



Original Article

A Survey to Assess Knowledge of Antenatal Care among Rural Women of Gujrat, Pakistan

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ABSTRACT

Introduction: Antenatal care is the daily health management of healthy pregnant women with few symptoms, orderly diagnosis of diseases or difficulties connected to obstetrics, and contributing to lifestyle, pregnancy, antenatal care, and safe delivery of child. **Objective:** To assess the knowledge of antenatal care among pregnant women of rural population. **Material and Methods:** The study was conducted at rural areas of Gujrat city for the period of 6 months, from January 2021 to June 2021. The data was collected through questionnaire which was piloted tested and validated by Cronbach. A sample of 100 was taken following inclusion criteria of pregnant women to assess knowledge from rural under developed areas of Gujrat, Pakistan. **Results:** A total of 100 participants were included in which common age groups were 26-32 having 37%. The profession and literacy status was evaluated and found 73% housewives and 59% illiterate. Results also show the responses about their knowledge clearly showing that 59% pregnant women do not visit and unaware of number of visits in Maternity Clinics. 40% of the women were unaware about blood pressure maintenance in antenatal care. 52% women did not know about blood and urine tests performed during pregnancy. Pregnant women who were unaware of vaccination during antenatal care was 54% and 59% do not acknowledge about using of multi vitamins during this period of pregnancy. **Conclusion:** In conclusion rural population had little of antenatal care, maternal issues, nutritional supplements, investigation tests, and vaccination practices. The primary reason for this was lack of awareness about proper health care services in rural areas. The secondary reason was family/husband restraints and impediments for not seeking antenatal care. **Recommendation:** It is recommended that further emphasis needs to be placed for a favorable influence on antenatal care among rural population.

INTRODUCTION

Antenatal care is essential for both the mother and the unborn child's health. Women can learn about healthy practices from qualified health professionals throughout their pregnancy, have a greater understanding of warning signs throughout pregnancy and childbirth, and receive social, emotional, and psychological support during this crucial time in their lives. The result of this kind of preventative health care antenatal care (ANC) is the daily

health management of healthy pregnant women with few symptoms, the orderly diagnosis of diseases or complications related to obstetrics, and the contribution to lifestyle, pregnancy, antenatal care, and delivery. In 1994, the World Health Organization (WHO) created the safe motherhood bundle, which consists of four components: antenatal care, family planning, safe delivery, and essential obstetric care. Maternal health and health care are

significant factors in newborn survival and child fitness. As a result, improving mother and child health is an essential global public health objective. The likelihood of maternal death in underdeveloped countries is one in 61, while it is one in 2800 in developed countries. In underdeveloped nations, complications during pregnancy and childbirth are the main cause of mortality and disability among women of reproductive age. Every year, there are an estimated 529,000 maternal deaths, with 99 percent of them occurring in underdeveloped nations (WHO 2005). Millions of women in these nations do not have access to adequate prenatal care especially in rural areas. Inadequate access to contemporary healthcare services and underutilization of these services are key causes of ill health in underdeveloped countries. The vast majority of maternal deaths occur during childbirth and the postpartum period, and the vast majority of these deaths are avoidable. Professional care for all women prior to, during, and after childbirth is vital to preserving women's lives and assuring best practises for delivering a healthy child. In any maternity healthcare application, ANC and transport care are considered essential components. During the period 1990 to 2010 a global estimates of the Maternal Mortality Ratio (MMR) decreased by 48 percent, falling from 400 to 210 per 100,000 live births. The yearly decline rate was reduced to 3.1 percent; little over half of what was required to meet the MDG5 goal¹. Antenatal care is critical in preventing pregnancy-related difficulties and health issues. It could be about the health of the mother or the infant, or both. Anemia, urinary tract infections, hypertension, diabetes during pregnancy, obesity & weight gain, and sexually transmitted infections such as HIV, viral hepatitis, tuberculosis, and hyperemesis gravidarum² are all prevalent problems. A trained person's ANC can reduce the chance of infant mortality by 34%. A 20 percent reduction in infant mortality can be achieved through consultation with a health care practitioner. Education and awareness about Knowledge in Rural areas can help to reduce child mortality (MDG Goal 4) and improve maternal health (MDG Goal 5)¹. If we give our future generation's adequate skills, many regions will be able to meet the Sustainable Development Goals. In 2015 Pakistan had the highest child birth rate (21.9 births per 1000) and the highest maternal mortality rate (MMR) (178 deaths per 100,000 live births). Every year, 20,000 moms die as a result of antenatal care. For antenatal care, the majority of women in the country rely on relatives or unskilled "Dais." This care is primarily based on non-scientific mythology or Antenatal care observations and experience. Only a small percentage of women seek professional help for good prenatal care. ANC services in Pakistan referred to any services offered by professional fitness people, such as doctors, midwives, lady health visitors (LHVs), and female

