INDICATORS OF HEALTH STATUS, PREVALENCE OF MORBIDITIES AND TREATMENT SEEKING BEHAVIOUR AMONG TRIBAL WOMEN OF KINNAUR DISTRICT OF HIMACHAL PRADESH

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Abstract: The objectives of the present study were to calculate the BMI of tribal women, which provides a reliable indicator of body fatness to screen for weight categories that may lead to health problems and to document the prevalence of morbidities and treatment seeking behaviour of tribal women of Kinnaur district of Himachal Pradesh. The study was conducted in two blocks viz Kalpa and Nichar of district Kinnaur of H.P. From both block 20 villages were selected randomly and from these villages 250 women in the age group of 15-45 years were selected. A self-structured interview schedule was administered that included the background information proforma, checklist for the prevalence of morbidities and treatment seeking behaviour of women. Karl Pearson correlation matrix was applied to find out the relationship among environmental profile with prevalence of morbidities among women respondents. The results show that (59.6%) of women had normal weight and (22.0%) were found to be underweight. On the other hand majority of women sought for allopathic treatment and all of the respondents believed in their local deities for curing their morbidities. Some variables of Environment profile of women were found to be significantly correlated with prevalence of diseases. The results of the study stress the need for greater attention to the quality of care in health programmes in connection with women morbidity. The findings suggest the need to create awareness among various health issues like personal care, cleanliness of self and surroundings and hygiene
Keywords: Kinnaura tribe, diseases, BMI, cleanliness.

Introduction

The word 'Tribe' denotes a group of people living in primitive conditions. It is a social group with territorial affiliation, endogamous with no specialization of functions. They have a headman or a chief who controls the activities of that group. Tribals have several sub-groups all of them together known as 'Tribal Society'. Himachal Pradesh has a considerable percentage of tribal population in the state. These tribal include the Kinners or Kinnaure, the Lahules, the Spitians, the Pangwalas, the Gaddis and the Gujjars. These people are soft spoken and indulge mainly into occupation like rearing of sheep and rising of wool. Other occupation of these people includes agriculture and horticulture.

Though the main occupation of Kinnauri tribes are raising wool and rearing sheep some are engaged in agriculture and horticulture. These Kinnauri tribes have the tradition of maintaining herds of cattle in their houses. The women of these tribes are quite hard working. Weaving is mainly practiced by the women community of this tribe. Along with that women also work in the fields. Women and children constitute a marginalized section within tribal communities. Their plight is even worse. Women face difficulties in discussing their health problems with doctors, most of whom are men. As a result, even minor health problems, which could be easily treated in the initial stages, assume chronic and serious proportions. For instance, untreated gynaecological problems in adolescent girls often lead to abortions and complications or even deaths during deliveries.

Traditionally, women bear primary responsibility for the wellbeing of their families. Either it is caring for the children, husband or other family members or it is cleaning home, cooking food, maintaining cattle, working in fields, collecting fodder or firewood etc. these women have less or no time to take care of themselves or sometime even eat their meals. They are so involved in day to day chores that they ignore the rest which their body or mind demands, which makes them more susceptible to diseases. Yet they are systematically denied access to the resources they need to fulfill their responsibilities, which includes education, health care services, job training, etc. For women in India, poor nutrition, early childbearing and poor reproductive health complications compound the difficulties of poor physical development. Women's reproductive health is largely influenced by their health status during infancy, childhood and adolescence. Compared with boys, the adolescent girls' health, nutrition, education and development are more neglected which has adverse effect on overall physical health of women. Most girls and women are not adequately aware of their increased nutritional needs for growth during adolescence and after they get married, resulting in complications during pregnancy and delivery. These women lack all kind of nutritional knowledge and deprive their children of adequate health care, good nutrition and opportunity for schooling.

As India strives towards becoming a more egalitarian society, individual development becomes important and health and education become critical factors in reaching this goal. Health includes physical and mental development also the psychological and social development. Health problems that the tribals face are women morbidities, maternal mortality, poor nutritional status, fertility, neo-natal mortality, post-natal mortality, peri-natal mortality, poor life-expectancy, ill health etc.

