

# Assessment of the Knowledge Regarding Antenatal Care among Pregnant Women with a View to Develop Information Booklet at Selected Clinics of District of Punjab

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**Abstract:** ***Aim:** A study to assess the knowledge regarding antenatal care among pregnant women with a view to develop information booklet at selected clinics of district of Punjab. **Method:** A descriptive research design was adopted for this study. The study sampling technique used was simple Random sampling technique. Data was collected from 100 pregnant mothers. After a thorough review of literature related to topic the tool was developed. Reliability of the tool was done by answering the questionnaire. Information booklet was given. **Result:** The knowledge of the pregnant mothers (50%) is having good knowledge. They are below 30 years of age. Majority of mothers (80%) is having good knowledge score and they are literate. Half of mothers (50%) are having good knowledge they are working mothers. 40% mothers are having average knowledge score one children in their family. There is significant association among demographic variables and knowledge of pregnant women regarding antenatal care. **Conclusion:** Knowledge regarding antenatal care to the pregnant mothers is less to those who are prim gravid and prim Para, low socio-economic status, low educational level. Hence there is a role for lifestyle modification i.e. education, occupation and economic status.*

**Keywords:** Knowledge, Assessment, Pregnant mother, Illness, Antenatal period, Antenatal care.

## 1. Introduction

“Healthy Mothers and Children’s are the real wealth of Societies.”

(WHO)

Pregnancy and Child birth are special events in women’s lives and indeed in the lives of their families. This can be a time of great hope and joyful anticipation. The primary aim of antenatal care is to achieve, at the end of pregnancy, a healthy mother and healthy baby. The quality of care is more important than the quantity. Pregnancy requires specialized care generally agreed to preventive activity. Antenatal care is the systemic medical supervision of women during pregnancy. Its aim is to preserve the physiological aspect of pregnancy and labour and to prevent or detect, as early as possible, all that is pathological. Early diagnosis during pregnancy can prevent maternal ill-health, injury, maternal mortality, foetal death, infant mortality and morbidity. Hence, the earlier in pregnancy a woman comes under the supervision of an obstetrician, the better. (Sheila Haldipu 2004)

Antenatal care refers to pregnancy related health care provided by a doctor or a health worker in medical facility or at home. Antenatal care should monitor a pregnancy for signs of complication detect and treat pre-existing and concurrent problems of pregnancy. It should also provide advice and counselling or preventive care, diet during pregnancy, delivery care, postnatal care and related issues. An antenatal care is necessary for ensuring a healthy mother and baby at the end of gestation. The antenatal period is a time of physical and psychological preparation of birth and parenthood. Becoming a parent is a time of intense learning both for parents and for those close to them. (Dutta)

Promotion of maternal and child health has been one of the most important components of the family Welfare Programme of the Government of India and the National Population Policy – 2000. One of the most important components of antenatal care is to offer information and advice to women about pregnancy related complication and possible curative measures for early detection and management of complications. Antenatal care can also play a critical role in preparing a woman and her family for birth by establishing confidence between the woman and her health care provider and by individualizing promotional health messages. Antenatal care is considered essential for health of both the mother and the child, it is important to analyze the possible factors contributing to its utilization. (N. C. Saxena 2005)

The list of any civilization is the measure of consideration and care, which it gives to its weaker sections. In any community, women are especially vulnerable during pregnancy. The maternal mortality ratio (MMR) in India is very high the data given by the registrar general of India for 1998 estimate that MMR to be around 407 per 100,000 live births. (WHO 2005)

Reducing MMR to less than 100 per 100,000 live births is a commitment enshrined in the national population 2000. India is committed to reducing MMR to less than 100 per 100,000 by the year 2010 from the current 407 / 100,000 live births. (SRS, RGI, 1998)

Maternal care includes care during pregnancy and should begin from the early stages of pregnancy. Women can success antenatal care service either by visiting a health centre where such services are available or from health

workers during their domiciliary visits. One of the most important components of antenatal care is to offer information and advice to women about pregnancy related complication and possible curative measures for early detection and management of complication. Antenatal care can also play a critical role in preparing a woman and her family for birth by establishing confidence between the woman and her health care provider and by individualizing promotional health messages. **(Balwan S Dhillon 2006)**

Effective antenatal care can improve the health of the mother and give her a chance to deliver a healthy baby. Regular monitoring during pregnancy can help detect the complication at an early stage before they become life – threatening emergency. However, one must realize that even the most effective scanning tools currently available; one cannot predict which will develop pregnancy related complication. Hence, every pregnant woman needs special care. **(Manchanda 2005)**

## 2. Review of Literature

A literature review is an evaluative report of information found in the literature related to selected area of study. The review describes, summarizes, evaluates and clarifies this literature. It gives a theoretical base for the research and helps to determine the nature of research.