medical experts (LHWs). Non-fitness professionals providing ANC services, such as traditional delivery attendants, were excluded. A sensitivity analysis was also carried out for newborns whose mothers had not attended any antenatal service for her subsequent Antenatal care in the five years prior to the survey. Antenatal care is a preventive technique for dealing with potential health issues during pregnancy. Pakistan has a high birth rate, high maternal death rates, and notably poor maternal health care indicators, as well as low levels of awareness, literacy, maternity care, and lack of specialist health care facilities especially in rural areas of Pakistan. We failed to meet the Millennium Development Goals, which result in maternal and child mortality and morbidity. Better ANC health-care services can considerably minimize the risk of Neonatal mortality. There is very less research studies on antenatal care and management in Pakistan. The current study may provide an entire impression of respondents' knowledge about ANC among women in rural areas. The findings from this study will be used to identify a range of measures that will improve mother and child health. It would also help to raise awareness among women in rural areas.

METHODS

The study was conducted at rural areas of Gujrat city. The data was collected through Questionnaire which was piloted tested and validated by Cronbach. All the questions were properly explained and the responses were plotted on the questionnaire. The researcher coded and entered the data into SPSS version 20. This Study was conducted over a period of 6 months, from January 2021 to June 2021. A sample of 100 was taken following inclusion criteria of pregnant women from rural under developed areas of Gujrat.

RESULT

A total of 100 Participants were included in this study. The data was based on the responses of knowledge about antenatal care. This Questionnaire contains Demographic information like Age, Education, Profession & six questions about Knowledge of Antenatal Care. Four Age groups were categorized to check the age related factor in assessment of knowledge in maternal care. A data on Profession was also considered in which Working woman and Housewife was the option to respond. For the Purpose of Assessing the Educational level two basic categories were made as literate and illiterate.

Age groups of Rural women					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19-25	28	28.0	28.0	28.0
	26-32	37	37.0	37.0	65.0
	33-39	27	27.0	27.0	92.0
	40-46	8	8.0	8.0	100.0
	Total	100	100.0	100.0	

Table 1: It shows the Age groups of rural women in which the most common age group was 26-32 having 37%, following very close figures of 27 & 28 % of very young and middle age women.

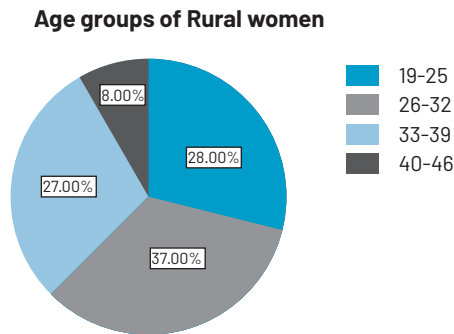


Figure 1: It shows the Division and frequency of Age groups of Participants.

Educational status of Rural women					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Literate	41	41.0	41.0	41.0
	Illiterate	59	59.0	59.0	100.0
	Total	100	100.0	100.0	

Table 2: It shows the Educational status of rural women in which the most common age group was 26-32 having 37% in number, following very close figures of 27 & 28 % of very young and middle age women

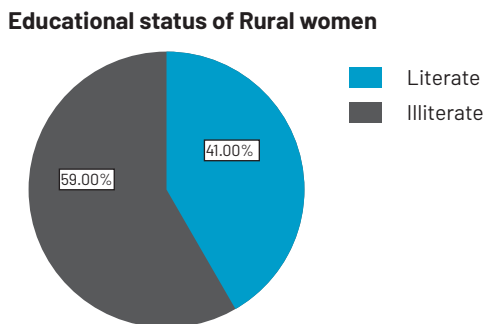


Figure 2: It shows the Division and frequency Literate and Illiterate

Occupation of Rural Women					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Working	27	27.0	27.0	27.0
	Housewife	73	73.0	73.0	100.0
	Total	100	100.0	100.0	

Table 3: It shows the Professional status of rural women in which 73% women were housewives and stay at home for household work and 27% women work professionally belonging a different professions.