Researchers have developed the concept of "Health Modernity". Modernity means certain psychological qualities of individual, which are pre-requisites for economic development. It makes the individual an effective agent of socio-economic and political development. Health Modernity does not ensure or guarantee social, economic and political modernity but it is the fundamental precondition of all other developments. It includes scientifically correct information, attitude and behaviour in relation to physical and mental health, personal hygiene and sanitation. Tribals display a far less health modernity as compared to the rest of the population. Their own beliefs, illiteracy, poverty, non-access to scientific information contribute to this low Health Modernity status. The health indicators for tribal people are poorer than the rest of the population and women and girls from these groups are particularly underprivileged. The main reasons for the poor health status of tribal people are poverty and under nutrition in both macro and micronutrients, poor environmental sanitation, hygiene and lack of drinking water and lack of access to health services. The present study is a little step towards tribal health which is and will remain important agenda not only at national level but also at international level. Therefore the present study was formulated to   calculate the BMI of tribal women, which provides a reliable indicator of body fatness to screen for weight categories that may lead to health problems and to document the prevalence of morbidities and treatment seeking behaviour of tribal women of Kinnaur district of Himachal Pradesh with keeping in mind the following objectives:

1.   To find out the indicators of health status of women according to their BMI.

2.   To document the Prevalence of morbidity among them

3.   To find out the treatment seeking behaviour among tribal women.

Methodology

Locale of the study: The study was conducted in two blocks viz. Kalpa and Nichar of district Kinnaur of Himachal Pradesh.

Sampling method: The sampling was done in three phases

Phase I: Himachal Pradesh has 12 districts and out of these three are the districts which have high density of tribal population i.e. Lahaul & Spiti, Kinnaur and Chamba. Out of these three tribal districts one district i.e. Kinnaur was selected purposively as this district is easily accessible than other tribal districts.

Phase II: From the selected district, two blocks namely Kalpa and Nichar blocks were selected purposively, keeping in view the time constraint.

Phase III: Further from each block, ten villages were selected randomly thus making a total of 20 villages from the selected district. From these blocks, 250 women in their reproductive years in the age group of 15-45 yrs Door-to door survey method was applied in selected villages to derive the sample.

Tools used for the study:

The detailed interview schedule was administered individually by the investigator. It included

1.   Background Information Proforma: It included age, education, occupation, caste, type of family, no of family members and environmental profile of the respondent, that included overcrowding, type of house, separate kitchen, cleanliness, adequate ventilation and light, domestic animals, toilet facility, storage of water, drainage and garbage disposal etc.

2.   Interview schedule for assessing health status of women. It included aspects like:

a.   Anthropometric measurements: In this Height and weight of women were recorded. Further BMI were calculated. Body Mass Index (BMI) is a number calculated from a person's height and weight. It provides a reliable indicator of body fatness for most people and is used to screen for weight categories that may lead to health problems. BMI was calculated by the equation given by Garrow and Webster (1985).

Body Mass Index (BMI) = weight (kg) / height m^2

Prevalence of morbidities (from last 6 months) among women was recorded

Treatment seeking behaviour of women was also recorded during the interview schedule.

Data collection: In order to ensure good response rapport was established with the women. The data were collected from women aged 15-45 years.

 Analysis of data: After the collection of data, the gathered information was tabulated on excel sheets. It was then computed in different forms. The tables were quantified using frequency tables and also percentages were calculated. The data were analyzed statistically. The following tests were used for the present study:

i)   Karl Pearson correlation matrix: correlation matrix was applied to find out the relationship between independent and dependent variables.

Results and Discussion

Age: It is evident from the Table 1 that (32%) of the women fall in the age group of 21-25 years of age. It is followed by (20.4%) of women respondents who belonged to the age group of 26-30 years. Further it can be seen from the table that (16%) of women respondents were in the age range of 31-35 years. Whereas only (12.8%) were of the age group of 15-20 years. On the other hand (7.6%) of the women respondents were in the age range of 41-45 years of

