regarding the facilities required. Apart from the subjective assessment of facilities by the respondents, they were asked to rate these facilities in terms of location of the house (whether hygiene or not), ventilation, space (whether spacious or congested), cleanliness, facilities for waste disposal and sleeping arrangement for the respondents. The positive side of the response was that 78.59 per cent gave predominance to hygienic and 67.50 to sleeping space. The general assessment to the enquiry regarding to all the facilities showed that the rating of ‘very good’ was given to only 29.33 per cent cases and ‘good’ for 41.25 per cent cases, 22.81 per cent cases were reported as ‘bad’ and the rest 6.40 percent as ‘very bad’.

Table 5: Friends as a Source of Strength

<table>
<thead>
<tr>
<th>Friends as a Source of strength</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No friends</td>
<td>19 (12.7%)</td>
<td>4 (2.7%)</td>
<td>23 (7.7 %)</td>
</tr>
<tr>
<td>Source of great strength</td>
<td>38 (25.3 %)</td>
<td>32 (21.3 %)</td>
<td>70 (23.3%)</td>
</tr>
<tr>
<td>Source of some strength</td>
<td>87 (58.0%)</td>
<td>97 (64.7%)</td>
<td>184 (61.3%)</td>
</tr>
<tr>
<td>Not a source of strength</td>
<td>6 (4.0 %)</td>
<td>17 (11.3%)</td>
<td>23 (7.7%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>150</td>
<td>150</td>
<td>300</td>
</tr>
</tbody>
</table>

When the researcher put one question regarding their condition with the option (a) received care and affection from near and dear ones (b) enjoyed freedom from financial responsibilities (c) did not get anything good in life. The
response based on these choices showed that the largest percentage of our subjects chose the third one viz. didn’t get anything good in life (55.7 per cent). Second come care and affection from near and dear ones (23.7 per cent) and enjoyed freedom from financial responsibilities comprised of 20.7 per cent. To the list of unfavorable things in life that we listed to our respondents as the possible negative factors in their present life i.e., (a) ill treatment from close kins (sons, daughters, and spouse) (b) ill treatment from grand children (c) indifference of near and dear ones (d) loss of spouse (e) loneliness/depression. The study reveals that of the respondents, 12.0 percent felt that they are ill-treated by their close kins while 14.7 per cent felt that their grandchildren ill-treated them. Indifference of dear and near is felt by 32.7 per cent of the respondent as the next. Loss of spouse also makes things bad with respect to 32.3 per cent of the respondents. Loneliness/depression is said to be the major contributory factor which makes life miserable to 41.3 per cent of the respondents.

For the aged, problems are many and most of these problems can be traced back to the psychology of ageing. After they retire from active life, they go to another phase of life; when they undergo psychological stress and strain more in getting adjusted to the society. During this period most of their problems are related to the psychological fitness, as it is more important than social and physical environment. The researcher enquired the respondents about their present feeling about their old age. Majority of the respondents (58.0 per cent) felt that weakness and tiredness were the major problems faced in old age. The next problem identified was becoming dependent on others (48.0 per cent). Enquiry was directed to the mental health of our respondents through the following question: Are there occasions when you feel depressed over some past life events or brood over them or feel severe mental strain or agony? To this question, 94.0 per cent answered ‘yes’. Asked about the reason for this depression, the following answers were given. Fear of death is seen to be the major cause of depression for majority of respondents, both male and female (38.1 per cent and 39.0 per cent) though this is slightly higher in female respondents. Another important factor that contributes much to the depression felt by the respondents is related to loss of close kins. Next come anxiety about the future. Ill treatment by close kin also contributes for depression of the respondents. It is quite natural that the elderly respondents are more concerned with fear of death than other causes of depression. The study also found that male and female respondents are equal (44.7 per cent) who feel that they are lonely or very much left out by children, relatives and friends. The National Sample Survey (1991) of the elderly finds that loneliness to be one of the major problems among the aged. Old people were found feeling anxious because they couldn’t make new friends in place of dead friends and migrated friends. They were bed-ridden and their life partner was dead. This makes loneliness among the old people (Hitesh N Patel, 1997). Respondents’ feeling of emptiness in life was also studied. Those in the age
group of 90 and above were comparatively feeling more emptiness in life when compared to the other groups. As age increases, for most respondents added to their ill-health it is the feeling of unwanted ness that worsens their plight. The healthy mind of the majority of the respondents could be attributed to their strong belief in God, to their spiritual ideas regarding *punya and papa*, *karma and rebirth and hell and heaven*. Majority of the respondents do make divine offerings (*vazhipadu*) regularly to their worshipping centre.

**Economic Problem**

The primary issue concerning older people in India is their economic empowerment, which determines, directly or indirectly, several factors contributing to their general status. From this study it was found that the majority of the respondents (84.3 per cent) have no financial independence. When a question was posed on the amount of income that they spend on themselves and their spouses, majority of the respondents (41.0 per cent) said that they have no income at all. 25.3 per cent have less than 25 per cent as their income than required for their maintenance. 14.0 per cent of the respondents have around 25-50 per cent income to have their subsistence while 5.3 per cent have less income for their maintenance. 41 per cent of the respondents neither had any income nor had any dependents to provide from their income. However, 28.7 per cent control their own income while 27.7 per cent have their income controlled by son/daughter. Apart from the 41.0 per cent of the respondents having no income, 28.7 per cent spend more than 50 per cent of their income to the family pool. 7.3 per cent do not spend anything on the family. As regards to transfer of property to children 14.7 per cent have no property, 54.0 per cent of the respondent gave away their entire property to their children, while 24.3 per cent gifted away more than 50 per cent of their property to their sons or daughters. Only 7.0 per cent of the respondents are keeping sufficient property under their control. Regarding preference to stay with sons or daughters in old age, about 75 per cent favor sons as against any other choice. On enquiry whether they have saving habits, it is found that 53.0 per cent of the respondents have no saving at all; 47.0 per cent do have some sort of saving; 69.3 per cent of the respondents have no debts at all. The purpose of the debt incurred of the remaining respondents are related to medical treatment, education of their children, maintenance of house, marriage of their children, household expenditure etc, (Table.6). The study also shows that majority of the respondents both male and female (48.0 per cent and 52.0 per cent) feels that there is no change in the attitude towards them by their kins. However 16.0 per cent of the remaining male respondents felt that they are treated better. But 36.0 per cent of males and 48.0 per cent of female respondents opined that their kins disliked them. The higher number of female respondents who are disliked by their kins could be attributed to lesser income or inability to perform their household function as in the past.
Table 6: Causes of Debt

<table>
<thead>
<tr>
<th>Purpose for debt</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No debt</td>
<td>112 (74.7%)</td>
<td>96 (64.0%)</td>
<td>208 (69.3%)</td>
</tr>
<tr>
<td>Education of children/Near Relatives</td>
<td>11 (7.3%)</td>
<td>1 (0.7%)</td>
<td>12 (4.0%)</td>
</tr>
<tr>
<td>Marriage of children</td>
<td>4 (2.7%)</td>
<td>4 (2.7%)</td>
<td>8 (2.7%)</td>
</tr>
<tr>
<td>Household expenditure</td>
<td>7 (4.7%)</td>
<td>30 (20.0%)</td>
<td>37 (12.3%)</td>
</tr>
<tr>
<td>Medical Treatment</td>
<td>16 (10.7%)</td>
<td>19 (12.7%)</td>
<td>35 (11.7%)</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>150</td>
<td>300</td>
</tr>
</tbody>
</table>

Health and Healthcare Problems

Old age in general is associated with multi-dimensional problems. The problems which are associated with old age and the care of elderly are not exclusively the problems of social, cultural and economic ramifications, rather they include health and medical problems also that affect the life of a community as well. Some of the common somatic diseases of the aged found in India are high blood pressure, heart disease, strokes, cancer, diabetes, kidney infections, urinary problem and diseases of joint and bones etc. Decline in vision or hearing and insensitivity to taste are the other common problems of the old age. Many of the elderly suffer from malnutrition. Malnutrition affects not only the general health of the person but also makes him more susceptible to many diseases and infections.

This study highlight the result of the analysis of the subjects who were self-assessed in terms of different variables that are prima facie related to health. Health is an important element in an old person’s life. Not only is good health required for the enjoyment of life but it is also necessary for making the very life worth living. The frequently oft-quoted phrase “give life to years while giving years to life” is quite relevant here. Generally as one grows older, health becomes worse and worse. The so called “expansion of morbidity syndrome” operates actively in this age coupled with this is the multiple disease syndrome.

Analysis of data in terms of age shows that as one gets older, health deteriorates. Health of the aged, especially those of 90 and above is bad (85.4 per cent). As women live longer than men, the most common belief is that they are healthier. In reality, women are more likely to experience poor health. Even though women live longer, they are more sickly and disabled than men throughout their life cycle. The study also reveals that only those residing with their spouses are found to be in good health (25.5 per cent) compared to others. Enquiry about chronic diseases, it was found that the common diseases among the respondents are loss of vision (67.0 per cent) followed by blood pressure (52.0 per cent), loss of hearing (47.3 per cent), urinary problem (45.7 per cent) and diabetes (45.3 per cent) (Table 7).
Table 7: Chronic Morbidity Pattern

<table>
<thead>
<tr>
<th>Chronic Morbidity Pattern</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No illness</td>
<td>2</td>
<td>0.7</td>
</tr>
<tr>
<td>Chronic diarrhea</td>
<td>20</td>
<td>6.7</td>
</tr>
<tr>
<td>Chronic Constipation</td>
<td>26</td>
<td>8.7</td>
</tr>
<tr>
<td>Chronic asthma</td>
<td>29</td>
<td>9.7</td>
</tr>
<tr>
<td>Diabetes</td>
<td>136</td>
<td>45.3</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>156</td>
<td>52.0</td>
</tr>
<tr>
<td>Asthma</td>
<td>83</td>
<td>27.7</td>
</tr>
<tr>
<td>Urinary Problem</td>
<td>137</td>
<td>45.7</td>
</tr>
<tr>
<td>Rheumatism</td>
<td>10</td>
<td>36.0</td>
</tr>
<tr>
<td>Loss of vision</td>
<td>201</td>
<td>67.0</td>
</tr>
<tr>
<td>Loss of hearing</td>
<td>142</td>
<td>47.3</td>
</tr>
<tr>
<td>Heart complaint</td>
<td>73</td>
<td>24.3</td>
</tr>
<tr>
<td>Arthritis</td>
<td>64</td>
<td>21.3</td>
</tr>
<tr>
<td>Alzheimer disease</td>
<td>1</td>
<td>3.5</td>
</tr>
</tbody>
</table>

It is not unusual that aged people are susceptible to multiple diseases as evident from the given above data. When asked our respondents whether they have any perennial health problem many of them responded in the affirmative. The study reveals that majority of the respondents (79.0 per cent) have perennial health problem. The common ailments are found to be paralysis and urinary problems (45.7 per cent) followed by heart disease (26.7 per cent) and cancer (70.0 per cent). The preferred system of treatment of our respondents was also analyzed. Majority of the respondents prefer allopathic system of medicine – male 77.3 per cent and female 89.0 per cent. Homeopathy is preferred only by male respondents (8.5 per cent). However, both males and females prefer Ayurveda next to allopathy. The respondents are not an exception with regard to adoption of the allopathic system of treatment as this is the general trend in the society also. Allopathic medicines are well known for their speedy recovery when compared to other two groups. As with the system of medicine so with the doctors also many people have preferences not solely based in the system of medicine but on whether they are private doctors or government practitioners. Majority of the respondents said that they prefer government doctors more (50.2 per cent) than private practitioners (45.8 per cent). Those having no preference (4.0 per cent) decide on the doctor on an adhoc basis, depending on the exigencies of the situation. Those who went to government doctors highlighted the free service and free medicines offered as the major reason. Nearness of the hospital is also one of the reasons for their preference. Those who do not
prefer government doctors gave a variety of reasons, out of which two of them i.e. low quality of service or of medicines or a combination of these, and the absence of a government hospital/clinic in the neighbourhood or the proximity of a private clinic were found the common reasons. These two reasons were also cited for opting private practitioners/hospitals. In this study, all the respondents were using spectacles, hearing aid, dentures or walking stick. Some of them were using more than one of the above aids.

Table 8: Using Aids

<table>
<thead>
<tr>
<th>Using Aids</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spectacles</td>
<td>112 (56.9%)</td>
<td>80 (49.7%)</td>
<td>192 (53.7%)</td>
</tr>
<tr>
<td>Hearing aid</td>
<td>15 (7.6%)</td>
<td>8 (4.9%)</td>
<td>23 (6.4%)</td>
</tr>
<tr>
<td>Walking stick</td>
<td>54 (27.4%)</td>
<td>43 (26.7%)</td>
<td>97 (27.0%)</td>
</tr>
<tr>
<td>Dentures</td>
<td>16 (8.1%)</td>
<td>30 (18.7%)</td>
<td>46 (12.9%)</td>
</tr>
<tr>
<td>Total</td>
<td>197</td>
<td>161</td>
<td>358</td>
</tr>
</tbody>
</table>

As age advances, people are not able to perform their basic activities of life as efficiently and comfortably as in their previous years. When asked whether they require another person’s assistance for their daily living, majority of the respondents found that they need no help for many of their activities. Those who need some sort of help require assistance mostly for walking to a long distance (30.3 per cent) followed by for bathing purposes (26.7 per cent) (Table 9).

Table 9: Activities that require another Persons Assistance

<table>
<thead>
<tr>
<th>Require another persons assistance</th>
<th>No need of help</th>
<th>Need help</th>
<th>Need full help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get out of the bed</td>
<td>70.0</td>
<td>13.3</td>
<td>16.7</td>
</tr>
<tr>
<td>Go to Toilet</td>
<td>60.3</td>
<td>20.0</td>
<td>19.7</td>
</tr>
<tr>
<td>Bathing</td>
<td>47.3</td>
<td>26.7</td>
<td>26.0</td>
</tr>
<tr>
<td>Walk inside the house</td>
<td>65.7</td>
<td>15.0</td>
<td>19.3</td>
</tr>
<tr>
<td>Walk for some distance</td>
<td>37.3</td>
<td>30.3</td>
<td>32.3</td>
</tr>
<tr>
<td>To take food</td>
<td>66.0</td>
<td>16.0</td>
<td>18.0</td>
</tr>
<tr>
<td>Dressing</td>
<td>61.7</td>
<td>19.3</td>
<td>19.0</td>
</tr>
</tbody>
</table>

Care-giving is assumed as the most vital level of serving the oldest-old and its quality and quantity will be the touchstone of intergenerational relationship. As far as the oldest person is concerned, care giving is the most valued return he/she expects from his son/daughter/closest kin in old age for obvious reasons. Those who got excellent care by the family members or relatives are the lowest segment-male 3.3 per cent and female 1.3 per cent (Table 10).
The respondents of all the age group have minimum or higher degrees of care irrespective of their age. Generally the respondents who reside with families of more than five members are found to be getting better care than their counterparts in the family group of less than four members. The joint family system, itself provided an element of security as well as status to the aged; the reciprocal obligations of the parents to support the child in infancy and the son to support the parents in the old age resulted in a ‘social insurance’ through the cohesion of the traditional family comprising of two or more generations. In this study, the majority (74.0 per cent) of the respondents said that the care given by the family members are sincere but only 20.0 per cent said that the care given was ‘very sincere’. While 2.0 per cent of respondents said that they did not get any real care but 4.0 per cent said that the care was sporadic. To a question, do you think that the amount of care that you get is related to the contribution you make to the family in terms of money and or service, 49.7 per cent of them said that the care that they received is not based on any contribution to the family. The remaining opined that it is dependent to some extent on the contribution made by them. The important component of health is food both in its quality and quantity. Asked about the quality of food available for consumption every day, 59.7 per cent of the respondents said that they had less food than they needed. When enquired about sleeping habits of our respondents, it was found that 11.3 per cent of them sleep less than three hours, majority (44.3 per cent) sleep 6-8 hours and 27.0 per cent sleep 3-5 hours. A good number of respondents (27.3 per cent) admitted that during illness they are looked after by their son or daughter while 25.0 per cent are looked after by sons-in-law or daughters-in-law. Majority of the respondents received this help always during illness from their family members. However home nurses also seems to have played an important role in looking after the aged.

It is interesting to note that most of the respondents are found to be vegetarians; only 25.3 per cent are consuming fish/mutton/chicken etc. daily or occasionally. However a good number of respondents are taking food supplements. As a person gets old, most of them switch on to vegetarianism routinely. The study also found that sound health was considered most important

---

**Table 10: Care Giving**

<table>
<thead>
<tr>
<th>Care giving</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent care</td>
<td>5 (3.3%)</td>
<td>2 (1.3%)</td>
<td>7 (2.3%)</td>
</tr>
<tr>
<td>Very good care</td>
<td>34 (22.7%)</td>
<td>62 (41.3%)</td>
<td>46 (32.0%)</td>
</tr>
<tr>
<td>Adequate care</td>
<td>65 (43.3%)</td>
<td>55 (36.7%)</td>
<td>12 (40.0%)</td>
</tr>
<tr>
<td>Minimum care</td>
<td>46 (30.7%)</td>
<td>31 (20.7%)</td>
<td>77 (25.7%)</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>150</td>
<td>300</td>
</tr>
</tbody>
</table>
by the majority of the respondents-80.3 per cent followed by peace of mind of all sorts-72.0 per cent, financial security-62.7 per cent and non-dependence in daily chores - 62.2 per cent.

Conclusion

Elderly life span brings in its wake a host of changes in body and mind of individuals with a consequent impact on the life style and social relations. The position of the elderly in a family was determined by a complex mix of the socio-economic and cultural development, as well as material and economic interrelations and traditions. In the case of support system to the elderly people of Kerala, the study shows that the family acts as an active support mechanism even after they have ceased employment. As age increases, the degree of satisfaction in life tends to decrease. Though the traditional family bonds and solidarity were change in any improvement in the general well being of the aged must begin from within the context of the family. There was a great need to consolidate the family bonds in the society where these have been snapped, and where the process of loosening of these bonds has already started. There was a need of proper social intervention so that these bonds get consolidated and strengthened. The future of the aged in India as in any other country depends to a great extent on how the aged look at their own predicament and prepare for the sunset years. The government of India though is trying to improve the situation by the welfare measures for the aged; there remains a basic question of how long and how well these welfare measures could solve the problem. The best option could be to strengthen the family ties and in motivating the family members to take care of the aged. This would not only help to improve the situation of the aged bust also to keep intact our traditional and cultural values.

Suggestions

1. The first suggestion is that in policies and program for the elderly, the old shouldn’t be treated as a single homogenous group but as different groups, each with different problems and needs. While individual approach will not be possible in government programs, the services will be most effective if they are geared to the different groups and sub groups among the old. Currently some economic categorization is followed with the restitutes being given old age pension, the indigents being given accommodation for in old age homes and the rich being given rebates in income tax. This is good enough, but a more systematic policy would require the consideration of age and gender in the matter of assistance and service to older persons. In the matter of age, this study would suggest that the elderly be treated as three age groups – the young –old will be still economically active and socially more integrated. Their health also will be much better. But as age advances,
physical capacities decline and the old age compelled to withdraw more and more from their household. This is also the period when one disease after another make their inroads on the old. The cumulative result of all these is to make the cost of maintenance of the old-old and the oldest-old; especially the latter very costly or expensive. If the old is senile of afflicted with dementia or Alzheimer’s disease, there is need for a full time attendant, which multiplies the cost. In the economic field this would immediately suggest an increase in old age pension for this category of destitute and terminal care homes for others in need. The old age pension scheme and old age homes need modification and diversification to this extent. This is only a indication of the need for a conscious policy revision.

2. Give higher priority to the welfare services to vulnerable sections such as the poor, the disabled, the infirm, the chronically sick and those without family support, promoting and assisting institutional and non-institutional services, assisting voluntary organizations for the construction and maintenance of old age homes, training and orientation of personnel employed in welfare institutions and setting up welfare funds for older persons.

3. To overcome the economic problems of healthcare, a graduated health insurance scheme may be introduced, offering health insurance to all and with premium varying according to means. Instead of a blanket approach, a criteria approach is feasible. Group insurance under the auspices of the local administration could be an appropriate method in universal Medicare.

4. Health education can go a long way towards healthy ageing. It should be imparted from younger days. This education should contain lessons on healthy lifestyles, healthy habits, healthy environment, good nutrition and other ways of keeping healthy and coping with diseases. Inter alias, it should also contain modules that will inform the old and common illness of old age, prophylactics and care. This education should be aimed at both the old and the caregiver. In so far as many old age diseases are non curable, care rather than cure should be the strategy for old age morbidity.

5. Involving the mass media as well as traditional and non-formal communication channels ageing issues to sensitize society promotes the concept of active ageing and identifies emerging issues and areas of action.

6. The 21st century is witnessing the graying of the world and India will feel the brunt of it is a serious manner because India has the second
largest elderly population in the world. To assure healthy ageing and quality of life for the elderly, steps should be taken as early as possible and with a sense of seriousness and urgency. Otherwise not only will the currently old suffer from it but those who are approaching old age and those who are younger ages now also will have to lead a not so-happy life as they will sooner or later cross the threshold of youth and enter old age. Ensuring the life of older persons, more congenial and safer through better policies and measures, which could include adequate safeguards against fraudulent dealings, physical and emotional abuse in the household and elsewhere are the need of the hour.

**Note**

1. A notable demographic feature of the Kerala population is the ‘feminization of ageing’, an increase in the share of the women among the older population. The favorable female-male ratio and high female life expectancy at birth in Kerala has contributed to the growing proportion of female elderly in the population. Moreover the incidence of widowhood among elderly women is greater in Kerala when compared to India as a whole.

2. The beauty about the Indian culture lies in its age-long prevailing tradition of the joint family system. Its system under which even extended members of a family like one’s parents, children, the children’s spouses and their offspring, etc. live together. The elder-most, usually the male member is the head in the joint Indian family system that makes all important decisions and rules, where as other family members abide by it dutifully and with due respect.

3. Marumakkathayam (marumakan = nephew; dayam = inheritance/gift) is a matrilineal system of inheritance which was followed by some castes of Royal Families, Nayars, most of the Ambalavasis, Ezhava, some tribal groups and mapplias of Kerala and in some parts of South India. It was one of the few traditional systems that gave women some liberty, and the right to property. In the matrilineal system the family lived together in a “Tharavadu”, (ancestor home) which comprised of a mother, her brothers and younger sisters, and her children. Lineage was traced through the mother, as the children ‘belonged’ to the mother’s family. All family property was jointly owned. An example is the former princely state of Travancore, where the royal lineage passes from the king to his nephew, rather than his son.

**References**

Cavan, R.S. *An Index of Senility in Social Adjustment in Old Age, Social Science Research Council*, New York, 1946.


Vinod Kumar, Ageing Indian Perspectives and Global Scenario,*All India Institute of Medical Science*, New Delhi: 1996.

GENDER AND ITS MANIFESTATIONS IN RURAL AREAS:
A CASE STUDY OF VILLIANUR LOCALE

* N. Chandra

Abstract

Gender studies, in common, include men and women invariably from all communities. This paper is an attempt to concentrate on a case study of gender in the rural area of Villianur; Villianur, belongs to the Villianur Commune Panchayat of Puducherry. The study is an analysis of the difference/discrimination the women and girls face due to their ‘gendered roles’ and also how this difference in different atmospheres such as education, work, dress codes, politics, etc has brought changes in their lives. The analysis also reads how conditioning and socialization have unconsciously trained women to accept the cultural norms and displays how in the recent past with opportunities for education and career gender differences are changing.

Key words: Gender discrimination, gender in rural areas, women education, gender roles, gender

Gender is a construction of the society, which reveals the difference between man and woman through social and cultural constructs; while the sexual difference between them is innate. Research work on gender issues was initiated long back and many of the scholars concluded that most often, biological differences are equated with social attitudes. Presently, there are a large number of debates, with regard to the same. Initially, people treated women and men as different, because they were biologically different but this biological difference slowly began to be a distinguishing feature to distinctly prescribe social roles which in present day research constitutes gender studies. Gender research has attempted to display the different ways of societal attitudes and to reveal the nature of hegemony in societies. In most societies, one notices that there are differences in the pattern of domination based on the culture, the place and the time in which the communities exist. A lacuna in gender studies is that gender structures in rural and urban areas are not taken up for serious study. In order to understand these set patterns of gender differentiation, this study was carried out in the locale of Villianur, belonging to the Villianur Commune Panchayat of Puducherry. Even though industrial and technological growth has taken place in

* Research Scholar, Dept. of English, Pondicherry University, Puducherry 605 014. E-mail: chandramalu@gmail.com
this area, the locale is treated as rural as most of the people are farmers who have no educational background and moreover many of them are also illiterate.

The locale of research was carried out in four-five villages of the Villianur locale. The work was initiated with data collection which was carried out mainly by casual conversation and observation. It was thought best to use this modus operandi as the populace then would reveal their views more explicitly and openly. For convenient analysis the attitudes of the interviewed individuals were divided into two categories, namely, social and cultural. In the category of social issues, the focus was on education, career and politics while the focus of culture was on marriage, family and dress codes.

**Education**

Discussion in education took into consideration the status of family (not the economical status but the status of the family). The second issue concerned was the period, that is, pre-independent and post-independent periods. Also there seemed to be a change in educating a daughter from 1970s to the present. Thus a woman of eighty-five, who could read and write Tamil very well, recollected that education to women during 1950s or early stages of post-independent India was considered as secondary. The primary aim was to get women married. The girls in her age, she reminisced, were not aware of the importance of education; and she personally agreed that women should be educated. She recollected that all her three brothers, were allowed to go to school, while on the other hand, her father did not allow any of his daughters to go to school. She explained that one of her brothers taught her alphabets by writing on the sand and later she gained knowledge on her own by perusing her father’s books.

The scenario put forth by some middle aged women with regard to their own experience was different. According to them, in the 1970s women belonging to the labour class were still not encouraged to study. The situation as far as upper class of society was concerned was quite different. Girls belonging to the higher class of society (namely the landowner’s children) were enrolled in schools not for purposes of education but to display the status and prestige of their parents especially their fathers. However even among them there were many drop outs. The reason for this was mainly the girl attaining puberty. According to this category of people, educating girls after they mature was meaningless as they have to now more importantly learn how to run a family. After the girls attain puberty, in case the father still thinks of educating them then that was seen as an embarrassment and a shame by others. Thus the people of these communities didn’t realise the importance of educating women and making them self-reliant. Another minor reason for not permitting girls to go to school was that educated girls may not obey their parents or they may cross their cultural and traditional norms of the society. The girls themselves could not desire for
education as there were no role models for them to follow. Most of the girls unconsciously got conditioned into such a thought process and felt that it was easier to stay at home instead of going to school and study. Thus most girls in the 1970s were not educated beyond class eight.

This attitude continued in 1980s with not much change in this type of thinking. These girls also got minimum literacy but the difference was that the number of girls going to school even after puberty increased. However, most of the girls did not show interest in their studies and the drop-out rate was high. One of the reasons cited by the girls for dropping out of school was failure in examinations. Secondly, as the girls had no role models they didn’t show interest in their studies and they felt it was of no use to them. They did not think nor realise that education could make a big change in their life style. This was the same with the boys in both the decades but the percentage of failure and number of non-going school girls was high. A final cause for the lack of education was that the mothers also did not realise the positive aspects of education and instead bowed down to societal attitudes. One of the middle age men who participated in the interview mentioned that girls were sent to schools in those days, but the girls didn’t study properly and were more interested discussing issues such as dresses and jewels rather than school matters. He also pointed out that some girls of that period did hard work and settled in life. However, he was of the opinion that girls had no need to economically support anyone and therefore they generally did not shoulder the responsibility of studying well.

In 1990s most of the girls began to go to school, because many villages got their own schools. The number of schools increased and so the school going girls also increased. One of the reasons for this increase was the proximity of the schools as well as the increased number of girls who began to attend school. A secondary reason was that schools also provided food and other things such as uniform, notebooks, books, etc. for them. This fact attracted the parents to send their daughters to school. Only very few girls stayed at home to take care of the domestic animals and some stayed at home to save their family prestige. The fathers of the second type (saving family prestige) girls, used to say that it is not compulsory for the girls to earn and support their families when there was enough money for the family’s survival. Yet those who went to school also stopped their education at eighth standard. Gradually they stopped their education i.e. some stopped at fifth and some at eighth and only one or two girls per village were going in for higher studies\(^1\). There are very few girls who were going for post graduate studies, inspite of better education facilities.

Even though many men in this age realised the importance of education they still felt that instead of spending money for their daughter’s education they need to save it for their daughters’ marriages. According to them education was
not a necessity where as marriages were essential. On the other hand, education of
the male child was important because they were the saviours of the family and
continued the lineage of the families. At present, the upper class families’
view regarding education is different. They are not bothered about the distance
of the school since they have facilities to drop their daughters in school. They
also want to display their class differences so they prefer to send them to private
schools rather than government schools. Unfortunately these girls are not
interested in studies as they do not realise the importance of education. The
ultimate goal of parents in these cases too was marriage. But now some changes
have occurred in the thinking and therefore individuals belonging both to upper
as well as middle class send their children to private schools, or to semi-private
schools. The family, at present does not differentiate that much between sons
and daughters but they are still bothered with the tag of co-educational school.
Therefore, they send them to girls’ schools in towns such as Puducherry or
Villianur. The students admitted to such schools found that travel was generally
tedious and many had to walk long distances to commute between home and
school, resulting in drop outs.

Other than prestige problem, there are other societal problems related to
women’s education. One of the major causes is that most families do not prefer
educated daughter-in-laws because they fear that educated women won’t respect
elders in the family or familial traditions. The belief is that the educated daughter-
in-law may not be a ‘good’ home-maker. A secondary problem is to find a
suitable alliance equivalent to her educational background. Another dimension
that comes with regard to this study is that women in many families do not want
to continue their daughter-in-law’s education after marriage but on the other
hand, they want their daughters to continue their education after marriage. Another
group of women were of the opinion that a woman — let it be daughter-in-law
or daughter — has to forget her education after marriage. Middle aged women
regret that they didn’t study and therefore atleast their daughters could study
and get settled in their life independently.

Yet another group of families were more interested in allowing their
daughters to work rather than study as they would then help the family
economically. They were willing to send them to some companies to get the
daily payment of Rs.30-35 which in turn would be used for their marriage
expenses. As the companies generally employ only girls in the age group of
fifteen or so the girls were allowed to do odd chores such as farm work, collecting
fodder for the cows or collecting firewood. These are the conditions of girls
who belong to lower or poorer economic groups. The opinion of the younger
generation in this regard is reverse. They want to change the trend and wish for
equality among men and women but this is again confined only to the area of
education.
Work

The next issue studied was the issue of women’s employment. As far as a career was concerned, there was no aspiration for big jobs, among the women. This was mainly because the women were not educated and so they could not get jobs at a higher level. Therefore they got low level jobs. Another factor at work was that they preferred jobs close to home and lesser working hours than men due to family pressures. Some of the women were also disturbed if they were labelled as ‘working women’. This was because of the stigma attached to the label, ‘working women’. They felt that they would be seen as ‘fallen’ women and it would disturb their family lives. Many women spoken to were also disappointed by the disparity in the salaries between men and women. (This point is elaborated upon later). The girls from poor families went to private companies as daily wage earners. Due to economic constraints, even if the salary was less or if the work was more the girls had to adjust and work. Therefore situations and economy constrained the choice of career as far as women are concerned.

In the rich families, even if they had educated daughter-in-laws, the family would not allow them into any profession as they thought that it would damage their ‘family prestige’. However this was true only for jobs in private companies and if on the other hand, the women got employed in government organisation with satisfactory salary, then they did not worry about family and ‘prestige’. There are many people who have begun to compare the salaries of their daughter-in-laws and feel proud about it. People who are envious of earning daughter-in-laws in other families resorted to hinting that such working women displayed bad behaviour. One such illustration quoted by one of the women was that of a nurse who spoke to other men in the hospital. Thus, the families in her area deemed that her image was not good. Such talk hinders the progress of women. As already mentioned the problem develops due to the biased assumption that working women’s behaviour is not morally correct. In some cases when the educational qualifications were equal between the husband and wife then the husbands wished to earn more than the wife as it was a question of prestige leading to the women’s freedom being curtailed or her career being sacrificed.

The disparity in salary is not only seen in regular official jobs but also in other fields. In various official positions, the disparity in salaries one can understand, is a result of educational qualifications but in other fields there is no such reason for the disparity to occur. Even in agricultural labour, men are paid more than women and the reason for this as explained by the people spoken to was that if women are paid equal to men, they won’t respect their husbands. When women, especially from the lower-middle class families, did these agricultural jobs most often they were also exploited sexually and abused by vulgar, threatening and
menacing words. Whenever they refused to cooperate with the middle-men then their chances of being employed a second time would lessen. The women generally were silent about such issues, because this would spoil the family prestige and the economy will be lost. At present too this wage and gender differentiation occurs but the margins have reduced. Another kind of rationalisation is that men are more capable in doing physical labour and therefore they need to get lower wages. However, in truth the woman does an equal amount of labour as the man and spends the same amount of time which is not compensated for. Another instance is when women are employed for construction works wherein the contractors prefer women for construction work because they can save money.

Few years ago some women started self help groups to become economically independent. Men opposed such groups and attempted to change the minds of these women’s families. They also condemned men who used women’s earnings and labelled them as not being masculine. However, these ‘groups’ started creating some awareness among village girls. A number of other women also believed that women would improve more and more without education, by simply joining in this teamwork and thus many men were unhappy about this. Another point to be noted is that many of these self-help groups were running in the name of women but with the ideas of their husbands/men. Almost all matters from running the meeting to agenda of the meeting and the finalisations if any were done by the husbands of these women.

Politics

The same attitude can be seen in electing Village Panchayat, Head, Councillor and Ward Member in this area. Since there was reservation for women in the civil election there was no way for them to nominate their wives. So whoever wanted to nominate would propose name of their wives. But in rural areas there is a difference, as the petition would directly go to the husband. Suppose if a lady was the councillor of the village, and if somebody wanted to meet the councillor they would end up meeting the husband rather than the wife. The problem would in many cases be solved without the knowledge of the councillor. Thus, the only task expected by the women who were in elected positions was to be present in the public meetings and sign when necessary. It is clear from this that society recognizes women in power/position only through men. Thus women become councillors or village heads only because of their husbands’ identities.

Marriage

In the social status women are considered lesser than men in status, prestige and privileges. Man is considered the earner of the family because he goes
outside and earns while the woman is seen as a mere housewife who takes care of domestic affairs. Married women are expected in many homes to follow conventional behaviour such as eating after men, obeying men in all respects, etc. Even when men have extra marital affairs, the wives are supposed to ‘adjust’. As revealed by the conversations with various families, many parents supported their sons-in-laws, and advised their daughters to regulate their life styles. In one such instance, there was a problem between a husband and wife wherein the husband was suspecting his wife. The brothers of that girl advised the woman to obey her husband. They also indicated to her that her disobedience would reveal her disrespect for the family’s prestige and respectability.

Family

The domestic arena was the only space allowed to women. Cooking, cleaning, washing and taking care of the family members were done by the women. The men/boys are not allowed to participate in these actions. Taking care of a small baby will be given to elder sister and not to elder brother. One of the girls who questioned why she was asked to wash the plates after eating and why not the boys at home was given the explanation that it was a woman’s job. She had been washing her brothers’ plates too. An old woman says ‘making a man to wash his clothes is a sin. A woman is in the house to do that work only otherwise why does a man get married. Man is the God of the family if there is no man, there is no god in the temple’. It is an unwritten rule that women have to do all the household chores and in case a man was ready to help his wife then he would be judged as abnormal by the community.

Moreover, if a woman is dead or she is not capable of bearing a child the man can re-marry while at the death of the man. The woman is considered as inauspicious and she is ostracised from all family functions. One such incident reported was about a woman who couldn’t bear a child after ten years of her married life. The husband was affectionate to her, but the sister-in-law and the mother-in-law of that woman sent her away saying she was not eligible for married life. Interestingly enough the same mother-in-law had herself given birth to a child only after fifteen years of her marriage. She however did not seem to reflect upon this issue.

Dress

Women are supposed to wear traditional dress and definitely dressing is not for beautifying themselves. Even though traditional dress is saree/ half saree, many parents prefer ‘churidar’ as comfortable dresses for their daughters. If any girl is found beautifying herself by her way of dressing, then she would become part of women’s gossip after their lunch hour. Men have no restrictions/ codes regarding dress. Only if they met someone or attended a function they would wear some decent clothes most often are seen in the village in just a
dhoti. At the same time women both in private and public spaces had to dress properly.

College going boys also supported some of these attitudes of the elders. In their views, if girls were equally educated and employed, then she should obey her husband. One of the girls reported, ‘we can speak of freedom and all but in practical life it is not possible’. So the girls want to follow the rules of elders. The elders trained the girls in such a way that many of these ideas/concepts became indoctrinated within them. Many girls were readily accepting that the old trends were good for their safe life. The boys preferred ‘quiet’ and ‘homely’ girls for marriage. They were scared to get married to educated girls because they may talk of equality and rights. Even if the girls are aware of this difference in gender after marriage they adjust with the family and do not want to break the family. That is why there are spinsters, widows and ‘vazhavetti’ (women who live in parent’s house left by her husband) in this area but there is no ‘divorcee’ so far.

As a whole, man is suppresses women in all aspects of social interaction in the name of culture and customs. The people have firm belief in their own customs and cultures. They consider the women as the representatives to pick up these cultures and customs. They give higher status to boys because they are supposed to take care of the family. So the parents are ready to spend more money on their education. In the case of girls, the parents had to spend more money as dowry which would be no use for them again, but the boys were useful for the parents at their old age. The whole family’s ‘prestige’ was in the ‘hands’ of a girl and her mother was responsible for preserving that prestige.

**Conclusion**

Although Indian women in the present century are reported to be free, educated and independent, the reality is far from true. This study proved that a large number of these stereotypes were rather current ways by which gender still prevailed. Thus the change in the society is impossible in these areas and the changes may happen but it will be a very slow process. Changes can be expected in two forms. The first one is through government or through some private sector. They can try to create some kind of awareness to both the men and women about the importance of women’s education and their equality with men. They can also show how the educated women are getting benefits after education through media. This could help in constructing a positive attitude among the families. The other changes have to be made gradually through some documentary movies showing the importance of women in the society and why they have to be treated equally. It is essential that mothers try to build up more positive images of womanhood in their own homes so that gender disparity decreases. Let us hope that these trends would gradually change.
References


Footnote

1 In another incident narrated a girl was stopped from school in standard eleven and her marriage was arranged. Much later the father married a second time and had three more daughters and he was of the opinion that he would spend money for their daughter’s education instead of spending for their marriage. Ten years ago he had not realised the importance of education and he had got his two daughters married but now realising the importance of education he was ready to send them for studies. This awareness was initiated in him through his second wife who had studied up to high school. This type of change, however, cannot be expected with every man and only some men are flexible breaking the old conceptions.
HUMAN BEHAVIOUR TOWARDS PRICE AND QUALITY
(WITH A SPECIAL REFERENCE TO BUYER BEHAVIOUR ON CONSUMER DURABLE, SEMI-DURABLE AND NON-DURABLE PRODUCTS IN PUDUCHERRY REGION)

* P. Ashok kumar, ** P.S. Velmurugan

Abstract

The study focuses on a market for a product that can be produced at different quality levels. All consumers prefer higher to lower quality but they may differ in their willingness to pay for quality. Producers can offer a range of products with varied quality corresponding to the price but higher quality products warrant more (input) production cost. At a certain price, consumers expect to find an optimum quality. This study seeks to examine the relationship between the price of the product and the buyers’ perception of quality in respect to Durable, Semi-durable, and Non-durable products. In particular, the study sought to explore answer two questions: (1) Does high price have a positive influence on the buyers’ perception of product quality? (2) Is there a significant difference in the buyers’ perception of the quality of products falling in different price ranges? Results indicate that price had a positive effect on perceived quality. Favourable product features and brand image positively influenced perceptions of quality, and subjects’ willingness to buy.

Key words: buyer behaviour, product price, product quality, price-quality relationship

Introduction

Consumers normally use a product’s price to determine whether the product is affordable. However, consumers also appear to use a product’s price as a measure of the product’s quality. Many empirical studies have shown that when consumers have some uncertainty concerning a product’s quality, the consumer often assumes that a higher product price indicates a higher level of quality.

Scitovszky (1945) observed that the use of price as an indicator of product quality is not irrational, but represents a belief that price in the market place is determined by the interplay of the forces of competitive supply and demand. A
high price may reflect either a high demand for superior quality or the high production costs associated with high quality.

Consumer expectations of higher quality at higher prices can be self-fulfilled only if sellers do not find it profitable to “cheat” by conveying false market signals charging high prices for lower quality.

This study seeks to examine the relationship between the price of the product and the buyers’ perception of quality in respect of durable, semi-durable, and non-durable products in the Indian context. Three products were selected for the purpose of the study: Refrigerator as a durable product; T-shirt as a semi-durable product; and Toilet Soap as a non-durable product. Data were collected from the primary sources with the help of a non-disguised, pre-structured questionnaire.

**The Price/Quality Relationship**

The perception of the most consumers is that the relatively high price is a sign of good quality. The belief in this relationship is most important with complex products that are hard to test, and experiential products that cannot be tested until used (such as most services). Where there is greater uncertainty surrounding a product, than consumers will depend more on the price/quality hypothesis and they will be prepared to pay premium. The classic example of this is the pricing of the snack cake Twinkies, which were perceived as low quality when the price was lowered. Note, however, that excessive reliance on the price/quantity relationship by consumers may lead to the raising of prices on all products and services, even those of low quality, which in turn causes the price/quality relationship to no longer apply.

**Types of Consumers based on Quality/Price sensitiveness**

**A. Type 1 Consumers**

Some of the consumers in this market are not concerned with this quality of the product. These consumers are very price sensitive. They will buy the lowest priced product regardless of the level of the quality. Type 1 consumers will buy more of the product as the price of the product decreases. The quantity of the product that type 1 consumers buy is not influenced by the level of the quality of the product.

