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Health Care Practices of Urban Tribal Women of Arunachal Pradesh in India: A Case Study

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ABSTRACT

Medical needs of women are more important from the point of view of their position in society. Method adopted by women to satisfy these needs also depends on many structural, social and socio-psychologic factors. Influences of hereditary conditions, inherent biological traits, contributions of culture and the potential sentimental factors are contributors to these phenomena. ***Objective:*** *The objective of the study is to examine the health care practices of urban tribal women in view of different socio-economic conditions at different age groups.* ***Method and Materials:*** *The survey was conducted among 100 tribal women through proportionate and stratified random sampling technique with the help of pre-designed and pre-structured questionnaire through direct interaction with the respondents. The respondents were divided into 1:1 ratio i.e., 50 respondents were from the age group of (20-50) years and another 50 from the age group of above 50 years. Graphical presentation and simple statistical techniques like percentages, standard deviation, co-efficient of variation, Yule Coefficient of Variation and regression analysis with requisite tests including Chi-square have been used to analyse the data.* ***Result and Discussion:*** *Men is more consciousness about their health with the increasing in age in comparison to women, that is why; the women suffer more than men and they fell ill more.* ***Conclusion:*** *Women's health and their active involvement in health care programmes are essential keys to the general health. In addition to their own special health problem, the major challenges they face during every day life, particularly during pregnancy and child-birth.*

Keywords: Socio-psychologic factor, Biological trait, hereditary condition, Culture, Yule Coefficient of Variation

Introduction

Medical needs of women are more important from the point of view of their position in society. The biological and social roles that operate on women always expose them to certain questions. Medical problems for women are very often the result of these kinds of issues. In modern times, the emergency of new kind of reported diseases and researches in the medical science has opened up new means of solution to these problems. At present, owing to the increasing influence of education and urbanization, even ordinary ailments are desired to be handled from a specialist's point of view by the most of people. Illness behaviour always varies among individuals. This is more so when the nature of complain are different, some people immediately seek medical aid while others may ignore symptoms and leisurely seek treatment. In the case of patients, the influencing factors in the utilization of medical care facilities may range from general cultural prescriptions and proscriptions to particular psychological motivations. There are many persons in the general population who require care and treatment but who do not come to the attention of care facilities. Conversely, there are some others who have developed in overdependence on the physician. The impact of a physical illness depends upon a number of factors: the nature of illness, treatment and the character of the person (Raymond S. Duff and August B. Holinshed, 1968).

Since women have higher level of distress, they are more likely to use medical services. Another possible explanation for the higher rate among women is that they are more dependent and affective and thus more likely to seek interpersonal solution to feelings of distress (Mechanic, 1978). Thus, there have been good evidences to support the argument that women feel or express more subjective distress of all kinds. Cultural leaning, dependency patterns, life situations and modes of expressing distress etc., are relevant to understanding different behaviours in regard to health among men and women (Sumaraj, 1991; p. 17). In any society, women health and their active involvement in health care programmes are essential keys to the general health of the group. This is because, quite aside from their own special health problems and the major challenges they face during every day life, particularly during pregnancy and child-birth, women customarily do most of the services for their family members. Studies on utilization of medical care facilities have revealed that generally women report symptoms of both physical and mental illness and utilise physicians and hospital services for these conditions at higher rates than men (Nathanson, 1995).

Origin of the Research Problem

Medical needs are always different among people. Method adopted by women to satisfy these needs also depends on many structural, social and socio-psychologic factors. Influences of hereditary conditions, inherent biological traits, contributions of culture and the potential sentimental factors are contributors to these phenomena. Among the biological traits, age is a significant variable. In the case of problems associated to medical care, aging assume the most important condition in case of women (**Sumaraj, 1991; p.76)**. Everywhere patterns of illness vary

in relation to a variety of socio-demographic indicators including age, sex, socio-economic factors and residential and geographic conditions. So, medical care is essential for everybody on occasions of necessity. But very often it is seen that there exist inequalities in the actual nature of providing such care to the individuals.

Objective

The objective of the study is to examine the health care practices of urban tribal women in view of different socio-economic conditions at different age groups.

Relevant Review of Literature

Review of literature is an important aspect in analyzing the research performance of any discipline. It provides the researchers a proper direction to carry out their research work and enables them to arrive at meaningful results. Keeping these facts in view, the available literature relevant to the objectives of the present study reviewing a few works could deserve attention.

Leena Sumaraj (1991) in her study "Women and Medical Care" explores that Men and women differ in many ways in their attitudes to their doctors. Age and sex variations have definite relationship between the choices or preferences for male and female medical officers.

Snehalata Panda (2015) in his article "Health Status of Tribes and New Initiatives" shows that majority of the tribes living in remote areas have no awareness about health as a prerequisite for human development. Much of this can be attributed to their culture; a cumulative deposit of knowledge transferred from generation to generation which are intrinsic to their social existence.

P. Srivatsa (2015) in his article "Need for New Health Care Service for Tribal" investigates that the medical system is simple societies is structured on the lines of herbal and psychometric treatment. The healing practices include a touch of mysticism, supernatural and magic, resulting specific magic-religious rites, etc.

K. Aruna Anand and Manju S. Nair (2016) in their article "Health Care Responsibility at the Grass Root Level: Analysis of Effectiveness of Local Self Government Institutions" states that in this race of development, a community that was left behind in a state of underdevelopment and isolation, tangled in the clutches of social customs and taboos was the scheduled tribes who possessed impeccable knowledge and expertise on the traditional medicine.

Hirendra Nath Sarma (2013) in his article titled "Traditional Medicines: A Rendezvous for Therapeutics in Global Perspective" discusses the importance of traditional medicines of the tribes of Arunachal Pradesh which draws the attention of scientific community, Government and non Governmental institutions across the world.