age. Education: Majority of the women respondents i.e. (25.2%) had education up to matric level. It is followed by (21.6%) of respondents, who had education up to higher secondary level. Further the table revealed that (19.6%) had the education up to middle level. Primary education was attained by (16%) of the women respondents. About (5.6%) of women respondents were illiterate. Type of family: Regarding family type (62.4%) of women lived in joint family. Whereas remaining (35.6%) belonged to nuclear family type. Only (2%) lived in extended family. Total number of family members: It is clear from the table that majority i.e. (48.4%) of respondents revealed that their family members were 6 in number. It is followed by (22%) where women had total of 4 family members in their family. About (15.6%) women reported that women had 7 family members in their family. About one fifth i.e. (10.4%) women respondents that they were 8 family members in total. Type of House: The table shows that (48%) of women lived in Kaccha house (made of wood). It is followed by (34.8%) of women respondents whose house was found to be Semi Pucca. Only (16.4%) of women respondents reported to have lived in Pucca houses. Overcrowding: The table further revealed that (77.2%) of women respondents reported that there was no problem of overcrowding in their homes. Separate room for Kitchen: It is clear from the table that about half (53.2%) revealed that they have no separate room for kitchen, out of which (48.8%) were from Kalpa block and (57.6%) were from Nichar block.. Cleanliness of living rooms: the data further revealed that no cleanliness of living rooms was found in (54.8%) of household. Adequate ventilation: More than half i.e. (52%) of women respondents reported that their homes didn't have adequate ventilation. Domestic animals: Most of the women respondents i.e. (79.6%) revealed that they had domestic animals in their homes, wherein (83.2%) were from Kalpa and (76%) were from Nichar block. Source of drinking water: More than half i.e. (58%) of the women revealed that tap was the source of drinking water to them. Whereas for remaining (42%) natural water of streams which they called *Chasme* in local language was their source of drinking water. Safe drinking water storage in house: The table further revealed that that 62.4% of women respondents had safe drinking water storage. On the contrary (37.6%) household did not have proper storage of water in their homes. Toilet facility: Regarding toilet facility only (40.8%) had toilet facility in their homes, whereas (59.2%) had to go to open field for toilet. Status of drainage: Majority of women i.e. (94.8%) reported to have open and running drainage system. Garbage disposal: Majority of the respondents i.e. (81.6%) had their garbage disposed in open. Whereas only (18.4%) burned their garbage.

Table 1: Background information of the respondents:

Particulars	Kalpa (n=125)	Nichar (n=125)	Total (n=250)
1. Age (years)			
15-20	12(9.6)	20(16.0)	32(12.8)
21-25	40(32.0)	40(32.0)	80(32.0)
26-30	28(22.4)	23(18.4)	51(20.4)
31-35	24(19.2)	16(12.8)	40(16.0)
36-40	15(12.0)	12(9.6)	27(10.8)
41-45	5(4.0)	14(11.2)	19(7.6)
2. Education			
Illiterate	4(3.2)	10(8.0)	14(5.6)
Literate but no formal schooling	3(2.4)	4(3.2)	7(2.8)
Primary	22(17.6)	18(14.4)	40(16.0)
Middle	19(15.2)	30(24.0)	49(19.6)
High	32(25.6)	31(24.8)	63(25.2)
Higher secondary	28(22.4)	26(20.8)	54(21.6)
Graduate	12(9.6)	6(4.8)	18(7.2)
Post-graduate	4(3.2)	-	4(1.6)
3. Type of family			
Nuclear	45(36.0)	44(35.2)	89(35.6)
Joint	77(61.6)	79(63.2)	156(62.4)
Extended	3(2.4)	2(1.6)	5(2.0)
4. Total number of family members			
4	30(24.0)	25(20.0)	55(22.0)
5	1(0.8)	8(6.4)	9(3.6)
6	84(67.2)	37(29.6)	121(48.4)
7	2(1.6)	37(29.6)	39(15.6)
8	8(6.4)	18(14.4)	26(10.4)
5. Overcrowding			
Yes	26(20.8)	31(24.8)	57(22.8)
No	99(79.2)	94(75.2)	193(77.2)
6. Separate room for kitchen			
Yes	64(51.2)	53(42.4)	117(46.8)
No	61(48.8)	72(57.6)	133(53.2)
7. Cleanliness of living room			
Yes	68(54.4)	45(36.0)	113(45.6)
No	57(45.6)	80(64.0)	137(54.8)
8. Adequate ventilation			
Yes	64(51.2)	56(44.8)	120(48.0)
No	61(48.8)	69(55.2)	130(52.0)
9. Adequate lighting			
Yes	72(57.6)	54(43.2)	126(50.4)
No	53(42.4)	71(56.8)	124(49.6)