**B. Type 2 Consumers**

Type 2 consumers are very quality sensitive. However, type 2 consumers are insensitive to price. They will buy more of the product as the quality of the product increases regardless of the product’s price. Nevertheless, all consumers
do face some budgetary restrictions. When the price per unit exceeds type 2 consumers will stop buying the product.

C. Type 3 Consumers

All consumers who were concerned with the quality of the product were also able to identify that quality. Some consumers, however, may want the quality but these consumers may be unable to determine whether or not the quality is present. These consumers as type 3 consumers. These consumers might use the level of price as a surrogate measure of the level of quality. The number of type 3 consumers increases, the price charged for the product increases. The number of type 3 consumers increases, the level of the quality also increases. Even though these consumers cannot detect quality, their desire for quality causes the company to increase the level of the quality.

A. Type 4 Consumers

Type 4 consumers are very quality sensitive. Neither type 4 consumers nor type 2 consumers are price sensitive. Nevertheless, at some point, a budgetary constraint becomes important. We, therefore, assume that once the product’s price exceeds, both type 2 and type 4 consumers will stop purchasing the product. Type 2 and type 4 consumers do differ on the quality they desire. Each type of consumer wants a different quality of the product to the exclusion of the other quality.  

Price-Quality Mapping

How people use price to evaluate quality is suggested by a paradigm developed in which buyers are hypothesized to categorize the product’s price, categorize the assessed quality, and then judge whether the assessed quality is equivalent to the expected quality for the categorized price.

In the Figure -1 below of subjective mapping of Price & quality, the mapping (a) to (b) and (c) to (d) is done simultaneously. Matching (b) and (c) depends on prior purchase experience with the product. If the line linking (b) and (c) has a negative slope, the item will be judged as high priced relative to assessed quality, while a positive slope would provide a low price judgment. In either situation, if the value of the slope is perceived to be relatively large, the buyer may refrain from comparing his ‘standard’ price-quality relationship against the one observed.
Is Price an Index of Quality?

Price the extrinsic cue, has received the most research attention out of all the intrinsic and extrinsic cues. Price is identified as an important index of quality. The word ‘cheap’ usually means inferior quality. In the United States, the word ‘expensive’ is in the process of losing its original meaning and becoming a synonym for superior quality. Price played an important role in indicating quality of many products for three reasons (Shapiro, 1968):

- The ease of measurement since price is a concrete, measurable variable.
- The effort and satisfaction, i.e., consumer satisfaction with a product depends on the amount of effort spent by the consumer in acquiring the product and an expenditure of money may be viewed by the consumer as similar to an expenditure of effort.
- The reduction of the perceived risk of buying a product of poorer quality.

However, Shapiro warned marketers that the concept of price as an indicator of quality should not be applied indiscriminately in making pricing decisions.12
The study seeks to examine the influence of price of the product on the buyers’ perception of quality in respect of durable, semi-durable, and non-durable products. It also seeks to ascertain whether this cue has a different effect on the three types of products.

**Durable Product**

In economics, a durable good or a hard good is a good which does not quickly wear out, or more specifically, it yields services or utility over time rather than being completely used up when used once. Most goods are therefore durable goods to a certain degree. Durable Products are goods that can last for a relatively long time, such as Refrigerators, Cars, and DVD players. Perfectly durable goods never wear out. An example of a durable good might be a brick. As a counter-example, sticky tape is not very durable.

Durable goods are typically characterized by long inter purchase times—the time between two successive purchases.

**Semi-Durable Goods**

The goods that differs from a non-durable goods in that it can be used repeatedly or continuously over a period longer than a year and that differs from a durable good in that its expected lifetime of use, though longer than a year, is often significantly shorter and that its purchasers’ price is substantially less.

Goods, as clothing or furniture, that is neither perishable nor truly durable also called as semi durable goods.

**Non-Durable Product**

Non-durable goods or soft goods. They are just the opposite of durable goods. They may be defined either as goods that are used up when used once. Non-durables are items which are consumed in one use or a few uses; expendables.

Examples of nondurable goods include cosmetics, food, cleaning products, fuel, office supplies, packaging and containers, paper and paper products, personal products, rubber, plastics, textiles, clothing and footwear.

Goods that do not last a long time, are quickly consumed, and so must continually be replaced by consumers. Food is the most prevalent example of nondurable goods. Consumer Non-Durables is a classification of frequently purchased consumer goods; Consumer non-durables are further sub-divided into packaged and non-packaged goods.
Statement of the Problem

Even in the 21st century, consumers are not aware of the quality and features of the products when they buy. They are often unable to make a quality comparison among various brands. Moreover, they often gather little information even when the financial commitment involved is substantial. A popular belief is: “you get for what you pay for”. Therefore consumers tend to believe that high price is an indicator of better quality. Although many studies conducted on price–quality relationship have supported this belief, it is necessary to find the relationship to be product specific with quality among the consumers.

Scope of the Study

This study aims to analyse the buyer behaviour in the context of price & quality on Durable product, Semi-durable product & Non durable product. This study may help the manufactures to modify their product quality according to consumer’s expectations and also increase the sales.

The level of satisfaction of the customers are measured by dividing the customers according to the level of income, age, occupation, education and this may help manufactures to supply goods according to the segments expectation.

Objectives of the Study

With the view of analyzing the behaviors of the consumers towards price and quality, this study is carried out with the following objectives:

- To check whether price have a positive influence on the buyers’ perception of product quality.
- To analyse whether there is any significant difference in the buyers’ perception of the quality of products that fall in different price ranges.
- To evaluate the role of price, quality, utility, service and value in consumer decision - making and satisfaction with regard to consumer durables, semi – durable and non – durable products.

Methodology

Type of Data

The study is based on both primary and secondary data. The primary data was collected with the help of pre-designed questionnaire for the three products [durable product, semi - durable product, non-durable product] taken for the study. A pilot study was undertaken and on the basis of the response and suggestions received, suitable modifications were made in the questionnaire. The secondary data was sourced from relevant books, journals and news papers.
Sample Size

The sampling method adopted for the analysis is convenient sampling method. The sample chosen consisted of 450 respondents for the three products taken together [150 respondents for refrigerator, 150 for T-shirt, and 150 for toilet soap]. The respondents represented different age- groups, educational levels, and income groups. They were selected from the respondents residing in different areas of Pondicherry Region. The survey was carried out between November 2008 and July 2009.

Tools Used

The data were analyzed with help of the SPSS (Statistical Package for Social Sciences) package. The statistical tools used for data analysis included tabulation and frequency distribution, mean, standard deviation, paired t-test and Garrett’s Ranking method.

Review of literature

Martin (1971) determined what information consumers of fashion need to acquire before purchasing clothing products. In this study, consumers looked at line drawings of shirts, dresses and coats. For each item Martin provided nine clothing evaluative criteria characteristics including: price, color, content of material, store, brand name, department of store, instruction for care of garment, and salespersons evaluation of style and quality. The sample was comprised of women from the Springfield, Illinois area. The results showed that the top three criteria were price, color, and the content of material5.

Shapiro (1973) sought to determine whether price would act as a communicator of quality and ascertain the reasons for consumers judging the product quality by price by determining the correlates of price reliance. It was found that, for most of the dimensions such as quality, durability, looks or fragrance, the number of buyers ranking the high-priced product better than the low-priced product was greater than the number of buyers ranking the low-priced product better than the high priced product. But, a substantial number of buyers rated the products as equal. The study revealed that price was a communicator of quality and the associated attributes in the marketplace when the product was actually present and the setting relatively realistic. On the other hand, the data showed that price was not a strong communicator of quality6.

Rao and Monroe (1989) integrated the previous research on the influence of price, brand name, and/or store name on buyers’ evaluation of product quality. They found that, for consumer products, the relationship between price and perceived quality and between brand name and perceived quality was positive and statistically significant, and the effect of store name on perceived quality
was small and not statistically significant. Moreover, though statistically significant, multi-cue studies generated slightly larger effect than single-cue studies\(^7\).

Erickson and Johansson (1985) investigated the multi-faceted role of price in product evaluation with an empirical analysis of beliefs, attitudes, and intention of buyers regarding various automobile brands. Three interesting conclusions were drawn from the empirical results:

The price-quality relationship operates in a reciprocal manner. A high-priced car is perceived to possess (unwarranted) high quality. A high-quality car is, likewise, perceived to be high-priced than it actually is.

- As a consequence of the price-quality relationship, perceived price is a good proxy variable for perceived quality. However, price was found to have a positive but indirect effect on intention, i.e., price affects intention positively through its positive effect on quality perception, through the positive effect of quality perception on attitude, and through the positive effect of attitude on intention.

- Price perception has an independent and negative effect on the probability of purchasing a car — a budget constraint\(^8\).

Forsythe (1991) looked at the effects of private, designer, and national brands on consumers’ evaluations of apparel products with reference to quality and price. “quality conscious” consumers (seeking the best quality) and “brand conscious” consumers (beliefs that higher priced means better quality) were identified as the two samples looked at in the study. Quality conscious and brand conscious consumers did not differ in terms of their demographic characteristics (gender, income, and education). The results showed that brand name does make a considerable difference in consumers’ perceptions of price, yet not in terms of the quality perceptions. The study found that consumers more commonly used garment characteristics such as color, style, fabric, etc. to determine garment quality\(^9\).

Pricing and Indian Buyers’ perception of Quality

Durable Product (Refrigerator)

In order to ascertain whether the buyers’ perception of product quality was affected by the price of the durable product (refrigerator), the respondents were asked to assess/judge the quality of refrigerator on the basis of four price ranges. Their responses are summarised in Table - 1. Out of the total only 21 respondents (14 per cent) believed that a low priced refrigerator would be of average quality. Whereas none of them opined it will be high or very high quality. In the case of refrigerator that has been priced above 10001, 48 respondents (32 per cent) opined that it would be of high quality and 102 respondents (68 per
cent) believed it would be of very high quality. Thus, it seems to be that higher the price of refrigerator, higher will be the consumer’s perception of its quality.

Table - 1 Price Ranges and Quality Ratings of Refrigerator

<table>
<thead>
<tr>
<th>Quality Price Range</th>
<th>Number of Respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Low</td>
</tr>
<tr>
<td>Up to 5000</td>
<td>5 (38.0)</td>
</tr>
<tr>
<td>5001-7500</td>
<td>0 (00.0)</td>
</tr>
<tr>
<td>7501-10000</td>
<td>0 (00.0)</td>
</tr>
<tr>
<td>Above 10001</td>
<td>0 (00.0)</td>
</tr>
</tbody>
</table>

Source: Primary Data    Note: Brackets show Percentages

Table - 2 Ranking Price Ranges: Perceived Quality of Refrigerator

Descriptive Analysis

<table>
<thead>
<tr>
<th>Price Range</th>
<th>Mean</th>
<th>Percentage mean</th>
<th>Standard Deviation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 10000</td>
<td>4.68</td>
<td>93.6</td>
<td>0.471</td>
<td>I</td>
</tr>
<tr>
<td>7501 to 10000</td>
<td>3.62</td>
<td>72.4</td>
<td>0.635</td>
<td>II</td>
</tr>
<tr>
<td>5001 to 7500</td>
<td>2.88</td>
<td>57.6</td>
<td>0.435</td>
<td>III</td>
</tr>
<tr>
<td>Up to 5000</td>
<td>1.76</td>
<td>35.2</td>
<td>0.686</td>
<td>IV</td>
</tr>
</tbody>
</table>

The mean, percentage mean and standard deviation for each of the price ranges are presented in the above Table - 2. It shows that the higher the price range, higher is the perception of quality of the refrigerator. The table observation that they the first rank was secured by the refrigerator falling in the price range above 10,000 whereas the lowest price range of up to 5000 secured the fourth and the last rank. This shows that buyers prefer higher price range products since they presume that it possess higher quality, as for as durable product (refrigerator) are concerned.

Comparison of Price Groups of Refrigerator

The information contained in Table-2 was further statistically analysed to ascertain if there was any significant difference in the perceived quality of refrigerator falling in different price ranges. In order to test this, all the price ranges were classified into six groups on the basis of their mean scores:
**Price-group A:** ‘Above Rs.10000’ and ‘Rs. 7501 to Rs 10,000.’

**Price-group B:** ‘Above Rs.10000’ and ‘Rs 5001 to Rs 7500.’

**Price-group C:** ‘Above Rs.10000’ and ‘Rs up to 5000.’

**Price-group D:** ‘Rs 7501 to Rs 10,000’ and ‘Rs 5001 to Rs 7500.’

**Price-group E:** ‘Rs 7501 to Rs 10,000’ and ‘Rs up to 5000.’

**Price-group F:** ‘Rs 5001 to Rs 7500’ and ‘Rs up to 5000.’

**Null Hypothesis**

**Ho:** The perceived quality of the refrigerator falling in different price ranges does not differ significantly.

**Alternative Hypothesis**

**H1:** The perceived quality of the refrigerator falling in different price ranges differs significantly.

The six price-groups were put to paired t-test, the results of which are presented in Table-3. The t-values were found to be significant at 0.01 level of significance in all the six cases. Hence, we may conclude that the perceived quality of the refrigerator falling in different price ranges differs significantly.

**Table – 3 Comparison of Price Groups of Refrigerator Paired t-test**

<table>
<thead>
<tr>
<th>Price Group</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Correlation</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pair 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>1.76</td>
<td>0.6869</td>
<td>0.584</td>
<td>-14.182*</td>
</tr>
<tr>
<td>Group B</td>
<td>2.88</td>
<td>0.43519</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pair 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>1.76</td>
<td>0.6869</td>
<td>0.441</td>
<td>-18.785*</td>
</tr>
<tr>
<td>Group C</td>
<td>3.62</td>
<td>0.63535</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pair 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group A</td>
<td>1.76</td>
<td>0.6869</td>
<td>0.136</td>
<td>-26.53*</td>
</tr>
<tr>
<td>Group D</td>
<td>4.68</td>
<td>0.47121</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pair 4</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group B</td>
<td>2.88</td>
<td>0.43519</td>
<td>0.57</td>
<td>-9.925*</td>
</tr>
<tr>
<td>Group C</td>
<td>3.62</td>
<td>0.63535</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pair 5</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group B</td>
<td>2.88</td>
<td>0.43519</td>
<td>0.307</td>
<td>-23.812*</td>
</tr>
<tr>
<td>Group D</td>
<td>4.68</td>
<td>0.47121</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pair 6</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group C</td>
<td>3.62</td>
<td>0.63535</td>
<td>0.54</td>
<td>-13.629*</td>
</tr>
<tr>
<td>Group D</td>
<td>4.68</td>
<td>0.47121</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.01 level

Thus, the Table-3 reveals that the consumers considered price as an important criteria in judging the quality of refrigerator. They perceived higher-priced Refrigerator to be of high quality. Significant differences relating to the perception of the quality of refrigerator falling in different price ranges were
also found. Thus, the null hypothesis is rejected the alternative hypothesis is accepted because of the fact that high price has a positive influence on buyers’ perception of product quality.

**Consumer Perception of the Influencing Factors: Durable Product (Refrigerator)**

In order to determine the importance of the six factors which influence customer perception on products (viz: brand image, promotion activities, product features, price, store reputation, and durability) among the respondents while buying the durable product (refrigerator), computation such as the total score and total mean score were computed through Garrett Ranking Technique. On the basis of their mean values, the factors were ranked. The results are presented in Table-4 below;

**Table - 4 Ranking Factors in Terms of Quality Perception**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Total score</th>
<th>Total Mean Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand reputation</td>
<td>9126</td>
<td>60.84</td>
<td>II</td>
</tr>
<tr>
<td>Promotion</td>
<td>4770</td>
<td>31.8</td>
<td>VI</td>
</tr>
<tr>
<td>Product features</td>
<td>9822</td>
<td>65.48</td>
<td>I</td>
</tr>
<tr>
<td>Price</td>
<td>7671</td>
<td>51.14</td>
<td>III</td>
</tr>
<tr>
<td>Store reputation</td>
<td>6336</td>
<td>42.24</td>
<td>V</td>
</tr>
<tr>
<td>Warranty &amp; durability</td>
<td>7056</td>
<td>47.04</td>
<td>IV</td>
</tr>
</tbody>
</table>

Rank wise the most important reasons influencing buying process, quoted for durable products (refrigerator), is product feature which has been assigned the first rank among other factors. The second rank goes to Brand reputation, followed by price at the third rank, warranty and durability is the fourth rank, while the fifth rank was given to store reputation, followed by promotions as the sixth rank.

The price does not highly influence the buyer behaviour because from the table-4 it is evident that buyers are more influenced by product feature and brand reputation respectively. This inturn means that when consumers feel that high price is a sign of better quality, they presume that the durable product (refrigerator) possess good product features clubbed with reputed brand.

**Semi-Durable Product (T-Shirt)**

In order to ascertain whether the buyers’ perception of product quality was affected by the price of the semi-durable product (T-shirt), the respondents were asked to assess / judge the quality of T-shirt on the basis of seven price ranges. Their responses are summarised in Table-5. Out of the
Table - 5 Price Ranges and Quality Ratings of T-Shirt

<table>
<thead>
<tr>
<th>Quality Price Range</th>
<th>Number and Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Low</td>
</tr>
<tr>
<td>Up to 100</td>
<td>102 (68.0)</td>
</tr>
<tr>
<td>101-200</td>
<td>45 (30.0)</td>
</tr>
<tr>
<td>201-300</td>
<td>06 (4.0)</td>
</tr>
<tr>
<td>301-450</td>
<td>0 (00.0)</td>
</tr>
<tr>
<td>451-600</td>
<td>0 (00.0)</td>
</tr>
<tr>
<td>601-900</td>
<td>0 (00.0)</td>
</tr>
<tr>
<td>Above 900</td>
<td>0 (00.0)</td>
</tr>
</tbody>
</table>

Source: Primary Data        Note: Brackets show Percentages

total only 18 respondents (12 per cent) believed that a low priced T-shirt would be of average quality. Whereas none of them opined it will be high or very high quality. In the case of T-shirt that has been priced above 900, 30 respondents (20 per cent) opined that it would be of high quality and 117 respondents (78 per cent) believed it would be of very high quality. Thus, it seems to be that higher the price of T-shirt, higher will be the consumer’s perception of its quality.

Table - 6 Ranking price Ranges: Perceived Quality of T - Shirt
Descriptive Analysis

<table>
<thead>
<tr>
<th>Price Range</th>
<th>Mean</th>
<th>Percentage Mean</th>
<th>Standard Deviation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>900 Above</td>
<td>4.76</td>
<td>95.2</td>
<td>0.476</td>
<td>I</td>
</tr>
<tr>
<td>601 to 900</td>
<td>4.1</td>
<td>82.0</td>
<td>0.58</td>
<td>II</td>
</tr>
<tr>
<td>451 to 600</td>
<td>3.54</td>
<td>70.8</td>
<td>0.542</td>
<td>III</td>
</tr>
<tr>
<td>301 to 450</td>
<td>3.16</td>
<td>63.2</td>
<td>0.468</td>
<td>IV</td>
</tr>
<tr>
<td>201 to 300</td>
<td>2.7</td>
<td>54.0</td>
<td>0.58</td>
<td>V</td>
</tr>
<tr>
<td>101 to 200</td>
<td>1.94</td>
<td>38.8</td>
<td>0.767</td>
<td>VI</td>
</tr>
<tr>
<td>Up to 100</td>
<td>1.44</td>
<td>28.8</td>
<td>0.705</td>
<td>VII</td>
</tr>
</tbody>
</table>

The mean, percentage mean and standard deviation for each of the price ranges are presented in the above Table-6. It shows that the higher the price
range, higher is the perception of quality of the T-shirt. The table observation that they the first rank was secured by the T-shirt falling in the price range above 900 whereas the lowest price range of up to 100 secured the seventh and the last rank. This shows that buyers prefer higher price range products since they presume that it possess higher quality, as for as semi-surable product (T-shirt) are concerned.

**Comparison of Price Groups of T-Shirt**

The information contained in Table-6 was further statistically analysed to ascertain if there was any significant difference in the perceived quality of T-shirt falling in different price ranges. In order to test this, all the price ranges were classified into three groups on the basis of their mean scores:

- **Price-group A**: ‘Above Rs 900’, ‘Rs 601 to Rs 900’
- **Price-group B**: ‘Rs 451 to Rs 600’ ‘Rs 301 to Rs 450’
- **Price-group C**: ‘Rs 201 to Rs 300’ ‘Rs 301 to Rs 101 to Rs 200’ & ‘Upto Rs 100’.

**Null Hypothesis**

$H_0$: The perceived quality of the T-shirt falling in different price ranges does not differ significantly.

**Alternative Hypothesis**

$H_1$: The perceived quality of the T-shirt falling in different price ranges differs significantly

The three price-groups were put to *paired t-test*, the results of which are presented in Table-7. The t-values were found to be significant at 0.01 level of significance in all the three cases. Hence, we may conclude that the perceived quality of the T-shirt falling in different price ranges differs significantly.

**Table - 7 Comparison of Price Groups of T-Shirt Paired T-Test**

<table>
<thead>
<tr>
<th>Price Group</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Correlation</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group B</td>
<td>2.9300</td>
<td>.44043</td>
<td>.626</td>
<td>-22.31*</td>
</tr>
<tr>
<td>Group A</td>
<td>4.1333</td>
<td>.44160</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group C</td>
<td>1.6900</td>
<td>.68430</td>
<td>.365</td>
<td>-25.96*</td>
</tr>
<tr>
<td>Group A</td>
<td>4.1333</td>
<td>.44160</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group C</td>
<td>1.6900</td>
<td>.68430</td>
<td>.654</td>
<td>-16.94*</td>
</tr>
<tr>
<td>Group B</td>
<td>2.9300</td>
<td>.44043</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.01 level
Thus, the Table-7 reveals that the consumers considered price as an important criteria in judging the quality of T-shirt. They perceived higher-priced T-Shirt to be of high quality. Significant differences relating to the perception of the quality of T-shirt falling in different price ranges were also found. Thus, the null hypothesis is rejected the alternative hypothesis is accepted because of the fact that high price has a positive influence on buyers’ perception of product quality.

**Consumer Perception of the Influencing Factors: Semi-Durable Product (T-Shirt)**

In order to determine the importance of the six factors which influence customer perception on products (viz: brand image, promotion activities, product features, price, store reputation, and durability) among the respondents while buying the semi-durable product (T-shirt), computation such as the total score and total mean score were computed through Garrett Ranking Technique. On the basis of their mean values, the factors were ranked. The results are presented in Table-8 below;

**Table – 8 Ranking Factors in terms of Quality Perception**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Total score</th>
<th>Total Mean Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand image</td>
<td>8403</td>
<td>56.02</td>
<td>III</td>
</tr>
<tr>
<td>Promotion activities</td>
<td>4704</td>
<td>31.36</td>
<td>VI</td>
</tr>
<tr>
<td>Product features</td>
<td>9219</td>
<td>61.46</td>
<td>I</td>
</tr>
<tr>
<td>Price</td>
<td>8439</td>
<td>56.26</td>
<td>II</td>
</tr>
<tr>
<td>Store reputation</td>
<td>6276</td>
<td>41.84</td>
<td>V</td>
</tr>
<tr>
<td>Durability</td>
<td>7443</td>
<td>49.62</td>
<td>IV</td>
</tr>
</tbody>
</table>

Rank wise the most important reasons influencing buying process, quoted for semi-durable products (T-shirt), is product feature which has been assigned the first rank among other factors. The second rank goes to price, followed by brand image at the third rank, warranty and durability is the fourth rank, while the fifth rank was given to store reputation, followed by promotions as the sixth rank.

The price is highly influence the buyer behaviour from the table-8 it is evident that buyers are more influenced by product feature and price respectively. This inturn means that when consumers feel that high price is a sign of better quality, they presume that the semi-durable product (T-shirt) possess good product features clubbed with price.
Non-Durable (Toilet Soap)

Table – 9 Price Ranges and Quality Ratings of Toilet Soap

<table>
<thead>
<tr>
<th>Quality Price Range</th>
<th>Number and Percentage of Respondents</th>
<th>Very Low</th>
<th>Low</th>
<th>Average</th>
<th>High</th>
<th>Very High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 10</td>
<td></td>
<td>99 (66.0%)</td>
<td>42 (28.0%)</td>
<td>9 (6.0%)</td>
<td>0 (00.0%)</td>
<td>0 (00.0%)</td>
<td>150 (100%)</td>
</tr>
<tr>
<td>11 to 15</td>
<td></td>
<td>36 (24.0%)</td>
<td>72 (48.0%)</td>
<td>42 (28.0%)</td>
<td>0 (00.0%)</td>
<td>0 (00.0%)</td>
<td>150 (100%)</td>
</tr>
<tr>
<td>16 to 20</td>
<td></td>
<td>0 (00.0%)</td>
<td>36 (24.0%)</td>
<td>114 (76.0%)</td>
<td>0 (00.0%)</td>
<td>0 (00.0%)</td>
<td>150 (100%)</td>
</tr>
<tr>
<td>21 to 25</td>
<td></td>
<td>0 (00.0%)</td>
<td>0 (00.0%)</td>
<td>99 (66.0%)</td>
<td>51 (34.0%)</td>
<td>0 (00.0%)</td>
<td>150 (100%)</td>
</tr>
<tr>
<td>26 to 40</td>
<td></td>
<td>0 (00.0%)</td>
<td>0 (00.0%)</td>
<td>18 (12.0%)</td>
<td>114 (76.0%)</td>
<td>18 (12.0%)</td>
<td>150 (100%)</td>
</tr>
<tr>
<td>Above 40</td>
<td></td>
<td>0 (00.0%)</td>
<td>0 (00.0%)</td>
<td>8 (5.33%)</td>
<td>51 (34.0%)</td>
<td>91 (60.67)</td>
<td>150 (100%)</td>
</tr>
</tbody>
</table>

Source: Primary Data       Note: Brackets show Percentages

In order to ascertain whether the buyers’ perception of product quality was affected by the price of the non-durable product (toilet soap), the respondents were asked to assess / judge the quality of Toilet Soap on the basis of six price ranges. Their responses are summarised in Table-9. Out of the total only 9 respondents (6 per cent) believed that a low priced toilet soap would be of average quality. Whereas none of them opined it will be high or very high quality. In the case of toilet soap that has been priced above 40, 51 respondents (34 per cent) opined that it would be of high quality and 91 respondents (60.67 per cent) believed it would be of very high quality. Thus, it seems to be that higher the price of toilet soap, higher will be the consumer’s perception of its quality.

Table - 10 Ranking Price Ranges: Perceived Quality of Toilet Soap
Descriptive Analysis

<table>
<thead>
<tr>
<th>Price Range</th>
<th>Mean</th>
<th>Percentage Mean</th>
<th>Std. Deviation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 40</td>
<td>4.6600</td>
<td>93.2</td>
<td>.47852</td>
<td>I</td>
</tr>
<tr>
<td>26 to 40</td>
<td>4.0000</td>
<td>80.0</td>
<td>.49487</td>
<td>II</td>
</tr>
<tr>
<td>21 to 25</td>
<td>3.3400</td>
<td>66.8</td>
<td>.47852</td>
<td>III</td>
</tr>
<tr>
<td>16 to 20</td>
<td>2.7600</td>
<td>55.2</td>
<td>.43142</td>
<td>IV</td>
</tr>
<tr>
<td>11 to 15</td>
<td>2.0400</td>
<td>40.8</td>
<td>.72731</td>
<td>V</td>
</tr>
<tr>
<td>Up to 10</td>
<td>1.4000</td>
<td>28.0</td>
<td>.60609</td>
<td>VI</td>
</tr>
</tbody>
</table>
The mean, percentage mean and standard deviation for each of the price ranges are presented in the above Table-10. It shows that the higher the price range, higher is the perception of quality of the toilet soap. The table observation that they the first rank was secured by the toilet soap falling in the price range above 40 whereas the lowest price range of up to 10 secured the sixth and the last rank. This shows that buyers prefer higher price range products since they presume that it possess higher quality, as for as non-durable product (toilet soap) are concerned.

**Comparison of Price Groups of Toilet Soap**

The information contained in Table-10 was further statistically analysed to ascertain if there was any significant difference in the perceived quality of toilet soap falling in different price ranges. In order to test this, all the price ranges were classified into three groups on the basis of their mean scores:

Price-group A: ‘Rs above 40’, ‘Rs 26 to Rs 40’

Price-group B: ‘Rs 21 to Rs 25’ ‘Rs 16 to Rs 20’

Price-group C: ‘Rs 11 to Rs 15’, and ‘Up to Rs 10’

**Null Hypothesis**

**Ho:** The perceived quality of the toilet soap falling in different price ranges does not differ significantly.

**Alternative Hypothesis**

**H1:** The perceived quality of the toilet soap falling in different price ranges differs significantly

The three price-groups were put to paired t-test, the results of which are presented in Table-11. The t-values were found to be significant at 0.01 level of significance in all the three cases. Hence, we may conclude that the perceived quality of the toilet soap falling in different price ranges differs significantly.

**Table – 11 Comparison of Price Groups of Toilet Soap Paired t-test**

<table>
<thead>
<tr>
<th>Price Group</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Correlation</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>1.7200</td>
<td>.57286</td>
<td>.284</td>
<td>-16.303*</td>
</tr>
<tr>
<td>B</td>
<td>3.0500</td>
<td>.33882</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>1.7200</td>
<td>.57286</td>
<td>-.494</td>
<td>-21.341*</td>
</tr>
<tr>
<td>C</td>
<td>4.3300</td>
<td>.42390</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3.0500</td>
<td>.33882</td>
<td>.202</td>
<td>-18.618*</td>
</tr>
<tr>
<td>C</td>
<td>4.3300</td>
<td>.42390</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.01 level
Thus, the Table-11 reveals that the consumers considered price as an important criteria in judging the quality of toilet soap. They perceived higher-priced toilet soap to be of high quality. Significant differences relating to the perception of the quality of toilet soap falling in different price ranges were also found. Thus, the null hypothesis is rejected the alternative hypothesis is accepted because of the fact that high price has a positive influence on buyers’ perception of product quality.

**Consumer Perception of the Influencing Factors: Non-Durable product (Toilet Soap)**

In order to determine the importance of the four factors which influence customer perception on products (viz: brand image, promotion activities, product features, price) among the respondents while buying the non-durable product (toilet soap), computation such as the total score and total mean score were computed through Garrett Ranking Technique. On the basis of their mean values, the factors were ranked. The results are presented in Table-12 below;

<table>
<thead>
<tr>
<th>Factors</th>
<th>Total score</th>
<th>Total Mean Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand image</td>
<td>8052</td>
<td>53.68</td>
<td>II</td>
</tr>
<tr>
<td>Promotion Activities</td>
<td>4887</td>
<td>32.58</td>
<td>IV</td>
</tr>
<tr>
<td>Product Features</td>
<td>8940</td>
<td>59.6</td>
<td>I</td>
</tr>
<tr>
<td>Price</td>
<td>7821</td>
<td>52.14</td>
<td>III</td>
</tr>
</tbody>
</table>

Rank wise the most important reasons influencing buying process, quoted for non-durable products (toilet soap), is product feature which has been assigned the first rank among other factors. The second rank goes to brand image, followed by price at the third rank, followed by promotions activities as the fourth rank.

The price does not highly influence the buyer behaviour from the table-12 it is evident that buyers are more influenced by product feature and brand image respectively. This inturn means that when consumers feel that high price is a sign of better quality, they presume that the non-durable product (toilet soap) possess good product features clubbed with reputed brand image.

**Summary on the Analysis**

An analysis of the price-quality relationship for the three products reveals the following:
Refrigerator

Along with the six factors measured by the buyers whereas purchasing a refrigerator, price is the most essential factor. The buyers recognize a significant difference among the superiority of refrigerator falling under different price ranges. They believe that price can expose its eminence and the privileged the price of the refrigerator, the superior will be its quality. Moreover, while purchasing a durable product like a refrigerator, buyers prefer to go for a high- or a reasonably priced brand, rather than a low-priced one. In addition, they want assessment for their riches and find it risk to buy a low-price for consumption.

T-Shirt

For purchasing T-shirts too, price is an essential thought while selecting a brand. On the other hand, the buyers would like to pay more for reputed brands and for facial appearance present in the T-shirt like the strength and texture of the fabric and fast tint. They accept as true that the lower the price of the T-shirt, the inferior will be its quality. However, they are a bit skeptical about the ‘high-price-superior quality’ relationship. Nevertheless, they observe a sizeable difference in the quality of the T-shirt declining in different price ranges. The probability getting value for their money has more magnitude to them than the high-price consideration.

Toilet Soap

The buyers normally give less concentration to the price of the lavatory soap while making the actual purchase. Brand loyalty, features of the lavatory soap, and trademark reputation takes precedence over price. However, they perceive a significant difference in the quality of the toilet soap available at different price ranges. They consider that the lower the price of the toilet soap, the inferior will be its quality and vice-versa. But, this confidence is to some extent weaker for toilet soap in comparisons to the other two products. Again in comparison to Refrigerator and T-shirt, while buying toilet soap, the buyers are less concerned about whether they will get value for their money from that purchase.

Conclusion

The findings indicate that, measured by the buyers purchasing behaviour on price is the most essential factor. The buyers recognize a significant difference among the superiority of refrigerator falling under different price ranges. They believe that price can expose its eminence of the refrigerator. Moreover, while purchasing a durable product like a refrigerator, buyers prefer to go for a high (or) a reasonably priced brand, rather than a low-priced one. For purchasing
semi-durable (T-shirts) too, price is an essential thought while selecting a brand. On the other hand, the buyers would like to pay more for reputed brands clubbed with facial appearance present in the T-Shirt like the strength and texture of the fabric and fast tint. Findings revealed that the lower the price of the T-shirt, the inferior will be its quality. Nevertheless, they observe a sizeable difference in the quality of the T-shirt declining in different price ranges. The buyers normally give less concentration to the price of the lavatory soap while making the actual purchase. Brand loyalty, features of the lavatory soap, and trademark reputation takes precedence over price. However, they perceive a significant difference in the quality of the toilet soap available at different price ranges. They consider that the lower the price of the toilet soap, the inferior will be its quality and vice-versa. But, this confidence is to some extent weaker for toilet soap while comparing to the other two product categories.

Consumers using price as a surrogate measure of quality, encourage companies to raise the level of product quality. Price reflects levels of quality even with limited competition. Hence, it is concluded based on the analysis that consumers feel the price as a measure of quality.

The message to consumer is: “you get what you pay for when you want”.

References


http://www.businessdictionary.com/definition/consumer-non-durables.html


Steven M. Shugan, (2003), university of chicago, *price-Quality Relationship*, EBSCO Publishing,


NUTRITION AND SOMATOTYPE OF SPORTS SCHOOL BOYS

* D. Sakthignanavel, ** H. Ravikumar

Abstract

In order to find the difference in nutrition intake and requirement as per RDA (Recommended Daily Allowances by WHO) and somatotype with percent body fat of sports school boys of 15-18 years in union territory Puducherry, the available sample of 22 boys was taken as subjects. Four skin folds, viz triceps, sub scapular, supra-illiac and calf; bicep girth, calf girth, fumour width, humour width, height and weight were measured. Somatotype rating was calculated for each subject using heath-carter methods of somatotype. Percent body fat is calculated and related with somatotype component of the subject. The subjects seven days diet were measured and nutrient value was analyzed as per RDA per day. Result indicates that somatotype sports boys were mostly in mesomorphic type. A significant relationship was found in percent body fat and endomorphic component. In dietary analysis the nutrition total fat, retinol (Vitamin-A) and phosphorous should be reduced in the diet. By increasing the adequate amount of protein through vegetarian source, beta carotene (Vitamin A), Vitamin B1, B2, and calcium helps for better performance in physical activity.

Key words: nutrition, sports students, somotogram

Introduction

Nutrition is the relationship of food to the well-being of the human body. It includes, (1) the metabolism of food, (2) the nutritive value of food, (3) the qualitative and quantitative requirement for food at different ages and development level to meet physiological changes and activity need, (4) the changes in nutrient and food requirement that assist in the reduced risk of degenerative condition, and (5) the economic, psychological, sociological and cultural factors that affect the selection and eating of food.

There’s nothing like the subject of nutrition to stir debate. It seems like the experts change their minds almost daily about what we should and shouldn’t eat. In truth, scientific nutrition hasn’t changed much at all in the last fifteen years.

* Reader, ** Ph.D., Scholar, Department of Physical Education Pondicherry University, Puducherry - 605 014. E-mail: gnanavelsakthi@yahoo.co.in
It’s the constant and never-ending emergence of fad diets and weight loss programs that adds to the confusion. It appears everyone has differing opinions...

Fortunately, scientific sports nutrition is a little less contested. There are some very well-researched, well-practiced dietary strategies that have been used by athletes for many years. They are applicable to most sports. In fact, they are more than applicable - they are a pre-requisite to peak performance.

Nutrients are chemical substances your body uses to build, maintain, and repair tissues, empower cells to send messages for various functions such as breathing, moving, eliminating wastes, thinking, seeing, hearing, smelling, tasting.

Food provides two different and distinct groups of nutrients:

1. Macronutrient: (Macro-Big) Protein, carbohydrates, fat & water.

**Proteins** are the building blocks of body. Proteins are ‘made up of long chain like nitrogenous compound called amino acid. Out of 20 known amino acid 8 are called as essential amino acid which can be getting through diet the essential amino acids are isoleucine, leucine, lycine, methionine, phenylalanine, threonine, tryptophan and vaine. One gram of protein contains 4 calories. An adult need 0.9 gms of protein/kg per day. Out of total Calories a person need 15 per cent to 20 per cent of protein from total Calories.

**Carbohydrates** furnish energy to millions of cells within human body. A person needs 50 per cent of carbohydrates from total calories. It is classified with monosaccharide Glucose to (Fructose & Galatose), disaccharide (Sucrose & lactose) One gram of carbohydrate contain 4 calories.

**Fat** have several and major functioning the body energy storage, carrier of fat soluble vitamins A, D, E & K through out the body, Protection as covering to organ such as heart lungs etc. protect our body in hot & cold. One gram of fat contains 8 calories. Out of total calories 25 per cent of calories must come from fat.

**Vitamins** are organic substances that are essential for human life. Since it needed in only small amount they must be provided either through diet or supplement. There are 13 vitamins classified as water soluble (vitamin C, B1, B2, B5, B6, B12 folic acid & biotin) and fat soluble (vitamin A retinol & beta carotene, D, E and K)

**Minerals** like vitamins provide no energy but plays vital role in individual’s diet. calcium, chromium, copper, iron, magnesium, manganese, phosphorous, potassium, selenium, zinc, sulfur, iodine.
Individual body type is related to his health, immunity from disease physical performance and personality characteristics.

Sheldon’s three aspects or components of bodily morphology he had determined were called endomorphy, mesomorphy and ectomorphy. The three descriptions were derived from the terms used to describe the three initial layers in the early embryonic forms of higher life.

**Endomorphy**

Total physique: Round and soft with large fat storage. In extreme form pear shaped. Abdomen is full and extensive and the thorax appears small. The limbs appear short and ineffective. Shoulders are full and round supporting a round head. The skin is soft and smooth. Fine hair with little showing on the body.

**Mesomorphy**

Total Physique: square and rigorous in appearance, with much prominent muscle. Shoulder predominates with thorax wide at the apex and the abdomen small. The limbs appear large and strong. Neck is short with a rugged head showing prominent eminencies. Skin is rather coarse, as is the hair.

**Ectomorph**

Total Physique: fragile and slender with a minimum of either factor muscle. The trunk generally appears short and poorly positioned and is accompanied by long spindly limb shoulder are wide but droop, the neck is slender and can appear inadequate for the head, which often has cranium. The skin is thin hairs and brittle.

**Methods & Materials**

**(A) Selection of Subjects**

The Subjects of this study were sports school boys in the age group of 15-18 years (N=22) in union territory of Puducherry.

**(A) Morphological conformation was determined by utilizing heath-carter anthropometric measurements.**

Necessary anthropometric measurement or somato type rating were taken as follows:

1. Height was measured by means of a well stadiometer. In centimeters
2. Body weight was recorded by a weighing machine in kilograms.
3. Bone width (humerus & femur) were assessed by means of sliding steel vernier calipers and recorded to nearest 0.05 cm.

4. Muscle Girths (bicep and calf) were measured standard tape and recorded to the nearest 0.10 cm.

5. Skinfold Measurement (triceps, sub-scapular, suprailliac and calf) were by means of Harpenden Skinfold Caliper Instrument to the nearest 0.10 cm.

The anthropometric measurements were computed into heath carter somato type rating form and the somato type components (endomorph, mesomorph and ectomorph)

(B) Analysis of Dietary intake

The subjects measured and recorded their food eaten over a period of seven days in their hostel. The food were prepared and when appropriate, cooked was weighed before consumption. Food from the dietary record were then coded, and energy, protein, carbohydrate, total fat, vitamins A, vitamins C, vitamins B1, vitamins 82, vitamins 86 calcium, iron & phosphorus. As per the RDA recommendation.

Statistical Analysis

1. The Students mean nutrient intake per day is compared with recommended daily allowances by National Health and Medical Research council with bar diagrams.

2. The Pearson Product Moment correlation ‘r’ was used to asses between percent body fat and somato type component such as endomorphic, mesomorphic, ectomorphic component.