Tamo Mibang and Lisa Lomdak (2013) in their edited book "Understanding North–East Region of India" states that the knowledge of the "Traditional Medicine" (TM) of the indigenous people is gained over centuries through experience and trial and error applications. The Traditional Medicines can be codified, regulated, taught openly and practiced widely and systematically and benefit from thousands of years of experience.

D. Howard Schwartz and S. Kart Carry (1978) in his book "Dominant Issues in Medical Sociology" examines that issues of medical care relating to women are rather more sensitive. The process of response, selection and application of medical care on women always need special consideration.

Meera Chatterjee (1988) in her study "Implementing Health Policy" investigates that women's access to medical care is a complex, multidimensional one. Ultimately, a women's access to health care could determine the economic viability of a family.

Constance A Nathanson (1975) in his article "Illness and Feminine Role: A Theoretical Review" shows that in any society, women health and their active involvement in health care programmes essential keys to the general health of the group.

By keeping the content and meaning of the analyzed review of literature in mind, it is observed that there is no systematic study on Health Care Practices of tribal women in the State. This is the gap identified by the researcher. In order to fulfill the gap, the present study is being undertaken.

Method and Materials

Sample Study Area and Type of the Study: The study is basically empirical in nature based on primary data collected from field study. The field study was conducted at capital city, Itanagar of Arunachal Pradesh mostly at Dera Natung Govt. College and surrounding locality during August, 2016 to January, 2017. The all respondents were at least school final passed or highly literate consisting of teaching and non-teaching staff, shop keeper and other service holders of surrounding area. We selected 50 respondents having qualifications of above School Final

or below Graduation or Graduation and 50 respondents having above Graduation. The fact and figures of health care practices of the tribal people are used to analyze the issues raised and incorporated in the study.

Selection of Respondents: The households who were normally suffering for self health problem or facing health problem of his or her family member(s). Major health problem was not considered here.

Sample Size and Sampling: The survey was conducted among 100 tribal women through proportionate and stratified random sampling technique with the help of pre-designed and pre-structured questionnaire through direct interaction with the respondents. The respondents were divided into 1:1 ratio i.e., 50 respondents were from the age group of (20-50) years and another 50 from the age group of above 50 years.

Data Analysis: The various data collected are scrutinized, processed, organized and tabulated logically and systematically under appropriate head of rows and columns of statistical tables in such a way to get the required result. Graphical presentation and simple statistical techniques like percentages, standard deviation, co-efficient of variation, Yule Coefficient of Variation and regression analysis with requisite tests including Chi-square have been used to analyse the data for which the details are presented in the proper places to write up the report of the study.

Result and Discussion

Issues of Health Care Practices (HCPs) relating to women are rather more sensitive. The process of response, selection and application of medical care on women always need special consideration. Certain peculiarities associated to the physiological and sentimental factors of women very often play an active role in the sickness of women. In our society, women report themselves ill more often than men. During their reproductive years adult women would be expected to show increased utilization of health services. Even when conditions associated with reproduction are excluded, women have higher rates than men for all the indices of illness experience. Both sickness and prevalence rates are substantially higher for women than men, while incapacity rates are generally higher for men (D. Howard Schwartz and Carry S. Kart, 1978; p.24). From the biological perspective, woman is seen as the product and prisoner of her reproductive system. An imbalance, exhaustion, infection or other disorder of the reproductive organs could cause pathological reaction in parts of the body. Married women's roles are especially frustrating relative to those of married men in regard to medical care habits (Sumaraj, 1991; p. 9).

Comparison of Sickness between Men and Women

Since women have higher level of distress, they are more likely to use medical services. Another possible explanation for the higher rate among women is that they are more dependent and affective and thus more likely to seek interpersonal solution to feelings of distress (Mechanic, 1978). Thus, there have been good evidences to support the argument that women feel or express more subjective distress of all kinds. Cultural leaning, dependency patterns, life situations and modes of expressing distress etc., are relevant to understanding different behaviours in regard to health among men and women (Sumaraj, **1991; p.** 17).

Generally, it has been seen that utilization of health services is greater for women than for men. Women report a higher morbidity and even after correcting for maternity, have a higher rate of hospital admissions (Ronald Anderson et al., 1970). While the nature and extent of knowledge about the symptoms of an illness is considered, then also it appears that women generally know more about health matters than men (Jacob J. Feldman, 1966). Furthermore it has been seen that proportion of Women in a household is causally linked to the number of physician visit for that household. It has been showed that larger the proportion of Women in particular household, greater is the demand or requirement for physicians (Wan and Soifer, 1974).

Due to more consciousness about self health, men fell ill less while due to less consciousness about self health, women fell ill more. There is negative correlation between consciousness and ill. The Table-1 given below shows the number of times of any type of sickness of men and women occurred in a year.

Table-1: Number of Sickness of Men and Women in a Year

Age Group	Men					Total		Women					Total
	Times of Sickness							Times of Sickness					
	Nil	**1**	**2**	**3**	**> 3**			**Nil**	**1**	**2**	**3**	**>3**	
20-50 years (Sample=50)	28	15	5	2	-	50		19	20	6	3	2	50
Above 50 years (Sample=50)	18	20	7	3	2	50		10	25	10	2	3	50
Total	46	35	12	5	2	100		29	45	16	5	5	100
	Chi-square (χ^2) at 4 degree of freedom =5.421532							Chi-square (χ^2) at 4 degree of freedom = 4.748659					

Source: Field Survey from 1st August, 2016 to 31st January, 2017.

