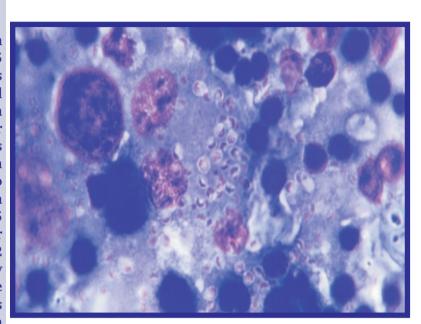
REPRODUCTIVE MORBIDITY AND TREATMENT SEEKING BEHAVIOR OF WOMEN IN UTTAR PRADESH AND BIHAR



Abstract:-

India's achievement of Millennium Development Goals, especially goals 4 and 5 mainly depends on the two most populous states of India, namely, Uttar Pradesh and Bihar. Though there is a progress in achieving the same in the recent years, Uttar Pradesh has high MMR of 359 and Bihar has 261 as per SRS (2007–09) estimates. India has MMR of 212 that has to be reduced to 109 by 2015. Regarding IMR, Uttar Pradesh has 53 and Bihar 43 (SRS 2012). Under 5 mortality is 73 for Uttar Pradesh and 59 for Bihar as against the national average of 52 (SRS 2012) which is to be reduced to 42 by 2015. As per DLHS-3 (2007-08), there are poor maternal and child health indicators for Uttar Pradesh and Bihar compared with other states.



The major objective of this paper is to estimate the prevalence rates and identify the factors influencing the reproductive morbidities and treatment seeking behavior of women in Uttar Pradesh and Bihar. For the present analysis, the data from District Level household survey, DLHS-3 (2007-08) is considered and analyzed with Bivariate and Multivariate Statistical techniques like Logistic regression using SPSS.of women in Uttar Pradesh and Bihar. For the present analysis, the data from District Level household survey, DLHS-3 (2007-08) is considered and analyzed with Bivariate and Multivariate Statistical techniques like Logistic regression using SPSS.Logistic regression analysis resulted that rural women are 1.1 times more likely to experience all reproductive health complications than urban women in UP. Other caste women are more likely to experience any reproductive complications than SC/ST in UP and Bihar. Women suffered more from reproductive health problems with age of women increases in both UP and Bihar. Women who are illiterates and completed primary education are 1.5, 1.2 times more likely to experience all reproductive health complications than educated women in UP and Bihar. Women married below 18 years are 1.3 times more likely to experience reproductive health problems than their counterparts in UP and Bihar.

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Keywords:

Morbidity, Treatment seeking behavior, RTI/STI, Health complications.

INTRODUCTION:-

In India, Delhi, Kerala, Himachal Pradesh, Haryana and Punjab are the best performing States in human development indicators, while Chhattisgarh, Bihar, Madhya Pradesh, Jharkhand and Odisha are the worst performers as per Human Development Report-2011. Maternal and child health indicators of Uttar Pradesh and Bihar are poorer compared with other states of India. These states fail to reduce maternal, neonatal, infant and child mortality and improve reproductive health and nutritional outcomes. Inappropriate social norms, lack of knowledge of women, unfavourable attitude and practices of under developed population groups are important contributors of maternal, neo-natal and child mortality and morbidity.

The central India is contributing maximum burden of reproductive morbidity and mortality of women due to social, economic and cultural factors as well as inadequate and under utilization of health services [Chaurasia, 2006].

Uttar Pradesh and Bihar are the two biggest states of India contributing much towards achieving health goals of India. Moreover, the progress is slow compared with other states and the reproductive morbidity, namely, obstetric (related to pregnancy, delivery and post delivery), gynecological (RTI/STI) is higher and the treatment seeking behavior is also poor.

This paper is intended to estimate the prevalence rates and identify the factors influencing the reproductive morbidities and treatment seeking behavior of women in Uttar Pradesh and Bihar.