Result

The mean nutrient intake and nutrient required per day for sports school boys of age group 15 to 18 years is given in Table - 1. The results of energy, macronutrient (protein, carbohydrate& fat). Micronutrient such as retinol and beta carotene, B1 (thiamine), B2 (riboflavin) and B6 (pyridoxine), vitamin C and Iron, calcium and phosphorus.
Table - 1 Nutrition intake

<table>
<thead>
<tr>
<th>Nutrition / Day</th>
<th>Mean Nutrition Intake / Day</th>
<th>Nutrition Required per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy (Kcal)</td>
<td>2570</td>
<td>2839</td>
</tr>
<tr>
<td>Protein (gms)</td>
<td>97</td>
<td>106.5</td>
</tr>
<tr>
<td>Carbohydrate (gms)</td>
<td>347</td>
<td>425.85</td>
</tr>
<tr>
<td>Total Fat (gms)</td>
<td>114.8</td>
<td>88.72</td>
</tr>
<tr>
<td>Retinol (IU)</td>
<td>829</td>
<td>600</td>
</tr>
<tr>
<td>Beta Carotene (IU)</td>
<td>1293</td>
<td>2400</td>
</tr>
<tr>
<td>Vitamin - C (mg)</td>
<td>74.2</td>
<td>45</td>
</tr>
<tr>
<td>Vitamin - B1 (mg)</td>
<td>0.93</td>
<td>1.5</td>
</tr>
<tr>
<td>Vitamin - B2 (mg)</td>
<td>0.78</td>
<td>1.8</td>
</tr>
<tr>
<td>Vitamin - B6 (mg)</td>
<td>3.34</td>
<td>2</td>
</tr>
<tr>
<td>Calcium (mg)</td>
<td>1179</td>
<td>1200</td>
</tr>
<tr>
<td>Iron (mg)</td>
<td>24.96</td>
<td>18</td>
</tr>
<tr>
<td>Phosphorus (mg)</td>
<td>1767</td>
<td>1200</td>
</tr>
</tbody>
</table>

The result shows that the nutrition intake should be slightly increased in the diet as per the requirement about 269 calories, so the calories should be planned from the protein 9.5 gms, carbohydrates 78.85. Increase in requirement of micronutrient such as betacarotene 1107 IU, vitamin B1 (thiamine) 14.07 mg, vitamin B2 (riboflavin) 1.02mg, calcium 21 mg.

The table also shows more intake of total fat 26.08gms, vitamin A (retinol) 229. IU, vitamin C (ascorbic acid) 29.2 mg, vitamin B6 (pyridoxine) 1.34mg, Iron 6.96mg & phosphorus 567mg. in their regular diet.

Table – 2 Scores of Body type and % Body fat (N=22)

<table>
<thead>
<tr>
<th>No.</th>
<th>Endomorphic</th>
<th>Mesomorphic</th>
<th>Ectomorphic</th>
<th>% Body Fat</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.5</td>
<td>7</td>
<td>3.5</td>
<td>17.9947</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>7</td>
<td>3</td>
<td>20.616</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>7.5</td>
<td>3.5</td>
<td>20.761</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>6.5</td>
<td>4</td>
<td>17.311</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>7.5</td>
<td>4.5</td>
<td>18.383</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>4.5</td>
<td>3</td>
<td>17.353</td>
</tr>
<tr>
<td>7</td>
<td>4.5</td>
<td>7</td>
<td>5.5</td>
<td>20.545</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>7.5</td>
<td>4.5</td>
<td>20.572</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>4.5</td>
<td>4</td>
<td>17.934</td>
</tr>
<tr>
<td>10</td>
<td>4</td>
<td>7.5</td>
<td>4</td>
<td>20.6525</td>
</tr>
<tr>
<td>11</td>
<td>4.5</td>
<td>7.5</td>
<td>4.5</td>
<td>20.588</td>
</tr>
</tbody>
</table>
The Table-2 Shows the scores of somatotype components plotted in somatogram.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>4.5</td>
<td>6</td>
<td>4.5</td>
<td>15.032</td>
</tr>
<tr>
<td>13</td>
<td>5</td>
<td>8.5</td>
<td>4</td>
<td>23.3615</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>6</td>
<td>5.5</td>
<td>17.949</td>
</tr>
<tr>
<td>15</td>
<td>2.5</td>
<td>4.5</td>
<td>6</td>
<td>14.714</td>
</tr>
<tr>
<td>16</td>
<td>4</td>
<td>7.5</td>
<td>5</td>
<td>23.093</td>
</tr>
<tr>
<td>17</td>
<td>4.5</td>
<td>6.5</td>
<td>3</td>
<td>20.558</td>
</tr>
<tr>
<td>18</td>
<td>4</td>
<td>6</td>
<td>4.5</td>
<td>20.7255</td>
</tr>
<tr>
<td>19</td>
<td>4</td>
<td>7</td>
<td>5.5</td>
<td>17.949</td>
</tr>
<tr>
<td>20</td>
<td>2.5</td>
<td>7</td>
<td>4</td>
<td>15.061</td>
</tr>
<tr>
<td>21</td>
<td>5.5</td>
<td>4.5</td>
<td>3.5</td>
<td>24.641</td>
</tr>
<tr>
<td>22</td>
<td>5.5</td>
<td>5.5</td>
<td>2</td>
<td>24.9085</td>
</tr>
<tr>
<td><strong>Meanscore</strong></td>
<td><strong>4.1</strong></td>
<td><strong>6.5</strong></td>
<td><strong>4.2</strong></td>
<td><strong>19.58</strong></td>
</tr>
</tbody>
</table>

The Table-3 Shows the data of somatotype components and the percent body fat of sports school boys of age group 15 to 18 years. The relationship between endomorph and percent body fat, mesomorph and percent body fat, and ectomorph and percent body fat were calculated.

**Discussion**

The primary purpose of the study was to find out the adequate micro & macro nutrient required for sports school boys of Puducherry and relationship between somatotype and percent body fat.

**Figure-1**  Bar Diagram Shows the dietary intake and requirement per day
Figure – 2 Macronutrient

The Figure-1 shows the caloric intake and requirement per day. The mean caloric Intake shows the need of additional diet (269 Kcal)

Since we get more calories from macro nutrient the calories are substituted through proteins and carbohydrate diet. Figure - 2 shows the total fat intake is more than the requirement. Fat diet should be decreased by 26.08 gm. By decreasing the animal protein and increase in vegetable protein gives less fat high protein diet. The additional calories required per day can be compensated by 20 to 30 gms of protein diet.

Micro nutrient has no caloric value, but very much essential to the body minimum of recommended dietary allowances for growth, development and normal metabolism. In figure - 3, the dietary intake of vitamin A - retinol is more than the RDA about 229 IV. But beta carotene in vitamin A was seems to be lesser intake than normal about 107 IV. Since the diet of sports school boys is mostly non-vegetarian diet availability of retinol is high than beta carotene. Intake of vegetarian diet such as carrot, squash, broccoli, especially green leaves should be included in the diet.

Figure-3 Micronutrient
Figure-4 Micronutrient

Vitamin B a water soluble micro nutrient contains eight vitamins such as B1, B2, B3, B5, B6, B12, biotin and folic acid. The fig - 4 shows the analysis of B1, B2 and B6 in which Bland B2 seems to be more deficit in daily requirement than B6 (Pyridoxine) which has more in dietary intake about 1.34 mg than RDA level of 2 mg. Since non - veg source such as white meet and red meat has more B6 (Pyridoxine) the level seems to be more in the diet. The non-veg source of protein should be reduced and protein from vegetarian source can be increased to get B1 & B2 vitamins sun flower seeds, whole and enriched, grains, dried beans, spinach noodle, mushrooms are recommended.

The Important micro nutrient & antioxidant mineral is vitamin C (ascorbic acid). Since it water soluble vitamin needs in daily diet minimum of 45mg/day. Fig - 5 shows the intake of vitamin C is 74.2 gms is more than the RDA recommended, is not harmful. The intake of vitamin C helps to recover from damages happening in the training period or life style activities. Intake of Vitamin C can be increased up to 1000 mg depend upon the need. In figure -5, Iron seems to be more than the recommendation need not be harmful for the sports school student of age group 15- 18 years. The vitamin C also helps in better absorption of Iron by 90 per cent. Recent studies on iron by Dufax et al (1981) pointed that the distance runner have higher Iron demand and New house Clement (1988) also pointed out the increase intake of iron in athletes through profuse sweating in endurance runner.

Figure-5 Micronutrient
The most abundant mineral in the body and one of most important mineral constitute about 1.5 to 2.0 per cent of body weight. In Figure - 6 shows the minimum calcium deficit is seen in diet about 21 mg. But phosphorus also seems to be higher intake of 567 mg. lowering the phosphorous gives better absorption of calcium in the bone, teeth and other body movements. The best calcium / phosphorous is 1:1 to 2:1 regulating more intake of egg yolk chicken breast, increasing the intake of greens and vegetable proteins gives adequate and balanced amount of calcium and phosphorous.

The somatotype of sports school boys were analyzed to find out whether any relationship between percent body fat with endomorphic component, mesomorphic component, and ectomorphic components. Since the correlation between percent body fat and endomorphic component is 0.67 is higher than table value of 0.423 a significant relationship was obtained at 0.05 level between percent body fat and endomorphic component is of Sheldon Classification for sports school Boys of IS to 18 years of age group. Since it is related to skin fold measurement in the first component of heath carter somatotype rating significance is found. A non significant relationship was found with the table value of 0.423 between percent body fat and mesomorph is 0.221 and percent body fat and ectomorph is -0.397. These findings are similar to the result in the previous research conducted on men (Baker, Hunt & Een 1958) and indicated that the children as well as adults percent body fat is closer to endomorphy. The same finding s obtained in this study.

The obtained endomorphic, mesomorphic and ectomorphic component score from 22 sports school boys of Puducherry are plotted in the somato chart show the body types.

The Table - 2 shows that the mesomorphic component seems to be more dominant than endomorphic and ectomorphic component, shows the perfection in the body type of mesomorphy. Other studies shows that athletes and non athletes differ as groups in their somato type components. This investigation agreed with the finding of carter (1970) and Polednak and Damon (1970) that athletes were more mesomorphic not endomorphic.
Conclusion

It has been concluded that the sports schools boys of age group 15-18 years in union territory of Puducherry are mostly mesomorphic type with very strong endomorphic ectomorphic component. A significant relationship was found in per cent body fat and endomorphic component.

In dietary nutrition total fat, retinol, phosphorous should be reduced in the diet. By increasing the adequate amount of protein, vitamin B1, B2, beta carotene and calcium helps for physical activity.

Somatogram Somato type Placement of sports School Boys

Mesomorph
References


THE IMPACT OF DEPRIVATION ON ADJUSTMENT 
AMONG ADOLESCENT STUDENT

* Baburao H. Muddankar, ** R. Venkat Reddy, 
*** V. Rama Krishna

Abstract

The term Deprivation has been used in various ways. There are many studies in natural and laboratory settings which have led to crystallization of various empirical evidence of this term. The word “Deprivation” is derived from the verb “To deprive” which means to dispossess or strip, and it implies a felt loss. The word deprivation literally refers to dispossession or loss of privileges, opportunities, material goods and the like. In a different context it has been used in different ways. It is used as “Social disadvantage, cultural alienation and a condition in which particular external and internal factors merge to narrow a person’s behavioral alternatives for achieving self-fulfillment”. It is the state of insufficient satisfaction of basic needs and deficiencies in individual family settings. Adjustment in a fast changing society is an important Socio-Psychological aspect, to be constant studied. The problem of adjustment especially during the most crucial phase of adolescence demands some more attention. Hence the process of adjustment is becoming more and more complex and stress full. Adolescence is one of the most crucial periods in ones life span. It is a period when one becomes sexually mature and gets integrated society. The various physical and mental changes bring about anxiety and self consciousness, changes in body images and various emotional changes in the adolescent. Adolescence is a period where a number of problems and disorders are experienced. Thought or cognitive development is important and major development take place during this period. This study was conducted on a sample of 145 Junior college Students (boys and girls) to test the hypothesis that The Impact of Deprivation on Adjustment of Adolescence participation in Gulbarga University, Gulbarga, Karnataka.

Key words: Deprivation, Adjustment, Adolescent
Introduction

According to Thripathi and Mishra, (1975), deprivation is to be considered as a prolonged process relative to a defined social setting. Socio-cultural life in any social setting can be conceptualized as a continuum at one end of which lie those who have all the Physical, Social, Economic and other facilities fulfillment of their biogenic as well as sociogenic needs leading to varied experiences in life, while on the other end lie those who are materialistically socio-culturally and psychologically handicapped in fulfillment of their needs and acquisition of diverse experience. It is a fact that accumulation of experiential variety and extent is an outcome in relatively longer periods in a natural setting, it has been considered advisable to add an epithet to the term deprivation and call it prolonged deprivation. The concept of prolonged deprivation stands for a variety of organism and environmental variables constituting the basic sources of experiences to the living organisms. It is a multidimensional phenomenon manifest over short or long durations (Mishra and Tripathi-1976). The deprivation may occur in all walks of life, either in isolation or together with all areas as possible.

The term social deprivation is nothing but absence of togetherness and / or group members with whom one can interact. The social deprivation is used synonymously with terms like social disadvantaged, social isolation, and poverty etc. Gordon (1965) has stated that terms such as “Socio-economic deprivation, socially disadvantaged and culturally alienated reflect concern with deficiencies in the stimulus conditions of childhood. Whiteman and Deutsch (1969) have considered social deprivation as a relative term referring exclusively to specific types of environmental factors”. According to him any environmental factors may be considered deprivational (1) if that factor is associated with certain social groupings, such as, Socio-economic status caste, race and community. (2) When the environmental variables are associated with imperiled performance. It means an environmental condition may be associated with particular psychological deficit, but it would not be considered a social deprivation if the conditions were not socially patterned.

The concept of adjustment is used to denote the personality of the individual. It is also used to refer to one’s behavior psychological condition {normal or abnormal} sociability etc. this epithet is also used to describe the quality and success of life. However, the concept of adjustment is a research variable need to be explored.

The concept of ‘adaptation’ which is the key term of Darwin’s theory of evolution was borrowed and renamed as ‘adjustment’ by psychologists. Thought the concept of adjustment was in usage for a long time to explain certain processes referring to the human behavior, the scientific study of adjustment started only in the twentieth century. The word adjustment came into popular use in
psychology during the 1930’s and was given strong endorsement by Shaffers (1936) Classical book “The Psychology of Adjustment”. He stressed upon the biological adaptation of the organism to its environment as adjustment. J.B.Watson and Fredrick Dashie (1930) the behaviorists influenced the thinking of psychologists during this time which was a mechanistic approach to human behavior. The important areas of adjustment that areas are likely to affect by Deprivation are Home, Health, Social and Emotional adjustment.

Home adjustment involves how much the individuals satisfaction or dissatisfaction with the home-life, relationship with the parents, discipline etc. Deprivation of basic needs, or partial satisfaction of needs, lack of warmth, and unsatisfactory relationship with in the family leads to adjust mental problems. Deprivation has strong relationship with the home adjustment of the adolescents.

Health adjustment relates to the illness, ailments, diseases and health status of the individual. Health of individual depends upon the nourishment and medical care provided to him. Early malnutrition and illness cause everlasting effect on the health of an individual. Economic insufficiency, inadequate housing facilities, in sanitary surroundings and lack of awareness about health and nutrition lead to health problems. These conditions are the result of deprivation. Hence health adjustment is associated with deprivation.

Social adjustment includes the individual’s participation in social activities, seeking and enjoying company of others desirable and favorable attitudes and establishment of spontaneous and harmonious interpersonal relationships. Poverty and socio-cultural deprivation limit the social participation. Hence, he avoids meeting people, feels uneasy, awkward, embarrassed; remains in the background and does not take initiative to meet other people. Deprivation has direct impact on the social adjustment.

Emotional adjustment is concerned with the emotional instability of the individual. Nervousness, depression, excitement, shyness are the characteristics of maladjustment deprivation frustrates the individual’s satisfaction of needs, which leads to emotional disturbances. Socio-cultural deprivation leads to feelings of being rejected, inferiority, insecurity, inadequacy and lack of self control mechanisms, and hostile rejection of adult values. As a result of deprivation, emotional adjustment gets affected adversely.

**Methodology**

The present paper will discuss with the variables deprivation, adjustment and academic achievement of the respondents applied with the number of sample group of 145, (both male and female) and the scales are 1. The Prolonged Deprivation Scale (PDS); 2. H.M Bells Adjustment Scale (1968); 3. personal data sheet. The findings of the paper is will be highlighted with the help of
graphs and tables has been taken into consideration along with the samples of the study.

**Aim of the Research Paper:** To find out the impact of deprivation on adjustment among adolescent student

**Objectives**

The main objectives of the present investigation are as follows.

1) To know the impact of deprivation in rating the adjustment of the high and low adjusted groups.

2) To verify areas of home, social, emotional, adjustment and deprivation of rural and urban students.

3) To know about difference between deprivation and adjustment of the rural and urban female students.

4) To know about difference between deprivation and adjustment of the rural and urban male students.

5) To study the relationship between deprivation (within the high deprived group) and adjustment.

6) To study the relationship between deprivation (within the low deprived group) and adjustment.

**Hypothesis**

The following hypotheses were formulated and tested in the present study.

1) There is significant different between deprivation and adjustment of Rural and Urban Students.

2) There is significant different between deprivation and adjustment of Rural male students.

3) There is significant different between deprivation and adjustment of Urban male students.

4) There is significant different between deprivation and adjustment of Rural female students.

5) There is significant different between deprivation and adjustment of Urban female students.

6) There is significant difference between the areas of home, health, social, emotional adjustment and deprivation of rural and urban students.
Study Population

As it is evident that the development of self begins from the early stages of life. In the span of development growth of maturity starts from 13-25 year of life. The impact of modern society, knowledge of science and technology, socio-political awareness, education etc. These all factors influenced the adjustment of the students; with this background it is decided in the present study to select the sample from the various Pre-University Colleges from S.B.College and Milind Pre-University College of Arts Gulbarga. The age of the students ranged from 17-20 years. In this study 75 (25 rural and 50 urban) male and 70(21 rural and 49 urban) female students, thus totally 145 samples are taken for study. The sample design is given below.

Sample Characteristics

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Sex</th>
<th>Domicile</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Rural</td>
<td>Urban</td>
</tr>
<tr>
<td>1.</td>
<td>Male</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>2.</td>
<td>Female</td>
<td>21</td>
<td>49</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>46</td>
<td>99</td>
</tr>
</tbody>
</table>

Tools and Techniques

The tests and scales used in the present study are as follows:

1. The personal data sheet
2. The Prolonged Deprivation Scale (PDS)

The Personal data sheet

A personal data sheet is specially designed for the purpose of the present study to collect information regarding the demographic variables. The variables include, name, address, age, sex, caste, religion, education. Types of family, domicile, order of birth, number of siblings, family income of the subjects etc. of both the sample groups.

The Prolonged Deprivation Scale (PDS)

For the long time sustained interest is being shown in the investigation of the effect of deprivation on human personality and adjustment of students (Chaubey et al. 1986). In most of these studies usually study samples are selected on the basis of caste, income and urban or rural residence. Where as the impact of social and economic deprivation appears to act in a very complex fashion. Investigators have generally considered people / participants belonging
to lower castes with income, residence in rural areas, slums, etc., under low SES category. Validity of these criteria is doubtful because, SES does not consist of all the factors which encompass deprivation. In every caste there are rich and poor people. Therefore caste can not be considered as a sufficient criterion of poverty and deprivation. While considering the income many researchers have not taken into account the number of dependents. Residence in the urban is no more a criterion of prosperity, there are people living in extension areas / dirty gullies without basic amenities on the other hand many people in the rural areas are leading a comfortable life. Hence, categorization of people as deprived or non-deprived on the basis of a few facts mentioned above may be misleading. At the same time, the duration of deprivation also need to be given due weight age since prolonged deprivation would certainly cause greater degree of damage to the personality and adjustment of the adult students.

Keeping these points in view it was decided to use “prolonged deprivation scale” developed and standardized by Misra and Tripathi (1980). The test retest reliability is 0.59, split half reliability is 0.95. The authors have established content, intrinsic, prediction and construct validity. The scale measures 15 areas of life situations. Viz. residential, accommodation, physical environment, economic sufficiency, food, clothing, motivational experiences, rearing experiences, childhood experiences, educational experiences, parental characteristics, interaction with parents, recreational experiences and cultural experiences. The scale includes 96 items and there are five alternative answers for each statement. Score values of 1, 2, 3, 4, and 5 are assigned to all the items except item 70, 74, 75 and 77 to which the score values are 5, 4, 3, 2 and 1. On the basis of the scores obtained the group may be divided into high, middle and low deprived groups based on quartile deviations. Higher score signifies higher level of deprivation and vice versa. As the subjects were of rural and urban backgrounds and of English and Kannada medium a few changes were made in case of some items.

**H.M. Bells Adjustment Scale (1968)**

There are 140 questions in H.M. Bells adjustment inventory are as like family, health, social and emotional to every question there shall be answer like “false or true” there shall be directions regarding the manner of writing in the answer sheet.

**A:-** Family adjustment - According to Bells more marks obtained in this adjustment family is unsatisfactory or they become unhappy and those obtained less marks they would be satisfactory and happy.

**B:-** Health adjustment- In this fields those who obtained more marks they have poor health and who have less marks they have good health.
C:- Social adjustment- Those who obtained less mark they will expect respectful ideas and desire to leave away from the society and who earn more marks they will be in relation with society.

D:- Emotional adjustment- In this field those who earn more marks they will less adjustment and who earn less marks will behave in a friendly manner and friendly with the society that is well adjustment.

In the adjustment scale there are 4 areas like home, health, social, emotional adjustment. The responses can be given in 2 ways (yes, no) if the response of the subject is same as in the scoring key given 1 marks is given to item, ticked. The scoring is done in accordance with scoring key of the manual.

Statistical Analysis

Mean, Standard deviation and “t” test was calculated for the both male and female regarding to the adolescence level of deprivation and adjustment.

Results & Discussion

Table: 1 Showing the mean, SD and t value of Deprivation and Adjustment of Urban and Rural students

<table>
<thead>
<tr>
<th></th>
<th>Home</th>
<th>Health</th>
<th>Social</th>
<th>Emotional</th>
<th>Deprivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>10.74</td>
<td>8.74</td>
<td>10.78</td>
<td>6.66</td>
<td>10.32</td>
</tr>
<tr>
<td>SD</td>
<td>5.855</td>
<td>3.361</td>
<td>5.088</td>
<td>3.094</td>
<td>4.177</td>
</tr>
<tr>
<td>t, value</td>
<td>2.068*</td>
<td>4.735**</td>
<td>2.010*</td>
<td>7.033**</td>
<td>2.662**</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level.
**Significant at 0.01 level.

F&M=Female and Male.
SD=Standard Deviation.

Table: 1 reveals that the mean and SD and the t-values of the home, health, social, emotional, adjustment and deprivation of urban and rural male and female students.

The obtained mean and SD of home adjustment of urban male and female is 10.74 and 5.855 is lesser than the mean SD of rural male and female i.e., 8.74 and 3.361 respectively. The calculated t-value 2.068* is significant at 0.05 degree level of significance. Therefore, there is significance difference between home adjustment of urban and rural male and female students.

In the health adjustment obtained mean SD of urban male and female is 10.78 and 5.088 is lesser than the mean SD of rural male and female students.
6.66 and 3.094 respectively. The calculated t-value 4.735** is significant at 0.01 degree level. Therefore there is significance difference between the health adjustment of urban and rural male and female.

In the social adjustment obtained mean SD of urban male and female is 10.32 and 4.177 is lesser than mean SD of rural male and female students 8.88 and 3.344 respectively. The calculated t-value 2.010* is significant at 0.01 degree level of significance. Therefore there is significance difference between the social adjustment of urban and rural male and female students.

In the emotional adjustment obtained mean SD of urban male and female is 12.90 and 4.854 is lesser than the mean SD of rural students 2.075 respectively. The calculated t-value 2.662** is significant at 0.01 degree level of significance. Therefore there is significance difference between the emotional adjustments of urban female and rural.

In the deprivation obtained mean SD of urban students is 11.36 and 4.134 is lesser than mean SD of rural students 9.38 and 2.267 respectively. The calculated t-value is 2.662* is significant at 0.01 degree level significance. Therefore there is significance difference between the deprivation of urban and rural students.

In the home, health, social, emotional adjustment and Deprivation, there is significant difference between the urban and rural female and male students.

**Graph showing the mean value of Home, Health, Social, Emotional, Adjustment and Deprivation of Urban and Rural Students.**

<table>
<thead>
<tr>
<th>Adjustment’s Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban F and M = 10.74%</td>
</tr>
<tr>
<td>Rural F and M = 8.75%</td>
</tr>
<tr>
<td>Health Urban F &amp; M = 8.75%</td>
</tr>
<tr>
<td>Health Rural F &amp; M = 6.66%</td>
</tr>
<tr>
<td>Social Urban F &amp; M = 10.32%</td>
</tr>
<tr>
<td>Social Rural F &amp; M = 8.80%</td>
</tr>
<tr>
<td>Emotional Urban F &amp; M = 12.90%</td>
</tr>
<tr>
<td>Emotional Rural F &amp; M = 7.32</td>
</tr>
</tbody>
</table>

Graphically Showing Mean aeries
Summary of Findings

In the present study significant difference observed with respect to different levels of deprivation and adjustment of the rural and urban adult students. On the contrary the rural students are used to compassionate natural styles of living with limited wants and expectations. Their health conditions are much better than urban students means their deprivation level is low. While the urbanization and mechanical styles of living in urban students leave limited options and ambit of adjustment means deprivation level is high. The joint family systems still prevailing in the rural sector bring in social attachments, mutual regards and respects. Thus rural students feel more secured life this is of late basically lacking in urban culture establishments of Kindergarten Schools and globalization and modernization. Lastly irrespective of the sex, rural students have better social and mental levels of adjustments and less deprived as compared to the urban students.

Reference


Amos (William E.) and Grambs (Jean Dresdon) (1968) Eds: Counselling the disadvantaged youths; prentice-Hall Inc, London.


Baron (Robert A) and Byrne (Donn) (1988); Social Psychology Understanding Human Interaction; Ed.5; Prentice-Hall, New Delhi.


Sinha (Ashok.k-1983): Socio-Cultural Deprivation and Locus of Control; Psychological Studies; Vol.28 (2) 90-91.


REFUGEES AND HUMAN RIGHTS:
A REVIEW OF INTERNATIONAL LAWS

* G. Sathis Kumar, ** S. Ramaswamy

Abstract
Refugees - the human rights victims seem to blame the state of origin. States are increasingly challenging the logic of simply assimilating refugees to their own citizens. Questions are now raised as to whether refugees should be allowed to enjoy freedom of movement, to work, to access public welfare programs, or to be reunited with family members. Human rights law offers a promising starting point for understanding refugee law. Refugee laws are seen as a subsidiary system of human rights protection. The purpose of refugee law could be to serve as a backup system. Individuals, whose human rights cannot be guaranteed in their country of origin, benefit from protection abroad, granted through refugee law. Thus, it is arguable that refugee laws should become operative only on the premise that a human rights violation takes place. Even though international law provides for the protection of an individual in the International Bill of Rights, the international human rights system is notoriously ineffective in many ways. The international legal framework for the protection of the human rights of individual has hitherto paid only insufficient attention to the problems of refugees. Simple reasons for the lack of attention to the problem of displaced and refugees have been the absence of their voice at international fora, where the interests of refugees have not been sufficiently represented; and until recently, refugees issues were kept away from legal systems of and debates on human rights. In this context, this paper, reviews several international laws in general and international human rights laws in particular; examines the existence of refugee laws in the international legal systems; and enlightens the rights of refugees.

Key words: Refugee, International Law, and Human Rights.

Introduction
There have always been refugees. Wars, political upheavals, ethnic discrimination, religious strife and a wide range of other human rights abuses lead people to become refugees. Refugees are people who have suffered human rights violations and who have fled across the borders of their home countries to
seek protection elsewhere (Gil Loescher, Alexander Betts, and James Milner, 2008). Refugees’ problems are as old as recorded in the society and it has been virtually universal. The current legal and institutional framework for addressing refugees’ situations was, however, shaped in the crucible of twentieth century events. Throughout the past century, there have been many peaks and troughs in the overall numbers of refugees and other displaced people in the world, with huge numbers during the two world wars and during the 1980s and 1990s. In mid-2007, the global number of refugees stood at almost 10 million, with another 25 million people internally displaced (Gil Loescher, Alexander Betts, and James Milner, 2008) and coping with refugee problems has become increasingly formalized. This formalization was inevitable in a world where nation states jealously guard their authority. When people cross border as on emergency basis, outside the provisions of normal immigration controls, governments must be concerned. If people are under such emergency circumstances, it is because governments have either violated their obligations to their residents or have not been able (whether it is due to war, natural disaster, famine, civil war and unrest, etc.) to protect or assist them at some minimum level (Gallagher D, 1989) and in most of the cases, refugees are forced to sit idly in camps with no hope of attaining self-sufficiency in circumstances a long way from the aspirations of human dignity (Julia Hauser Mann, 1985). In the present circumstances, only a small segment of the refugees only find opportunities for resettlement in the industrialized / developed world, on the one hand. On the other, most of them have to remain in the regions of the origin or host, impose an extended burden on fragile infrastructure and thus, require assistance (Good Willie S, 1983). They need emergency relief immediately, but even provision of bare essentials often is difficult, because of inadequate transportation and communications facilities, lack of water, and shortages of food or other basic commodities. In addition, requirement for their longer self-sufficiency and integration can be even more complex (Good Willie S, 1983). This is one of the major challenges to governments of the host as well origin countries and refugees alike. To mitigate the problem of refugees, the international institutions and governments must, recognize the full dimensions of the problem of displacement, and respond to the needs of the uprooted needs to be strengthened, but what is also required is serious attempt to resolve the underlying problems which give rise to flight, and to protect people from being forced into flight. Second, we need to assess protection in the context of human needs. Analysis of the international protection provisions and the role and mandates of the international organizations concerned with protection indicates that there are circumstances in which refugee law does not apply and categories of persons not falling within the mandates of any organization. These problems need to be addressed. Third, we must find ways to strengthen the enforcement of existing laws of protection. It is well known that there are a plethora of legal provisions, not only in refugee law but also in international
humanitarian and human rights law. What is lacking is not so much law but effective mechanisms for its enforcement. Finally, new initiatives are required to enable the international community to respond in a coherent manner to the tremendous humanitarian problems of displacement in today’s world.

### Causes of Refugee Problems

The causes of existing refugees’ situations, following the existing refugee definitions juxtaposing them to new and analogous evolving situations. They are: *Primary factors* are those enumerated in the 1951 Convention) in Article 1.A (2), i.e. (i) racial, (ii) religious, (iii) political and (iv) social; *Secondary factors* are those partly enumerated in the 1969 Convention adopted by the Organization of African Unity and partly those accepted generally by the international community, viz. (i) military, (ii) ideological, and (iii) ethnic / cultural; *Auxiliary factors* are those that are completely outside the framework of traditional concepts of refugees but that in certain regions are playing or will play an increasingly important role as contributing factors to massive population movements. They are (i) economic, (ii) ecological, and (iii) demographic (Rizvi, Zia, 1988). The factors which causes the prolonging of refugees situations over the world irrespective of South and North, East and West, and developed and developing, are briefly commented at this juncture: The primacy of *race and religion* is indicative of the special circumstances and the environment prevailing in the aftermath of World War II. *Political factor* dominates the refugee scene in the sense that an element of it is present in practically all refugee situations. This is so because politics reflects the ills of a society as much as its strong points and because in the end, most situations end up getting politicized, if they are not political at the outset. *Social factors* are inextricably linked in the most countries to political factors. Moreover, the notions of class and caste are relevant to this factor in many societies. As for *military factor*, it is interpreted to include armed violence and conflicts, both between States and within States. The *ideological factor* has continued to play a significant role, not only in terms of East - West rivalries and tensions but also, by extension, in a number of South - South situations. The nature of a majority of present-day regimes - mostly authoritarian and repressive - ensures that the struggle between the oppressed and the oppressor will continue to be important in terms of possible refugee flows. The *ethnic* dimension linked more directly to language and culture, is an increasingly important contributing factor in the context of ethnic rivalries and cultural clashes. *Economic* migrants who, often for reasons of personal convenience, arrive in developed countries, or who claim fear of persecution in order to avoid returning home have become a familiar feature of the refugees’ lobbies. *Ecological refugees* are those who cross international borders simply because of geographical proximity or tribal affiliations end up in refugee camps. In the demography context, rapid and largely uncontrolled population growth,
the growing number of young people, persistent of poverty and unemployment are elements that will collectively contribute to large number of people leaving their homes in search of a better life and livelihood (Rizvi, Zia, 1988).

**International Law and Human Rights: Trends Concerning Refugees**

Refugees have a particular interest in liberty and personal integrity rights, including freedom of movement and the rights to leave and to return to one’s own country, to seek refuge and asylum, to enter another country, not to be expelled, and not to be returned to a country in which life or freedom may be endangered; procedural rights, for example equal protection of the law, access to courts and tribunals, remedies; status rights, as residents, refugee with asylum, or the child to a nationality; family rights including reunification and special protection for children; employment rights, such as the right to work, to fair conditions of work and to security; political rights, including freedoms of thought and conscience, expression, assembly and association; and cultural rights, relating to language, education, and community rights (Guy S.Goodwin-Gill, 1989). Refugee studies reflect the tendency to take said issues with the classical principle of state sovereignty and argue for new forms of political community, which would be less exclusionary towards so-called ‘non--nationals’, and probably be more sensitive to the needs and interests of the ‘outsiders’ (Gautam Kumar Basu, 2001). The refugee-related problems could perhaps be studied from the following perspective: First, from a managerial perspective, i.e. how refugee problems can be managed and solved in a system dominated by anarchy and guided by national interest; Secondly, it can be studied from regime perspective, i.e., how states try to develop norms, formulate principles, codify laws, create institutions and generate consensus for solving global refugee problems; Thirdly, it may be viewed as the product of power configurations, ideological preferences and may simultaneously reflect possibilities as well as constraints of transition towards a better world order (Gautam Kumar Basu, 2001). This paper however approaches the problem of refugees from regime perspective, not others.

The creation of international agencies for the protection and assistance of refugees was accompanied by action for the establishment of multilateral instruments designed to define and improve the legal status of refugees. According to 1951 UN Convention Relating to the Status of Refugees (and extended in the 1967 Protocol), refugees are individuals who owing to a ‘well founded fear of persecution’ for reasons of political opinion, race, religion, nationality or membership in a particular social group are outside their country of nationality and are unable or, as a result of such fear, unwilling to return to it. At the time of drafting of the 1951 Convention, the only comprehensive standard for international human rights law was the unenforceable Universal Declaration
of Human Rights (1948) opens in article 1 with affirmative, “All human beings are born free and equal in dignity and rights”, followed by the Preamble to Charter of United Nations proclaims the determination “to reaffirm faith in fundamental human rights, in the dignity and worth of the human person” and the Annex to the International Labour Organization (ILO) Constitution affirms that “all human beings irrespective of race, creed or sex have the right to pursue both their material well-being and their spiritual development in conditions of freedom and dignity, of economic security and of equal opportunity” (Guy S. Goodwin-Gill, 1989). Prior to the development of international human rights law, traditional international law was exclusively a ‘law of nations’ rather than a ‘law of people’ (Chimni B.S., 2007). Consequently, the traditional body of law and the approaches and practices it envisages has become too narrow to accommodate the new dimensions of the refugee problem. The strong political and ideological context in which they were initially conceived of either no longer exists or has long been superceded by new developments (Castro-Magluff J.M., 2004). But the subsequent adoption of a number of conventions at the regional and international levels raises the question of the relationship of the specific refugee rights regime contained in the 1951 Convention and international human rights law. Indeed, the question arises as to whether in view of the enormous developments in international human rights law there is a longer need to retain a refugee-specific rights regime (Chimni B.S., 2007). In addition, under the 1951 Convention, there is no necessary link between refugee status and life-threatening states of affairs, such as situations of generalised violence, like war, or natural disasters or plagues. In Africa, the Organization of African Unity (OAU) has filled this void by offering an alternative to the UN definition. As well as covering those fleeing persecution, the OAU has, since 1968, attributed refugee status to ‘every person who, owing to external aggression, occupation, foreign domination or events seriously disturbing public order in either part or the whole of his country of origin or nationality, is compelled to leave his place of habitual residence in order to seek refuge in another place outside his country of nationality’ (Matthew J. Gibney, 2004). The vast majority of refugees are, by contrast, unprotected under customary international law. The 1951 Convention’s definition of ‘Refugee’ does not, in fact cover most refugees worldwide until recently. The recent mass movements due to civil wars, military occupation, natural disasters, gross violations of human rights, or simply bad economic conditions have emphasized the urgent need to reformulate international legal regime, which governs the problems of refugees (Manoj Kumar Sinha, 2004).

The fundamental right of refugee status gives people the right of not being back against their will to the country from which they have fled: the right in legal parlance is called ‘non-refoulement.’ Nations that ratify the UN Convention and Protocol obligate themselves not to expel refugees from their territory without
due process of law, and, if grounds for expulsion are found, to give the refugee
time to seek legal admission to another country of asylum. The obligations of
host country also include issuing identity papers and travel documents, allowing
refugees at least the same civil rights as those enjoyed by other legal immigrants,
and facilitating as far as possible refugees’ assimilation and naturalization. As
refugees wait durable solutions to their plight, their most urgent requirement is
the wherewithal to meet basic physical needs; food, clothing, shelter, and
medicines. But this only begins to address their problems. As soon as possible
the displaced people must cease to be refugees, either by voluntary returning
home, by becoming integrated into the society that first sheltered them, or by
relocating to a third country. Whether refugees support themselves or depend
on relief supplies, the impact of a large number of them on the country they first
reach is devastating. In poor countries, the price of basic necessities such as
foodstuffs, building materials, cooking utensils may suddenly escalate with the
new demands, creating serious financial problems for the people of that area.
Local labour markets, too, may be disturbed as refugees, desperate for work,
drive down the prevailing wage rates (Kathleen Newland, 1981). According to
a specialist in refugee law, Goodwin-Gill, ‘the main purpose of any’ definition or
description of the class of refugees is to facilitate, and to justify, aid and protection’
(Tom Kuhlman, 1991). Thus, the coordinated response of governments to the
needs of both refugees and the countries that shelter them has been built around
the concept of ‘international solidarity’ - an obligation to ensure that countries
that give asylum do not pay an unbearable price in terms of their own stability
and development. The first element of international solidarity in the context of
the refugees is material support - money, supplies, personnel, and transportation
equipment - to set up refugee camps and keep them running. A second channel
for refugee assistance is bilateral aid, operating independently of the
intergovernmental agencies. Most governmental aid does move through the
multilateral organizations. Some governments, however, prefer to deal directly
with a recipient government. The third major route for international response is
through the activities of private, voluntary organizations. In cooperation with
UN agencies and national governments, they have taken on a large share of the
responsibility for refugee relief and resettlement. The church groups, charitable
organizations, citizens’ committees, corporations, and private development
agencies operate free of some of the political constraints that hamper or delay
governmental action (Kathleen Newland, 1981). International human rights law
has developed separately from international law on migrants and refugees, but
neither is exclusive; both fields of law are interrelated and interdependent (Guy
S.Goodwin-Gill, 1989). Most provisions of human rights instruments, and most
states in their practices, draw no distinction between nationals and non-nationals
- the rights to life, for example, or the right to integrity of the person and to
human dignity, are guaranteed to everyone without distinction (Guy S.Goodwin-
Gill, 1989).
Lacunae in the formal system of refugee protection are clearly apparent in areas such as refugee definition, admission, standards of treatment and solutions. International human rights law offers an additional, sometimes parallel, system of protection, but its extension into the migrants and refugees field has yet to be made fully effective (Guy S. Goodwin-Gill, 1989). In detail, the inability of the international refugee law instruments to account for and accommodate the aforementioned developments and changes represents for many crises that goes to the theoretical and conceptual foundations of the present international legal regime. Thus, the most fundamental problem with the various efforts to expand the scope of international law is that states have generally not been willing to acknowledge their force. As the gap between declared universal law and the practice of states widens, advocates of an expansive interpretation of universal human rights norms may inadvertently be contributing to the destruction of a meaningful system of general interstate obligation toward humankind (James C. Hathaway, 2005). The contemporary unwillingness of states to accept and protect refugees is motivated by a large number of factors: concern over dilution of national sovereignty, spread of international terrorism, rise of illegal immigration, and changes to the ethnic and religious composition of society. To alleviate their fears, many states have undertaken radical changes through legislative and interstate arrangements, which have had the effect of blocking access to refugee status determination procedures and restricting the rights of refugees once they have arrived. As economic interdependence encourages transnational movements of capital and tends towards a ‘borderless world’, political and social pressures pull in the opposite direction (Castro-Magluff J.M., 2001).

Conclusion

One common goal of international refugee laws and regimes is to find out the ways and means to solve the problem of refugees and illustrate and improve the status of refugees in terms of both physical and mental. Research communities of the world have already made several attempts to focus the issues of refugees and found quiet number of new issues for refugee research viz. education, human rights, geography, history, war, ethnic problems, regional disparities, development etc. The net results of the research studies done by several international institutions, organizations, and also individual researchers suggested that while appraising the utility of a refugee-specific rights regime in an era of widely applicable international human rights, one might consider three factors: first, whether the existence of a refugee-specific system enhances the enforceability of generally guaranteed rights; second, whether the refugee rights regime breaks new substantive ground as compared with general human rights law, resulting in a more comprehensive enumeration of rights; and third, whether the refugee-specific regime aids in the clarification or reinforcement of generally accepted rights so as more effectively to coincide with the real needs of the refugees (Chimni B.S., 2007).
References


**Endnotes**

1 The earliest manifestations of international concern for refugees traced back to the aftermath of the First World War, when the League of Nations created the office of the High Commissioner for Refugees, and in 1950, the present office of the High Commissioner for Refugees (UNHCR) was created by the United Nations general Assembly. And then the UNHCR instituted the UN Convention (1951) and Protocol (1967) Relating to the Status of Refugees.