**(Queensland university, 1999)**

A Literature review is a body of text that aims to review the critical points of knowledge on a particular topic of research.

**(ANA, 2000)**

A literature review is an account of what has been already established or published on a particular research topic accredited scholars and researcher.

**(University of Toronto, 2001)**

A review of literature is an essential aspect of scientific study. It involves the systematic identification, location, scrutiny and summary of written materials that contains information on a research problem. It broadens the views of the investigator regarding the problem under investigation, helps in focusing on the issues specifically concerning the study.

Few studies have been done in the field of breast feeding and antenatal care. The investigator has made an attempt to explore studies, publications and reports relevant to the study.

Review of literature is done for the present study and presents in the following headings.

- Studies and Literature related to knowledge and practice of antenatal care among antenatal mothers.
- Antenatal care
- Maternal health status
- Pregnancy and risk

### Antenatal care

**Nahla A Kishk (2009)** conducted a comparative study to assess the Knowledge and Practices towards ANC between rural and urban women in Alexandria a cross sectional, community – based house to house survey was conducted in Alexandria using cluster – sampling technique 30 clusters from urban areas and 30 clusters from rural areas. Concerning maternal practices the current study revealed rural/ urban disparities as significantly higher proportions of urban women had proper practices during antenatal period in their last pregnancy as regards utilization earlier initiation and frequent visits of antenatal care.

**Susila. C (2008)** performed a study to assess the level of self motivation of primigravidae mothers towards antenatal care at Sree Ramachandra Hospital and Research institute Chennai, among 100 mothers only 8% of the mothers were with high level of self motivation towards receiving or following the antenatal care and she finds that there is a responsibility for the nurses to increase the level self motivation among antenatal mothers.

**Petersen J, John A, (2008)** conducted a study on “Suspicious findings in antenatal care & their implications from the mother’s perspective a perspective study in Germany”. This study was conducted on 360 pregnant women in the rein- Neckar Germany. Self administered structured questionnaires used result 2/3 (67.2%) of antenatal care attendees reported suspicious more than half (53.2%) of those suspicious findings reported they were quarterly worried. Conclusion: - most antenatal care attendees are warned about possible abnormalities & often lead to further investigations & cause considerable worries.

**Samuel Oginni 2, Kayoed sung bade (2008)** conducted a study on “Antenatal care services in secondary health care facilities in Nigeria.” This study was conducted on 390 consecutive pregnant women. Interview method was used in this study. Results- 386 (99%) were reached with at least one educational message. 167(42.8%) had haemoglobin & gave estimated. Routine iron and folic acid supplement were given to 142 & 25(6.4%). Conclusion: - The antenatal care services such iron & folic acid supplements & malaria prophylaxis are given to all pregnant women would help to meet national guideline improve quality of services.

### Maternal health status

**Mubyazi Gm, Bloch P, Olsen teal (2010),** conducted a study on “Women’s experiences & views about costs of seeking malaria chemoprevention & other antenatal services. a qualitative study from two districts in rural Tanzania “. This study was conducted on 300 pregnant women. Qualitative content analysis interview method used in this study. Results FGD participants and interview responds the following key limits facts for women use of ANC services. Conclusion: - a variety of resources related factors were shown to affected the health seeking behaviour of pregnant women in rural Tanzania

**Mushin D, Pembina R, John A. (2010),** conducted a study on “Effectiveness of safe motherhood promoters in

improving the utilization of obstetric care. The case of Mewari rural district in Tanzania". This study was on 578 antenatal mothers, 96% of total population of 8300. In these study interview method used results deliveries with skilled attendant significantly increased from 34.1% to 51.4%, 79% of pregnant women were visited. Conclusion: - the study has demonstrated effectiveness of community based safe motherhood intervention in promoting the utilization of obstetric care & skilled attendant at delivery.

**Ashwin CA, Watts (2010)**, conducted a study on "Women's use of nicotine replacement there by in pregnancy a structured review of the literature". In Nottingham NG51PB, UK. This study was conducted on one hundred fifty two pregnant women. A structured teaching method was used. Results- the findings from this structured review raise awareness of the importance of smoking cessation during pregnancy. Conclusion:- Further research is needed to explore the view of women using NKT during pregnancy to aid smoking cessation.

**Mwiladhi mrhap, Rachel A Haws, Adel mushi (2010)** conducted a study on "The use of antenatal care perspectives & experiences of women & health care providers in rural southern Tanzania". This study was conducted on 300 antenatal mothers. Interview method was used in this study. Results- Women linking the health system.

