

Impact of Health Seeking Behaviour on Morbidity Pattern and Health Service Utilization among Muslim Women: A Case Study of Balasore Municipality, Odisha

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ABSTRACT

Despite the fact that economic reforms were enacted in India in the 1990s, and the country saw rapid economic growth, the health of the country's population has only slowly and unevenly improved. There are still major differences in access to health care, which have risen between states, rural and urban areas, and within communities. The present study proposes to look into the morbidity patterns and health service utilization by Muslim women in Balasore district of Odisha. The study has used primary survey in Balasore Municipality for analyzing the morbidity pattern and utilization among Muslim women. The study applies the purposive sampling method to collect the information on women health status among the household members in the study area. The study has used two multiple regressions analysis, one multiple regressions for total health expenditure and another one for expenditure made on women health. The study reveals that income, educational, age and duration of illness are affecting the health expenditure of the families in the study area. The above findings will be useful for taking suitable public policies.

Keywords: Health seeking behaviour, Morbidity pattern, Health service utilization

JEL Classification Codes: C21, I01, I12, I19

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I. INTRODUCTION

Minority women's health was determined to be inadequate, and they were not effectively involved in decision-making. The minority communities are most poverty stricken and they have been facing persistent health related problems. Women have a lesser health status, which leads to discrimination and being treated unfairly or refused something merely because they are female. It may take many forms in different societies, but it always has an impact on the health of women. These problems can be solved to some extent by educating and providing employment to women, which would also break the vicious circle of the overall low status of women in family as well as in society. Hence, good health is a personal and social state of wellbeing in which a woman feels active, creative, wise, and worthwhile, but the health status of women and the disparities in ill behaviour between men and women are often critical indicators of equality in a society. Several studies have been conducted on various aspects of women's health, but there are a few aspects, that are still untouched or on which few studies have been undertaken by the researcher. Despite various policy measures taken by the government, women are not able to fully access them for the improvement of their health and work efficiency. Despite so many studies conducted at the macro level, not a single study has been conducted on women's issues at the macro level in Odisha. The present study tries to fill the gap by taking Balasore as the study area. The present study is based on the impact of health seeking behaviour on morbidity patterns and health service access among Muslim women in the Balasore Municipality area of Odisha. This district is economically developed, but its women's health status is very poor. Women are not conscious of their health, and they are completely neglected by their family members.

II. THE REVIEW OF LITERATURE

There are studies (Koehlmoos et al., 2008; Amin et al., 2010; Bhattacharjee et al., 1981) found that female who lived in street dwellers were mostly affected by reproductive health problems and newborns had neonatal morbidity. Some studies explore that high income group women were used modern trained providers for antenatal care birth attendance, postnatal care, child health care as compare to low-income group women.

They have revealed that various factors limit the access of maternal and child health care services such as availability, accessibility and quality of services. Total income households, education and health care facilities are significantly affecting the health status of the people. The study reveals that compared to rural women, urban women spent more money on private clinic and self-medication. The study also reveals that the effect of mother's education and other demographic, socio economic factors in the nutritional status of children and exposed that more than half of all children under age four are malnourished children growing in low educational background with lower nutritional status. The present study revealed that poor socio-eco status, lack of physical accessibility, cultural beliefs and perceptions, low literacy level of mothers and large family size leads to poor utilization of primary health care services. Long distance has influenced the health seeking behavior and health services utilization. Some studies have found that access to clean drinking water and sanitation facilities do act as a suppressor

variable in reducing the morbidity rate (Mohanty, 2014; Mohanty, 2016). The under access of the health services in public sector has been a disincentive to health seeking behavior (Sa & Sridevi, 2009; Bhatia & Cleland, 2001; Sheikh & Juanita, 2004). Earlier researchers dealt with the issue of supply side of health services and various health problems, indicators for the different social and economic sections and neglected the demand side, particularly the morbidity and access of health care services. The present study has tried to fill the gaps in the literature by considering the morbidity pattern, determinants as well access of health care services by women from Muslim community from Balasore Municipality in Odisha at micro level.