2 The term ‘refugee’ shall also apply to every person who, owing to external aggression, occupation, foreign domination or events seriously disturbing public order in either part of the whole of his / her country of origin or nationality, is compelled to leave his place of habitual residence in order to seek refuge in another place -outside his / her country of origin or nationality.
INDIA IN THE NEW MILLENNIUM: A PUBLIC HEALTH SCENARIO CARDIOVASCULAR DISEASES: FALLOUT OF URBANIZATION AND MODERNIZATION OF THE SOCIETY

* G. Rajesh babu, ** T. Subramanyam Naidu

Abstract

Cardiovascular diseases have become a serious public health issue with an alarming increase in the mortality rate. The incidence is higher among the lower socioeconomic group in the Middle Ages. Prevention of this disease is the best cost effective strategy. Analysis of the major risk factors has been done. It was found that in addition to the conventional risk factors, life style changes in the society, social demographic factors and other psychosocial conditions are also involved in the early onset of this disease. It was found that all these factors are interlinked with one another. It was possible to derive few important cost effective strategies for the prevention and control of this disease.

Key words: Cardiovascular diseases, mortality, social demography, psychosocial factors, risk factors, prevention and control.

Introduction

India is the second most populous country in the world. It is experiencing an epidemiological health transition with a rapid decline in the mortality rate due to communicable diseases and an alarming increase in the death rate due to non-communicable diseases especially the cardiovascular diseases.

It is more shocking to know the demographic profile of such mortality with the statistics showing that every fifth person dying in the world due to such disease is an Indian. It is depressive to know that the populations affected by this dreaded disease are mainly the lower socio economic groups the too in the age groups of 30-40 years, the age that is considered to be most productive period not only for the individual’s lifetime but also the prosperity of the nation. So it is time to give more serious concern about this and also to explore a very out for this problem.

* Asst. Professor, Institute of Forensic Sciences, Gujarat University, Gujarat. E-mail: rajreeka@yahoo.co.in
** Director and Professor of Anthropology, Pondicherry University, Puducherry. E-mail: tsnaidu1952@gmail.com
Background

Indian has the dubious distinction of being the diabetic capital of the world. There are 55 million diabetic patients and 44 million hypertension patients. These are the precursors of ischemic heart diseases, which is the main form of cardiovascular diseases.

A couple of decades back, these diseases were considered to affect the affluent society, but it has started affecting lower socioeconomic groups mainly the urban dwelling population groups. Also it was considered as a geriatric disease (a disease that affects people in the old ages) but it the disease manifestation starts as early as 30-40 years of age. This age is considered to be economically and socially responsible period in the lifetime of every individual. It is high time to give serious thought about this and to take strategic measures to tackle such a situation.

Objectives

To analyze the major risk factors associated with the cardiovascular diseases.

To analyze the psychosocial conditions involved in the patients of cardiovascular diseases.

To analyze the social demography of the patients and

To establish the possible cost effective strategies available for the prevention and control of the cardiovascular diseases.

Area of the study

The study was done at the Shree Jayadeva Institute of Cardiology, Bangalore. This is the government owned super specialty hospital rendering service to the lower socio-economic strata in the society.

Demographic Profile

The study population is the patients belonged to the Kannada speaking native population. They are all ethnically and demographically identical population. In total as many as 270 patients were taken for the study. There were age matched and ethnic matched control also considered for the study. They were in the age group of 30-65 years of age.

Disease profile

The patients were diagnosed to have the ischemic heart diseases with the tests such as TMT (tread mill test), angiogram and other biochemical tests.
Ischemic Heart Disease is now becoming an increasingly common heart disease. This disease was common in the middle age and the elderly earlier but it has now started affecting the young adults also. Ischemia means inadequate blood supply to the heart. The narrowing of coronary arteries that supply blood to the heart usually causes ischemic heart disease.

Heart is basically a muscular pump and is richly supplied by 2 coronary arteries the larger left coronary artery supplies. The main or major pump the left ventricle and the right coronary artery feeds the right ventricle. When the lumen of these coronary arteries become narrow due to deposition of Cholesterol and other fatty material as well as blood particles, the blood flow is decreased. Initially there is adequate flow to supply a resting heart and the insufficiency is manifest when excess blood flow is demanded by exercise or emotional upset. Gradually the deposits called atherosclerosis builds up and there is insufficient flow even to supply the heart at rest. Occasionally such increased obstruction can also develop suddenly. From the above description, it is understood why the disease is called atherosclerotic heart disease or coronary artery disease or ischemic heart disease.

Anatomy of the Heart with Potential Blockage Sites in coronary Arteries

External Anatomy of the Heart
Cannary Arteries at the Heart

Blocked Lumen in Branch of Left Coronary Artery

Anterior infarct
Absolute or non-modifiable risk factors

These are the factors that cannot be altered by any method such as age, gender and genetic factors. Being a male is a predisposition for the possible onset of this disease and that too in the later part of the adult hood genetic factors cannot be modified. Females have a protective mechanism against the possible incidence of this disease during their reproductive ages, though after menopause there is no such protection.

Modifiable risk factors

These are Diabetes, Hypertension, BMI (body mass index) more than 25, excessive smoking, excessive alcoholism, obesity, high LDL, low HDL. Sedentary life style, stress and other psychosocial factors.

Diagnostic Criteria

This includes hypertension with more than 140/90 mm of Hg. Blood pressure body mass index more than 25, fasting blood sugar level more than 110 mg/dl, Dyslipidemia (total cholesterol more than l80 mg/dl) low high density lipoproteins (less than 40 mg/dl), higher level of low density lipoproteins (more than 130 mg/dl and high plasma triglycerides levels (more than 150mg/dl) collectively known as metabolic syndrome and are the best disease markers. The patients were diagnosed to have ischemic heart diseases with all the above biochemical markers beyond the permissible limits and the investigations like tread will test (TMT), angiograms were found to be positive results.

Materials and Methods

The patients under study were explained about the research work and informed consent was observed from them apart from the approval given by the ethics committee of the institution where study was under taken.

A Performa was prepared which incorporated information regarding demographic, anthropometric and clinical data apart from the personal data of the patients.

A questionnaire was also administered to them. This contained queries about family history of the patients about the parental illness and sibling suffering to know the genetic factors. Data about existing hypertension and diabetes was also asked which are considered to be the precursors (important risk) for the onset of ischemic heart diseases. Another important data collected was that of psychosocial factors involved among the patients and the socio economic status of the patients. This includes education level, occupation and income. Education is the best indicator of social status, as it would not change after young adulthood. Income reflects the economic status of the individual. Education
level has been classified as literates, 10th class level, 12th class or PUC graduates, postgraduates or professionals.

Questions regarding life style and unhealthy habits such as smoking and alcoholism were also included. If they are smokers, the number of cigarettes smoked per day was noted and for the drinkers, the frequency and quantity of drinking alcohol was noted. Dieting habits such as vegetarianism and non-vegetarianism were also noted.

Clinical or biochemical parameters were collected from the hospital records in which the blood sugar level. Blood personae high density lipoproteins, low density lipoprotein level, total cholesterol, were available as theses tests were done at the hospital laboratory itself where the errors will be at its minimum level. Anthropometrical data were also collected from the patients. Height in centimeters was measured from a calibrated scale where as weight was noted from a dial type weighing scale in kilograms. Body mass index was calculated by dividing the weight in kilograms to the height in square centimeters. All these data were tabulated and analyzed.

<table>
<thead>
<tr>
<th>Trait / Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>t' Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>22.8</td>
<td>2.3</td>
<td>0.63*</td>
</tr>
<tr>
<td>Controls</td>
<td>22.1</td>
<td>2.24</td>
<td></td>
</tr>
</tbody>
</table>

* Not significant

<table>
<thead>
<tr>
<th>Trait / Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>t' Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>34.82</td>
<td>3.84</td>
<td>4.27*</td>
</tr>
<tr>
<td>Controls</td>
<td>44.08</td>
<td>3.45</td>
<td></td>
</tr>
</tbody>
</table>

*At 5% significant level
Table 3: Distribution of LDL levels in patient and control groups

<table>
<thead>
<tr>
<th>Trait / Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>118.2</td>
<td>19.6</td>
<td>4.44*</td>
</tr>
<tr>
<td>Controls</td>
<td>98.6</td>
<td>12.4</td>
<td></td>
</tr>
</tbody>
</table>

* At 5% significant level

Table 4: Distribution of Total cholesterol in patients and control

<table>
<thead>
<tr>
<th>Trait / Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>182</td>
<td>34.5</td>
<td>2.9*</td>
</tr>
<tr>
<td>Controls</td>
<td>158</td>
<td>18.5</td>
<td></td>
</tr>
</tbody>
</table>

* At 5% significant level

Table 5: Distribution of Height between patients and control groups

<table>
<thead>
<tr>
<th>Trait / Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>165.7</td>
<td>17.6</td>
<td>0.14*</td>
</tr>
<tr>
<td>Controls</td>
<td>167.4</td>
<td>13.7</td>
<td></td>
</tr>
</tbody>
</table>

* Not significant

Table 6: Distribution of weight between patient and control groups

<table>
<thead>
<tr>
<th>Trait / Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>67.7</td>
<td>6.7</td>
<td>0.12*</td>
</tr>
<tr>
<td>Controls</td>
<td>65.8</td>
<td>4.6</td>
<td></td>
</tr>
</tbody>
</table>

* Not significant

Table 7: Level of Literacy among patients

<table>
<thead>
<tr>
<th>Traits</th>
<th>No</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterates</td>
<td>5</td>
<td>1.9%</td>
</tr>
<tr>
<td>Literates up to 10 years education</td>
<td>108</td>
<td>40%</td>
</tr>
<tr>
<td>SSLC</td>
<td>102</td>
<td>38%</td>
</tr>
<tr>
<td>PUC</td>
<td>25</td>
<td>9.3%</td>
</tr>
<tr>
<td>Degree</td>
<td>20</td>
<td>7.4%</td>
</tr>
<tr>
<td>PGs / Professionals</td>
<td>10</td>
<td>3.7%</td>
</tr>
</tbody>
</table>
Table 8: Percentage distribution of socio-economic status of patients

<table>
<thead>
<tr>
<th>Traits</th>
<th>Numbers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIG</td>
<td>27</td>
<td>10%</td>
</tr>
<tr>
<td>LIG</td>
<td>173</td>
<td>64%</td>
</tr>
<tr>
<td>MIG</td>
<td>70</td>
<td>26%</td>
</tr>
</tbody>
</table>

Table 9: Frequency of various parameters among the patients.

<table>
<thead>
<tr>
<th>Traits</th>
<th>No</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI &gt; 25</td>
<td>38</td>
<td>14%</td>
</tr>
<tr>
<td>BMI &lt; 25</td>
<td>232</td>
<td>86%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>176</td>
<td>66%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>162</td>
<td>60%</td>
</tr>
<tr>
<td>Smoking</td>
<td>238</td>
<td>88%</td>
</tr>
<tr>
<td>HDL &lt; 40mg/dl</td>
<td>232</td>
<td>86%</td>
</tr>
<tr>
<td>LDL &gt; 130mg/dl</td>
<td>210</td>
<td>78%</td>
</tr>
<tr>
<td>TC &gt; 180 mg/dl</td>
<td>230</td>
<td>85%</td>
</tr>
<tr>
<td>Triglycerides &gt; 140mg/dl</td>
<td>212</td>
<td>79%</td>
</tr>
<tr>
<td>Alcoholic abuse</td>
<td>162</td>
<td>60%</td>
</tr>
</tbody>
</table>

Table 11: Distribution of education levels among controls

<table>
<thead>
<tr>
<th>Traits</th>
<th>No.</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterates</td>
<td>1</td>
<td>1.4%</td>
</tr>
<tr>
<td>Literates</td>
<td>27</td>
<td>39%</td>
</tr>
<tr>
<td>SSLC</td>
<td>23</td>
<td>33%</td>
</tr>
<tr>
<td>PUC</td>
<td>7</td>
<td>10%</td>
</tr>
<tr>
<td>Graduates</td>
<td>4</td>
<td>5.7%</td>
</tr>
<tr>
<td>PGs/Professionals</td>
<td>8</td>
<td>11%</td>
</tr>
</tbody>
</table>

Results and Discussion

Epidemiological transition with increasing life expectancy and demographic shifts in population, more people attain old ages with the unhealthy life styles such as smoking and excessive alcoholism, improper dietary habits, stress and other psycho social factors combined with biological or bio chemical parameters being abnormal then is an accelerated risk in the development of ischemic heart disease epidemic in India. All these factors are discussed in detail.

In this study an attempt has been made to analyze the psychosocial conditions and socio demographic factors of the patients and other major risk factors. All
these factors were found to be interlinked with one another. The major risk factors found to be responsible for the onset of the disease was smoking. Almost 88% of the patients were smokers. This was highly significant. Smoking develops atherosclerosis, increase in plasma cholesterol concentration and hypertension that are very important risk factors for the development of ischemic heart diseases.

As most of the patients belonged to lower socio economic group, they resort to smoking habits to allay their stress, anxieties and hunger. Such a poor coping style they follow, as they are laborers with daily wages, drivers and construction site workers in whom education level was very low. They tend to smoke to skip their regular meal, leave alone the nutritious diets.

Smoking induces oxidative stress, which leads to lowered body antioxidant status. Particularly the serum beta-carotene is the important factor that protects the individuals from ischemic heart diseases. In addition to these, smoking reduces oxygen carrying capacity of blood and there by builds up carboxy hemoglobin which produces hypoxia. There occurs an endothelial damage due to which lipid inflation occurs and results in atherosclerosis.

Other important risk factor found to be was the excessive alcoholism. Almost 65% of the patients had the habits of alcoholic abuse though some studies say moderate intake of alcohol has a soothing effect on cardiac health. But it leads to hypertension, stroke and striking imbalances in the liver as the dosage of alcohol consumed by them are beyond the useful levels (safe). It leads to lipid per oxidation. Also they don’t take proper diet after its consumption. It was reported that they developed this habit to get rid of the harsh realities they face in their life temporarily. But it worsens the health condition.

Beyond all these, the core issue is in the form of psychosocial conditions they are living under. The psychosocial factors and social demography play an important role in the onset of the disease. Though it is a broad entity the predominant one is the stress. This is the main reason due to which the patients started following the unhealthy life styles such as smoking and alcoholic abuses.

As far as the social aspects are concerned they face huge social isolation in the society. Because of their poor economic condition (which is determined by education level income level) they are neglected a lot by the members of the society of higher income groups. They develop negative emotions such as hostility, anger and enmity and jealously. There is lack of social cohesion and social support. In the domestic level, they have serious concerns due to economical / financial constraints to meet out their regular day-to-day livelihood (leave alone bringing up their children against all odds starting from providing education, nutrition and health care). These are the serious inducers of stress, which are known as stressors.
The major and important risk factor (predominant and independent) found to be responsible for the development of the disease was smoking. Almost 85% of the patients were smokers. (Either cigarettes or beedis) This was found to be statistically more significant.

As the patients belonged to lower socio economic groups, they report to smoking habits to allay their anxieties and stress coping styles are very poor among these patients. Most of them are construction site laborers, drivers and other contract workers of daily wages. Because of their working condition they tend to smoke and give least importance to their regular meals (leave alone the nutritious diet). Smoking induces oxidative stress, which leads to lowered body antioxidant status particularly the serum beta-carotene, as it is the most important factor that protects the smokers from cardiovascular diseases. In addition to these, smoking reduces oxygen carrying capacity of blood building up carboxy hemoglobin which produces hypoxia. Endothelial damage occurs due to which lipid infiltration occurs and that leads to atherosclerosis.

In the working place also they have a plenty of stressors. As auto rickshaw drivers have increased responsibility of safety for others and also be under extreme unrealistic time pressures. The people who work in construction sites or architectural layouts are exposed to dangers. People who work in a low level job also have pressure from the peers to finish the work within an impossible time frame. They have poor self-esteem and low control over the job.

To cope with all these stressors, they resort to unhealthy habits such as smoking excessive alcoholism as they feel that get a temporary relief from harsh realities of life, but ultimately it leads to an increased risk of developing ischemic heart diseases.

As for as the biochemical parameters are concerned, most of them were found to have the values within the normal limits. LDL, the low-density lipoprotein level was found to be much significant with that of the controls. While the HDL, the high-density lipoprotein the good cholesterol was found to be below the normal required level among the patients. This was found to be one of the most significant differences between the patients and the controls. Blood glucose level also showed significant difference between patients and controls.

As for as the anthropological parameters are concerned, there was no significant difference noted between, the patients and controls in the BMI (body mass index). This parameter may not be the right indicator for the disease risk as per Indian standards.

**Conclusion**

After analyzing the results thoroughly, following inferences could be made. Socio economic status of the patients showed more significant difference as the
lower socio economic groups are more vulnerable to the incidence of ischemic heart diseases. The change in life style, unhealthy habits and psychosocial conditions of the patients are more involved in the early onset of the disease. There is a tendency of more exposure to a possible risk of developing ischemic heart diseases among the lower socio economic group because of their unhealthy life styles.

Among the lower socio economic group people, there are a bad coping styles and poor life styles and unhealthy habits, which ultimately lead to abnormal levels of risk parameters. This results in an early onset of the disease.

They resort to smoking and alcoholic abuse to escape from the harsh life events. So the core issue to be tackled is the better coping mechanisms. For all these, the basic problem lies in their lack of awareness, education and poor economic conditions. If their education standards are improved, they tend to lead a healthy life style and also have awareness about the disease and also would follow good coping mechanisms.

The higher socio economic group people, by virtue of their affordability and awareness, get right treatment at appropriate time. They know how to cope with the stressful situations. They are aware of yoga and other relaxation exercises also. So this section of population follows healthy life styles and thereby they are able to prevent the disease or postpone the onset of such diseases.

**Suggestions**

Because of their underlying stress and other psychosocial factors, these population groups are under great risk of developing this disease. So the cost effective strategy is that of prevention and control. The strategy is to provide proper education and awareness about the disease and also to improve the standard of life of the vulnerable population by improving their socio economic status. This will definitely eliminate to some extent the social effects (such as social exclusion and isolation) of cardiovascular diseases

**Limitations**

It is imperative that in any study there would be always an existence of few limitations. In that way, in this study the population considered were the lower socio economic groups belonged to urban areas. They belonged mainly to a particular occupation. It did not cover the vast majority of other such population groups. The sample size was also not too large to exactly represent and reflect the plight of such groups.

It is purely a tentative work. It is the responsibility of the future researchers to throw more light on this matter and to come out with more valuable suggestions.
References


THE GREEN - EYED MONSTER: UNDERSTANDING THE MEANING OF JEALOUSY IN ROMANTIC RELATIONSHIP

* Anindita Chowdhury

**Abstract**

The present research was an exploratory study conducted to understand the meaning and implication of jealousy in romantic relationship by exploring (a) the conceptualization of jealousy (b) Tracing the reasons/ context that led to it (c) The strategies used for coping when confronted with jealousy (d) The effect on the relationship. The research was conducted on five postgraduate students of University of Delhi, who were either currently involved or were a part of romantic relationship, for at least a year. Qualitative research methods of semi-structured interview and grounded theory were employed for data collection and Analysis respectively. It was found that conceptualization of jealousy and the context / reason attributed as its cause were interdependent, which subsequently determined the behavior of both the partners and the outcome of the relationship, in terms of either enhancing it or terminating it. The relationship outcome was guided by the coping behavior, the desirability of the relationship and the indispensability of the partner, each carrying its own range of connotation. The conceptualizations obtained were dynamic in nature, rooted in the context of the individual’s romantic relationship.

**Key words:** Romantic relationship, jealousy, grounded theory, coping strategies, model of Investment

**Introduction**

The ensuing introduction entails definitions, theories and variables that are associated with understanding and explaining jealousy in romantic relationship, followed by researches that are relevant for the present study. The rationale for carrying out this study has been mentioned at the end of the introduction.

**The Nature of Jealousy in Romantic Relationship**

Jealousy is an intrinsically relational phenomenon (Guerrero, Eloy, Jorgensen, & Andersen, 1993). Jealousy is defined as ‘a complex of thoughts, emotions and actions that follows loss or threat to self-esteem and/ or the existence or
quality of the romantic relationship’ (White, 1980). Romantic jealousy is a set of thoughts, emotions and responses following a perceived threat to a romantic relationship by a rival (Guerrero & Andersen, 1998b). Jealousy occurs when a person desires to protect a relationship with someone perceived as already possessed, in contrast to envy, which involves the desire for something or someone not currently possessed (Guerrero & Andersen, 1998b).

Several emotions comprise the jealousy complex, including anger, fear, and sadness (Guerrero & Andersen, 1998a; Sharpsteen & Kirkpatrick, 1997). Jealousy is associated with loss of affection, rejection, suspiciousness, insecurity and anxiety (Peretti & Pudowski, 1997). External manifestations of jealousy include crying, retaliating, leaving, using surveillance or even becoming violent (Guerrero & Andersen, 1998a; Pines, 1998). These responses can be both direct and indirect (Guerrero, Andersen, Jorgensen, Spitzberg, & Eloy, 1995).

In sum, jealousy is an involuntary emotion that typically follows some sort of real or perceived relationship threat. The potentially destructive nature of this threat is well established (Afifi & Reichert, 1996; Peretti & Pudowski, 1997). Indeed, jealousy is the most commonly attributed cause of relational violence.

However, research also suggests that jealousy is sometimes associated with positive relational outcomes (Buss, 2000; Pines, 1998; White, 1980). For example, some partners believe that jealousy is a reflection of how much a partner values and loves them (Staske, 1999). One study found close to three-quarters of respondents reported attempting to make their partner jealous at some times or another (Sheets, Fredendall, & Claypool, 1997).

More pertinent to the present study are the studies concerning jealousy and its effects on relationship status. Research findings on the association between relationship satisfaction and jealousy, relationship status or length of relationship have been somewhat conflicting. Many studies report that jealousy increases at the point where a developing relationship becomes serious or exclusive (Braiker-Stambul 1975). A study conducted by Mathes (1986), indicate a positive relation between jealousy and romantic love, suggesting that jealousy preserves and promotes love. Review of literature shows that couples that are seriously dating or living together experience and express more jealousy than individuals who are casually dating, married or are opposite-sex friends (Aune & Comstock, 1991; Guerrero et al., 1993).

Relationship intensity also affects jealous experiences. For example, jealousy tends to be more prevalent among individuals in love (Mathes & Severa, 1981), who are more emotionally dependent (Guerrero & Andersen, 1998b), and whose partners have invested less time, money, and emotion (White, 1981a). These diverse findings are consistent with an evolutionary conception in which
jealousy serves functions such as mate guarding, expressing commitment, or attempting to elicit such signs from one’s partner (Guerrero et al., 2004).

Relatively little research has directly examined whether, why or how people might make others jealous. The type of the relationship (married vs. unmarried) is believed to have a close relationship to jealousy Guerrero et al. (1993) found that unmarried individuals display more intense emotional and cognitive reactions to jealousy than their married counterparts. Buunk (1981) showed that unmarried women showed more jealousy symptoms than married women.

**Studies Focused on Conceptualization of Jealousy**

Gehl and Watson, (2003) derived a conceptualization of jealousy using the data driven method of factor Analysis that was not entirely novel. Buunk, (1997) based upon prior conceptualization proposed three different types of jealousy: reactive, preventive and anxious. Radecki et al, 1990, studied the effects of adult attachment and Depression of Quality of Relationships and romantic jealousy found higher levels of dispositional jealousy correlate with depression. A study conducted by Knobloch, 2001 on relationship development and attachment in the experience of jealousy found relational uncertainty and intimacy linked to cognitive and emotional jealousy respectively. A number of scales have also been formulated to measure jealousy. Boukhout et al., 2003 developed the Relationship Issues Scale (RIS) to explore infidelity. Pfeiffer et al, 1989 conducted studies to investigate the psychometric properties of Multidimensional Jealousy scale (MJS), which provides separate assessment of cognitive, emotional and behavioral jealousy.

**Research Objectives**

The objective of this research was to understand the dynamics of this construct in romantic relationship by:

- Coming to a conceptualization of the term from the perspective of the participant
- Identifying the context (s) that gives rise to it.
- The impact it has on oneself and the partner
- The impact it has on the relationship.

Underlying assumptions on which the objective was based were:

- Jealousy is a negative physiological, emotional and mental state, experienced at least at some point in the relationship by all individuals (Pines and Aronson1983).
Jealousy is universal in nature; its ramification is found extensively in romantic and intimate relationship.

From the review of literature it was well evident that it is not a simple concept but a combination of emotions and reactions.

The role of culture in understanding this construct seemed of paramount importance since it falls within the purview of relationship which is determined by culture and societal norms.

In the present study the exploration was narrowed down only in terms of romantic relationship and did not explore the connotation and dynamicity of this concept in marital relationship. Romantic relationship in this study was viewed as a complex ratio of passion intimacy along with commitment. Review of literature shows that jealousy and its various correlates had been studied quantitatively, from a western perspective. Role of culture is a very important factor since the concept of jealousy is found to be associated and determined by cultural factors. Rationale for the preset study is based on the paucity of research of jealousy from an individual perspective following qualitative approach, keeping the Indian perspective and sensitivity in mind.

**Method**

**Sample:** The current study was based on 8 Unmarried postgraduate students of Delhi University. (4 male, 4 female) who were either currently involved in a romantic relationship, or were in a romantic relationship. Purposive sampling technique was used in this study. The Choice of unmarried sample was based on the findings of the research carried out by Guerrero et al 1993. The participants belonged to the age range of 21-25 years.

Method used in the study: In the present study qualitative method of enquiry was adopted, since it enabled deeper engagement vis-a-vis the subject which was the focal point of the study. In the process of meaning making, the author’s role as a co-creator facilitated the process of dialogue. Moreover the acceptability of the researcher’s own subjectivity and frame of reference was not a source of contamination, which would compromise the objectivity of the research. Another significant reason of choosing qualitative method was the desire to obtain rich data, based on the faith of kaleidoscope of human experience.

Last but not the least was the fact that available literature on this subject was completely quantitative in nature, from the assumption that the method of study determines the result and the findings, the novelty of the process of the data and themes that would emerge from the narratives were the chief areas of interest.
Nature of data: Data was in the form of narratives, which were verbatim in nature. The use of a tape recorder allowed the privilege of storing the intensity of each participant’s experience, that they revealed in the interview, in uncontaminated form. The flow of the interview was left upon the comfort level of the participant.

**Method of data collection:** Semi-structured interview.

**Data Analysis Grounded theory**

**Procedure:** Each participant was interviewed twice and in certain cases thrice.

There was no fixed time limit kept for the interview, in a way it was left open to the flow of the conversation. The enquiry was framed as “If you were writing an autobiography about your romantic relationship what are some of the significant chapters that you would include or write about? What are some of the issues that you would mention? What are the landmarks that define and make your relationship different from others? What are some of the problem areas and silver linings in your relationship?”

This seemed un-provocative and at the same time gave a lot of control to the participant. They felt easier to relate to it. They started right from the way how the relationship started. This memory was one of the happiest for all of them, and it put them in a good mood. It gave them a frame, to come up with the issues as an when they happened in the relationship. In the process they mentioned the way jealousy affected their relationship. Strangely enough very few mentioned the term jealousy; they spoke of it experientially rather than conceptually.

Transcribing: this took place simultaneously with the data collection. After each transcription the basic analyzing of the data was taken up. Going through the transcription at least thrice, the process of coding was initiated notes were jotted at the right side of the lines or paragraph, they became the open codes. Further readings refined them.

Next similar concepts that each paragraph contained were clubbed; they became themes or axial codes. The themes were the underlying similarity in the concepts and categories, which were further specifications of the concepts. The participants were re-interviewed in case of any clarification/ addition/ elaboration for certain instance. More focused interviews were conducted after open coding.

After finishing the coding and data Analysis using the grounded theory approach, the next participant was approached and the same procedure of data collection and simultaneous Analysis was followed. The next stage after Analysis
of the data was that of discussion, where the common themes were amassed to understand the processes and come to a broader understanding of the dynamics. Due to lack of rich data and other factors only the last 5 interviews were used for data interpretation and discussion.

**Interpretation of Results**

A brief case study of the 5 participants whose narrative had been Analyzed have been presented in the following section, followed by a discussion chart of one participant whose various themes have been amassed to come to various variables operating on the relationship.

Case study 1: *Raj* has been in the relationship with *Anu* for 7 years, and he feels that the magic is still there. The relationship started from high school. It was not love at first sight but a gradual affection, which metamorphoses in love catalyzed by the chemistry they share. The relationship went through its tests successfully. The fact that it was able to transcend the problematic dimension of long distance 5 years after its commencement made it more special. Long distance was not stated as a problem, but the issue regarding the “other” was an area, which had challenged the relationship time and again and had almost terminated it. The rival who had qualities, which he envied, and the capacity to replace him was a constant threat in the relationship. His own circumstantial inadequacy made him feel threatened.

Case study 2: *Pakhi*, 23 has been in the relationship for 9 years, two years of which was before *Vivek* got married, while the rest 7 ensued after his marriage. In a way jealousy marked both the start of a serious relationship and the reason for termination. In this dynamics of jealousy operated in an ego destructive fashion. Issues regarding the concept of fidelity as understood from gender perspective evolved. Conceptualization of trust, mistrust and coping strategies used in relationship for mate retention came to the forefront through the narratives.

Case study 3: *Smita*, aged 22, was in the relationship for two years with *Sohan*, which started from friendship and later turned into a romantic attachment. Issues of possessiveness, and partner exclusivity were the major factor for falling out. Her style of attachment and over indulgence seemed to make her undesirable in the eyes of the partner. Her main difficulty in the relationship was over sharing *Sohan* even with his friends, she wanted him exclusively to herself and considered every one coming between them in any way a threat to herself and the relationship. Link between attachment style and romantic relationship was one of the important dimension was explored in the discussion.

Case study 4: *Sonya* aged 23 narrated her relationship with *Rohit*, which was just over two years. It was long distance relationship right after three months
of commencement. The progression being from class mates –city mates-long distance lovers- to cross continent lover. Main issues in the relationship were regarding ex boyfriends and her ongoing friendship with them. Rohit found it overbearing owing to his introvert nature and the fact that she was his first lady friend. According to her, he felt his territory violated whenever there were instances of her past cropping up in the relationship even in the form of platonic friendship.

Case study 5: Ana, 22 years was in the relationship with Karan for over one and a half years. She is the one who had taken the first step. Being the silent kind he was not very sure if she would reciprocate his feelings, so he had stayed put. In a way she harbors this feeling of not having been won over like she had desired in her heart. Her feelings are a clash between what she wants and what she has. Her insecurities about the relationship and love are often put to litmus test of jealousy, which she skillfully manipulates to constantly reassure herself on both grounds.

Discussion

The process surrounding the construct of jealousy have been elaborated in terms of conceptualization of the construct, tracing the factors that arouse it, the effect of it on the person experiencing as well as on the partner and finally the effect of it on the relationship.

Individual conceptualization of jealousy was obtained from the instances that aroused it either in oneself or on the partner. Its effect on the relationship was dependent on the behavior of the couple in response to each other, and the situation. The study had been conducted keeping in mind the Indian Context, which had not been taken up by any previous research. As a researcher the object was to conceptualize jealousy from the narratives, in the process of which, the understanding developed that the subjective meaning jealousy, has for an individual determines not just his behavior in the relationship but also that of his partners and thereby the fate of the relationship. Thus subjective conceptualization of jealousy can be considered the overarching frame, which explains all the other dynamics of jealousy in the relationship.

The processes formulated in this study are resonant with the theoretical model of Investment given by Rusbult, (1980, 1983), Interdependence theory (Thibault& Kelley, 1959; and Ellis’ (1998) model of partner-specific investment (PSI), which is grounded in evolutionary theory. In the process of meaning making eight interviews had been taken but only five were used for the purpose of interpretation. The reason behind this was that the mode of interview was reorganized and improved based on the learning’s and shortcomings of the previous interviews. Out of the three interviews that were not used in the process
## Chart I: Conceptualization of Jealousy: Raj

<table>
<thead>
<tr>
<th>Conceptualization of jealousy</th>
<th>Reason attributed for jealousy</th>
<th>Effect on self</th>
<th>Effect on partner</th>
<th>Effect on relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>The fear of losing the loved one to someone else</td>
<td>Comparison with other more successful relationship</td>
<td>Pretense of normality and nonchalance</td>
<td>Unawareness of the true feelings of the partner</td>
<td>Relationship initiation</td>
</tr>
<tr>
<td>Being the second fiddle</td>
<td>Comparison with rival and information about his resources</td>
<td>Striving to keep the partner all to self</td>
<td>Comparison with other romantic relationships</td>
<td>Bitterness and souring</td>
</tr>
<tr>
<td>The information regarding existence of desirable men in the life of the loved one other than oneself</td>
<td>Speaking of the opposite sex in flattering terms</td>
<td>Non participation in conversations</td>
<td>Crying</td>
<td>Reduced desirability of partner and relationship</td>
</tr>
<tr>
<td>Intrusion of a potential rival in the private space extracting quality time from partner</td>
<td>Partner considering the rival as perfect match</td>
<td>Hatred and aggressive feelings directed towards the rival</td>
<td>Re-evaluating the desirability of the partner and the relationship</td>
<td>Seeking alternatives</td>
</tr>
<tr>
<td>Inability to keeping partner exclusively to oneself</td>
<td>Entertaining Doubts of partner and relationship uncertainty</td>
<td>Desire to get back at the partner Losing faith in relationship</td>
<td>Renewed faith and security in the relationship</td>
<td>Re-establishment of love and need for partner</td>
</tr>
<tr>
<td>Too friendly overtures of other men directed at my partner</td>
<td>Feeling animosity towards the partner</td>
<td>Partner and the relationship losing its desirability</td>
<td>Giving more power and control to the partner</td>
<td>Tilting balance of power</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Attempts to salvage male ego</td>
<td>Reassurance of love and need for the partner</td>
<td>Strengthening and preservation of relationship</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Substance abuse</td>
<td>Choosing partner over desirable alternatives</td>
<td></td>
</tr>
</tbody>
</table>
of analysis, two were un-recorded transcripts. The participants had refused to allow recording and didn’t go into the intricacy of their romantic relationship as a result the data obtained was not rich enough for analytic purpose.

Another feature of this study was the use of exploratory mode of enquiry while addressing individuals. The qualitative method of enquiry gives the freedom and due space for using one’s own subjectivity to enter into the phenomenological world of individuals. It helped in tapping the range of emotions and understanding the significance and implication of the meaning of the construct in the life and personal space of the individual. After the process of individual data analysis, the understanding of interdependency of conceptualization and the context was well established. That is context determines the experience of jealousy in an individual while the other face of the coin was that the conceptualization of the jealousy, which has personal meaning for the individual determines the context under which it is aroused.

Based on the understanding an effort has been made to diagrammatically bring out the meaning of jealousy and thereby its dynamics in a romantic relationship. Depending upon the behavior adopted by the couple in either situation, the course of the relationship was determined, which was either enhanced or terminated. Thus behavior of the partner in response to one’s felt jealousy or induced jealousy determines the effect on the relationship. The direction taken for the resolution of the context in which jealousy operates determines the fate of the relationship.

**The Dynamics of Jealousy**

![Diagram of the Dynamics of Jealousy]

In accordance to the framework the common themes around the conceptualization of jealousy were:

- Evidence of love, and desirability of oneself and the relationship in the eyes of the partner:
- Fear of loss of partner or the relationship
• Threat to the relationship from a potential rival, which involves the desirability of the alternative relationship as against the current.

• Possessiveness and need to make the partner exclusively one's own.

From the instances taken out of the narratives, the conceptualization of jealousy crystallized around the factor of love, dependency, insecurity and inequity in terms of investment into the relationship, be it tangible or symbolic. This is in accordance with the findings of Guerrero and Anderson, 1998a. All of these conceptualizations corroborate the fact that jealousy tends to be prevalent among individuals in love who are more emotionally dependent and whose partner have invested less in time money and emotion, which makes the individual insecure and uncertain about the commitment of the partner. With regards to the narrative everybody other than Raj, considers that their partner have not invested as much as them in the relationship. This sets apart the conceptualization obtained from Raj's narrative from those of the others. For him the experience of jealousy is greater when the relationship is threatened by a potential rival who has resources, which the partner finds desirable. The next conceptualization of jealousy as formulated from the narrative of Ana, and Pakhi, was that of desirability of oneself and the relationship in the eyes of the partner, or the need to evidence love through manifestation of possessiveness. The feeling of jealousy in such relationships made the relationship desirable and the partner committed. The effect of jealousy, in such instances, was associated with positive relational outcome, since it enhanced the relationship making the individual feel more secure (Buss, 2000; Pines 1998; White, 1980). Individual’s operating with this conceptualization, deliberately tried to make the partner feel threatened in the relationship just to test their love and commitment. This implies that jealousy for these individuals served a personal need with an underlying motive for certain strategic outcome. (Fleischmann et al., 2005). In all the narratives the feeling of jealousy was associated with possessiveness or partner exclusivity, which was found to increase at the point when a developing relationship becomes serious and exclusive. Another conceptualization of jealousy that came about was that of the feeling of jealousy, which aroused an emotional need to getting back, what was once possessed. “...the fact that he was married and that somebody who was all mine all this while was now somebody else’s triggered off all the emotions like how can I let something that is mine go away, so it was more of an emotion of getting back getting it back.” This feeling of possessiveness and retention of the partner goes to the extent where she justifies even his cheating on her. Pakhi, operated on the evolutionary understanding of human sexual behavior. According to which, women consider emotional commitment with rival as a sign of infidelity. The study conducted by Meyer’s et al, 2000, assumed that women infer emotional infidelity from the partner’s spending time and exploring common interest with the third party. So to prevent
the development of any form of emotional attachment with the rival, who was
the wife in this case, *Pakhi*, bound him to the terms of the contract, which was
psychological in nature. Operating on the belief that he was still emotionally
faithful she chose not to terminate her relationship with him even after the birth
of his son. But *Rohit* (her boy-friend) didn’t want show her the same forgiveness
when she had sexual relationship with another man. He wanted to end the
relationship. The study conducted by Harris et al, 1996-showed similar pattern
of sexual difference in response to jealousy. According to this study women
thinking that man can have sex without love would think in terms that having sex
does not imply that he has fallen out of love with her. The same scenario when
encountered in *Sonya’s* relationship created difficulty for *Rohit* to cope with.
Thinking along the lines that a woman has sex only when in love, he had reasons
to believe that since his partner had had sex with another man, she must have
been in love with that man. Extrapolating on that he felt that the old love would
be re-evoked if she kept in touch with her past. So for him, the issue of her past
relationships seemed like a constant threat to the relationship’s fate. These finding
are consistent with an evolutionary conception in which jealousy serves the
functions of mate guarding, expressing commitment or attempting to elicit such
signs from one’s partner.

Having framed the conceptualization of jealousy, grounded in individual
narrative, there were certain points of departure that set each of the relationships
apart. That is, it (jealousy) enhanced certain relationships while led to break up
in others. This can be understood when analyzed from the perspective of
theoretical models;

The reason accounted for jealousy in a relationship was based on certain
factors, which can be divided in to individual and relationship variables.

Individual based variables were those which aroused the feeling of jealousy
in partner purposely and sometimes without reflection. The jealousy, in these
instances was conceptualized as demands that would fulfill certain needs of the
individual. So more often than not it took the form of goal directed behavior
aimed at fulfilling that need.

- The need of the individual may be to get attention,
- To sustain attention,
- To bolster self esteem,
- To reinstate the feeling of indispensability,
- To reinstate exclusive rights on partner or to establish new rules in the
  relationship to broaden the area of control over partner.
Relationship variables: This was dependent upon the degree of presence or absence of security in the relationship and the stage of the relationship i.e. in terms of being a developing, serious or exclusive relationship. Therefore in this case the following instances resulted in making an individual feel jealous.

- Uncertainty in terms of future with the partner.
- Lack of commitment, or allowed license of trust given by the partner.
- Presence of an alternative, which led to conflicts about the desirability of the current relationship.
- To get back at the partner for some past infliction of a similar kind.
- To score a point during an argument.
- Feeling the relationship slackening.
- As a way out of the relationship due to reasons that makes the previously desirable relationship currently less desirable.

Behavior of either partner depends on the reason accounted for the feeling of jealousy in the relationship. The individual who functions on the basis of the individual based variable uses behavior strategies, which are goal directed, based on the success rate of past experience and accurate intuition of the partner’s response. Some such behavior, found were

- Developing more dominating behavior.
- Demanding more control.
- Use comparison actively.
- Make the partner feel threatened to make them realize his or her importance.
- Inform presence of attractive alternatives beyond the relationship.
- Use various techniques that make the partner reiterate their love, based on past effectiveness.

The individual feeling jealousy due to relationship variable develops a form of behavior, which is coping in nature. It has the following features

- Trying to incorporate the positive or the desired feature of the rival unto self to sustain the attention of the love interest.
- Inflicting pain on self, like self mutilation. which is used as a form of blackmail.
• Using suicidal threats.
• Threats to terminate relationship
• Withholding affection or becoming distant and reducing various forms of expected intimacy.
• Setting boundaries like asking partner not to talk, or spend time with rival.
• Reduce the chances of emotional attachment with the rival
• Constant vigilance.
• Communication of indifference.
• Seeking out relationship alternatives.
• Getting back at the partner.

Depending upon the frame from which the individual is operating i.e. individual need or relationship issues the recipient partner resorts to crying; giving more control to the partner; agreeing to any terms and condition laid down by the partner to win him/her back; making choices, albeit forced upon them; which are in keeping with the demands of the partner; being more attentive; changing lifestyle to reduce the issues i.e. forsaking a certain lifestyle which were non acceptant to the partner; or reanalyzing the desirability of the relationship.

The last factor of analyzing the desirability of the relationship determines the fate of the relationship; it is psychological and completely dependent upon the individual’s own perception and needs. Its content cannot be specified with accuracy.

According to Interdependence Theory, (Kelley 1979; Thibault & Kelley, 1959) individuals evaluate their partners and relationships based on the perceived consistency between a priori standards or expectations and perceptions of the current partner and relationship. This is done by using the two standards: the comparison level (CL) and the comparison level for alternatives (CLalt). The former determines the attractiveness of and satisfaction in the current relationship while the latter refers to what the individual will obtain if they indulge in the alternative relationship available to him / her.