**Padam Singh, R.J.Yadav (2009)** conducted a study to assess the status of antenatal care among pregnant women in India. In that study 89% of the pregnant women availed antenatal visits of which 62% had received three or more ANC visits. Those receiving the second dose of TT or booster dose were about 78%. About 73% of the pregnant women received IFA tablets during their pregnancy. About 53% of the pregnant women had full package proportion of pregnant women who availed full ANC package was lower in rural as compared to urban areas, lowest for ST followed by SC higher for literate women as compared to illiterate women. The population of Institutional deliveries managed by hospitals and health centres was about 41% , it being higher among literate women and in urban areas. The study revealed that the literacy of women is the key to improve antenatal care of pregnant women. Hence efforts should be made to have information, Education and Communication (IEC) activities targeted to educate the mothers especially in rural areas.

**C.S.Metgud, S. M.Katti, M. D.Mallapur and A.S.Wantamutte (2009)** conducted a study of Utilization Patterns of Antenatal care among Pregnant women all women (n=130) village in Tanzania who were pregnant at the start of the study and who became pregnant during the study.

Most of the pregnant women (92.31%) were registered for antenatal care, but only 30.00% of them were registered in the 1<sup>st</sup> trimester of pregnancy. As regards to TT immunisation 70.77% of the pregnant women as received two doses or one booster dose iron and folic acid supplementation was taken by 59.68% of the pregnant women. Nearly 39.52% of the pregnant women were provided with full antenatal care. The main antenatal care

provided for the pregnant women was doctor (64.52%). The study shows early and wide spread of the antenatal care, but it also reveals that the antenatal visits occur late in pregnancy.

**S. Kiwawa (2008)** conducted a study about the use of antenatal care maternity services for the pregnant women in Lewero Dist in Uganda. A sample size of 769 women in the viewed, among that 417 visiting initially, during second trimester 242, during third trimester 266. About the use of antenatal services most the woman delivered in health centers (28.7%), (26.4%) delivered from home, (18.2%) in private maternity homes and (13.8%) in hospital. About maternity service utilization approximately (59.2%) gave birth with a skilled attendant present others delivered other by themselves or with help of relatives, friends and traditional birth attendees.

### **Pregnancy and risk**

**Dodd JM, Crow her CA,(2012)**, conducted a study on "Specialized antenatal clinics for women with a multiple pregnancy for improving maternal and infant outcomes". This study conducted on 162 pregnant women's. The method was Cochrane pregnancy and birth group's trials used in this study. The result was showed that women receiving specialized antenatal care were significantly. More likely to birth by L.S.C.S. The study conducted that specialized multiple pregnancy clinics in improving health outcomes for women and their babies are valuable.

**Hans, Middleton P, Crow her CA (2012)** conducted a study on "Exercise for pregnant women for preventing gestational diabetes mellitus". This study conducted in five trials with a total of 1115 women's and their babies. The method was randomized and cluster used in this study. Result showed that when comparing women receiving additional exercise interventions with those having routine antenatal care, there was no significant difference in GDM incidence.

**Jallow IK, Choy, Huang N (2012)**, conducted a study on "Women perception of antenatal care services in public & private clinics in the Gambia" in Roc, Taiwan, Taipei. This study was conducted on 502 pregnant women face to face interview & questionnaires method used in this study. Results- The satisfaction rate with antenatal services was 79.9% for Public facilities & 97.9% for Private facilities. Conclusion: - We found that although "Women tended to be highly satisfied with both private & public ANC facilities, those attending public clinics were significantly less satisfied than those attending private clinics".

**Megan E passkey, 1 Catherine, [2012]**, conducted a study on "Knowledge, attitude & other factors associated with assessment of tobacco smoking among pregnant by health care provider" in Australia, New south. This study was conducted on 127 pregnant women. Across section survey was used. Result, the smoking prevalence was 95% most 79% indicates that they assess smoking status in 100% client. Conclusion -the health system must provide support to providers through appropriate policy & resources to enable them to address these issues.

**Tran TK, Nguyen HD, Ashanti et.al [2011]**, conducted a study on “Urban, rural disparities in antenatal care utilization a study of two cohorts of pregnant women in Vietnam”. This study was conducted on 2132 pregnant women. Interviewed using structured questionnaires method used in this study. Result -77.2% of women had at least 3 visits & 69% attended ANC during the 1 trimester .The corresponding percentage for the urban women were 97.2% only 20.33% of the rural women compared to 81.12% of the urban women. Conclusion– Revision & enforcement of the national guideline to improve the behaviour & practice of both users & providers are necessary.

