Original Article

Comparative Study on Maternal and Child Health Services Utilization among Rural Women of Varanasi and Jaunpur

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ABSTRACT

Introduction: Maternal and child health facilities are the leading significances of community health programs. According to Indian culture, the mother is the underpinning of the family and children are upcoming of the country. According to WHO maternal and child health services can be defined as "promoting, preventing, therapeutic or rehabilitation facility or care for the mother and child."

Aim: This study is to assess the utilization of antenatal care services in two divisions of Uttar Pradesh Varanasi (Chitaipur) Jaunpur (Rehati).

Methodology: Cross-sectional study, sampling technique- simple random sampling using interview schedule questionnaire. Chitaipur, Rehati, statistical test i.e., Z test is used for the comparison between two districts of Uttar Pradesh.

Result: This study indicates that between two districts of village i.e. Chitaipur, Rehati. Chitaipur is a better utilization of ANC care Comparison than Rehati.

Conclusion: Uttar Pradesh has hugely proceeded in terms of maternal health in recent times, motionless some key areas require prompt attention. Spreading of information and assistance regarding the utilization of ANC services should be stimulated to achieve a reduction in maternal mortality.

Key Words: Antenatal checkup (ANC), Utilization, Married women, Pregnant women, Comparative, Maternal Health Services

INTRODUCTION

"Women's health issues from Womb to tomb." Maternity is the most important position a woman can have in her life but can be a life frightening event as well. The complication of pregnancy and childbirth are major causes of death and disability among reproductive age leading to high maternal mortality in India. During pregnancy, any woman can develop serious complications that require medical care. In the International Statistical Classification of diseases and related health problems. Tenth revision,1992(ICD-10), WHO defines maternal death as "The death of a woman while pregnant or within 42 days of termination of pregnancy, regardless of the duration site of the pregnancy or its management but not from accidental or incidental cause [1]

For all women who dies, 30-50 women suffer from injury, infection, or disease. Pregnancy-related complications are among the leading causes of death and disability for women aged 15-49 in developing countries. The desired outcome of pregnancy is always a healthy mother and healthy baby. Because there is no reliable way to predict which women will develop pregnancy complications is essential that all pregnant women have access to high-quality obstetric care throughout their pregnancies. Maternal complications and poor perinatal outcomes are highly associated with the non-utilization of antenatal and distribution care services and poor socioeconomic conditions of the patients. Poorer results are seen in undid than booked patients.[2]

In low and middle–income countries, less than half of all pregnant women have a minimum of four antenatal care visits .[3]

In India, the reproductive and child health programme aims at providing at least three antenatal checkups which should

include a weight and blood pressure check, abdominal examination against tetanus and iron and folic acid prophylaxis, as well as anaemia management.[4]

The National maternity benefit scheme has been modified by Janani Suraksha Yojana (JSY). It was launched on 12th April 2005. It is a 100 per cent centrally sponsored scheme under the national rural health mission. The scheme focuses on poor pregnant women with special attention. Tracking each beneficiary registered under this yojana should have a Janani Suraksha Yojana (JSY) card along with a Maternal and child health (MCH) card. Accredited Social Health Activist, Anganwadi worker ASHA /AWW any other identified link worker under the overall supervision of the Auxiliary Nurse Midwife, Medical Officer, Primary Health Centre ANM and MO, PHC should mandatary prepare a micro -plan. This will effectively help in monitoring antenatal checkups, and standing delivery care. Uttar Pradesh is a low performing state under Janani Suraksha Yojana.[5]

Hence, it becomes essential to analyze and study the utilization of maternal health services in Uttar Pradesh and identified districts with poor performance. This will provide track to the policymakers and Government to effectively employ its programmes under Janani Shishu Suraksha Karyakram (JSSK).

The present study focuses on developing indicators to measure the adequacy of antenatal care. In particular, this study aims to describe the adequacy of antenatal care for women in the context of a population in two different districts of Uttar Pradesh; (Varanasi) Chitaipur and (Jaunpur) Rehati.