The relationship of Sohan and Smita didn’t work out because Sohan perceived his CLalt higher than his current relationship hence he became indifferent. The current relationship had lost its attractiveness for him, owing to the constant fights and excessive possessiveness that Smita exhibited.
In the case of Pakhi, the relationship had developed from the mutual investment in which both of them had made tangible as well as symbolic investment. The switch in orientation that the relationship underwent following his marriage had made it more desirable. Since Pakhi had not been interested in any form of long term commitment before his marriage the relationship functioned on an exchange basis wherein rewards was based on the principle of equity. This became communal: a relationship in which people reward their partner out of direct concern and to show caring; when the future of the relationship was considered. But when Vivek in the later stage refused to reciprocate it was seen as a violation of commitment and caring. But the reason she continued with the relationship can be understood from the point of view of the Interdependence and Social Exchange theories of relationship commitment. This theory posits that’s when relationships end, it is possible to recover items left at a partner’s apartment, or divide marital assets, but it is not possible to retrieve the time spent doing things with, or for, partners. These types of “un-bankable” relationship investments play a pivotal role in determining relationship commitment (Rusbult and Bunk, 1993b). Specifically, the more people invest in their relationships, the more likely they are to stay in those relationships. This was the reason Pakhi didn’t terminate the relationship, in spite of wanting to move out of it at various points of time. The evidence of Vivek cheating on her also didn’t change her mind.

Vivek, on the other hand considered his alternative relationship more attractive since if he let go of Pakhi then he would stand the advantage of forming emotional bonding with his wife and child, whereas if he continued with Pakhi he would lose on both fronts. Pakhi’s physical involvement with a man other than him was something that he had difficulty dealing with. This adversely affected both his dependency on her and his commitment to her, and made him re-consider his alternative relationship which became more promising in comparison.

In case of Raj and Anu, the relationship being that of a committed one, individual monitoring of possible alternatives to their current relationship influenced interaction with current partner (Thibaut and Kelly, 1959, Buss 2000), he believed that his partner would be difficult to replace, this made him resort to constructive coping strategies. In case of Sonya, she depended completely on Rohit, she considers her relationship extremely attractive given the fact that he understands every small nuances of her mood like no one else. As specified by the Interdependence Theory (Thibaut & Kelley, 1959; Kelley, 1979), dependence reflects the degree to which outcomes obtained in one’s current relationship surpasses one’s CLalt, for her this relationship was the first of its kind, in which she completely felt secure and trusting unlike her previous other relationships. As a result she felt more satisfied with her relationship and engaged in behaviors...
that promote greater long-term relationship well-being (Drigotas & Rusbult, 1992). She gave up her freedom to a great extent. She even gave him the control to set boundaries which would govern her social life. With him she resolved issues in a manner that it would be in his favor because she perceives him to have valuable personal attributes, which surpassed her best available alternatives. For Ana, the litmus test of jealousy was enough to reassure herself about her importance and indispensability to the partner, which was an added boost to her making the relationship and the partner extremely desirable.

Limitations of the Present Study

- The study uses only unmarried couple thus the dynamics only relate to one aspect of intimate relationship.
- This study could not delve into the childhood relationship and attachment pattern of the participant.
- The narratives are just one side of the story, the dynamics of jealousy can be better understood if both the participant and his /her partner can be interviewed.

Conclusion

Individual data analysis and compilation revealed that individual conceptualization of jealousy was based on the factor which evokes it, that is whether it is self evoked or situational based, this determines the behavior of the individual experiencing it as well as his or her partner. The behavior can be goal directed when jealousy is tried to be purposely induced unto the partner to fulfill an ulterior motive, or it can coping behavior which is adopted to deal with the jealousy aroused by the situation. Depending upon the behavior adopted by the couple in either situation, the course of the relationship was determined, which was either enhanced or terminated. Thus behavior of the partner in response to ones felt jealousy or induced jealousy determines the effect on the relationship. The direction taken for the resolution of the context in which jealousy operates determines the fate of the relationship.

Directions for Future Research

- The conceptualization of jealousy is individual specific, so if a detailed life history is taken it would reflect the unconscious cause of it which has a personal significance for the individual. This can be extrapolated and used in dealing with crisis in relationships of various kinds.
- What is the psychology of fear that makes individual try out every possible avenue of mate retaining strategy?
• Relationship between attachment style, fate of relationship and other personality variables is another avenue where fresh research based on culture needs to be explored.

• This study dealt with the conceptualization only in unmarried couple, future researches can be carried out tapping the same variable among women with different relationship duration across various age groups.

• The same objective can be carried out with married population, since conceptualization is expected to differ based on cultural norms of the society.

• Broader understanding of romantic jealousy can be obtained if it can be compared and contrasted with jealousy in other relationship like that between siblings.

References


A CRITICAL REVIEW OF MEASUREMENT OF POVERTY AND POLICIES OF INDIA

* Shraddha Srivastava, ** Amarnath Tripathi, *** A.R. Prasad

Abstract

Poverty is one of the most burning issues of the world and the whole world is facing poverty reduction as a big challenge. Many attempts have been taken by the government for poverty alleviation in India since Independence but even now we are struggling against poverty. Poverty is a situation where people are not able to fulfill their basic needs. Thus, the concept of poverty depends upon basic needs. At subsistence level basic needs are availability of food, clothes and shelter. To measure the level of poverty and identification of poor at any time in anyone country are critically dependent upon the definition of the poverty line. The poverty line is determined as to how many people are poor and how many are non-poor. As such, its determination is always a matter for debate and controversy. This paper attempts to discuss the different concepts of poverty as well as poverty measures. The paper also evaluates different programmes and policies which have been launched during the last sixty years in India for poverty alleviation. Alternative conceptualization, suggestions and recommendations are also made for the next steps for continuing the development of improving and appropriating methods of identifying the poor.

In this paper it has been suggested that consumption approach is the best approach to measure the poverty line but there is need to consider specific food items that contains all types of nutrients and non-food items (such as education, health, etc.) which improve quality of life in the basket of goods which are used to quantify the poverty line. The paper also suggests that indirect and direct approaches are complementary but not substitutes to each other for poverty alleviation. So, the government should concentrate on both direct and indirect approaches.
**Introduction**

Poverty is one of the most discussed and burning issues of the world and whole world is facing poverty reduction as a big challenge. Many attempts have been taken by the Government for poverty alleviation in India since Independence but even now we are struggling against poverty. It is estimated that 1/3 of the world’s poor live in India and there are more poor people in India alone than in the whole of Sub-Saharan Africa. Although official estimates of the Government of India indicate that only every fourth Indian is poor. According to the estimates of the internationally recognized poverty line of dollar day, 44 per cent of persons in India are poor and 86 percent of people earn less than $2. (N.C. Sexena & John Farrington, 2003) It does not mean that the attempts of government have not succeeded. It can be seen from figure 1 (given in appendix A) that poverty rate has decreased from 51.3 per cent in 1977-78 to 22.15 per cent in 2004-05. This means that about 241.43 millions are poor in India. This figure indicates that these attempts could not achieve what were expected. There are many reasons why these attempts have not fully succeeded. One of the most important reasons is basically conceptual and definitional drawbacks.

**Appendix (A)**

**Figure- 1 (Incidence of Poverty)**

Poverty has declined during reform period, but a fifth to a quarter of the population still remains poor. An estimation based on NSSO’s different round surveys showed that the poverty rate has decreased from 51.3 per cent to 22 per cent in 1977-78. 15 per cent in 2004-05 (see Table 1). This means that about 241.43 millions are poor in India. This figure indicates that these attempts could not achieve what were expected. There are many reasons why these attempts have not fully succeeded. One of the most important reasons is basically conceptual and definitional drawbacks.
Table-1 Incidence of Poverty

<table>
<thead>
<tr>
<th>Year</th>
<th>Round</th>
<th>Poverty Rate (in percent)</th>
<th>Poverty Reduction (in percent) (Over five years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1977-78</td>
<td>32</td>
<td>51.3</td>
<td>-</td>
</tr>
<tr>
<td>1983</td>
<td>38</td>
<td>45.65</td>
<td>11.01</td>
</tr>
<tr>
<td>1987-88</td>
<td>43</td>
<td>39.09</td>
<td>14.37</td>
</tr>
<tr>
<td>1993-94</td>
<td>50</td>
<td>37.27</td>
<td>4.66</td>
</tr>
<tr>
<td>1999-00</td>
<td>55</td>
<td>26.09</td>
<td>30.00</td>
</tr>
<tr>
<td>2004-05</td>
<td>61</td>
<td>22.15</td>
<td>15.10</td>
</tr>
</tbody>
</table>

Source: Calculated from different rounds of NSS

One can observe the poor by seeing his condition but firstly it is necessary to give the official meaning of poverty by which everyone could understand with the actual condition of a poor. So, this paper attempts to discuss the different concepts of poverty as well as poverty measures. This paper also evaluates different programmes and policies which have been launched during the last sixty years in India for poverty alleviation. Alternative conceptualization, suggestions and recommendations are also made for the next steps for continuing the development of improving and appropriating methods of identifying the poor.

**Poverty and Poverty Line: Concept and Measurement**

Poverty is a situation where people are not able to fulfill their basic needs. Thus the concept of poverty depends upon basic needs. At subsistence level a basic need are “availability of food, clothes and shelter” but with the time society has changed so the basic needs has added more things like “availability of education, health, freedom”, etc.

To measure the level of poverty and identification of poor at any time in any country are critically dependent upon the definition of the poverty line. The poverty line is determined how many people are poor and how many are non-poor. As such its determination is always a matter for debate and controversy. There are two main approaches for constructing a poverty line; one is absolute poverty and the other is relative poverty. The concept of absolute poverty is based on absolute needs of the people and people are defined as poor when some absolute needs are not sufficiently satisfied. (Insufficiency of basic needs). The concept of relative poverty is related to the general standard of living of a society. Thus, according to the relative concept of poverty, people are poor because they are deprived of the opportunities, comforts, and self respect regarded as normal in the community to which they belong. In relative concept of poverty, poor are defined as a person or family whose income is less than the
average income of the community (Jane Falkingham and Ceema Namazia, 2001). The other main important concept is the poverty lines. In this paper we have only discussed those approaches which are used in determining the absolute poverty line. This is because there are problems in defining a poverty line within relative approach. Some of these problems are as to how we establish what the norms of our society are, what we put in the basket of goods, etc. At least with the absolute approach, there are reasonably objective norms but with the relative approach the decisions concerning what is an acceptable minimum become much more subjective. There are various approaches for quantifying the absolute poverty line but broadly only three are discussed here: one income approach, second consumption expenditure approach, and third energy requirement approach.

According to the income level approach, the minimum income necessary for basic needs and those whose income are below this level are considered poor. According to the consumer expenditure approach, the expenditure is necessary for minimum needs and those people or households who do not have this level of expenditure are below the poverty line. According to the energy requirement approach, the Planning Commission’s task force recommended an average of 2,400 and 2,100 calorie per capita per day for rural and urban areas respectively. Here, the procedure is to convert all the food items into calories to for calorie intake.

Here one question is arising whether low income, consumption or calorie norms are the better indicator of poverty or not. Poverty is concerned with low income, low spending or a low calorie norm is rarely made explicit. However very different results are obtained depending on which measure is used. (Atkinson, 1989). All the indicators are important through different point of views. Firstly, the calorie norm of poverty assumes that calories are the most basic need of livelihood and also binding constraint in Indian diet if calorie requirements are met; other basic requirements of life are automatically filled up. Yet consumption expenditure is better than calorie norm and income approach because it is seen by us that calorie norm provides too narrow definition of poverty as pointed out by Sen (1981) even though a household is able to meet the calorie norm on an average, the individual members of the household may still be undernourished because of the inequitable distribution of food within the household. The second limitation of this indicator is calorie consumption was proposed as a measure of one aspect of nutrition but as pointed out by Dandekar (1982) the expenditure level at which calorie norm is met, is not supposed to measure an aspect of nutrition. Want of adequate income defined, as poverty and deficiency of energy defined as under nutrition.
In the same way we can see that consumption expenditure approach is also better than the income approach because in a developing countries in rural areas where income is generated primarily from rain-fed agriculture consumption measure reflect to a greater degree the level of resources household control and may also reveal information about incomes in both the past and the future consumption includes both goods and services that are purchased and those that are provided from ones’ own production (in kind). People are always willing to recall what they have spent than what they have earned. Due to tax burden many people reveal their real income (Atkinson, 1989). A household may have an income \((Y)\) below a given amount \((Z,\) the poverty line) but may be able to attain a level of expenditure above \(Z\) running down savings or by borrowing. In such cases \(Y<Z<E\), if income indicator used, the household defined as poor and on the basis of expenditure indicator household defined as non-poor. In developing countries income is dependent on the agricultural seasons. The permanent income hypothesis by (Friedman, 1957) is that consumption expenditure is a better proxy for permanent income, since people tend to smooth out their fluctuations in income and this is reflected in their expenditure.

Among these three indicators calorie norm is also better than income approach because calorie norm is basic need of man. Calories are believed to be the binding constraint in the Indian diet. Calorie requirement lends itself more easily to measurement compared to the standard of living. At last there is a direct link between deficiencies of calories and hunger which is a physically felt need requiring satisfaction unlike deficiency of protein and other nutrients. Yet among them we can observe that the best indicator is consumption expenditure due to containing many deep qualities. Consumption expenditure approach should be used in India

**Poverty Alleviation Strategies**

Since Independence, Government of India has been concerned about the well being of Indian people. Many policies have been made for those people who were poor and deprived. But during mid 1970s the government could not be satisfied with the policies made for poverty reduction so Indian Government have decided to reduce poverty directly rather than depending on general growth alone. Generally, there are two types of poverty alleviation strategies, one is the indirect approach and the second is direct approach. The indirect approach focuses on the poverty reduction through the growth and its redistribution. For proper redistribution of fruits of growth and to reach this effect to bottom level (Trickle down effect) many steps have been taken. Some of these steps are land reforms, agricultural development, human resource development and controlling population. There are only two ways of reducing the poverty by land system the first is to redistribute the existing stock of land through land reforms.
Land reform is a potentially powerful direct instrument for improving access to land for the poor and creating a set of favorable initial conditions for increasing growth. The record of land reform in the market economies of Asia is far from impressive yet the scope for land reform as a redistributive measure is also becoming more limited due to mounting pressure of population on limited land availability. In the absence of land reform the only scope for improving the effective availability of land for the poor is to encourage and support is that the land is augmenting and labour using technological changes which increases yields per hectare while also increasing the labour input per hectare. In it irrigation development has to be planned on an area basis which would include both large and small farmers. Provision of credit, which is a key requirement for supporting agricultural transformation, requires building an extensive institutional network for making credit available both to large and small farmers. The success of a small farmer strategy is dependent upon the overall policy toward agriculture being supportive. The objective of raising incomes of the rural poor is served by the expansion of employment opportunities in agricultural and non-agricultural sectors. The dependence of the rural poor on wage employment has to increase because of more demographic pressure on land. When the technical changes in agriculture has come, many employment opportunities also has come in the hand of rural poor as example mechanization in land preparation displaces human labour and bullock labour but by mechanization it is easy to make use of land for pasture to release for crop cultivation thus adding to total employment generation and it may also help to reduce the time required for land preparation and may thus facilitate the sowing of a second crop. In this case labour per hectare per crop may decline, but total labour use per hectare in all crops may actually increase. Since agriculture growth will provide only limited possibilities for labour absorption so the burden of absorbing additions to the rapidly growing labour force must be shared by rapid employment expansion in the non-agriculture sector. As the size of the non agriculture sector increases relative to the agriculture sector, its growth has a greater potential impact on poverty through a larger capacity to absorb surplus labour from agriculture. The operation of the labour markets in India introduces biases against labour intensity and these are in some ways the most difficult to handle. Maintenance of artificially high wages in the organized sector creates bias in favour of greater capital intensity, in this way the managers feel there are high costs associated with handling a large workforce. So it is difficult to quantify the impact of any one of these biases and it may not be practical to remove all of them in a short time. By the significant progress in removing these biases, combined with a macroeconomic framework conducive to high growth, will produce a growth process which favour greater employment generation. This would undoubtedly help to raise labour incomes and accelerate the process of poverty reduction. While the indirect approaches focuses on the policy framework which will generate a
growth process which ensures an adequate flow of benefits to the poor but due to some defects governments also took the direct approach which relies on targeted programmes aimed directly at increasing incomes of identified poverty groups.

In direct approach, government, directly, hit to the poverty by financial assistance programmes and by employment programmes. Financial programmes aimed at generating additional income for the poor from self-employment and employment programmes aimed at providing wage employment for the poor. Self-employment ventures are on a very small scale, employing mainly family labour. The programme has in built safeguard for the weaker sections. This programme brings the assisted poor families above poverty line by providing them income-generating assets through bank credit and government subsidy. Some financial assistance programmes are High Yields Variety Programmes (1965), Integrated Rural Development Programme (1978-79), Swarn Gram Sawarojgar Yojana (1999), etc. Swarn Gram Sawarojgar Yojana programme was operationalised in April 1999 after restructuring and combining the IRDP with allied programmes into a single self-employment programme. The programme has in built safeguard for the weaker sections. This programme brings the assisted poor families above poverty line by providing them income-generating assets through bank credit and government subsidy, etc.

Wage employment programmes can help to create economically productive or socially useful assets for the whole rural economy. India’s experience is perhaps the most extensive, beginning with the rural manpower programme in 1960, and then at the state level there is also a programme as like Employment Guarantee Scheme (1972). At national level there are programmes like Food-for-Work Programme (1977), National Rural Employment Programme (1980), Rural Landless Employment Guarantee Programme (1983), Jawahar Rojgar Yojna (1989, NREP and RLEGP were merged into JRY), Swarn Gram Rojgar Yojana (a scheme combining the programmes like EAS, JGSY and FFW), National Rural Employment Guarantee Scheme (2006).

For poverty alleviation, the direct approach is important and useful because it has the advantage of responding immediately and visibly in support of identified target groups yet this approach has many weaknesses, one of these is that it necessarily involves a heavy draft on budgetary resources which most low-income countries can ill afford. The programmes relating to human development category are as yet too small to have any visible impact on the poor. Most of the government programmes suffer from the problem of the top down approach and due to highly standardization these programme have very little sensitivity to local needs and adaptability to local conditions. These programmes mainly deal with individual and not with group. Employment programmes aimed at creating
productive assets have also been criticized on the grounds that the assets created, such as irrigation work or even roads, ultimately enhance the value of land and the benefits therefore accrue mainly to upper income land owning groups and not to the poor. In the same way self employment programme suggests that there are many problems which need to be resolved if these schemes are to become a truly effective instrument for poverty alleviation. It is certainly not easy to set up poor households as independent producers. So in this way the indirect approach has the advantage that it focuses on the operation of the whole economy but on the other hand since the approach depends on the overall pace and pattern of growth, it may not be able to provide adequate income support to all groups.

Conclusion

In this paper it has been suggested that consumption approach is the best approach. To measure the poverty line Consumption expenditure approach uses a consumption bundle that is deemed adequate, including both food and non food items and it estimates the cost of the bundle for each subgroup of a population. So there is needed to consider not only food items but also those types of food items which contain all the nutrients like carbohydrate, fat, vitamins, and protein, etc so that human being can be skilled, talented and energetic. And non-food items (such as education, health, etc.) should be included in poverty line because these items can improve the quality of life of a human being. Education, health, and water are the possible entry points. The interaction with these factors can help the poor to secure information, analyze their problems and articulate their felt needs better.

In this way government should take the concept of human poverty index which concentrates on deprivation in three essential elements of human life which already reflected in human development index like longevity, knowledge and a decent living standard. The paper also suggests that indirect and direct approaches are complementary but not substitutes to each other for poverty alleviation. So, the government should concentrate on both direct and indirect approaches.

References


DOES ILLITERACY INCREASES REPRODUCTIVE TRACT INFECTION AMONG WOMEN IN SLUMS IN GREATER MUMBAI

* V. M. Sarode

Abstract

This study uses primary data, collected using cluster sampling of sample size of 433 reproductive women who have given at least one live birth prior to the survey, on symptoms of RTI, delay in reporting of RTI problems, availing the treatment, whether satisfied with the treatment and the reasons for developing these problems from the Rafi Nagar slum. This paper examines reproductive tract infection among the study women and utilization of health services available to them in the slums in Mumbai on the basis of standard of living index constructed from household amenities, housing quality and sources of drinking water, electricity and toilet facilities. The findings reveals unimaginable low level of health services availed by these illiterate women in this slum including least awareness about RTI they had. Besides to these there were delay in reporting of RTI to the health providers and were not satisfied with the treatment under taken and majority had opinion that RTI was due to unclean delivery. This paper suggest that improving awareness regarding RTI may help them in reducing such wide spread disease amongst the poorest of economic stratum of such illiterate and low SLI category women in slums.

Key words: Reproductive Tract Infection; Treatment; Illness; Mumbai Slum

Absence of reproductive tract infections (RTIs) is essential for the reproductive health of both women and men and is critical for their ability to meet their reproductive goals. There are three different types of reproductive tract infections for women: endogenous infections that are caused by the multiplying of organisms normally present in the vagina; iatrogenic infections caused by the introduction of bacteria or other infection-causing micro-organisms through medical procedures such as an IUD insertion; and sexually transmitted infections (STIs).

Endogenous infections and several of the iatrogenic and sexually transmitted infections are often easily cured if detected early and given proper treatment. If
left untreated, RTIs can cause pregnancy-related complications, congenital infections, infertility, and chronic pain. They are also a risk factor for pelvic inflammatory disease and HIV (Population Council, 1999). This paper focuses on reproductive tract infections and discusses the awareness of reproductive health of women in slums, RTI and its prevalence. This paper also discusses the health personnel’s visits to the respondents.

A community-based study was carried out (Monika; et al., 2007) to assess the prevalence of reproductive tract infections (RTIs) among ever married rural women aged 15-45 years at village Naila during 2002. At least one symptom related to RTIs was found in 471 (55 per cent) out of 859 women. Only 50 per cent (432/859) women gave consent for their gynaecological and microbiological examinations. Out of 432 women examined 61 percent (263/432) had at least one type of RTIs. Out of 263 cases, 43 percent had cervicitis, 26 per cent had bacterial vaginitis, 14 per cent had fungal infection, 8 per cent had trichomonas vaginitis, 22 per cent had pelvic inflammatory disease and 19 per cent had cervical erosion. Prevalence of RTI was significantly associated with age, personal hygiene, material used for menstrual blood, gravida status, type of attendance at child birth, invasive contraceptives, gynaecological surgery but caste, literacy status and place of deliveries were not significantly associated with RTI status in the study.

A study was done by Srivastava (2004) with an aim to find out perception of women about Reproductive Tract Infection and comparison was done in rural, various villages of Sainya block; urban, Lohamandi, Agra; and urban slum areas, in Jattu Bazaar, Shiv Nagar and Anand Nagar areas of Lohamandi, Agra; A criterion for correct perception about reproductive tract infection was that it is associated with vaginal discharge, urethral discharge, lower abdominal pain and genital ulcers. This study was conducted among 345 married women in reproductive age group of 15 to 45 years, 115 women from each area the rural, urban and urban slums. This study resulted that the perception about Reproductive Tract Infection was responded correctly by 74.78 per cent urban, 28.69 per cent rural and 45.22 per cent urban slum women and difference was found to be significant (P<0.05) in all three areas. The difference was significant in all three areas perception about side effect of vaginal discharge was correct 100 per cent in rural and urban while 97.39 per cent in urban slum with significant difference between rural & urban & urban slums (p<0.05). The occurrence of vaginal discharge was found 54.78 per cent in rural 43.48 per cent in urban and 43.48 per cent in urban slums with in average of 47.24 per cent in all three areas. Watery vaginal discharge was found 67.74 per cent rural 64 per cent urban and 64 per cent urban slum women and 22.58 per cent rural, 20 per cent urban and 24 per cent urban slum women had curly discharge.
Nashid et al (2004) had tried to link environmental factors with prevalence of RTI/STD symptoms among women in the urban slums of Dhaka, Bangladesh and also tried to investigate if there are differences in levels of RTI/STD prevalence among the slums. Fourteen slums from Dhaka city were the secondary units for this study. Almost 65 per cent women were found to have reported at least one RTI/STD symptom in the last one year. Final parsimonious model using multilevel logistic regression of prevalence of RTI/STD symptoms on various correlates found two environmental factors to be significant. Women were more likely to report symptoms if their houses were located more than 10 yards away from the toilet, and they did not practice proper garbage disposal habits. However, age of the woman was the most significant predictor of RTI/STD symptoms, older women having reporting more symptoms compared to women aged below 19. Most slums had similar level of RTI/STD prevalence; only one slum had significantly lower ones. Environmental factors seem to have significant correlation with reporting of RTI/STD symptoms in the urban slums. Tackling women’s reproductive health is more a multisectoral approach than establishment of health clinics alone.

Syndromic approach was used (Singh; et al. 2001) to identify reproductive tract infections (RTI) by a trained public health nurse among 130 ever-married women aged 15-45 years in a resettlement colony, Chandigarh. A lady medical officer in the dispensary examined and treated 48(37 per cent) referred symptomatic women as per syndromic approach guidelines. They were suffering from vaginitis (52.1 per cent), cervicitis (20.8 per cent), pelvic inflammatory disease (PID) (14.6 per cent), urinary tract infections and PID (4.2 per cent) and 4 did not have any clinical abnormality. Poor menstrual hygiene was observed among 72.7 per cent women with RTI. Follow-up done after one month showed effectiveness in terms of symptomatic relied in 72.7 per cent while 9.1 per cent discontinued treatment and 4.5 per cent did not comply with the medications.

An attempt (prakasam; et al. 2004) was made to know the reproductive morbidity (gynecological morbidity) focusing on problems related to vaginal discharge such as itching / irritation, bad odor, abdominal pain, fever, pain / burning while urinating and problems related to coitus among 15-19 year old currently married women (adolescents) in Andhra Pradesh and Tamil Nadu and also risk of reproductive morbidity by socio-biological variables in the selected states and the health seeking behavior among adolescent women towards reproductive morbidity. Data was collected through NFHS-2. And it reveals that at least 31.4 per cent women suffer from one or the more complications of reproductive health. Analysis shows that reproductive morbidity problems were found to be more for the study women in Andhra Pradesh than in Tamil Nadu. Similarly the women who delivered within 14 years of age and got married over
14 years of age were found to have higher odds than reference category in reporting RTI problems.

Every fourth person in Bangalore slums (The Times of India, 3 June, 2003, Bangalore), was found contracted with sexually transmitted disease (STD) or reproductive tract infection (RTI), the rate of which has been termed “alarming”. These startling statistics came to the fore during a family health campaign conducted by the Bangalore City Corporation (BCC) and the Karnataka State AIDS Prevention Society (KSAPS). Some 24.5 per cent of slum-dwellers, who attended the camp, suffer from STD and RTI. Among women, it was 26.3 per cent and men 17.3 per cent. The campaign spanned 250 slums at 55 health centers and urban family welfare centre and covered people in the sexually active 15-49 age group. Ulcers, discharge, wound, infection and pain in reproductive tract were the symptoms of the diseases. While 348 people were suffering from ulcers, 2,870 were found to have continuous discharge and 1,237 people had other forms of infection. “It is alarming.” These 14,000 people are in the high-risk group and, therefore, chances of them contracting HIV increase by 10 folds. “Both STD and RTI are curable. People tested for STD and RTI should undergo treatment along with their spouses. While men are asymptomatic, women show signs of symptoms,” Dr Nagaratna added.

Ultimately poverty is the underlying determinant and common denominator for all these medical, social factors. In general, women in slum remain unaware of their own reproductive health problems. Hence it is necessary to impart knowledge about the health care of reproductive women in the urban slums where even such women remains unaware of the existing health facilities available in the area.

Keeping in view of above research work an attempt was made to evolve a suitable strategy for knowing the perception about reproductive tract infection among the study women in a slum of Greater Mumbai, health services availed by them and the reasons for developing such reproductive tract infections, this study has been initiated.

Background of the study area

The city of Mumbai is originally a cluster of seven islands having an area of 603 sq. km. It has grown at a tremendous pace over the years. Between 1941 and 1961 the population grew 2.5 times and between 1961 and 1981 was of two times. Between 1981 and 2001 the population increased from 82 lacs to 120 lacs. Thus the overall population density of Greater Mumbai works out to be 19000 persons per sq. km. where Maharashtra’s only 314. This high density of population coupled with dearth of housing has lead to the development of degrading slums.
According to Census of India 2001, about 49 per cent of population of Mumbai lives in slums. About 28 per cent and 21 per cent of total population is male and female respectively who lives in slums.

The present study is an attempt to know,

i) To study the perception about reproductive tract infection among reproductive women.

ii) Utilization of health services available in the study area.

Materials and Methods

Measuring household standard of living

In the absence of data on income and consumption measures, household standard of living indices are often constructed using three set of information, namely source of drinking water, Toilet facility, type of house and ownership of selected consumer durables (Montgomery et al., 2000). Index scores for the present study ranges from 1-6 for a low SLI to 7-9 for a medium SLI and >=10 for a high SLI (Appendix).

Data

For the present investigation, two stage sampling procedure has been adopted. In the first stage, the slums in the Greater Mumbai according to their population size were listed using the “Directory of Slums” published by office of the additional collector (ENC), Mumbai & Mumbai Sub. Dist. (see ref.). Two lists were prepared, one for plain area slums and other for hilly area slums. From plain area slum list, one slum was selected at random. This plain area slum was Rafi Nagar slum located at Deonar, Mumbai which comes under M-ward of Brihan Mumbai Municipal Corporation. The populations of this slum (study area) were 5000 respectively.

In the second stage of sampling, from this selected slum area, using cluster sampling, two clusters were selected at random. From these two clusters of Rafi Nagar slum area 433 households were selected, thus represents slum population in Greater Mumbai. This survey was conducted from June to August, 2005.

In order to know the perception about reproductive tract infection among the study women and the utilization of health services availed by them during the last three years prior to the survey were considered.
Results and discussion

In the survey, the data was collected from the study women on some common symptoms of RTIs, namely problems with abnormal vaginal discharge, urinary tract infections and intercourse-related pain in the three months preceding the survey.

Specifically, the prevalence of reproductive health problems among currently married women is estimated from women’s self-reported experience with each of the following problems: vaginal discharge accompanied by itching, by irritation around the vaginal area, by bad odour, by severe lower abdominal pain, or by any other problem; pain or burning while urinating; and painful intercourse. The study Women who experience one or more of these reproductive health problems could either have or be at risk of getting an RTI/STI. However, since information on health problems is based on self reports rather than clinical tests or examinations, the results were interpreted with caution.

1. Reproductive Health Problems of study women in Rafi Nagar Slum, Deonar, Mumbai.

Table 1. shows the prevalence of different reproductive health problems among women in Rafi nagar slum area by background characteristics as education. Three percent of the study women reported at least one type of problem related to vaginal discharge, and 15 per cent of the study women reported symptoms of a urinary tract infection. Overall, 18 per cent study women reported either problems with vaginal discharge or symptoms of a urinary tract infection. Pus in urine was 10 per cent in among the study women. Among problems related to vaginal discharge, itching or irritation was mentioned most frequently (17 per cent) in Rafi nagar slum area, followed by severe lower abdominal pain (29 per cent), and bad odour (23 per cent). Low backache was 50 per cent reported by the respondents of Rafi nagar slum area. Ten percent reported painful intercourse in Rafi nagar slum area.

Table 1. also depicts information of reproductive health problems among the study women along with their education level and these health problems were found maximum among the illiterate women except Frequent Urination and Genital ulcer/rash when compared with women having education up to 6th standard and women having education more than 6th standard.

Thus it can be concluded that the illiterate women suffer more due to reproductive health problems compared with the literate women.
Table 1. Percentage of Women reporting Reproductive Health Problems along with their education, in Rafi Nagar Slum, Deonar, Mumbai.

<table>
<thead>
<tr>
<th>Reproductive health problems</th>
<th>Education of Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Illiterate</td>
</tr>
<tr>
<td>White Discharge</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>141</td>
</tr>
<tr>
<td>Percent</td>
<td>49.5</td>
</tr>
<tr>
<td>No</td>
<td>144</td>
</tr>
<tr>
<td>Percent</td>
<td>50.5</td>
</tr>
<tr>
<td>Abnormal vaginal discharge</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
</tr>
<tr>
<td>Percent</td>
<td>3.9</td>
</tr>
<tr>
<td>No</td>
<td>274</td>
</tr>
<tr>
<td>Percent</td>
<td>96.1</td>
</tr>
<tr>
<td>Itching around vagina</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>50</td>
</tr>
<tr>
<td>Percent</td>
<td>17.5</td>
</tr>
<tr>
<td>No</td>
<td>235</td>
</tr>
<tr>
<td>Percent</td>
<td>82.2</td>
</tr>
<tr>
<td>Pain in lower abdomen</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>83</td>
</tr>
<tr>
<td>Percent</td>
<td>29.1</td>
</tr>
<tr>
<td>No</td>
<td>202</td>
</tr>
<tr>
<td>Percent</td>
<td>70.9</td>
</tr>
<tr>
<td>Pain during abdomen</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>24</td>
</tr>
<tr>
<td>Percent</td>
<td>8.4</td>
</tr>
<tr>
<td>No</td>
<td>261</td>
</tr>
<tr>
<td>Percent</td>
<td>91.6</td>
</tr>
<tr>
<td>Frequent Urination</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>43</td>
</tr>
<tr>
<td>Percent</td>
<td>15.1</td>
</tr>
<tr>
<td>No</td>
<td>242</td>
</tr>
<tr>
<td>Percent</td>
<td>84.9</td>
</tr>
</tbody>
</table>

Contd....
Contd....

<table>
<thead>
<tr>
<th>Genital ulcer/rash</th>
<th>Yes</th>
<th>42</th>
<th>7</th>
<th>14</th>
<th>63</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>14.7</td>
<td>9.7</td>
<td>18.4</td>
<td>14.5</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>243</td>
<td>65</td>
<td>62</td>
<td>370</td>
<td></td>
</tr>
<tr>
<td>Percent</td>
<td>85.3</td>
<td>90.3</td>
<td>81.6</td>
<td>85.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pain during intercourse</th>
<th>Yes</th>
<th>31</th>
<th>7</th>
<th>7</th>
<th>45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>10.9</td>
<td>9.7</td>
<td>9.2</td>
<td>10.4</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>254</td>
<td>65</td>
<td>69</td>
<td>388</td>
<td></td>
</tr>
<tr>
<td>Percent</td>
<td>89.1</td>
<td>90.3</td>
<td>90.8</td>
<td>89.6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Low backache</th>
<th>Yes</th>
<th>148</th>
<th>29</th>
<th>41</th>
<th>218</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>51.9</td>
<td>40.3</td>
<td>53.9</td>
<td>50.3</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>137</td>
<td>43</td>
<td>35</td>
<td>215</td>
<td></td>
</tr>
<tr>
<td>Percent</td>
<td>48.1</td>
<td>59.7</td>
<td>46.1</td>
<td>49.7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Foul Smelling</th>
<th>Yes</th>
<th>72</th>
<th>14</th>
<th>14</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>25.3</td>
<td>19.4</td>
<td>18.4</td>
<td>23.1</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>213</td>
<td>58</td>
<td>62</td>
<td>333</td>
<td></td>
</tr>
<tr>
<td>Percent</td>
<td>74.7</td>
<td>80.6</td>
<td>81.6</td>
<td>76.9</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pus in Urine</th>
<th>Yes</th>
<th>34</th>
<th>6</th>
<th>4</th>
<th>44</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>11.9</td>
<td>8.3</td>
<td>5.3</td>
<td>10.2</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>251</td>
<td>66</td>
<td>72</td>
<td>389</td>
<td></td>
</tr>
<tr>
<td>Percent</td>
<td>88.1</td>
<td>91.7</td>
<td>94.7</td>
<td>89.8</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. shows that about 65 per cent of study women in Rafi Nagar slum have delayed in reporting the RTI symptoms.

**Fig 1 Delay in Reporting RTI in Rafi Nagar Slum, Deonar**
Sixty five percent of respondents from the area had given opinion that they were not serious where as sixty eight percent of illiterate women compared with the other two categories of education were maximum and were not serious about reporting of their RTI problems to the health personnel.

Fifty eight percent of study women from Rafi nagar slum area had taken treatment from government health facility, where as 13 per cent have taken treatment from private health facility and 28 per cent did not go for treatment where as 38 per cent of illiterate women did not go for treatment at all.

Seventy two percent from Rafi nagar slum area were not found satisfactory with the treatment availed where as only 68 per cent of illiterate women satisfactory with the treatment availed.

A reason was asked, for not availing treatment, 42 per cent of study women from Rafi nagar slum area told that they were not serious about the gravity of problems. Thirty three percent of study women from Rafi nagar slum area told that they felt shy to talk about the problems. Twenty four percent of study women told that they had no money for treatment. Thus it can be concluded that the respondents of Rafi nagar slum area did not availed treatment.

The opinion of the respondents were taken about development of this problem, 64 per cent of study women from Rafi nagar slum area told that they had unclean delivery where as just 61 per cent of illiterate women said that RTI was due to unclean delivery. This indicates that other two educated groups have more knowledge about development of RTI. 11 per cent of study women from Rafi nagar slum area told that RTI was developed due to unclean abortion.

12 per cent of illiterate women expressed their opinion that RTI was developed from their husband where as Ten percent of the study women from Rafi nagar slum area told that they developed the problems from their husband. 14 per cent of study women from Rafi nagar slum area and told that they developed the problems after pelvic examinations.

Thus it can be concluded that the illiterate category of study women of Rafi nagar slum were unaware about the development of RTI they had.
Table 2 Percentage of women reporting reasons for delay in reporting, treatment availed, reasons for not availing treatment and the development of RTI in Rafi Nagar Slum, Deonar.

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Education of Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Illiterate</td>
</tr>
<tr>
<td>Have you delayed in reporting these problems</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>139</td>
</tr>
<tr>
<td>Percent</td>
<td>65.0</td>
</tr>
<tr>
<td>No</td>
<td>75</td>
</tr>
<tr>
<td>Percent</td>
<td>35.0</td>
</tr>
<tr>
<td>If yes do you feel that these problems are not serious</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>95</td>
</tr>
<tr>
<td>Percent</td>
<td>68.3</td>
</tr>
<tr>
<td>No</td>
<td>44</td>
</tr>
<tr>
<td>Percent</td>
<td>31.7</td>
</tr>
<tr>
<td>Where did you avail the treatment to cure these problems</td>
<td></td>
</tr>
<tr>
<td>Govt. health facility</td>
<td>121</td>
</tr>
<tr>
<td>Percent</td>
<td>56.5</td>
</tr>
<tr>
<td>Pvt health hospital</td>
<td>26</td>
</tr>
<tr>
<td>Percent</td>
<td>12.1</td>
</tr>
<tr>
<td>Applying home remedies</td>
<td>1</td>
</tr>
<tr>
<td>Percent</td>
<td>.5</td>
</tr>
<tr>
<td>No treatment</td>
<td>66</td>
</tr>
<tr>
<td>Percent</td>
<td>30.8</td>
</tr>
<tr>
<td>Were you satisfied with the treatment</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>101</td>
</tr>
<tr>
<td>Percent</td>
<td>68.2</td>
</tr>
<tr>
<td>No</td>
<td>47</td>
</tr>
<tr>
<td>Percent</td>
<td>31.8</td>
</tr>
</tbody>
</table>

Contd....
Contd....

<table>
<thead>
<tr>
<th>Please tell reason for no treatment</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not think its seriousness</td>
<td>25</td>
<td>5</td>
<td>7</td>
<td>37</td>
</tr>
<tr>
<td>Percent</td>
<td>37.9</td>
<td>71.4</td>
<td>46.7</td>
<td>42.0</td>
</tr>
<tr>
<td>Felt shy to talk about</td>
<td>22</td>
<td>1</td>
<td>6</td>
<td>29</td>
</tr>
<tr>
<td>Percent</td>
<td>33.3</td>
<td>14.3</td>
<td>40.0</td>
<td>33.0</td>
</tr>
<tr>
<td>No idea where to take treatment</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Percent</td>
<td>1.5</td>
<td>.0</td>
<td>.0</td>
<td>1.1</td>
</tr>
<tr>
<td>No money</td>
<td>18</td>
<td>1</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>Percent</td>
<td>27.3</td>
<td>14.3</td>
<td>13.3</td>
<td>23.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In your opinion how did develop this problem</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>After unclean delivery</td>
<td>40</td>
<td>5</td>
<td>11</td>
<td>56</td>
</tr>
<tr>
<td>Percent</td>
<td>60.6</td>
<td>71.4</td>
<td>73.3</td>
<td>63.6</td>
</tr>
<tr>
<td>After unclean abortion</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Percent</td>
<td>12.1</td>
<td>28.6</td>
<td>.0</td>
<td>11.4</td>
</tr>
<tr>
<td>From husband</td>
<td>8</td>
<td>0</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Percent</td>
<td>12.1</td>
<td>.0</td>
<td>6.7</td>
<td>10.2</td>
</tr>
<tr>
<td>After inserting IUD</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Percent</td>
<td>1.5</td>
<td>.0</td>
<td>.0</td>
<td>1.1</td>
</tr>
<tr>
<td>After pelvic examination</td>
<td>9</td>
<td>0</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Percent</td>
<td>13.6</td>
<td>.0</td>
<td>20.0</td>
<td>13.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Was your husband also given treatment due to these problems you had</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>913.6</td>
<td>0.0</td>
<td>16.7</td>
<td>1011.4</td>
</tr>
<tr>
<td>Percent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>57</td>
<td>7</td>
<td>14</td>
<td>78</td>
</tr>
<tr>
<td>Percent</td>
<td>86.4</td>
<td>100.0</td>
<td>93.3</td>
<td>88.6</td>
</tr>
</tbody>
</table>

2. ANOVA Table

The variations of the degree of awareness of reproductive morbidity diseases is same in different age groups, was tested using ANOVA test (Table No. 3). The symptoms reported by study women were white discharge, abnormal vaginal discharge, itching around vagina, pain in lower abdomen, pain during urination, frequent urination, genital ulcer / rash, pain during intercourse, low
backache, foul smelling, pus in urine. Symptoms except white discharge, abnormal vaginal discharge, pain during urination, low backaches were significant whereas symptom, pain during intercourse showed significant from Ramabai nagar slum area. Here we can say that the symptom, pain during intercourse probably leads to dyspareunia. This can be a sign of infection, most commonly a yeast infection and the other, frequent urination leads to micturition problem. This can be a sign of urination tract infection.