**Siam Akhundl & Bilal Equal Avan1 [2011]**, conducted a study on “Development &pretesting of an information, education & communication [IEC] focused antenatal care handbook in Pakistan”. This study was conducted on 300 expected women, 100 women from community. A quantitative & qualitative method was used. Results- 23% of the interviewed women primigravida, 50% multigravida & 27% grandmultipara. Conclusion- The ANC handbook can applied in the health services sector of Pakistan.

**Patrick Gold Oyibo, 1 peter Nidd Ebeigbe (2011)**, conducted a study on “Assessment of the risk status of pregnant women presenting for antenatal care in a rural health facility in ebony state, south eastern Nigeria”. This study was conducted on 605 pregnant women. Random sampling & interviews administered questionnaire methods used in this study. Results- The women with at risk pregnancies registered for care late 58.9% register for antenatal care in the sacred trimester 137% register in trimester of pregnancy. Conclusion: - The Govt. health department should intensify efforts through health enlightenment campaigns to educate rural pregnant women of the benefits of utilizing modern antenatal care services.

**Ali Yawar Alam & Akhtar Ali Qureshi (2007)** performed a cross sectional survey to access the knowledge and practice of women utilizing and not utilizing antenatal care facilities during their previous pregnancy among 200 married women in the age range 15-49 years were compared by the calculating odds ratios and 95% confidence intervals. Studied showed Pallor was significantly lower among women utilizing antenatal care (57%) as compared to those who were not (77.6%) (O.R.38.95% CI (. 18-81) p value.02). Tetanus toxoid coverage was higher among women utilizing antenatal care (92%) compared to those who were not (59.2%) (O.R 10.8 95% CI (4.5-26.2). Knowledge about danger signals in pregnancy and realization of the importance of eating healthy diet during pregnancy was significantly higher among utilizing antenatal care. The finding reveals that Lesser prevalence of Anaemia and better tetanus toxoid coverage was seen among women attending antenatal care facilities. Identification of danger signals in pregnancy and recognition of nutritional demands of pregnancy are better understood by women utilizing antenatal care facilities.

### 3. Objectives of the Study

The objectives of the study are to:

- To assess the knowledge of mothers regarding antenatal care.
- To determine the association between the knowledge on antenatal care and selected demographic variables such as age, education, occupation, socio economic status.

### 4. Material and Methods

The current study was descriptive and descriptive research design was adopted for this study. The study sampling technique used was simple Random sampling technique. Data was collected from 100 pregnant mothers in 2015. After a thorough review of literature related to topic the tool was developed. The data was collected by using Demographic data profile sheet, Self- Structured Checklist. The study was delimited to pregnant mothers who were willing to participate and who were available at the time of data collection. Analysis of data was done by using descriptive, inferential statistics and answering the questionnaire.

### 5. Results

#### Section-1

#### Socio-Demographic Characteristics Of Pregnant Women Of Ivy Hospital At Khanna.

**Table 1:** Frequency and percentage distribution of socio-demographic characteristics of pregnant women, N=100

Variables	Opts	Frequency (f)	Percentage (%)
Age of the Pregnant Women	Below 20 years	15	15
	Below 25 years	29	29
	Below 30 years	22	22
	Above 35 years	34	34
Educational level of the Pregnant Mother	Illiterate	23	23
	Secondary	13	13
	Senior Secondary	45	45
	Graduation	19	19
Parity of the Pregnant Mother	Multipara	37	37
	Grand Multipara	25	25
	Nulli para	3	3
	Primi para	35	35
Occupation of the Pregnant Mother	House wife	13	13
	Unemployed	81	81
	Govt. Employee	4	4
	Other	2	2
Social Status of Family	Lower class	34	34
	Medium class	61	61
	Upper class	5	5

Table 1:- Depicted the frequency and percentage distribution of socio-demographic characteristics of pregnant mothers come for antenatal care at clinics of Punjab.

In relation of their age shows that majority of women’s (5%) are belong from below 20 year age group. 10% women’s belong from below 25 year age group and 70% women’s are belong from below 30 year age group and above 35 year are 15% age group. Distribution of women’s

by educational status shows that majority of women's are illiterate 10% and 30% are secondary & 40% senior secondary only 20% mothers are graduate. Distribution of parity of women's shows that majority of women's 60% are multi para, 4% are grand multi para, and 36% are primi para. Distribution of women by occupation shows that 59% women are working women and same numbers are house wife. & 11% are UN employee, 27% are government employee & 4% are other. Distribution of mothers by Social status of family shows that 30% women are lower class, 65% are in medium class & 5% are in upper class.

