

# A Study to Assess the Determinants Affecting the Health Seeking Behavior and their Effect on Utilization of Antenatal Services among the Pregnant Women: A Cross - Sectional Study

Medha Wadhwa\*, Subhasish Chatterjee and Varsha Gadhavi

**Abstract--- Introduction:** *Good Maternal Health is the foundation of a healthy society. The maternal health is influenced by the women's own health seeking behavior. The present study aims to highlight the factors affecting the maternal health seeking behavior of pregnant women at Vadodara and the effect on utilization of these factors on the utilization of the ante natal care services at health center.*

**Material & Methods:** *The study is undertaken at five different PHCs of Vadodara district from each of the zones. The sample size of the study comprises of 83 pregnant women who willingly gave consent to participate in the study and were in their second or third trimester. The data was gathered using the primary method of data collection through a schedule to assess the factors affecting the health seeking behavior of pregnant women. The data was assessed on a five point likert scale and analyzed using SPSS version 21.*

**Findings:** *There were 17 women showing positive health seeking behavior, 40 showing moderate and 26 showing the negative health seeking behavior related to institution and system determinants. There were 26 women showing positive health seeking behavior, 38 showing moderate behavior and 19 showing negative health seeking behavior with respect to social and cultural determinants. There were 16 women showing positive health seeking behavior, 20 showing moderate behavior and 47 showing negative health seeking behavior with respect to individual and household determinants. There is no difference in the health seeking behavior of the pregnant women for all the determinants as the p value of the Kruskalwallis test is non-significant (p value more than 0.05).*

**Conclusion:** *The study highlights that the female may possess a negative health seeking behavior with respect to her individual and household determinant but a positive health seeking behavior with respect to institution and system or social and cultural belief may be a motivating factor in utilization of the services at health center in the prescribed manner. The study focuses that health seeking behavior with respect to one determinant cannot be the deciding factor but an aggregate of behavior influenced by an interaction of various determinant affect the utilization of the services.*

**Keywords---** *Health Seeking Behavior, Utilization of Services, Ante Natal Care, Pregnant Women.*

---

---

Medha Wadhwa\*, PhD Scholar (Assistant Professor), Department of Management, Sumandeep Vidyapeeth Deemed to be University, Piparia, Waghodia, Vadodara, Gujarat, India. E-mail: drmedhakalyan@gmail.com

Subhasish Chatterjee, Professor (PhD Guide), Department of Management, Sumandeep Vidyapeeth deemed to be University, Vadodara, Gujarat.

Varsha Gadhavi, District Program Coordinator (Urban) at District Mehsana, Health & family Welfare, Govt. of Gujarat.

## I. INTRODUCTION

The Health in all as defined by The WHO 8<sup>th</sup> conference at Helsinki, Finland is an approach where in the public policies across sectors systematically take into account the different aspects of health, seek synergy and avoid impact of harmful decisions. This would, eventually lead to improvement in population health and bring us closer to equitable health. The WHO theme, hence not only focuses on health sector but the various allied sectors that also affects health. Maternal health according to WHO is defined as “Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period.” The maternal health has always been a priority for not only WHO but all the countries as it reflects various aspects of the society. The joy of motherhood is thought to be an enjoyable experience for women but for many it does not turn out to be one. The reasons can be attributed to a lot of factors that are either in or out of control of an individual. This is not only the problem of developing nations but also of the developed nations like USA where between 1990 and 2013, the maternal mortality ratio for the USA more than doubled from an estimated 12 to 28 maternal deaths per 1,00,000 births and half of them were preventable. Similarly, the picture in India is also not rosy where in, there are only 54 per cent of pregnant women who had at least three ante-natal care visits as compared to 83 per cent for the rest of the urban population. The states of India where less than a quarter of mothers within the poorest quartile received adequate maternity care are Bihar (12 percent), and Uttar Pradesh (20 percent), and less than half in Madhya Pradesh (38 percent), Delhi (41 percent), Rajasthan (42 percent), and Jharkhand (48 percent). Availing three or more ante-natal check-ups during pregnancy among the poorest quartile was better in West Bengal (71 percent), Maharashtra (73 percent).<sup>1</sup>The Sustainable development goals released in 2015 also aim to reduce maternal and infant mortality rates. The deplorable state of women in a nation is alarming for its growth and development. Although every individual would agree in concept with this yet the state of women in our country needs attention. The main reason is the inequality between male and female in our society. Tiwari<sup>2</sup> analyzed the gender inequality on the basis of gender parity index and found that there was a significant gender bias against females. Sengupta<sup>3</sup> observed that women were far behind men in terms of well being and their well being significantly depended on the wealth they possessed. This difference arises even before the birth of a girl child in the family. Son preference is significantly high among Indian society, especially in rural areas.<sup>4</sup> Evidence from previous studies reveal one fourth of the mothers in the year 2004–2005 were unable to use services because of cost of health services.<sup>5</sup> Disparities exist in the utilization of health services between urban and rural populations; and inequities exist in availability and accessibility of maternal health care services.<sup>6</sup> WHO recommends that every pregnant woman should have undergone at least four goal-oriented focused ANC visits under the supervision of skilled provider and should be commenced as early as possible in first trimester which includes all interventions on regular intervals throughout the pregnancy.<sup>7</sup> There is a strong correlation between adequate ANC and the maternal health and regular ANC gives opportunity to monitor and correct adverse health outcomes of the maternal related health issues. It is also reported that women with poor socio-economic background, low levels of education had low utilization of the antenatal services.<sup>8-10</sup>