Table 3  ANOVA table for Symptoms of Reproductive Health problems of study women from Rafi nagar slum area

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have problems like - White Discharge?</td>
<td>Between Groups</td>
<td>.846</td>
<td>2</td>
<td>.423</td>
<td>1.698</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>107.149</td>
<td>430</td>
<td>.249</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>107.995</td>
<td>432</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have problems like - Abnormal vaginal discharge?</td>
<td>Between Groups</td>
<td>.164</td>
<td>2</td>
<td>.082</td>
<td>2.827</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>12.446</td>
<td>430</td>
<td>.029</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>12.610</td>
<td>432</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have problems like - Itching around vagina?</td>
<td>Between Groups</td>
<td>.919</td>
<td>2</td>
<td>.459</td>
<td>3.233*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>61.091</td>
<td>430</td>
<td>.142</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>62.009</td>
<td>432</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have problems like - Pain in lower abdomen?</td>
<td>Between Groups</td>
<td>1.716</td>
<td>2</td>
<td>.858</td>
<td>4.231*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>87.198</td>
<td>430</td>
<td>.203</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>88.915</td>
<td>432</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have problems like - Pain during urination</td>
<td>Between Groups</td>
<td>.091</td>
<td>2</td>
<td>.045</td>
<td>.643</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>30.394</td>
<td>430</td>
<td>.071</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>30.485</td>
<td>432</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you have problems like - Frequent Urination?</td>
<td>Between Groups</td>
<td>1.719</td>
<td>2</td>
<td>.859</td>
<td>6.996**</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>52.822</td>
<td>430</td>
<td>.123</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>54.540</td>
<td>432</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Contd....
Contd....

<table>
<thead>
<tr>
<th>Do you have problems like - Genital ulcer/rash</th>
<th>Between Groups</th>
<th>2.226</th>
<th>2</th>
<th>1.113</th>
<th>9.274**</th>
<th>.000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within Groups</td>
<td>51.608</td>
<td>430</td>
<td>.120</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>53.834</td>
<td>432</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do you have problems like - Pain during intercourse?</th>
<th>Between Groups</th>
<th>1.236</th>
<th>2</th>
<th>.618</th>
<th>6.797**</th>
<th>.001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within Groups</td>
<td>39.088</td>
<td>430</td>
<td>.091</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>40.323</td>
<td>432</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do you have problems like - Low backache</th>
<th>Between Groups</th>
<th>.828</th>
<th>2</th>
<th>.414</th>
<th>1.658</th>
<th>.192</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within Groups</td>
<td>107.417</td>
<td>430</td>
<td>.250</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>108.245</td>
<td>432</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do you have problems like - Foul Smelling?</th>
<th>Between Groups</th>
<th>1.845</th>
<th>2</th>
<th>.922</th>
<th>5.285**</th>
<th>.005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within Groups</td>
<td>75.060</td>
<td>430</td>
<td>.175</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>76.905</td>
<td>432</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do you have problems like - Pus in Urine?</th>
<th>Between Groups</th>
<th>.947</th>
<th>2</th>
<th>.474</th>
<th>5.279**</th>
<th>.005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within Groups</td>
<td>38.582</td>
<td>430</td>
<td>.090</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>39.529</td>
<td>432</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*P< 0.05,     ** P<0.01

3. Awareness of Reproductive health problems between different age groups in Rafi nagar slum, Deonar

Table 4 shows that 46 per cent of study women from Rafi nagar have abnormal vaginal discharge problem among the age group of 30-49 which is maximum compared with other two age groups. It is also observed that abnormal vaginal discharge problem increases as age increases. It clearly indicates that Rafi nagar slum respondents have more RTI problems in the later age which is quite serious.

Table 4. Age wise Reproductive health problems in Rafi nagar slum, Deonar

<table>
<thead>
<tr>
<th></th>
<th>15-24</th>
<th>25-29</th>
<th>30-49</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormal vaginal discharge</td>
<td>3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Yes (Percent)</td>
<td>23.1</td>
<td>30.8</td>
<td>46.2</td>
</tr>
<tr>
<td>Frequent Urination</td>
<td>29</td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td>Yes (Percent)</td>
<td>45.3</td>
<td>20.3</td>
<td>34.4</td>
</tr>
</tbody>
</table>
4 Utilization of Health Services for the Reproductive Morbidity

Respondents were asked about the discussion held with the health personnel when visited their house about visiting the hospitals, to take care of personnel and child health etc. Fifty six percent of respondents from Rafi nagar slum area told that health personnel had visited their residence. 60 per cent of respondents from Rafi nagar slum area told that health personnel were from Govt./municipal hospital. Similarly 38 were from UHC/UHP. 58 per cent of respondents from Rafi nagar slum area said that health personnel discussed about immunization. Similarly 10 discussed about breast feeding and 17 discussed about family planning. Sixty nine percent of respondents respectively from Rafi nagar slum area said that the health personnel had organized meeting with them. 55 per cent discussed about immunization and 18 per cent discussed about family planning.

Thus it can be concluded that health personnel had played more role in discussing the problems of health in Rafi nagar slum area.

Summary and Conclusion

In this study the reproductive tract infection among the study women has been identified in the slum area of Rafi Nagar, Deonar, Mumbai. The primary data of sample size of 433 reproductive women who have given at least one live birth prior to the survey on the symptoms of RTI, such as white discharge, abnormal vaginal discharge, itching around vagina, pain in lower abdomen, pain during urination, frequent urination, genital ulcer / rash, pain during intercourse, low backache, foul smelling, pus in urine; delay in reporting of RTI problems, availing the treatments, whether satisfied with the treatment availed and the reasons for developing these problems was collected. This study revealed that the reproductive health problems of illiterate women were found to be quite serious compared with the other two categories of the women who had education up to 6th standard and above including delay in reporting of such RTI to the health personnel. The illiterate category of study women of Rafi nagar slum were unaware about the development of RTI they had.

Seventy two percent of the study women from Rafi nagar slum area were of the opinion that they were not found satisfactory with the treatment availed where as only 68 per cent of illiterate women were found satisfactory with the treatment availed. 46 per cent of study women from Rafi nagar have abnormal vaginal discharge problem among the age group of 30-49. It clearly indicates that Rafi nagar slum respondents will suffer more with RTI problems in the later age which is quite serious. Respondents were asked about the discussions held with the health personnel when visited their house about visiting the hospitals, to take care of personnel and child health etc. Fifty six percent of respondents from Rafi nagar slum area told that health personnel had visited their residence.
Table 5. Percentage of women who have availed the health facilities from health personnel visits

<table>
<thead>
<tr>
<th>Health Personnel visits</th>
<th>Rafi Nagar Slum, Deonar</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Percent</td>
</tr>
<tr>
<td>Did any health personnel ever visited to you</td>
<td>241</td>
<td>55.7</td>
</tr>
<tr>
<td>If yes, please name the clinic/hospital they belonged</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Govt./municipal hospital</td>
<td>145</td>
<td>60.2</td>
</tr>
<tr>
<td>UHC/UHP/UFWC</td>
<td>92</td>
<td>38.2</td>
</tr>
<tr>
<td>Govt mobile clinic</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>private hospital</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td>Vaidya/hakim/homeopathic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>What did they discussed with you</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunization</td>
<td>140</td>
<td>58.1</td>
</tr>
<tr>
<td>Breast feeding</td>
<td>23</td>
<td>9.5</td>
</tr>
<tr>
<td>Personal health and hygiene</td>
<td>10</td>
<td>4.1</td>
</tr>
<tr>
<td>RTI/STD/HIV/AIDS</td>
<td>16</td>
<td>6.6</td>
</tr>
<tr>
<td>Family planning</td>
<td>40</td>
<td>16.6</td>
</tr>
<tr>
<td>Small family size</td>
<td>11</td>
<td>4.6</td>
</tr>
<tr>
<td>Income generating activities</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Whether any meeting was arranged by them during the last three months</td>
<td>165</td>
<td>68.5</td>
</tr>
<tr>
<td>If yes, what issues were discussed during the meeting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunization</td>
<td>90</td>
<td>54.5</td>
</tr>
<tr>
<td>Breast feeding</td>
<td>16</td>
<td>9.7</td>
</tr>
<tr>
<td>Personal health and hygiene</td>
<td>12</td>
<td>7.3</td>
</tr>
<tr>
<td>RTI/STD/HIV/AIDS</td>
<td>12</td>
<td>7.3</td>
</tr>
<tr>
<td>Family planning</td>
<td>29</td>
<td>17.6</td>
</tr>
<tr>
<td>Small family size</td>
<td>4</td>
<td>2.4</td>
</tr>
<tr>
<td>Income generating activities</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>165</td>
<td>100.0</td>
</tr>
</tbody>
</table>
The variations of the degree of awareness of reproductive morbidity diseases is same in different age groups, was tested using ANOVA test (Table 3). Symptoms except white discharge, abnormal vaginal discharge, pain during urination, low backaches were significant where as symptom, pain during intercourse showed significant from Rafi Nagar slum area. Here we can say that the symptom, pain during intercourse probably leads to dyspareunia. This can be a sign of infection, most commonly a yeast infection and the other, frequent urination leads to micturition problem. This can be a sign of urination tract infection.

Thus it can be concluded that the illiterate women suffer more from the RTI who are reluctant to avail the health facilities available in the nearby area, compared with the literate women i.e. illiteracy counts in increase in RTI among Illiterate women, as what this study shows.

Therefore it is suggested that training of nurses, health workers, dais, anganwadi workers regarding RTI identification and referral using syndromic approach and promotion of menstrual hygiene, genital hygiene and health care seeking behaviour would help in reducing the burden of RTI in the community. Indigenous methods of sanitary pads like clean, sundried domestic cloths can be promoted during menstrual periods so that their economic conditions do not act as a barrier in the maintenance of hygiene. Emphasis should be given for psychosocial and physical development of girl child so that she may become a healthy, future mother of the community. Govt. sector of health services should be strengthened and widely approachable especially in the field of family welfare. For this involvement of health workers in family planning programmers should be intensified in such slum areas and similarly the cooperation and involvement of Non Governmental Organization (NGOs) should also be sought.

Acknowledgement

Author is thankful to his guide Dr. M. B. Joshi, Associate Professor, Government Medical College, Aurangabad and to Dr. C. P. Prakasam (retd.), Professor, International Institute for Population Sciences, Govandi, Mumbai for giving valuable suggestions while drafting this paper. He is also thankful to the organizing committee and IASSH for providing him travel grants for presenting his paper in this conference.
References


Directory of Slums a) Slums Came into Existence Prior to Year 1976 in Greater Mumbai. b) Slums Came in into Existence Between Years 1976 to 1980 in Greater Mumbai Published by Office of the Additional Collector (ENC), Mumbai & Mumbai Sub. Dist.


The Times of India, 3 June, 2003, Bangalore.

APPENDIX

The standard of living is calculated by adding the following scores:

Type of House: 4 for pucca, 2 for semi-pucca, 0 for kachha;

Toilet facility: 4 for own flush, 2 for public, 1 for public pit or open, 0 for no facility;

Source of lighting: 2 for electricity, 1 for other, 0 for no facility;

Source of drinking water: 2 for pipe, hand pump, well, 1 for public tap, hand pump, well, 0 for other water sources;

Separate room for cooking: 1 for yes, 0 for no;

Ownership of house: 2 for yes, 0 for no.
BUILDING SOCIO-ECONOMIC AND POLITICAL EMPOWERMENT THROUGH SELF HELP GROUPS

* Mohan A K, ** Laxmi

Abstract

There is continued inequality and vulnerability of women in all sectors. As women are oppressed in all spheres of life. They need to be empowered in all walks of life. Active participation of women in self help group activity will make them to be empowered in socio-economic and political aspects. Empowerment is a process of awareness and capacity building leading to participation, mobility, decision making capacity and household autonomy.

Key words: Empowerment, Discrimination, Development, Mobility, Autonomy, Power.

Introduction

The bias against women takes different forms. It takes the form of exploitation, discrimination and upholding of unequal economic and social structures and religio-cultural violence. From womb to tomb women are subjected to cruelty. Female foeticide is justified on the ground that it helps in population control. Female infanticide is also practiced very widely in many parts of India in a very subtle way with no compassionate heart. Research studies on intra-household poverty indicate the degree of deprivation suffered by girl children as far as access to nutritive food and health care are concerned. Hospital records indicate higher number of admission of boys than that of girls for various childhood diseases. This is mainly due to the biased attitude of parents in seeking medical care for children and not due to girls being less prone to such diseases than boys. In spite of these efforts by the society to put an end to the life of a girl child if she manages to survive, life is made so miserable for her that death would have been a better alternative. She is forced into child labour to contribute her share in the family. If not she is forced to discontinue her studies to take care of the younger siblings and thus act as ‘surrogate mother’, at the age of 8 to 10. Even before she becomes adult, she is pushed into marriage and childbirth. Then it comes the worst part of her life cycle. She carries the double burden of being a mother and career women, unable to reconcile...
the demands of both. She undergoes severe mental and physical strain, which finds expression with fragile health at old age. As a widow she leads life of dependency receiving least care from children. There is no retirement for women from the monotony of domestic chores. This is the story of majority women of India who belong to the lower strata of society.

In such a context human rights for women could be envisioned as the ‘collective rights of woman to be seen and accepted as a person with the capacity to decide or act on her own behalf and to have equal access to resources and equitable social economic and political support to develop her full potential’ (Shanti, 1998).

The world economic profile of women shows that women represent 50 per cent of the total population, makes up 30 per cent of the official force and utilizes 60 per cent of all the working hours; receives 10 per cent of world income, and owns less than 1 per cent of the world’s property, (The Voice of the Working Women, 1982). Contribution by the women in the development of rural sector has been one of the most neglected and discriminatory areas. The active involvement of women in the development of rural as well as other sectors has been overlooked, bye-passed, underestimated and even neglected. The absence of proper recognition of women’s positive contribution and participation is due to the contention that their activities are economically unproductive, supplementary, optionally intermittent and dispensable. From the point of view of increasing labour force as well as of involving themselves in production and service activities, women’s active and positive participation cannot be overlooked. But throughout the world, the rural women have been under-represented in the development processes.

**Empowerment**

The most conspicuous feature of the term empowerment is that it contains within it the word ‘POWER’. So obviously empowerment is about changing the balance of power. In every society there are powerful and powerless groups. Power is exercised in social, economic and political relations between individuals and groups.

**Women Empowerment**

In the process of restructuring power relations, the factor which most devastatingly affects the psyche of women is that of the ‘system’. Whether it expresses itself as abject poverty, which is a growing manifestation of the class system of neo-liberal economics wedded to export-led growth models, or the cruel forms of the caste system, the oppressive patriarchal system or the cultural system that camouflages all forms of violence unleashed on women. The common thread running through them all, is the system, women are in the lowest status.
As a result, women bear the burnt of multiple forms of exploitation that originate from the caste, class, and cultural and patriarchal systems. As Peggy Antrobus puts it, the “strongest case for the focus on the poor third world woman is that in her we find the conjuncture of race, class, gender and nationality which symbolizes under-development. Generations of women have endured this subjugation for ages and it is their history; denial, sub-ordination, dehumanization and even annihilation, female infanticides to dowry deaths conveniently overlooked by historians. Studies have revealed that women’s sub-ordinate position is perpetuated and reinforced by their limited access to and control over resources than to men. Women thus get doubly marginalized by virtue of being poor and being women.

It is important, therefore, to acknowledge that although it is essential to meet some of the practical needs of women, without simultaneously tackling the critical question of power relations between men and women, both within the household and in the community, women’s issues cannot be effectively addressed. These have been identified as ‘practical gender needs and strategic gender interests’. This distinction is important. Strategic interests relate to the sub-ordinate position of women in society and aim at long term gender equality, access to and control over resources and decision making power in every respect from power over her body and reproductive system to control over physical assets and property. It implies freedom from violence, abuse and fortune, whether arising from with in the family (husband, father, brothers or sons) or inflicted by upper caste men, landowners, contractors or political vandals. This perspective puts women’s empowerment in a human rights framework.

Establishing identity and self image

It is thus important to recognize that approaches that attempt to integrate women into mainstream development do not address the real issues pertaining to them. This is only possible if the approach that is adopted ‘empowers’ women to fight not only the lop-sided development models, but also their own repression by the patriarchal system. Such an approach would need to assert the twin problems of ‘poverty’ and ‘strategic gender interests’.

The cruelest blow that ‘patriarchy’, together with the caste-class combine, has rendered to women in rural India is the destruction of their self-image. As a result, marginalized women tend to have low self-confidence and self-esteem. This increases their ‘dependency trait’, thereby reinforcing the patriarchal system. Empowerment primarily enables a process that allows women to re-build their self-image. It is a psychological support process that acknowledges women’s capacities, assuring and reposing faith in them, and guiding through a journey of discovery. In short, it is a process of rebirth and establishment of their identity.
Creating space

The prescription of norms for women’s roles is one of the many instruments adopted by the patriarchal system to subjugate women. In addition to her primary role as wage earner, either by serving as an agricultural labourer or construction worker or by working in her own field if the family possesses land, a woman has to perform a variety of other roles: collecting fuel, fodder and water, cooking for and catering to the family, performing household chores such as washing and cleaning, taking care of livestock, child rearing and nursing, fulfilling conjugal duties and the biological reproductive functions of child bearing. These roles and functions with no time to think about herself, much less to interact with other women.

‘Empowerment’ attempts to break through this drudgery by creating space for women to reflect about themselves and explore relationships with other women in order to reconstruct their realities and space in terms of time, relationships, physical freedom, privacy and identity.

Social leadership

Women’s leadership at the community level is an important dimension of empowerment. The strategy here is to motivate women to take up leadership roles in issues relating to community needs like drinking water, streetlights, land pattas (records) and housing. When women take up these problems through their respective groups by putting pressure on the block and district authorities, it reinforces their self-esteem and self-image by providing them visibility. Women are gradually accepted in social roles, a domain hitherto reserved for men. In other words, they are able to expand their space—from household to community, from personal issues to issues concerning women in general. Furthermore, this process of fighting for entitlement rights enlarges their conceptual framework in the context of poverty and development besides sharpening their analytical skills. It also substantially changes their social behavior.

Economic security

The fifth area of women’s empowerment is reflected in the various economic interventions that result in women becoming the owners of productive assets. The formation of micro-credit unions and accessing the formal banking system through micro-credit is yet another strategy that enables women’s economic security. Access to credit and control over economic resources is a crucial component in the empowerment process.

Women’s personal autonomy

All these processes enables women to assert themselves in their own personal lives in order to ensure gender equity in their respective homes, and
then gradually take up the cause of ‘gender justice’ for other women in their village through groups. In order to put this in proper perspective, it is essential to comprehend the condition’s in which women live, with particular reference to domestic violence. The implications of acquiring bargaining power by women, in the words of Hart, ‘women workers’ have the capacity to contest the ideology of male responsibility in the domestic sphere…. Reciprocity linked with their capacity to define themselves as workers, and to organize collectively in opposition to their employers.

**Institutional support**

Any challenge to ‘patriarchal’ norms at the household level is often put down by the only method known to men i.e. physical violence. This ‘physical subjugation’ of women by their husbands is both approved of and reinforced by the cultural norms of our society. Women’s struggle to gain gender equity can therefore never be successful unless they establish effective linkages outside the household that can be used to pressure men into changing their behavior. It is thus important to develop strong women groups at the village level that are federated horizontally for providing the ‘critical mass’, necessary for a power base, and structured vertically into an apex body that serves as a symbol of their collective identity and is at the same time, a legal entity that can effectively interface with administrative structures including the police and the judicial system. In short, women’s empowerment requires an institutional base in the form of a woman’s groups/ federations which, apart from serving as a symbol of their collective identity, also plays a unifying role and acts as a critical reference point for women, whose only reference point had hitherto been their father, husband or son.

**Accessing political power**

With official development assistance focusing on the feminization of poverty, empowerment may remain a concept by becoming a vehicle for development activities aimed at ameliorating poverty conditions, if it does not enter the domain of the body polity. Panchayati Raj Institutions (PRIs) are critical governance structures at the local level. In decentralized governance, political leadership is shared and power is diffused. Access to and control of this power is normally denied to women in patriarchal societies. It took half a century to translate the ‘Directive Principles of State Policy’ enshrined in chapter four of the Constitution into the 73rd and 74th Constitutional Amendments that reserve one-third of PRI seats for women. While access to political power at the local level is open to women, its control is still a distant goal. It is in this context that empowerment through social leadership at the personal, the household and the community levels could enable women to break the barriers and expand their space into the political realm. This interface exposes them to new and hitherto unfamiliar forms of
patriarchy – at the political, bureaucratic and administrative levels. Women find their entry into the political arena resisted at all three levels and this resistance takes several forms ranging from paternalistic take-over, subversion of legitimate opportunities and physical threats, including kidnapping; inciting patriarchal sentiments in the home to exerting family pressure, encouraging domestic violence and corrupting women with bribes, tempting them with offers of jobs for their kin. Ironically, an encounter with these processes only serves to enrich women’s empowerment.

Access to political power through Panchayati Raj Institutions legitimizes women’s power base, which was hitherto limited to women’s groups or federations that are best described as social, non-political formations. A political power base reinforces women’s position in other social institutions such as family, marriage etc. Access to political power can thus be defined as a strategic gender interest if women are to emerge from their subordinate position and deconstruct gender percepts on the one hand, and use political power to redistribute entitlement rights and direct government machinery to perform favour of the poor and women on the other (Veena Devi, 2005).

Despite the fact that half of its population lives in poverty conditions, India is all set to enter the next millennium and integrate with the world economy. The processes of economic globalization and liberalization offer very little hope to the poor. Our macro-economic policies reflect a commitment to a model of development that does not address the structural causes of poverty. A free market approach would only serve to eventually remove State regulations on the market and provide a ‘level playing field’ for trans-national corporations.

The process of women’s empowerment is conceptualized in terms of personal assertion and confidence as individuals; the ability to protect themselves as women; attaining economic independence as well as ownership of productive assets; ability to handle capital and assets; and provide leadership in both women and community related issues at the village and Panchayat levels. All these empowerment processes provide women with direction and confidence to establish their autonomy in the sphere of political self-governance at their village and block levels. The cumulative effect of these changes at the individual level is a reconstruction of gender precepts; at the family level, it implies a negotiation of gender relations that alters the asymmetrical power relations between women and men (Charles and Merrian, 1950).

Women’s empowerment, which envisions ‘gender equity’, implies the restructuring of a relationship premised on a subordination-domination axis into an inter-dependent relationship based on the values of respect, dignity and freedom of choice. This reversal will entail disequilibrium in structures till they are recast and a new equilibrium is established. In other words, women’s empowerment
destabilizes existing power relations. Power, by its very definition, ascribes privileges and history provides very little evidence of any voluntary surrender of privileges. On the contrary, any perceived threat to power invariably unleashes physical force to eliminate or downsize the source of threat or control it with greater force whereby future stakes are contained. This entails struggle. At its core, women’s emancipation is struggle-oriented and the women’s movement recognizes this element. And it is in the ‘family, which is an elementary social institution and into which this struggle element is carried forward, that the tension is substantial; it is here that the divergent stances and dilemmas are the most acute. Exercising restrain in exerting external pressure or manipulation is therefore vital.

In a country such as India which is known for its long history and a very complex culture, changing the age old status of women is not easy for obvious reasons. Empowering her and bringing her to the main stream is a very difficult task. In the context of the problems of the rural women and changes that are expected in them through ‘empowerment’ as explained, various tools of empowerment have been tried and tested.

One such ‘tool’ is the women’s Self Help Groups (SHG). Self Help Groups are supposed to provide the much desired informal institutional support apart from empowering the needy women economically, socially, politically and otherwise, if only the platform (SHG) is properly built and used.

**SHGs under Indian context**

Poverty has been a normal feature for the larger part of the Southern Hemisphere. Competitive market system adopting western technologies in ‘soft’ democratic society was not consistent with employment generation and poverty eradication in over populated, labour surplus economies such as India. After nationalization of the banks in 1969, poverty alleviation was attempted through income generation through credit led assets. Various poverty alleviation programmes were conceived, designed and executed by the State and Centre from time to time to assist the poor and the needy. Credits being a ‘critical input’ in all these programmes, banks were involved in a big way to assist the beneficiaries of the various government sponsored programmes. While disbursing credit, banks, at the instance of RBI and NABARD adopted various methods. These methods suffered setbacks owing to reasons such as lack of education amongst the beneficiaries of the programmes, leakage of funds, political interference etc.

Funding these programmes through SHGs appears to be a better and viable alternative to other methods of credit disbursal tried earlier. The transaction cost of the credit is reduced to a great extent to the bankers with very good
recovery performance. The process of creation of assets was far better, under various schemes.

Micro finance through SHGs has emerged as a catalyst to help meet the credit needs of informal or unorganized rural sector in the recent past. Apart from meeting the economic needs of the people, it also helps in empowering, poor people mainly women economically, politically and socially.

Methodology

The study aims at finding out the contribution of SHGs for the empowerment of women. There are a large number of SHGs, in the country promoted by government, NGOs, Co-operative Societies etc., over the last two decades. Though the ultimate objectives of these SHGs are the same, the structure, functioning and management of these SHGs vary a great lot, there by creating acute differences in their impact. The reasons for such differences are very many and they depend on various regional/local factors. It may not be possible to measure the impact of SHGs using a common yardstick. It is in this context that regional/local/micro studies may throw lot of light on the functioning and management of these SHGs and their consequent impact.

Objectives

- To study the profile of the respondents
- To find out SHGs contribution in socio-economic and political empowerment of women

Research design

A descriptive, analytical research design was adopted for the study. The primary data has been collected from the members of SHGs. The design intends to find the social, political and economic indicators to analyze the level of empowerment.

Study area

Study area is limited to five taluks in the district of Dakishana Kannada were selected for research where group and group members were to be contacted. These taluks included Mangalore, Bantwal, Puttur, Belthangady and Suilia.

Results and discussions

The table 1 compares the age and educational status of the respondents of all the three categories. As for as age distribution of the respondents is concerned, it is found that under Navodaya groups, 04.5 per cent of the respondents belonged
Table No. 1. Comparative analysis of age and education of the respondents

<table>
<thead>
<tr>
<th>Education Group</th>
<th>Bachelor Degree</th>
<th>Master Degree</th>
<th>Doctoral Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Group 1</td>
<td>20-24 years</td>
<td>25-29 years</td>
<td>30-34 years</td>
</tr>
<tr>
<td>Age Group 2</td>
<td>35-39 years</td>
<td>40-44 years</td>
<td>45-49 years</td>
</tr>
<tr>
<td>Age Group 3</td>
<td>50-54 years</td>
<td>55-59 years</td>
<td>60+ years</td>
</tr>
</tbody>
</table>

International Research Journal of Social Sciences - Volume 3, Number 1 Jan. - June 2010
to the age category of less than 20 years, under NGOs, no respondent was less than 20 years of age and under Sthree Shakthi groups, 6 per cent of the respondents belonged to the category of less than 20 years of age. On the whole majority of the respondents fell under the age group of 21 to 30 years, (46.6 per cent under Navodaya groups, 36.1 per cent under Sthree Shakthi groups and 31.6 per cent under NGO groups). Of the total sample, only one (0.8 per cent) respondent was found in the age category of above 61 years under Sthree Shakthi group.

The productive age group for various activities is said to be 18 to 35 years. Various government sponsored programmes consider this age group as effective for the selection of beneficiaries under various schemes. From the analysis, it may be seen that majority of the members under three categories fell in this effective age bracket, though Navodaya groups had exceeded this age limit slightly. Level of education is not an eligibility criterion to become a member of any self help group. As these are the women from lower socio-economic strata, illiteracy or inadequate education is one of the characteristic features of such members. In less developed districts of North Karnataka, majority of the group members will be illiterates and there are many instances where their books/records are written by outsiders. In the area under study, the general level of education itself is high and hence the percentage illiteracy amongst members is low. The books/records are written by the members themselves.

The level of education has correlation with their level of awareness and empowerment. Many studies have proved this aspect across the country.

Serajul Haque’s (2005) study on, ‘Micro credit and Empowerment of Women: Evidence from Bangladesh’ observed social development activities conducted for women on various subjects. The result of the study found that participation in the micro credit programme increased the ability of women to buy things independently; take part in public protests and generally made women more economically secure. The results also provide evidence showing that the longer a woman was a member of such micro credit programme, greater the likelihood was that she would be empowered.

In the present study in order to assess the mobility pattern of respondents after becoming the members of SHGs, as mentioned earlier, five parameters have been used namely, shopping/marketing, visiting health centers, watching cinema, visit to bank and free movement in the village (Table 2) one hundred and five (78.9 per cent) respondents promoted by NGOs observed that their shopping/marketing had increased after becoming the members of SHGs, while it was 67.7 per cent in Sthree Shakthi Group and 56.4 per cent in Navodaya Groups. As far as visiting the health centers is concerned, it was observed that 72.9 per cent members of NGO promoted groups and 71.4 per cent members in
Table No. 2. Impact of SHG on Social, Economic and Political status: Comparative analysis of mobility

<table>
<thead>
<tr>
<th>Region</th>
<th>Mobility 1</th>
<th>Mobility 2</th>
<th>Mobility 3</th>
<th>Mobility 4</th>
<th>Mobility 5</th>
<th>Mobility 6</th>
<th>Mobility 7</th>
<th>Mobility 8</th>
<th>Mobility 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>West</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Further details and numerical data are present in the table but are not transcribed here.
the Sthree Shakthi Groups followed by 50.4 per cent members of Navodaya groups were visiting the centers. Relatively more number of women members under NGO groups observed that there was increase in their watching cinema which means that they had the freedom to visit cinema theaters to an extent now when compared to other two categories. But majority of the women belonging to all three categories opined that their status remained static as far as watching cinema is concerned and there was not much of a connection with this to Self Help movement. As for as the increase in visits to bank is concerned, majority of the members from all the three groups noted that due to their enrollment in SHGs, there had been an increase in their visits to bank branches. Relatively this percentage was more (91.7 per cent) in SHG promoted by NGOs compared to other groups. All the 133 (100 per cent), NGO promoted group members observed that they were freely moving in the village as a consequence of their improved self esteem through the activities of SHGs. 75.9 per cent members belonging to Sthree Shakthi Groups and 68.4 per cent members belonging to Navodaya groups opined similarly.

From the above analysis it is very clear that mobility of the members (women) had increased after becoming the members of SHG, which results in their empowerment as observed by Serajul Haque.

It is almost clear from the field data that the mobility of women has increased with their involvement through SHGs. While discussing about the level of education of the members, it was discussed that the percentage literates are more in the area under study. This must have added to the increased courage of the women through the approved SHG platforms, which got expressed through improved mobility.

The difference registered under the three categories is not much which means to conclude that, in general, the SHG movement has lead to the empowerment of women through increased mobility, decreased inertia and lack of confidence.

The data presented in the table 3 observed that, on the whole, decision making capacity and autonomy of women had increased with regard to various house hold functions after becoming the members of SHGs. With regard to enrollment of children to schools, it is found that majority of the (78.9 per cent) respondents under NGOs observed increase in decision making capacity, while it was 62.4 per cent under Sthree Shakthi groups and 54.1 per cent under Navodaya groups. With regard to visiting the doctors, majority (77.4 per cent) of the respondents under NGOs have mentioned that there was an improvement in their decision making followed by Sthree Shakthi groups (67.7 per cent) and Navodaya groups (52.6 per cent). Concerning vaccination to children, majority of the respondents under NGOs, that is 81.2 per cent mentioned that, though
Table No. 3 Comparative analysis of decision making capacity in household and autonomy.
they had the power earlier, it had increased after becoming SHG members, followed by 66.2 per cent under Sthree Shakti groups and 54.9 per cent under Navodaya groups. Rest of the respondents opined that their status remained unchanged because even earlier they had autonomy. Majority (81.95 per cent) of the respondents under NGO groups opined that their decision making capacity and autonomy had increased with regard to deciding about family planning, followed by Sthree Shakti groups (65.4 per cent) and Navodaya groups (43.6 per cent).

With regard to girl child development, 81.2 per cent of the respondents under NGOs, which is the majority number when compared to other two categories mentioned increase, followed by 67.7 per cent under Sthree Shakti groups and 56.4 per cent under Navodaya groups. Enrollment into SHG had influenced on purchasing household necessities. Majority of the respondents under NGO groups (89.5 per cent), mentioned that their decision making capacity and autonomy had increased with regard to purchase of household necessities, followed by Sthree Shakti groups (70.7 per cent) and Navodaya groups (63.2 per cent).

As far as decision making capacity and autonomy pertaining to the purchase or sale of land is concerned, on the whole, in all the three categories of respondents it was observed that there was not much change after becoming the SHG members. Under NGO groups 50.4 per cent of the respondents mentioned increase, followed by 43.6 per cent under Sthree Shakti groups and only 18.8 per cent under Navodaya groups. With regard to involvement in IGA outside the house, 85.7 per cent respondents under NGO groups opined that their autonomy and decision making capacity had increased, followed by 69.2 per cent under Sthree Shakti groups and 60.9 per cent under Navodaya groups. As far as spending respondent’s own money, it was found that majority (72.8 per cent) of the respondents under NGO groups had mentioned increase in power followed by Sthree Shakti groups (63.2 per cent) and Navodaya groups (57.1 per cent). With regard to borrowing money is concerned majority (83.5 per cent) of the respondents under NGO groups followed by Sthree Shakti groups (73.7 per cent) and Navodaya groups (54.9 per cent) observed increase in their power. As far as involvement in PO/NGOs is concerned, majority of the respondents under NGOs that is 94.7 per cent observed increase in their decision making power, followed by 85 per cent under Sthree Shakti groups and 71.4 per cent under Navodaya groups.

On the whole, majority of the respondents belonging to all the three categories have observed increase in their decision making power with regard to their involvement in PO/NGOs because after becoming the members of the SHGs they started participating in various activities of people’s organizations.
Autonomy in relation to talking to unknown person had increased to 88.7 per cent under NGO group respondents, followed by 74.4 per cent under Sthree Shakthi groups and 56.4 per cent under Navodaya groups. Casting vote independently by women is an important indicator to assess the level of empowerment. This parameter is used to observe whether it helped the respondents in making their own decisions to caste vote independently. Majority, that is 88.7 per cent of the respondents under NGO groups followed by 72.9 per cent under Sthree Shakthi groups and 69.9 per cent under Navodaya groups mentioned increase in their decision making capacity and autonomy. When decision making capacity and autonomy to do saving by the respondents is compared among all the three categories, it is found that majority (92.5 per cent) of the respondents under Sthree Shakthi groups observed increase, followed by NGO groups (89.5 per cent) and Navodaya groups (85.7 per cent). Majority of the respondents under NGO category mentioned that there was increase in investment by becoming the member of SHGs, followed by 59.4 per cent under Sthree Shakthi groups and 54.9 per cent under Navodaya groups.

From the field study, while comparing the decision making capacity in house hold and autonomy in relation to various parameters, it was found that impact of SHG is more on the respondents under NGO groups with regard to majority of the parameters used, followed by Sthree Shakthi groups and Navodaya groups.

Decision making capacity is one of the indicators which measure the level of empowerment. Empowerment in simple terms means taking decision about ones own self, put in different situations at different points in time. If women can take decisions connected with various family issues, it depicts their level of empowerment. Various studies have proved this.

In the present study various issues about which women were not in a position to take decision have been used to measure their level of decision making leading to their empowerment consequent with their ‘exposure’ and ‘learning’ through SHG platform. Various issues and the related opinions on decision making have been discussed. By and large, the women belonging to all the three categories of SHGs were observed to have improved their decision making capacity after becoming the members of SHGs.

Education of the children is an important issue. Owing to ignorance, women in the rural families were not taking any decision with regard to the education of their children. They were not aware of the importance of education as an ‘investment’ in the child’s personality. They used to treat children as a source of employment generation and not as the ‘nation building human resource’.
It is clear from the study that women after becoming the members of SHGs have understood the importance of literacy relatively better and education of their children and they have started taking right decisions which was maximum amongst SHG members sponsored by NGOs followed by Sthree Shakthi and Navodaya. This is indeed a good trend. If women can take decisions about crucial issues such as childrens’ education, that would help rebuild the rural poor family as education holds the key of the ‘better future’ of the family.

Another issue where women are expected to take decisions is health and related aspects. Generally, women in rural areas, owing to illiteracy and ignorance, shun decision making in this important area- health issues connected with them, their children and other family members.

It could be seen from the study that the SHG platforms have succeeded in improving the decision taking capacity of the members with regard to health related issues such as, (1) visiting the doctors (77.4 per cent under NGOs, 67.7 per cent under Sthree Shakthi groups and 52.6 per cent under Navodaya groups) (2) getting children vaccinated (81.2 per cent under NGOs, 66.2 per cent and 54.9 per cent under Navodaya groups) (3) resorting to family planning (81.95 per cent under NGOs, 65.4 per cent under Sthree Shakthi groups and 43.6 per cent under Navodaya groups)

The percentage increase in decision making with regard to the above issues in SHG members belonging to three categories have been discussed. Though, women were taking decisions earlier also, it had increased which means that the level of ‘empowerment’ had increased. The NGO sponsored SHG members relatively are more empowered than Sthree Shakthi and Navodaya sponsored SHG members (percentage improvement given). This analysis goes to prove the role played by SHGs while empowering women members.

Another very important issue about which there is apathy at the village level pertains to the development of girl child. In most places girl children are not treated on par with the boys, owing to various historical and socio-cultural reasons. This is a very dangerous trend, which, in the longer run would mar the development prospects of any community. Proper education and awareness can only change the situation.

It is clear from the study that the SHG platforms organized by the three agencies have, to a great extent, succeeded in instilling this input (caring for the girl child) in the members, the trend being the same (NGO, Sthree Shakthi Navodaya). If women can take up this issue positively, there can be a great change in our villages. If women’s organizations such as SHGs can do this, it would be very good.
With regard to the purchase of various household necessities, the traditional trend generally with the rural women would be that they could not take any decision with regard to such purchases. They would leave it for their spouses or other men in the family. This issue may sound very trivial but has its own impact on the decision making capacity of the women. If women can start taking decisions with such issues, the same can lead them for other decisions.

From the field study it is clear that after becoming the members of the SHGs, the decision making capacity of these women had increased substantially which has been explained in terms of percentages in Table 3.

With regard to purchase or sale of land, rural women, by and large are not essentially, consulted, either while purchasing or selling of any land, which goes to prove the male dominance in Indian rural society. The present study has thrown light on this issue also. It is clear from the field that the, decision of the women members were given weightage which could be an impact of their membership of SHGs.

With regard to the spending of own money or borrowing money from outside sources, again, the field data confirmed that the SHG members belonging to three SHPIs were positively disposed with regard to both ‘spending’ and ‘borrowing’ of money. This goes to prove their independent decision making capacity which, to an extent, speaks about the empowerment of members.

It is of interest to note that the SHG platform has started empowering the members politically also. It was significant to observe that the awareness level of the members with regard to adult franchise increased considerably. It must be appreciated here that if rural women start understanding the importance of casting their votes in various elections that would be the stepping stone for their understanding and probable participation in various political activities. Literature is available which mentions the importance of SHGs in making its members contest panchayath elections. It should be understood here that the trained members of SHGs can be better elected women representatives, at the grama panchayath level. The importance of 73rd Constitution Amendment is that women in general and women belonging to vulnerable sections are to be represented in the panchyaths. The whole concept of reservation has this idea of empowering women, especially those belonging to vulnerable sections politically. In this context, the connection between the women Self Help Groups and the grama panchyaths are to be appreciated. Thus the results of the present study are very relevant.

Another very important issue about which there is apathy at the village level pertains to the ‘development of girl child. In most places girl children are not treated, on par with the boys, owing to various historical and socio-cultural reasons.
Conclusion and summary

It is an established fact that the women throughout the world are discriminated and exploited, though they represent 50 per cent of the total population. The intensity of subjugation and exploitation varies from society to society and place to place. The active involvement of women in the development of rural as well as other sectors has been overlooked, bypassed, underestimated and neglected even. The absence of proper recognition of women’s positive contribution is due to the contention that their activities are economically unproductive, supplementary, optionally intermittent and dispensable.

The study observed that the Self Help Groups organized by the three categories of SHPIs, by and large, had achieved the purpose of ‘empowering rural women’ which varied amongst the SHGs sponsored by three Organizations. The background information about the members proved that they were all from the vulnerable sections of the rural society and they needed a platform such as SHG. The group members represented heterogeneity in terms of their age, educational status, caste, marital status, occupation, annual income etc. These differences seem to have not had any perceptible changes in terms of the impact the groups have created on the members.

References


MATERNAL AND CHILD HEALTH OF THE URBAN POOR IN INDIA - IMPLICATIONS FOR ACHIEVING THE MILLENIUM DEVELOPMENT GOALS

* Siddharth Agarwal ** Aradhana Srivastava *** Monisha Vaid

Abstract

India is committed to achieving the Millennium Development Goals (MDGs) set by the UN Millennium Declaration in 2000. MDGs ably summarize crucial global development concerns, encompassing multiple dimensions of economic and social poverty. As a result, they have been incorporated smoothly into the five-year planning framework of the country. Specifically with regard to health, the Eleventh Five Year Plan is optimistic about achieving the MDG targets for infant and maternal mortality rate (IMR and MMR) by the end of the plan period. The plan also acknowledges the need for action on many fronts to achieve this, including improved access to health centres, institutional deliveries, nutritional supplementation, and clean drinking water and sanitation. However, attainment of these goals within the given time frame is possible only through targeted focus on vulnerable groups that significantly account for the country’s burden of poverty and deprivation, and lag far behind in the country’s march towards development.