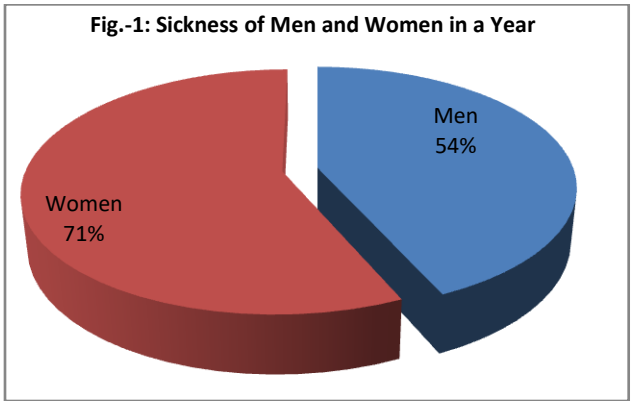


Table value of Chi-square at 5 per cent level of confidence = 9.46

In case of men, Chi-square Test tells that the variables are not significantly related even at 5 per cent level of confidence. Hence the null hypothesis (Ho) is accepted.

In case of women, Chi-square Test tells that the variables are not significantly related even at 5 per cent level of confidence. Hence the null hypothesis (Ho) is accepted.

Findings from Table-1 and Fig.-1: The study was conducted among 100 men and 100 women. It is seen from the study that men fell less only 54 per cent while women fell 71 per cent. It signifies that the consciousness about self health care of men was improved on account of which they fell ill less. On the other hand, the consciousness about self health care of women was not improved. In any society, women's health and their active involvement in health care programmes are essential keys to the general health of family. Women customarily have to take care for their family members and children and use to do most of the household chores. For minor health problems, they tolerate the pain many times. But they face major challenges particularly during pregnancy and child-birth. Here study reveals that generally women fell in sickness more than men but report less for physical and mental illness in comparison to their male counterpart.

Women reported themselves ill more often than men. During their reproductive years, adult women would be expected to show increased utilization of health services. Even when conditions associated with reproduction are excluded, women have higher rates than men for all the indices of illness experiences. Both sickness and prevalence rates are substantially higher for women than men. But in regard of health care, the women were lagging behind the men.

Yule's Coefficient of Association

Again it can be calculated that how much consciousness were men and women about their self-health **in the study area?** In this respect, Yule's Coefficient of Association may be applied following Yule method to see correlation between consciousness of self-health and age as per Table-2.

Table-2: Health Consciousness and Number of Times of Sickness at different age group of Men and Women

Consciousness of Self-Health	Number of Times of Sickness			
	Men		Women	
	1 Time	More than 1 Time	1 Time	More than 1 Time
20-50 years	15	7	20	11
Above 50 years	20	12	25	15
Total	35	19	45	26
Grant Total	54		71	

Source: Field Survey from 1st August, 2016 to 31st January, 2017

Applying Yule's method for Male

Let A denotes one-time sickness and α would denote more than one-time sickness.

Let B denotes consciousness about self-health of the respondents lying between (20-50) years old and β would denote consciousness about self-health of the respondents lying above 50 years.

Construction of Table for calculation Yule's Coefficient of Association for Men

	A	α
B	15	7
β	20	12

$$\text{Yule's Coefficient of Association} = \frac{(AB)(\alpha\beta) - (A\beta)(\alpha B)}{(AB)(\alpha\beta) + (A\beta)(\alpha B)} = \frac{(15 \times 12) - (20 \times 7)}{(15 \times 12) + (20 \times 7)} = \frac{40}{320} = 0.125$$

There is positive association between consciousness of self-health and age of men. It means that self-health consciousness increases with the increase in age.

Applying Yule's method for Women

Let A denotes one-time sickness and α would denote more than one-time sickness.

Let B denotes consciousness about self-health of the respondents lying between (20-50) years old and β would denote consciousness about self-health of the respondents lying above 50 years.

Construction of Table for calculation Yule's Coefficient of Association for Women

	A	α
B	20	11
β	25	15

$$\text{Yule's Coefficient of Association} = \frac{(AB)(\alpha\beta) - (A\beta)(\alpha B)}{(AB)(\alpha\beta) + (A\beta)(\alpha B)} = \frac{(20 \times 15) - (25 \times 11)}{(20 \times 15) + (25 \times 11)} = \frac{25}{575} = 0.0435$$

There is positive association between consciousness of self-health and age of women. It means that self-health consciousness increases with the increase in age.

Comparison: Yule's Coefficients of Association for men and women are 0.125 and 0.0435 respectively. Both are positive association between consciousness of self-health and age. But the value for men is higher than that of women i.e., 0.125 > 0.0435 meaning that men is more consciousness about their health with the increasing in age in comparison to women, that is why; the women suffer more than men and they fell ill more.

Mode of Preference for Treatment

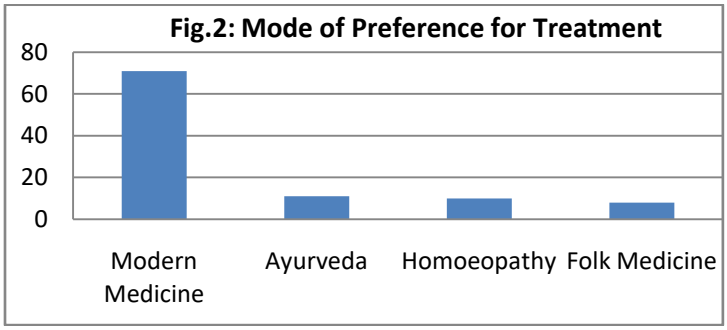
Medical care attention depends on the need and satisfaction of those who require the service. The skill and amenities associated to the profession and the background of the beneficiaries are always important in medical service. Human problems of ill-health among individuals may arise out of several conditions and many a times in the case of disease, especially modern diseases, they appear independent of individual reasons. Women of lower income status avail medical service from government medical centres more often than others. Similarly women of younger ages always tend to enjoy private medical care through hospital services, when they are in need (Sumaraj, 1991; p. 49-51). The mode of preference for their treatment on the basis of respondents' response in the study area is shown in Table-3.