10. Domestic animals			
Yes	104(83.2)	95(76.0)	199(79.6)
No	21(16.4)	30(24.0)	51(20.4)
11. Source of drinking water			
Tab	79(63.2)	66(52.8)	145(58.0)
Well	-	-	-
Tube well	-	-	-
Hand pump	-	-	-
Chasme	46(36.8)	59(47.2)	105(42.0)
12. Safe drinking water storage in home			
Yes	93(74.4)	63(50.4)	156(62.4)
No	32(25.6)	62(49.6)	94(37.6)
13. Toilet facility			
Open	68(54.4)	80(64.0)	148(59.2)
Flush	57(45.6)	45(45.0)	102(40.8)
14. Status of drainage			
Open and stagnant	-	-	-
Open and running	118(94.4)	119(95.2)	237(94.8)
Closed	7(5.6)	6(4.8)	13(5.2)
15. Disposal of garbage			
Open	90(72.0)	114(91.2)	204(81.6)
Burn	35(28.0)	11(8.8)	46(18.4)

Figures in parentheses depicts percentage

Table 2 revealed that data on health status according to their BMI. It can be seen from the table that half i.e. (59.6%) of respondents have normal weight, wherein (50.4%) belonged to Kalpa and (68.8%) belonged to Nichar block. It is followed by (22.0%) of women who were found to be underweight, whereas remaining (17.2%) of respondents were overweight. On the other hand negligible percentage of respondents i.e. 1.2% were in the category of obese. Both over- and underweight is a major problem and extremely unhealthy. Underweight may cause additional problems as a weak immune system and a higher risk of life threatening situation when infected with certain diseases because these patients don't have any fat reserves. In women, being grossly underweight can result in amenorrhea (absence of menstruation) and possible complications during pregnancy. It can also cause anemia and hair loss. Underweight is an established risk factor for osteoporosis even for young people. Results are in line with Results are in line with the Chakraborty (2006) who demonstrated that the prevalence of adult under nutrition was very high among Savar tribal women. These rates increased with increasing age.

Table 2: Indicators of health status according to their BMI of women respondents

Particulars	Kalpa (n=125)	Nichar (n-125)	Total (n=250)
Underweight	31(24.8)	24(19.2)	55 (22.0)
Normal	63 (50.4)	86(68.8)	149 (59.6)
Overweight	28(22.4)	15(12.0)	43(17.2)
Obese	3(2.4)	-	3(1.2)

Figures in parentheses depicts percentage

Table 3 revealed the data regarding prevalence of morbidities among tribal women. The table reported that majority i.e. (84.0%) of women suffered from fatigue. More than half (63.2%) of women respondents of Kalpa and Nichar block were found to suffering from Urinary Tract Infections. More than half i.e. (58.8%) were found to be suffering from headache. It is followed by (53.2%) of women who were suffering from Cold and Cough. More than one fourth of women respondents i.e. (23.2%) had the problem of diarrhea, where (17.6%) were from Kalpa and (28.8%) belonged to Nichar block. Regarding the prevalence of Bronchitis (22.0%) were found to be suffering from this disease. About (14.0%) were suffering from BP and nearly one fifth i.e. (9.2%) respondents were found to be suffering from Tuberculosis. Epilepsy and Typhoid was found to be among (3.6%) and (3.6%) of respondents respectively. Orissa Health Strategy (2003) indicated that the tribal people suffer disproportionately from malaria, sexually transmitted diseases, tuberculosis sickle cell anaemia and also nutritional deficiency diseases. Desai and Patel 2011 revealed the Information collected from married women age 15-44 on common symptoms of RTI. The symptoms included painful micturition, lower abdomen or vaginal pain during intercourse, and abnormal vaginal discharge. According to Nalinam (2016) reports from newspapers show that tribes in Kerala underwent serious health issues. Recent changes in land use pattern and land alienation has adversely has affected their traditional livelihood leading to food insecurity. Poverty, lack of cleanliness, infrastructure inadequacy, coupled with various health problems add fuel to fire.