Key words: maternal and child health care, vulnerable groups, urban poverty.

India’s Urban Transition

India is currently on the threshold of an urban transition, witnessing unprecedented urbanization in recent years. During the decade 1991-2001 India’s urban population grew by 31.2 per cent while the rural population grew at a much slower rate of 17.9 per cent. It is estimated to number about 336 million in 2008. It is projected that by the year 2030, 41 per cent of the country’s population, numbering around 600 million, will live in cities. By the year 2050, this proportion is expected to increase to 55 per cent of the total population.
Increasing share of Urban Poverty

Growing urbanization in India has led to an increase in the share of poverty in urban areas. Urban poor are in fact the fastest growing segment of Indian population, owing to migration, expansion of city limits and natural growth, and are expected to increase from the estimated 804 - 1005 million in 2005 to 202 million in less than 15 years. They also constitute a major socially excluded group, suffering severe deprivations. Most of the urban poor reside in slums, many of which are unlisted in official records. These unlisted or hidden slums suffer greater vulnerability and exclusion owing to their inability to access basic services and government programmes for the poor.

Even within slums there are pockets of more vulnerable groups such as scavengers, construction site workers, workers of local industries, those residing along large drains or temporary migrants amidst older settlers. Such groups are left out of the social fabric and therefore suffer from lack of confidence to express their requirements and very low negotiating power.

Urban Poor and the MDGs: Where do they stand?

The urban poor are vulnerable to many health risks as a consequence of living in conditions characterized by cramped, low-quality housing with limited sanitation, limited access to affordable quality health care, widespread illiteracy, social isolation, and a lack of negotiating capacity to demand improved public services. This is reflected in their health outcomes. Health indicators among urban poor are worse than urban averages and exhibit sharp disparity between poor and non-poor. Women and children are the most vulnerable to slum environments and urban poverty. Slums are fertile breeding grounds for a number of diseases such as diarrhea, fever, respiratory infections, tuberculosis, jaundice and malaria. Children have little immunity against their onslaught. Women suffer from poor maternal health on account of early pregnancies, which are multiple and closely spaced, under nutrition, home deliveries, largely unsafe and without trained assistance, besides denial of rights, domestic violence and crime. These deprivations directly impact the MDGs 1, 4, and 5 relating to maternal and child health and nutrition.

Objective

There are several research studies available across the world showing a trend of poorer maternal and child health and nutrition leading to higher morbidity and mortality in urban slums. However, commonly available large-scale statistical data does not highlight these intra-urban inequities. The objective of the paper is to analyse maternal and child health status of urban poor in India vis-à-vis that of the non-poor, especially relating to targets set by the MDGs.
Methodology

Analysis of the National Family Health Survey (NFHS) - 3 (2005-06) data disaggregated by economic status was conducted to determine the health indicators of the urban poor and its comparison with other population groups. NFHS-3 used the wealth index based on 33 assets and household characteristics for categorising population into economic group quintiles. The same cut-offs were used irrespective of rural or urban residence. As a result, the urban population was concentrated in the upper quintiles. In fact, the cumulative share of urban population in the bottom two wealth index quintiles was only 9.4 percent. This did not realistically capture intra-urban economic disparity.

In this study, the urban sample population was taken separately and divided into wealth index quartiles. The lowest quartile was selected as representative of the urban poor and the three upper quartiles were merged to represent the non poor. The lowest quartile is estimated to be reasonably representative of urban poverty, in view of the latest Planning Commission estimates put the number of urban poor in India at about 80.8 million or 25.7 per cent of the total urban population.

This methodology was developed by Urban Health Resource Centre (UHRC) in consultation with some eminent scholars involved in the NFHS-3 survey and analysis, such as Prof. P. M. Kulkarni, Prof. Sulabha Parsuraman, Dr. Sunita Kishore and Dr. Fred Arnold. The results show that it has successfully brought out the extent of deprivation suffered by the urban poor vis-à-vis the non-poor in relation to maternal and child health indicators, as well as indicators like access to water supply and sanitation.

Results and Discussion

A number of indicators derived from the NFHS-3 data relating to maternal and child health of the urban poor are relevant in the context of the MDGs. While some of the indicators are also MDG indicators, some others relate to them and are equally significant in assessing where the urban poor stand vis-à-vis the MDGs. This section presents some key indicators for the urban poor gauging their status on specific MDG targets as well as related indicators.

MDG 1: Eradicate Extreme Poverty and Hunger

Besides poverty reduction, MDG 1 also aims to halve, by 2015, the proportion of people who suffer from hunger. Child under nutrition is one of the key indicators to assess the progress on this front. It is, however, also a grim reality among the urban poor in India.
MDG Indicator 1.8: Prevalence of underweight children under-five years of age.

- About half (47.1 per cent) of the children below five years of age among the urban poor were underweight (-2 SD weight for height). The non-poor, on the other hand, have a lower prevalence of under nutrition with 26.2 per cent children below five years of age being underweight.

Figure 1: Proportion of Underweight Children (% Children aged below 5 years who were underweight)

High prevalence of under nutrition among young children is the result of a combination of several factors including faulty infant feeding practices, poor dietary intake as a consequence of food insecurity, lack of hygiene, food contamination and lack of proper child care practices. Frequent occurrence of infections which deplete the body of nutrients and impede their proper absorption is also a major problem (Ghosh & Shah 2005).

Insecurity of income and livelihood along with absence of social support networks implies that cash availability with the urban poor is not uniform, thereby leading to irregular food consumption and poor nutrition outcomes, especially among children and women.

MDG 4: Reduce Child Mortality

MDG 4 aims to reduce child mortality by two thirds by 2015. However, every year about 2.5 million children in India die due to illnesses, most of which are easily preventable through immunization (World Bank 2007).

The poor health and survival of children among the urban poor vis-à-vis the non-poor is quite visibly reflected in neonatal, infant and under-five mortality. Neonatal mortality among the urban poor was 34.9 per thousand live births, much higher than the non-poor average of 25.5 per thousand.
MDG Indicator 4.1: Under-five Mortality Rate

- Under-five mortality among the urban poor was 72.7 per thousand, substantially higher than that of the non-poor (41.8) or the overall urban average (51.9).

MDG Indicator 4.2: Infant Mortality Rate.

- The urban poor have an infant mortality rate of 54.6 in comparison to 35.5 among the non-poor and the urban average of 41.7.

Figure 2: Neonatal, Infant and Under-five Mortality Rates, 2005-06

Vaccination of children against six serious yet preventable diseases, namely tuberculosis, measles, diphtheria, whooping cough, tetanus and polio, is the cornerstone of child health programmes in India. Children of the urban poor suffer accentuated vulnerability to such illnesses, as outbreaks of vaccine preventable diseases are more common in urban slums owing to high population density and continuous influx of new pool of infective agents with immigrating population (Loeining et al, 1983; Lal & Vashisht 2003; AFP Alert 2002; Awasthi & Agarwal 2003; Agarwal, Bhanot & Goindi 2005). The overcrowding results in prolonged exposure to infections and greater severity of infections in such cases (Lodha 2000; Aaby 2005).

MDG Indicator 4.3: Proportion of 1 year-old children immunized against measles.

- 52.6 per cent urban poor children 12-23 months of age had received measles immunization as compared to 80 per cent among the non-poor and the urban average of 72 per cent.

Only 40 per cent children among the urban poor received complete immunization as per NFHS-3, which is much lower than 65.4 per cent coverage among the non-poor. 29.5 per cent children among the urban poor were left out
from Universal Immunization Programme. In spite of facing equal or even greater risk of infections, immunization benefits have not been able to reach all urban poor children, in spite of comparatively easier geographical access.

**MDG 5: Improve Maternal Health**

The fifth MDG aims to reduce maternal mortality ratio by three quarters and achieve universal access to reproductive health by 2015. Maternal health is a serious concern in India, with the country reporting the largest number of maternal deaths in the world (WHO, UNICEF, UNFPA & The World Bank 2007). NFHS-3 data indicates that the urban poor are a high-risk group in terms of access to maternity care and suffer from poor access to reproductive healthcare.

**MDG Indicator 5.2: Proportion of births attended by skilled health personnel.**

- Despite proximity to specialty hospitals, 56 per cent of slum children are born at home, possibly without skilled birth attendance. This is much higher than 21.5 per cent among the non-poor and the urban average of 33 per cent.

**MDG Indicator 5.3: Contraceptive prevalence rate.**

- About half (49 per cent) of the urban poor use any modern method of family planning as compared to 58 per cent among the non-poor and the urban average of 56 per cent. The use of spacing methods among the urban poor is limited to only 8 per cent.

Urban poor populations are characterized by low levels of acceptance of family planning methods, owing to lack of awareness, non-compliance as well as non-availability of such facilities (Mamdani 1993; Joshi & Patil 2007). Preference for large family size also is a possible reason for non-acceptance or delayed, acceptance of family planning methods. This is indicated by the finding that 71.4 per cent women opting for sterilization among the urban poor did so after 3 or more births in the family.

**MDG Indicator 5.5: Antenatal care coverage (at least 1 visit & at least 4 visits).**

- Only about 54 per cent mothers had at least 3 antenatal care visits among the urban poor, much lower as compared to the urban average (75 per cent) and that of the non-poor (83 per cent).

Prevalence of anemia is another key indicator for maternal health and has a bearing on birth outcomes as well. 58.8 per cent urban poor women aged
15-49 years suffered from anemia as compared to 45.3 per cent of the non-poor women. Consumption of IFA tablets for 90 days or more (as recommended in the Reproductive and Child Health programme RCH-II) was 18.5 per cent among urban poor mothers as compared to 41.8 per cent mothers among the non-poor.

Tetanus toxoid (TT) vaccination is the third component of antenatal care in RCH-II, which recommends two TT vaccinations for pregnant women. NFHS-3 data shows that three fourths (75.8 per cent) of pregnant women among urban poor got TT vaccinations, though the figure was lower than the urban non-poor average of 90.7 per cent.

On the whole only 11 percent mothers received complete antenatal care (which includes at least 3 ANC visits, IFA supplementation for 90 days and 2 TT vaccinations) among the urban poor. This is much lower than the non-poor average of 29.5 per cent.

**Figure 3: Access to Antenatal Care (% Mothers who had at least 3 antenatal care visits)**

![](image)

**MDG Indicator 5.6: Unmet need for family planning.**

- Unmet need for family planning among the urban poor was 14 per cent as compared to 8.3 per cent among the non-poor and an urban average of 10 per cent.

Unmet need is a critical and programmatically most relevant aspect of family planning. It points to the gap between women’s reproductive intentions and actual contraceptive behavior, and poses a challenge for the family planning programme of reaching and serving such women (Singh 2004). Some common reasons for unmet need among the urban poor include difficulty of access and poor quality of family planning services, concern about side effects of contraceptives, son preference and opposition from spouse/family members (Puri, Garg & Mehra 2004).
**MDG 7: Ensure Environmental Sustainability**

A crucial target of MDG 7 is to halve by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation. Environmental sanitation is especially relevant in the context of child health, since poor sanitation accounts for a number of common infections among children, such as diarrhea, jaundice and typhoid.

**MDG Indicator 7.8: Proportion of population using an improved drinking water source.**

- Only 18.5 per cent urban poor households have access to piped water supply at home, which is much less than the urban average of 50.7 per cent households and even lower than that among the non-poor (62.2 per cent).

**MDG Indicator 7.9: Proportion of population using an improved sanitation facility.**

- Only 47.2 per cent urban poor have access to toilet facilities as compared to the urban average of 83.2 per cent and 96 per cent among the non-poor.

Most slums and urban poor habitations are encroachments on public or private lands, under constant threat of eviction. Since they are unauthorized occupations, slums are also not served by any civic amenities, including water supply, drainage and sanitation. This adds to the poor living environment and higher prevalence of infections among slum dwellers, especially children.

**V. Challenges in improving maternal and child health among the urban poor**

The above discussed statistics highlight the situation of the urban poor in India as a highly vulnerable group, suffering similar gaps in maternal and child health indicators as other vulnerable groups in the country. Targeting the urban poor is essential for achieving all-round improvement in maternal, child health and nutrition in order to effectively achieve MDGs within the timeframe of 2015.

There are several challenges associated with the access of maternal and child healthcare among the urban poor.

**A. Community level challenges**

1. *Poverty and poor living conditions:* Poverty is an overarching factor which intervenes through poor nutrition, compromised ability to seek health care and poor living conditions resulting in poor health outcomes.
among slum communities. It compels urban poor communities to live in crowded, closely packed slums that lack access to basic services. Such an environment is ideal breeding ground for many infections which are a grave threat to child health.

2. Lack of community awareness and culturally influenced behaviors: Slum residents often have no/limited knowledge on appropriate behaviors with respect to maternal and reproductive health, child and newborn care, hygiene and prevention of infections among children. Religious and traditional beliefs also sometimes promote harmful practices and hamper the acceptance of recommended behaviors. Slum dwellers are also often not aware of the schemes and services being provided for them, including health or immunization camps. Ignorance is also a reason for non-recognition or delayed recognition of symptoms regarding newborn and child diseases, often leading to complications and even fatality on account of delayed action.

3. Weak social cohesion and poor negotiating capacity: Slums communities are socially excluded from the urban mainstream. They also suffer from weak social cohesion internally. This is a hindrance to organized community collective efforts among them and prevents them from raising a strong demand for essential services and thereby influencing public action.

**B. Legality and Exclusion**

4. Illegality and Social Exclusion: Slums are almost always initially informal settlements with no land tenure rights. The illegal nature of occupied land prevents their inclusion in official slum lists (Ramanathan 2004). Owing to long delays in updating of official slum lists in most cities, slums may remain unrecognized for years (Taneja and Agarwal 2005). Civic and health services usually do not reach such hidden and missing pockets of urban poor that are not a part of official records. They are also deprived of the benefits of public schemes like ICDS and PDS, which are crucial for the welfare of the poor.

**C. Weak Health Services**

5. Inadequate and ineffective public health services: Unlike rural areas which have a dedicated primary health infrastructure, such structure is absent in urban areas. Moreover the rapidly growing urban population especially of the urban poor renders the already scarce urban health infrastructure further inadequate. One primary health care facility in an urban area therefore caters to a much higher population compared to the norm of 1 center for every 50,000 population (Shekhar and Ram,
2005). Initiatives like the World Bank funded India Population Project (IPP- VIII) (1993 to 2002) have helped augment urban health facilities in larger cities like Bangalore, Delhi, Hyderabad and Kolkata, but largely remain absent from other cities.

6. **Expensive private facilities:** Though health facilities in the private sector have a wide presence in urban areas, they are often not accessible to the poor because of the high cost. The poor are therefore forced to fall back on the largely unqualified private providers practicing in slum areas who provide poor quality services. Moreover, these informal providers do not provide preventive health services such as immunization, antenatal care, health education and family planning since these services are not profitable.

### D. Weak Linkages and Coordination

7. **Weak community-provider linkages and low demand for services:** Owing to poor linkage between slum communities and health providers, slum residents are likely to be unaware of the location and services provided by health facilities, out-reach visits of health workers etc. This results in poor demand and utilization of health services. This problem is exacerbated in the case of recent or temporary migrants with little social support. Similarly, from the providers’ perspective health service delivery in slums is an enormous challenge, given the large and rapidly mobile population.

8. **Unclear accountability and weak coordination among different stakeholders:** In addition to limited infrastructure, there is lack of clarity of roles, coordination and accountability for providing services to the urban poor by the agencies responsible for providing health services in urban areas. These include state health department, municipal bodies, ICDS, NGOs, charitable organizations etc. There is little coordination between these agencies leading to both overlapping service areas and large un-served pockets.

### How do the urban poor progress ahead on the MDG path?

In order to overcome the challenges in addressing maternal and child health issues among urban poor communities, any programmatic intervention needs to focus on the “supply” of health services as well as the “demand” side. All slums are not equal and therefore effective programming entails the need to target resources and efforts at the more vulnerable slums. This section outlines possible measures which can impact both the demand and supply aspects of maternal and child healthcare among the urban poor.
Supply side measures

City specific planning for healthcare

City-specific planning for healthcare is crucial to effectively address health needs of the urban poor, especially reaching out to excluded and un-served clusters. This can be most effectively achieved through city-specific slum situation analysis, mapping and planning on the basis of the exercise. It is also essential to build the capacity of municipal bodies in management of health services at the local level through various means such as trainings, orientations and exposure visits of elected representatives as well as officials to well-managed urban health programmes.

Augment Public Sector Urban Health services including outreach activities with focus on vulnerable urban settlements

Primary health care facilities have not grown systematically to cater to the explosive growth of urban population especially the poor (Agarwal et al 2007). Therefore facilities for the poor are not evenly distributed across the city and not necessarily in physical proximity to urban slum clusters. Location of primary health facilities in urban areas on the basis of slum identification and mapping is essential to maximize reach and coverage of such facilities.

Promote pro-poor Public Private Partnership for health service delivery

Given the large presence of the private sector (both profit and non-profit) in providing health services even to the disadvantaged sections, partnerships with the sector helps expand reach and coverage of health facilities to urban poor communities. Such partnerships can also help improve the quality of health services provided to the urban poor. Several examples of such partnerships are available from corporate as well as civil society initiatives (UHRC, 2007). Such initiatives need to be scaled up and replicated to achieve larger coverage of urban poor population who can benefit from them.

Strengthen Program Management capacity (including financial management)

A number of programmes such as JNNURM, SJSR Y and IHSDP aim at improving livelihood and providing better infrastructure and services for the urban poor, which will ultimately also have a positive impact on their health status. Ensuring an effective programme management setup at all levels, especially the district and ULB level, which includes efficient financial management, will help maximize the programme benefits to slum populations.
Capacity building of health workers

Motivational training should be provided to health providers (ANMs, Supervisors, MOs) working in slum areas to i) understand the unique problems and complexities relating to health in slum communities; ii) be more sensitive towards disadvantaged communities, and ii) recognize and coordinate with community health workers, slum-based community organizations and other agencies working for healthcare among urban poor.

Demand side measures

*Increase awareness about optimal behaviors, services and provisions*

One of the main reasons accounting for the gap in utilization of antenatal care and institutional deliveries between the urban poor and non poor is lack of awareness on maternal health issues among the slum dwellers (Agrawal & Bharti 2006; Agarwal, Singh & Garg 2007). Promotion of safe delivery practices and optimal care of newborns during the neonatal period are vital for addressing high neonatal mortality among the urban poor. Post-neonatal mortality needs to be targeted through extended immunization coverage along with programmes for hygiene promotion and prevention of under nutrition (UHRC 2006).

Ensure that demand is met with increased availability

Ensuring linkages between the community and providers, as well as involvement of the community in the programmes are essential for their effectiveness as well as sustainability. Linkages and coordination between community and providers and among the providers themselves is also crucial for regularity and improved coverage of services (UHRC 2006). Slum women can be trained to serve as the crucial link between community and health services and for assisting others in accessing maternal and child health services and in counselling to raise demand for services (Agarwal 2006; Agarwal 2007).

*Enhance peoples’ capacity to improve behavior and negotiate for services* 

Empowered slum communities can ensure better accessibility and supply of services. Collective voice has greater strength and ability to influence change. Therefore, organizing slum communities into CBOs and raising their awareness on health issues, services and entitlements helps empower them to negotiate for better services and access to entitlements. Building linkages between the service providers CBOs also ensures increased demand for services at slum level as well provision of quality services at the providers’ level (Aggarwal, 2008).
Conclusion

The MDGs have, as one of their targets, achieving a significant improvement in the lives of at least 100 million slum dwellers by 2020. This reflects the growing realization of the need to impact urban poverty. The effort, however, is not sufficient to make a significant impact on the lives of the urban poor at the global level. Since urban poor constitute about a tenth of India’s population and are also the fastest growing segment, it is essential to address their needs in order to substantially impact overall achievement of MDGs in the country.

- Impacting maternal and child health among urban poor warrants increased policy measures and energetic implementation on multiple aspects including housing, basic services, livelihoods, food security besides healthcare. Such measures have been initiated through a number of policies and programmes. Recent Indian Government initiatives for the urban poor, including the Jawaharlal Nehru National Urban Renewal Mission, efforts to universalize the ICDS and the forthcoming National Urban Health Mission offer apt opportunity for accelerated efforts to make slums healthier environments for their inhabitants.

- Existing policies at all levels can also be made more urban poor friendly, practical and measurable. Participatory implementation of programmes and efficient programme management is essential for thy many public policy efforts to have an effective impact on the urban poor. Another important requirement for energetic policy implementation is training of officers and increased information flow to urban poor, to activate and reinforce demand-supply linkages.

- Slums have some inherent advantages such as greater accessibility, concentrated population, presence of NGOs and less intense scarcity of health facilities, which can be leveraged to facilitate effective impact of interventions. Successful innovative approaches available in civil society and PPP initiatives can be scaled up and replicated to achieve larger coverage of urban poor population who can benefit from them.

- Coordinated interventions from all concerned sectors are required for improvement in the health of mothers and children in urban slums. Multi-stakeholder coordination meetings at city and ward level of coordination committees at each level would help achieve a synergistic impact through i) convergence of related schemes to achieve common goals, ii) integrated planning and pooling of resources and iii) jointly reviewing progress and taking remedial actions.

In the absence of such efforts, indeed, achieving the MDGs on time will remain a distant dream.
“Ultimately, as the developing world becomes more urban and as the locus of poverty shifts to cities, the battle to achieve the Millennium Development Goals will have to be waged in the world’s slums.”

**References**


233
Endnote


7 Agarwal, S. and Taneja S., (2005), All Slums are not Equal: Child Health Services among the Urban Poor. Indian Pediatrics, 42: 233-244.

8 Professor of Population Studies, Jawaharlal Nehru University

9 Professor, IIPS and Coordinator, NFHS III

10 Senior Gender Specialist, MEASURE DHS, ORC-MACRO

11 Vice-President, Demographic and Health Research Division (DHR), ORC-MACRO
A STUDY OF TÂNTRIC SCULPTURES OF SRI MÛLANÂTHAR TEMPLE, BÂHÛR, PONDICHERRY

* R. Ezhilraman

Abstract

Bâhûr is one of the ancient places in Pondicherry whose antiquity can be traced back to the 9th century and even earlier. The Temple of Mûlanâtha at this place contains many inscriptive as well as sculptural evidences. This paper studies the Tàntric sculptures on the pillars of the temple and analyzes their significance.

Key words: Sculptures - Tàntric Art - Mûlanâtha Temple – Bâhûr – Bairavi Cakra

Introduction

Since very early times, the popular belief systems, magical rites and rituals found their way into the Saiva and Sakta sectarian philosophy, rituals and pantheon. The original classification of Saivism was into three schools: Vedic, tantric and Misra. In course of time, tantric ideology affected all of them in various degrees. The Vâmâcârâ and Dakshinâcârâ classification of tantric sects in both of them speak about the Brahminical interpolation. Interpolating the popular beliefs and rites, it is in the Vâmâcârâ sects that the tantric religion blossomed in various directions of which the Siddha cult is the most important and long lasting one. The Siddha cult spread in various directions and ultimately got absorbed by the Tibetan Buddhism and again got transported into the Saiva and Vaishnava schools of Hinduism during the medieval times. In the process of its development and spread the Siddha cult absorbed various elements of other belief systems such as Pasupata, Kapalika, Vajrayana, Sakta and so on. As a result, the medieval Nâtha Siddha cult grew as an amalgamation of all these diverse sectarian beliefs and practices, which later further absorbed into its fold even the Sufi philosophy and personalities. Even today in South India the Siddha tradition in various forms is in a flourishing state having millions of devout adherents.

The Siddhas/Nâtha Siddhas are one of the most venerated spiritual teachers of the yore who still have the same divine standing among their followers, who in majority belong to the marginalized sections of the society. The antiquity of
the Siddha cult is as old as the Tantric religion itself which encompass almost all religious faiths of the country, past and present. In fact, the Siddha Cult transcended the narrow religious or dogmatic boundaries and became a part and parcel of the body politic of the Indian spiritual tradition and Philosophy as a whole.

The origin of the Siddha cult is not authentically dated but can be related to the earliest form of Saivism i.e, the Pasupata School of Saivism. But the popularity of the Siddha cult became more pronounced during the medieval times. The Art representations of the Siddhas and Nātha Siddhas in the Temple sculptural art of various periods, identified on the basis of textual descriptions indicate the wide popularity of the Siddha cult throughout the length and breadth of South India well in to the 17th century and after.

Nāthism originated among persons belonging to the lower sections of the Society. The Nātha Siddhas had a general predilection toward occult practices and acquisition of supernatural powers. They believe in the divine power of the Guru or preceptor who initiates the disciple according to his receptivity. There are five kulas or brands of the Siddha culture: Dombi, Nati, Rajaki, Candali, and Brahmani. These are symbols of five forms of female Sakti. According to Nātha cosmology, before the creation every thing was dark and void. In that vacuity came into being a bubble from which an egg was formed. From the sweat of the primal god, Adinātha, was born in his lover Ketaki or Manasa, and from their union sprung Brahma, Vishnu and Siva. In order to test them AdiNātha assumed the form of a mutilated corpse. Having seen the corpse Brahma and Vishnu avoided it, but Siva recognized it as the body of his father and took it to the cremation ground. When the body was in flames, Mina Nātha sprang from its navel, Goraksha from its head, Hadi-pa from its bones, Kanu-pa from its ear, and Caurangi from its legs. They are the five original Nātha Siddhas who are also called as the Adi Pancakam. It is not clearly known when these five Adi Nāthas were added up to become Nava Nāthas.

The Nātha cult is believed to have been founded and developed by nine Nāthas and eighty four Siddhas. Adinātha is believed to be an incarnation of Siva. The followers of the cult are therefore called as the Nāthapanthis. The most important feature of this cult is the belief in attaining supernatural powers through yogic practices. The Siddhas are believed to be experts in the four kinds of Yoga and to have attained the eight siddhis. Nātha cult was very popular in Karnataka, which believed to be a blend of Vajrayana Buddhism and Saivism. Though there are no exclusive followers of the cult in Karnataka, the centres of their activity are there even now. Gorakhnāth and Matsyendranāth themselves are believed to have popularised the cult in Karnataka. Nātha Pantha mathas are found in many parts of Karnātaka beginning from Handi Badganāth in
Belgaum district to Kadire and Vittal in *Dakshina* Kannada. Bhois of Gulbarga area are among the followers of Nâtha Pantha¹.

The Siddhas and Nâthas are the great human teachers who attained *astasiddhis* (powers) through their yogic practices. The *astasiddhis* are 1. *Anima* (power of becoming the size of an atom and entering into smallest life), 2. *Mahima* (power of becoming mighty and co-extensive with the universe), 3. *Laghima* (capacity to be light though big in size), 4. *Garima* (capacity to be heavy though seeming small in size), 5. *Prapthi* (capacity to enter all the worlds), 6. *Prakasyam* (power of transmutation and enjoying what he wants), 7. *Isithvam* (having the creative power of god and control over the heavenly elements), and 8. *Vasithvam* (power of attracting others or control over kings and gods)². The term Siddha refers to a perfect or liberated person. In Tamil, they referred as ‘Siddhar’, ‘Sittars’ or ‘Cittars’.

All Siddhas are historical personages and authors of works on their special spiritual practices (*sâdhanâ*). Siddhas believe that the body is the microcosm of the universe and the *pancha bhutas* which existed in the universe such as land, water, air, fire and space are also exists in the human body. It is by *Hathayoga* that one is able to have total control over the body and mind; so they believe in *Kaya-Sâdhanâ*¹. They also referred to Nâtha Siddhas and Siddha Nâthas.

Popularly there are nine Nâthas known as Nava Nâthas. The Nâtha cult is a *Saiva* cult, which uses *rudraksa*, i.e. rosaries and *vibhuti* of ash on the forehead. This cult also came to be mixed up with similar yogic and Tantric cults which did not strictly forbid contact with women. The aim of the esoteric practices of the cult was the attainment of the state of neutrality where there is no birth and death². Even though it is mentioned that there are nine Nâthas, their names and identifications are not still known properly. G. W. Briggs in his work mentions the names of Navanâthas as Garakshanâtha, Matsuynandranâtha, Carpatanâtha, Mangalanâtha, Ghugonâtha, Gopinâtha, Prananâtha, Suratanâtha and Cambanâtha³. In the same way, Anila Verghese identified the sculptures of Navanâtha with their vehicles such as bear, tiger, snake, scorpion, tortoise, *makara*, fish, antelope and boar that found on the *mandapa* wall of Somesvara temple at Ulsoor, (Bangalore) Karnataka⁴.
Tântrism and Tantra

Tântrism is a school of spiritual teachings and practices, stressing the necessity of involving all the constituents and dynamic forces of the human personality, including the emotions and bodily functions, in the process of spiritual endeavour, and recognizing their affinity and interrelatedness with the cosmic forces and the need to integrate them consciously into the global scheme of polarity.

Like the Veda, Tantra was primarily the way or means to understand the mysteries of life and universe. It arose as the sum total of human knowledge of the objective world and a way of life that sought the significance of knowledge, in the daily activities of men, such as agriculture, cattle breeding, iron smelting, alchemy, medicine, embryology, and so on. In this the microcosm that found within the human body is identical to the macrocosm that exists in the outer side world.

Tantra literally means thread, threads in a loom. It is a Sanskrit word meaning rule, regulation, system or administrative code. Tantra is a branch of knowledge which offers a systematic and scientific method by which high spiritual powers can be achieved in human life for realization of the self that leads one to the path of salvation. The word ‘Tantra’ has been derived from the Sanskrit root ‘tan’ meaning ‘to expand’. Therefore, Tantra is known as all-comprehensive knowledge of the fact that the external objects about one’s life are nothing but the outcome of certain conscious force within. The objects and the beings of the material world are due to the play of the conscious energy in its various manifestations.

Generally, Tantra believed to be a Sâdhanâ, a method, a technique or a path and is available in all religions. One may have faith in any religion. One can practice or do sâdhanâ as it does not touch one’s religion or faith. It is a regulated path to bring God, the deities and others under one’s control through worship and prayer as it contains various methods of Sâdhanâ and use of materials in specified forms, under set rules and directions.

Tantras are textual sources or agamas of Tântrism which started appearing around the seventh century A.D. However, the exact origin of Tantra seems to be lost in a mysterious antiquity. Many schools of thought claim to hold that the Tantras existed during the period as old as that of the Vedas. In other words, they seem to have originated in the conception of the Creator of God through the aspect of motherhood.

The chief focus of tantric ritual is on the attainment of a physically strong body (Siddhadega or Kâya) through various yogic practices. Pranayâmâ (controlled breathing) is one such yogic exercise. Through several forms of the
Pranāyamā, the innate energy in the human body identified as female energy, is aroused to meet the male energy in the Sahasarara at the centre of the head. Of the two aspects of Tāntrism namely, the sophisticated and the popular, the latter incorporates a number of non-Brahmanical Hindu elements – one of which is the concept of Sakti. Sakti resides in human body as the serpent power (kundalini) within mūladhara cakra. The dormant female energy is awakened by yogic exercises and then she is to be taken up through the regions of five other cakras to the realm of sahasrara¹. If an sādhaka gets success in this nearly impossible endeavour, he attains salvation and the highest virtues. There are two grades of sound and these are called bindu and nada. Bindu is Siva; bija is Sakti, while the term nada combines Siva and Sakti. Siva is recognized as the male principle and Sakti denotes the female principle, and through their union (kāma-kala) proceeds creation (sººti). Siva is passive, Sakti is active and without Sakti, Siva is rendered into Sava (corpse)².

As enunciated above, tantric philosophy and methods were absorbed by all the religious systems of India. In being the amalgamation of the native simple belief systems, practices tantric religion took into its fold the masses of the country, besides the elite and the affluent. In course of time tantra got classified into two major currents – the sophisticated and the popular³, of which the former contained many Brahminical Hindu elements, which were the interpolations of the post-Gupta Brahminical dominance. The latter however, retained its original popular form and content, in theory and practice.

Bâhûr Sri Mûlanâthar Temple

Bâhûr situated at a distance of 20.5 km south-west of Puducherry. It is a revenue village and the headquarters of Bâhûr Commune Panchayat¹. The ninth century Sanskrit copper plate inscription of Pallava king Nrupatungavarman refers to this place Vâhur which is its earliest known name and refers to an offering of three villages to the vidyastana of Vâhur. The Tamil portion of the copper Plate mentions the date as the eighth year of Ko-Vijaya Nripa². Several of the inscriptions in Sri Mûlanâthar temple also refer to this place as Vahur which seems to have changed into Bâhûr. During the Chola days, it was known as Azhagia Chola Chaturvedi Mangalam, probably after Parantaka –II who was also known as Sundara Cholan. Perhaps Rajaraja-I may have given the village and the surrounding areas as brahmadeya to Brahmins and hence came to be known as Chaturvedimangalam. Vahur was also the headquarters of Vagur Nadu during the Chola and Pallava days. Three inscriptions of the Rashtrakutas are also found in the temple and all of them belong to the reign of Kannara Deva III.
Temple Complex

The temple is surrounded by a big compound (prakara) wall. Many shrines were constructed during the later period to the minor deities. They include Surya, Thiruchobanamudayar, Vinayaka, Subrahmanya, Vimochanamudayar, Chandikeswara, Navagraha, Saneswara, Bhairava and Gnana Sambandar. With in the enclosure there is a flower garden and kitchen (madappalli).

The sanctum sanctorum of Bâhûr Mûleswara/Mûlanâthar temple is square in shape and its presiding deity is worshipped in the form of linga. The Siva linga is placed on a Padma pitam (lotus petal base). No sculptures found on the pillars inside the sanctum sanctorum.

The Mukhamandapa

The mukhamandapa (frontal porch) is square in plan with six rows of six pillars each. The height of these pillars is 2.90 meters each. The corbels of the pillars are of plain type that resembles the Chola style. The shafts have two square sections without any sculptural panels of gods except flowers. The Vedambikai (Amman) shrine is facing towards north and is located between the arthamandapa and mukhamandapa attached to the main temple. The Amman Vedambikai is mentioned as Porchalai Nangai in the Bâhûr inscriptions which belong to Raja Raja I of 997 A.D.

Two inscriptions belonging to Kannaradeva refers to a gift of two pillars, two half pillars and a beam for the construction of ardhamandapa by Kârai Udayan Kaliyan Manrâdi Iyyan Nâyakan and the inscription is on the left side wall of Ardhamandapa. Another inscription of Krishna III refers to a donation of four stones (kallu) by one Nammi Nagan Sankaran for the construction of padai (wall or layer).

It is clear from the above study that the sanctum sanctorum and ardhamandapa, the Amman shrine and mukhamandapa; the mahâmandapa, the independent shrines and the front brick mandapa belongs to different periods and these are all constructed as later additions to the sanctum sanctorum.

The Mandapas

The temple is supported by having three mandapas (halls). The first one is a sloping structure of tiles, chunnam and bricks belonging to the French period of Pondicherry probably of 19th century. After this enclosed structure in the open place are the balipitha (sacrificial altar), dwajastambha (flag post) and a Nandi (the sacred bull).
The Mahâmandapa

The Second one is the Mahâmandapa. There is also a miniature balipitha and Nandi at the entrance of mahâmandapa. At the same place can be seen two dvarapalas (doorkeeper) on the either side. They are four armed with their heavy weapons. The left side dvarapala is having lion his vehicle whereas his counterparts on the right side have elephant as his vehicle. The plan of mahâmandapa is square. It is having four rows of four pillars each with a height of 2.93 meters each. Now only four are visible and others were covered with the sidewalls of the mandapa. The pillars of this area are having a square shaft consisting of kumbha panjaras. They are having well-ornamented corbel decorated with pushpa potika (banana flower) mouldings. The shaft of pillars has two square sections that contain the nagabandha (snake band). The square parts are having sculptural designs on their panels. They are squatting lion, ascetics on yogic pose, Vyagharpada, Patanjali (whose lower portion of the body is like a snake), Sankapani, dancing Siva, Pârvathi, Gaja Lakshmi, Mahâvishnu, Gajasamhâramûrti, Vrishabharudra or Vrishavahanamûrti, a dancer, an ascetic seated with belt tied around his knee, Jayalakshmi, deer, a battle scene, Brahma, Minanâtha, Vyâlinâtha, Bairava and so on. The third one is the arthamandapa.

Ardhamandapa

Ardhamandapa is a later addition that was attached to the front of sanctum sanctorum (garbhagriha) is rectangular shape. In ardhmandapa, there are four pillars with an alignment of two rows of two pillars each, which corresponding half pillars only on the southern and northern walls. The pillars are having padma padas (lotus bases). The pillars are octagonal with well formed kal, kalasa, tadi, kumbha, padma, and phalaka. The outer walls of the ardhmandapa are having deva kostas that accommodated ekadanta (single tusk) nâtya Ganesha on the southern side and Durga on the northern side. The dancing Ganesha is the unique feature found in the Bâhûr temple. The sanctum sanctorum and ardhmandapa together measure 12 meters in length and 7 meters in breadth.

Tântric Sculptures

In the Mahâmandapa pillars of Sri Mûlanâthar temple of Bâhûr there found many sculptures in an artistic manner. The sculptures are depicted in mid-relief with clearly identifiable figures. On the pillars of Mukhamandapa which is just opposite to the Amman shrine also many sculptures are depicted which are very crude and difficult for identification of the figures sculpted. Though there exists many artistic sculptures of various kinds, only the sculptures that related to the tantric mode of worship is taken up for discussion in this study.
such as the sculptures various ascetics in yogic poses, sculpture of Bikshatanamûrthy, Bhairava, practice of Bhairavi Cakra, and sculptures of Nâthas like Matsyendranâtha, Vyâlinâtha.

**Bhairava**

Bhairava is described as the purnarûpa or the full form Sankara. Those whose intellect is darkened by mâya are not able to understand the superiority of this aspect of Siva. The Bhairava is so called because he protects the universe (Bharana) and because he is terrific (bhishana). He is called Kâla- Bhairava because even Kâla (Yama) trembles before him. He is also called Papabhadshana because he swallows the sins of his devotees. Vishnudharmottara and Siva-purana described the sixty four forms of Bhairava. The tantric sects of Kâpalikas called themselves as Bhairavas and are well known for their atimargika practices of the usage of panchamârakas.

The Bhairava should be depicted as having four hands, and in the left upper hand holding damaru, and left hand is holding and a skull is hanging, and in the right upper hand he holding a trisûla, and in the right hand a khadga was depicted. And snake as an ornament. He should be nude wearing a garland of skull, his hair is left free, on his right side beside his right leg a snake is to be depicted and on left side a dog is to be depicted, his eyes will be closed, and he should be wearing wooden sandals. Contrary to the textual description, the Bhairava representations at Bâhûr are shown with a thin lower garment, which is an interesting feature.

However, in Bâhûr temple, in the mid relief sculpture of Bhairava that is located on one of the mahâmandapa pillars that situated in the first row of the left side facing towards east, the Bhairava was depicted with two hands instead of four and in the left hand he holding a snake, and in his right hand is resting on his right knee. He is wearing only a single loin cloth around the hips between the waist and the tops of the legs. His hair is left free, on his right side a snake is depicted his eyes looks upward. His body is depicted as a he is a strong man with extended chest. His both legs are slightly bent (Fig.1).

Similar Bhairava sculpture is found in on another pillar of the same mukhamandapa just opposite to the entrance of the Amman shrine that facing towards the west or sanctum sanctorum with slight differences. In this sculpture, the whole body of Bhairava is depicted in a tribhanga posture, as if he is in dance or in a movement. He kept his right hand on his right thigh; the hair is loose and different than the above mentioned sculpture. He is wearing rudrakshamâla (garland of rosaries) in his neck that hangs down to his chest (Fig.2).
Bikshatanamûrthy

Bikshatanamûrthy is the form of Siva as a beggar for committing the sin of cutting Brahma’s head in the form of Bhairava. He was smitten with madness and set out to beg throughout the world in the form of an ascetic, as per the advice of the Brahma. Bhairava surrounded by a host of bhûtas (goblins) went from place to place begging for food. All the women of the house he visited fell in love with him and set out, singing and dancing, to accompany him. Of the women who surrounded Siva some should appear to be completely possessed of irrepressible love for him, some eager to embrace him, some others blessing him, while still others serving in his vessel food taken out from another with a spoon. Out of lust for Siva the clothes of the women should appear slipping down their loins. Bikshatanamûrthy is always accompanied by the antelope (deer) which frolics near his right hand. Deer symbolizes the changing and wavering desires of human mind. Often in the sculptures, it is depicted that Bikshatanamûrthy holding a deer in his hand. It symbolically represents that he controlled all desires and arrested it in his hands. In his left hand he holds a trisûla which rests on his shoulder. In the other hands he holds the drum (udukkai or damaru) and the beggars bowl (kapala). He is naked and he has on his feet wooden sandals called pâdaraksha such as ascetics worn.

Similar representations of Bikshatanamûrti sculptures are also frequently found in the gopuras of south Indian Siva temples. Particularly the sculptures of Bikshatanamûrti found in on the pillars of the temple of Tirukameswara of Villianûr, and stucco sculptures found in the gopuras of Vrithachalam Vrithagirisvara temple, Cuddalore Pâtaleswara temple are very interesting.