Table-3: Respondents' Mode of Preference for Treatment of Normal Ailment

Modern Medicine	Ayurveda	Homoeopathy	Folk Medicine	Priest	Total
71	**11**	**10**	**8**	**-**	**100**

Source: Field Survey from 1st August, 2016 to 31st January, 2017

N.B.: M=men and W=women



Findings from the Table-3 and Fig.-2: It is found from our study that there were often reflected in the real mode of preference and response to the enjoyment of medical care. Majority of the respondents i.e., 71 per cent per cent of women desired to have medical attention from modern medicine. 11 per cent, 10 per cent and 8 per cent of women believed and were interested in Ayurvedic, Homoeopathic and Folk Medicine treatment respectively during their illness while none was interested to go to their priest during their ailment. Though these three systems were not popular, the ailing respondents believed upon the systems for curing diseases. There is Ayurvedic Research Centre at Itanagar, where there is facility of Ayurvedic treatment in addition to Allopathic and Homoeopathic Health Centres.

In case of severe ailment, almost all of the respondents went under modern allopathic treatment during which they had even determined to confine themselves in praying God ultimate cure of diseases. If they were Christian they went to Church. If the respondents were follower of Donyi-Poloism, they worshiped to calm the malevolent spirit through Puja-archana with the help of priest sacrificing methun, pig, fowls, puppy, etc. ultimate to cure their diseases. Many diseases and problems are cured and solved by the local priest. The tribal people believe that the spiritual power of priest is God gifted. Because, the tribal people believe that their life is regulated by a number of spirits and some of these spirits are the souls of their ancestors. If these spirits are benevolent, they bring prosperity, whereas if these spirits are malevolent, they cause suffering and illness in their home and community. But the worship is very costly and beyond of the capacity of the poor. Due to impact of modern civilization, this practice is likely to be out dated. Again the priest is also not available. A few aged priests are still seen in the villages. After a decade the priest will be very rare. Sentiment of women when examined in relation to their response to medical care, modern medicine was the popular one prepared by the women folk (71 percent.) while there was none to go to priest for minor physical ailment.

Socio-Economic Status

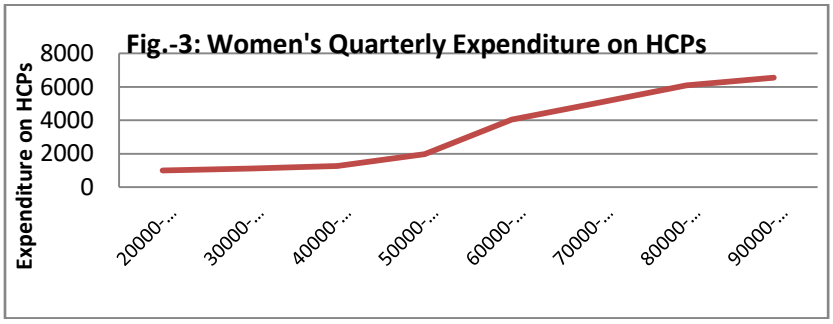
Socio-economic status particularly the influence of education and income are very much associated with the preferences of HCPs. It has been seen that persons of lower status accord greater priorities to hospitalized treatment rather than home treatment. A marked association is found in our study between the financial condition of the patients and their general preference to hospital treatment and home treatment. Innumerable studies indicate that the poor have a greater prevalence of illness, disability and restriction of activity because of health problems than those of higher status; they have less accessibility to many types of health services and receive lower quality of care in many respects. There exists a direct relationship between socio-economic status and use of physician's services. There is no doubt that with increasing affluence there has been a homogenization of illness rates in the various social classes. But there are many categories of conditions that have different rates of incidence among various status groups. Occurrence of chronic diseases is higher among lower socio-economic groups. The excess of chronic disease in lowest income group can be attributed in part to a process whereby illness and disability reduce income, but is likely that some of the variance is attributable to increased vulnerability that results from less favourable living conditions. Lowered socio-economic status probably affects access to medical care and other favourable environmental factors and limitations of access may further result in unnecessary disability and an earlier death (Mechanic, 1978; p. 194). Medical care attention depends on the need and satisfaction of those who require the service. The skill and amenities associated to the profession and the background of the beneficiaries are always important in medical service. Human problems of ill-health among individuals may arise out of several conditions and many a times in the case of disease, especially modern diseases, they appear independent of individual reasons. Modern development in medical care offers many questions and doubts. These issues are more important when they are applied to the condition in our society. Generally there is a feeling that among women sense of dependence on a particular system of medical care varies with the level of income they possess. Respondents of lower income status avail medical service from government medical centres more often than others. Similarly Respondents of younger ages always tend to enjoy private medical care through hospital services, when they are in need (Sumaraj, 1991; pp.48- 78).

We collected quarterly data of the expenditures for medical care and data of the level of income they possess per month. We considered such type of the households who were normally suffering for self health problem or normally facing problem of her family members' health problem. Major health problem was not considered. Only quarterly data on HCPs was considered, as because monthly expenditure was very volatile. Again half-yearly or annual data might be less reliable as the householder did not keep record.

Table-4: Monthly Income and Quarterly Expenditure on Health Care Practices (HCPs) for Women (in Rs.)

Income in Rs. (X)	20000-30000	30000-40000	40000-50000	50000-60000	60000-70000	70000-80000	80000-90000	90000-100000
Expenditure on HCPs in Rs. (Y)	999	1121	1273	1982	4041	5056	6082	6543

Source: Field Survey from 1st August, 2016 to 31st January, 2017



From Table-4 and Fig.-3, we see that the different expenditures were borne by the households of different income groups for medical treatment of their women. Higher income group spent more. That is why; the expenditure curve moves upward. It is seen from the table that per capita expenditure on health care of the sample households has been analysed on the basis of categories of per capita income earned. The expenditure on health care is higher for higher income group and very lower for lower income group. Since the lower income group spent a little depending very much on folk medicine and went to medical practitioner when the symptom might be acute and serious.

Econometric Study between Monthly Income and Quarterly Expenditure on Health Care Practices : We have used SPSS software.

