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# UNDERSTANDING OF HEALTH CONCERNS DURING PREGNANCY: A STUDY AMONG THE RURAL WOMEN OF SIWAN DISTRICT, BIHAR

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#### **ABSTRACT**

Every day, approximately 800 women die from preventable causes related to pregnancy and childbirth, of which, 99% of all maternal deaths occur in developing countries. In India, Bihar is consistently having poor maternal health indicators despite of various Govt. run program such as Janani Suraksha Yojna(JSY) which was introduced on 2005. For the present study a community based cross-sectional study was conducted in 49 villages selected using multistage sampling technique for selecting 494 women in the age group of 15-49 years during January 2018-June 2018 to find out the socio demographic factors influence women's choice of place of Antenatal Care Services (ANC) in rural areas of Siwan district, Bihar. Data analysis was done with the help of Statistical Package for Social Sciences (SPSS) version-20. The result reveals that education, age at marriage, educational, appeared strong influencing factors for the choice of place of Antenatal Care (ANC) among women in rural areas. The result also shows that 32.4% of Respondents have received health facilities from private hospitals in the study area. It concludes that lack of awareness about Antenatal care services and poor socioeconomic conditions of the family appear to be the main reasons for choosing to delivery at home. It recommends that Government should be taken a comprehensive strategy to increase the availability, accessibility and affordability of delivery care services in rural areas. Public health strategies involving traditional birth attendants will be beneficial particularly rural & remote areas where their services are highly needed.

KEY WORD: Antenatal Care (ANC), Pregnant, Women, Rural, Health care

#### 1. INTRODUCTION:

Around the world, approximately 800 women die every day from preventable causes linked to pregnancy and or childbirth-related complications (World Health Organization 2017). Improving maternal health is one of the United Nations Millennium Development Goals (MDG), with primary targets of reducing the Maternal Mortality Ratio (MMR) by three quarters and achieving universal access to reproductive health by 2015 (United Nation 2015). Although there have been great strides in areas like Sub-Saharan Africa and Asia, where maternal mortality has declined between half and two-thirds respectively, maternal mortality



ratios in developing regions still remain about 14 times higher than those in developed regions (United Nation, 2015; World Health Organization 2017). The MMR in developing countries in2013 was approximately 230 per 100,000 live births, while the MMR in developed countries was16 per 100,000 live births (World Health Organization, 2017). Most of the maternal deaths which occur in the developing world are preventable, as many healthcare solutions to prevent, manage and treat the complications are well known (World Health

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Organization, 2017). Reducing maternal mortality rates have been the major focus in developing countries since the late 1980's.

Antenatal Care (ANC) is considered to be a cost-effective component to help reduce mortality, as several of the health concerns which pregnant women face can be prevented, detected and treated during antenatal care visits(Pallikadavath, Foss, and Stones, 2004; Singh, Rai, and Singh, 2012; World Health Organization, 2017). Providing Antenatal Care (ANC), or care for the women during the pregnancy time period, has been proven to be an important determinant of overall health for the mother and in the development of the unborn baby (Lincetto, Mothebesoane-Anoh, Gomez, and Munjanja, 2006). Studies have consistently shown that in groups having more ANC visits there are lower rates of maternal, fetal and neonatal morbidity and mortality than those with fewer to no visits at all (Carroli et al. 2001). According to the World Health Organization (2006), the overall aim of antenatal care is to "prevent, alleviate or treat/manage health problems/diseases (including those directly related to pregnancy) that are known to have an unfavourable outcome on pregnancy, and to provide women and their families/partners with appropriate information and advice for a healthy pregnancy, childbirth and postnatal recovery". ANC entails women having at least 4 ANC assessments/checkups by or under the supervision of a skilled health attendant (World Health Organization 2006).

Antenatal care can aid a woman in preparing for her delivery as well as help her understand any warning signs which may develop during the pregnancy and in childbirth (UNICEF, 2015). It can also be a source of prevention or treatment for several conditions such as hypertension, eclampsia, tetanus, malaria, and HIV(UNICEF, 2015). Improving overall maternal health globally is one of WHO's key priorities; but in order to reach this goal, barriers that limit access to quality maternal health care services, specifically antenatal care, must be identified and addressed (World Health Organization, 2017).

#### 2. REVIEW OF LITERATURE:

There is a substantial body of research which assess different socio-economic dynamics of Antenatal care including child health and maternal health in both developed and developing countries. Many of these researches assume health knowledge is a result of formal education (Frost, Forste, and Haas, 2005; Glewwe, 1999; The Partnership for Maternal, Newborn and Child Health 2006).

**Sugathan, et al (2001)** sated that the limitations of antenatal risk assessment the basic functions of detection of pre-eclampsia, anemia and other incipient complications remain essential. In addition, other less tangible benefits may be realized which are not easily evaluated in isolation Antenatal consultations provideopportunities for health education, health promotion and social support at both the individual and community level. Especially in the rural setting, accessing antenatal care is an important step in bringing women into contact with the health care system. This contact has facilitated women's access to medical care for future health needs, including postnatal care.

