

# Demographic Influences on Use of Antenatal Care Services: A Study of Indian Urban Slum Areas

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**Abstract:** ***Purpose:** Antenatal care services is the care or advices provided by the health personnel's during and after the pregnancy period. ANC services are very important for both pregnant woman and child. The poor utilization of these services arises many high risk cases and some time it lead to death of both. So, the present study aims to understand the demographic influences on utilization of antenatal care services by women. **Design/methodology/approach:** A descriptive research design was used for the study. The data were collected through a self administered questionnaire-based on survey method (270 responses) from Indian women. The data were analyzed through chi square test by using statistical software SPSS 18. **Findings:** The findings show the significant influence of demographic variables such as age, education, income, and occupation on utilization of antenatal care services by women. **Research limitations:** The study is limited to Indore urban region with limited demographic variables.*

**Keywords:** Antenatal care services, Demographic variables, Utilization of ANC

## 1. Introduction

Mother and child is a beautiful relationship in this world, and pregnancy is a beautiful gift of god. At the time of antenatal period, it is very important time for one mother and her family to take care of mother's health and her unborn baby by antenatal health checkups and services. The main aim of antenatal care services is to control maternal and infant mortality and morbidity rate in India, (Neyaz, A. et.al 2015). The purpose of this antenatal visit is to promote mother and her family for institutional delivery to achieve happy and healthy mother and child.

In this antenatal visit mother is completely examined for any antenatal complication such as anaemia in pregnancy, hypertensive disorders during pregnancy, multiple pregnancy, ante partum haemorrhage, any abnormalities of cord and placenta, Growth and development status of fetus can also be observed. In first antenatal visit mother is asked for sign symptoms of pregnancy like nausea, vomiting, giddiness, weakness, or any other complains about her health. In Urban slum areas unavailability and accessibility is not a bigger issue, Their traditional belief, Illiteracy or lack of awareness ,fear of hospital intervene the mother for proper antenatal care utilization.

In most developing countries especially in Indian rural and slum areas women are forced for marriage in very young age and imposed various responsibilities of family members, In fact women are expected to make happy the family members by bearing child just after marriage, at this age she has no knowledge about the pregnancy, related care and complication. Women are bounded to follow the instructions of in laws either father in law or husband, she is not independent for their own decision. They never visit the antenatal clinic and do not take proper care and extra supplements during pregnancy.

Where, educated family members shows interest for antenatal care visits and checkups, In case of only husband is educated and aware about antenatal care services and their

benefits women are expected for complete health checkups. Education of women and her family members found significant factor which affect the utilization of antenatal care services. This is always found that usage of proper antenatal care services is give best result in pregnancy and its outcomes. Women's and her family's education has a positive impact on utilization of antenatal care services. (Onasoga, O. A et.al 2012). When mothers comes first time at antenatal clinic she advised to have one confirmatory blood test for pregnancy, once she confirmed the gynaecologist or midwife ask her every 3 month for antenatal checkups or in case of any complication visit at least once in a month.

## 2. Review of Literature

Literature review is a content or knowledge related to the topic which make the scholar familiar with the existing studies and provide the information needed to conduct the research. There are various previous studies conducted in the context of antenatal care services. Nougara A., Sauerborn R., et al (1989) also conducted a study to assess the factors influencing the Maternal and Child Health (MCH) services offered by professional and community health workers in the district of Solenzo in Burkina Faso. According to the findings of the study educational level of both the mother and the husband, and ethnic group were identified as major factors influencing health seeking behaviour. Chandrashekar S., Rao R. P., et al (1998) entitled to identify the Socio-demographic determinants of antenatal care services in Karnataka, concluded that factors like socio-economic status, religion and matriarchal system are significantly associated with utilization of ANC care services. Overbosch G.B., Nsawah-Nuamah N, et al (2004) entitles on the study to determinants of antenatal care use in Ghana using the Ghana Living Standards Survey (GLSS) data of 1999. The study found that living standard, cost of consultation, education and travel distance have a significant impact on the demand for the recommended visits of four. While their study makes a significant contribution to the body of knowledge in this area. Appiah-Kubi (2004) studied access

to and utilization of safe motherhood services of expecting mothers in Ghana using the 1998 GDHS. Employing a logistic regression model, mother’s education, regional location of residence and socio-economic status were found to be significant predictors of the use of safe mother services (place of delivery, assistance during delivery, antenatal care and immunization).