III. OBJECTIVES

The primary objectives that the present paper has attempted upon are:

1. To look into the morbidity patterns and health service utilization by Muslim women in Balasore district of Odisha
2. To examine the factors that affects poor illness behaviour and health care expenditure of Muslim women in the study area

IV. DATA AND METHODS

The present study is based on primary data. For the collection of primary data, purposive sampling method has used to collect the information on women health status among the Muslim household members in the study area. For the primary work, the present study has taken three specific areas of Balasore Municipality having densely Muslim majority population like Manikhamb, School Bazar and Balu Bazar respectively. Primary data has been collected from 60 household members twenty from each specific area has been taken into consideration for analyzing the morbidity pattern and health service utilization among Muslim women. Information on women health problems and their health seeking behavior on specific diseases and ailments has been collected. For convenience, the health-related problems are divided into three types like Reproductive Health Problems (RHPs), General Health Problems (GHPs) and Other Health Problems (OHPs). In Reproductive Health Problems (RHPs), the researcher has included white or any type of discharge, menstruation related problems, DNC, infertility miscarriages. Pregnancy is also included in this category but is not viewed as a health problem. It has been done to analyze the availability and utilization of health facilities which are equally required in pregnancy as well as in other RHPs. General Health Problems (GHPs) include gastro intestinal problems, febrile illness or fever of any type, diarrhea, dysentery, cold, jaundice, accidents, injuries, fracture, skin disease, eye ailments, disease of urinary system and undiagnosed health problems. Whereas in the category of Other Health Problems (OHPs) those ailments are considered which are of long duration such as diseases of joints and bones, diabetes mellitus, blood pressure, psychiatric disorders, tuberculosis, cardiovascular diseases, and respiratory diseases. Some cases are there, where they have more than one health problems. There are several factors that affect the health expenditure such as income, education, family size, age, duration of illness, area, members under reproductive age etc. have been collected from households. Estimation is based on (both qualitative and quantitative data) has collected for the above analysis. Further, the study has estimated total health expenditure as well as health expenditure made on women health of the sample households.



For this we have used two multiple regressions analysis, one multiple regressions for total health expenditure and another one for expenditure made on women health. Here the dependent variable is health expenditure and socio-economic and demography factors as independent variables. For the second model, total family health expenditure on women as dependent variable and independent variables are same as stated above.

V. ANALYSIS AND RESULTS

The details of health status and types of diseases suffered by women household members are examined from three areas of Balasore Municipality namely Manikhamb, School bazaar and Balu bazaar on the basis of suffering from different health problems. Researcher had collected data from 60 respondents consisting of 377 household members and 1218 ailing cases. The total ailing cases are divided into three broad categories such as general health problems, reproductive health problems and other health problems respectively.

Types of Health Problems in the Study Area

In Reproductive Health Problems (RHPs), the researcher has included white or any type of discharge, menstruation related problems, infertility, miscarriages. Pregnancy is also included in this category but it is not viewed as a health problem. General Health problems (GHPs) include gastro intestinal problems, fever, cold, jaundice accidents, fracture, skin disease, eye ailments, disease of urinary system, ear problem, Headache, neurological disorder, anaemia, ring worm, weakness, filariasis, diarrhoea, tumour, appendix operation, teeth problem whereas in the category of Other Health Problems (OHPs) those ailments are considered which are of long duration such as disease of Joints and bones, back pain, diabetes mellitus, blood pressure, Mental disorder, cardiovascular disease and respiratory diseases. Some cases are there, where they have more than one health problem.

Area Wise Distribution of Health Problems

There are three categories of health problems in which people suffered from three areas under Balasore Municipality area, namely Manikhamb, School Bazaar, Balu Bazaar. It is evident from the responses of 1218 ailing cases.