Table-5: Descriptive Statistics of Expenditures on HCPs for Women

Statistics	Women
Mean	3387.10
S.D.	2321.23609
C.V.	68.53%

Mean expenditure on HCPs for women is 3387.10 while Co-efficient of Variation (C.V.) for women is 68.53%, which is more than 50%. The series having greater C.V., it is called to be less uniform, less homogeneous, less consistent or less stable i.e., it has higher degree of variability. Therefore, HCPs for women is less uniform.

Box-1: **Explanation of Regression Equation on HCPs of Women**

Regression Equation on HCPs of Women

$Y_w = \alpha + \beta X_w + e$ where Y= Exp. on HCPs (dependent variable) for women and X_w = Income level (independent variable) for women.

$\hat{Y}_w = -2114.375 + 0.092 X_w$
(Std. Error) (627.571) (.010)
[t-Test] [-3.369] [9.384]
Degrees of Freedom= 6
R^2 = 0. 936; Adjusted R Square = .926
F= 88.056
Durbin-Watson = 1.161

Findings: : It is observed that:

(i) Regression constant (α) and regression co-efficient (β) are found significant even at 5 per cent level of confidence.

(ii) The equation is good fit since R^2 = 0.936 and F = 88.056. It depicts a strong relationship between the dependent and the independent variables showing that 93.6 per cent of the dependent variable is explained by the independent variables. Thus it justifies the goodness of fit of the model. The goodness of fit of the model is further confirmed by the ANOVA Table-7 with statistically significant F- value [$F_{(1,6)}$= 88.056; p=0.00].

Again $\beta > 0$ indicates that expenditure on HCPs is registered a significant rise following on increase in the income level. Durbin-Watson Test is satisfied even at 5 per cent level showing that there is no auto-correlation.

Anova Test

Table-6: ANOVA for Women

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.531E7	1	3.531E7	88.056	.000[a]
	Residual	2406039.583	6	401006.597		
	Total	3.772E7	7			
a. Predictors: (Constant), X_w						
b. Dependent Variable: Y_w						

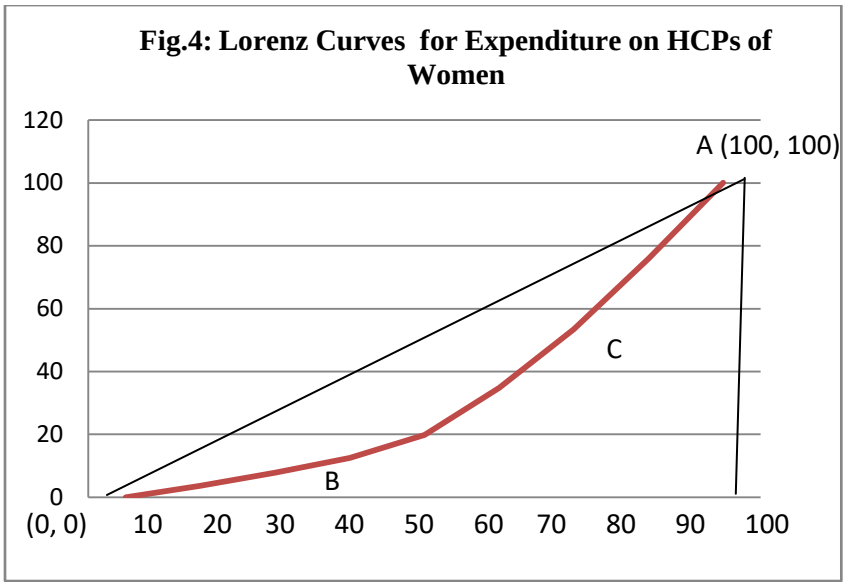
Explanation of the Expenditures incurred by the Households for HCPs of Women with the Help of Lorenz Curve and Gini-Coefficient

Table-7: Construction of Lorenz Curve for Expenditure on HCPs of Women

Mid. Income (X)	Cumulative (less than type)	per cent of Cumulative	Expenditure	Cumulative (less than type)	per cent of Cumulative
25000	25000	5.208333	999	999	3.686755

35000	60000	12.5	1121	2120	7.823744
45000	105000	21.875	1273	3393	12.52168
55000	160000	33.33333	1982	5375	19.83614
65000	225000	46.875	4041	9416	34.74923
75000	300000	62.5	5056	14472	53.40813
85000	385000	80.20833	6082	20554	75.85342
95000	480000	100	6543	27097	100

Source: Self Calculated on the basis of Table-4



The Lorenz Curves in Fig.4 for women is used to study the inequality in the distribution of expenditure. The diagonal 0 A is called the egalitarian line or the line of equal distribution. Obviously it makes a 45^0 angle with the horizontal axis and the co-ordinates of the point A is (100,100) while the co-ordinates of the point O is (0, 0). If the values are equally distributed i.e., occur with equal frequencies, the curve will be the straight line, connecting the two extremes, 0 (0, 0) and A (100, 100). Here Lorenz curve like OBCA is obtained. The less the area between the Lorenz Curve OBCA and the diagonal straight line OA, lesser will be dispersion. On the other hand, the larger the area, greater will be dispersion. Dispersion means lack of uniformity. The curve shows that higher income group people spent more on HCPs and vice-versa. The degree of inequality of expenditure on health care is very severe for the households lying between B and C, where the households are of high income group. To get concrete idea of inequality, we need quantitative measurement of uniformity. Gini-Coefficient can fulfill this purpose. So we now calculate Gini-Coefficient.