**Mohanty, (2012)** pointed that Thirty-two percent Indian ever-married women reported being deprived in one of the three dimensions, percent in two and percent in all three; 43 percent was deprived in none. A woman deprived in all three dimensions was less likely than those not deprived in any. Who received ANC or PNC? A birth occurred by medical assistance was smaller for deprived women in three dimensions than for those deprived in none. These patterns were correct for every larger Indian state. Differentials in utilization of maternal care services were higher across deprivation levels in the states where service coverage was low in states where service coverage was high. Moreover, income differences in access to maternal care were widening across and within countries as poor women were receiving fewer services than those who are better off.

**Jowett, (2000)** stated that limited resources there is a need to ensure valuefor money: overall, antenatal care is considered to represent a cost-effective component of maternity services as part of 'safe motherhood' interventions to reduce mortality and morbidity.Recognising that socio-cultural factors are likely to be critical determinants of care seeking and service utilization in the context of pregnancy, the objective of this paper is to examine factors associated with the use of antenatal care facilities in the rural

areas of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh (the latter including Uttaranchal). The paper also examines factors associated with access to specific critical components of care. A final objective is to study the differences, if any, in the pattern of antenatal check-ups and services received through health facilities.

Wagstaff and Van Doorslaer (2000) explored that decline in consumption poverty is not associated with a decline in starve or an improvement in the health of the population. For instances, more than two out of fifths of Indian children less than five are undernourished, and half of the women are anemic. Health care financing arrangements vary across countries and within a country over time, with changes of government. These variations not only have strong implications for income distribution but also affect the manner of health care utilization.

## 3. MATERIALS& METHODS

### 3.1 Study area:

According to National Family Health Survey-4, 2015-16. Siwan district the third lowest district of women who received Full Antenatal care (ANC) in Bihar state. All women were living with their husbands and had given at least one birth one year prior to the survey.

#### 3.2. Study Design:

A community based cross-sectional study was conducted in 49 villages selected using multistage sampling technique for selecting 494 women only in the age group of 15-49 years during January 2018-June 2018.

#### 3.3. Selection of the Sub district:

Siwan district had totally 19 blocks, which comprise 1530 revenue villages. In the first stage, 4 blocks were selected which represent the geographical distribution of the study district. The selected blocks Ziradei were from north, Goriakothi from east, Ragunathpur from south, Siwan Sadar were from west and central part of study district.

# 3.4. Selection of the Villages

There were 1530 revenue villages in these selected four Sub district. In the second stage, all the villages which had 50 percent of population were selected. I.e. 443 villages were selected. For covering entire Sub district, one third of the villages (5/6 villages) were selected from each block by simple random sampling method. Thus, 49 villages were selected for the research purpose.

#### 3.5. Selection of the Respondents

In the third stage, house listing operation was carried out prior to the data collection to provide the necessary frame for selecting the households for the study. Totally 1980 houses were listed in the four Sub district. Identification of eligible married women (15-49 years) in each household was the next step in the research. There were 494 households with the target .Totally 494 women in the age group of 15-49 were identified. Systematic random sampling technique was applied for selecting 10/12 respondents from each village. In order to take care of non-response due to various reasons, an extra 5% of respondents were included in the sample. i.e. 519 respondents were selected for the interview. Totally, 494 respondents were completed the interview and 25 respondents declined to participate interview.

#### 3.6. Data Collection Tools

The respondents were assessed using a structured interviewer administered questionnaire which was pretested in Daraundha Sub district near to district head quarter, about 20 km away from Siwan district

#### 3.7 Data Analysis

Results were summarized and presented as frequencies and percentages for assessing the socioeconomic conditions of the sample respondent's households and the factor associated with to use of antenatal care facilities in the rural areas of Siwan district of Bihar.

#### 4. DATA ANALYSIS & DISCUSSION:

The table-1 shows the age-wise classification of the respondents. The table reveals that 48(9.7 percent) respondents are in the age group of 20-24 years. 268 (54.3 percent) are in the age group 25-29 years. 152(30.8 percent) respondents are in the age group of 30-34 years and 26 (5.3 percent) respondents are in the age group of above 35 years. The research concludes that majority of the respondents are in the age group of 25-29 years.

Table1.Percentage distribution of women by their Age

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Sl.No	Age (years)	Percentage	Number of Respondents		
1	20-24	9.7	48		
2	25-29	54.3	268		
3	30-34	30.8	152		
4	35+	5.3	26		
	Total	100	494		

**Sources:** Computed from the primary data

The figure 1 shows the educational status of the respondents. Among the 494 respondents. 54(10.9 percent) respondents studied only middle school. Secondary and above 79 (16 percent) respondents. 286(57.9 percent) respondents are illiterates or having no formal schooling and 75 (15.2 percent) respondents studied only primary level. From this table we conclude that the majority of the respondents were Illiterate or no formal Schooling in the Siwan district of Bihar.