The present study is undertaken in the rural areas of Vadodara among the pregnant females to analyze the factors affecting their health seeking behavior and utilization of the health services.

**Objective:** The investigator intended to assess the determinants, differences, and utilization of health care and to find out the association of health seeking behavior of the pregnant women

## II. MATERIAL & METHODS

The present study is taken in five primary health centers in Vadodara which were randomly chosen from each zone of the Vadodara district. The duration of the study was one month where in one week was given to all the selected PHCs. The sample of the study was 83. The health seeking behavior of pregnant women was analyzed through a close ended structured schedule on a five point likert scale from strongly agree to strongly disagree. The factors assessed were institutional and system determinants, social and cultural determinants and individual and household determinants. The pregnant women were also asked for their number of ANC visit.

The health seeking behavior pertaining to institutional and system determinants were assessed as follows:

1 to 22: Negative Health Seeking Behavior

23 to 35: Moderate Health Seeking Behavior

36 to 55: Positive Health Seeking Behavior

The health seeking behavior pertaining to social and cultural determinants were assessed as follows:

1 to 20: Negative Health Seeking Behavior

21 to 35: Moderate Health Seeking Behavior

36 to 50: Positive Health Seeking Behavior

The health seeking behavior pertaining to individual and household determinants were assessed as follows:

1 to 18: Negative Health Seeking Behavior

19 to 30: Moderate Health Seeking Behavior

31 to 45: Positive Health Seeking Behavior

The pregnant women were classified according to their number of number of ANC visit such as 1. Ideal/desirable category: women attended at least four ANC visits; they were assisted by skilled personnel; 2. Moderate category: women received less than four ANC visits 3. Undesirable category: women made no ANC visits.

**Sampling Description:** The population of the study was the pregnant women attending the PHC center of the selected areas. The sample included all the pregnant women visiting the center at the time of visit and was in their second or third trimester. The data collection tool was content validated by the experts. The data collected were entered into MS excel and analysis was carried out using SPSS version 21.

## III. RESULTS

There were total 83 pregnant women included in the study where there were sixteen pregnant women from Bhayli PHC, fourteen from Tundav PHC, thirteen from Thvuavi, nineteen from Dabka PHC and 21 were from Waghodia PHC.

Table 1 shows that there were 17 women showing positive health seeking behavior, 40 showing moderate and 26 showing the negative health seeking behavior related to institution and system determinants. There were 26 women showing positive health seeking behavior, 38 showing moderate behavior and 19 showing negative health seeking behavior with respect to social and cultural determinants. There were 16 women showing positive health seeking behavior, 20 showing moderate behavior and 47 showing negative health seeking behavior with respect to individual and household determinants.