Hence it was concluded that most of the pregnant mothers were of 30 years, pursuing less education were married. Maximum of them belongs to medium class and were working mother. Majority of them are multipara.

### Section – II

**Objective:** - To assess the knowledge of pregnant mothers regarding antenatal care.

**Table 2:** Frequency and percentage distribution of level of knowledge of antenatal care among pregnant mother

Criteria Measure Of Knowledge Score		
Level of Scores N= 100	Frequency	Percentage (%)
Adequate (16-25)	24	24
Moderate (10-15)	35	35
Inadequate (Below10)	41	41

Maximum =25 Minimum=0

Table 2:- showed that majority of the women 41 (41%) had inadequate knowledge for antenatal care followed by 35 (35%) had moderate knowledge and remaining 24 (24%) had adequate knowledge. Therefore, it was inferred from the table that 35 (35%) pregnant mother had moderate knowledge, 24 (24%) had adequate knowledge and 41 (41%) had inadequate knowledge about antenatal care.

**Table 3:** Mean, SD and Mean percentage of knowledge of pregnant mother about antenatal care, N=100

Descriptive Statistics	Mean	S.D.	Maximum	Minimum	Range	Mean %
Knowledge Score	11.44	4.66	21	4	17	45.76
Maximum =25		Minimum =0				

**\*Significant p<0.001**

Table 3:- depicted that mean, SD and mean percentage of knowledge of pregnant mother about antenatal care. Mean score was found to be with standard deviation followed by mean percentage. Hence it was concluded overall mean percentage knowledge 45.76%.

**Table 4**

**Objective:** - To determine the association between Knowledge regarding antenatal care among pregnant mother with their demographic variables

**Table No.: 4.** Chi Square values showing the association of knowledge regarding antenatal care among pregnant mother with selected demographic variables.

Demographic Data	Levels (N=100)
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Variables	Opts	Adequate	Moderate	Inadequate	df	χ <sup>2</sup>
Age of the Pregnant Women	Below 20 years	2	1	12	6	26.247*
	Below 25 years	6	14	9		
	Below 30 years	2	6	14		
	Above 35 years	14	14	6		
Educational level of the Pregnant Mother	Illiterate	7	13	3	6	55.858*
	Secondary	0	0	13		
	Senior Secondary	17	20	8		
	Graduation	0	2	17		
Parity of the Pregnant Mother	Multipara	9	14	14	6	0.681
	Grand Multipara	6	9	10		
	Nulli para	1	1	1		
	Primi para	8	11	16		
Occupation of the Pregnant Mother	House wife	5	4	4	6	5.732
	Unemployed	19	29	33		
	Govt. Employee	0	2	2		
	Other	0	0	2		
Social Status of Family	Lower class	13	9	12	4	5.876
	Medium class	10	24	27		
	Upper class	1	2	2		

**\*Significant (p<0.001)**

**Table 4** – depicted the association of knowledge regarding antenatal care among pregnant mother with selected demographic variables. Chi Square have shown that there was no significant association of demographic variables age, educational level, occupation, parity and social status of the family. Hence it was concluded from the table that the H<sub>2</sub> Hypothesis is rejected and null hypothesis is accepted that there is no association between the knowledge regarding antenatal care of pregnant mother with their selected demographic variables.

## 6. Discussion

The real voyage of discovery consists not in seeking new landscapes but in having new eyes.

**-Marcel Proust**

The discussion of findings based on sample characteristics, pregnant women knowledge on antenatal care.

The aim of this study was to develop and implement information booklet to improve the knowledge of pregnant women on antenatal care. The effectiveness of information booklet was evaluated by assessing the knowledge of pregnant women on antenatal care, after the information booklet administered.

The present study revealed that half of mothers (50%) are having good knowledge and they are below 30 years of age, majority of mothers (80%) is having good knowledge score and they are literate, half of mothers (50%) are having good knowledge they are working mothers, 40% mothers are

having average knowledge score one child in their family. So there is significant association among demographic variables and knowledge of mothers regarding antenatal care.

## 7. Conclusion

Knowledge regarding antenatal care to the pregnant mothers is less to those who are prim gravid and prim Para, low socio-economic status, low educational level. Hence there is a role for lifestyle modification i.e. education, occupation and economic status.

## 8. Recommendation

On the basis of the findings of the study, the following recommendations had been made for the further study:-

- Study can be replicated on a large sample to validate the findings and make generalized.
- A comparative study can be conducted among the rural and urban pregnant women.
- A similar study can be done by using other research design.

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