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Sources: Computed from the primary data

## 4.1Antenatal Care (ANC) Services

Table: 2discloses that percentage distribution of women those who received Antenatal care (ANC) Services based on registered last pregnancy which is almost 340 (68 percent) of the respondent. Among them the women from Raghunathpur (77.8 percent) sub district is highly reported Antenatal care services whereas the women from sub district Siwan Sadar is reportly lowest among four sub district (45.8 percent), followed by GoriaKothi (69.8 percent) and Ziradei (70.9) Sub district. The research concludes that majority of respondent received Antenatal care services from Raghunathpur of Siwan district.

Table2. Percentage distribution of women received Antenatal care services by Sub district

SI.No	Sub District Name	Yes	No	Number of Respondents
1	GoriaKothi	69.8	30.2	86
2	Raghunathpur	77.8	22.2	72
3	Siwan sadar	45.8	54.2	96
4	Ziradei	70.9	29.1	86
	Total	221	119	340

### 4.2 Place of visit for Antenatal Care (ANC) Services

Table 3: Show that Place of visit for Antenatal care Services in Siwan district of Bihar .Here we can see that Private hospital (32.4 percent) is highest mode of Antenatal care services where as minority of women were visited Community Health Center 19 (8.6 percent) for ANC .Apart from this 61(27.5 percent) Respondent visited in District hospital, 41 (18.5 percent) and 29 (13.1 percent) were visited Health facilities. The research conclude that majority of respondent has received Antenatal care Services in Private Hospital.

Table 3.percentage distribution of beneficiary who received Antenatal Care (ANC) by different types of health facilities

SI.No	Health Facilities	Percentage	Number of Respondents
1	SC/AWW	13.1	29
2	PHC	18.5	41
3	CHC	8.6	19
4	DH	27.5	61
5	Private Hospital	32.4	71
	Total	100	221

**Sources:** Computed from the primary data

SC-Sub Center, PHC-Primary Health Center, CHC-Community Health Center, DH-District Hospital

# 4.3 Average cost involved in Antenatal Natal Care (ANC) Services

Figure 2 reveals that average cost involved in Antenatal Care Services of the respondents. It explains the above table 3 explains the monthly health expenditure of the family. Almost 96 (43.4 percent) of respondents has spending average cost between Rs.500 to 1000, for Antenatal Care Services. Whereas majority of respondent has been spent Rs.1001 to 2000 which is nearly 106 (48 percent). On the other side very few almost 19 respondents are spending average cost between Rs. 2001-3000

Figure 2. Percentage distribution of respondent according to the average cost on Antenatal Natal Care (ANC) Services 120.0 106 96 100.0 80.0

60.0 48.0 Percentage 43.4 40.0 19 ■ Number of 20.0 Respondents 8.6 0.0 500 to 1000 1001 to 2000 2001 to 3000

#### 5. FINDINGS & CONCLUSIONS:

This study investigated that socio-demographic factor such as Age of the respondent, education, standard of living index, birth order and mass media have influence on women's choice of place of Antenatal Care server ices in rural areas. This study has provided a snapshot insight into the women who went for at different place of Antenatal care Services institution. Around 7 percent of women were visited Community health Center (CHC) in the study area. Majority of the women were visited Private Hospital The main reasons for not going for other health facilities at institution included: not good facilities in govt sector ,lack of transportation facility and lack of time to visit the health facility for Antenatal Care and delivery.

Average cost for Antenatal care also plays an important predictor to prefer women's place of Antenatal care. The present study discloses that all women who were majority having cost between 1001-2000.In addition to these, lower educational status, marital status and low standard of living index were factors found to be strongly associated with option of home delivery as against hospital delivery. Some studies in developing countries have shown that the decision to deliver at home is related to sociodemographic and economic factors such as Age, income, educational status and occupation and low standard of living index were factors found to be strongly associated with option of home delivery as against hospital delivery. Some studies in developing countries have shown that the decision to deliver at home is related to socio-demographic and economic factors such as income, educational status and marital status.

# 6. RECOMMENDATIONS & SUGGESTIONS:

Socio-demographic factors have influence on women's choice of place of Antenatal care visit in rural areas. Family tradition and poor socio-demographic condition of the family appear to be the main reasons for ANC check up in Private Hospital in study area. Majority of the ANC visit were monitored by private practioners only. The study findings show the importance of adopting a comprehensive approach to increase the availability and accessibility of maternal and child health care services in the community. Poverty alleviation strategies will contribute to improve access and utilization of maternal and child health care services. Strengthening the partnership program between village midwives and traditional birth attendants is recommended because of the frequent use of private health facilities by the respondent in this area. Training of government staffs would enable them to up-skill their Antenatal care Practices practice under the supervision of health professionals, especially in rural and remote areas. It recommends that Government should be taken a comprehensive strategy to increase the availability, accessibility and affordability of \_\_\_\_\_

delivery care services in rural areas. Public health strategies involving traditional birth attendants will be beneficial particularly rural/remote areas where their services are highly utilized.

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