Table-1: Area Wise Differences in the Prevalence of Ailing Cases

Types of Health Problem	Area			Total Ailing Cases
	Manikhamb	School Bazaar	Balu Bazaar	
Reproduction Health Problem (RHP)	20 (5.84%)	23 (5.11%)	27 (6.33%)	70 (5.74%)
General Health Problem (GHP)	246 (71.92%)	328 (72.88%)	297 (69.71%)	871 (71.51%)
Other Health Problem (OHP)	76 (22.22%)	99 (22%)	102 (23.94%)	277 (22.74%)
Total	342 (28.94%)	450 (36.94%)	426 (34.97%)	1218 (100%)

Source: Field Survey August 2018

Table-1 reveals that area-wise differences in the categories of health problems. Total general health problem is 871, out of which 328 (72.88%) cases of general health problems are found to be prevalent in school bazaar as compared to the other two areas i.e., 71.92% in Manikhamb and 69.71% in Balu Bazaar, because of lack of consciousness among the inhabitants and poor financial status. Most of them have addressed their health problems through domestic treatment. With regard to reproductive health problem, 27 (6.33%) ailing cases is observed in Balu Bazaar whereas the incidence of such cases is almost similar in other two region i.e., 5.84 and 5.11% respectively. When we talk about reproductive health problems majority of women hide this type of ailing cases and other reason is that long waiting time in public health care Centre, they have cured their health issue through domestic treatment. Lastly Other health problems 102 (23.94%) ailing cases in Balu Bazaar, 99 (22%), in school bazaar and 76 (22.22%) in Manikhamb area because of long waiting time as well as financial reason they don't have treated at all any health Centre.

Access of Health Care Services by the Female Household Members

Utilization of health facilities included public health facilities, private health facilities, and Chemists. The people choice of health service providers for various groups of health problems is given above. The following tables give the breakup of utilization of different health facilities for different health problems.

Table-2: Access of Health Care Services by the Female Household Members in the Study Area

Types of Health Problem	Treatment Taken			
	Public Health Centre	Private	Chemist	Total
Reproductive Health Problem	15 (27.27%)	39 (70.90%)	1 (1.81%)	55 (6.12%)
General Health Problem	189 (30.68%)	273 (44.31%)	155 (25.16%)	616 (68.59%)
Other Health Problem	56 (24.77%)	135 (59.73%)	35 (15.48%)	226 (25.16%)
Total	260 (28.95%)	447 (49.77%)	191 (21.26%)	898 (100%)

Source: Field Survey August 2018

It is observed from the Table-2 that, in case of reproductive health problems majority females preferred private health clinic 39 (rather than public health care centre i.e., 15 (several reasons which hurdle to prefer public health care Centre these are long waiting time, non-availability of medicines, examination equipment's, services not satisfactory in case of reproductive 39 (as well as other health problems) 135 (mostly female preferred private clinic than public health care and chemist.

Non -Utilization of Health Facilities for Different Health Problems

Non utilization of health facilities means household members not at all taken any type of treatment, neither public nor private health facilities, they have not at all serious about their health, there are several factors that influence not taken any



type of treatment, first of all financial barrier, long waiting time, and not conscious about their health.

Table-3: Treatment Not Taken by the Female Household Members in the Study Area

Types of Health Problem	Treatment Not Taken			
	Manikhamb	School Bazaar	Balu Bazaar	Total
RHP	3 (4.34%)	8 (5.67%)	4 (3.63%)	15 (4.68%)
GHP	50 (72.46%)	95 (67.37%)	90 (81.81%)	235 (73.43%)
OHP	16 (23.18%)	38 (26.95%)	16 (14.54%)	70 (21.87%)
Total	69 (100%)	141 (100%)	110 (100%)	320 (100%)

Source: Field Survey August 2018

Table-3 reveals that there are three types of health issues in three areas people doesn't have taken any type of treatment. Total ailing cases 1218 out of them 320 people have doesn't taken any treatment behind these there are several reasons such as financial issues, not conscious about their health because some of them are not well health educated as well as doesn't care about their health, some of them believe through domestic treatment they have cured, most important thing is that long waiting time in public health centre is the main barrier for not taken treatment.

In case of both reproductive and general health problems majority doesn't take any type of treatment in School Bazaar 5.67% as compared to other two areas i.e. 4.34% in Manikhamb and 3% in Balu bazaar in RHPs. In General health problem 81% in Balu Bazaar is comparatively very high as compared to other two regions. i.e., 72.46% and 67.37% in Manikhamb and School Bazaar respectively.