Objectives

To compare the data on maternal and child health care services two districts wise Varanasi and Jaunpur in rural areas.

2- To compare the maternal and child health utilization among two districts of village Chitaipur in (Varanasi), Rehati in (Jaunpur) in rural areas.

Methodology:

A cross-sectional study, Random sampling techniques, population – The total population 1343 (rural Chitaipur) Varanasi and 1143 (rural Rehati) Jaunpur among married women (15-49) maternal health utilization I selected randomly 60 married women in (Varanasi) Chitaipur village,60 married women in (Jaunpur) Rehati total married women in 120 selected during 15 January 2019 to 18 March 2019.

Tools: Interview Schedule questionnaire.

Statistical Analysis: The z-test for two population proportions has been applied to compare various study indicators. The hypothesis is given by:

Ho: There is no difference in the study variable in the two regions.

H1: There is a significant difference in the study variable in the two regions.

The test statistic is given by:

$$Z = \frac{p_1 - p_2}{\sqrt{p(1-p)(\frac{1}{n_1} + \frac{1}{n_2})}}$$

Where p1= proportion of the first population
p2=proportion of the second population
n1= sample size of the first population
n2= sample size of second population and

$$p = \frac{n_1 p_1 + n_2 p_2}{n_1 + n_2}$$

The corresponding P value is calculated and if p>0.01, Ho is accepted otherwise rejected at 1% level of significance.

RESULT

Figure-1 describes that almost 11.6% are graduates in Varanasi (Chitaipur) compared to Jaunpur (Rehati) 50% of rural subjects were illiterate. Varanasi is a better educational level compared to Jaunpur. Incidence of early marriage (below 18 years) was high in Jaunpur in rural areas. In this study majority of subjects were. In this study, the majority of Subjects were age group 20-24 years, that is, 50% in Jaunpur compared to Varanasi 33.3%in rural areas. In the study participants, 61.66 were housewives and only 23.33 % did the job tailoring at home. Comparatively, In Varanasi 57.67% were housewives and only 16.63% did the job of ornament making at home. In the present study in Varanasi 93.3% Hindu, 6.7% Muslim. Comparatively in Jaunpur 68.3% Hindu, 31.7% Muslim women. In the present study in Varanasi (Chitaipur) 83.3% joint family, 16.7% Nuclear family. Comparatively in Jaunpur (Rehati) 81% of joint families, 18.3% Nuclear families.
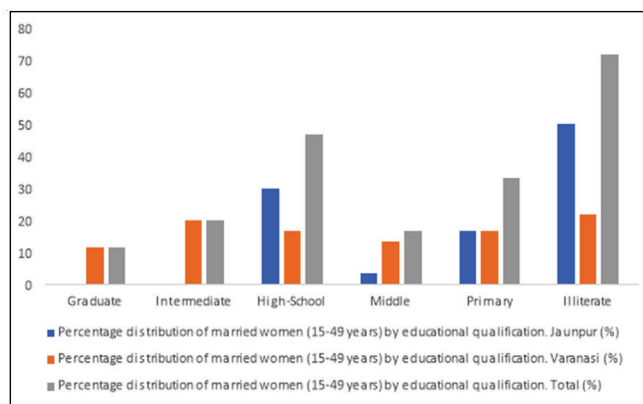

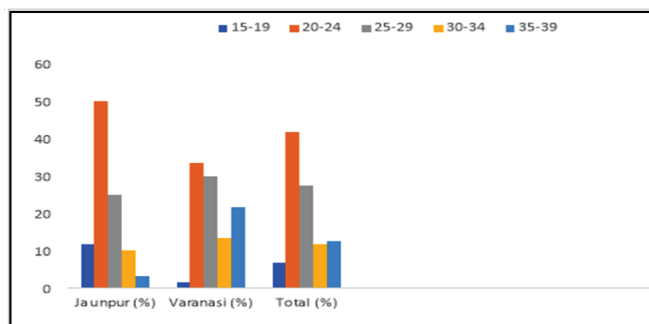**Figure 1:** Socio-Demographic Characteristics of Respondents.

