

Volume 5, Issue 2
December, 2015

ISSN No.:2348-4667

Anthropological *Bulletin*

a peer reviewed international journal



**A
B**

Department of Anthropology
University of Lucknow, Lucknow, India

ANTHROPOLOGICAL BULLETIN

A peer-reviewed International Journal

Volume5, Issue 2, December, 2015.

Published by

Department of Anthropology,

University of Lucknow,

Lucknow, India – 226 007

EDITORIALBOARD

Anthropological Bulletin,
Department of Anthropology
Lucknow University, Lucknow

Editor-in-chief

Prof. A.P. Singh
Head,
Department of Anthropology
Lucknow University, Lucknow
Phone nos. 0522-2740004,

Editor

Dr Keya Pandey
Department of Anthropology
Lucknow University, Lucknow
Phone nos. 0522-2740004,
9450561571(Mobile)
keyapandey9@gmail.com

Managing Editor

Dr. Daud Salim Faruque
Executive Director, Oxford Evidence and Interventions (OXEVIN)
Oxford, United Kingdom
Phone nos. +447826929636 (mobile)
managingeditor@anthropologicalbulletin.in

For Submitting Papers

editor@anthropologicalbulletin.in

For enquiries and feedback

info@anthropologicalbulletin.in

Editorial Advisors

Prof. B.R.K. Shukla, Lucknow	Prof. Nadeem Hasnain, Lko
Prof. Venkata Rao, Hyderabad	Prof. Vinay Srivastava, New Delhi
Prof. Rajan Gaur, Chandigarh	Prof. P.C. Joshi, Delhi
Prof. S.R. Mondal, Darjeeling	Prof. A.P. Singh, Lucknow
Prof. Sukant Chaudhary, Lucknow	Prof. Subho Ray, Kolkata

Anthropological Bulletin, biannual journal of Department of Anthropology is published in July and December every year. All the correspondence pertaining to the Anthropological Bulletin and any other business should be addressed to the Editor, Anthropological Bulletin, Department of Anthropology, Lucknow University, Lucknow.

Subscription Rates:

India	Rs 2,000/- per volume
Foreign	US\$ 40 per volume

CONTENTS

Volume 5, Issue 2, December 2015

1.	Socio-Economic Demography of Rajis: A Lesser Known Tribe of North India	5
	<i>KEYA PANDEY</i>	
2.	Caste Solidarity in Managing Social Networks: Evidence from the Western Himalayas, Himachal Pradesh	21
	<i>SYED AIMAN RAZA</i>	
3.	The Daily Grind: An Analysis into the Day To Day Socio-Economic Problems Of The Nawabs Of Lucknow	27
	<i>SYED AASIM RIZVI</i>	
4.	Morbidity Pattern among the Tharu Tribal Population as an Indicator of Health Status	35
	<i>PRAMOD BIHARI SHUKLA</i>	
5.	Sustainability in Vernacular Architecture: Laurie Baker and Hassan Fathy's Approach	43
	<i>ASIF ALI</i>	
6.	Health and behavioural consequences of child abuse	47
	<i>DAUD SALIM FARUQUIE</i>	



SOCIO-ECONOMIC DEMOGRAPHY OF RAJIS: A LESSER KNOWN TRIBE OF NORTH INDIA

Keya Pandey¹

Tribal demography, hitherto has been a neglected area of study by demographers in India. No doubt, a few studies have been carried out on fertility behaviour of a few selected tribal communities. However, many of these studies are based on a very limited sample, which give less scope for wider generalization. Demography is the statistical study of human populations. It can be a very general science that can be applied to any kind of dynamic living population, i.e., one that changes over time or space. It encompasses the study of the size, structure, and distribution of these populations, and spatial and/or temporal changes in them in response to birth, migration, aging and death.

The Area

Pithoragarh and Champawat districts are situated in the north west of Uttarakhand and forms the north eastern part of the Kumaun division. It lies between lat 29.4° N 30.3° N and longitude 80° E to 81° E. On its north and east lies international border of Tibet and Nepal respectively, while on its south west touches the district Almora. It is bounded in the south by district Nainital and district Chamoli, is on its west. The total geographical area of the district is 8,856 square kms.

The Rajis inhabit nine villages of the districts Pithoragarh and Champawat namely Jamtadi, Altadi, Kuta & Chaurani, Madanpuri in tehsil Didihaat, Kimkhola, Bhaktirwa, Gangaon and Chipalthara in tehsil Dharchula, and Khirdwari in Champawat. The physical location and approaches to the field centres are either by kuchha road or pucca road. Rajis have been reported from other places also like Udham Singh Nagar and Central Himalayas but the present study was confined to Pithoragarh and Champawat districts.

Selection of the Field Centres

The selection of the field centres were made on the basis of a twofold consideration. Firstly, the village to be selected must have a representative character with regard to the culture of the region for study and secondly, the village must have a suitable size and setting. I have divided the field centres into two areas interior area and the outer area. It is the

¹ Assistant Professor, Department of Anthropology, Lucknow University, Lucknow

interior are which possesses more of the typical culture of the area. Whereas the condition of the outer area, which is comparatively open to the outsiders may not give a good insight into the people understanding of the way of life of the people. My primary attention, therefore, was focussed on the interior area to know the traditional pattern of the culture and secondly attention was on the outer area to know the changes occurred in the lifestyle of the tribals. The interior area includes Gangaon, Bhaktirwa of Dharchula Tehsil, Kuta & Chauram, Madanpuri and Altadi of Didihaat tehsil whereas outer area includes Kimkhola and Chipalthara of Dharchula tehsil and Jamtadi of Didihaat tehsil respectively. In the interior areas, local differences are so great and they vary so much from tehsil to tehsil in context of some of the cultural traits that it was not advisable to depend on single centre for my study. However, frequent visits to the areas were made which includes Kimkhola, Chipalthara of the outer areas and Altadi, Kuta and Chaurani, Madanpuri and Ganagaon of the interior area. Other remaining villages were visited and they served the purpose equally but the easy rapport we could establish in these villages and rich data made us finally select them. (Pandey, Keya 2007).

Situation of the villages:

There are total nine villages of Raji setting falls under three tehsils viz. Dharchula, Didihaat and Champawat (New District). The Physical locations and approaches to the villages are discussed as following:

Jamtadi (Kantoli). Village Jamtadi (Kantoli) falls within the block Kanalicchhina. This village can be approached either via Askot or Jauljibi. Askot is 50 Kms. from Pithoragarh and Jauljibi is further 25 Kms. from Askot on Dharchula motor route. From Askot Jamtadi is 8 Kms. on a steep descent route. If approached from Jauljibi it is 8 Km. via. Gania which is situated on the bank of the Gon Ganga river on Jauljibi - Baram road. After crossing Gon Ganga by a bridge one has to cross a rivulet known as "Rautish gad" to reach Jamtadi. The name 'rautish gad', 'rautish' from Raut or Rawat and 'gad' means rivulet, literally meaning 'the rivulet of Ban Rawat or Rajis'. Jamtadi is inhabited by khasiyas, Brahminis, Shilpkars, the main ethnic groups of Kumaun hills and the Rajis. From Askot a rugged and stony path leads to the village settlement of Jamtadi through a steep descent of 7 Kms. The nearest forest outpost is that of Askot which is on the way to Askot. A few hilly paths connect one village to other. All the way to Jamtadi are dense forests.

Altadi. This village can be reached from Askot and has to get down at Bajrihat 11 Kms. on Askot- Dharchula motor road. From Bajrihat one has to walk 3 Km. to reach Hansewar, a beautiful village in a green valley. The distance of Altadi from Hansewar is 8 Km. Another way to the Altadi village is to reach Bhagichaura, 8 Km. from Didihaat Tehsil office and from there one has to start with the puccha road and has to pass through a narrow and zig-zag way and at times to cross dense forests and precipitous rocks, where there is no recognizable track. The ways from Bhagichaura include a sharp ascent of five miles and in the last stage a sharp descent of three miles. The kuccha road in the first stage is maintained by the forest department, this road serves as the main artery of travel and commerce for the whole area.

Kuta Kanyal & Chaurani. This village falls under the jurisdiction of Didihaat tehsil. The bus or jeep service is available to reach Khettaar from Didihaat market. From there is a mountaineous route upto six kms. which includes a back breaking ascent and sharp descent in the mid stage. This route also covers a small bridge which connects two mountainous areas.

Madanpuri. This village is near to the Kuta Kanyal and Chaurani. It is a small village of Raji setting. The route till Kuta is same then one has to come down for about three kms. to reach Madanpuri.

Kimkhola. This village can be approached from Jauljibi on Jauljibi. Dharchula motor

road at a distance of 5 Kms and from motor road one has to walk a distance of half km. This is the biggest village of Raji setting. There is a kuchha road which leads to the village At Jauljibi there is a rest house of P.W.D. In which one can stay during his visit to the village. There is a market area on Jauljibi Dharchula road which completes the necessities of the tribals. At Balwakot on the motor route of Jauljigi Dharchula an ashram type school for the education of tribals as well as for the non tribals too and this is the nearest school for Kimkhola, Ganagaon and Bhaktirwa tribals. The density of population in the area is greater than that of all the other Raji villages.

Bhaktirwa. After reaching Kinikhola there is a mountainous route to Bhaktirwa. This village is one km. from Kimkhola towards western ridge. This is the smallest village of Raji setting. The important thing is that this village has not been included in the census report of the Government. It is surrounded by the dense forest.

Ganagaon. It is situated at distance of 3 Km. from Kimkhola towards north ascent. It can also be approached from Bhaktirwa at a distance of 2 km. The path between Bhaktirwa and Ganagaon is extremely hazardous. This village is of considerable size and very difficult of communication.

Chipaithara. It is approached from Jauljibi towards Jauljibi Baram motor road. From Baram one has to walk on foot towards east about 5 km steep ascent. It also falls under the Dharchula tehsil. Chipalthara is important from the point of view of culture contact and culture changes. It has provided material for the study of a diversity of culture pattern and the changes that are taking place.

Khirdwari. This village falls under the jurisdiction of Champawat tehsil which is now a separate district. It is a village in a valley and quite further away from other Rajis dwellings mentioned above. For reaching Khirdwari one has to reach Chaithi, which is on Tanakpur-Pithoragarh motor road about 47 kms. from Tanakpur. From Chalthi one has to walk for a distance of 13 kms. This village is situated on the bank of Chaithi river. The path towards this village is so rough and risky that even the villagers would like to avoid it.

The village site

Village settlements are to be found in comparatively open parts of a slope half way up the hill, with greater or lesser number of terraced plots for cultivation on one or more side, above and below, though most of the fields are often situated near away from human habitation. The topography of the Raji region is such that all the huts in a village are never situated at the same level. The difference in elevation between the clusters of houses may vary greatly. The village Ganagaon & Kuta Chaurani is on the peak of the hills may represent an extreme case of ruggedness. The huts in the villages are not aligned. They are scattered in a small area of uneven terraced lands. The densest village is kimkhola and due to the limited space to one hut they have generally untidy and clumsy appearance. Rajis prefer to live aloof from the outsiders and reside in dense forest with the help of which one cannot negotiate their villages. Small cultivable lands are all around their huts.

Tribe under study

There were five scheduled tribes in the state of U.P. namely- Bhoksa, Bhotia, Jaunsari, Raji and Tharu. Raji is one of the five scheduled tribes who were declared for the first time in June 1967 vide scheduled caste and scheduled tribe list modification 1967 along with Tharu, Bhoksa, Jaunsari, Bhotia in U.P. in which Raji was declared the primitive tribal group (PTG) by Govt. of India in 1975. Before 1967 there was no recognised scheduled tribe in this state. Presently the tribe under study falls under the state jurisdiction of Uttarakhand.

Historical background of Rajis

The Raji tribals dispersed over the Pithoragarh and Nepal are not of equal status. The

Rajis of Nepal and the Rajis of India intermarry but the Rajis of India consider themselves to be of higher racial group. Raji is a little known tribal community which was brought into light for the first time in 1823 by the then Commissioner of Kumaun C.W. Trail. It is said that Rajis or Banrawats are descendents of the prehistoric kiratas, who were comparatively early settlers of the region then the Nagas and the Khasas.

Atkinson stated that these early tribes entered India by the same route as the Aryans and the Kiratas who were the first to arrive than the others. In course of time Kiratas were gradually uprooted from the region by the dominating impact of other ethnic groups but their few descendents remained in Kurnaun and Nepal. In Kumaun they were called Rajis but they are not aware of their prehistoric Kirat origin.

The legend current among them is that they were descendents of the royal family of Askot. Until recently they lived a life typical of neolithic age, as cave dwellers and food gatherers subsisting on hunting, fishing and jungle produce. Still they cannot be considered as aboriginals as they had not inhabited the region from the beginning. Regarding the origin of Raji tribe there are many reasons which are told by Raji informants. However, according to W. Crooke- *"The Rajis have been identified with Raja Kiratas, who in early Sanskrit literature are joined with Sakas and Savaras as Dasyu and are placed by the Varaha Sarnhita between Amarwana and China or between Jageswar and Tibet and a title will mean either" the princely Kiratas or the "Kiratas of Ragya"*. Crooke further stated that the Rajis represent themselves as descendents of one of the aboriginal princes of Kumaun who with his family fled to the jungles to escape the destruction threatened by an usurper under the pretention of royal origin, the Rawats or Rajis abstain from offering to any individual whatever his rank, the usual eastern salutation. Further on the basis of fresh inquiry based on the notes of Bhawani Singh, teacher of Devaliakote School in the Almora district, Crooke mentioned that they are known by the two names Raji and Rawat. These names are used by the people themselves as well as by outsiders. They say that they are descended from the Raja of Kutpur by whom they were expelled for some fault. Since then they have been wandering about in the hills and forests, living on jungle produce. At the time of their expulsion, the Raja of Kutpur was NilKamal, but they cannot say how many years ago he lived. This Kutpur family, they say, reigned for 38 generations from Vikramaditya to Biramdeo. All the members of the tribe considered themselves equal and intermarry.

Rajis are locally known as Banawats and Rajwar and this name is used by the members of the community themselves as well as by outsiders. During the field inquiry few elderly Raji informants told about their origin that they were descendents of the king of Askot and give the following account of their origin. It is said that the king of Askot had two sons. The elder son was fond of hunting and fled into the forest. He never returned from there and practically he ruled in the forest. He being in the forest used to live on forest fruits, roots and jungle games. The younger brother therefore, the ruler of Askot kingdom, it is alleged that the Rajis are the descendents of elder brother who called themselves *Banrawats* or *Rajis* or *Rajwars*, where as the descendents of younger brother are called *Pals*. In support of their origin from elder brother, they maintain a status of supremacy and do not offer salutation to anybody. Thus from the tradition of their origin the Rajis claimed to have a royal descent.

Racial stock of Rajis

Mr. Traill stated that there is a total dissimilitude of language between the Rajis and Kumaunis, and that the Doms may have been descended from the Rajis - *"the former being, for the most part, extremely black, with crisp, curly hair, inclining to wool."* This until the present inquires is the only account that has been given on any authority regarding the Rajis, yet Prof. Ritter found in it confirmation of the opinion that a Negro race may have been among the aboriginal inhabitants of the Himalayan and Kuen- Jima. There is no foundation for the statement that the Doms have curly hair inclining to wool. Out of hundreds they have come

under notice, not a single one can be said to have any Negroid characteristic, though many are of an extremely dark complexion, like the other similar servile castes in the plains. (Trail, 1954) Dr. Pritchard conjectured that the Rajis would be found to resemble the other numerous aboriginal tribes found along the Himalayan border. All possessing the physical character of the Bhotiyas in general and very unlike the Doms. (Trail, 1954).

Dr. Latham too expresses his conviction that the Rajis are the equivalents to the "Chepang of Nepal" (Atkinson, 1981). Captain Strachey noticed "*nothing very remarkable about them, except an expression of alarm and stupidity in their faces, and they are perhaps darker and otherwise more like lowland Hindustanis than the average kumaun paharis*". Atkinson stated the "*in countenance race and appearance, presently they exhibit mixed physical traits of Aryans, Dravidians and Mongoloids. It appears that the intermingling of different ethnic elements for ages has caused the disappearance of their original racial features*". (Anonymous, 1981).

Distribution of Rajis

Rajis are reported from different parts of Uttarakhand but in Pithoragarh district they have been reported from the nine villages *i.e.* Kimkhola, Ganagaon, Bhaktirwa, Chipalthara, Altadi, Jarntadi, Kuta Chaurani, Madanpuri which falls under Dharchula and Didihaat tehsil. These villages are scattered and dotted in a vast area of about 200 kms. Their habitations are generally at the altitude ranging from 2000' to 5000' above sea level. Their settlements are in accordance with hilly nature and are away from the main habitation because they prefer to live aloof from other communities.

Social Demography of Rajis

The study of the demographic structure of village has been made on the basis of the village census and family wise genealogies and information. The census is recorded in prescribed forms for families in this area. Besides, certain narrative accounts have been collected through structural interviews with various families and individuals and general information have been made with regard to the conditions of the village settlement. Reference data have also been gathered from various official sources and checked with my field findings.

According to the census of 1991 the population of Rajis was 494 but the present situation of their population is different from the former. The present data has been collected in October 2012.

A classified enumeration of population is not only intrinsically valuable in providing data for statistical estimations of density of population, sex rates, fertility rates and other indices, it is also essential to an understanding of social structure since the organization and functions of kingroups, associations and other social groups will be found to be related to their numerical strength and to be modified with change in that strength.

Population Structure

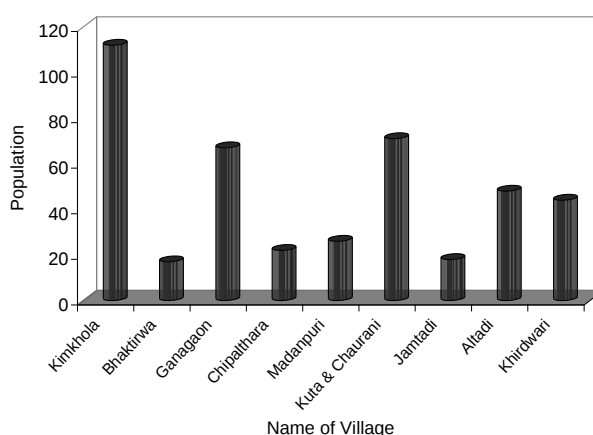
According to the census of 1991 the population of Raji was 494 but the present situation of their population is different from the former. The present data has been collected from door to door survey in July 1997. A classified enumeration of population is not only intrinsically valuable in providing data for statistical estimations of density of population, sex rates, fertility rates and other indices, it is also essential to an understanding of social structure since the organization and functions of kingroups, associations and other social groups will be found to be related to their numerical strength and to be modified with change in that strength.

