

The Knowledge and Acceptance of Antenatal Classes in Saudi Arabia

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ABSTRACT

Study Design: Cross sectional

Background: Antenatal means the period of pregnancy from conception to childbirth. Ante natal classes are sessions designed to give a pregnant female and her husband information about pregnancy, delivery and caring for herself and her newborn after birth. These classes can help improve antenatal care.

Methods: A cross sectional study done via online forms using convenience sampling. All married adults above age of 15 with at least 1 child born in Saudi Arabia were included in the study. The sample size was 700.

Results: 70% of participants said they did not know about antenatal classes and 94% said they had not attended any antenatal classes before. There was no correlation between age at first pregnancy and knowledge about antenatal care however there was significant association ($p=.001$) between low knowledge of antenatal events and fear and adverse outcome during first pregnancy. 75% of participants said they would attend antenatal classes if it was available. Major sources of knowledge about these events were mothers, friends or internet.

Conclusion and Recommendation: Our results show that most of the knowledge women gain about care during antenatal period is not from a medical source but rather from mothers, relatives or internet. So, we would like to recommend to the ministry of health and concerned authorities and stakeholders to plan and implement antenatal classes and health education sessions for women during their routine antenatal visits.

Keywords: Antenatal classes, high MMR, Saudi Arabia, antenatal care

INTRODUCTION

Ante natal classes are sessions designed to give a pregnant female and her husband information about pregnancy, delivery and caring for herself and her new-born after birth it is usually scheduled with regular antenatal visits of the pregnant mother¹.

Studies done in Sweden and Italy which have very low maternal mortality rates (MMR) suggest that antenatal classes lead to better maternal and child outcome during ante natal, intra natal and post-natal periods² The involvement of the spouse/ partner is an additional positive point for the wellbeing of the mother and child according to these surveys³.

Simple education and exercise classes not only give the females comfort but prepare them mentally and physically for the birthing process as well as care of their child in a better way providing psychological support also⁴.

These antenatal classes are now a part of major maternal and childcare centers in not only developed countries like Sweden, Italy, U.K. and USA but is also being adopted in developing countries like Pakistan to shift the maternal mortality rate to a better number⁵.

Saudi Arabia is a developed country with a birth rate of 2.53, the latest figures regarding maternal mortality rate and infant mortality

rate (IMR) are 17/100000 and 6/1000 live births⁶. Saudi Arabia is rapidly moving towards modernization with focus on providing latest updated healthcare services to the citizens under the current leadership. However, the people in Saudi Arabia have tribe-based affiliations and cultural norms and practices are deeply rooted in all processes of life. By educating the masses, changes and adaptation to more upgraded healthcare services can take place. Improved antenatal practices can help lower the MMR and IMR of the country. For this purpose, antenatal classes need to be implemented in all health care centers dealing with maternal and child health as it can help lower the maternal and infant mortality rates. Antenatal classes are not a part of general antenatal care in Government MCH hospitals in Saudi Arabia. Very few private hospitals in Jeddah, Riyadh and Dammam provide these classes.

Under the current leadership and Vision of 2030, provision of improved health care is a priority area. Evidence shows that antenatal classes can help bring down MMR, but the question was: Will it be acceptable to the local population? Our study aimed to bridge this gap and assessed the knowledge and acceptance of antenatal classes amongst females in Saudi Arabia

AIM OF THE STUDY

- To assess knowledge and acceptance of community regarding antenatal classes

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Objectives:

The objectives of the study were as follows:

- To Assess the knowledge about ante natal classes in community using a questionnaire.
- To Determine the sources of knowledge about antenatal events for females during and after pregnancy.
- To Assess and compare outcome of pregnancy with knowledge.
- To Assess if this service will be availed if provided by MCH.

Materials and Methods:

Design and Sampling: Cross sectional study.

Setting: Online. Forms both in English and Arabic were shared via an electronic link on Whatsapp, local face book, twitter and snapchat groups.

Study Participants: Married females above the age of 15.

Sample Size: Sample size was calculated by using OPEN EPI sample size calculator. The population of KSA is 34.27 million⁷. At 95% confidence interval required sample size was 384. Our final sample size was 700.

Sampling Technique: Convenience sampling.

Forms were shared via an electronic link on local face book, twitter and snapchat groups.

Inclusion Criteria:

- Married males and females
- Age: 15-and above
- Given birth to at least 1 child in Saudi Arabia.