We know, Gini-Coefficient, $G = 1-2B$

Where, $B = 0.5 \Sigma (P_j - P_{j-1}) (Q_j + Q_{j-1})$

$= 0.5 \Sigma [P_j (Q_j + Q_{j-1}) - P_{j-1} (Q_j + Q_{j-1})]$

Therefore, $G = 1- \Sigma [P_j (Q_j + Q_{j-1}) - P_{j-1} (Q_j + Q_{j-1})]$

Table-7: Construction of Gini-Coefficient for the Expenditure on HCPs of Women

Mid.Income (X)	Cumulative per cent of Income (Pi)	Cumulative per cent of Exp. (Qi)	Q_i+Q_{i-1}	$P_j(Q_j+Q_{j-1})$	P_{j-1} (Q_j+Q_{j-1})	Col.5-Col.6
1	2	3	4	5	6	7
25000	0.052083	0.036868	0.036868	0.00192	0	0.00192
35000	0.125	0.078237	0.115105	0.014388	0.005995	0.008393
45000	0.21875	0.125217	0.203454	0.044506	0.025432	0.019074
55000	0.333333	0.198361	0.323578	0.107859	0.070783	0.037076

65000	0.46875	0.347492	0.545853	0.255869	0.181951	0.073918
75000	0.625	0.534081	0.881573	0.550983	0.413237	0.137746
85000	0.802083	0.758534	1.292615	1.036785	0.807884	0.228901
95000	1	1	1.758534	1.758534	1.41049	0.348044
Total						0.855072

Source: Self calculation on the basis of Table-4

Here, $\Sigma [P_j (Q_j + Q_{j-1}) - P_{j-1} (Q_j + Q_{j-1})] = 0.855072$
Gini-Coefficient for women $G_w = 1 - 0.855072 = 0.144928$

Finding: Gini-Coefficient for Women (G_w) is 0.144928. Therefore, Gini-Coefficient for women indicates more or less uniformity.

Comment: Coefficient of Variation (C.V.), Lorenz Curve and Gini-Coefficient have given the same results, i.e., the data on expenditures of HCPs of women is more or less uniform.

Educational Qualification wise Preference for Treatment

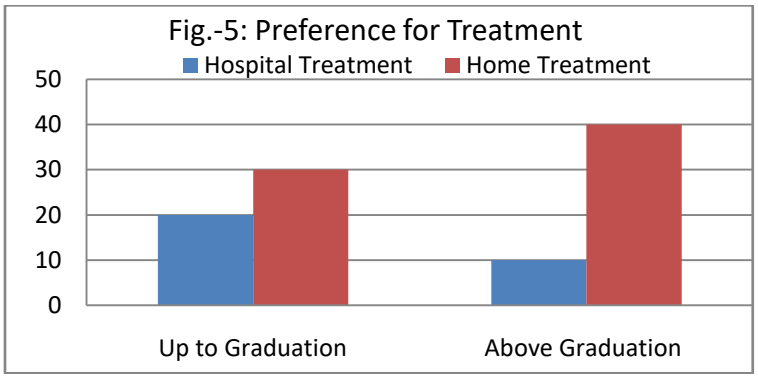
In order to verify the actual relationship between the real preference or desire and the practice of our womenfolk, the nature of seeking medical care also studied. The observations suggested that majority of our women preferred for taking medical treatment at home while others welcome hospital treatment. Many respondents, usually hospital and hospitalization bring certain stigma and anxiety. With this in view, our data is studied in detail to explain the intensity of interest that the literate women were willing to be treated at government hospital. Usually these attitudes differed in the case of different hospital.

Table-8: Respondents' Preferences for Hospital Treatment and Home Treatment

Preference	Up to Graduation	Above Graduation	`Total
Hospital Treatment	20	10	30
Home Treatment	30	40	70
Total	50	50	100
	Chi-square Test at 1 degree of freedom (χ^2) =69.52		

Source: Field Survey from 1st August, 2016 to 31st January, 2017

Table value of Chi-square at 1 per cent level of confidence=6.63
Table value Chi-square at 5 per cent level of confidence= 3.84
Therefore, the Chi-square Test supports that the variables are significantly related at 1 per cent level of confidence.



From Table-8 and Fig.-5, the nature of seeking medical care of the patients was studied and we verified their real preference for treatment. We observed that overall 30 per cent respondents out of which 20 per cent of respondents having Graduation or below and 10 per cent of respondents having above Graduation preferred to be treated in hospital while overall 70 per cent respondents out which 30 per cent of respondents having Graduation or below and 40 per cent of respondents having above Graduation preferred to be treated at their home. Majority of respondents

(70 per cent) preferred for taking medical treatment at home. Socio-economic status of women particularly the influence of education and income are very much associated with these preferences. It has been seen that persons of lower status accord greater priorities to hospitalized treatment rather than home treatment. A marked association is found in our study between the financial condition of patients and their general preference to hospital treatment and home treatment. Evaluation of these kinds of self-assessment of patients always differ in many respects especially women are different in their perceptions. Basically this is a function of experience in life and very commonly reflected through the process of aging. In the case of health care utilization, the role of the social network and its specific values, opinions, attitudes and cultural background act to suggest advice or coerce an individual into taking or not taking particular course of action regarding health care (Cockerham, C. William, 1978; p.73).

Age wise Preference

As these systems of medical care are characteristically different in the nature and method, the reactions of patient may also be different at different stages of their lives. Variation in the age among women is an influential factor in the nature of their sick. Hence we try to find out the influence of age towards disease and to medical care on the basis of field study.