Table 1 Showing population according to Tehsilwise, blockwise and villagewise

SN	Name of Tehsil	Name of Block	Name of village	No. of households	Total Pop.
----	----------------	---------------	-----------------	-------------------	------------

1.	Dharchula	Dharchula	Kimkhola	25	112
			Bhaktirwa	03	17
			Ganagaon	17	67
			Chipalthara	09	22
2.	Didihaat	Didihaat	Madanpuri	06	26
			Kuta & Chaurani	17	71
		Kanalichhina	Jamtadi	05	18
			Altadi	10	48
3.	Champwat (District)	Chapawat	Khirdwari	10	44
Total				102	425

Total Population of Rajis (Villagewise)

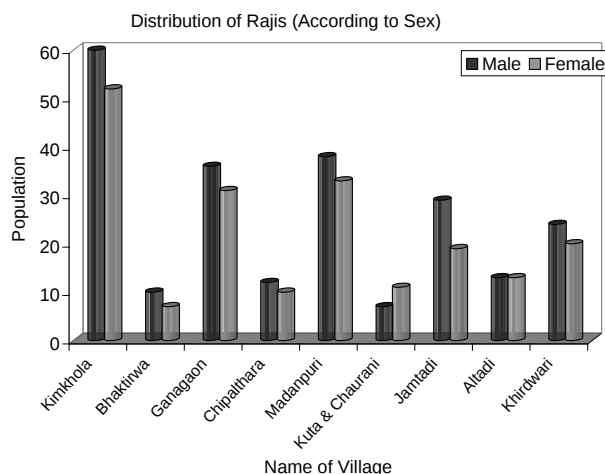


From the above table it is evident that three villages viz. Kimkhola, Ganagaon and Kuta Chaurani have a sizeable Raji population whereas Altadi village has average size of population and the remaining four villages viz. Bhaktirwa Chipalthara, Madanpuri and Jamtadi have a very small population. The population trend shows the sizeable increase in their population during past years. The main reason of their population variation is on account of their cross country relationship as Rajis are also reported to be in good number in Nepal. The villagewise distribution of Rajis according to age and sex is furnished in following table 2-

Table -2 showing distribution of Rajis according to their age and sex.

SN	Village	1-10		10-20		20-30		30-40		40-50		50-60		60 & above		Total	Total
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1.	Kimkhola	27	21	12	09	07	08	07	06	04	03	03	03	00	02	60	52
2.	Bhaktirwa	04	02	02	02	01	01	01	00	02	01	00	01	00	00	10	07
3.	Ganagaon	10	06	07	10	07	04	03	03	04	04	02	01	03	03	36	31
4.	Chipalthara	02	02	03	01	03	03	01	02	03	01	00	00	00	01	12	10
5.	Chaurani	12	13	16	00	07	06	02	04	01	00	00	00	00	00	38	33
6.	Jamtadi	01	04	01	02	02	02	00	02	02	01	00	00	01	00	07	11
7.	Altadi	09	05	06	00	01	03	06	05	01	01	03	02	04	03	29	19

8 Madanpuri	07	05	03	05	01	00	00	00	02	03	00	00	00	00	13	13	26
9 Khidwari	08	05	05	06	06	06	03	02	01	01	01	00	00	00	24	20	44
Total	80	63	55	45	35	33	13	14	20	15	08	07	08	09	229	196	425
%age	18.8	14.8	12.9	10.5	8.23	7.76	5.41	5.64	4.7	3.52	1.88	1.64	1.8	2.11	53.8	46.1	100



From the table 2 it is evident that the village kimkhola has the maximum Raji population i.e. 112 whereas village like Bhaktirwa, Ganagaon, Chipalthara, Chaurani, Jamtadi, Altadi, Madanpuri and Khirdwari have 17, 67, 22, 26, 71, 18, 48 and 44 population respectively. Accordingly the percentage of males and females comes to 53.8% and 46.1% Amongst the

0-10 years age group there are 143 children out of which 80 (18.8%) are females. Amongst the age group of 10-20 years there are 100 children out of which 55(12.9%) are males and 45 (10.5%) are females. Amongst the age group of 20-30 years there are 68 persons out of which 35(8.23%) are males and 33(7.76%) are females. Amongst 30-40 years of age group there are 47 persons out of which 23(5.41%) are males and 24(5.64%) are females. In the same way amongst 40-50 years of age group there are 35 persons out of which 20(4.71%) are males and 15(3.52%) are females. In the age group of 50-60 years there are 15 persons out of which 8 (1.88%) are males and 7(1.64%) are females. Amongst 60 and above age group there are only 17 persons out of which 8(1.88%) are males and 9(2.11%) are females. The largest number of the persons are in the age group of 0-10 years and the least number of the persons are in the age group of 50-60 years and 60 and above category of age groups. Very few people remain alive after fifty years of age. As compared to females, males have a large population among Rajis i.e. 196 females and 229 males thus we can say that the population of Rajis is decreasing as they are suffering from malnutrition.

Literacy

From the given table 1.3 it is evident that out of total population of Rajis only 104 (24.4%) are literate and 311 (75.5%) are illiterates. It shows that above 75% of the population are illiterate. Out of 104 literate no Raji was found educated above primary level except three from kimkhola. In fact Rajis do not want to send their children outside the village. If we calculate the literacy level in the above written nine villages we find that 63 males i.e. 14.8% of the total population are literate and 41 females i.e. 9.64% of the total population are literate. As compared to females the literacy level of the males is greater. In the same way 161 males are illiterate i.e. 37.8% of the total population and 160 females are illiterate i.e. 37.6% of

the total population.

Table-1.3 showing distribution of Rajis according to their literacy and sex.

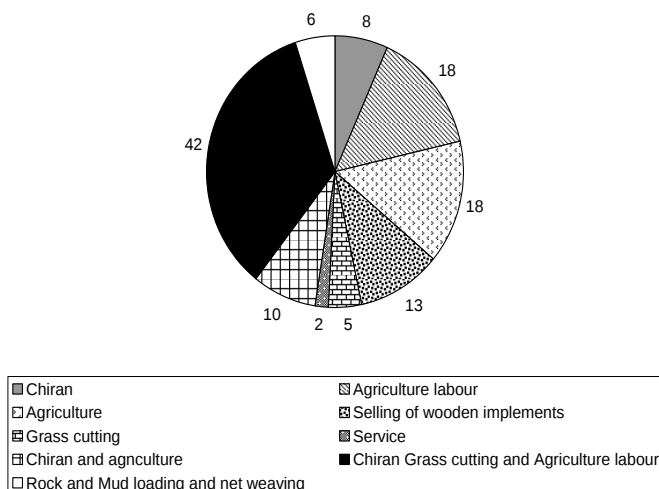
SN	Village	Literates			Illiterates			Total
		M	F	Total	M	F	Total	
1.	Kimbhola	24	15	39	36	37	73	112
2	Bhaktirwa	02	01	03	08	06	04	17
3	Ganagaon	12	09	21	24	22	46	67
4	Chipalthara	06	02	08	06	08	14	22
5	Chaurani	03	00	03	35	33	67	71
6	Jamtadi	01	04	05	06	07	13	18
7	Altadi	06	04	10	22	16	38	48
8	Madanpuri	00	00	00	13	13	26	26
9	Khidwari	09	06	15	11	18	29	44
Total		63	41	104	161	160	321	425
%age		14.8	9.64	24.4	37.8	37.6	75.5	100

Occupation and Income

The table '1.4' presents the distribution of Raji folks according to their occupation . Out of 102 households of Rajis 08 households practice Chiran' which is also known as wood cutting in English language. Again there are 08 households which are under the leading agriculture labourers. They have no lands of their own. They work as labour on the lands of other people. Those households which practice only agriculture are 08 in number. They are fully dependent on it. They get sufficient food to eat and sufficient food to sell for their livelihood. As I have written earlier that they are well versed in their wooden craft which is day by day deteriorating but today also there were 13 households which are still making wooden implements and selling them to fulfil their necessity 05 households were reported which were involved in grass cutting and 02 households were reported in which one member of the family is a Govt. servant respectively.

Table-1.4. showing occupation of Rajis

S.N.	Occupation	No. of Household
1.	Chiran	08
2.	Agriculture labour	18
3.	Agriculture	18
4.	Selling of wooden implements	13
5.	Grass cutting	05
6.	Service	02
7.	Chiran and agriculture	10
8.	Chiran Grass cutting and Agriculture labour	42
9.	Rock and Mud loading and net weaving	06
Total		102

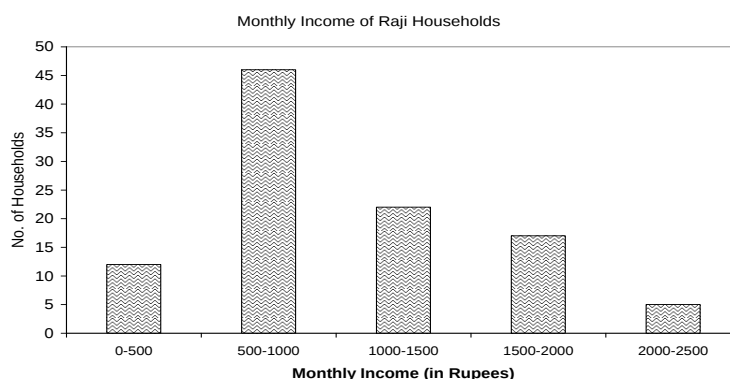


There are some household which supplement their occupation with some other work. They are 58 in number in which 10 households practice chiran and agriculture 42 households practice Chiran along with grass cutting and agriculture labour and 06 are involved in rock and mud loading and net weaving. Last category was seen in the village Bhaktirwa which falls under the tehsil Dharchula. Raji folks are hunters, food gatherers and agriculturalists.

The traditional occupation of Rajis was hunting and food gathering. They were leading a wild life depending upon the forest produce and partly to secure food grains from local villages by bartering their hand made wooden articles of domestic use. Now they are almost leading settled life and depending upon labour and partly upon agriculture with the contact of local people.

Table 1.5. showing monthly income of the Raji households

S.No.	Income/Mth.	No. of households	Percentage
1.	0-500	12	11.7%
2.	500-1000	46	45.0%
3.	1000-1500	22	21.5%
4.	1500-2000	17	16.6%
5.	2000-2500	05	4.90%
Total		102	100%



The above table shows that the income of 102 households was calculated. 12 were reported in the income group of 0-500. In the income group of 500-1000, 46 (45.0%) households were found. In the monthly income group of Rs. 1000-1500, 22 (21.5%) households were reported. Similarly in the income group of Rs. 1500-2000, only 17 (16.6%) households were reported, 5 households (4.90%) were reported in the income group of Rs. 2000-2500. Maximum number of households i.e. 46 (45%) were reported in the income group of Rs. 500-1000 and the least number of households were reported in the income group of Rs. 2000-2500 and the number of households are 5 (4.90%) respectively. Table 1.6 showing land holding & monthly income of Rajis.

Land Holding and Monthly Income

Table 1.6. showing land holding & monthly income of Rajis

SN	Land in Nalis	Monthly income in Rupees					Total	Percentage
		0-500	500-1000	1001-1500	1501-2000	2001-2500		
1.	Landless	4	5	1	-	-	10	9.80%
2.	<5	3	5	1	-	-	09	8.82%
3.	5-10	2	11	3	5	0	21	20.5%
4.	10-15	3	12	5	4	2	26	25.4%
5.	15-20	-	12	9	5	3	29	28.4%
6.	20-25	-	-	1	3	-	04	3.92%
7.	25-30	-	1	2	-	-	03	2.94%
8.	50& above	-	-	-	-	-	00	0.00%
Total		12	46	22	17	05	102	100%

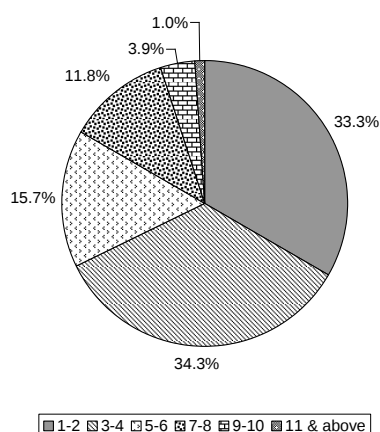
The above table shows that out of 102 households 10(9.80%) were found landless in which 4 households were falling in the income group of Rs. 0-500, 5 households in the income group of Rs. 501- 1000 and 01 households in the income group of Rs. 1001-1500. The land holding of 9 (8.82%) households were below 5 nalis out of which 3 were falling in the income group of Rs. 0-500, 5 were falling in the income group of Rs. 501-1000 and 01 falls under the category of Rs. 1001-1500 respectively. The land holding of 21 (20.5%) households were in between 5-10 nalis out of which 2 falls under the income group of Rs. 0-500, 11 falls under the income group of Rs. 500-1000, and 3 falls under the income group of Rs. 1001-1500 and 5 falls under the income group of Rs. 1501-2000. The land holding of 26 (25.4%) households were in between 10-15 nalis out of which 3 falls under the income group of Rs. below 500, 12 falls in the category of Rs. 501-1000, 5 under the income group of Rs. 1001-1500, 4 falls under the income group of Rs. 1501-2000 and 2 falls under the income group of Rs. 2001-2500. The land holding of 04(3.92%) households were in between 20-25 nalis, out of which 01 falls under the income group of Rs. 1001-1500 and 3 falls under the income group of Rs. 1501-2000. In the same way 3 (2.94%) households were in the category of land holding carrying inbetween 25-30 nalis, out of which 01 household falls under income group of Rs. 501-1000 and 2 falls under the income group of Rs. 1001-15 respectively. In all the nine village the highest range of households are 29(28.4%) which falls under the category of land holding ranging between 15-20 nalis and there are only five households which falls under the income group of Rs. 2001-2500. No household was reported which falls under the income group of Rs. 2501- and above. Secondly the least range of land holding was reported in between the range of 25-30 nalis and only 3 households were reported who possess such land holding. Above the range of 30 nalis no household was reported.

Monthly Income and Size of Raji Families

The following table shows the monthly income in respect to size of the family.

Size of the family (in nos.)	Monthly Income					Total	%age
	0-500	501-1000	1001-1500	1501-2000	2001-2500		
1-2	05	15	08	05	01	34	33.3
3-4	03	16	07	05	04	35	34.3
5-6	02	10	02	02	-	16	15.6
7-8	02	05	02	03	-	12	11.7
9-10	-	-	03	01	-	04	3.92
11 & above	-	-	-	01	-	01	0.98
Total	12	46	22	17	05	102	100

Size of Family & Monthly Income (In Percentage)



The above table shows that out of 102 households 34 (33.3%) households were found having 1-2 member out of which 5 households were falling in the income group of Rs. 0-500, 15 households were falling in the income group of Rs. 501-1000, 8 households falls under the income group of Rs. 1001-1500, 5 under the income group of Rs. 1501-2000 and 1 household was found under the income group of Rs. 2001-2500 respectively. 35 (34.3%) households were found having 3-4 member out of which 3 households were falling in the income group of Rs. 0-500, 16 were reported under the income group of Rs. 501-1000, 7 households were reported under the income group of Rs. 1001-1500, 5 households were falling under the income group of Rs. 2001-2500 respectively. In the family size of 5-6 members 16 (15.6%) households were reported out of which 02 households were falling under the income group of Rs. 0-500, 10 households were falling under the income group of Rs. 501-1000, 2 households were reported under the income group of Rs. 1001-1500, 2 households were again reported under the income group of 1501-2000. Similarly in the family size of 7-8 member 12 (11.7%) households were reported out of which 2 households were falling under the income group of Rs. 0-500, 5 were falling under the income group of Rs. 501-100, 2 households were reported under the category of Rs. 1001-1500 and 3 households were reported under the category of Rs. 1501-2000 respectively. In the family size of 9-10 members 4(3.92%) were reported out of which 3 households were falling under the income group of Rs. 1001-1500 and 1 household was found to be reported under the income group of

Rs. 1501-2000. In the family size of 11 and above members only 01 (0.98%) household was reported and its monthly income group ranges in between Rs. 1501-2000. From the table we infer most of the households falls under the category of family size having one or two or three or four member in their family, the least number of households. Were reported in the category of family size ranging in between 7-10 or 11 and above. The average no. of households in which 5-6 or 7-8 members were living were reported. They don't have any concept of family planning because due to the in adequate medical facilities their children does not survive and this is the main cause that their population is day by day decreasing. The following table shows the family type of Raji households:-

In the table 1.8 I have classified family types into five classes viz. nuclear, extended, joint family, broken family and the sub nuclear family. The nuclear family is that type of family in which husband wife and their unmarried children lives.

Table 1.8. showing family type of Raji households.

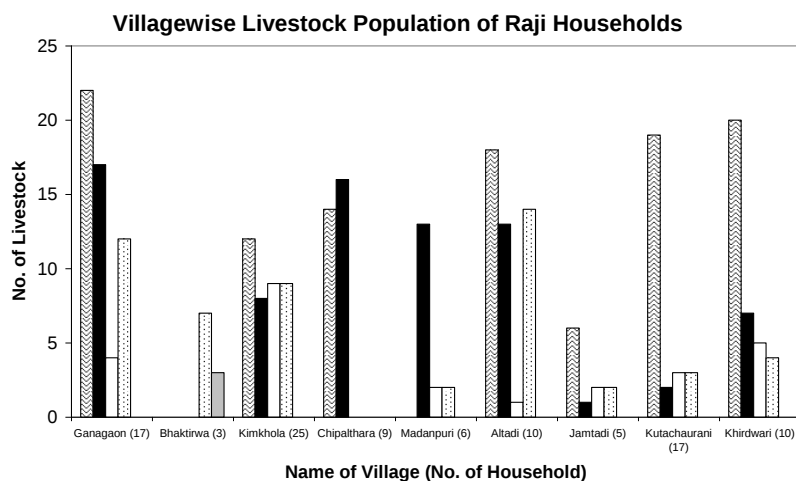
Type of the family		No. of households	%age
1.	Nuclear family	47	46.0
2.	Extended family	13	12.7
3.	Joint family	08	7.84
4.	Broken family	04	3.92
5.	Sub nuclear family	30	29.4
Total		102	100

Sub nuclear family consists only of a married couple a husband and his wife. It is likely to be completed in a course of time, when the couple has children, that is why, a sub nuclear family is often called as an incomplete nuclear family. A broken family, particularly a broken nuclear family consists of only one of the parents while the other is dead and the unmarried children of whom atleast one may be an adult in order to help in the maintenance of the family. On the other hand any groping broader than the nuclear family which is related by descent or marriage is an extended family. Further two or more nuclear families affiliated through the extension of parent child relationship also constitutes an extended family and a joint family comprise of two or more distinct nuclear families. Form this table it is evident that 47 (46.0%) households falls under the category of nuclear families. The households which are 30(29.4%) in number falls under the heading of sub nuclear families. Extended families were reported in 13(12.7%) households. In the same wary joint family was reported in 8 (7.84%) households. 4 (3.92%) households were reported in the category of broken families.

From the data we conclude that the maximum number of households were reported in the category of broken families. The nuclear and the sub nuclear families are prevalent among Rajis. The joint families re rarely found among them. Soon after the marriage the couple separate themselves from the family and work separately for their livelihood. Very rare I found couple residing along with the parents in one house. It was seen that if the family is having more than three sons, they make their separate house near to the house of the parents and if there is only one son, it was reported that they prefer to reside with the parents if one of the two is dead, and if there is no internal feud among them. But as compared to joint and extended families, nuclear were much in number.