REVIEW OF PAST STUDIES:

WHO (1990) defined reproductive morbidity as any morbidity or dysfunction of the reproductive tract. Obstetric morbidity is related to pregnancy. Direct obstetric morbidity results from obstetric complications of pregnancy such as ante- or postpartum hemorrhage, eclampsia, or sepsis. Indirect obstetric morbidity results from pre-existing diseases, such as malaria, hepatitis, and tuberculosis. Psychological obstetric morbidity includes puerperal psychoses, or fear of pregnancy and childbirth. Direct gynecological morbidity includes reproductive cancers and bacterial or viral sexually transmitted diseases (STDs). Indirect gynecological morbidity includes traditional practices, such as circumcision. Psychological morbidity is associated with STDs and infertility.

RTI/ STI are considered as a major cause of reproductive morbidity in developing countries. Untreated infections can lead to a number of serious health problems, including pelvic inflammatory disease, ectopic pregnancy, infertility, foetal loss, cervical cancer etc. In rural India, 92 percent women had one or more gynecological problems, 91 percent suffered from iron deficiency anemia and infections constituted 50 percent of the disease burden, according to an epidemiological study (Bang et al., 1989). Studies conducted from 1985 to 1994 revealed (Koeing et al., 1998) that the poor women affected with gynecological morbidity and reported at least one gynecological complaint which ranged from 55 to 84 percent. Belsey and Royston (1990) stated that nearly half a million women die every year in developing countries from pregnancy and childbirth related problems. Anemia and hemorrhage caused 41 percent of maternal deaths in rural India.

Hope (1996) found that women in a rural PHC in India affected with RTI problem and women reported symptoms of RTI were white vaginal discharge (75 percent), foul smelling vaginal discharge (11 percent), pain in lower abdomen, backache (71 percent). And only 34 percent of women treated for RTI problems in health centres. Oomman (1996) investigated in a study conducted in rural Rajasthan and the result of logistic regression shows that women are at risk of infection from sterilization operation and prolapsed with increased age.

According to a study conducted in Karnataka by Bhatia and Cleland (1997), a third of women reported symptoms of at least one gynecological morbidity, and 50 percent sought treatment. A tenth of women reported menstrual problems and 23 percent of women reported anemic. Jejeebhoy (1997) pointed out that factors affecting reproductive health of women include malnutrition, adolescent marriage and childbearing, lack of sex education, barriers to contraceptive use, poor quality reproductive health care services, poor service delivery, women's inability to seek health care, and a need for health information etc.,

Population Council, 1999 indicated that 10 to 60 percent of women in India reported vaginal discharge and lower abdominal pain with fever as the major symptoms of RTIs. Generally, in India women consider many symptoms of reproductive problems as normal; do not seek treatment until the problem becomes severe. (Oomman 2000; Apte and Trasi, 2001; Prasad et al., 2005; Rangaiyan and Sureender, 2006;). Married women are reluctant to seek medical treatment because of lack of privacy, lack of female doctor at the health facility, the cost of treatment and their subordinate social status (Jejeebhoy, 1998; Barua and Kurz, 2001), prevailing cultural and traditional practices, which are harmful to the health of the women (Devi, 1996).

The reproductive health problems of women in Uttar Pradesh and Bihar are higher and the treatment seeking behavior of women also very poor compared with other states as per DLHS-3 (2007-08). The findings of the present study will help the policy makers and program implementers to reorient the programs to promote reproductive health and treatment seeking behavior of women in Uttar Pradesh and Bihar

GENERAL OBJECTIVE

The general objective of this paper is to estimate the prevalence rates and identify the factors influencing the reproductive morbidities and treatment seeking behavior of women in Uttar Pradesh and Bihar.

SPECIFIC OBJECTIVES

To find out the effect of socio-economic and demographic factors on reproductive health problems of currently married women.

To examine the prevalence of the reproductive health problems such as pregnancy complication, delivery complication, post-natal complication, menstruation problem, RTI/STI and abnormal vaginal discharge. To examine the treatment seeking behavior of women with reproductive health problems.

METHODOLOGY:

The present paper utilizes the district level household survey (DLHS-2, DLHS-3) data. In order to fulfill the above objectives, the recently concluded reproductive and child health data - DLHS-3 have been used. The survey was carried out by International Institute for Population Sciences (IIPS), Mumbai, under the guidance of Ministry of Health and Family Welfare, GoI in 2007-08. The survey collected the information by using the separate questionnaire for the individual household, women, husband, village and health respectively. This paper utilizes only the information collected from the women who are currently married and in the age group of 15-44 years in the state of Uttar Pradesh and Bihar. Further it utilizes the sample of 90,415 households (HH) in UP in which 87,564 women and 47,137 HHs in Bihar in which 46,840 women were interviewed both from rural and urban areas by taking the entire 75 districts in UP and 38 districts in Bihar.