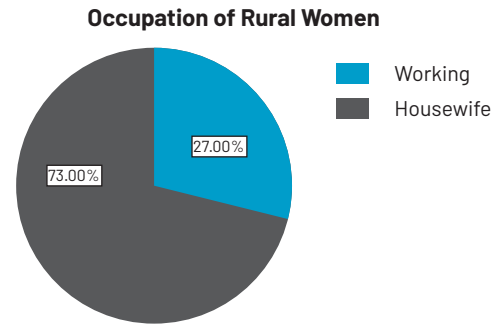


Figure 3: It shows the Division and frequency of Housewives and Working Professionals.

Does Pregnant Woman need to know the visits of Antenatal Care?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	59	59.0	59.0	59.0
	No	41	41.0	41.0	100.0
	Total	100	100.0	100.0	

Table 4: It shows the Response of the rural women about their knowledge of Antenatal visits for Maternal and Obstetric care. The responses were very Clear showing that 59% women think that a pregnant women should visit Hospitals and Maternity Clinics. But still 41 % women were unaware about visiting for Antenatal care.

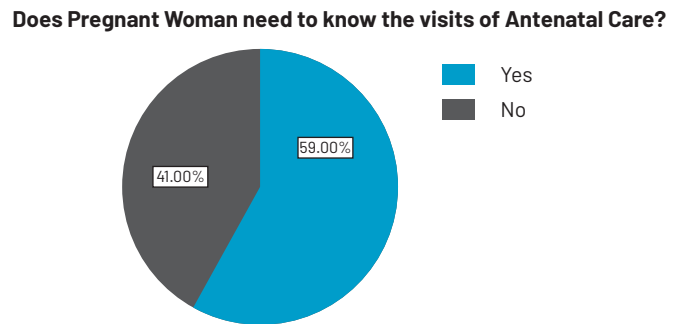


Figure 4: It shows the Response of Rural women about knowledge of visiting Maternity Clinics.

Does High Blood Pressure in Pregnancy affect the Fetus Growth?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	60	60.0	60.0	60.0
	No	40	40.0	40.0	100.0
	Total	100	100.0	100.0	

Table 5: It shows the Response of the rural women about their knowledge of High Blood Pressure and its effects on Fetus. The responses were very Vibrant showing that 60% women think that pregnant women should maintain their blood pressure and an abnormal BP can affect their fetus. But still 40 % of the women were unaware about visits for BP checking in Antenatal care.

Does High Blood Pressure in Pregnancy affect the Fetus Growth?

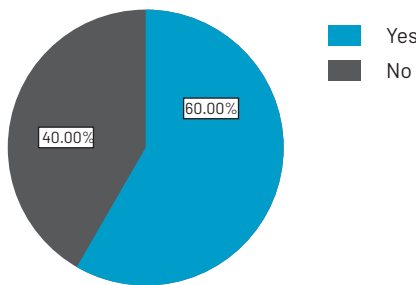


Figure 5: It shows Knowledge about Blood Pressure effects on Fetus

Do you know that at least five visits at Antenatal Clinic are must in Pregnancy?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	31	31.0	31.0	31.0
	No	69	69.0	69.0	100.0
	Total	100	100.0	100.0	

Table 6: It shows the Response of the rural women about their knowledge of Antenatal Visits. The responses were like 69% women were unaware about minimum 5 visits at antenatal care set ups. . Only 31% visited and knows that 5 visits are compulsory for Good Maternal care.

Do you know that at least five visits at Antenatal Clinic are must in Pregnancy?

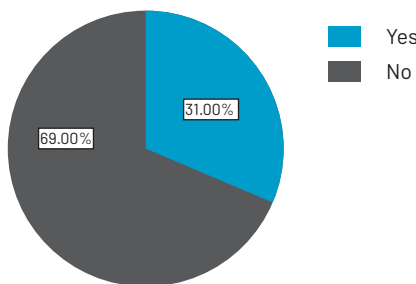


Figure 6: It shows the number of acknowledgement of 5 Visits to Maternity Clinics.

Do you have Knowledge of Blood and Urine tests during Antenatal Clinic Check-up					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	48	48.0	48.0	48.0
	No	52	52.0	52.0	100.0
	Total	100	100.0	100.0	

Table 7: It shows the Response of the rural women about the Blood and Urine tests for proper diagnosis and Management. The blood tests like basic screening and Hemoglobin consideration and protein test in urine. 52% women did not know much about Blood tests and had mixed and confused responses. While 48% was quite sure to go for Blood and Urine examination the cycle of pregnancy.