Figure 2: Shows that the percentage of mothers who did not get registration within twelve weeks of pregnancy is higher in Varanasi (65%) than Jaunpur (42.5%) which is statistically significant at a 1% level of significance. the p-value for the indicator is 0.0082 which is less than 0.01 thus the difference between Varanasi (Chitaipur) and Jaunpur (Rehati) is statistically at a 1% level of significance.

This shows that the percentage of Mothers who got registered with Auxiliary nurse-midwife, commonly known as (ANM) within twelve weeks of pregnancy is higher in Varanasi (60%) than Jaunpur (30%) which is statistically significant at a 1% level of significance. The P-value for the indicator is 0.0005 which is less than 0.01 thus the difference between Varanasi(Chitaipur) and Jaunpur (Rehati) is statistically at a 1% level of significance (Table 1).

Table 1: Percentage distribution of married women (15-49 years) according to registration.

Maternal and Child Health	Jaunpur	Varanasi	J Vs. V	
			(Z-Score)	(P-Value)
Mothers Who got Registered within 12 Weeks of Pregnancy (%	57.4	35	2.3984	0.9918
Mothers Who did not Get Registered within 12 Weeks of Pregnancy (%)	42.59	65	-2.3984	0.0082
Mothers Who got Registered with Asha Within 12 Weeks of Pregnancy (%)	33.33	28.33	0.593	0.7234
Mothers Who got Registered with Anm within 12 Weeks of Pregnancy (%)	30	60	-3.303	0.0005
Mothers Who got Registered with Aww within 12 Weeks of Pregnancy (%)	36.67	13.33	2.951	0.9984

Shows that percentage of the mother who had three antenatal care visits in pregnancy is higher in (Varanasi) Chitaipur (58.33%) than (Jaunpur) Rehati (16.67%) which is statistically significant at 1% level of significance p-value for the indicator is 0 which less than 0.01% thus the difference between (Varanasi) Chitaipur and Jaunpur (Rehati) is statistically significant at 1% level of significance (Table 2).

Table 2: Percentage distribution of married women (15-49 years) according to ANC services received.

	Jaunpur	Varanasi	J VS. V	
			(Z-Score)	(P-Value)
Mothers who had <3 antenatal care visits (%)	83.33	41.67	4.714	1
Mothers who had 3 antenatal care visits (%)	16.67	58.33	-4.714	0

shows that percentage of the mother who consumed iron and folic acid for 100 days when they were pregnant is higher in Varanasi (Chitaipur) (53.33%) than Jaunpur (Rehati) 23.33 which is statistically significant at a 1% level of significance p-value for the indicator is 0.0004 which less than 0.01thus the difference between Varanasi (Chitaipur) and Jaunpur (Rehati) is statistically at 1% level of significance (Table 3).

Table 3: Percentage distribution of married women (15-49 years) according to IFA tablet consumed.

	Jaunpur	Varanasi	Z-Score	(P-Value)
Mothers who consumed iron-folic acid for 100 days when they were pregnant (%)	23.33	53.33	-3.38	0.0004
Mothers who consumed iron-folic acid for less than 100 days when they were pregnant (%)	76.67	46.67	3.38	0.9996

shows that percentage of mothers who received Tetanus toxoid (TT) immunization in pregnancy is higher in Varanasi (Chitaipur) (76.67%) than Jaunpur (Rehati) (38.33 %) which is statistically significant at a 1 % level of significance p-value for the indicator 0 which less than 0.01 thus the difference between Varanasi (Chitaipur) and Jaunpur (Rehati) statistically significant at 1% level of significance (Table4).

Table 4: Percentage distribution of married women (15-49 years) according to TT immunization received.