The reproductive health problems of the currently married women was estimated from the women's self reported experience in the three months preceding the survey with any of the following problems, namely, pregnancy complications, delivery complications, post- delivery complications, RTI/STI problems. Those who have reported at least one symptom stated above are regarded as having the reproductive health problem.

Socio-economic factors such as residence, religion, caste, type of house, education of women, Wealth Index and demographic factors such as age of mother, age at marriage are considered as independent variables. Tabular analysis with test of significance like chi-square and logistic regression analysis was adopted.

RESULTS AND DISCUSSION

$Socio\,economic\,and\,demographic\,correlates\,of\,women's\,reproductive\,health\,problems:$

The Reproductive morbidity, namely, obstetric and gynecological is higher for women living in Uttar Pradesh and Bihar, which leads to mortality of women due to Social, Economic and Cultural factors. The following Table 1 explains the Socio economic and demographic correlates of women's reproductive health problems in UP and Bihar.

A higher percentage of women living in rural areas in UP (59.6 percent) and Bihar percent) suffered from any one of the reproductive health (RH) complications (obstetric / gynecological) and is presented in Table 1.

Table-1: Socio economic and demographic characteristics of women's reproductive health problems in Uttar Pradesh and Bihar

Characteristics	Any one of the Reproductive Health Complications		
	Uttar Pradesh	Bihar	
Type of locality			
Rural	59.6	63.7	
Urban	53.6	59.1	
Religion			
Hindu	58.0	62.6	
Muslim	63.2	68.3	
Christian	44.6	43.5	
Others	55.2	60.0	
Caste			
SC	61.5	65.5	
ST	59.0	60.8	
Others	56.5	61.5	
Type of house			
Kuchcha	61.3	64.6	
Semi pucca	59.2	63.7	
Pucca	53.5	58.8	
Age of women			
15-24	66.5	71.1	
25-34	69.0	73.5	
35-44	45.2	48.9	
45+	29.7	32.9	
Education of women			
Illiterate	68.0	70.9	
Primary	59.8	65.5	
High school	58.8	62.7	
Higher secondary	54.6	62.0	
Degree/Others	58.7	63.1	
Age at marriage			
<18	58.8	63.3	
18-21	59.0	64.0	
22-24	56.0	61.4	
25+	55.1	60.0	
Wealth Index			
Lowest	69.8	75.4	
Second	60.4	70.9	
Middle	52.4	65.9	
I	1		

Source: DLHS 3 (2007-08)

Fourth

Highest

Women belonging to Muslim community in UP (63.2 percent) and in Bihar (68.3 percent) experienced more RH complications than their counterparts. Women belonging to Scheduled Caste suffered more from RH complications in UP (61.5 percent) and in Bihar (65.5 percent) compared with other Castes. A higher percentage of women living in Kuchcha houses in UP (61.3 percent) and in Bihar (64.6 percent) suffered due to any one of the RH complications than living in Semi pucca and Pucca houses. Women in the age group of 25-34 years affected with any one of the RH problems in UP (69 percent) and in Bihar (73.5 percent) than other age groups. Illiterate women in UP (68 percent) and in Bihar (71 percent) experienced more from any one of the RH problems than educated women. Women married in the age group of 18-21 years in UP (59 percent) and in Bihar (64 percent) suffered from RH problems than others. Women with lowest Wealth Index suffered more from RH problems in UP (70 percent) and in Bihar (75 percent) experienced any one of the RH problems than other women.

50.8

48.3

60.5

54.5

Application of Chi-square test of significance for all reproductive health complications with socio-economic and demographic variables shown in Table 2, revealed that there exist significant association between reproductive health complications and socio economic and demographic variables. The findings are significant at 1 percent level except age at marriage in Bihar.