Livestock Position of Raji Households**Table 1.9. showing villagewise livestock position of the Raji households.**

SN	Name of the village	No. of households	Number of animal					Total
			Bullocks	Goats	Buffaloes	Cows	Hegoat	
1.	Ganagaon	17	22	17	04	12	-	55
2.	Bhaktirwa	03	-	-	-	07	03	10
3.	Kimkhola	25	12	08	09	09	-	38
4.	Chipalthara	09	14	16	-	-	-	30
5.	Madanpuri	06	-	13	02	02	-	17
6.	Altadi	10	18	13	01	14	-	46
7.	Jamtadi	05	06	01	02	02	-	11
8.	Kutachaurani	17	19	02	03	03	-	27
9.	Khirdwari	10	20	07	05	04	-	36
Total		102	11	77	26	53	03	270



The above table indicates that Rajis have in all 270 cattle out of which 111 bullocks 77 goats, 26 buffaloes, 53 cows and 03 he goats. They use bullocks for ploughing purposes. Whereas cows and buffaloes are maintained for milk purposes and he goats and goats for meat. They don't use the milk of goat whereas the milk and ghee of cows and buffaloes are used and sold by them.

Conclusion

Demographic problems of Rajis are very peculiar and in this respect the census of Rajis had been reported from time to time by the U.P. government. The census which was available to me as conducted by the dept. of tribal welfare is as following:-

1969	-	254	Total population
1971	-	228	Total population
1978	-	341	Total population
1981	-	371	Total population
1991	-	494	Total population
1993	-	504	Total population
1997	-	425	Total population
2001	-	620	Total population

2011 -

From the above data we decipher that in 1971 population of Rajis decreased from 254 to 228 but in 1978 to 1993 it is seen increasing in number and it was reported 504 in 1993 by the tribal development office but door to door survey was conducted by me in the year 1997. The population of Rajis according to survey was 425 which include 102 households. According to my report it is decreasing in number. There are many causes behind that and they are –

- a) Due to the inadequate medical facility they are unable to take their children to the hospitals.
- b) Due to the malnutrition the child dies in foetus only.
- c) Due to the ignorance, illiteracy and shyness they never open themselves properly in front of any outsider or stranger.
- d) Due to the unhygienic conditions in the villages the diseases spread steadfastly.
- e) They are migrating from tribal area to other rural area or they are migrating from India to Nepal.
- f) Due to the habit of drinking local beer and smoking they die because of lungs and liver problems.
- g) Due to the unemployment and poverty they are unable to meet their local necessities. Hence, in the due course of time they die with hunger.

The number of males are much as compared to females but above 50 years the number is almost equal but above 60 years the females were reported nine in number and males were reported eight in number. Females are much more laborious than males. Due to habits of drinking and smoking they have turned themselves lazy and inactive. Above 25 years we can easily have an eye that the male number is becoming somewhat equal to females. The causes are as following :

- a) Females are much more hard working and laborious than males because they are lazy and inactive.
- b) Males are used to drink local beer and smoke and they drink much more than an average person, which is some time poisonous and draw them towards death.

The level of literacy is very low. Only 24.4% people are literate and 75.5% people are illiterate. In the category of literate males and in the literate females there is a lot of difference. But in the category of illiterate males and illiterate females there is not much difference. The higher literacy level was reported from the village kimkhola followed by khirdwari village respectively. The following are the causes which led them towards illiteracy.

- a) There is no facility of schools or any other educational institutions in the village itself.
- b) The schools which are outside the village are quite far from their places that they avoid their wards going there especially the girls because of the forest route.
- c) The marriages of boys and girls takes place at a very early age so they enter into household activities which makes them devoid of education as they have to start with some work for their livelihood.
- d) If some person starts teaching them in their village, then also they will not take advantage of the facility because they are shy and are not open to the outsiders.
- e) They lack trained teachers as it was reported that some institutions were opened which are now closed due to the lack of trained teachers. It was evident from the fact that some persons who claim themselves to be literate don't know even how to write their names properly.

In the field of occupation, varieties were reported as one occupation cannot make them

satisfied in meeting their desired needs. The maximum number of households was reported from the group which performs *chiran*, grass cutting and agriculture labour because they live in forest area where they get sufficient wood and grass to cut. They don't have to go at distant places to work the whole day. The sites are quite near to their houses. And when they are free from all these things they prefer to work on the lands of Kumauni people. Two households were reported which were engaged in service at Govt. institutions. One was Indra Singh who is a peon at C.D.O. office, Pithoragarh. The other was Kaman Singh who is a fourth class employee at the leprosy centre, Balwakot. Some households are based only on one field of source of income and the causes are –

- a) They are living quite close to the main motor road so that they can sell their products.
- b) The working hands are not enough to do other work and may be that person is living alone or along with his/her spouse so he has to depend on one occupation.
- c) Being nomads, they never remain in one occupation. It depends on the filed area in which they start to live again.

Raji people are very poor and they are considered to be below poverty line. The monthly income is so less that they can't even save the money for an emergency. Maximum no. of households were reported which were carrying Rs. 500-1000 per month which is not sufficient to meet their necessary needs. According to the Dhan Singh of Ganagaon "*Hum Jitna Kamate hai who usi din khatam Ho Jata Hai*" (Whatsoever they earn in one day it is wholly spent on that day only, nothing remains to be used on the next day). Very few households were reported which were earning between Rs. 2001-2500. They are many causes of being so poor and they are as following :-

- a) Food production is less because they don't have sufficient land to cultivate and on the other hand their production is of low standard due to the ignorance of using pesticides, fertilizes etc.
- b) Due to the illiteracy they are exploited by the money lenders and other outsiders.
- c) They spent their money on drinking local beers and in smoking.
- d) Their traditional art of making wooden implements is day by day deteriorating so they are unable to gain much from them.
- e) The males of this region are so lazy and inactive that they are dependent on females of their houses. The females are much more active than the males and the drawback with the females is that they can't go outside to work in that region. So they earn less.
- f) Due to the shyness and illiteracy they are not open to the outsiders so it plays like a hurdle in the development.

The land holdings of Raji households are not much in Nalis. They have been allotted a small piece of land but due to the distribution of the families into nuclear ones., the lands are becoming small and they are not fulfilling there daily needs. The other cause is this that due to the habit of nomadism they change their place to the other and they become deprived of lands. Sometime they sell their lands to the moneylenders.

Most of Raji families are small in size. They have either one or two members in their house or three to four members but above that very few families come. They have nuclear sub nuclear families and very few joint or extended families because just after the marriage they separate themselves from the family to avoid feud and they also disintegrate when their local deity asks them to move from the village. There is one more cause which was reported from Altadi village that to lessen the burden from one household they separate themselves along with their families.

Livestock position is also not well in the villages. They are not in good conditions. The number of cattle in nine villages is less. This is due to many causes and they are-

- a) Due to the unhygienic conditions in the village they suffer from the diseases which are not curable and they are not aware of it so they die in such conditions.

- b) In the search of fodder when the cattle are made free they fall from the hilly slopes and die.
- c) Often it was found that due to the unavailability of fodder, cattle become weak and insufficient for the fieldwork and sometimes die.

In short, Rajis are in pitiable conditions. Government is also working on their problems regarding the overall development of Rajis and succeeded in few spheres but the major problems like illiteracy, and lack of hospitals made their conditions deteriorating and population decreasing. If such conditions continued in future it is not surprising that one day they will get extinct.



Caste Solidarity in Managing Social Networks: Evidence from the Western Himalayas, Himachal Pradesh

Syed Aiman Raza²

Introduction

Harsh environmental conditions are synonymous with the mountain ecosystems. This impels the mountain communities to develop strategies to overcome the vagaries of nature for their survival and in turn brings an interplay of solidarities. The paper is based on ethnographic data gathered from Jangi village in district Kinnaur of Himachal Pradesh, and attempts to document, how village solidarities among the Kolis (weavers) caste group shape up and help them to sustain a livelihood through social networking. Here the documentation of social networking can be seen as an indication of how small and combined efforts can make a job sustainable along with creating a we feeling among the members of the caste group. This paper can be seen as contributing to the growing body of literature on sustainable development and social dynamics in mountain ecosystems.

Rugged terrain, inhospitable climate and lack of fertile land for agriculture, characterises the mountain ecosystems. Hence, survival is always at stake for all those communities inhabiting these regions of the world. We often find in mountains, the land use practices and many other survival strategies are a product of a long history of creative adaptation to local environments and ecological conditions such as climate, terrain, soil, water, air, plants, and animals (Raza, 2007). These adaptive practices have given rise to 'indigenous knowledge' that enables these people to live well and with confidence in diverse and sometimes harsh environments, as well as develop their livelihoods, such as weaving, hunting and gathering, shifting cultivation, nomadic pastoralism and terraced agriculture, as

² Department of Anthropology, Shia P.G. College, Lucknow

well as trade of natural and cultural products through social networks.

Analyzing this socio-cultural dimension of human engagements with non human environment and to identify the traditional knowledge of the people that informs this relationship, is the core purpose of this research paper. Concepts like 'indigenous knowledge systems' and 'social networking' have been used to highlight the nexus between culture and environment, which has helped tribal communities around the world for their livelihood sustenance. Both these concepts in the present perspective have an important bearing as far as sustainable development of communities is concerned.

Faith in the resourcefulness of the indigent has led many contributors to the discourses in sustainable development towards building up an information base in indigenous knowledge. Dei (1995) for instance, among others (Singh and Titi, 1995) views indigenous knowledge as a fundamental tool for the empowerment of the poor in the world's drive towards sustainable development. Drawing from the information he gathered in the West African region, Dei (1995) argues it is increasingly been realized that the establishment of a more humane society in a globally transformed world will depend on the extent to which common struggles are based on the internal linkages between people's histories, heritage, philosophies, value system and knowledge base. This knowledge draws on the common sense ideas of local people about the everyday realities of living. Indigenous knowledge is a worldview that shapes how people relate to their environment. It may be holistic in outlook and adaptive by nature, gathered over generations by observers whose lives depended on this information and its use. It often accumulates incrementally, tested by trial-and-error and transmitted to future generations orally or by shared practical experiences (Ohmagari and Berkes, 1997).

An important feature of indigenous knowledge system, especially where poverty is prevalent, is the tendency to spread income generating knowledge. This is an almost induced phenomenon where collaborative action, brought about by normative behaviour through kin groups, neighbourhood ties and household linkages, lead to spill over from one area to the another. A spill over of information is an important manifestation of indigenous knowledge base over which the local inhabitants feel a sense of collective ownership. A spill-over in the present context is the transference of local knowledge from one place to the other, from one person to the other, who are either close by or who live in distant places. Thus, the main function being, to empower people and generate local solidarity and assist in building sustainable livelihoods.

Therefore, this paper attempts to analyse the horizontal caste solidarities which has led to a formation of social networks among the Koli (weaver) caste group in Jangi village (altitude 2790 m) of Morang Tehsil in Pooh Division of Kinnaur district in Himachal. Such horizontal ties of castes are important, as in several spheres of life members of same caste and those connected with affinal ties tend to act together and help each other. These extend the interactive network and social space of a village well beyond its boundaries into neighbouring areas (Marriott, 1955). The Koli caste group, as we know does spinning, weaving, tailoring and also play musical instruments in the temples every fortnightly. Now days due to paucity of money and regular income some of them have switched off to wage earnings in construction and development projects in and around the village.

In documenting social networking, structured interviews were taken up. There were also even 'depth interviews' in which I allowed the respondents to express themselves freely

about their subjective dimensions. Building up the profile of this target group, certain common aspects were researched. Their ages, the distance of their natal homes, number of items manufactured and so on. Life histories were taken up to build up a detailed generic development of the sample group. Profile building was time consuming and required more than one visit to most of the people who were interviewed. Collective time spent ranged from between two to three hours, which was spread over several visits. Reconstructing the 'life histories' on how they acquired their knowledge or dispensed with it for the benefit of other required careful backtracking of thoughts that pointed towards many directions in the Tehsil.

Social Networking among the Koli Caste Group

For the study, I have selected the Koli (weavers) for a simple reason, that they are numerically second highest (97) out of a population of a total population (668) and secondly, that most of them are still pursuing their traditional weaving for sustenance of livelihood. Thus, in a way showing that local structures and indigenous knowledge systems are still crucial for sustainable development strategies as well as maintaining the ethos and culture of the village life.

The sample size of the Kolis interviewed was 60 from a population of 97 people. Others were casually spoken to, to get affirm information, elicited from the interviewers. Out of the 60 Kolis who were interviewed, only 14 Kolis (both male and female), provided information on social networks. This helped in reconstructing on how they acquired the knowledge of weaving, designing and stitching from kinship networks which included friends in neighbourhood, and kinship ties in and outside the village.

The information gathered can be seen in table 2.3, reflects on several important aspects of social lifelike kinship networks, neighbourhood ties and more importantly how they galvanize together to sustain a living out of such a meagre occupation.

Another important point to note here is that these 14 Kolis who are shown in table 2.3 are those who have learnt the trade from someone who is away from their home. All those who got the knowledge from their own parents or family members living in their homes, are not shown in table 2.3. Another important point to note here is that the earnings shown in table 2.3 ranges over a month to a couple of months, because some of the garments like Dhoru and Chubba takes approximately two to three months in getting finished. Moreover, the earnings shown in the table are 'individual earnings'.

Table: 2.3 Social Networks (These are individual earnings)

No	Age	Sex	Network	Distance	Types of Items	Earning (Rs)	Total Rs.
1	18	M	Fathers elder sister	20 km	1 Chubba-Long coat 2. Suthan- Woolen Trouser 3. Thefang-Cap	2000 200 120	2320
2.	23	F	Father's elder sister	12 km	1. Choli - Blouse 2. Tefang - Cap	200 120	320
3.	36	M	Father's brother	20 km	1. Chubba- Long coat 2. Suthan-Woolen trouser 3. Dhoru - Woolen sari	2500 250 4000	6750

4.	45	F	Mother's mother	15 km	1. Dhoru- Woolen sari 2. Pattu- Shawl 3. Samu Kurti -Kurti	2700 3000 900	6600
5.	28	F	Mother's elder sister	12 km	1. Shalwar / Kurti 2. Choli-Blouse 3. Tefang-Cap	120 200 60	500
6.	18	F	Mother's brother	15 km.	1. Kamez- Shirt 2. Shalwar Kurti	60 100	160
7.	26	F	Maternal cousin (Mo ElSiSo)	20 Km.	1. Choli-Blouse 2. Shalwar Kurti 3. Pattu- Shawl	150 120 2000	2270
8.	49	F	Mother's Younger sister	12 km.	1. Tefang- Cap 2. Shalwar Kurti	100 120	220
9.	36	F	Father in law	12 km	1. Pattu- Shawl 2. Choli- Blouse 3. Shalwar	2500 150 100	2750
10.	41	M	Friends in neighbouring village	8 km	1. Chubba-Long Coat 2. Suthan-woolen Trouser 3. Kameez-Shirt	1800 200 60	2060
11.	28	M	Friends in neighbouring village	8 km	1. Shalwar Kurti-Kurta 2. Dhoru-Woolen Sari 3. Kherach-Mat	100 3500 400	4000
12.	55	M	Friends in neighbouring village	12 km.	1. Dhoru- Woolen Sari 2. Sanukurti-Kurta	4500 800	5300
13.	62	F	Neighbouring households	–	1. Dhoru- Woolen Sari 2. Pattu-Shawl 3. Kherach-Mat	2500 2000 200	4700
14	25	M	Neighbouring households	–	1. Shirt 2. Shalwar Kurti 3. School Uniform	60 120 200	380

On analysis, table 2.3 highlights the age, sex, networks, the source from where they got the knowledge, its distance, the type of items they made and lastly their income. Numbers one to three reflects connections with paternal relatives, numbers 4 to 8 reflect connections directly from maternal relatives. Number 9 who got married at an early age learnt the art of weaving and stitching from her father-in-law, after her husband died. 10, 11 and 12 learnt stitching and weaving from friends in neighbouring villages, and lastly 13 and 14 learnt from neighbouring households. The earnings show some fluctuation in the prices, this is due to the fact that some are simple while the others involve complex embroidery and hence they are a bit expensive. All these activities, one could say, lead to common forms of social and household patterns, giving rise to a cultural and economic ethos that is impossible to ignore.

The Cultural Ethos Linked with Social Networking

One can easily notice that behind each individual's earnings there is a set of activities, which highlights the social context in which the production occurs. These activities are an illustration, which anthropologists have been stressing for decades, on how social is tied to the economic and how both the activities are linked to their domestic homes, if not to the global economy. The social and economic are inseparable especially in rural areas. This does pose a major challenge to the protagonists of economic growth theory which since world-war two have consistently ignored the value of social factors in economic growth.

We see that apart from having a strong economic value of clothes, there exists a significant cultural link between clothes and culture. It is seen that especially in weddings and gift giving ceremonies, clothes like Dhoru, Pattu, Samukurti, Chubba etc. forms an integral part of marriages. They become an important medium that reinforces social relationships and indigenous hierarchy to a certain extent. Gifts are given to the parents of bridegroom and also to the bridegroom in all wedding ceremonies. The present ability and workmanship are generally expressed in appreciation at the time of gift receiving. Apart from this, the above clothes are also worn in festivals, rituals and birth ceremonies and help the people in maintaining a distinct Kinnaurese identity. Moreover, the Kherach (mats) prepared from the wool of sheep or goat, helps to insulate cold surface of the floor in winters. The Kherach acts as a buffer against the cold and then the individual cover themselves with blankets. These Kherach are also used when some friends or relatives visit the house. Traditionally they are expected to sit on the Kherach woven by the Kolis. Another aspect which is linked with culture and economy is the symbiotic relationship which is called the Binana (mutual co-operation) between the non-artisans and the artisan groups in non agricultural field only. This type of exchange persists between the Rajputs on one hand the Koli, the Lohar and the Badhai on the other. Keeping it in the Kinnaurese context, here, just a small reference to it is made to link the Binana System with the issue of social networking in the cultural context.

With the Kolis, the Rajputs have two types of Binana, depending on the nature of work done by them. One is Bonu Binana and the other is Sui Binana. For the above two Binana a close relationship develops between the two ethnic groups. Where the Koli are weavers, they serve the Rajputs by weaving their clothes; the Rajputs establish a Bonu Binana with them. Under this, the Rajput give the Koli, a quantity of wool which the later spin and weave and make required woollen clothing. In lieu of this service, the Koli weaver gets cash and sometimes cereals. Sui banana is present between the Rajput and the Koli, who tailor the required woollen or cotton clothing's for the Rajput. In exchange, the Koli gets his remuneration in cash or sometimes he gets paid in cereals. I suggest that this traditional interaction persists because, regardless of the economic and political changes that have occurred, it continues to be of fundamental importance to the maintenance of the social status and patterns of social interaction that are essential for strengthening the rural social structure and in a way also helping on to build upon local creativity and entrepreneurship in vulnerable environments.