Do you have Knowledge of Blood and Urine tests during Antenatal Clinic Check-up

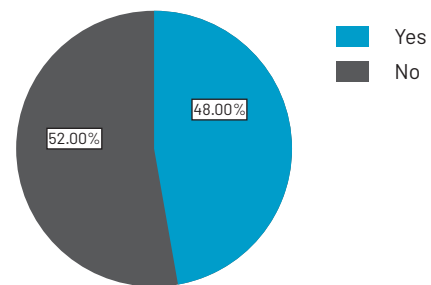


Figure 7: It shows the response of respondents having knowledge of Blood test, Urine test and Blood Pressure.

Does Pregnant Woman need some medications during her Antenatal Check-up?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	41.0	41.0	41.0
	No	59	59.0	59.0	100.0
	Total	100	100.0	100.0	

Table 8: It shows the Response of the rural women about the medication and multi vitamins taken during time of pregnancy. It shows that 59% women don't require and need certain drugs and medicines during pregnancy. 59% have less knowledge about health benefits.

Does Pregnant Woman need some medications during her Antenatal Check-up?

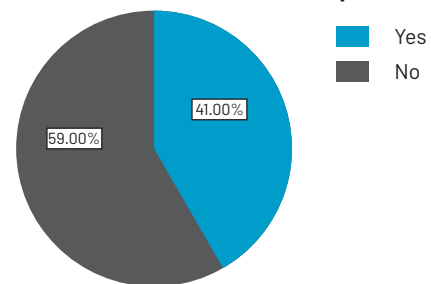


Figure 8: It shows the response of respondents having knowledge Medication and certain drugs usage in

Pregnancy.

Do you have any Knowledge of Vaccinations during Antenatal visits?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	46	46.0	46.0	46.0
	No	54	54.0	54.0	100.0
	Total	100	100.0	100.0	

Table 9: It shows the Response of the rural women about the Vaccinations. Only 46 % women know about vaccination of Tetanus Toxoid, SP anti-malarial prophylaxis, ferrous sulphate and albendazole. While 54% respondents doesn't not know about proper vaccination process.

Do you have any Knowledge of Vaccinations during Antenatal visits?

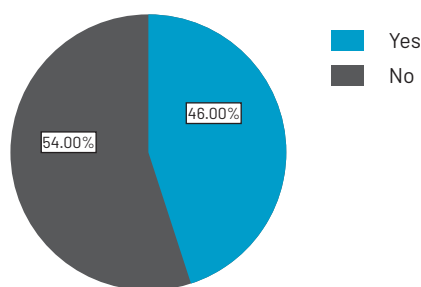


Figure 9: It shows the response of respondents having knowledge Medication and certain drugs usage in Pregnancy.

DISCUSSION

Antenatal care is an important goal for pregnant women's health during their reproductive time, with approximately a quarter of all pregnant women in the globe receiving it. Attempts have been made through the antenatal care service to identify pregnant women who are not at risk and those who are at risk based on previous pregnancy or current historical or clinical factors, and steps are being planned to prevent it in this allegedly high-risk group of women in order to reduce adverse pregnancy outcomes. Pakistan's maternal mortality rate is 178 per 100,000 live births per year, equating to around 15,000 deaths per year or 40 deaths per day as a result of poor antenatal care and childbirth. The results of this study were based on 100 Participants and their responses of knowledge about antenatal care. Demographic information Age, Education, Profession was asked and a total of six questions about Knowledge of Antenatal Care were asked and results were based on it. Four Age groups were categorized to check the age related factor in assessment of knowledge in maternal care. A data on Profession was also considered in which Working woman and Housewife was the option to respond. For the Purpose of Assessing the Educational level two basic