In case of Other Health Problems 26.95% are not taken treatment because they are not conscious about their health. 23.18% are not taken treatment because they believe in domestic treatment. Other than those socio economic and cultural factors discussed earlier, most important reasons attitudes of ailing persons and their family. Another thing is that mostly women are neglected in their home in case of health issues. Severity of the health problems also determines the behaviour of a person for utilisation and non utilisation of health facilities. Lack of education, non-exposure to media, shyness, lack of financial resources, lack of required health facilities, high preference to family care, low value of women in their family, low self-esteem and ignorance about the value of own health are few of the reasons due to which women fail to avail medical facilities.

Reasons behind Utilizations and Non-Utilizations of Health Care Facilities in the Study Area

There are 60 households out of them 1218 ailing cases are found in the study area. In which they have victimized different diseases, for these disease there are some reason behind access and non-access of health facilities in three areas namely

Manikhamb, School Bazaar and Balu Bazaar, From the Survey, the important reason for utilization of any type of health facilities are some women are educated and conscious about their health, other thing is that nearby health Centre, in public health Centre they have treated free of cost or very low cost that's why they have utilized health facilities. Emergency is also play a crucial role to have utilized health facilities, behind non utilization of health facilities are long waiting time, not serious, domestic treatment and financial problems.

Table-4: Reasons behind Utilizations and Non-Utilizations of Health Care Facilities in the Study Area

Facilities	Reasons	Area			
		Manikhamb	School Bazaar	Balu Bazaar	Total
Utilization of Health Facilities	Nearby	68 (44.15%)	42 (27.27%)	44 (28.57%)	154 (12.64%)
	Conscious	65 (34.75%)	79 (42.24%)	43 (22.99%)	187 (15.35%)
	Free of cost	50 (22.66%)	85 (38.46%)	86 (38.91%)	221 (18.14%)
	Low Cost	25 (27.77%)	33 (36.66%)	32 (35.55%)	90 (7.38%)
Non-Utilization of Health Facilities	Long Waiting time	16 (48.48%)	13 (39.39%)	4 (12.12%)	33 (2.70%)
	Not serious	11 (22%)	17 (34%)	22 (44%)	50 (4.10%)
	Financial Problem	41 (20.09%)	93 (45.58%)	70 (34.31%)	204 (16.74%)
	Domestic Treatment	4 (10.52%)	17 (44.73%)	17 (44.73%)	38 (3.11%)
Total		342 (28.07%)	450 (36.94%)	426 (34.97%)	1218 (100%)

Source: Field Survey August 2018

Table-4 reveals that an analysis of the reason for the utilisation of any type of health facilities by ailing persons in three areas. In Manikhamb area majority women i.e. 44.15% utilized health facilities due to Nearby health centre, 34.75% conscious about their and only 22.77% preferred health facilities for low cost, although low cost and free of cost play a vital role in choice of health facilities, but not as good as expected. 25.72% persons treated their health issues because of emergency, which is very less.

It would be very interesting to find the number of households who have perceived the need for health check-up, but couldn't utilize these health services for various reasons. The reason for not going for health checkup even after realizing the need are many and the causes of non-utilization are long waiting time, not serious, financial problem, and domestic treatment women doesn't seek medical care when they were sick. The results indicate that, in area Manikhamb 48.8% women doesn't



take any medicine due to long waiting time, 22% women had not serious, 20.09% had financial problem and 10.52% women had domestic treatment. In School Bazaar 39.39% doesn't taken treatment due to long waiting time, 34% not serious, 45.58% had financial reason they do not take any treatment, 44.73% domestic treatment. In Balu Bazaar majority women i.e., 44.73% doesn't taken any treatment, because of uneducated and financial problem they cured their health issues at home, they believe in home treatment. Lack of education, non-exposure to media they are not conscious about their health i.e., 44% and 34.31% have financial reason, only 12.12% not receive treatment due to long waiting time. In the present study it has been assumed that health status is a function age (reproductive age), marital status (MS), total Family Income (TFI), types of health problems, availability of health facilities, utilization of health facilities, types of utilized health facility, education (Edu.), Total Family Health Expenditure (TFHE), Duration of Illness (DI) and Household Size (HHS). The previous chapters, analyzed the of health services that are required and are available; services which are available but not utilized, their reason for utilization and non-utilization as well as the services that are required by the women the most.