Bhairavi Cakra

Of the three types of human beings, according to the tantric religion only the vîra type is allowed to use the panca-mâkaras or kaula dravyas Panchamâkaras (Madya, Mâmsa, Matsya, Mudra and Maithuna) in the tantric rituals. The woman with whom sexual intercourse is to be had is called Sakti or Prakrti or Lata and this special ritual is called Latasâdhanâ. According to Kaulavalinirnaya, sexual intercourse is the only means by which the aspirant can become a Siddha. Every woman is fit for intercourse, except the wife of the Guru or of one who has attained the status of vîra. The most significant Tantric sex rite is cakrapûja, i.e. worship in a circle. According to a description of it found in the Kaulavalinirnaya, an equal number of men and women, without distinction of caste and even of blood-relation secretly meet at night and sit in a circle. The goddess is represented by a yantra or diagram. The women cast their bodices in a receptacle and each of the assembled men finds a female companion for that night by taking a bodice out to those contained in the receptacle.
In the sculpture (Fig.3), the tantric practitioner is standing in *anjali mudra* whose hands are raised above his head. His hairs are matted. His legs are just bent towards the right side. He is shown ithyphallic or with a virile membrane. Usually a group of practitioners are depicted along with a sculpture of nude woman who represents the *Bhairavi* or female *shakti*. Here, the female called a *Bhairavi* stood before the practitioner as nude with legs wide apart or displaying her secret parts. Surrounding her on either side are three male tantric practitioners similarly nude with virile membranes in *Anjali mudra*. In this sculpture or in this pillar no such panel sculptures are found around it. However, this isolated representation of the *sâdhaka* with the erect penis indicates the existence of the practice of tantric sexual rites in the Bâhûr during medieval times. This sculpture is found at the first pillar of the right side in mahamanda that facing towards east in the lower square. One of the interesting feature of this sculpture is, similar type of sculptures that depicted with a group of tantric practitioners of *Bhairava Cakra* are frequently found in almost all Siva temples of South India, especially Tamil Nadu, Andhra Pradesh and Kerala. In Tirukamesvara Temple of Villianûr, Pondicherry, more than twenty such panels representing the *Bhairavi Cakra* is depicted.

**Yogic Postures Of Siddhas**

The basic thing for Siddha cult is *Yoga Sâdhanâ* and Bâhûr may be a place for the Yogic practices during medieval times as attested by the these sculptural representations. Through the *yoga sâdhanâ* the human body is to be made strong and thus the mental plane is also strengthened. This will ultimately give the *Sadhaka* the needed physical and mental pre-requisite for the attainment of *Kâya Siddhi*. The yogi is depicted here as in seated posture and his knees were tied with *yogapatta* with crossed legs that rested on the ground. He is having a long beard and his hairs are matted. His eyes are seemed to be closed that denotes that he is in deep meditation. His hands rest down on his knees. In his two arms and wrist, he wearing a bangle likes rings. Many of the scholars identified this yogic sculpture with Iyannar, a village deity. This sculpture is depicted in the left side first pillar of the *mahâmandapa* that facing towards north.

(Fig. 4) Apart from Bâhûr, almost in every temples of south India sculptures of various yogic postures are frequently found.

For instance, in the Siva temple of Madagadipet, Siva himself depicted as in yogic posture with wearing of *yogapatta*, on the south side of temple *vimâna*. In the *prakâra* wall of Srisailam Malikarjuna temple, many sculptures of various yogic postures were depicted artistically. Similar sculptures are also found in many Siva temples of South India.
Matsyendranâtha Or Minanâtha

Matsyendranâtha is believed to have lived in 9th and 10th centuries A.D. According to legends, he is the first incarnâate teacher of the Nâtha yogi movement and the reputed founder of the Hatha yoga system, along with his disciple Gorakshanâtha. He composed an important Tantric work Kaulajñanirnaya, and also found one of the Kaula schools called Yogini-Kaula. Matsyendranâtha or Minanâtha is generally identified in sculptures with fish in which he seated on. There existing some controversial issues regarding Matsyendranâtha and Minanâtha, that both are not the same persons. In support of this, some popular legends say that, Minanâtha was born to Matsyendranâtha and Premala, the Queen of Malayala Dçsa. Later he was rescued by his disciple Gorakshanâtha, to continue his ascetic life.

The Sculpture of Matsyendranâtha or Minanâtha is found in the ardhamandapa pillar of the Bâhûr temple. (Fig. 5) It is carved as a mid-relief that facing towards North. He is depicted as he seated on the fish probably without any dress and ornaments. His left hand is resting on the body of the fish and in his right hand, he carrying the yogadanda. His left leg lay on the fish and bent towards its tail and his right leg is folded and resting on the left leg. His hair is left uneven and rounded around the head. One interesting aspect in Bâhûr temple is that the principal deity of the temple itself having the suffix ‘nâtha’ in his name as Mûlanâtha. Similar sculptures of Matsyendranâtha are frequently found in the pillar relief and gopura walls of Villianûr Tirukameeswara temple and almost in all Sivaite temples of South India. For instance, in the prakâra wall of Sri Mallikarjuna temple at Srisailam, in the pillar mandapa of Ulsoor Someswara temple, Jalakanteswara temple at Kalasapalya near Bangalore, the sculptures of Matsyendranâtha are artistically depicted.

Vyâli Nâtha

The Vyâli Nâtha is one among the Navanâthas. He is also known as Jalandranâtha. This sculpture of Vyâlinâtha is found on the first pillar from the entrance of Mahâmandapa facing towards north. In this sculpture the Vyâlinâtha is seated on his vehicle Vyâli. (Fig.6). His head is adorned with matted hair. The kundalas (ear rings) on his ears are clearly visible. He is wearing a bangle like ring in his hands. His right is rested on the back of his vehicle Vyâli and his left hand is put down towards the opened mouth of the Vyâli. His left leg is folded and its foot is resting on the body of his vehicle and his right leg is hanging down towards the ground. The Vyâli is depicted as in striding position which denotes that it is in movement and its tail is erect. The sculptural representations of Vyâlinâtha are frequently found in the sculptures of Nâtha representations of South India.
Conclusion

Thus, from the above study of the sculptures, we may consider and conclude that the Siddha, Nātha and their tantric practices were most familiar in Bāhūr region right from its medieval times. Since it gained royal support, such sculptures are engraved in the pillars of mahāmandapa and mukamandapa, which are erected inside and just opposite to the main deity, the linga in the sanctum sanctorum.

Illustrations

Fig. 1- Bhairava

Fig. 2- Bhairava

Fig. 3- Bhairavi Cakra

Fig. 4 – Yogic Posture
Foot Note


2. Ibid.,


4. Ibid. p.285

5. B.S.L. Hanumantha Rao, Religion in Andhra: A Survey of Religious Developments in Andhra from early times up to A.D. 1325), Archaeological series No. 69, Dept. of Archaeology and Museums, Govt. of Andhra Pradesh, Hyderabad, 1993, p. 290; The eight siddhis or astasiddhis are 1. Anima (power of becoming the size of an atom and entering into smallest life), 2. Mahima (power of becoming mighty and co-extensive with the universe), 3. Laghima (capacity to be light though big in size), 4. Garima (capacity to be heavy though seeming small in size), 5. Prapthi (capacity to enter all the worlds), 6. Prakasyam (power of transmutation and enjoying what he wants), 7. Isithvam (having the creative power of god and control over the heavenly elements), and 8. Vasithvam or Kamavasayitva (power of attracting others or control over kings and gods). For more details see T.N. Ganapathy, The Philosophy of the Tamil Siddhas, Indian Council of Philosophical Research, New Delhi, 2004, p. 15; also see N. N. Bhattacharyya, op.cit., p. 280.

7 T.N. Ganapathy, *op.cit.*, p. 15; also see N.N. Bhattacharyya, *op.cit.*, p. 280


11 G. W. Briggs, *Gorakhnâth and the Kanphatayogis*, Motilal Banarsidass, Delhi, 1938, p. 136; But he didn’t mentions about their vehicles or their identifications.


13 N. N. Bhattacharyya, *op.cit.*, p.1


16 Pranab Bandyopadhyay, *op.cit.*, p. 1

17 By the yogic control of breath, the thirty knots in the spinal cord can be loosened, as a result of which the two vital winds, *prana* and *apana*, can enter the spinal cord and move upwards as *hamsa* through the six nerve plexuses – *mûlâdhâra*, *svadhisthāna*, *manipuraka*, *anahata*, *visuddha* and *âjna* – and on reaching the *Sahasrara* region, assume the nature of *sûnya*. There are 7200 nerves within the body of which sixty-four can be distinctly located and fifteen utilized for yogic purposes. For more details see T. N. Misra, *op.cit.*, p. 95.

18 T. N. Misra, *op.cit.*, p.19


21 *Epigraphica Indica*, Vol. III, No. 2; See also S.I.I, Vol. VII, No. 98; it mentions about the donation of three villages as Vidyabhoga to Vâhûr Vidyasthana namely Śc̣ttupākkam, Vilangāttukaduvânur and Iraipunachçrry of Vesalipâdi by one Nilathangi Mârthânda, who styled himself as Vesalipadi Pçraraiyan.


23 S.I.I, Vol. VII, No. 809; It deals with the donation of land for burning sandhi vilakku (lamp) and offering of two nāli of prasâdam (food offering) by the member’s of great assembly of Bâhûr, for Porchalai nangai Amman. Probably the land was given to one Sambunavan a member of Erivariyam and in turn he should supply one nāli of oil per month for the Nandâ vilakku (perpetual lamp).

24 Vijaya Venugopal (Ed) Bâhûr S. Kuppusamy, *Inscriptions of Pondicherry*, Pondicherry, 2005, No. 6; It deals with the donation of two pillars, two half pillars and a uttiram (beam) for the construction of a mandapa in front of the Sanctum Sanctorum (probably Ardhamandapa) by Manrâdi Iyyan alias Rajaditha Perariyan.


26 *Ibid.* , p. 43


32 G. Jouveau Dubreuil, *op.cit.*, p. 30-31

33 The Tantras speak of three temperaments, dispositions, characters (*bhava*), or classes of men, namely, the *pashu-bhava* (animal), *vira-bhava* (heroic), and *divya-bhava* (*dçva*-like or divine). These divisions are based on various modifications of the *guna* as they manifest in man (*jiva*); see Arthur Avalon (Sir John Woodroffe) (Trans), *Mahanirvana Tantra - Tantra of the Great Liberation*, p. 25.

34 N. N. Bhattacharyya, *op.cit.*, pp. 121-122
The depiction of Bhairavicakra worship in the prakāra wall of Srisailam Malikarjuna temple is one of the best examples, that no were found in such realistic manner in entire south India. Though being at present a Vaishanavite temple, hundreds of sculptures relating to the Bhairavicakra are found in the pillared halls of Athikesava Perumal temple at Tiruvattaru in Kanniyakumari District.

It is situated on the highway between Puducherry and Villupuram, to the west of Puducherry; it is a very old and famous Siva temple built during the Chola period.

N.N. Bhattacharyya, op.cit., p. 78

Uma Sampath, Sithathamellam Sivamayam (Tamil), Varam Pvt. Ltd, Chennai, 2006, p.107

Acknowledgement

I am thankful to my Research Supervisor, Dr. N. Chandramouli, Reader, Department of History, for introducing me into this research field and for his suggestions and help in the preparation of this paper.

References


Bhattacharyya, N. N., History of Tantric Religion, Manohar Publishers, Delhi, 1982

Briggs, G. W., Gorakhnâth and the Kanphatayogis, Motilal Banarsidass, Delhi, 1938.


Dubreuil, G. Jouveau, Iconography of Southern India, A. C. Martin (trans), Cosmo Publications, New Delhi, 2001


Tomory, Edith., *A History of Fine Arts in India and the West*, Hyderabad, 1989
DISPLACEMENT AND IT’S SOCIO-CULTURAL IMPLICATIONS ON HEALTH

* Somenath Bhattacharjee

Abstract

Every culture irrespective of its simplicity and complexity has its own belief and practices concerning health, disease and treatment. These are keenly interrelated with surrounding environment. During the past few decades the concept of health has emerged as a fundamental human right and a world wide social goal. But there are a number of factors which generates a great hindrance for health and creates a number of health hazards to the people. In this regard the present study has been done among the Rajbanshis who are the early settlers of North Bengal and Bangladesh. Partition of the nation, a number of socio-political unrest and other factors have forced some section of them to migrate from Bangladesh to the different districts of North Bengal located in Indo-Bangladesh border region of West Bengal. Displacement and migration had forced them to loss their permanent settlement and traditional occupational pursuit. They were struggling for livelihood and desperately needed any means for survival. Among them a certain portion started to settle down on the vested land of Balasan river bed of Darjeeling district in West Bengal, in search of a new occupational pursuit i.e. the stone based occupation. The present study had been primarily conducted through intensive field work and the prime objective of this study is to analyze the socio-cultural implications of displacement and its overall impact on the health situation of the concerned people.

Key words: Environment, Migration, Stone crushers, Socio-Cultural Factors, Health.

1. Interaction between Man - Environment and Health

Society can be looked upon as a process, a series of interactions between human beings. In all social behaviour, the prime emphasis lies on the aspects of social behaviour, which is subjected to certain kinds of social regulations, sanctions, norms and value orientations. These aspects are very much related with the livelihood circumstances of the concerned society and it is deeply interwoven with the natural environment in which the society persists. It is a common
acceptance that, human beings are capable of passing from one environment to another as well as of changing the conditions of a given environment to suit their own purposes; in truth the relation of life and environment is extremely intimate. The term ecology was first defined by Ernst Haeckel in 1866 as “the science of relations between organisms and their environment”. Actually the environment is the physical surrounding of man of which he is a part and on which he is dependent for all of his activities like psychological functioning, production and consumption. Thus any sort of environmental change ultimately determines in the changes of livelihood condition. Along with it, if the socio-economic conditions also get changed, then the socio-cultural practices and the functions of social organisations and social institutions will must get altered which ultimately influences a lot on the daily ways of living of the concerned people or society.

Human being have an ongoing contact with and impact upon the land, climate, plant and animal species in their vicinities and these elements of environment have reciprocal impact on human. The environment of human being lies in his surroundings of land, air, water, forest and the substratum beneath the Earth’s surface. These components of natural environment provide the fundamental resources to human being for their survival. Thus the need of the human society is totally depended on the nature in a diversified manner and its way of accumulation reflects the culture of the human being.

The response of human being to a particular environment ultimately determines his cultural appearance and it helps a human being to achieve a beneficial adjustment to his concerned environment in which he lives. In the context of livelihood, the foremost important factor related between the environment and man, lies in the factor of human health. According to the definition of World Health Organization, “Health is a state of complete physical, mental and social well being and not merely an absence of disease or infirmity.” The feature of health can broadly be differentiated into following pattern –

![Health Feature Diagram]

(Source: Greenberg & Dintiman, 1992:9)
These aspects of health were altogether co-related with the environmental factors, livelihood conditions and other aspects of human life that is their social interactions and relationship with their neighbourhood.

Every culture irrespective of its simplicity and complexity has its own beliefs and faith concerning health, disease and treatment. There are numerous cultural practices related with health and prevention of diseases. These traditional practices are intermingled with surrounding environmental background. It is thus apparent that the standard of health and well-being varies with the environment, which of course alters enormously among populations and even in their subgroups. It is a consensus that the feature of health, nutrition and disease is very much inter-related with surrounding environment and it is a world wide phenomenon.

But there are a number of socio-economic factors which are a great hindrance for health and these are creating a number of health hazards to the people. Among a number of factors the issues of displacement plays a very important role. Displacement and migration are the very important factors that influence the socio-economic and other institutional changes in the society. It is said that migration is a response of human being to the environmental, economic, social, political and other forces. People tend to remain in a particular area until they are forced by some factors to move to other area. Thus when any society migrates from its original or traditional habitat to a new habitat, its traditional culture, norms and values undergo change to cope up with the new physical and socio-cultural setting. Such a situation had been observed among the Rajbanshi stone crushers of Balasan Colony, resided on the Balasan river bed where the people were exposed to a new social and occupational environment from their earlier one.

**Studied Area and the People**

The studied area was located in the foothill region of North Bengal i.e. in the foothill of North Eastern Himalayan belt of West Bengal, India. North Bengal is a region of varied landscape and distinctive cultural practices. Naturally with the changing environment the concept of basic needs and the ways to acquire those needs are variable too. The Rajbanshis are one of the early settlers of North Bengal and Bangladesh. They were villagers and primarily depended on agriculture as well as far from urban attractions. Their way of life and mode of behaviour were based on folk cultural aspects. Their existence was totally enmeshed with their land and with their neighbour.

But the dimension of time, place and situations are always changing. During the decade of 70’s (1970) there took place a number of political changes in the said region. In 1971, there occurred a severe political unrest in Bangladesh. As
a result a huge number of migrants took shelter in Siliguri as well as in other suburban and rural areas. Among them the Rajbanshis were large in number. Question of daily existence was a prime factor for the migrated and landless people who were devoid of any source of income. Thus lack of purchasing capacity forced them to search for a permanent occupation which could give them a backbone regarding their establishment as early as possible. On the other hand Siliguri started to get flourish as the largest urban centre of North Bengal. Its importance lied in its role as a commercial centre at the gateway with the North Eastern states of India as well as with International Borders like Nepal, Bhutan, Bangladesh, China and Myanmar. Still it is a developing urban centre. On the other hand many rivers like Mahananda, Balasan, pass through the heart of the Siliguri town and natural resources like boulder, stone, sand come downward from the high hilly regions. These natural resources are used as the raw materials for various urban constructions and it is the only earning source for a large number of people.

The stone field of Balasan River bed thus became unquestionably the best option for the uprooted and resourceless people as it does not need any kind of capital investment. Moreover the Balasan River bed provided them the land to establish a new residence. Since 35 years the roofless, resource less migrated Rajbansis are living in the Balasan River Bed by forming a Colony named as “Balasan Colony”. The study was done on 200 families of the said colony who were engaged with stone based economy. The studied families had 1012 populations, with 507 males and 505 females; and the sex ratio was 997.

Brief Statement of the Problem

The Balasan river bed provided a scope of resettlement and a source of income to the concerned people. However, their earning was quite disproportionate to meet up with the common minimum livelihood. Thus poverty had become a part of their daily life. On the other hand, exposure to an adverse working atmosphere, poor livelihood condition and inaccessibility of modern medical practices had created an adverse impact to the health situation of the studied people. Poor socio-economic condition had become an added criterion to worsen their health situation. Thus the problems related to the health situation of the studied people were multifarious from different aspect. The socio-economic scenario, socio-cultural factors and surrounding environment had a direct impact on their livelihood and on their health situation.

Objective of the Study

1. To know about the causes that influenced the people to choose the stone based occupation.

2. To evaluate the working atmosphere related with stone crushing.
3. To know about the overall health situation particularly their quality of daily feeding, different types of health hazards and their mode of treatment.

**Review of Literature**

In the context of the present study the following literature had been studied thoroughly to know about the multifarious factors related with the health situation of a particular society. Those were-

Chaudhuri, (1990) in his book, “Cultural and Environmental Dimension on Health”, clearly mentioned the relationship between health and natural environment. He also gave a classical example that how the whole tribal life is related with forest and environmental background.

Dutta (2005) in her article “Undocumented Migration from Bangladesh to West Bengal”, mentioned brief data regarding the migration of Bangladeshi refugees to India ever since India’s independence.

Park (2000, 16th ed.) in his book “Park’s Text Book of Preventive and Social Medicine”, analyzed the various dimensions of health. He also discussed about the social factors related with health and various types of diseases.


**Methodology Applied**

The entire study had been done through intensive field work. In this regard Preliminary Census schedule was applied on 200 stone crushing families to collect data about their period of migration, cause of migration, occupational change, present occupational pursuit, daily working schedule, educational status, marital status, age at first marriage and first child, concept of health, disease and treatment and their daily food habit. Further, interviews were taken from the key informants to know about their early settlements, their previous socio-cultural practices and concerned changes of those issues due to migration. Information was also taken about the formation of the colony and the factors related with the stone crushing occupation. Thereafter, case studies were taken on the people regarding their suffering from different diseases. It also emphasized about their way of treatment and their hindrances related with the treatment. In this concern data were collected from the health staffs of Balasan colony health sub centre to know about the factors related with the health disease and treatment of the studied people. The data collected through field work was analyzed in detail to know about the various factors related with the stone crushers, particularly on the issues of their health situation.
2. Resettlement, New Occupational Involvement And Struggle For Survival

Resettlement and New Occupational Involvement

All of the studied 200 families of the Balasan colony were migrants. The migration of people to the Balasan river bed had started in the decade of 70’s (1970) and it is still going on. Among the total migrant families, most had come from Bangladesh. After migration and loss of early settlement, the concerned people became roofless and almost resourceless in condition. Under such circumstance they came and settled down on the vested land of Balasan river bed. It mainly took place due to their local adjustment and contemporary initiatives of the local political authorities. Meanwhile most of the families were devoid of their ration card and other relevant documents related with the new settlements. Among the studied families, most of them had voter identity card but they were unable to seek any sort of administrative support related with that. Most of the studied families were undocumented migrants.

Before migration the studied people were settled agriculturists in most of the cases. But due to severe political unrest and migration they were not at all in any position to reinstate their traditional occupation i.e. settled agriculture. On the contrary, they found the stone crushing occupation as the best way of survival and readily accepted it. Their parental generation was totally agriculturist but the present generation was mostly (90 per cent) engaged in stone based economy. Naturally with the changes of surrounding environment and economy, a number of alternations had simultaneously taken place in their daily livelihood as well as in their socio-cultural life.

The Balasan River flows downward from the Himalaya with natural resources like sand, stone, boulders. The colony members were engaged in collection and supply of those raw materials for urban constructions to the adjacent areas. The stone based economy was the prime source of income for most of the studied families. Hard manual labour was the only requirement for the said occupation. This occupation was devoid of from any age and gender biasness. Among the studied families, in most of the cases the entire family worked as a production unit. Excluding the children, 94.82 per cent male and 87.16 per cent female were either primarily or secondarily involved with the stone crushing work. The main interesting feature was that, their daily requirements had forced most of the women to give prime importance to the said work inspite of their household activities. It is to be mentioned here that the females and the children who were primarily engaged in household work and education respectively, were simultaneously involved in the stone crushing work secondarily either in the stone field or in their houses to fulfill their familial requirements. Even in some cases the children were primarily involved in this work. The work was conducted
in every climatic condition. The concerned people went to the river bed early in the morning and did their work till the dusk. Most of the working population had to work for more than 8 hours. The female who were mostly involved in the household work, also did the stone crushing work for 3-4 hours in a day. They worked under ‘sardars’ or local group leaders and could get their payment once in a week (on Tuesday) according to their quantity of work. Considering the family income 26 families could earn below Rs. 1000/- per month, 154 families earned between Rs. 1001/- to Rs. 2000/- and only 20 families had the monthly income between Rs. 2001/- to Rs. 3000/- . Thus despite their hard manual labour the concerned people earned a very little amount. Earlier the people were mostly depended on the agricultural crops and fishes of their own land, village ponds and nearer rivers but during the study the scenario had changed completely and they were primarily depended on market based products. Their average family member was five in number and with this mere source of income they had to face all sorts of inconveniences to fulfill their daily livelihood requirements.

Socio-Cultural Issues and Daily Livelihood Conditions

Before migration, the studied people resided in the huts build on the open space in the middle of their agricultural land. They preferred to build their huts on their own lands with his parents, wife and children. Usually they preferred the Joint or extended family system under the authority of one head. The elderly person of the family was the sole authority and every one was bound to abide by his direction. The families were patrilineal and patrilocal with recognition of social relations with the kin members on both sides. Rarely a married son got separated from the family and lived elsewhere. The relatives and kin members participated altogether in their social, religious and other festivals.

But due to displacement and migration, mostly they were forced to leave their relatives and kin members and even sometime their wives and children. Further, they settled in the Balasan colony with their family members and in some cases they got remarried and started a new family life. Here all the family members were involved in the stone crushing work for most of the time and they were no more related with agricultural works and allied practices. Most of the families were nuclear in Balasan colony and their neighbourhood relationship was no more integrated, harmonious and affectionate as it was earlier. People were quite busy with their hard working schedule to accumulate a fold of rice in the context of their survival. In this regard they could hardly pay enough attention to their neighbourhood. It had been reported that the young generations were getting separated from their parents after their marriage to deal own personal life and they merely accepted any opinion of their guardians. Most of the families were far from their close kin members and they had a very few contact with them. Their familial integration had broken very rapidly in these circumstances.
Often neighbourhood quarrels could be seen among them. Their social integrity was no more peaceful and harmonious as it was earlier. As a result the social structure and social organization based on familial and neighbourhood interaction level had changed a lot from their earlier feature. The contemporary social functions had become confined to the circumference of nuclear familial level despite the entire societal level as it was prevalent earlier. Most importantly, a family was the prime source of socialization and personality formation for a child. Meanwhile, in the studied area most of the children were lacking the guidance and affection of their close kin members, particularly of their grandparents. From early childhood they could observe familial tension, quarrel with neighbours and acute poverty.

Further, the poor level of income had provided a very little chance to the stone crushing families to acquire better living conditions. Most of the families had only a couple of room to reside and in some cases they resided in a single room. Most of the houses were devoid of proper drainage and sanitary means and for this purpose they often used the river bed. The environment around most of the houses was not adequate from the perspective of health and hygiene. Lack of proper household infrastructure had created psychological stresses among the family members and specially it affected the children very much. Despite their hard work they had a very mere chance to enjoy mental recreation and in the evening most of them got involved in a number of addictions. Most of the adult male members were alcoholic and were involved in gambling. They almost spent their entire earning behind those. Even the teenage children were also addicted to alcoholism, tobacco uses and sometime in gambling. Ultimately a very little amount of money was left for the women to fulfill their familial needs and in this regard they had to face all sorts of inconveniences. The continuous pressure of need and lack of its fulfillment ultimately generated familial tension among the married couples and often the wives were maltreated by their husbands. Those intricacies created a problem to their children and in this regard their simple tender mind had to face all sorts of complexities. These ultimately hampered their education as well as socialization and personality formation as a whole. Their poverty, addiction and familial tensions were a great hindrance for them to lead a joyful life. Thus it is to be noted here that the socio-economic and socio-cultural life of the studied people had altered a lot after their displacement and migration form early settlement and they were forced to struggle for their existence in the present settlement.

3. Impact on Health Situation

Due to displacement the previous environmental background was totally changed and the concerned people were exposed in a new ecological set up. Naturally the new environmental scenario brought new cultural practices to them. It is already stated that irrespective of any climatic condition, the stone
crushers were engaged in their work throughout the whole day. The working atmosphere on the Balasan river bed was a dusty and polluted one. Simultaneously the stone crushers always had to work in touch with the river water. They worked day long under scorching sunlight, shivering cold and under heavy showers. Naturally, the working atmosphere had created a number of health hazards to them. The little amount of income was a severe constraint for the poor stone crushing families to consume the adequate balance diet. All of the studied families mainly took rice, pulses and little amount of vegetables in their daily diet twice a day. In their previous settlement the agricultural productions, cultivated vegetables in the kitchen garden and the fishes collected from the local rivers provided them their daily nutritional requirements. But during the study that opportunity was no more prevalent. On the other hand, due to severe economic scarcity it was almost impossible for them to purchase expensive animal protein from the market. Hardly they could manage to consume least expensive fishes once in a week. To provide milk and fruits particularly to the children was a seldom happening factor. The stone crushing people who were primarily engaged in the work took their lunch directly in the dusty and open river bed in most of the cases. Even they fed the children at the same place along with them. Even during the pregnancy period, the conceived mothers were also depended on same sort of diet. Thus their might have a probability that the pregnant women were quite malnourished in the studied area. To earn a fold of rice among 270 ever mother, 160 (59.26 per cent) worked for long time even upto 5-6 hours in the stone field during their pregnancy period. The pregnant women had to face both the situation of hard manual labour and malnutrition. Among the total 270 ever mother, 202 (75.00 per cent) had more than one child and they all had given the birth of their next children in the consecutive year. Meanwhile, it is to be mentioned here that the overall social insecurity had forced the parents to conduct the marriage of their daughter quite at an early age. As a result they often became pregnant without attaining adequate physical and mental maturity. The feature of malnutrition during the pregnancy period along with the hard work at the same time might have told upon the health of the new born baby and they often became malnourished too. The process of immunization was conducted under the influence of the worker of colony health sub centre but concerned women were unable to keep it in their remembrance. Among total 270 ever mother, 65.23 per cent had given birth to their children in houses and in presence of mid wives, 20.29 per cent had given birth to their children both in house and medical college and 14.48 per cent had given birth to their children only in medical college. It revealed that the cases of child birth mostly took place without any proper modern medical attention. It is to be mentioned here that as the women were quite busy with the hard manual labour, so they had a very little opportunity to look after the daily cleanliness and proper nourishment of their children. The livelihood circumstances had resulted the
fact that, a new born baby had to face the inconveniences of poverty, malnutrition, lack of proper medication, irregular immunization, lack of adequate parental care and so on ever since their birth.

Further considering the fact of drinking water and water usage for household work gave another highlighting issue. More than 80 per cent of the families were depended either on uncovered wells or on the river directly for the said purposes. They consumed the water without any sort of disinfection and boiling. The expensive rate of fuels were a great hindrance for them to boil the water but the lack of awareness also had prevented the people to take the water even after filtrating it by cloths. The wells were seldom disinfected by the concerned authorities and they got contaminated with a number of germs. It might have resulted serious water borne diseases like dysentery throughout the entire year in the colony. The children were the worst sufferer of those diseases. Meanwhile along with the lacking of purified drinking water most of their houses were devoid of from proper sanitary means and drainage systems, as a result those houses had become a key birth place of germs.

The stone crushing occupation itself had resulted a number of health hazards to the concerned people. Their diseases would be divided into two broad categories like short term diseases and long term diseases. Short term diseases were often seen among them and they got partial recovery from them with a little treatment. But long term diseases were those from which the concerned people were suffering from a long time and it required proper medical check up. During the stone crushing work often the people got injured with stone chips or with the iron implements. Those sorts of injuries could be seen on their hands and eyes.

But often their negligence over short term diseases made them complex ones and it had been turned out as a serious problem to them. Ignorance of injuries on eyes created the swelling of eyes with burning sensation and problem in eyesight. Improper care over minute physical injuries during works turned into blisters with mucous secretion. They worked for long in touch of water. In this concern the moisture and their unclean bathing along with the uses of unclean dresses might have resulted the fact that skin diseases were quite common to them. Their continuous work in the dusty and polluted stone field as well as the dust emitted out from the broken up stones, repeatedly being inhaled by them through their respiration and it might have turned out the fact that adult and elderly people were suffering from acute respiratory problem and chest pain which might have turned into chronic asthma. Lack of proper nutritive food and hard manual labour might have resulted acute nutritional imbalance among them and it may had turned into the fact that both the male and female were suffering from anemia. Another major problem was the tuberculosis. According to the health staffs of the colony health sub center, lack of nutrition, heavy work load
together with dusty working environment and their alcoholism and smoking might have resulted this disease. From field observation it could be interpreted that their lack of nutritive food despite hard manual labour together with irregular schedule of food intake might be a prime cause behind this disease. Moreover the concerned people were suffering from fever, cold and cough almost throughout the year but they had a very mere opportunity for their proper treatment. Those simple problems became complex with expensed time because their poverty was a great hindrance for them to go through proper medical check up for long duration. Another major issue lied here with their problem of menstrual cycle like leucorrhea, irregular discharge. It may had resulted due to their involvement in a polluted working atmosphere, malnutrition and heavy workload altogether. Thus, the stone crushing occupation related with other probable factors had created a number of health hazards to the concerned people.

Most of the people with their ailments went to the colony health sub-centre for primary treatment but it was not always provided with adequate medicines and infrastructure of necessary diagnostic tests. The concerned people with numerous health sufferings went to the nearest Primary Health Centre and Medical College. But they were unable to bear the expenses regarding medicines and other required clinical diagnosis. Even they could not seek medical consultancy from the private doctors due to unaffordable expense. To get rid from various diseases they first of all went to the quacks of local medical shops and often avail indigenous health care practices. The requirements of traditional medicinal plants were lacking very much and that’s why the indigenous treatment was facing a serious problem. In this circumstance they had to depend on quacks for their treatment in most of the cases. Their lack of economic backbone and health awareness had prevented them to go through concerned diagnosis and proper medical check up. Meanwhile, it is to be mentioned here that the diagnosis through modern medical check up required a long duration and specific regulations of medicine and diet. The studied people had a very mere attention behind those because their adequate poverty had forced them to think that the expenditure of valuable time will ultimately cut short their working involvement and they had to suffer more economic hardship in the forthcoming period. On the other hand the medicines provided by the quacks could give them a fast remedy and they could rejoin to their work in a quick succession.

Meanwhile the traditional healers also played a role in the prevention of diseases. They gave sanctified lockets and extract of various leaves and tubers in the form of tablets to the people. But in many cases these sorts of supernatural belief were unable to prevent their sufferings and they could not get the remedy. The expended time behind those sorts of practices made the cases more critical for the health staffs of the sub centers to deal properly and they often referred the patient to their higher authorities. But the expensive medical treatment and
the duration of treatment became unaffordable to the studied people. Their time bound hard labour was a great hindrance in this concern because only their labour could provide a fold of rice to them and they thought that expenditure of time behind medical check up made the valuable working period to spend in vain. Lack of educational knowledge, laborious working schedule and acute poverty were the main factors which had made most of the stone crushing families far away from proper medical care and health awareness. Their poor livelihood condition, lack of food and nutrition as well as absence of drainage and sanitation had collectively made the situation worse in condition. Insufficient infrastructure of modern health institution was an added criterion in this regard. Thus this occupation had resulted health hazards and malnutrition as a part of their daily livelihood. Moreover the scarcity of resources, disproportionate fulfillment of familial requirements and hardship for survival often resulted familial conflict and quarrel with neighbourhood in the studied area. As a result, the concerned people had to face an acute mental stress in their livelihood. Poverty, acute scarcity in daily livelihood, familial tension and social factors had collectively affected the tender mind of the children and their socialization as well as proper psychological development had to face an acute hindrance in this regard. As a whole the physical, mental and social health situation of the concerned people had been affected very much after their resettlement and the new occupational involvement.

Conclusion

Migration is a major factor that influences the socio-economic and other institutional changes in the society. It is said that migration is a response of human beings to the environmental, economic, social, political and other forces. Thus, when any society migrates from its original or traditional habitat to a new habitat, its traditional culture, norms and values undergo change to cope up with the new physical and socio-cultural setting.

The overall scenario of the Balasan Colony could be analyzed from multidimensional aspects. In the early settlement their livelihood was intimately related with the environment and it provided the security of food, shelter, nutrition to the studied people by the utilization of their own natural resources. It was a fact that they were not in an economically well-to-do status, but they were neither exposed to any serious struggle for survival nor they had to face any utter constraints to accumulate their common minimum livelihood of food, shelter and dress. Their livelihood as well as social structure was quite secured through the man-environment interrelationship. But due to major political crisis the studied people were forced to get displaced from their early settlement and ultimately they lost their all round well being. Naturally their surrounding environment also got altered. In a new environmental background on Balasan river bed they started a new way of life and it affected a lot on their traditional socio-cultural aspects.
Their joint family pattern had broken up and the strong kinship bondage gradually got diminished. As a result familial disintegration became a common happening factor. When they started to get resettled, a stable and stronger economic backbone was their prime need for the fulfillment of common minimum requirements in daily livelihood. In the studied area they were mostly depended on expensive market based products for the food and other daily necessities. The stone crushing occupation was unable to provide them the basic amenities according to their requirements. The children of the studied area had to face all sorts of familial and social intricacies, ever since their birth. It ultimately told upon their tender mind and in this consequence they often got involved in many offensive incidents. Another major problem was their lack of identity. They were unauthorized, undocumented and devoid of any administrative facilities. They came here as disintegrated and till now they are on the way of disintegration. Even their new occupation was unable to provide them the fundamental rights of education, food, hygienic shelter and social security. Ultimately their lack of economic and social security had created a lot of inconveniences regarding their daily livelihood. The poor economic condition had prevented them to acquire adequate nutritious diet required for heavy workload. In this new settlement they had no scope to accumulate food resources from the surrounding environment. On the other hand educational knowledge was also lacking among them. Under this circumstance the knowledge regarding health and hygiene was suffering a major setback. In this context, the continuation of work in the polluted working atmosphere and the application of crude technological implements without any protective measures had made the health condition more alarming. It had resulted the fact that a number of occupational injuries and occupational diseases were a common happening for every working individual. They could not avail modern medical access due to lack of infrastructure and financial constraints. They could only manage to consult with the colony health sub centre and quacks in most of the cases. But those treatments often became unable to provide them the adequate ailment; rather it makes their sufferings more aggravated. It is to be mentioned here that, in their early settlement they had their own cultural practices of traditional medicine because the required medicinal plants were abundant in their surrounding environment. But with the changes of their settlement, the concerned medicinal plants were no more available in their present habitation. They had a general consensus to go to the traditional healers and also had a psychological faith on them. But the concerned healers were facing an acute problem to go through proper treatment due to lack of required medicinal resources. They had no adequate solution to redress the problems regarding the health situation and to lead a disease free life. The WHO’s declaration of “Health For All” by 2000 AD is far from any kind of proper implication here.
Due to economic scarcity, the studied people were unable to accumulate adequate food and nutrition. Further, due to polluted working atmosphere they had to face a number of inconveniences in their daily working schedule and they were suffering from a number of diseases and ill health condition throughout their entire life. Their physical health situation was worse in condition and it was not only an individual issue rather it had become a problem for the entire community. The economic scarcity was a great hindrance for them to manage their common minimum livelihood according to the demand. Moreover, their dwelling houses were quite poor in condition without any scientific means of livelihood. Most of the houses were made up of only a single room and it was dwelt by even four to five members of the family. Even proper sewage and other basic facilities were lacking to them. Their utter constraints for the survival created an acute emotional distress among them. Meanwhile, it is to be mentioned here that, in the studied society familial conflicts, neighbourhood quarrel and different types of addiction were a common occurrence. It ultimately affected worstly on their children and created an acute hindrance on their socialization and personality formation; even they also get involved in several offensive activities from their early teenage. From the early childhood he could notice acute poverty, hunger and scarcity of common minimum requirements. Further, regarding the demand of livelihood essentialities and scarcity over it, the quarrel between the couples was almost a regular phenomenon. Thus the entire livelihood condition was not suitable from the perspective of a better social health condition. From the overall scenario it can be stated that, the problems related with the different aspects of health in the studied area was not only an individual matter, rather it was the problem of the entire community. In their early settlement, despite economic scarcity they had the security of their common minimum livelihood requirements of food, dress, shelter etc. Even their working environment and livelihood circumstances were quite hygienic. Further, they had their own knowledge for the ailment of their ill health situation. As a result, the entire community was in the status of a perfect health situation. Then with the changing dimension of time they were exposed to a new environmental condition and new working atmosphere, which ultimately eliminated their security of a perfect health condition. It may be concluded that if the present situation gets continued then only the forth coming period will tell us about their fate and mere chances will be left for their convenient survival.

**Bibliography**


PROCEDURES AND REFERENCES MODEL

The Full length paper should accompany the following:

1. Requires an abstract of 250 words.
2. Requires 5 key words.
3. The local words / Sanskrit words like “Varna” should be in italics.
4. A through English and grammar correction is necessary.
5. Full length article should be within 6000 to 8000 words (including tables and figures).
6. The article should be neatly typed in MS-Word – Times New Roman – in 12 point.
7. For Procedures and References refer the following format.
8. Articles should be sent in Soft copy by CD and also in Hard copy (two) to the Editor-in-Chief.
9. For publishing the articles in the January issue the article should reach on or before October 31, and for July issue the article should reach on or before April 30.

Book by a single author:

Edited volume:

Books of two or more Authors


Journal Articles


Article in an edited volume

Subsequent references

Ibid.
Mathew, Ibid., pp.101-2.
Mathew, n.1, p.21.

More than one book by the same author
Mathew, n.1, p.23.
Mathew, n.3, p.34.
Nehru, Speeches,
Nehru, Selected Works,

Corporate author

International Monetary Fund, 1997, Surveys of African Economy, Washignton D.C.: International Monetary Fund

Translated and Edited Book


An Anonymous Book

Book Published in a Second or Subsequent Edition

Rev. ed. – “Revised Edition”
Abr. Ed. - “Abridged edition”

A Multivolume Work

In case of using one volume only –
A Republished Book


Online Documents


Online Scholarly Project, Database etc.


Online Book
ORDER FORM

Dear Sir / Madam

Please enter my Subscription / Membership fee for IRJSS (International Research Journal of Social Sciences). I enclose the required amount by Demand Draft drawn in favour of the Editor payable at Pondicherry.

Category of Membership

Signature __________________________________ Date ____________

Name ______________________________________________________

Institution __________________________________________________

Address ___________________________________________________

________________________________________________________________

________________________________________________________________

________________________________________________________________

Payment Particulars : DD No...................................... Date ....................................

Bank ..............................................................................
International Research Journal of Social Sciences

Each regular issue of the journal will contain, besides full-length papers, review articles, book reviews, and other relevant academic information.

<table>
<thead>
<tr>
<th>Annual Subscription</th>
<th>Inland</th>
<th>Foreign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutions</td>
<td>Rs.500</td>
<td>US $ 50</td>
</tr>
<tr>
<td>Individuals</td>
<td>Rs.200</td>
<td>US $ 25</td>
</tr>
<tr>
<td>Students and Retired Teachers</td>
<td>Rs.150</td>
<td>US $ 20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Life Membership</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutions</td>
<td>Rs.5,000</td>
<td>US $ 200</td>
</tr>
<tr>
<td>Individual</td>
<td>Rs.1,500</td>
<td>US $ 100</td>
</tr>
<tr>
<td>Single Issue</td>
<td>Rs.150</td>
<td>US $ 20</td>
</tr>
</tbody>
</table>

Bonafide students and retired teachers are welcome to ask for special subscription forms. All subscriptions must be prepaid through Demand Draft favouring the Editor-in-Chief and payable at Puducherry. Air mail cost will be charged extra to those subscribers who want to get the journal by air mail. Request for air mail delivery must be made in writing.

All communications regarding subscription for journal may be sent to:

Prof. T. Subramanyam Naidu
Editor-in-Chief, IRJSS,
School of Social Sciences & International Studies
Pondicherry University
Puducherry - 605 014.
email: pussjournal@yahoo.co.in
pussjournal@gmail.com

Printed at:
Pinnacle Computer Offset, No.21, Sakthi Towers, Natesan Nagar,
Puducherry-5. Ph: 0413 - 2200188, 4508118