	Jaunpur	Varanasi	J VS. V (Z-Score	J VS. V (P-Value)
Mothers who received TT immunization	38.33	76.67	-4.247	0
Mothers who did not receive TT immunization	61.67	23.33	4.247	1

DISCUSSION

The results indicate that there were significant differences in utilization of maternal health care services between the two districts of Uttar Pradesh Varanasi (Chitaipur), and Jaunpur (Rehati). Overall Varanasi is a better utilization of maternal and child health care services. The comparison then another similar study of Uttarakhand, Almora, Champawat, Nainital and Udham Singh Nagar had better usage of maternal health care facilities.[6] shows that the percentage of mothers who did not get registration within 12 weeks of pregnancy is higher in Varanasi (Chitaipur), 65% than Jaunpur (Rehati), 42.5% which is statistically significant at 1% level of significance p-value for the indicator is 0.0082 which less than 0.01 thus the difference between Varanasi (Chitaipur) and Jaunpur (Rehati) is statistically significant at 1 % level of significance.   In a similar study, A greater percentage (85%) of women were registered early, according to a study in Rajasthan (Ramakant Sharma, 2006-07.[6] Mother who had an antenatal visit in pregnancy is higher in Varanasi (Chitaipur)58.33% than the percentage of women who went for three or more than three ANC checkups was also reported to be high in West Bengal, Assam and Orissa i.e., 97.8%,89.6% and 83% i.e., 83%,97.8% and 89.6% respectively and comparatively low in U.P, M.P and Rajasthan i.e72.8%,65.5% and 65.4% respectively (MOHFW,2007). According to NFHS-3, almost half the women (52%) received three or more antenatal checkups across India. As compared to our country E. Materia et al. (Ethiopia,1993) reported that a greater proportion (61%) of the women who received antenatal care reported having had 3 or more visits according to a study regarding MCH service utilization[8] In the present study, only 53.33 % of women consumed hundred IFA tablets in Varanasi (Chitaipur) than Jaunpur (Rehati 23.33%. A smaller proportion of women in our Nation. A similar study consumed hundred IFA tablets as per NFHS-III data i.e., 26% and 23% respectively. The percentage of women who consumed hundred IFA tablets was found to be very high i.e., 98% in Kerala (Sumitra, 2006).[9] In the present study, Mother who had received in Varanasi (Chitaipur) 76.67% TT vaccination is higher than Jaunpur (Rehati) 38.33%. Mothers whose last birth was protected against neonatal tetanus 93.2% in Varanasi comparison than Jaunpur 90.9%. Varanasi is better than Jaunpur utilization of maternal and child health care. (NFHS4).[10] In the present study Mother who had received financial assistance under Janani sukkahs Yojana (JSY) for birth delivered in an institution 76.67% in Jaunpur (Rehati) comparison than Varanasi (Chitaipur) 46.67%. The Similar study According to (NFHS-4 2015-16) Mother who received financial assistance under (JSY) for birth delivered in an institution 56.3% in Varanasi in a rural area 53.7% in Jaunpur in the rural area.[11] In this study, a good awareness level is identified about the facilities provided by the scheme Mamoni as compared to other schemes. In another part of India, different studies are conducted to assess the level of awareness regarding Maternal and child health care schemes. According to a study by Kannan et.al awareness level about JSY is about 62.3%.[12] Overall, ASHA/ ANM is a very important role for pregnant women at the village level.

CONCLUSION

Utilization of maternal and child health care MCH services was poor in both rural areas in Jaunpur (Rehati), Varanasi (Chitaipur). Awareness of women concerning their health assumes special implications in the Indian context because the maternal health problems are mainly due to ignorance, poverty, and lack of knowledge regarding the issue. It is therefore very important to first focus on services for the increasing awareness level of the mother. Special attention in rural areas of Jaunpur. A sustained and attentive information education and communication campaign to improve the awareness amongst the community on MCH will help in improving the quality, accessibility, and utilization of maternal health care services provided by the government agencies in both rural areas. Maternal women are belonging to the vulnerable group because every people can be easily physically, emotionally or mentally hurt or influenced in society. But communication is a good platform to aware pregnant women in our health. In rural areas so many modes of communication to aware of the health-related information for pregnant women. So, there is a need for an effective communication strategy to improve the quality of life of pregnant women.

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