Exclusion Criteria:

- Any co-morbids (diabetes, hypertension, asthma)
- Incomplete forms

Tool for Data Collection: A structured questionnaire was used, validated through a pilot study. The results of pilot study were not included in final analysis.

Collection of Data: Academic year 2020-2021.

Ethical Consideration: The study was conducted after approval of ethics review committee of Jouf University.

Questionnaire:

- The questionnaire contained 10 different sections.
- Starting from sociodemographic data to questions about knowledge of various aspects of antenatal care.
- Last section had an informative paragraph about antenatal classes and participants were then asked questions related to antenatal care.

Confidentiality: Data was collected without any identifying information and after informed consent.

Statistics: Data analysis was performed using SPSS version 21. Only complete forms matching the inclusion criteria was included in the analysis.

Funding: self-funded.

RESULTS

Table 1: Socio-Demographic Data

VARIABLES		% (rounded)	N=700
Nationality	Saudi	99%	693
	Non-Saudi	1%	7
Age distribution	15 to 24	40%	280
	25 to 64	58%	406
	Above 65	2%	14
Educational status	Primary and below	4%	28
	Upto high school	13%	91
	Upto university	83%	581
Smoking status	Smokers	8%	56
	Non smokers	92%	644
Employment status	Employed	65%	455
	Unemployed	35%	245

Objective 2: To determine the sources of knowledge about antenatal events for females

Respondents were from 20 cities of Saudi Arabia. With major contribution from Dammam -15%, Jeddah, Riyadh, Madinah, Tabuk, Jubail and Taif. When asked about awareness about antenatal classes 70% of respondents said they don't know about antenatal classes while only 6% (n=42) participants had actually attended antenatal classes and they belonged to Dammam and Jeddah (Table 1).

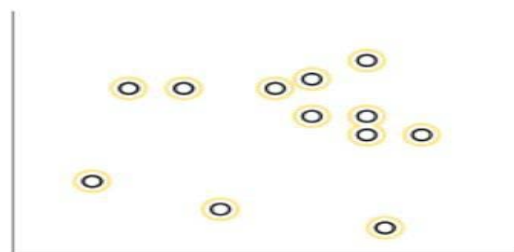


Figure 1: Correlation of Age at first pregnancy compared to knowledge about antenatal care

A significant *p*- value (.001) was obtained when knowledge regarding above stated antenatal events were compared with outcome of first pregnancy, indicating that low knowledge of antenatal care may lead to poor outcome of pregnancy (Table 2 and Figure 1). Similarly, feeling of fear to low knowledge about antenatal events was compared and showed significant results as shown in Table 3

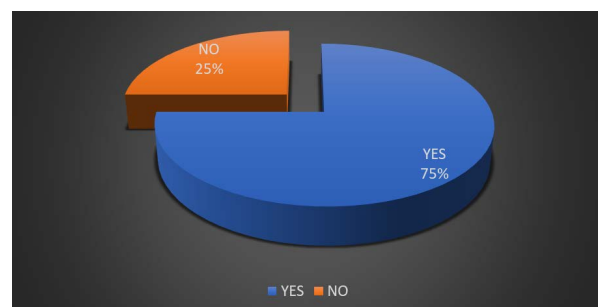


Figure 2: Community agreement to attend antenatal classes if available

Table 2: Source of knowledge about antenatal events

	I still don't know	My mother/my relatives	My friends	My doctor/nurse	internet
Knowledge about nutrition during pregnancy	0%	55%	10%	17%	18%
	0	385	70	119	126
Knowledge about child birth process in 1 st pregnancy	0%	25%	30%	0%	45%
	0	175	210	0	315
Knowledge about monitoring your weight and growth of baby	55%	2%	15%	15%	13%
	385	14	105	105	91
Knowledge about how to bathe and dress a newborn	5%	80%	0%	4%	11%
	35	560	0	28	77
Knowledge about exercises which are allowed during and after pregnancy	60%	2%	3%	1%	34%
	420	14	21	7	238
Knowledge about pain managements methods available during labour or delivery	95%	0%	4%	0%	1%
	665	0	28	0	7
Knowledge about Family planning methods available after delivery	73%	5%	10%	2%	10%
	511	35	70	14	70
Knowledge about what should you take to the hospital when pains start	0%	85%	15%	0%	0%
	0	595	105	0	0
Knowledge about taking care of yourself in the 40 days after giving birth	0%	85%	10%	0%	5%
	0	595	70	0	35

Table 3: Feeling of fear during first pregnancy compared to knowledge about various antenatal events