Spreading the knowledge through networking

Everyone whose account is mentioned in table 2.3 has acquired knowledge from their neighbourhoods or from some initiative that was a product of the spill over from another area. The spill over to them occurred through various processes, including chance. The recourse to knowledge of weaving is based on the common will by those who have to ameliorate the impoverished statuses of kin, friends and neighbours. The willingness to share knowledge and ideas stems from solidarity. There is a special tendency to filter this knowledge to kins who do not have any income. There is a feeling of commitment among

household members to participate in the activities, especially since each 'ones' survival is at stake. Therefore this organizational pattern among the Kolis ensures the spreading and survival of knowledge in weaving, stitching and tailoring. Each member of the household ought to have at least a basic knowledge of the working patterns, which in turn introduces other well meaning kin or neighbours in it. In this way the dignity of the household and wider community is sustained.

Moreover, if we look at table 2.3 then we can notice an equal participation from the female Kolis, which brings into light that how self initiative and collaborative action by the weaker section can contribute towards the capacity to survive in areas with poor infrastructure and proper support mechanisms. They have demonstrated an ability to match their counterpart males in earning as much they are earning. There is a sense among young women about self worth and dignity. When questions regarding self employment or achievements were asked, the only response from them was that they were strong willed and wanted to remain self employed. One of the women even got emotional while answering me, she summarized her point in succinct terms: "I work to feed and earn for my family so that when I am not alive, there is much to take care of many young ones." This woman spoke to me at length about how she supplemented her income by going door to door for work related to weaving and stitching. She even managed a plot of small land on which she did subsistence farming. The land provided her with some vegetables which were used for daily consumption. She even had planted apple cuttings which would take few years to become beneficial. Thus all the women take personal credit for resource management and earning for their family. But somehow they are unable to notice the function of social networking behind all their endeavours.

Conclusion

The documentation of social networking here, in it self is an indication that how small combined efforts of local people can make a meagre job sustainable. The study of social networking among the Kolis of Jangi reflects the dynamics of indigenous knowledge which opens new vistas for the government agencies to look into. The horizontal solidarity among the Kolis presses the need to recognize the application of social networking based on indigenous knowledge around various parts of the country, especially in rural areas. This will certainly ensure sustainable development when and where ever applied. The strong horizontal ties helping to form networks, reflects the helping attitude of a lower caste towards its caste members, thus becoming a basis for further research into caste studies.

References

- Dei, G.J.S. (1995) 'Indigenous Knowledge as an Empowerment Tool for Sustainable Development', in Naresh Singh and Vangile Titi (Eds.) *Empowerment: Towards Sustainable Development*, Halifax, Canada: Fernwood Publishing.
- Marriot, M. (Ed.) (1955) *Village in India: Studies in the Little Community*, Chicago: University of Chicago Press.
- Ohmagari, K. and Berkes, F. (1997) 'Transmission of indigenous knowledge and bush skills among the Western James Bay Cree women of subarctic Canada', *Human Ecology*, Vol.25, pp.197-222.
- Raza, S.A. (2007) 'Forces of globalisation, dynamism and diversity in the agro-ecological productionsystem: a study in sustainable development from a hill tribe in Western Himalaya', *Int. J. Agricultural Resources, Governance and Ecology*, Vol. 6, No. 6, pp.666-678.
- Singh, N. and Titi, V. (1995) *Empowerment: Towards Sustainable Development*, Halifax, Canada: Fernwood Publishing Ltd.



ISSN: 2348-4667
Anthropological Bulletin
5 (2), 27-34, 2015

The Daily Grind: An Analysis into the Day To Day Socio-Economic Problems Of The Nawabs Of Lucknow

Syed Aasim Rizvi

Introduction

The culture and pattern of life which developed during the magnificent era of Mughals, in the sixteenth century in Delhi during the reign of Akbar, after its disintegration started to diffuse across the Avadh (Oudh) as certain leading figures left Delhi and eventually found a new home in Lucknow, where the independent court of Avadh was established in 1753. The highly developed culture brought by them was further refined in Lucknow to the level of sophistication scarcely paralleled in any other Indo- Islamic society.

Pahle –Aap ‘after you’ was a phrase of welcome in old Lucknow and especially imbued with the mannerism of Lucknow’s past usually associated with the Nawabs. Arabic Nawab, plural of Naib: ‘Deputy’, but used honorifically as a title. Under the Mughal government the title of Nawab was prefixed to the name of a high official and the Viceroy or Governor of a Province. At the time of disintegration of the Mughal Empire, some of the Nawabs became independent rulers, hence the word came to a common title for a Muslim sovereign in India. The title was retained by the British Government of India who would confer it upon a Muslim of a high rank or a dignitary without any office being attached to it. In 1947, the Republic of India, abolished the creation of new Nawabs of Avadh had the title prefixed to the names of all the members of the family including the women. This practice continued among the Muslim aristocracy in Lucknow, even after the demise of the ruling dynasty. It actually survived, however, as long as the feudal system survived in Uttar Pradesh- that is until the British left India in 1947.

Since then, as expected, the process of evolution has transformed the physical, social and cultural landscape of the people of Lucknow, especially the Nawab families, whom ancestors were regarded as the richest and endowed with mannerism and finesse. The culture of Lucknow like that of other countries at different times and places couldn’t retain its status quo. It required a constant re-examination of its value system for the quest of new goals in order to infuse fresh vitality in the society, which seems to have ended at the death of Nawab Saadat Ali Khan. Its depreciatory effect over a period of time disturbed the apparent tenuous internal equilibrium people had acquired between humans, morals and society. From the external side, a slight push from the British proved to be a sufficient catalyst for its destruction. People appeared to have neither the will nor the strength to strip

away the layers of style before substance.

Hence the social institutions and the economic status kept on degrading for the whole society and also of the Nawabs as well. Thus, the present paper on the socio economic profiles of the descendents of Nawabs, traces the sociological analyses of their economic life. The paper also contributes to the linking of micro levels of analysis of money management which has helped many Nawab families today to manage their resources, when the whole world seems to be reeling under severe economic stress, caused by recession.

Methodology

The most important sources for the findings reported in this research are the words and actions of the poor Nawabs themselves. In particular, I have relied on a qualitative year long observation with indepth interviewing having both structured and unstructured interview schedules. A total of sixty households belonging to the descendents of Nawabs were selected on a random basis from the list which was provided by the Office of Husainabad Trust, which still maintains a register which holds the names and addresses of all the surviving Nawabs of Lucknow. Two research areas were selected which had a majority of Nawabs, were Raees Manzil near Husainabad and Ghazi Mandi in old city area of Lucknow.

The intensity of getting to know the characters in the research gave an indepth insights into the socio economic mode of life and as well as their financial behaviour though out the year. Stress was laid to gain a deeper and more personal understanding of the families of Nawabs and how they were coping with their present financial conditions. Thus keeping this in mind a complete qualitative analysis was used to capture the richness and complexity of poor Nawab's financial lives while being systematic enough in data collection, just to prevent it from being dismissed as a set of mere anecdotes.

The Daily Grind: Socio-economic Problems of the Nawabs

Recession has played an important role in deepening the woes of the poor, especially in the third world countries. The impact of recession is huge- there are definite signs of job losses, loss of income, high expenditures and an unusual increase in food prices. It then becomes just unimaginable when we take into account the poor from the third world countries, whose life depends upon the earnings, which are vulnerable to economic fluctuations and seasonality. This dilemma of poverty becomes more pathetic when these earnings are just less than 2\$, working for more than eight hours a day. Living on less than two dollars a day for a household is nothing but misery which is compounded when their earnings are marred by seasonal fluctuations and irregularities. Thus, the present study is an ethnographic account of the Shia population, especially in this context the descendents of Nawabs in Lucknow, who are reeling under intense poverty and suffering as a result of living on pittance.

Case Study of Mohammad and Shaheena

Mohammad belonging to a family of Nawabs in Husainabad was 37 when I met him and his wife Shaheena only 29, though their oldest son Iqbal was by then at least 14. They had three more children, all sons, and Shaheena was pregnant again and delivered her fifth son midway through the research year ("No more!" she told us). Day by day, Mohammad and Shaheena focused on managing life on a dollar a day per head – and sometimes less. Their strategies, and those of other interviewers, are the subject of this chapter. I will see how their money management respond to the challenges of living on income that is both low and uncertain, and how doing so determines much of their financial lives.

It is not just the low value, but also the uncertain timing of their incomes that makes money management so important for poor households, and so it was for Mohammad and Shaheena. Institutions such as the United Nations and the World Bank usually focus on explaining why incomes, totaled over the year, are so low,

and what can be done to raise them. But the unpredictable ups and downs of income are also an important part of what it is to be poor, and they cause many of the specific challenges faced by the households I came to know.

The low returns and uncertain availability of work opportunities lead households like Mohammad's to patch livelihoods together from different sources, each irregular and unpredictable. For a while, Mohammad, who generally pedaled a hired rickshaw. On good days, he earned Rs112.5 \$ 2.50. Most of the time, though, he pedaled a rickshaw – extremely demanding work that only the very fittest can do day after day. Mohammad, like most men of his age, found it too exhausting to do for more than four days a week. Even when he was working, his earnings fluctuated with weather conditions, political strife, harassment by the police, and simple good and bad luck.

Towards the end of the year, their teenage son, Iqbal, got a job in a garment factory at Rs 1215 (\$ 27) a month, Iqbal, who had never attended school regularly, then gave up scavenging for scrap materials for a dealer in their area. His younger brother Salauddin, 10 continued to rag-pick, and earned Rs 270 (\$ 6) in a good month. After the new baby was born, Shaheena returned to a job working as a maid, earning some Rs 450 (\$10) a month. Taken together, total house-hold income peaked at an average of Rs 141.3 (\$ 3.14) a day for the seven of them. In bad times, it fell as low as Rs 85.5 (\$ 1.90) a day.

Making these uncertain income flows deliver a stable home life was a constant preoccupation for Mohammad and Shaheena. Most of the time they succeeded. They never had to beg, but they did skip meals and the quality of their food varied. Sometimes I found them eating hot meals three times a day – mostly rice and lentils, sometimes a bit of fish, or, as a rare treat, beef. Usually, though, they ate twice, and in really bad times just once a day. But at least they ate something every day, and it is a tribute to their resourcefulness that they managed that.

Mohammad and Shaheena and their family survived thanks in part to financial tools. In the year I spent with them, Mohammad and Shaheena did not, for example seek a "microcredit" loan to fund the expansion of a small business. True, Mohammad could have earned more if he owned his rickshaw rather than renting, and a loan would have hastened the purchase. But, as I show below, he had good reasons not to do so. Others looking at the couple's situation might instead stress the importance of helping people like them to save to build up meaningfully large assets. Borrowing and saving for the long term are indeed important to poor households, as later chapters show but long-term goals are not the primary financial concern of most households I met. Instead households like that of Mohammad and Shaheena borrowed and saved mostly to meet pressing short-term needs, their main objective was cash-flow management. Being able to manage immediate needs is a precondition for considering long-term ambitions – but the way that poor people achieve it has received scant attention from policymakers and others arguing for financial access for the poor.

The most basic objective for households like that of Mohammad and Shaheena is to make sure that there's food on the table every day, and not just on days when income flows in. The poor households I met actively employ financial tools not despite being poor but because they are poor. When it came to managing money, Mohammad and Shaheena put a premium on the flexibility and convenience of their financial tools, even though those tools are not always reliable. Their juggling reminds us that money is fungible – it can be split and combined in a number of

ways.

Nawabs and Chikankari

There were other waged jobs and have one or more members of the household working in the Zardozi and Chikan karkhanas (workshops). Some nineteenth-century accounts suggest that Lucknow Chikan was not made by embroiderers for their personal use, but primarily, if not exclusively, for exchange. The differentiation of fine from cheap work was evident well over 100 years ago. William Hoey's account of northern Indian industries and George Watt's catalogue of the 1903 Delhi handicrafts exhibit some 20 years later allude to women (and children) as the makers of cheap work, meaning that all other workers, by default, must have been men. "Men appear to have made fine work in their karkhanas (workshops), while women and children worked at home under their direction on cheap piece work, typically containing only one kind of stitch (as the cheapest work does today). Possibly, early female embroiderers were upper-class women whose families fell on hard times following the Uprising of 1857, although whether they were applying a skill previously adapted to use value production or only encountered embroidery as exchange value production is unknown." Fine work was made on a contract basis for an elite local clientele. Aristocratic men, ordering caps and angarkhas (long, embroidered coats) were important consumers of fine chikan" Sharar (1975).

Unpredictability and Low Incomes

With changing times both Chikankari and Zardozi artisans were affected by low incomes and seasonal variations in earnings. The diary sample here, shows the income of Nawabs who are involved in Zardozi (embroidery) as an occupation. I am highlighting Zardozi (embroidery) here for a simple fact that almost all the households had at least one member who was involved in Zardozi (embroidery).

The family needs for food, shelter, education of their children and health concerns are all taken care of from whatever is earned on a weekly basis. Either the Zardoz are self employed or they are Karigar at a certain Karkhana. The Nafri (wage) is very low which ranges between Rs 110 to Rs.140 for 8 hours of work. Being self employed, the Zardoz brings work from local boutiques or Offices (who bag orders from exporters and showrooms in metros). These Offices are sometimes run by a Karkhandar (person who employs wage labourers in his Karkhana for Zardozi, at a certain Nafri (daily wage). As the orders are huge, they in turn distribute the work to their Branches (group of Zardoz working for a particular Karkhandar). But these days, in local Zardozi parlance, the term Office refers to a place for getting the work, and the person distributing the work to the Zardoz, might not be a Karkhandar himself.

The distribution of work is based on the work skills of the Zardoz concerned and their interpersonal understandings. The Office makes sure that the self employed Zardoz embroidering a piece of cloth does it at the lowest possible Nafri. It is at the time of negotiations that the cloth and design in the form of a printed picture or a Khaka is given to the Zardoz, who then tries to quantify the number of Nafri which will be needed in order to prepare the piece of cloth. The rates are then decided at that moment, but the dilemma remains that the Nafri might exceed the amount negotiated with the Office, which happens quite often. Many a times the Office rejects the completed piece of cloth in case housefly excreta or discoloration of threads is spotted at the time of delivery. The Zardoz is helpless as he has to keep the completed Nag (rejected embroidered piece) with

himself and has to pay the Nafri from his own purse to all those Zardozi Karigars employed during the completion of the embroidered piece. The Office in turn cuts the cost of the cloth from the payment amount kept as dues. These dues guard the Office against losses which could incur due to the discoloration or any other patches which reduces the quality of the completed fabric.

Syed Sajid Husain (50) a self employed Zardoz works in his own Karkhana, along with his two sons- Shahzade, (21) and Raja (10). Sajid tries to give insights into the intricacies and work principles involved in Zardozi and reasons as to why the Zardoz are not able to get the work directly from the metro cities and shops, and have to depend upon the Offices for work.

A few voices have been raised during the last couple of years to increase the Nafri, but to no avail. The government has turned a blind eye to the demands of this poor artisan class.

Seasonal Earnings of Nawab Households attached to Zardozi

The average income for a household in Raees Manzil (Fig.1) during the *Madda* (*Lean Earning Period*) and *Season* (*High Earning Period*) this year was Rs 2582.98 (\$53.79) and Rs 6150.73 (\$128.13) respectively, while that of Ghazi Mandi (Fig. 2) area during the *Madda* was Rs 3762.40 (\$78.39) while Rs7567.77 (\$157.66) in the *Season*.

These averages don't show the true picture of earnings because these are not individual earnings per month, but an average of a composite aggregate of all the household members working on Zardozi.

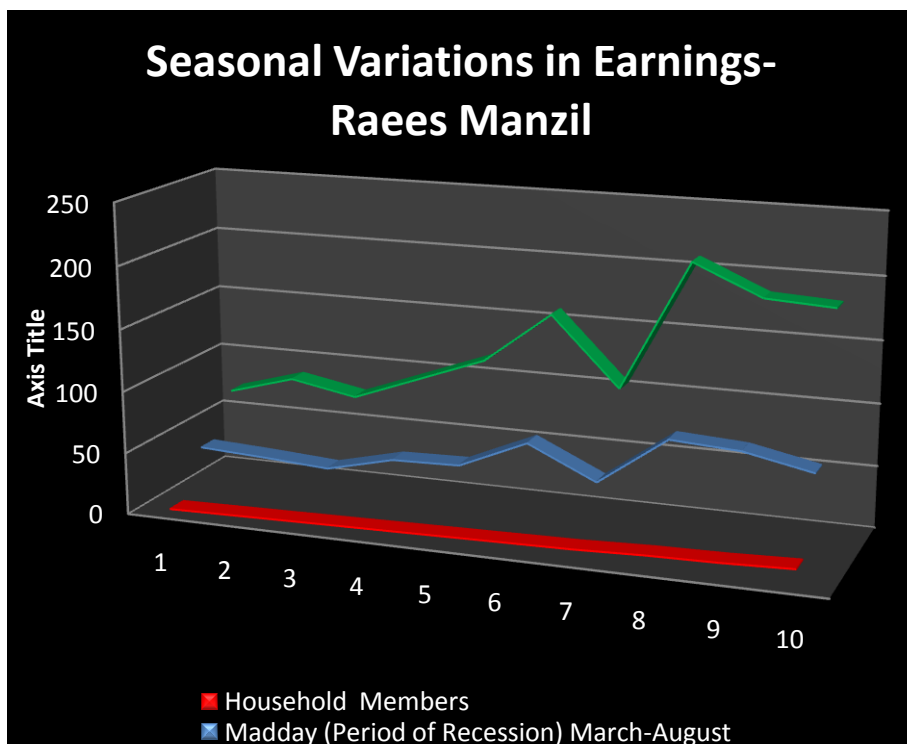


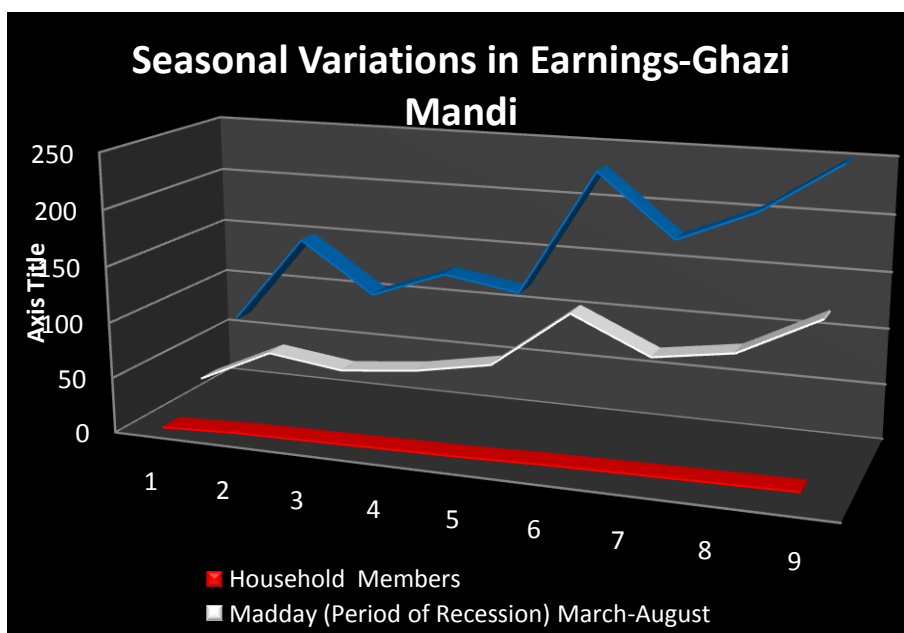
Figure.1 *Seasonal household variations in US Dollar -Raes Manzil*

Figure 2. Seasonal household variations in earnings-Ghazi Mandi

Small Scale lending and Borrowing

To manage day to day, the households patched and stretched their savings and their loans, a strategy that was called into play whenever an employer failed to pay on time, a spell of unemployment hit, or a visitor suddenly arrived, to name just a handful of reasons. Perhaps because saving is something that an individual or a household can do without involving others, virtually every household saved. For example, not a single one of the 60 households, even the very poorest, was without some form of do it yourself saving. And yet for none of these households was saving-at-home a sufficient strategy: all of them had to turn to others in their community to bolster their capacity to manage their money. So while saving was the most ubiquitous instrument, much more cash food through loans, when I looked at all withdrawals from saving and loans taken by the households, including the very smallest transactions of each type, loans outnumbered savings withdrawals by four to one.