Table 1: Shows the Distribution of the Health Seeking behavior Related in the Selected PHCs

<i>Sr. No</i>	<i>Determinants</i>	<i>Positive Health Seeking Behavior</i>	<i>Moderate Health Seeking Behavior</i>	<i>Negative Health Seeking Behavior</i>	<i>Total</i>
1	Institution and System Determinants	17	40	26	83
2	Social and Cultural Determinants	26	38	19	83
3	Individual and Household Determinants	16	20	47	83

Table 2 shows that there is no difference in the health seeking behavior of the pregnant women for the institutional and system determinants, social and cultural determinants and individual and household determinants as the p value of the Kruskal Wallis test is non-significant (p value more than 0.05). The mean rank for each of the determinants at the selected PHCs is almost same.

Table 2 shows the difference in the Determinants of Health Seeking Behavior and different PHCs

<i>Area</i>	<i>Institutional and System Determinants</i>	<i>Social and Cultural Determinants</i>	<i>Individual and Household Determinants</i>
Bhayli	36.78	38.18	40.19
Tundav	34.28	35.15	41.93
Thvuavi	37.21	39.81	40.67
Dabka	41.77	38.22	41.63
Waghodia	40.36	39.17	40.27
Kruskal Wallis Chi Sq (p value)	37.91 (0.747)	28.59 (0.469)	25.19 (0.572)

Table 3 shows that there were majority women showing positive health seeking behavior who were in the ideal category if utilization of the services while there were only six pregnant women having moderate level of utilization showing positive health seeking behavior and four pregnant women having positive health seeking behavior but in the undesirable category of utilization of the health services. There were seven pregnant women showing negative health seeking behavior and were in the undesirable category of utilization of health services. The chi square test of association shows that there is a statistical significant association between the health seeking behavior of the pregnant women and their utilization of health services.

Table 3: Shows the Association between the Utilization of Health Services and their Health Seeking Behavior at different PHCs

<i>Utilization Category</i>	<i>Positive Health Seeking Behavior</i>	<i>Moderate Health Seeking Behavior</i>	<i>Negative Health Seeking Behavior</i>	<i>Total</i>
Ideal/Desirable Category	37	10	04	51
Moderate Category	06	07	03	16
Undesirable Category	04	05	07	16
Chi Sq (p value)				39.27 (0.043)

Table 4 shows that there is association between the institutional and system determinants and the utilization category as the p value are less than 0.05 rejecting the null hypothesis. There is also an association between the social and cultural determinants and individual and social determinants and the utilization category as the p value is less than 0.05.

Table 4: Shows the Association of the Determinants of the Health Seeking Behavior and Utilization of the Ante Natal Services

Sr. No	Utilization Category	<i>Institution and System Determinants</i>			
		<i>Positive Health Seeking Behavior</i>	<i>Moderate Health Seeking Behavior</i>	<i>Negative Health Seeking Behavior</i>	<i>Total</i>
1	Ideal/Desirable Category	08	23	20	51
2	Moderate Category	05	10	01	16
3	Undesirable Category	04	07	05	16
Total		17	40	26	83
<b>Chi Sq (p value)</b>		48.31 (0.003)			
Utilization Category		<b>Social and Cultural Determinants</b>			
Sr. No	Determinants	Positive Health Seeking Behavior	Moderate Health Seeking Behavior	Negative Health Seeking Behavior	Total
1	Ideal/Desirable Category	18	24	09	51
2	Moderate Category	05	08	03	16
3	Undesirable Category	03	06	07	16
Total		26	38	19	83
<b>Chi Sq (p value)</b>		57.11 (0.027)			
		<b>Individual and Household Determinants</b>			
Sr. No	Utilization Category	Positive Health Seeking Behavior	Moderate Health Seeking Behavior	Negative Health Seeking Behavior	Total
1	Ideal/Desirable Category	07	10	34	51
2	Moderate Category	05	07	04	16
3	Undesirable Category	04	03	09	16
Total		16	20	47	83
<b>Chi Sq (p value)</b>		74.29 (0.047)			

#### IV. CONCLUSION

The study highlights that there were no difference in the health seeking behavior at different PHCs. The pregnant women showed moderate health seeking behavior with respect to institution and system determinants and social and cultural determinants. The individual and household determinants led to negative health seeking behavior indicating that the women are more inclined to their household duties which hold them back for seeking the health care at appropriate time. There was no difference in these determinants with respect to the five PHCs indicating that the individual and household determinant remain the most common factor among the women for their health seeking behavior irrespective of the area from where the pregnant women belongs.