Table-9: Age wise Preference and Nature of Satisfaction on Allopathic Treatment of the Women Respondents

Age Group	Preference of Allopathic Treatment		Ayurvedic Treatment		Test		Preference to Female Doctor	
	Home Treatment	Hospital Treatment	Satisfied	Not Satisfied	Pre-Natal Test	Post-Natal Test	Yes	Can't say
	1		2		3		4	
Young Age: (20-50) years Sample: 50	32 (64)	18 (36)	9 (18)	41 (82)	15 (30)	12 (24)	35 (70)	15 (30)
Old Age: Above 50 years Sample: 50	38 (76)	12 (24)	31 (62)	19 (38)	10 (20)	8 (16)	20 (40)	30 (60)
Total	70	30	40	60	25	20	55	45

Source: Field Survey from 1st August, 2016 to 31st January, 2017

From the field study it is known that same respondents were treated sometimes under Allopathic treatment and sometimes under Ayurvedic treatment for their different ailment. Almost all the respondents liked more Allopathic treatment especially for their serious ailment. They underwent Ayurvedic treatment for their some special minor ailment. Now we discuss their responses column wise from the **Table-9.**

Column-1: Preferences of Allopathic Treatment are divided into two categories: home treatment and hospital treatment, which are already discussed in table-8. But here we see the age wise preferences. It was seen that younger women largely desire to have modern system of medical care. Comparatively 76 per cent older age group of above 50 years women preferred home treatment while the remaining 24 per cent of that age group preferred hospital treatment. The 64 per cent of younger age group (20-50) years preferred home treatment while the remaining 36 per cent of that age group preferred hospital treatment. Therefore, there was a diametrically opposite trend of preferences among the youngsters and older women. In the case of resorting to medical treatment in modern medicine, greater the age of women lesser is the preference of home treatment. Women at large preferred to have medical treatment at their respective homes than other places. Many a time, women differed among themselves in these kinds of ideas as well especially when the modern women were more emancipated.

Column-2: Concerning Ayurveda, greater the age of women, greater is the preference for accepting Ayurvedic treatment. It is very clear that the aged women are more inclined to Ayurvedic medical system and women of relatively younger ages like to modern system of medicine. It was seen that almost all younger women i.e., 82 per cent lying between the age group of (20-50) years largely were not satisfied with Ayurvedic treatment, they desired to have other system to medical care. 62 percent of women above 50 years of age liked Ayurvedic treatment, while only 38 per cent of women in this age group did not like this treatment at all.

Column-3: In case of Pre-Natal Test and Post-Natal Test, 30 per cent women of age group (20-50) years and 20 per cent of above 50 years underwent pre-natal test while 24 per cent of age group (20-50) years and 16 per cent of above 50 years underwent post-natal test.

Column-4: In case of preference to Female Doctor, 70 per cent of women of age group (20-50) years and 40 per cent of above 50 years preferred female doctor while 30 per cent of age group (20-50) years and 60 per cent of above 50 years responded that they had no preference. Over all 55 per cent preferred female doctor while 55 per cent had no preference. Men and women differ in many ways in their attitudes to their doctors. Age and sex variations have definite relationship between the choices or preferences for male and female medical officers. Gynaecological problems, the inherent shyness of women toward male doctors, etc. can often create a dilemma in the choices of medical services particularly in the direction of female doctors when women's body is examined in detail. It was seen that majority of our women respondents did not prefer to consult male doctors. But this attitude varied considerable with the changing dimension of age of women. Younger women at large were found to prefer to female medical officers for consultation. But as age increased a decreasing tendency of this behaviour was noticed for our women respondent.

Reasons of Preference of Hospitals for Allopathic Treatment

Medical care is essentially an interchange between a patient in search of a service and the provider who is able and willing to furnish it. Excepting under compulsory circumstances, the decision to initiate this interchange rests on the patients. A patient who is in search of medical care makes many criteria in selecting a hospital. Generally, patient, particularly woman patient selects hospital for the medical care on the basis of many criteria shown below.

1. Organisation of the hospital
2. Perception of the patient about the medical personnel such as availability, honesty, expertise, etc.
3. Cleanness of the hospital,
4. Instruments to test organs of the hospital,
5. Charges and fees for medical service,
6. Previous experience of hospitalization of the patient,
7. Women medical personnel,
8. Distance from home to the hospital,
9. Economic and social condition of the patient, and
10. Quality of nursing care.

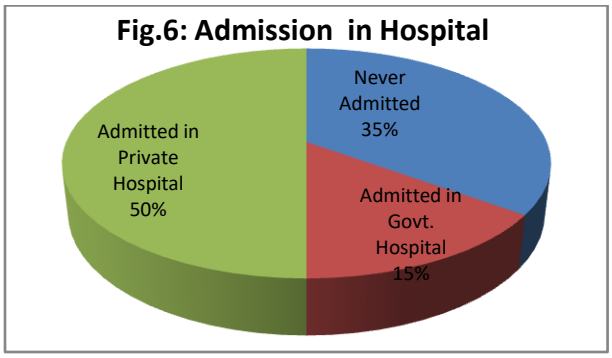
When these criteria are examined with respect to the different level of patients' acquaintance with the medical centres, we should first investigate their previous admission in hospitals. The report of field study in regard of admission in hospitals is shown in Table-10.

Table-10: Previous Admission of respondents in Govt. Hospital or Private Hospital

Never Admitted	Admitted	
	Govt. Hospital	Private Hospital
35	15	50

Source: Field Survey from 1st August, 2016 to 31st January, 2017. N.B.: Data can be explained as percentage as the number of respondents is 100. At Itanagar town, there is Rama Krishna Mission Hospital treated as Private Hospital, where tribal patient get medical treatment at very low cost. Govt. Hospital is at Naharlagun, 15 km away from Itanagar. Our study was at Itanagar.

From the Table-10 and Fig.6, it is known that 35 per cent women who never admitted previously in any other medical institutions. So they had no experience about the expertise of medical personnel in selecting the type of hospital. 65 per cent women who admitted one time or more than one time in hospital for their medical care out of which 15 per cent in Govt. Hospital and 50 per cent in Private Hospital.



The general attitude towards medical care of patients is reflected not only in the actual availing of medical treatment at an institution but also on the nature of assessment on the utility of service obtained by the patient. Here we consider only allopathic treatment, as because presently in case of serious ailment all the respondent used to be admitted in allopathic hospital. Women of lower income status availed medical service from government medical centres more often than those of higher income status. Again women of younger ages always tended to enjoy private medical care during their illness. Hence, we enquired the utility of service in regard of selection of type of hospital out of 65 women patients shown in Table-11.