Feeling of fear during first pregnancy	Compared with	* P-value
Feeling of fear during first pregnancy	knowledge about birth process at first pregnancy	.0001
Feeling of fear during first pregnancy	knowledge about What to take to the hospital when pains start	.0001

*calculated by chi square

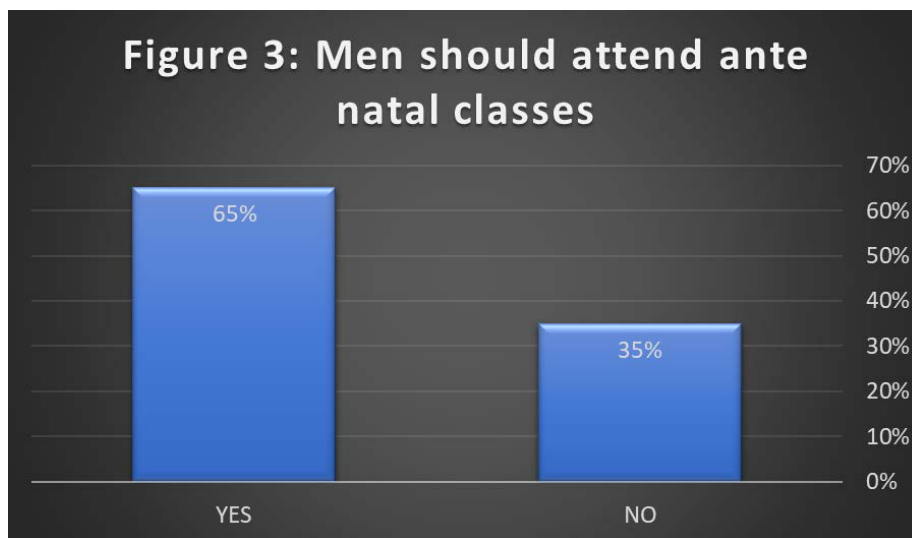


Figure 3: Men should attend antenatal classes

DISCUSSION

Comparison of our study with other studies done on different aspects of antenatal care classes showed similar results.

Alkaabi, et al in a study in 2015 titled 'Women's knowledge and attitude towards pregnancy in a high-income developing country' showed that knowledge about pregnancy among Emirati women was low⁸. Ante natal classes that focused on educating women about issues related to pregnancy were needed. Our study showed similar results. but since 2015 emirates has focused on this area and now have one of the lowest MMR of 3/100000 deaths in the region.

Saudi annals of medicine in Feb 2013 published an article titled: 'Saudi women's acceptance and attitudes towards companion support during labor: Should we implement an antenatal awareness program? Of 402 women who participated in the study, 182 women (45.3%) preferred the presence of a companion during childbirth the reason might be a lack of understanding of the positive role of a companion during childbirth or because of cultural beliefs⁹. Compared to this in our study 65% of the respondents said that men should attend antenatal classes and be present in labor room. However, 65% said it should not be mandatory, rather everyone should be given a choice to do so.

According to pain management options during labour we did not find any related study in gulf area but a study done in India in 2019 with 200 women, showed that 98% did not have any idea about pain management options during labour¹⁰. In our study amongst our participants also 95% were not aware about pain management options during labour and the 5% who knew got their information from friends or internet

Another study done in 2019 with title 'Association between antenatal classes attendance and perceived fear and pain during labour' showed that antenatal classes significantly lowered feeling of fear in first pregnancy supporting our result which showed that low knowledge of antenatal events during first pregnancy was significantly related to feeling of fear^{11,12}.

CONCLUSION

In conclusion our results show that most of the knowledge women gain about care during antenatal period is not from a medical source but rather from mothers, relatives or internet. Women are ready to utilize antenatal classes' service if made available for them. Also, poor outcome during pregnancy may be related to lack of knowledge about the care and health requirements during the ante natal and post-natal period. Our recommendation on the basis of our study to the ministry of health, concerned authorities and stakeholders to plan and implement antenatal classes and health education sessions for women during their routine antenatal visits. This will bridge the knowledge gap and empower couples to have control and make choices about their health.

Authorship Contribution: All authors share equal effort contribution towards (1) substantial contributions to conception and design,

acquisition, analysis and interpretation of data; (2) drafting the article and revising it critically for important intellectual content; and (3) final approval of the manuscript version to be published. Yes.

LIMITATIONS: Low response from non-Saudi residents of the community

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Potential Conflicts of Interest: None

Competing Interest: None

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