Overwhelmingly, the loans were taken locally, in the "informal market". 88 percent of all borrowing deals were informal, a figure that climbs to 92 percent for the poorest part of the sample.

While moneylenders loom large as lenders of last resort, charging fees that can stretch the capacities of borrowers, informal-sector borrowing usually means paying zero interest, and in general the smaller the sum the more likely is to be the case.

After home savings, interest free borrowings was by far the most frequently used financial instrument in all three countries. It complements rather than

contrasts with the households' attempts to save at home, because interest free borrowing and lending is in essence a way of harnessing the savings power of a neighbourhood or family network to address the cash-flow problems of its individual members. To tap into this network the diary households needed to be part of it: the portfolios of the poor are thus portfolios of transactions and relationships. Better-off people might manage money on an everyday basis with a credit card. For the poor households in our study, the main strategy was to turn to each other, using one-on-one lending and borrowing between friends, family, and neighbours.

These interest free borrowings and lendings were ubiquitous among all the households. Interest free borrowing and interest free lending relate to each other in interesting ways. Often there is an understanding that the borrower will return the favor and lend when the need arises: I call this "reciprocal" lending and borrowing. In other cases, the borrowing flows one way and the creditor in one deal is unlikely to become the debtor in the next: this might be called "obligatory" lending since it depends on the lender's sense that he or she is obliged to help out the borrower with a loan. "Obligatory" lending appears to be common in where there are many fewer reports of interest-free lending by the diary households themselves than of interest-free borrowing. This suggests that many poor people go to wealthier people (people outside the range of our enquiry) for such loans - better off family members or employers, for example, who feel some sense of responsibility to help out.

Conclusion

Stark realities emerge from this research and that has always bewildered me for several reasons- the foremost being how people are able to survive with such low incomes. One of the biggest challenges of living on two dollar a day is that it doesn't always come, which makes it impossible to plan out future expenditure and calculate one's own capacity to save or repay. My concern remains with how these Nawabs will be able to meet the challenges which the world will be posing for them in the near future? Expenses are mounting, inflation in India is unstoppable and showing an upward trend, education and health remains unattended due to a poor household economy.

From my conversations with the Nawabs they have an urge to move forward and free themselves from the clutches of the *Offices/Boutiques/Shops* who, with their corrupt practices, are pushing them over the edge. They believe there is nothing wrong with the profession, but traditionally, the way the Nawabs are victimized by a handful of middle men who have controlled their access to markets, dictated business terms, and siphoned off profits, creates images in their minds which are full of misery filled with an intense feeling to shun this occupation. There have been instances where the Nawabs have requested me to look for alternative jobs, so that at least the younger generation can move out and earn without being crushed on a daily basis for a few bucks.

They are fighting a lone battle for their families but they need help in order to educate their children and give them a better life which is free from corruption and erratic in earnings.

Although the Nawab households are under intense pressure to earn night and day, each member does his bit which keeps them far from hand to mouth. They remain close to their neighbours helping them when emergencies strike, but when bringing designs and orders from the Office they tend to hide it even from their

closest friend- for now it is their livelihood at stake. Reducing the plight of these poor Nawabswill require access to alternative jobs and they need to learn skills which they can apply when they have no work. A steady economic foundation is the need of the hour, along with helping them save money through instruments that are safe and easy to use. The lack of financial literacy remains a concern for them.

Bibliography

- Abolafia, M, 1996 *Making Markets: Opportunism and Restraint on Wall Street*. Cambridge, Mass.: Harvard University Press.
- Armendariz de Aghion, B and Morduch, J 2005, *The Economics of Microfinance*, MIT Press, Massachusetts.
- Arrow, Kenneth 1974 *The Limits of Organization*. New York: W.W. Norton.
- Becker, Gary 1976 *The Economic Approach to Human Behavior*. Chicago: University of Chicago Press.
- Chamlee-Wright, E 2002, 'Savings and Accumulation Strategies of Urban Market Women in Harare, Zimbabwe,' *Economic Development and Cultural Change*, vol. 50, no. 4, pp. 979-1005.
- Durkheim, Emile, 1893, 1964 *The Division of Labor in Society*. Glencoe, Ill.: Free Press.
- Eggertsson, Thráinn 1990 *Economic Behavior and Institutions*. Cambridge, U.K.: Cambridge University Press.
- Granovetter, Mark 1990 "The Old and the New Economic Sociology: A History and an Agenda." In Roger Friedland and A. F. Robertson, eds., *Beyond the Marketplace*. New York: Aldine.
- Iber, Max (1904) 1949 "'Objectivity' in Social Science and in Social Policy." In *The Methodology of the Social Sciences*. New York: Free Press.
- Parsons, Talcott, and Neil Smelser 1956 *Economy and Society: A Study in the Integration of Economic and Social Theory*. London: Routledge and Kegan Paul.
- Sharar, AH 1994, *Lucknow: The Last Phase of an Oriental Culture*, trans. E. S. Harcourt and F. Hussain (eds.), OUP, New Delhi. (Original work published in 1975)
- Yonus, M 2007, *Creating a world without poverty: Social business and the future of capitalism.*, Public Affairs, New York.

Morbidity Pattern among the Tharu Tribal Population as an Indicator of Health Status

Pramod Bihari Shukla³

Abstract

A thorough examination of the morbidity profiles among the Tharu tribal population and an evaluation of the related factors are required to improve the delivery of health care to the different Tharu groups and to estimate the cost of that care, a total of 1,722 subjects were randomly selected from September 2002 to August 2003 in the five districts of Tharu inhabit area. Data on socio- demographic and health characteristics were collected using a structured interview schedule. When available, the medical records and medications taken by the subjects were also cross-checked. Of the total subjects, 15.04% reported Cholera/ Diarrhoea, followed by Malaria (12.66%) and Anaemia (11.03%). The most common morbidities were Chicken pox/ Measles, Malaria, Meningitis, Pneumonia, Respiratory diseases, Tuberculosis and Skin and nail infection are due to the environmental or sanitary habits and personal hygiene. Morbidity was significantly associated with employment, household income, alcohol intake, self-assessed health status, and worries about health. These data will enhance understanding of the patterns of health problems among different Tharu groups and will contribute to the application of appropriate intervention strategies.

INTRODUCTION

It is a well established fact that there is a relation between type of disease and ecology. It has been observed that there are some particular diseases which are found in certain ecology and the people who live in these areas also suffer from these disease. It is true that apart from ecology and climate condition there are also some social and economic factors like belief, practices, knowledge, education, occupational pattern, income, food habits etc., which directly or indirectly act as barrier either to eradicate or to diminish the frequency of incidences of the disease prevalent and the frequency of cases become high due to some socio- economic factors.

Modern medicine has had a primarily biological orientation (Jaco, 1958) but the basic

³ *Department of Anthropology, University of Lucknow, Lucknow*

Acknowledgements: This work was supported by the Ministry of Tribal Affairs from the Government of India, New Delhi. We thank Mr Parijat Nagar for helping to conduct field work among different Tharu groups.

concern with social and cultural aspects of the maintenance of health and the etiology of disease is deeply rooted in medical history. Since the first five year plan period, steps for preventive and curative measures for better health were taken both by the government and voluntary organizations, but till today the modern health programmes are not well accepted amongst the rural people of this country, more particularly among the Scheduled Tribe communities. Generally, the Scheduled Tribe people live in remote and inaccessible areas. It is common belief that illness is a punishment for wrong doing, which is wide spread in human society. Where it occurs, the social order is identified with the moral order of a universe in which health depends on virtue. The difficulty of defining disease is implied in the very structure of the word: 'dis- ease'. So many different kinds of disturbance can make a person feel not at ease and lead him to seek the aid of a physician that the word ought to encompass most of the difficulties inherent in the human condition.

Concept of Health

Health is one of the fundamental human rights. The international organization like the United Nation and the World Health Organisation has endorsed this principle.

Unfortunately, the health cannot be given or distributed, but has to be actively acquired and won. In order to know the ways of preserving and promoting health preventing and conquering disease, it is necessary to understand that one could be able to take proper measures and care necessary to built up health.

Concept of Illness

It is generally observed that the concept of health and disease in a society vary according to the social- cultural levels of the different states of society. The higher income groups with higher level of education, living standard and better knowledge affect the concept of health and disease as compared to the predominantly illiterate and lower income groups. In the tribal societies the differentiation is of rudimentary character and the socio-cultural levels are rather homogeneous. Where all failures, disappointment, suffering or material loss are attributed to evil spirits who constantly struggle for mastery and control over the destiny of man and receive the greatest attention everywhere among the tribal societies. So in all societies, primitive or advanced various charms, amulets and similar practice are used.

Morbidity

There are hundreds of diseases which kill persons and sometimes more than one disease leads to death. Morbidity refers to the study of diseases in a population. In India it may be observed that fever- which includes Malaria, typhoid, measles, diphtheria and meningitis has been a very important cause of death. Since diseases often cause death, morbidity is an important factor in population structural analysis. However, morbidity may be a more useful indicator than mortality, since it is related to the pain and sufferings of the people, while mortality is a terminal event. But the problem with morbidity is that it is difficult to measure without bias. Despite these well- recognised problems and difficulties of measurement, there can be little doubt that good information on morbidity is extremely useful (Sen, 1998). The morbidity is primarily influenced by the behavioural decisions of the individuals or family, besides genetically inherited health endowments and the health environment in which they reside. Thus, illness is not a random event, but one that is systematically related to the household- and community-level factors.

Self-perceived morbidity measure is based on morbidity information, pertaining to incidence or prevalent rate of illness, type of illness, functional disability indicators and use of medical services, collected through surveys. This measure however, critically depends upon a person's knowledge and perception of illness, and willingness to report the same. As

many scholars argue (Riley 1990; Johansson 1991; Vaidyanathan, 1995) such as perception of illness is subjective and culturally conditioned, varies over space and time and renders comparisons difficult. Observed morbidity measure, on the other hand is based on the illness pattern as assessed by an independent trained observer using specific methods that lend themselves for repetition with some degree of consistency. The methods include observing physical and vital signs, measuring physiological indicators by conducting laboratory tests, functional tests and making clinical diagnosis. Although clinically observed morbidity would yield more accurate data the method is seldom applied in practice due to the high cost involved in collecting the data. Hence, most large-scale morbidity surveys depend on the responses of individuals to structured questionnaires. The information is collected through a set of questions relating to illness symptoms, severity of illness, functional disability, and the use of health services.

Having these concepts and views in our mind the above topic was chosen for study is and necessary field work was conducted. Since every population is different in its ecology and Eco- niche, which influences the socio- cultural patterns and practices of the people, it also creates curiosity and eagerness.

The Tarai- The Habitat of the Tharus:

The Tarai Foot Hill Zone succeeds the Rain Forests Zone and extends for two- thirds of the length of Himalayas. It comprises a long narrow strip of the country running along the foot of the hills. The tarai extends to the whole sub- mountain region in Uttar Pradesh and Uttaranchal. This zone again has a great variety of eco- systems which are complex. Much of the zone has low lying lands and, though tarai receives moderate to low rainfall from monsoons which have travelled already long over the land, yet it is a complex of water-soaked land with swamps and mass vegetation, dense jungles and a northern forest screen traversed by numerous streams. This is the general character of Tarai Foot Hills. However, regular efforts through different malarial eradicating government programs the Tarai has changed drastically over the last 30-40 years, both ecologically and with regard to its population by massive human intervention.

Tharu is a generic term, which designates the score of people who inhabit the malarious area of the tarai region. The tarai is a vast swampy forest – clad alluvial tract of sub-Himalayan region. Tharus are a primitive tribe in the scheduled of the Government of India. They are semi- Hinduised people having Mongoloid affinity. They are of average medium height with round head and medium broad face, their cheek bones tend to be high and flat. They speak *Tharuhati* language but can communicate in Hindi and write in Devnagari script. Agriculture is their main stay. Though, they have adopted a patriarchal system, yet their women are dominant having a respectable place in their society and full authority to run the household. The characteristic features of the Tharu society is its division into numerous localized endogamous groups, normally separated from one another on the regional basis. In Uttar Pradesh and Uttaranchal, three major endogamous groups are recognized among them. They are the Rana, The Danguria, and the Pacchimaha but in the present study two more endogamous groups, namely the Katharia and the Jogia/ Gosain also added with them. The present study attempts to find out the kinds of diseases prevalent in the Tharu society, what is their concept about health, whom they consider healthy and whom they do not consider healthy?

METHODOLOGY

Since the population of the Tharus is too large, it was necessary that a proper sample representative of the Tharu universe is properly drawn. The entire Tharu population includes 1,78,638 souls, according to Indian Census 2001. It is noted from the literature that Tharus inhabit twenty tehsils in the five districts. It was virtually not possible to consider all

the villages inhabited by Tharus Therefore, attempts were made to draw a representative sample on the basis of the current distribution of Tharus. The Katharia Tharu of Nighasan block of Kheri district includes 200 household which is maximum studied household whereas Rana of Pallia block of Kheri district and Pacchimaha of Nautanwa block of Maharajganj district have the lowest (40 each) number which have been surveyed for the present study. Danguria Tharu of Mihinpurva block of Baharaich district includes 100 household, Danguria Tharu of Pachperva of district Balrampur and Jogia/ Gosain Tharu group U. S. Nagar district of Khatima block include 60 each household.

Present study was conducted on the different Tharu populations. For this study door to door survey was conducted and data has been collected through a specially designed interview-schedule. For sampling, both male and female individuals were selected; mainly head of the house- hold, educated person was interviewed. For collecting good information school teachers, doctors, medicine man, magician etc. were also interviewed.

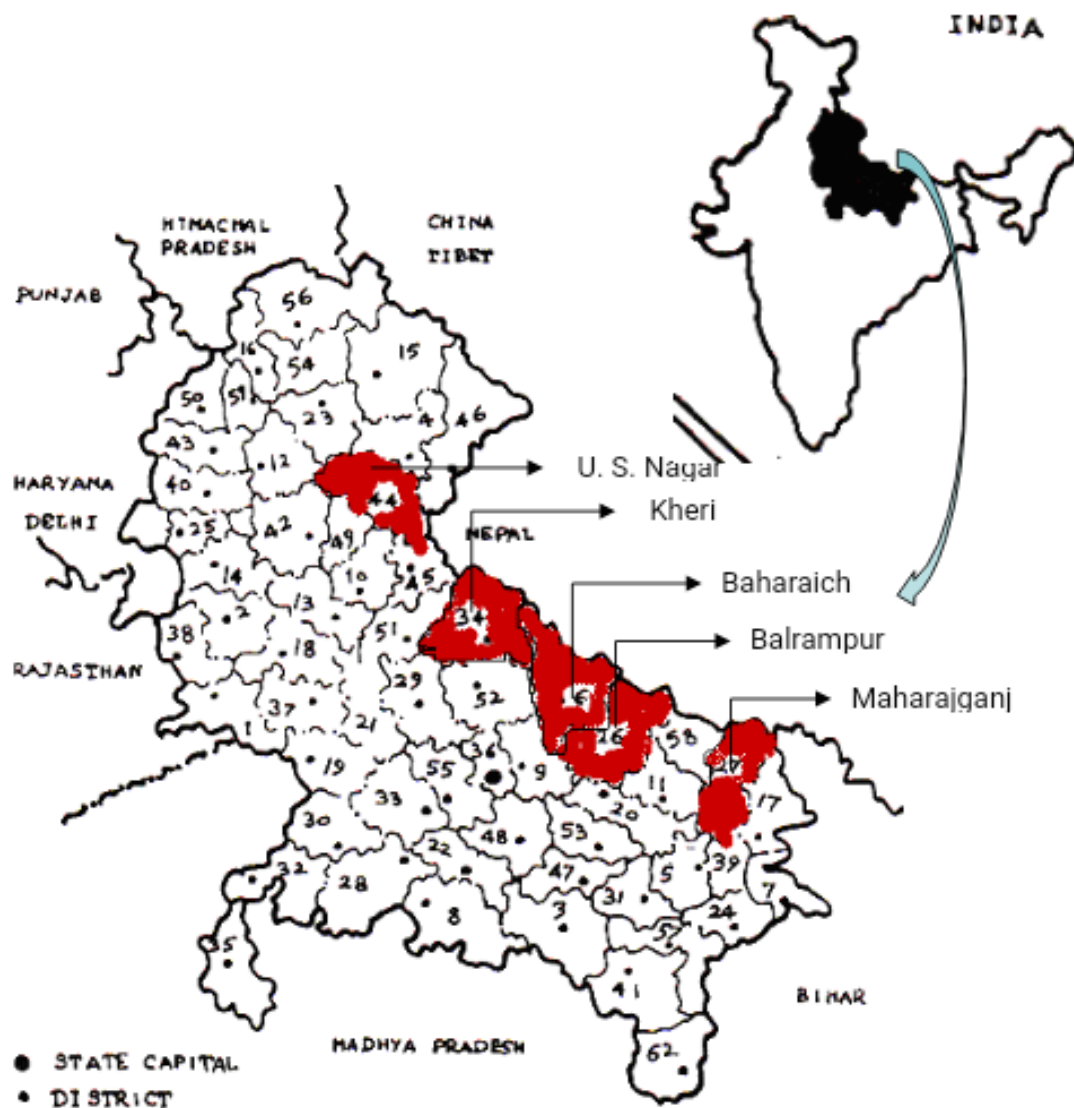


Figure 1: Distribution of Tharu Populations
(Uttar Pradesh and Uttaranchal combined)

RESULTS AND DISCUSSION

Morbidity Pattern

The morbidity is very much influenced by the availability of health infrastructure. Village-level information on the availability of and distance to various health facilities is combined and the data provides a measure of village health score. Hence, it is not possible to identify the effect of each of the health infrastructure variable. Household environment is an important determinant of morbidity.