In the present chapter functional relationship between TFHE (dependent variable) and independent variables - age (reproductive age in this study), gender, education, marital status, TFI, DI are calculated by regression analysis. Another relationship for women specific studies has been presented between TFHE on women (dependent variable) and the independent variables - age (reproductive age), education, marital status, TFI, and duration of illness.

Health Expenditure

Here an attempt was made to understand the factors that affect the health expenditure of the households and expenditure made on women's health in the study from three localities of Balasore Municipality in Orissa. A sample of sixty households, twenty from each area was collected to analyze the health status of the women household members in the study area. Factors affecting the health expenditure such as income, education, family size, age, duration of illness, area, members under reproductive age etc. were collected from sample household. Here we have an attempt to look into the health care expenditure by considering the total health expenditure as well as expenditure made on women health of the sample households. For this we have used the two multiple regressions analysis, one multiple regressions for total health expenditure and another one for expenditure made on women health. Here the dependent variable is health expenditure and socio-economic and demography factors as independent variables.

$TFHE = \alpha_1 + \beta_1 TFI + \beta_2 EDU + \beta_3 AGE + \beta_4 DI + \beta_5 TRA + \beta_6 HHS + U_i$
Symbolically, the above model can be written as below.

$$Y = \alpha_1 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + U_i$$

Where, α_1 = Intercept term

β_1 = Coefficient of total income

β_2 = Coefficient of educational qualification of the head of the household

β_3 = Coefficient of the age of the head of the household

β_4 = Coefficient of duration of illness

β_5 = Coefficient of members under reproductive age

β_6 = Coefficient of Household size

U_i = Error term

Here Total family income (TFI), education level (ED), age (AGE), duration of illness as (DI), members under reproductive age as (TRA) and household size as (HHS)

Table-5: Results of the Total Family Health Expenditure

Variable	Coefficient	t-Statistic	Prob.
Constant	-24.31	-4.68	0.0072 ***
TFI	0.04	3.75	0.0003 ***
EDU	2.83	2.03	0.0418 **
AGE	23.67	1.75	0.0827 *
DI	50.39	2.29	0.0238 **
TRA	-55.19	-0.36	0.7144
HHS	-29.45	-0.22	0.824
R-squared	0.66		
F-statistic	7.51		
Prob. (F-statistic)	0		
Durbin-Watson stat.	1.87		

Source: Calculated by authors from primary data

Note:

*** denotes significant at 1 % level

** denotes significant at 5% level

* denote significant at 10% level

Educational qualification is divided into illiterate, literate, primary, secondary, technical and higher, the score is given from 1 to 5 respectively. we have to be first clear about the value and score allocated to each variable. Here health expenditure, income, age, duration of illness, family size, and age are calculated numerically except education.

$$TFHE = -24.31 + 0.04 TFI + 2.83 EDU + 23.67 AGE + 50.39 DI - 55.19 TRA -29.45 HHS$$

The above table shows that the estimated values of the above variables. It can be seen that the variable coefficients like total family income, education, age, duration of illness are positive and significant which show the positive effects of these variables on the health Expenditure. But, all other variables like members under reproductive age and household size are not significantly affecting the health expenditure of the households. Total family income, age, education, duration of illness, are significant at 1%, 5%, 5% and 10% level respectively. Coefficient of education, age and duration of indicates that if there is one unit increase in the entire above said variable, the health expenditure is increased by 2.83, 23.67 and 50.39 percent respectively. The estimated F-statistic and probability of F-statistics are highly significant with very less probability value 0.0000, indicates that together all the variables are significantly determining the health expenditure of households in the study area. The R-square value shows that there is 66 percent of variation



caused by the independent variables. The Durbin-Watson statistics also close to two which shows that there is no autocorrelation between error terms. It is clear that income of the households, educational status of the head of the household, age of the household and duration of illness are significantly affecting the health expenditure of the families in the study area.