categories were made as literate and illiterate. In current Study the Age groups of rural women in which the most common age group was 26-32 having 37%, following very close figures of 27 & 28 % of very young and middle age women. The Educational status of rural women in which the most common age group was 26-32 having 37% in number, following very close figures of 27 & 28 % of very young and middle age women. The Findings about Professional status of rural women in which 73% women were housewives and stay at home for household work and 27% women work professionally belonging different professions. A study by Simon M Collin in 2007 reviewed a decade of antenatal care services in Bangladesh and found the similar results like us with same conclusion and findings related to MDG5. In his Study Between 1993 and 2004, Based on major socio-demographic criteria such age group, career, and education, four Demographic and Health Surveys were conducted to look at trends in the percentage of live births preceded by antenatal counseling, attended by a health professional, and delivered by caesarean section. Despite a bigger increase in rural than urban areas, use among the poorest rural women without formal education remained substantially lower (18%) with rural locations growing faster than metropolitan ones. Socioeconomic and demographic changes completely muddled the trend in professional attendance, although the woman's and her husband's education remained major drivers of obstetric service consumption. Despite significant progress in boosting antenatal care uptake and equipping health facilities to provide emergency obstetric care, these facilities are nevertheless underutilized in rural areas because of illiteracy-. The Responses on Knowledge was recorded and it was observed that the rural women about their knowledge of Antenatal visits for Maternal and Obstetric care. The responses were very Clear showing that 59% women think that a pregnant women should visit Hospitals and Maternity Clinics. But still 41 % women were unaware about visiting for Antenatal care. Significantly they have no knowledge of Antenatal Visits. The responses were like 69% women were unaware about minimum 5 visits at antenatal care set ups. . Only 31% visited and knows that 5 visits are compulsory for Good Maternal care. They also have a very less knowledge of High Blood Pressure and its effects on Fetus. The responses were very Vibrant showing that 60% women think that pregnant women should maintain their blood pressure and an abnormal BP can affect their fetus. But still 40 % of the women were unaware about visits for BP checking in Antenatal care. According to Yenita Agus's 2012 study, half a million women and girls die needlessly as a result of complications during pregnancy, childbirth, or the first six weeks after delivery. The great majority (99 percent) of these deaths occur in developing countries. During their ANC visits, 145 out of 200 pregnant married women of

reproductive age completed a questionnaire. Three-quarters of respondents said they had received it more than four times (77.9 percent). Only 22.1 percent of the population had less than four doses of ANC. Pregnant women had ANC visits in 59.4 percent of cases. Those who were urged to seek ANC services by their families scored higher on traditional views than women who did it on their own. Rural women, who may or may not be aware of the antenatal visits, should be given more attention. In current study the Response of the rural women about the Blood and Urine tests for proper diagnosis and Management was low. The blood tests like basic screening and Hemoglobin consideration and protein test in urine. 52% women did not know much about Blood tests and had mixed and confused responses. While 48% was quite sure to go for Blood and Urine examination the cycle of pregnancy. They were also unaware of the medication and multi vitamins taken during time of pregnancy. It shows that 59% women don't require and need certain drugs and medicines during pregnancy. 59% have less knowledge about health benefits. Most importantly the rural women have a very less idea about the Vaccinations. Only 46 % women know about vaccination of Tetanus Toxoid, SP anti-malarial prophylaxis, ferrous sulphate and albendazole. Almost 54% of the respondents are unknown to the procedure of proper vaccination process and its significance in pregnancy. In a 2012 study by Duflo E., rural women received ANC from private health institutions at a higher rate than urban women. The significant proportion of rural women who received ANC from the private sector, with greater costs per visit than in the public sector, while receiving more ANC from the private sector, rural women spent less money on ANC than urban women. Because of the decreased number of visits and the regular services, it's possible that they had ANC visits. The increased number of women who received ANC at private health resources may explain why ANC is insufficient in rural areas while private health providers follow national criteria is still unclear. Another Study by Adeniyi Francis in 2015 concluded from results that Poor, rural, and less educated respondents from Northern Nigeria, particularly the North East zone, were the most likely to use ANC. In Nigeria, the barriers to ANC use are affordability, availability, and accessibility of ANC providers. Hence in our Country the conditions are almost same and Antenatal care can be achieved by removing financial and other barriers to ANC usage, improving the quality of HealthCare services to boost women's happiness and utilization, and ensuring maximum upgrading in women education, awareness and ANC providers.

CONCLUSION

The rural population had little knowledge of antenatal care. The Antenatal care, maternal issues, nutritional

supplements, investigation tests, and vaccinations practices were all unknown to majority of them. The primary reason for this was lack of awareness about proper health care services in rural areas. Due to family/husband restraints and impediments, the majority of women did not seek perinatal care. To avoid prenatal problems and reduce newborn and maternal mortality, further emphasis needs to be placed for a favorable influence on antenatal care among rural population.

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