The knowledge of the extent and severity of morbidity and its determinants are very important for several reasons. Firstly, it reflects the well-being or ill-being of the society. People's perception of illness is by itself an important phenomenon about which not much is known at present. Secondly, information on the prevalence, perception and type of illness would inform us about the burden and sufferings associated with illness.

Incidence of Diseases

The incidence of diseases is a measure of new cases of diseases within a particular population. Table present the incidence of the diseases noted among the Tharu population. Since the Tharus do have not any concept of health and hygiene, most of the diseases from which they suffer are due to infection and epidemic. The prevalence of water borne diseases is very high among the Tharu population. This high prevalence is usually due to certain behavioural practices besides the quality of safe drinking water. Among the Tharus diseases or illness are attributed to more than one cause. The table 1 shows the main diseases that is affecting Tharus, are Malaria, Cholera/ Diarrhoea, Pneumonia and Respiratory problems frequently however, the frequency of these diseases vary from group to group among the Tharu population. When compared between the groups on the basis of prevalent diseases, it is apparent from the table 1. that the frequency of Cholera/ Diarrhoea is very high (15.04%), this is followed by Malaria (12.66%) and Anaemia (11.03%). The diseases viz. Respiratory diseases, Pneumonia, Meningitis, Chicken Pox/ Measles, Tuberculosis, Cholera/ Diarrhoea and Malaria are very high among the Katharia (Th2) than the rest of the Tharu population. If comparison of the non- communicable diseases is made which has been presented in the table., the heart disease ranges from 4.44% in Jogia/ Gosain (Th5) to 35.56% in Katharia (Th2). The diabetes disease is also prevalent i.e. 3.37% among the Tharu groups. The causes of accident and injuries were found in the Tharu and this is due to fire and biting by insects or snakes. Its value ranges between 2.82% (PacchimahaTh4) to 36.62% (Katharia Th2). The table further indicates the prevalence of skin and nail infection, it contribute 10.86% among the Tharu prevalent diseases, it is mainly by the unavailability of safe drinking water. Because of the Tarai area the water level is shallow, so no regular practice of the use of deep drinking water. As indicated in the table the Osteoarthritis ranges from 4.00% to 40.00%, Anaemia which is the deficiency of red blood cells or their haemoglobin in the blood, the value indicate it is highest in Katharia (Th2) (31.05%) to that of Pacchimaha (Th4) (6.84%) which is lowest among rest of the Tharu groups. 'Other' category of disease found in Tharu populations are Filaria, Whooping Cough, Poliomyelitis, Cancer and Blindness etc. their lowest value (7.83%) in Jogia/ Gosain Th5 and highest percentage value (37.39%) in Katharia Th2.

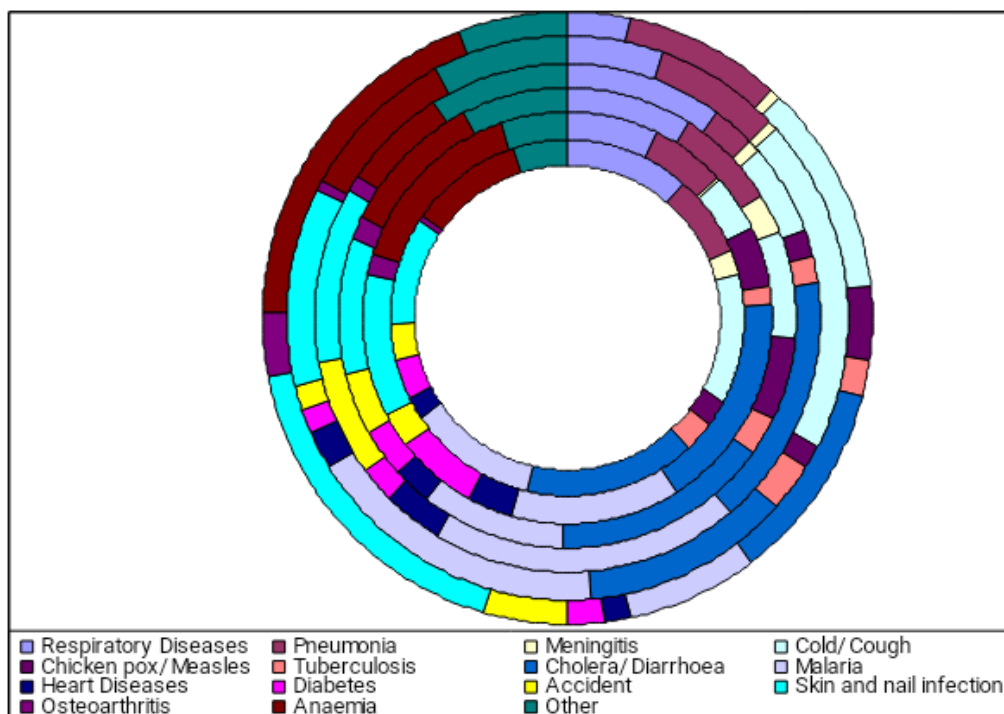
Table 1: Frequency of Prevalent Diseases among different Tharu Population during survey

Population							Prevalent Diseases
Total	Jogia / Gosain (Th5)	Pacchimaha (Th4)	Rana (Th3)	Kathari a (Th2)	Danguria (Th1Bl)	Danguria (Th1B)	
148	5	8	23	51	17	44	Respiratory Diseases

8.59	3.38	5.41	15.54	34.46	11.49	29.73	
114	13	10	6	42	13	30	Pneumonia
6.62	11.40	8.77	5.26	36.84	11.40	26.32	
29	1	1	2	16	1	8	Meningitis
1.68	3.45	3.45	6.90	55.17	3.45	27.59	
156	17	27	13	43	10	46	Cold/ Cough
9.06	10.90	17.31	8.33	27.56	6.41	29.49	
68	6	2	4	35	11	10	Chicken pox/ Measles
3.95	8.82	2.94	5.88	51.47	16.18	14.71	
39	3	4	4	15	3	10	Tuberculosis
2.265	7.69	10.26	10.26	38.46	7.69	25.64	
259	16	17	36	89	40	61	Cholera/ Diarrhoea
15.04	6.18	6.56	13.90	34.36	15.44	23.55	
218	11	25	45	59	31	47	Malaria
12.66	5.05	11.47	20.64	27.06	14.22	21.56	
45	2	3	9	16	8	7	Heart Diseases
2.61	4.44	6.67	20.00	35.56	17.78	15.56	
58	3	2	5	19	15	14	Diabetes
3.37	5.17	3.45	8.62	32.76	25.86	24.14	
71	7	2	17	26	6	13	Accident
4.12	9.86	2.82	23.94	36.62	8.45	18.31	
187	27	16	25	55	26	38	Skin and nail infection
10.86	14.44	8.56	13.37	29.41	13.90	20.32	
25	5	1	3	10	4	2	Osteoarthritis
1.45	20.00	4.00	12.00	40.00	16.00	8.00	
190	29	13	15	59	34	40	Anaemia
11.03	15.26	6.84	7.89	31.05	17.89	21.05	
115	9	11	20	43	12	20	Other
6.68	7.83	9.57	17.39	37.39	10.43	17.39	
1722	154	142	227	578	231	390	Total
100.00	8.94	8.25	13.18	33.57	13.41	22.65	

CONCLUSION

It can be concluded on the basis of above discussion that Incidence of infective and parasitic diseases, respiratory and of the digestive system was found to be high in the Tharu population. The highly prevalent fatal diseases like Malaria, Cholera/ Diarrhoea, Chicken pox/ Measles, Meningitis, Pneumonia, Respiratory diseases, Tuberculosis and Skin and nail infection are due to the environmental or sanitary habits and lack of personal hygiene among the Tharu population along with their beliefs in traditional medical practices, add the risk in their lives. Although local medical practitioner, doctors and hospitals are available yet the traditional medical beliefs and practices are quite common among them.



Towards outer side Tharu groups are in the following order:

Danguria (Th1B), Danguria (Th1Bl), Katharia (Th2), Rana (Th3), Pacchimaha (Th4), Jogia / Gosain (Th5)

From the survey it is clear that the tribal people are quite ignorant of many of the diseases. The knowledge in health and hygiene and preventive measures are more or less absent. The benefit of modern treatment is yet to be accepted by the tribal communities as still they have their traditional beliefs and practices according to their culture. The village medicine-men generally treat and prescribe medicine for most of the disease prevalent in the area. It is interesting to note that in some cases the medicine-men prescribe prayers and offerings as a curative method because it is known that few diseases have a definite time period, mention may be made of Malaria, Cholera/ Diarrhoea, Chicken pox/ Measles, Meningitis etc. In other cases the medicine men prescribe their traditional medicines. Poor economy, physical distance, lack of awareness pose major problem for the tribal folk to accept the modern health measures as well as to continue the same.

REFERENCES

- IIPS 2006. India- Reproductive and Child Health- District Level Households Survey 2002-04. Indian Institute of Population Sciences. Mumbai.
- Jaco, E.G. 1958. Patients, Physicians and Illness (Source book in Behavioral Science and Medicine) Glencoe, Ill. The Free Press.
- Johansson, S.R. 1991. The Health Transition; The Cultural Inflation of Morbidity during the Decline of Mortality, Health Transitions Review, Vol.1, No.1, pp. 39-68.
- Majumdar D.N. 1944. The Fortunes of Primitive Tribes, Lucknow: Universal Publishers Ltd.
- Riley, A.C. 1990. "The Risk of Being Sick: Morbidity Trends in Four Countries" Population and Development Review, Vol.16. No. 3, pp-403-32.
- Sen, A. 1998. Mortality as an indicator of economic success and failure. Economic Journal; 108: 1-25.

- Sharma, Tej P. and B.R.K. Shukla. 2004. ABO Blood Groups and Autosomal DNA Polymorphism as the Indicators of Genetic Diversity among the Tharus of Uttar Pradesh. *Indian J. Phy. Antho. and Hum. Genet.* 23:2, 171- 184.
- Srivastava, A. 2002. Genetic Demography of Tharus of Uttar Pradesh (unpublished Ph.D. Thesis).
- Srivastava, S.K. 1958. The Tharus- A study in Cultural Dynamics. Agra University Press, Agra.
- Vaidyanathan, A. 1995. "An Assessment of Nutritional And Health Status", Discussion Paper No. 3, UNDP Research Project, CDS.

Sustainability in Vernacular Architecture: Laurie Baker and Hassan Fathy's Approach

Asif Ali⁴

ABSTRACT

The age of climate change is threatening the human welfare and their environment globally. The energy resources are depleting day by day. Being the large consumer of the energy resources, the contribution to the climate change is majorly by the building industry. Numerous researches and thoughts have been developed to find the solution by keeping in mind the conventional building techniques which are taking place in urban areas. But the suburban and rural areas are mostly not taken care, which is major part of any developing country. For a sustainable development of built environment, minimization of input energy and low energy intensive material is an essential part. The successful coexistence of nature and built environment in vernacular architecture has proved that a sustainable and environmental friendly development is also achievable through the indigenous quality of a region. There are Architects, at least few in numbers, who are seeking and learning from the traditional societies and applying the vernacular principles to their architectural practices. But their approach is remarkable, because of their impetus they had to apply against the prevailing conventional architecture of their time. Two architects, Hassan Fathy from Egypt and Laurie Baker from India sought the strong relation of man and nature in their works and provided a traditional solution for the sustainable development in present time. In this paper the author shall discuss the approaches of these two architects which in turn found them a role model for the sustainable development through traditional architecture.

Key Words: - Vernacular architecture, Sustainable architecture, Laurie Baker, Hassan Fathy.

Introduction

Since its inception the word 'sustainable' had been used in its general meaning the ability to be sustained, supported, upheld, or confirmed' or 'able to be maintained at a

⁴ Assistant Professor, Architecture Section, University Polytechnic, Faculty of Engineering and Technology Aligarh Muslim University, India E-mail: asifarchitect@rediffmail.com

certain rate or level.' But it engendered a specific and contextual meaning derived mainly from its definition by the United Nations Brundtland Commission in 1987. According to this definition," *those paths of social, economic and political progress that meet the needs of the present without compromising the ability of future generations to meet their own needs* (Brundtland, Gro Harlem, 1987). The commission recommends the social, economical and environmental development of the globe and discusses urban challenges. Its ekistics part, in detail, was incorporated at a later stage in the form of one chapter of Agenda 21- United Nations Conference on Environment & Development held in Rio de Janeiro, Brazil in 1992. It conveys the promotion of sustainable human settlement development with special attention to indigenous people. The chapter seven of Agenda-21 further suggests to strengthen indigenous building material industry, to enhance the utilization of local materials by construction sector, to promote labor intensive construction and self housing buildings. A review of implementation of Agenda-21 in 2012 by Stakeholder Forum for a Sustainable Future signals a few progresses in this area in two decades.

The indigenous settlements were studied a lot in the light of history and anthropology but the aspects of materials and technology were negligible. Art historians illustrated it as a part of art history, ornamentation and decoration while Architectural Historians pulled them up to forms, scale and proportions only. A very few practicing architects, having insight of application of the indigenous concepts to the contemporary world, there work was generally blamed as historicism. The aspects of sustainability through indigenous architecture, is the prime concern now a days as an alternative to the conventional approaches. However its early example can be seen in the work of Hassan Fathy, an Egyptian architect. He was an early thinker of impact of built masses over environment. His works prove a sustainable approach for the major part of the population. However, Fathy's architecture, by some critics, was seen only as a safeguard of tradition and culture and a mere nationalist expression against western power (Ghirardo, 1996). Although the indigenous sustainable architecture cannot be separated from the culture in which it was developed. And indigenous buildings due to culture based designing results into a regional and economical aesthetic. According to Thomas and Trever (2007), *"Architecture and urban design need to be located in an environmental, historical and cultural context. The environmental crisis creates an opportunity for a varied architecture which responds to site, setting and context."*

Modern Vs Traditional Architecture

The Modern architecture as a whole rests over the notion of dissatisfaction with the past, rapid mechanization and emergence of new materials and techniques. The rationality of machine design was seen in the design of houses as could be evidenced with Le Corbusier's famous saying "a house is a machine for living in". In contrast to Corbusier's approach Fathy (1986). says, *"A machine is independent of its environment. It is little affected by climate and not at all by society."* In the most part of the world the legacy of architectural tradition was climate responsive. However it was marginalized under the influence of modern architecture mainly due to colonial interval in most of the countries. After independence these countries attempted to seek their national identity though a discontinuity in architectural legacy and disruption of technological development under the contemporary socio economic situation lead them to a chaos. In nineties an approach to sustainability evoked the simple technologies of indigenous architecture and regional historical buildings as a source of inspiration. In his previous work, author has also discussed the different elements from Mughal buildings which may inspire designers for sustainable development in the contemporary world (Ali, 2012).

Fathy's Approach

Hassan Fathy, an Egyptian architect, born and brought up in an elite family of Alexandria at the dawn of twentieth century. Through his sensitivity towards form and

space, Fathy made us visible a built environment which was already present around us. Fathy's architecture embraces the human culture and its history. The austerity and simplicity of his work sometimes mislead the observer, however the harmony and balance of the form is an expression of his creative intellect. And his creative phenomenon is much more than a vernacularism. Due to shortage of steel and cement during World War II, he was prompted to learn from indigenous buildings which could be built without these materials and new local-modern architecture was produced with clay that was based on vernacular practices (Perera, 2013). The excessive repetition of limited visual elements in his projects can be seen as his quality of imaginative excel. He writes *"If the architect does not respect the God-made environment, he commits a sin against the God. God-made environment is the landscape; the atmosphere, the flora, the fauna, and the human beings who live in this environment. In this God-made environment there is nothing which is inharmonious. If we become one with nature, beauty is defined as it is. Beauty, then, is obtained when form consider the forces that are working on it. It is only when man has ignored the environment and has been cut off from nature that problems arise. We must not distort any of the forces in nature"* (Steele, 1992).

Baker's Approach

Laurie Baker had worked in India for about a half century. His projects range from residences to churches and from institutions to hospitals. His designs are the response to the specific needs of individuals, local climate and traditions. In his approach he rejected the idea of universality of specific set of designs and standard materials. He put emphasis over the user's actual needs culture and lifestyle which in turn reflected in its architecture. Baker's architecture as a result is a true reaction to the climate of region, and available materials. His approach to architecture was influenced by his long stay at Pithoragarh district and guided by Gandhian philosophy, which he directly extracted from Mahatma Gandhi during his confrontation with him in the early days of his professional life. Gandhi guided him regarding design of a village house that the construction material should be procured only within five mile of radius. After studying in England, on a mission to India, to convert the refugee centre for Leprosy patients in to hospitals with minimum expenditure, baker worked throughout the country. From 1945 to 1948 he worked with an organization and later he settled in Pithoragarh for next sixteen years. During his stay at Pithoragarh he realized the importance of appropriate and intermediate technology which in his view could be learned from local people. Baker left Pithiragarh in 1963 and shifted to a village Vokaman of central Kerala and later he settled in Trivandrum. Modern technologies were supposed to provide a solution of housing in India and to improve the standard of life for everybody. The rapid industrialization is the main cause of cause of growth of demand of housing. In India, the government attempted to improve the situation but unable to achieve the demand for houses. Industrial economy emphasized over the improvement of living conditions instead of a humanistic concerned. It evolved a new kind of architecture which was not in any way a continuation of tradition and led a chaos for the inhabitants. Baker's work in India is a contemporary vernacular, and parallel to the Hassan Fathy's work in Egypt and John Turner in Latin America. Baker's work is an innovation without imitating the traditional style. His approach to exploit new building materials in context with local climate and tradition gave a new dimension to his architecture. For example concrete as a material for roofing with terracotta tiles and brick walls with unusual bond is a compromise between tradition and modern design techniques. In contrast to the architectural practices in India, Baker's work shows a continuation of past at least in a region. The challenges of housing demands in the country provoke to re evaluate the present technology adopted and its relation with the life styles of the people. Modern architecture in India is a poor imitation of the west in terms of forms and technology. The industrial revolution and mechanization of materials have influenced the global architecture and set a new definition of aesthetics. The modern building in India lack contextual unity with the past. History of architecture is adopted by

some revivalist as a dictionary of elements instead of assimilation with true meaning. Baker used historical elements but not as decorative elements but with their true meaning of spatial and climatic contexts. As a result, Baker's architecture is a reflection of cultural and traditional continuity by using the elements with their true meanings like window jaali, courtyard and screened walls. These elements which are the need of a region not only cope up with the climate but also reflect their life style and it cannot be considered merely an iconic architecture by Baker or Fathy.

Conclusion

Fathy considered vernacular architecture as a paradigm but with a rational approach. His approach to the design cannot be considered only a historicity, and a safeguard of tradition. In his projects, every single feature was given a thought in terms of response to climate, orientation, material as thermal mass, openings and form all play an important role regulating temperature and ventilation inside the building in a hot and humid region. He claimed that the indigenous architecture of a place embodies the sustainable elements. These elements on one hand respond to the environment and on the other hand they evoke the cultural continuity of a place.