There were maximum women who have done atleast 4 ANC visiting and exhibited ideal utilization while there was less percentage of women in the undesirable category. Although the percentage of women in the undesirable category is less, the efforts should be there to convert this percentage of utilization to an ideal utilization of ANC services as the maternal health is the responsibility of the society.

There is an association between the determinants affecting the health seeking behavior and utilization of the antenatal services. This indicates that the utilization solely does not depend on the good quality services and incentives; there are other factors like cultural beliefs, social norms and customs and individual and household responsibility that affect the utilization of the antenatal services. An individual positive health seeking behavior motivates her to utilize the services. The study highlights that the female may possess a negative health seeking behavior with respect to her individual and household determinant but a positive health seeking behavior with respect to institution and system or social and cultural belief may be a motivating factor in utilization of the services at health center in the prescribed manner.

The study focuses that health seeking behavior with respect to one determinant cannot be the deciding factor but an aggregate of behavior influenced by an interaction of various determinant affect the utilization of the services. Based on the findings of the study, the authors recommend that even though the utilization of antenatal services appear to be ideal in majority of the cases but the cases where the utilization is moderate and undesirable should not be ignored and due focus should be given to change the health seeking behavior of pregnant women by devising various programs that highlight the three determinants presented in the study. The recommended actions can be education to rural women that may lead to change in the health seeking behavior, income generating opportunities that would make the pregnant women independent and would allow them to take their own decisions. The women in rural area can be provided with various income generating opportunities that would make them financially independent and allow them to take their own decisions. The ANM, AWW and ASHA workers are already helping in providing care that is personalized in nature to these pregnant women but further efforts can be put together by the health centers to break the barriers and reinforce a positive health seeking behavior of the pregnant women.

**Conflict of interest:** There is no conflict of interest in this study.

**Funding:** This study was conducted by self funding.

**Ethical consideration:** Ethical clearance was obtained from Sumandeep Vidyapeeth institutional Ethics Committee

## REFERENCES

- [1] Agarwal, S. "The state of urban health in India; comparing the poorest quartile to the rest of the urban population in selected states and cities". *Environment and Urbanization*. 2011
- [2] Tiwari AK. Gender inequality in terms of health and nutrition in India: Evidence from national family health survey-3. *Pacific Business Review International*. 2013; 5(12).
- [3] Sengupta A. Gender inequality in well-being in India: Estimates from nfhs household-level data. *Economic and Political Weekly*. 2016; 51(13).
- [4] Shalini C, Akansha S. Applications of Survival Analysis in Assessing Women's Health Status in India: A Revisit. *Biostat Biometrics Open Acc J*.2017; 2(3): 58
- [5] International Institute for Population Sciences. India National Family Health Survey (NFHS-3), 2005-06. International Institute for Population Sciences. 2007.
- [6] Pathak PK, Singh A, Subramanian SV. Economic inequalities in maternal health care: prenatal care and skilled birth attendance in India, 1992-2006. *PLoS one*. 2010; 5(10):e13593
- [7] Lincetto O, Mothebesoane-Anoh S, Gomez P, Munjanja S. Antenatal Care: Opportunities for Africa's Newborns. New York: *World Health Organization*. 2010.

- [8] World Health Organization, UNICEF. Antenatal care in developing countries: Promises, Achievements and Missed opportunities: An analysis of trends, levels, and differentials: 1990-2001. Geneva, New York: WHO and UNICEF. 2003.
- [9] Houweling TA, Ronsmans C, Campbell OM, Kunst AE. Huge poor-rich inequalities in maternity care: an international comparative study of maternity and child care in developing countries. *Bulletin of the World Health Organization*. 2007; 85(10):745-54.
- [10] Simkhada B, Teijlingen ER, Porter M, Simkhada P (2008). Factors affecting the utilization of antenatal care in developing countries: systematic review of the literature. *J Advanced Nurs*. 2008; 61(3):244-60.