Table 2: Reproductive Health Complications and Socio-economic and demographic variables:

	All RH complications		
Characteristics	Uttar Pradesh	Bihar	
Type of locality	*	*	
Religion	*	*	
Caste	*	*	
Type of house	*	*	
Age of women	*	*	
Education of women	*	*	
Age at marriage	*		
Wealth Index	*	*	

Note: * Significant at 1% -- Not significant

As per DLHS-2 (2002-04) report for Uttar Pradesh, 31 percent women suffered from pregnancy complications, 20 percent from delivery complications, 34 percent from post delivery complications, 16 percent from menstrual problems and 36 percent suffered from RTI/STI complications. As per DLHS-2 (2002-04) report for Bihar, 41 percent of women suffered from pregnancy complications, 79 percent from delivery complications, 46 percent from post delivery complications, 20 percent from menstrual problems and 39 percent suffered from RTI/STI complications. All reproductive health complications are higher for Bihar compared with UP and is presented in Table 3.

Table 3: Percent of women with Reproductive Health Complications in U P and Bihar

D 1 4	Uttar Pradesh		Bihar	
Reproductive Health Problems	DLHS 2 (2002-04)	DLHS 3 (2007-08)	DLHS 2 (2002-04)	DLHS 3 (2007-08)
Pregnancy complications	31.3	64.0	40.8	75.7
Delivery complications	20.2	66.1	79.4	81.3
Post delivery complications	33.5	18.8	46.1	57.4
Menstrual problems	15.7	19.6	20.4	23.2
RTI/STI	35.6	40.0	39.2	39.7

The DLHS-3 report for UP revealed that all reproductive health complications except post delivery complications are reported higher compared with DLHS-2, namely, pregnancy complications (64 percent), delivery complications (66 percent), post delivery complications (19 percent), menstrual problems (20 percent) and RTI/STI problems (40 percent). Similarly for Bihar, as per DLHS 3, all reproductive health complications are reported higher compared with DLHS-2, namely, pregnancy complications (76 percent), delivery complications (81 percent), post delivery complications (57 percent), menstrual problems (23 percent) and RTI/STI problems (40 percent). This may be due to reporting of health problems compared with previous years and is due to increase in awareness level among women in reporting RH problems.

Women treated for RH problems in DLHS-3 (2007-08) compared with DLHS-2 (2002-04) in UP and Bihar is presented in Table 4.

Table 4: Percent of Women Treated for Reproductive Health Complications in Uttar Pradesh and Bihar

	Uttar Pradesh		Bihar	
Treated for RH Problems	DLHS 2 (2002-04)	DLHS 3 (2007-08)	DLHS 2 (2002-04)	DLHS 3 (2007-08)
Pregnancy complications	40.6	45.5	36.2	41.7
Post delivery complications	55.2	61.1	42.3	57.4
RTI/STI	32.9	40	28.5	39.9

Women treated for pregnancy complications in UP increased from 41 percent to 46 percent and from 36 percent to 42 percent in Bihar. Regarding post delivery complications, percentage of treatment seeking is increased from 55 percent to 61 percent in UP and in Bihar it is increased from 42 percent to 57 percent. Similarly the percentage of treatment seeking for RTI/STI increased from 33 percent to 40 percent in UP and from 29 percent to 40 percent in Bihar. Though there is an increase in treatment seeking for reproductive health problems, the remaining untreated women are to be motivated to go for treatment for RH problems.

Women (72 percent) who delivered at government health facility treated in UP and 82 percent of women treated in Bihar for delivery problems. And 15 percent of women who delivered at government health facility treated in UP and 59 percent of women treated in Bihar for post delivery problems. Seventy four percent of women who delivered at private health facility treated in UP and 85 percent of women treated in Bihar for delivery problems while 16 percent of women who delivered at private health facility treated in UP and 57 percent of women treated in Bihar for post delivery problems.