References

- Ali, A. (2012). Passive Cooling and Vernacularism in Mughal Buildings in North India: A Source of Inspiration for Sustainable Development. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*, 4, 015-027.
- Brundtland, Gro Harlem. (1987). *Report of the World Commission on Environment and Development-Our Common Future*. Oxford: Oxford University Press.
- Fathy, H. (1986). *Natural Energy and Vernacular Architecture: Principles and Examples with reference to Hot Arid Climates*. Chicago: University of Chicago Press.
- Ghirardo, D. (1996). *Architecture After Modernism*. New York: Thames and Hudson Ltd.
- Perera, N. (2013). Critical Vernacularism. In N. Perera, & W.-T. Tang (Eds.), *Transforming Asian Cities* (pp. 78-93). New York: Routledge.
- Steele, J. (1992). *Architecture for A Changing World*. London: Academy Editions.
- Thomas, R., & Trever, G. (2007). *The Environments of Architecture*. New York: Taylor & Francis.

Health and behavioural consequences of child abuse

Daud Salim Faruque⁵

This paper addresses the serious issue of child abuse which is widespread but understudied in India. The chapter contains descriptions and evaluations of studies and interpretation of data on the physiological and psychological health effects associated with child abuse. Global knowledge has been referred to develop the understanding of the concept and presentation of the evidence of negative effects of abuse. This information is presented to provide public health officials, physicians, psychologists, anthropologists, policy makers, NGOs and other interested individuals and groups with (1) an overall perspective of the problem of child abuse and (2) a description of evidence indicating various damaging health effects.

The discovery of “battered child syndrome” in 1962 by Henry Kempe’ and associates saw the beginning of interest of the general public and also serious researchers in the phenomenon of child abuse and its consequences. Later on, sexual abuse was highlighted in Britain during 1980’s (Corby, 1993). It was further noted that children are subjected to different kinds of victimization and are particularly vulnerable due to their developmental status (Finkelhor and Dzuiba-Leatherman, 1994). In the course of time, cross-cultural studies brought awareness that child abuse is a global problem (Segal and Ashtekar, 1994).

Concept of child abuse is perhaps the most difficult issue to be defined. According to Parke and Collmer (1975), abused child refers to “any child who receives non-accidental physical injury as a result of acts and omissions on the part of his parents or guardians that violate the community standards concerning the treatment of children”. But Jill (1981) has taken a wider perspective and included those acts of maltreatment which do not produce an injury but are equally harmful. Jill refers child abuse to all kinds of physical or mental injury, negligent treatment or maltreatment of a child by a person who is responsible for the child’s welfare.

It is suggested by literature in the area that abuse may be divided into different categories, according to the type of maltreatment and its effects. The popular categories of abuse are physical abuse, sexual abuse, economic abuse (concerned with working children), and physical and emotional neglect.

⁵ Executive Director, OXEVIN, U.K.

David Gil (1968) has defined *physical abuse* as “any non-accidental physical attack or physical injury, inflicted upon the child by the child’s caretakers”. Attacker or abuser may be anyone who is at least a temporary caretaker of the victim such as; parent, teacher, employer, relative or elder sibling.

Unlike other maltreatments, *sexual exploitation or abuse* of minors is one of the most horrendous crimes. Kempe’ and Kempe’ (1978) has defined it is “the involvement of dependent and immature children in sexual activities they do not fully comprehend, to which they are unable to give informed consent”. Sexual abuse is physical, verbal or emotional sex treatment to the child. It occurs when an older or more knowledgeable child or adult uses child for sexual pleasure. Abusers make the child comply in different ways such as deception, bribery, verbal intimidation and physical force (Gomez-Schwartz, Horowitz, & Cardarelli, 1990). In such cases, the sexual interaction of victim with the perpetrator may lead to an act either by commission or by omission. Act of sexual abuse may include sexual touching or fondling, confrontation with sexual media (showing the child printed or audio-visual sexual stuff), having sexual chat with them, having them pose, undress or other sexual performance, peeping or spying over them and rape or attempting rape.

A peculiar form of child sexual abuse is child’s exposure to pornography. According to Zillmann (1989) prolonged exposure to pornography may result in many behavioural abnormalities including elevated level of violence, altered perception of sexuality, insensitivity toward victims of sexual abuse and being capable of committing rape etc. The problem is further aggravated when children themselves are lured or forced to become subjects of such activity. On the face of it, it looks to be relatively easy business and therefore many runaway children try to adopt it to survive in large cities (Encyclopaedia of crime and Justice, 1983). Impacts of the pornographic experiences often produce feelings of betrayal, guilt, worthlessness and rage (Pierce, 1984).

With the reach of media particularly the Internet expanding and enlarging uncontrollably, the child’s vulnerability to confrontation with sexual stuff has grown to a great extent (Carlsson, 1999). Accessing Internet pornography by children becomes more dangerous as it provides access for child abusers, blackmailers and paedophiles (Aftab, 1999). Paedophiles form their association and forum on Internet developing their own vocabulary and code words to operate and communicate with each other in order to engage children in inappropriate sexual communication and to entangle them in a sexual trap (Quayle and Taylor, 2001).

Economic exploitation of a poor working child is also an abuse of the child. It is not a category of abuse which is popular in common parlance but, with children forming a sizeable workforce of many countries including India, its importance cannot be lost sight of. Children of very low socio-economic strata do petty remunerative jobs under various non-organised / cottage undertakings such as, glassware, brassware, lock factories and small roadside hotels (*dhabas*). These child workers are generally not protected by any legal / labour agency and usually work under the mercy of their employers. In order to exact more work while paying less, employers usually harass them and do not pay them properly. This economic exploitation comes under the category of economic abuse. Economic abuse may include:

- Not paying them for their work. (non-payment)
- Paying less for their work. (under-payment)
- Keeping their payments pending.
- Forcing them to work more than their due remuneration.
- Demanding loans/snatching money from them.

Physical and emotional neglect is another form of abuse. Failure to recognize hazardous

circumstances or responding improperly to child's nutritional, health and developmental needs, or leaving a child unattended either wilfully or inadvertently, leading young children to serious accidents, deaths from falls or burns and poisoning etc. also come under the purview of abuse (Lupton, C.; Khan, P.; & Lacey, D. 1997). Kratcoski and Kratcoski (1979) have defined physical neglect as "the failure to provide the essentials for normal life, such as food, clothing, shelter, care and supervision, and protection from assault. He further explained emotional neglect as the lack of expressed love and affection and the deliberate withholding of contact and approval. Under the category of emotional maltreatment children are usually blamed, belittled, rejected, unequally treated with reference to siblings and are targets of lack of concern from parents/caretakers.

Apart from the four major types of child abuse described above, some other issues like child marriage and child labour also come under the category of abuse.

Indicators of child abuse:

Bear, Schenk, Buckner (1993) have identified some physical and behavioural indicators of the forms of child abuse. These indicators have been tabulated below:

	Physical Indicators	Behavioural Indicators	
Physical Abuse	▪ Unexplained bruises (in various stages of healing) welts, human bite marks, bald spots ▪ Unexplained burns, especially cigarette burns or immersion burns ▪ Unexplained fractures, lacerations or abrasions	▪ Self destructive ▪ Withdrawn and aggressive – behavioural extremes ▪ Uncomfortable with physical contact ▪ Arrives at school early or stays late, as if afraid.	▪ Chronic runaway (adolescent) ▪ Complains of soreness or moves uncomfortably ▪ Wears clothing inappropriate to weather, to cover body
Physical Neglect	▪ Abandonment ▪ Unattended medical needs ▪ Consistent lack of supervision ▪ Consistent hunger, inappropriate dress, poor hygiene. ▪ Lice, distended stomach, emaciation.	▪ Regularly displays fatigue or listlessness, falls asleep in class. ▪ Steals food, begs room classmates. ▪ Reports that no caretaker is at home.	▪ Frequently absent or tardy ▪ Self-destructive ▪ School dropouts (adolescents)
Sexual Abuse	▪ Torn, stained or bloodied underclothing ▪ Pain or itching in genital area ▪ Difficulty walking or sitting ▪ Bruises or bleeding in external genitalia ▪ Venereal disease ▪ Frequent urinary or yeast infections	▪ Withdrawn, chronic depression ▪ Excessive seductiveness ▪ Role reversal, overly concerned for siblings ▪ Poor self-esteem, self devaluation, lack of confidence ▪ Peer problems, lack of involvement ▪ Massive weight change	▪ Suicide attempts (especially adolescents) ▪ Hysteria, lack of emotional control ▪ Sudden school difficulties ▪ Inappropriate sex play or premature understanding of sex ▪ Threatened by physical contact, closeness ▪ Promiscuity.

Indicators of emotional neglect according to Denver (1961) are:

- Habit disorders such as biting, thumb sucking.
- Conduct disorders such as destructiveness, cruelty and stealing
- Neurotic traits such as sleep disorders and inhibition of play.
- Psycho-neurotic reactions such as hysteria, phobias and obsession.
- Behaviour extremes such as appearing overly complainant, extremely passive or aggressive, very demanding or undemanding.
- Lag in emotional and intellectual development and
- Attempted suicide.

Indicators of economic abuse may overlap with the characteristics of other types of abuses. It is difficult to observe and state the signs of economic abuse as clearly as can be done in the case of sexual and emotional abuse.

SOME OTHER PHYSIOLOGICAL MANIFESTATIONS OF CHILD ABUSE:

Munchausen Syndrome by Proxy (MSBP):

A syndrome, which mystifies physicians, was first described in 1977 (Von Burg and Hibbard 1995a). Especially in western countries where law towards the childcare is more forceful, parent/s sometimes try to induce fictitious symptoms of illness in their child to escape from accountability in case of neglect or abuse on their own account (Blumenthal, 1994; Mehl, Coble and Johnson, 1990; Yorker and Kahan, 1990; Kravitz and Wilmott, 1990). This fabricated illness in the child is also known as medical child abuse (Boros et. al. 1995; Evans, D. 1995 and Marcus et. al., 1995)

Kwashiorkor Disease:

If for a long period of time quantitative or qualitative under-supply of nutrition is given to the child, he/she may lose weight and may get stagnation and/or stunted growth. This state is known as Kwashiorkor disease (Bonet et. al. 2001). This is measured with the comparison of expected growth (considering height, weight etc.) with actual body size of the child (Wehner, et. al. 1999).

Legal strictures and international action:

The problem of child abuse has been defined in legal terms and necessary laws have been made to check this social evil. Government of India has also recognised the seriousness of the problem and passed the Immoral Trafficking (Prevention) Act in 1986.

Article 24, clause (f) of this act casts a duty on states to declare that children are given opportunities and facilities to develop in a healthy manner and in conditions of freedom and dignity and that childhood and youth are protected against exploitation against moral material abandonment.

Together with this, the Indian Penal Code, Section 361 has considered kidnapping or maiming a child for begging or for prostitution as an offence. Major international bodies associated with United Nations viz. UNDP, UNICEF and UNESCO are working for the betterment of poor children, abolition of their maltreatments and management of the detrimental effects of the maltreatment.

United Nations in this connection, made several declarations of the rights of the child. One such convention on the rights of the child was adopted by the general assembly of the United Nations on 20th November 1989. The Government of India acceded to this convention on 11th December 1992. This convention was the extended version of earlier conventions i.e. the Geneva Declaration of the Rights of the child (1924) and the Declaration of the Rights of the Child adopted by the General Assembly on 20th November 1959. The declaration has made various provisions not only the controlling and management of maltreatment of children but the rehabilitation provisions have also been made. In this reference Article 19 (1)

of this declaration says that, "States shall take all appropriate legislative, administrative, social and educational measures to protect the child from all forms of physical or natural violence, injury or abuse, while in the case of parent(s), legal guardian(s) or any other persons who has the care of the child."

Article 34 is dedicated particularly to the sexual exploitation of children. This article declares that, "States undertake to protect the child from all forms of sexual exploitation and sexual abuse. For these purposes, states shall in particular take all appropriate national, bilateral and multilateral measures to prevent:

- (a) The inducement of coercion of a child to engage in any unlawful sexual activity.
- (b) The exploitative use of children in prostitution or other unlawful sexual practice.
- (c) The exploitative use of children in pornographic performances and materials.

This convention has manifested its concern towards the rehabilitation of child victims and management of their problems. In this connection Article 39 declared that, "States shall take all appropriate measures to promote physical and psychological recovery and social re-integration of a child victim of any form of neglect, exploitation, or abuse; torture or any other form of cruel, inhuman or degrading treatment or punishment; or armed conflicts. Such recovery and re-integration shall take place in an environment, which fosters the health, self-respect and dignity of the child.

Consequences of child abuse:

Consequences of child abuse are detrimental and far-reaching. It is suggested by work in this area that child abuse results in severe consequences to the victim, physiologically; socially and psychologically. After the discovery of *battered child syndrome* in 1962 by Henry Kempe', so many health-related researches have been conducted in this direction, surfacing the *physiological consequences* of child abuse. The physical symptoms of child abuse are bruises/welts, cuts/scratches, dislocation of joints, burns, scalds and bone fractures (de Paul, J.; Milner, J.S.; Mugica, P. 1995, Block, S.S. 1996). In chronic cases, haemosiderin deposits in lungs and liver (Dorandeu, A. et. al. 1999), internal injuries such as intracranial haemorrhage and abdominal visceral injuries leading to the severe morbidity and mortality (Cheah, I.G. et. al. 1994) etc. *Skeletal manifestations* include general fractures (Patterson M.M. 1998; Cramer, K.E. 1996 and Block, S.S. 1996) fracture of ribs (Strouse, P.J. and Owings, C.L. 1996) and fractures of chostochondral junctions (Ng, C.S. and Hall, C.M. 1998).

Physiological responsiveness such as heart rate, pulse rate, skin temperature and conductance, electromyography and motor reactivity of abused children to different stimuli of the environment may be delayed as compared to the non-abused children (Carrey, N.J. et. al. 1995). This explains that *slow reactivity or responsiveness to the environment* may be one of the impacts of child abuse.

Child abuse most often result in *Orofacial injuries*. Von Burg and Hibbard (1995) maintained that more than 50% of physical abuse occurs to the head and facial area and more than 70% fatalities happen due to such implementations. Orofacial injuries, according to Jessee (1995) include fracture of teeth or maxilla, mandible and other facial bone, facial burns, lacerations of lips and lingual fraenum and bite marks on face and neck. Besides the orofacial injuries, *Ocular Injuries* are also important to come under the purview of child abuse. These include intraocular haemorrhage, periorbital edema, ecchymosis and retinal detachment (Harley, 1980).

Child sexual abuse may result in sexually transmitted diseases. (Petrak, Byrne and Baker 2000; Laszlo, et. al. 1991; Koss and Harvey 1991). Researchers have found connection

between CSA and HIV (Zierler, et. al 1991; Wingood and DiClemente 1997; Bartholow, et.al, 1994; Brown et. al. 1997; Kissinger, Clark and Abdalian, 1997).

Psychological Impacts of child abuse are far reaching (Gilles, 1999) and it is a significant risk for mental health problems in childhood (Beitchman et al., 1991; Kendall-Tackett, Williams, & Finkelhor, 1993) such as self-esteem, depression, anxiety, and feelings of anger and hostility (Gomes-Schwartz et. al., 1985; Mannarino, Cohen & Gregor 1989). Detrimental effects of abuse could be seen among the victims in short-term as also in the long-term.

General behaviour changes that may occur for *short term* in abused children include *fear or dislike of certain people, sleep disturbances, headaches, school problems, withdrawal from family, friends, or usual activities, excessive bathing or poor hygiene, return to younger and more babyish behaviour, depression, anxiety, discipline problems, running away, eating disorders, passive or overly pleasing behaviour, delinquent acts, low self-esteem, self destructive behavior, hostility or aggression, drug or alcohol problems, sexual activity or pregnancy at an early stage and suicide attempts* (Irving, 1983).

According to Milling (1999) abused children show lower grades in academic subjects, more days absent, more placements in special education programs, more retention in grade, and more school problems than non-abused children. Sexual victimization may profoundly interfere with and alter the development of attitudes toward self, sexuality, and trustworthy relationships during the critical early years of development (Tsai & Wagner, 1984). Early age sexual experiences also result in emotional immaturity and distorted views of sex (Dillon, 1999). Children who have higher rates of physical abuse, sexual abuse, severe neglect and family breakdown and parental criminality develop themselves as borderline personality (Guzder, et. al. 1999). It has also been noted that abused children can have a preoccupation for situations or behavior similar to the initial traumatizing circumstance (Eth & Pynoos, 1985), victims with a post-traumatic stress disorder selectively process threatening material while undergoing the expectations test. (Bryant & Harvey, 1995; Foa, Feske, Murdock, Kozak, & McCarthy, 1991).

According to Stevenson (1999) abused children are at risk of *long-term* adverse psychological sequelae related to the abuse per se. Finkelhor (1984) notes that, victims of sexual abuse may sexualise all their relationships in an attempt to gain affection; in adolescence this can lead to a self-destructive pattern of promiscuity with a succession of abusive relationships.

Prominent theories on the effects of child abuse have focused on abuse variables in predicting mental health outcomes. Childhood victimization of abuse and neglect is associated with increased risk for lifetime Post-traumatic Stress Disorder. Very less part of the population of abused children meet DSM-III-R criteria of lifetime PTSD. Disordered eating attitudes in adult life with depression, anxiety and dissociation is also a result of childhood abuse (Kent et.al., 1999).

Severe levels of dysfunction in adulthood, including psychosis high frequency of auditory hallucinations, particularly command hallucinations to kill oneself, paranoid ideation and delusions have high correlation with the history of child sexual abuse (Read and Argyle, 1999). The pernicious experiences of childhood abuse may hamper the proper personality developments like cognitive processes specially perception of moral concepts (Faruque & Ahmad, 2002), attitude formation (Kousar et. al., 1993) and constriction in the self and healthy character development (Famularo, Kinscherff and Fenton, 1990).

If perceptions and ideations can be affected by the experience of abuse, children undergoing these experiences may manifest features different from what children usually express in others appraisal and judgment of morally loaded issues. Realizing such

seriousness of the problem, it is indeed of high importance to understand the evidence which puts forward the claim of negative consequences of child abuse.

Evidence on child outcomes:

There is a huge body of cross-cultural and sub-cultural evidence which confirms negative outcomes of child abuse. It is however impossible to sum and represent the entire volume, the most relevant studies are being described here.

It is warranted that evidence from India is quoted first where child abuse is rampant and widespread but least attended. Segal and Ashtekar (1994) attempted to assess whether the abuse of children by caregivers/parents is a phenomenon that is prevalent in Indian society. In this connection, 515 children were interviewed in Bombay. Approximately 50% of the respondents reported of physical violence from parents or caregivers and over two-thirds reported the use of abusive violence. In addition, over 60% of the children who had run away from their homes, cited violence by parents as the primary reason for their leaving. Authors proposed that this might be one of the variables adding to the numbers of street children in India.