**3. Need of the Study**

Government of India is providing free antenatal checkups by trained health professionals, Nurses, Midwives, free vaccinations, iron Folic acid and calcium tablets in very low cost, providing grains and other food materials in spite of these 830 Indian women die every day across the world with poor pregnancy outcomes.

Maternal related health problems and maternal mortality found higher in urban slums and rural poorer communities and it is more prevalent due to the preventable causes like excessive blood loss during and after delivery, infection usually after delivery, diabetes, high blood pressure and anaemia during pregnancy.

**4. Objectives of the Study**

To study the antenatal care and its services provided in slum area of Indore district.

To investigate the impact of demographic variables on utilization of antenatal care services by mothers.

**5. Hypothesis**

H0<sub>1</sub>: There is no significant effect of Age on utilization of antenatal care services.

H0<sub>2</sub>: There is no significant effect of Income on utilization of antenatal care services.

H0<sub>3</sub>: There is no significant effect of Education on utilization of antenatal care services.

H0<sub>4</sub>: There is no significant effect of Occupation on utilization of antenatal care services.

**6. Research Methodology**

The current study investigate the effect of various socio demographic traits (such as Age, Education, occupation and Income etc.) on the consumption of maternal services. The conceptual framework used in the current study was Andersen health care utilization model (ahum) and three delays model. A conceptual structure or a blue print for conducting the research called research design. The present study has adopted single cross-sectional descriptive research design. Sampling technique anon probability judgmental sampling technique was used for the present research. The sample size of the present study was 350 respondents.

**7. Analysis and Interpretation**

**Demographic profile of respondents**

**Table 1:** Represents detailed information about Demographic profile of respondents.

Age	Frequency	Percent
15-24	104	32.91
25-34	128	40.51
35-44	84	26.58
Total	316	100
<b>Woman Education</b>		
Illiterate	176	55.7
Primary	106	33.54
Secondary	19	6.01
Intermediate	15	4.75
Total	316	100
<b>Husband Education</b>		
Illiterate	121	38.29
Primary	127	40.19
Secondary	53	16.77
Intermediate	15	4.75
Total	316	100
<b>Family education</b>		
Educated	117	37.03
Uneducated	199	62.97
Total	316	100
<b>Woman Occupation</b>		
House Made	61	19.3
Personal Business	43	13.61
House Wife	60	18.99
Labour Work	137	43.35
Others	15	4.75
Total	316	100
<b>Husband Occupation</b>		
Private Servant	95	30.06
Personal Business	31	9.81
No Works	34	10.76
Labour Work	147	46.52
Others	9	2.85
Total	316	100
<b>Monthly Family Income</b>		
Below 10,000	96	30.38
10,001-15,000	145	45.89
15,001-25,000	75	23.73
Total	316	100

Above table describes the detail information about the socio demographic characteristics of 316 samples.

**Table 2:** Results of Chi Square Test: Level of awareness and utilization of ANC services, N=316

Age	Pearson Chi-Square Value	df	Asymp. Sig. (2-sided)
Do you know services	9.44	2	0.009
Frequency of ANC	18.88	6	0.004
woman education			
Do you know antenatal services	24.31	3	0.000
Frequency of ANC	22.98	9	0.006
husband education			
Do you know services	32.09	3	0.000
Frequency of ANC	17.71	9	0.039
family education			
Do you know services	5.19	1	0.023
Frequency of ANC	28.19	3	0.000
woman occupation			
Do you know services	15.50	4	0.004
Frequency of ANC	34.02	12	0.001
husband occupation			

Do you know antenatal services	4.75	4	0.314
Frequency of ANC	42.52	12	0.000

### Hypothesis Testing

H01: There is no significant effect of Age on utilization of antenatal care services.

According to the results of Chi square test for age the significant value was 0.009 and 0.004 which was less than the level of significance (0.05). This implies that there is significant effect of age on knowledge and frequency of using Antenatal care services.

H02: There is no significant effect of woman Education on utilization of antenatal care services.