RESULTS OF LOGISTIC REGRESSION ANALYSIS:

Women who experienced any one of the reproductive health complications like pregnancy, delivery, post delivery, menstrual or RTI/STI is coded as 1 and who have not experienced is coded as 0 for Logistic Regression analysis. Results of Logistic Regression analysis in Table-5 showed that except place of residence and age at marriage, all the variables are significantly associated with any one of the Reproductive Health problems of women in UP and Bihar. Women belonging to Hindu religion are more likely to experience RH problems in UP and Bihar. Women belonging to SC are more likely to experience all reproductive health complications than other women in UP and Bihar. Women living in Semi Pucca houses in UP and women living in Kachcha houses are more likely to experience RH complications than their counterpart. Illiterate women are more likely to experience all reproductive health complications than women with higher education. RH problems reduced as the education of women increased. Women belonging to 15-24 years in UP and women belonging to 25-34 years in Bihar are more likely to experience all reproductive health complications than their counterparts. Women with Lowest Wealth Index are more likely to experience any one of the Reproductive Health complications than other women in UP and Bihar.

$Treatment \, sought \, for \, reproductive \, health \, problems \colon$

Women who sought treatment for any one of the reproductive health complications is coded as 1 and who did not sought treatment is coded as 0 for logistic regression analysis. Religion, Caste, House type, Age, Education and Wealth Index of women are significantly associated with women sought treatment in UP and Bihar. Women belonging to Hindu in UP, Muslim and Christian in Bihar are more likely to go for treatment for the reproductive problems than other women. SC/ST women, women who are living in Kuchcha houses, illiterate women and women belonging to lowest wealth index are less likely to go for treatment than their counterparts in UP and Bihar. Treatment seeking behavior increases as the education of women increases. Women in the age group 25-34 are more likely to go for treatment for the RH problems than other women in both the states. Logistic regression analysis, from Table 5 clearly shows that Women belonging to SC/ST, Women living in Kuchcha houses, Illiterate women and Women in the age group 15-24 years, Women in the Lowest Wealth Index are the targeted women to be educated and motivated to take treatment for their reproductive health problems.

Table 5: Logistic Regression analysis

	Reproductive Health Problems		Women sought treatment	
Variable	Ex	rp(B)	Ex	p(B)
	UP	Bihar	UP	Bihar
Religion *				
Hindu (Ref)				
Muslim	0.350	1.290	0.356	1.212
Christian	0.758	0.598	0.152	1.149
Others	0.059	0.002	0.785	0.927
Caste*				
SC (Ref)				
ST	0.922	0.843	0.556	0.822
Others	0.563	0.915	2.256	1.124
House type*				
Kuchcha (Ref)				
Semi Pucca	2.305	1.020	2.523	1.113
Pucca	0.756	0.900	1.583	1.094
Age of mother*				
15 - 24 (Ref)				
25-34	0.456	1.137	1.259	1.365
35-44	0.322	0.389	0.821	0.795
45 +	0.265	0.199	0.592	0.612
Education*				
Illiterate (Ref)				
Primary	0.820	0.788	1.256	1.564
High School	0.762	0.695	1.312	1.791
Higher. Sec.	0.705	0.653	1.428	1.928
Degree/Others	0.621	0.561	1.728	2.828
Wealth Index*				
Lowest(Ref)				
Second	0.830	0.844	1.563	1.820
Middle	0.685	0.651	1.578	1.469
Fourth Highest	0.557 0.238	0.770 0.450	2.549 2.925	1.782 2.456
Constant	3.462	4.256	3.569	2.436
-2 Log Likelihood	57788.432	62596.125	49523.489	52563.144
Nagelkerke- R^2	.106	.212	.192	.201
%Correct Prediction	67.0	72.6	75.5	69.5

Note: Exp(B)-Odds ratio, (Ref)- Reference Category * Significant at 1% level Source: DLHS 3 (2007-08)

CONCLUSION AND SUGGESTIONS:

The government of India and the State governments have taken lot of measures to achieve health goals in the recent decades with the help of national programmes, state programmes and state Population Policies. But still there exists variations between the districts in some of the indicators. Special efforts have to be taken by the government of UP and Bihar to reduce the inter district disparities in demography and development. Women belonging to SC/ST, Women living in Kuchcha houses, Illiterate women and Women

in the age group 15-24 years, Women in the Lowest Wealth Index need to be targeted and to be given special care to improve the reproductive health of women in UP and Bihar.

The programs and strategies namely, providing special care and awareness creation among targeted women for reproductive health needs, proper monitoring of government programmes, involving local people at Panchayat level and local NGOs, training on health care to the targeted women, providing health education and need of male participations will help to improve the reproductive health status of women.

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