Continuing their previous trend, Segal (1995) conducted another study to determine if the abuse of children was prevalent among middle-class professionals in India. Face-to-face interviews were conducted with a stratified random sample of 319 subjects, in three cities in India, to assess their attitudes toward child rearing and their expectations about child development. 56.9% of the subjects reported having used "acceptable" violence, while 41.9% revealed that they had engaged in "abusive" violence. Interestingly, 2.9% admitted to having employed "extreme" violence toward their children. It was suggested that violence against children in India may well be the result of social sanction. Children of low socio-economic strata are more vulnerable to an abusive treatment. Mcloyed (1998) found that children, who are socio-economically disadvantaged, receive harsh and inconsistent parenting. The most important and wide ranged epidemiological work was carried out by the Ministry of Women and Child Development (2007) which covers 13 states in India with a sample size of 12,447 and looked at the extent and characteristics of child abuse and girl neglect in India. Findings show that children on the street, children at work and children in institutional care reported the highest incidence of sexual assault, while the majority of abuse cases take place within the family environment. The study reveals that two out of three children were physically abused, 53% children reported to have faced one or more forms of sexual abuse among which 22% faced severe forms of sexual abuse. In 50% cases of sexual abuse, abusers were known to the child or in a position of trust and responsibility. Every second of the contacted child reported facing emotional abuse in which 83% of the cases parents were the abusers.

At international level, the problem of child abuse has got rather serious attention of researchers. Therefore, the problem has not only been studied for its prevalence and epidemiology but its theoretical connections and socio-behavioural pathways have also been established (Thompson and Wyatt, 1999). According to them children's emotional or behavioural problems, learning disabilities or other difficulties often reflect broader problems that are associated with abuse or neglect.

Brezina (1997), established theoretical relationship between maltreatment of children and its social consequences, using three behavioural dimensions viz. social control, social learning and strain. According to the author, social control theory contends that, maltreatment disrupts important delinquency-inhibiting ties; social learning view says that the deviant values and patterns of behaviour are learned from the abuser, either implicitly or explicitly, whereas general strain theory says that criminogenic emotions such as anger and resentment are likely to arise amongst the victims. This theoretical explanation opens the possibility that abuse may have its impact on child's cognitive-developmental process and

behavioural pathology.

The notion that post-traumatic stress disorder (PTSD) may be found in children who have experienced abuse (sexual in particular) has become an important issue in research and clinical practice (Morrisette, 1999). Children who have been exposed to violence are at risk for developing PTSD (VanFleet, Lilly and Kaduson, 1999). Ratna and Mukergee (1998) in a quest to establish relationship of child sexual abuse with PTSD estimated that approximately 20% of victims go on to have serious long-term pathology. It was concluded that there is high incidence of PTSD following sexual trauma. Furthermore, evidences of neuro-endocrine disturbances similar to those seen in war veterans with PTSD were also found amongst the victims. Saunders et. al. (1999) interviewed adult women with a history of childhood rape and found that childhood rape dramatically increases risk for development of psychological problems such as, PTSD, major depression and substance use. Likewise, Dubner and Motta (1999) studied and compared three groups of children comprising of 50 sexually abused, 50 physically abused and 50 non-abused children. Subjects completed Child Post-Traumatic Stress Reaction Index. Results indicated that sexually and physically abused children demonstrated a high incidence of PTSD. Authors further noted that preadolescents demonstrated more severe PTSD than early adolescent subjects. Widom (1999) observed that 37.5% victims of childhood sexual abuse, 32.7% of childhood physical abuse and 30.6% of childhood neglect met DSM-III R criteria for lifetime PTSD.

Impact of physical and sexual abuse during childhood may become permanent resulting in long-term sequelae related to the abuse per se (Stevenson, 1999). Abnormalities caused by the childhood experiences may surface up during adulthood. Sheldon and Bannister (1998) studied problems of adult female survivors of childhood sexual abuse. Authors noted major long-term consequences of child sexual abuse and divided them in three categories. First, psychological problems with a psychiatric presentation such as depression, anxiety, sleeping difficulties, eating disorders, self-harm and alcohol and drug dependence. Second, severe interpersonal difficulties characterised by feelings of isolation, alienation, distrust, fear of men, repeated victimization in an adult relationship and difficulty in their relationships with their own children. Third category includes sexual problems such as avoidance of sex, sexual anxiety, and guilt, promiscuity and prostitution.

Child abuse has its detrimental effects on behavioural pathology leading to the psychotic or neurotic problems in victims. Read and Argyle (1999) studied three positive symptoms of schizophrenia namely hallucinations, delusions and thought disorders amongst physically and sexually abused children. It was seen that there is a relationship between specific type of abuse and specific symptom. Hallucination was found highly associated with sexual abuse whereas delusion and thought disorder were associated with physical abuse. The study findings confirmed previous findings of a high frequency of auditory hallucinations; particularly command hallucinations to kill oneself, and paranoid ideation among inpatients with a history of abuse. Straus and Kantor (1994) studied the impact of corporal punishment on mental health and social relationships amongst teenagers of low socio-economic strata. Authors found that children who experienced corporal punishment in adolescence had an increased risk later in life of depressive symptoms, suicidal thoughts, alcohol abuse, physical abuse of children and wife beating. Zlot and others (2000) compared women having major depression with women suffering from pain due to psychological factors. Results of the study showed that negative childhood experiences ("brutality between parents", "brutality towards child" and "sexual abuse") are prominent and similar in both groups.

It has commonly been found that abused children are at risk for later becoming abusive parents. Narang and Contreras (2000) examined the relationship between history of child abuse and abusiveness as an adult. Researchers adopted a cross-sectional design to examine

three constructs viz. physical abuse history, dissociation and physical abuse potential in 190 respondents. Results showed that all three constructs were correlated with each other significantly.

Anxiety and depression seem to be a basic behavioural digression caused by trauma or abuse. Cohen and Mannarino (1988) in their study found that parents of sexually abused girls (aged 6-12 yrs) rated them having significantly more behavioural problems such as depression, anxiety or low self-esteem as compared to parental ratings of non-abused sample. Raskin et al (1989) examined the early childhood experiences of socio-economically disadvantaged patients having anxiety disorders. More than 50% of the subjects were found to be abused during their childhood. Hudson (1990) found severe separation anxiety, fear of starting school, avoidance of their own bed, refusal to sleep alone, and fear of the dark amongst children who were sexually molested by adult strangers, were threatened with murder if they revealed the abuse, and being photographed during the abuse. Devor (1994) found fear, anxiety and depression amongst subjects who encountered at least one severe level of sexual, physical or emotional child abuse. Using Beck Depression Inventory on adult survivors of child abuse, Holmes (1995) found that in comparison to patients having no history of abuse, those with a history of abuse showed no improvement in anxiety scores after therapy.

Cahill, Kaminer and Johnson (1999) in order to discuss developmental, cognitive, and behavioural sequelae of child abuse, explored the literature on the short and long term sequelae of physically and sexually abused and neglected children, and concluded that abuse and neglect effects on child's neurologic, behavioural, and cognitive system.

Earlier on Carrey et.al. (1995) compared physiological responses of abused children to different stimuli with responses of children in a reference group and to correlate the physiological responses with intellectual and personality functioning. In the first session of this study children were shown slides with emotional or cognitive content while heart rate, pulse rate, skin conductance, electromyography, and skin temperature were measured. In the other session, intellectual and personality functioning was measured using the WISC-R, Quick Neurological Screening Test, and the Junior Eysenck personality inventory. Abused children had higher introversion and lower Verbal and Full Scale IQ scores. Verbal and Full Scale IQ scores were inversely related to the severity of abuse that had been experienced. When these variables were used in a discriminant function analysis, children were assigned to the correct group 86% of the time. Authors conclude that these findings support a model that describes the effects of abuse as delaying cognitive development and inhibiting physiological responsiveness to the environment.

DeFronzo and Pawlak (1993) Found that childhood trauma (i.e., having been beaten as a child) promoted both smoking and alcohol abuse whereas religious belief and belief in the importance of conformity with shared moral principles have significant negative effects on smoking, alcohol use, and alcohol abuse. Authors' resultant findings support the notion that abused children are more prone to commit substance abuse.

The strength of global evidence and the wide prevalence of the problem in India alarms us that the country faces huge burden of child abuse. The presented evidence in this connection may be helpful for the stakeholders and policymakers for identifying the most effective, efficacious and cost-effective interventions for the prevention from child abuse and treatment of the aftereffects with the victims. The evidence would also be helpful to evolve practice guidelines for the implementation agencies and NGOs.

References

- Aftab, P. (1999). *Sexual abuse of children, child pornography and paedophilia on the internet: An international challenge*. UNESCO, Paris.
- Bartholow, B.N.; Doll, L.S. and Joy, D. et. al. (1994). Emotional, behavioural and HIV risk associated with sexual abuse among adult homosexual and bisexual men. *Child Abuse and Neglect*, 18, 747-761.
- Bear, T.; Schenk, S. and Buckner, L. (1993). "Supporting victims of child abuse." *Educational Leadership*, 50 (4), 44.
- Beitchman, J.H.; Zucker, K.J.; Hood, J.E.; Da Costa, G.A.; and Ackman, D. (1991). A review of the short-term effects of child sexual abuse. *Child Abuse and Neglect*, 15, 537-556.
- Brown, L.K.; Danovsky, M.B. and Lourie, K.J. et. al. (1997). Adolescents with psychiatric disorders and the risk of HIV. *Journal of American Academy of Child and Adolescent Psychiatry*, 36, 1609-1617.
- Bryant, R.A. & Harvey, A.G. (1995). Processing threatening information in posttraumatic stress disorder. *Journal of Abnormal Psychology*, 104, 537-541.
- Cahill L.T., Kaminer R.K. & Johnson P.G. (1999) Developmental, cognitive, and behavioral sequelae of child abuse. *Child and Adolescent Psychiatry Clinic of North America*, 8 (4), 827-843.
- Carlsson, U. (1999), "Child pornography on the internet: Research and information", *News on Children and Violence on the Screen*, Vol.3, No.1, pp.4-5.
- Carrey N.J.; Butter H.J.; Persinger M.A. & Bialik R.J. (1995) Physiological and cognitive correlates of child abuse. *Journal of American Academy of Child & Adolescent Psychiatry*, 34 (8), 1067-1075.
- Cohen, J.A. & Mannarino, A.P. (1988). Psychological symptoms in sexually abused girls. *Child Abuse & Neglect*, 12(4), 571-577.
- Corby, B. (1993), *Child Abuse – Towards A Knowledge Base*, Open University Press.
- DeFronzo, J.; Pawlak, R. (1993). Effects of social bonds and childhood experiences on alcohol abuse and smoking. *Journal of Social Psychology*, 133(5) 635-642 .
- Denver, M. (1961). Protective services and emotional neglect. *The American Human Association*, pp. 6-7.
- Devor, H. (1994). Transsexualism, dissociation, and child abuse: An initial discussion based on non-clinical data. *Journal of Psychology & Human Sexuality*, 6(3) 49-72.
- Dubner, A.E. and Motta, R.W. (1999). Sexually and physically abused foster care children and posttraumatic stress disorder. *Journal of Consulting & Clinical Psychology*, 67 (3), 367-373.
- Encyclopaedia of Crime and Justice (1983). Volume-3, New York: Free Press, 1080-1081.
- Faruque, D.S. & Ahmad, H. (2002). Moral judgement and moral practice amongst abused working children. Paper presented at 89th Indian Science Congress Association, Lucknow, India.
- Finkelhor, D. & Dzuiba-Leatherman, J. (1994). Victimization of children. *American Psychologist*, 49, 173-183.
- Foa, E.B.; Feske, U.; Murdock, T.B.; Kozak, M.J. & McCarthy, P.R. (1991). Processing of threat related information in rape victims. *Journal of Abnormal Psychology*, 100, 156-162.
- Gil, D. (1968). Incidences of child abuse and demographic characteristics of persons involved. In Helfer & Kempe (eds.) *The Battered Child*, Chicago: Univ. of Chicago, pp. 20.
- Gilles, E.E. (1999). Integrating a neurobiological system approach into child neglect and abuse theory and practice. *Children's Health Care*, 28(2), 167-187.
- Gomez-Schwartz, B., Horowitz, J.M. & Cardarelli, A.P. (1990). *Child sexual abuse: Initial effects*. Newbury Park, California: Sage.
- Gomez-Schwartz, B., Horowitz, J.M. & Sauzier, M. (1985). Severity of emotional distress among sexually abuse preschool, school-age and adolescent children. *Hospital and Community Psychiatry*, 36, 503-508.

- Harley, R.D. (1980). Ocular manifestations of child abuse. *Journal of Pediatrics Ophthalmology Strabismus*, 17 (5).
- Holmes, T.R.(1995).History of child abuse: A key variable in client response to short-term treatment. *Families in Society*, 76(6) 349-359.
- Hudson, P.S.(1990).Ritual child abuse: A survey of symptoms and allegations. *Journal of Child & Youth Care*, Special Issue, 27-53.
- Jessee S.A.(1995).Orofacial manifestations of child abuse and neglect. *American Family Physician*, 52 (6), 1829-1834.
- Jill, K. (1981). *Child abuse and neglect: Cross-cultural perspectives*, Berkeley, University of California Press.
- Kempe', C.H.; Silverman, F.H.; Steele, B.F. et.al. (1962). The battered child syndrome. *Journal of American medical association*, 181 p. 105.
- Kempe', R.S. and Kempe', C.H. (1978). *Child abuse*. London, Fontana.
- Kendall-Tackett, K.A.; Williams, L.M. and Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychological Bulletin*, 113,164-180.
- Kissinger, P.; Clark, R.A. and Abdalian, S.E. (1997). Psychosocial characteristics of HIV-infected adolescents in New Orleans. *Journal of Adolescent Health*, 20, 258.
- Koss, M. and Harvey, M. (1991). *The rape victim: Clinical and community interventions*. Newbury Park, California: Sage Publications.
- Kratcoski, P.C. and Kratcoski, L.D. (1979). *Juvenile delinquency*, New Jersey, Prentice-Hall.
- Laszlo, A.; Burgess, A. and Grant, C. (1991). HIV counselling issues and victims of sexual assault. In: A. Burgess (Ed.) *Rape and Sexual Assault III*. New York: Garland Publishing.
- Lupton, C.; Khan, P. and Lacey, D. (1997). *Concerted action on the prevention of child abuse in Europe: Workpage 3*. Social Services Research and Information Unit, University of Portsmouth, U.K.
- Morissette, P.J. (1999) Post-traumatic stress disorder in childhood sexual abuse: A synthesis and analysis of theoretical models. *Child & Adolescent Social Work Journal*, 16(2), 77-99.
- Narang, D.S. and Contreras, J.M.(2000). Dissociation as a mediator between child abuse history and adult abuse potential. *Journal of Child Abuse and Neglect*, 24 (5), 653-665.
- Parke, R.D. and Collmer, C.W. (1975). *Child Abuse: An interdisciplinary analysis*. Chicago, University of Chicago Press.
- Petrak, J.; Byrne, A. and Baker, M. (2000). The association between abuse in childhood and STD/HIV risk behaviours in female genitourinary (GU) clinic attendees. *Sexually Transmitted Infections*, 76, 457-461.
- Pierce, R.L. (1984). Child pornography: A hidden dimension of child abuse. *Child Abuse and Neglect*, 8(4), 483-493.
- Quayle, E. and Taylor, M. (2001) Child seduction and self-representation on the internet. *Cyber Psychology and Behaviour*, 4(5) 597-608.
- Raskin, M.; Nurnberg, H. G.; Prince, R.; Fine, J.; et al (1989). Abuse of the child and anxiety in the adult. *New York State Journal of Medicine*, 89(3), 138-140.
- Ratna, L. and Mukergee, S. (1998). The long-term effects of childhood sexual abuse: Rationale for and experience of pharmacotherapy with nifedipine. *International Journal of Psychiatry in Clinical Practice*, 22 (2), 83-95.
- Read, J. and Argyle, N. (1999). Hallucinations, delusions, and thought disorder among adult psychiatric inpatients with a history of child abuse. *Psychiatric Services*, 50 (11), 1467-1472.
- Saunders, B.E; Kilpatrick, D.G.; Hanson, R.F.; Resnick, H.S. et.al. (1999). Prevalence, case characteristics, and long-term psychological correlates of child rape among women: A national survey. *Child Maltreatment: Journal of American Professional Society on the*

- abuse of Children*, 4 (3), 187-200.
- Segal U.A. & Ashtekar A. (1994). Detection of intrafamilial child abuse: children at intake at a children's observation home in India. *Child Abuse & Neglect*, 18 (11) 957-967.
- Segal U.A. (1995) Child abuse by the middle class? A study of professionals in India. *Child Abuse and Neglect* 19 (2), 217-31.
- Sheldon, H. and Bannister, A. (1998). Working with adult female survivors of childhood sexual abuse. A. Bannister (Ed.), In: *From hearing to healing: Working with the aftermath of child sexual abuse* (2nd ed.). New York: John Wiley and Sons, 96-117.
- Stevenson, J. (1999). The treatment of the long-term sequelae of child abuse. *Journal of Child Psychology and Psychiatry*, 40 (1) 89-111.
- Straus, M.A. and Kantor, G.K. (1994) Corporal punishment of adolescents by parents: a risk factor in the epidemiology of depression, suicide, alcohol abuse, child abuse, and wife beating. *Adolescence*, 29 (115), 543-561.
- VanFleet, R.; Lilly, J.P. and Kaduson, H. (1999) Play therapy for children exposed to violence: Individual, family and community interventions. *International Journal of Play Therapy*, 8(1), 27-42.
- Von Burg M.M.; Hibbard R.A.(1995).Child abuse education: do not overlook dental professionals. *ASDC Journal of Dentistry for Children*, 62(1), 57-63.
- Von Burg M.M.and Hibbard R.A.(1995a).Munchausen syndrome by proxy: a different kind of child abuse. *Indiana Medicine*, 88 (5) p378-82.
- Widom, C.S. (1999). Posttraumatic stress disorder in abused and neglected children grown up. *American Journal of Psychiatry*, 156 (8), 1223-1229.
- Wingood, G.M. and DiClemente, R.J. (1997). The effects of an abusive primary partner on the condom use and sexual negotiation practices of African American women. *American Journal of Public Health*, 87, 1016-1018.
- Zierler, S.; Feingold, L. and Laufer, D. et. al. (1991). Adult survivors of childhood sexual abuse and subsequent risk of HIV infection. *American Journal of Public Health*, 81, 747-761.
- Zillmann, D. (1989). Effects of prolonged consumption of pornography. In Zillmann, D. and Bryant, J. (Eds.), *Pornography: Research advances and policy considerations*. New Jersey: Hillside, 127-157.
- Zlot SI, Herrmann M, Hofer-Mayer T, Adler M, Adler RH (2000). Childhood experiences and adult behaviour in a group of women with pain accounted for by psychological factors and a group recovered from major depression. *International Journal of Psychiatry and Medicine*; 30 (3): 261-75.