Table 3: Prevalence of morbidities among women

Particulars	Kalpa (n=125)	Nichar (n-125)	Total (n=250)
Bronchitis	31(24.8)	24(19.2)	55(22.0)
Typhoid	2(1.6)	7(5.6)	9(3.6)
T.B	14(11.2)	9(7.2)	23(9.2)
Diarrhea	22(17.6)	36(28.8)	58(23.2)
Arthritis	11(8.8)	9(7.2)	20(8.0)
B.P	14(1.2)	21(16.8)	35(14.0)
Cough and Cold	62(49.6)	71(56.8)	133(53.2)
Headache	65(52.0)	82(65.6)	147(58.8)
UTI	84 (67.2)	74(59.2)	158(63.2)

Epilepsy	7(5.6)	2(1.6)	9(3.6)
Piles	1(0.8)	4(3.2)	5(2.0)
Pneumonia	3(2.4)	1(0.8)	4(1.6)
Fatigue	98(78.4)	112(89.6)	210(84.0)

Table 4 depicts the correlation between environmental profiles of women with prevalence of morbidities. It can be seen from the table that cleanliness in homes, domestic animals in homes, toilet facility and storage of water in homes was found to be significantly correlated with prevalence of morbidities at 5% level of significance. However disposal of garbage was found to be highly significantly correlated with prevalence of diseases among women at 1% level of significance. On the other hand type of house, overcrowding, separate kitchen, adequate ventilation and light, drainage status were non-significant with prevalence of morbidities among women of tribal areas of Kinnaur. The generally low standards of housing and hygiene of tribes also had an important impact on nutritional standards, especially in infants and young children among whom malnutrition is wide spread (Suguna 2002). Devan (1988) observed that the contributory factors for malnutrition, gastro-enteritis and scabies among the adivasis of Waynad of Kerala were due to unhygienic condition such as lack of pure drinking water and untidy premises.

Table 4: Correlation between environmental profile of women with prevalence of morbidities

Environmental profile	Prevalence of morbidities
Type of house	0.01105 (NS)
Overcrowding	0.009301(NS)
Separate Kitchen	0.002298 (NS)
Cleanliness	0.1228*
Adequate ventilation	0.004098(NS)
Adequate light	0.0004154 (NS)
Domestic animals	0.1343*
Toilet facility	.07151*
Storage of water	0.1197*
Drainage	-0.001615 (NS)
Garbage disposal	-0.06145 **

**Significant at 1% level, *Significant at 5% level, NS-Non significant

Regarding the treatment seeking behaviour of women respondents it was found from table 5*the* data gathered that majority i.e. (96.0%) of women took allopathic medicine for certain diseases. Whereas all of the respondents tried Home remedies for the diseases. For e.g. *(if they or any family member suffer from cold or cough they make namkeen (salty) chai for them, which included their local herbs and Oil of chuli (kumani seeds) , in case of fever they boil gucchi in water and drink that water. For headache or backache they massage head or any affected area with chulli oil).* Even the respondents believed in their local deities for curing their morbidities. They believe that if they or anyone is suffering from major disease it is the repercussion of their sins or anger of their local devi or devta whom they have angered in some way or another. Around (37.2%) of women claimed that they took treatments from local vaid and Hakims for their diseases. About (32.4%) of respondents took Ayurvedic treatments for their morbidities, whereas (11.6%) of respondents took homeopathic treatment for their diseases. The respondents also claimed that allopathic was the main medicine for curing their diseases and believe in t local deities was higher than anything. It was their belief that the medicines only work if their deities permit them to work. The study done by Desai and Patel (2011) pointed out that sources of treatment among women were found that only 23percent of women had sought treatment from government health facility for RTI/STI symptoms including vaginal discharge whereas 66 percent of the women went to a private health facility and percent tried home remedy or other source of treatment. Rahman *et al*. (2012) aimed at exploring the choices in patterns of health care seeking behaviour of the hill tribal population of Bangladesh to present the obstacles and challenges faced in accessing healthcare provision in the tribal areas. The findings suggested that the tribal communities may differ from the predominant Bengali population in their health needs and priorities. Traditional healers are still very popular and gender and age plays a role in making decisions in household in relation to health matters and treatment seeking and distinct differences exists among the tribal people concerning their knowledge on health, awareness and treatment seeking behaviour.

Table 5: Treatment Seeking Behaviour of respondents

Particulars	Kalpa (n=125)	Nichar (n-125)	Total (n=250)
Allopathic	119 (95.2)	121(96.8)	240(96.0)
Ayurvedic	36(28.8)	45(36.0)	81(32.4)
Homeopathic	18(14.4)	11(8.8)	29(11.6)

Home remedies	125(100.0)	125(100.0)	125(100.0)
Local Vaid/Hakim	54(43.2)	39(31.2)	93(37.2)
Local deities	125(100.0)	125(100.0)	250(100.0)

Figures in parentheses depicts percentage

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