Table-11: Type of Allopathic **Hospital and Opinion of Women on Medical Care Received**

Type of Hospital	Health Care Received					Total
	Excellent	Good	Fair	Poor	Don't Know	
Govt. Hospital	-	10 (15.38)	5 (7.69)	3 (4.62)	3 (4.62)	21
Private Hospital	32 (49.23)	8 (12.31)	2 (3.07)	-	2 (3.07)	44
Total	32	18	7	3	5	65
Chi-Square Test (χ^2) at 4 degree of freedom = 32.67998						

Source: Field Survey from 1st August, 2016 to 31st January, 2017, N.B.: Data can be explained as percentage as the number of respondents was 65 out of 100 as 65 women took admission in hospital.

From Table-11, it is found that majority of the women i.e., 49.23 per cent felt that they received good medical care from the private hospital in which they were admitted termed as 'Excellent' while none was in favour of excellent for Govt. hospital. 15.38 per cent women opined Govt. hospital as 'Good' while 12.31 per cent in favour of 'Good' for Private Hospital. 7.69 per cent seemed that they got fair service from Govt. Hospital while 3.07 per cent thought so for Private Hospital. 4.62 per cent thought that the quality of medical service for Govt. Hospital was poor while there was none to say poor service in case of Private Hospital. 7.69 per cent out of which 4.62 per cent for Govt. Hospital and 3.07 per cent for Private Hospital responded as 'Don't Know'.

Table value at 1 per cent level of confidence=13.28
Table value at 5 per cent level of confidence= 9.49
Therefore, the Chi-square Test supports that the variables are significantly related even at 1 per cent level of confidence.

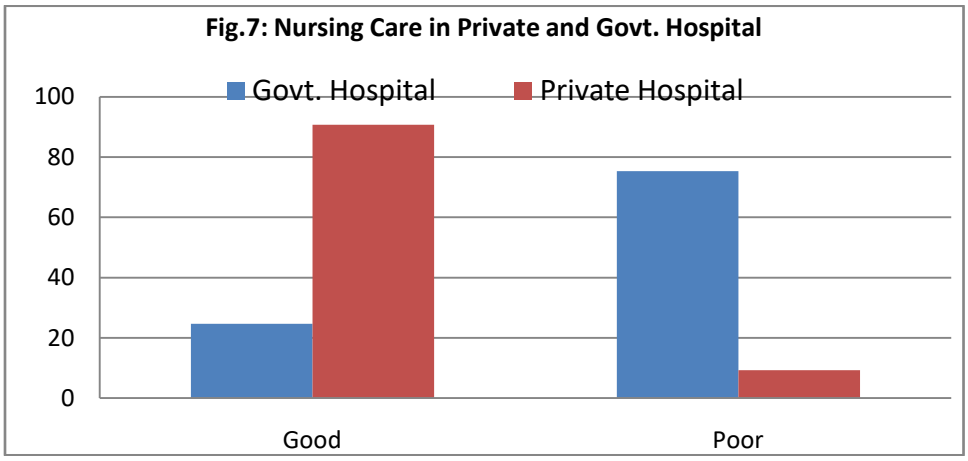
Nursing Care

Although the hospital authority performs the medically related tasks through the division of labour, the quality of nursing care is a central feature for the quality of medical care in a hospital. Physicians have no continuity of contact with patients to monitor them successfully. So the role of nurses in the coordination of overall patient care is very important. The nurses are the liason between the patients and the physicians. So the satisfaction of medical care depends very much on the nursing care. So the responses of patients about the nursing care they received from the hospital should also be studied.

Table-12: Nursing Care in Private and Govt. Hospital

Type of Hospital	Response on Nursing Care	
	Good	Poor
Govt. Hospital	16 (24.62)	49 (75.38)
Private Hospital	59 (90.77)	6 (9.23)

Source: Field Survey from 1st August, 2016 to 31st January, 2017, N.B.: Data can be explained as percentage as the number of respondents was 65 out of 100 as 65 women took admission in hospital.



From Table-12 and Fig. 7, it is seen that in our field study, a major part of the women patients i.e., 90.77 per cent were very happy about the nursing care, they received during the admission in private hospitals while a very low percentage i.e., 24.62 per cent only in Govt. hospital was of the opinion that they received good nursing care. A very few percentage i.e., 9.23 per cent considered the nursing care received from private hospitals as poor while major percentage of women patient i.e., 75.38 per cent felt that nursing care was poor in Govt. hospital during their admission. Thus satisfaction about nursing care was greater for private hospitals that Govt. hospital

Therefore, significant differences were noticed on the responses of the patients admitted in the private and public hospitals in regard of nursing care. The unbearable increase in the cost of hospitalization forced many respondents to prefer Govt. hospital for their medical care as the cost is very low.

Conclusion

Women's health and their involvement in health care activities are very much essential health care programmes. More female doctors should be recruited in the public hospital so that the female patient can treat their Gynaecological problem. Even though recently the per capita use of health services are increasing considerably, but is not up to the mark. The women face so many problems to get medical attention from the doctors in the public health care institutions. Though medical care is vast and complicated process, the government should take care to increase the medical facility. The government is spending huge fund to run the medical hospital for the diagnosis and treatment of many types of acute and chronic illness. But the women of good economic status prefer more in private hospital for treatment. Most of women under survey used to treat in the private hospital. The decision to seek medical care is dependent on a variety of socio-economic and cultural characteristics, socio-demographic indicators such as age and sex, geographic condition and pattern of illness, etc. of patients. Good health is an important determinant of a person's quality of life. It determines the ability of individuals to live happy lives as social beings. It is the responsibility of the governments to look after and provide good health care facilities. Constraints and bottlenecks of the existing health and family welfare delivery system should be identified, specifying clearly the infrastructure required, strategies to be developed which are in consonance with the needs of the local tribal population.

In any society, women's health and their active involvement in health care programmes are essential keys to the general health. In addition to their own special health problem, the major challenges they face during every day life, particularly during pregnancy and child-birth.

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