According to the results of Chi square test for Women's education the significant value was 0.000 and 0.006 which was less than the level of significance (0.05). This implies that there is significant effect of women's education on knowledge and frequency of using Antenatal care services.

H03: There is no significant effect of husband's Education on utilization of antenatal care services.

According to the results of Chi square test for Husband's education the significant value was 0.000 and 0.039 which was less than the level of significance (0.05). This depicts that there is significant effect of husband's education on knowledge and frequency of using Antenatal care services.

H04: There is no significant effect of woman Occupation on utilization of antenatal care services.

According to the results of Chi square test for women's occupation, the significant value was 0.004 and 0.001 which was less than the level of significance (0.05). This depicts that there is significant effect of women's occupation on knowledge and frequency of using Antenatal care services.

H05: There is no significant effect of husband Occupation on utilization of antenatal care services.

According to the results of Chi square test for Husband's occupation, the significant value was 0.314 and 0.000 which was less than the level of significance (0.05). This depicts that there is significant effect of husband's occupation on knowledge and frequency of using Antenatal care services.

## 8. Result and Discussion

### Objective 1: To study the antenatal care and its services provided in slum area of Indore district

In distribution of women's knowledge and awareness about the services, result found out of 316 samples of women the highest 90.50% has knowledge and awareness at the same place around 9.49% have no information about the same. In the section of maternal services available in health centres In 270 mothers half of the women 50% know about the what program and health benefits are available for mothers and child, where half of the respondents 50% were have no information about the advantages of health centres and available benefits.

### Objective 2: To investigate the factors affecting the utilization of antenatal care services.

For this purpose, the study conducted extensive review of previous literature: theories and models and identified various factors. Sharma, A, et al (2018)

Education of mother, husband and family, occupation of women, staff shortage, age, timing of pregnancy registration, family income, residence, distance of service centre these are the common factors which were observed by extensive review literature.

### Objective 3: To investigate the impact of demographic variables on utilization of antenatal care services by mothers.

The demographic variables such as Age, Education of women and husband, occupation of women and husband, are definitely influence the ANC services utilization. To fulfil this objective, the study applied various statistical tools such as chi square test and one way ANOVA. Results of the analysis shows significant effect of age and education, to use ANC services whereas, husband's occupation was not having significant effect.

According to the results of Chi square test for age the significant value was 0.009 which was less than the level of significance (0.05). This implies that there is significant effect of age on general knowledge about ANC services provided by health care organization.

Similarly the result of chi square test for women's education and husband's education, Families education, and women's occupation, was (0.00, 0.000, 0.023, 0.004) which was less than the level of significance (0.05). These indicate that there is significant effect of these variables on general knowledge and utilization of ANC services provided by health care organization.

But result of chi square on the husband's occupation was 0.314 which is more than the level of significant it proves that there is no significant effect of husband occupation on utilization of ANC services provides by health care organizations.

## 9. Nursing Implications

### 1) Nursing Practice

The training of staff and health care professional are required in health centers of slums area, because lack of services provider affect the mother's interest to use ANC services. In urban slum areas there are various difficulties to avail the health services, the mother come clinic with various family and other struggle, in this situation a women need to have proper guidance counseling, and care. The nurse should be very alert an attentive with lots of energy to deliver satisfactory care to women.

### 2) Nursing Education

Health personnel's play major role in primary prevention and the very famous and attractive method is health education. A midwifery nurse can educate the antenatal mothers during their antenatal period and improve the health status of mother and child. Education in health sector play

an important role as always primary prevention is better option.

### 3) Nursing Administration

In Previous review literature shows that a strong team work is essential in obstetric and gynecological field. A nurse administrator contributes an important role in improving health status of mother as well as child. An administrator must organize an educative training program for health worker in order to train the health worker for betterment of maternal and child health. An administrator should conduct an in-service education and continue education program for ANM/GNM nurses to update their existing knowledge so that they can deliver sufficient and satisfactory awareness to pregnant women.

## 10. Limitation of the Study

- Study is limited to Antenatal mothers who were visit to near aanganwadi centers.
- Study is limited to antenatal women who can read and write Hindi.
- Study is limited to antenatal women who are willing to play a part in the study.

## 11. Conclusion

Study concludes that demographic variables such as Age, education, of women, and husband, occupation of women, and husbands affect the utilization of antenatal care services.

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