Relationship between TFHE on women with TFI, age, education, house hold size and duration of illness is given below. In this model as in previous model independent variables are same such as TFI, EDU, DI, AGE, HHS but dependent variable is TFHE on women. Regression is as given below:

$$Y = \alpha_1 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + U_i$$

Where, α_1 = Intercept term

β_1 = Coefficient of total income

β_2 = Coefficient of educational qualification of the head of the household

β_3 = Coefficient of the age of the head of the household

β_4 = Coefficient of duration of illness

β_5 = Coefficient of members under reproductive age

β_6 = Coefficient of Household size

U_i = Error term

Table-6: Estimated Results of the Total Family Health Expenditure on Women

Variable	Coefficient	t-Statistic	Prob.
Constant	-30.31	-0.34	0.73
TFI	0.01	2.13	0.03 **
EDU	4.83	4.83	0.004 ***
AGE	13.48	1.28	0.2
DI	13.17	0.79	0.42
TRA	-32.55	-0.19	0.84
HHS	-54.07	-0.24	0.8
R-squared	0.52		
F-statistic	3.57		
Prob. (F-statistic)	0		
D-W stat.	2.02		

Source: Calculated by authors from primary data

Note:

*** denotes significant at 1 % level

** denotes significant at 5% level

* denote significant at 10% level

TFHE ON WOMEN= -30.31 + 0.01 TFI + 4.83 EDU + 13.48 AGE + 13.17DI - 32.55 TRA - 54.07 HHS

There is a positive relationship between total family income, education, age, duration of illness and health Expenditure on women health. But, all other

variables like members under reproductive age and household size are negative and not significantly affecting the expenditure on women health of the households. It can also be seen that only total family income of the household, the educational status of the head of the household are significant at 5% and 1% level respectively. The coefficient of total income of the household 0.01 shows that if there is one unit increase in income level, there are 0.01 unit changes in the expenditure on women health of the household. Similarly, the coefficient of education i.e., 4.83 unit indicates that if there is one unit increase in the educational status variable, the expenditure on women health is increased by 4.83 units.

The estimated F-statistic and probability of F-statistics are highly significant with very less probability value 0.00, indicates that together all the variables are significantly determining the health expenditure of households. The R-square value shows that there is 52 percent of variation caused by the independent variables. The Durbin-Watson statistics also close to two which shows that there is no autocorrelation between error terms. It has shown that income, education, age and duration of illness are significantly affecting the health expenditure of the families.

VI. CONCLUSION

In the present study we have used two multiple regression analysis for total health expenditure and another one for expenditure made on women health. Here the dependent variable is health expenditure and socio-economic and demography factors as independent variables. Total family income, education, age and duration of illness are more significant. In the second multiple regressions of total family expenditure on women health as the dependent variables and total family income, education, duration of illness, age, household size as independent variable. Here total family income and education are more significant. There was a positive relationship between total family income, education, age, duration of illness and health expenditure on women health. But, all other variables like members under reproductive age and household size are negative and not significantly affecting the expenditure on women health of the households. It can also be seen that only total family income of the household, the educational status of the head of the household are significant at 5% and 1% level respectively. The coefficient of total income of the household 0.01 shows that if there is one unit increase in income level, there are 0.01-unit changes in the expenditure on women health of the household. Similarly, the coefficient of education i.e., 4.83 indicates that if there is one unit increase in the educational status variable, the expenditure on women health is increased by 4.83 units. The estimated F-statistic and probability of F-statistics are highly significant with very less probability value 0.00, indicates that together all the variables are significantly determining the health expenditure of households in the study area. The R-square value shows that there is 52 percent of variation caused by the independent variables. The Durbin-Watson statistics also close to two which means there is no autocorrelation between error terms. It shows that income of the households, educational status of the head of the household, age of the household and duration of illness are significantly affecting the health expenditure of the families in the study area as a whole.



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