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Mahalakshmi N
PM Office, Military Hospital
Secunderabad, Tirumalgiri,
MH Road, Secunderabad,
Telangana, India

A study to assess the effectiveness of structured teaching programme on knowledge regarding antenatal services among pregnant women attending outpatient department at urban primary health center, New Delhi

Mahalakshmi N

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Abstract

Antenatal care is the pivotal factor for safe motherhood and one of the most effective health interventions for preventing maternal morbidity and mortality, particularly in places where the general health status of women is poor.

Methodology: A pre experimental, one group pre-test, post-test design was adopted in the study. The study conducted among 40 pregnant women attending OPDs at urban health center, New Delhi. Data collection was done by structured knowledge questionnaire before and after administering the STP.

Results: Majority of pregnant women (62.5 percent), were married at the age of 20 to 25 years; 62.5% were Hindus, 67.5% were having secondary education, 52.5% were homemakers, 55% were from nuclear family, 42.5% were getting Rs.10001-15000/- income per month and 50% had information from health personnel. The overall mean knowledge in the pretest was 15.10 and SD 5.91, where as in the post-test the total mean was 29.18 and SD 7.99. The obtained 't' value was 10.94, which was highly significant. The intervention was effective in increasing the knowledge of antenatal services among pregnant women. There was no significant association between pre-test knowledge and selected background variables education, which proved that the structured teaching program was effective independent of the background variables such as age, religion, occupation, type of family income and source of information on antenatal services.

Keywords: Antenatal services, pregnant women

Introduction

The wealth of the nation is its healthy population today's children are tomorrows citizens who should be the healthy the mothers contribution in creating a healthy population is beyond explanation. The mother must be prepared physically, emotionally and socially to bring forth of a healthy child.

Different factors influence the awareness regarding importance of antenatal checkups which include role of education, income, support of the family and equitable distribution of health services between rural and urban population. It has been documented that as the educational status of the females in urban settings is improving leading to increase in the awareness regarding importance of antenatal care. It is seen that educated mothers make conscious decision of availing ANC services from government or private hospitals. The estimates also support that, maternal deaths can also be reduced by capacity building of the health personals both at government and private sector who can identify the pregnancy related complication and at the same time provide health education to the expectant mother.

Need for the Study

Most pregnancies end with the birth of a live baby to a healthy mother. For some however childbirth is not a joyous event but it turns into tragedy when a woman loses her life while performing this social obligation. Sometimes they result in an unexpected maternal and prenatal outcome. As community health nurse we are honored to be a part of new life rituals. Every year more than 200 million women become pregnant.

Corresponding Author:
Mahalakshmi N
PM Office, Military Hospital
Secunderabad, Tirumalgiri,
MH Road, Secunderabad,
Telangana, India

Pregnancy is considered to be a normal physiological state, as per the scientific view. To a lay person it is a common phenomenon occurring in a woman after marriage according to genetics it is the process of procreation.

Maternal mortality is unacceptably high. About 830 women die from pregnancy- or childbirth-related estimated that in 2015, roughly 303 000 women died during and following pregnancy and childbirth. Almost all of these deaths occurred in low-resource settings, and most could have been prevented. Health promotion consists of education and counselling activities that help enhance and maintain health and healthy behaviors. Poor pregnancy outcome is associated with limited or late prenatal educational care. The value of prenatal education can be presented in-terms of healthy birth of a baby. Health practice of individual or group designed to inform pregnant women and their partners includes prevention and early screening of minor disorders, nutrition, immunization, exercise, hygiene, services, contraceptive information, labor, postnatal care and infant care.

Back ground of the study

Personal perception of the investigator while working with perinatal mothers at clinical posting was that many of the mothers are uneducated and ignorant about perinatal care. Researcher observed in her hometown that the pregnant women unaware about the knowledge on the maternal health services provided by the primary health centres and from the government. The personal experience of researcher motivated to conduct a study regarding the maternal health services which are provided from the government, to provide adequate knowledge and awareness to pregnant women regarding these health services and encourage mothers to prevent perinatal risks and there by promote the health status by utilization of antenatal services and that reduces maternal morbidity and mortality.

Objectives of the study

(1) To assess the pre-test and post-test level of knowledge regarding antenatal services among pregnant women attending outpatient department at urban primary health center, New Delhi. (2) To develop and administer the structured teaching programme for pregnant women regarding antenatal services. (3) To find out the association between pre- test level of knowledge regarding antenatal services among pregnant women of selected socio-demographic variables.

Operational definitions

- **Structured Teaching Programme:** Refers to an instruction programme of 45 minutes duration, conducted by the researcher for the purpose of the study, for improving the knowledge on antenatal services of pregnant women.
- **Knowledge:** Refers to the current responses of pregnant women regarding antenatal services to the structured knowledge questionnaire prepared by investigator for the purpose of study.
- **Antenatal Services:** Refers to all aspects of antenatal care, intranatal care, and postnatal care of the pregnant woman.
- **Pregnant Women:** Refers to a woman who is conceived and were in between the period from the day of conception to till delivery.

Hypotheses

H1: There will be significant difference in the post-test level of knowledge among pregnant women on antenatal services.

H2: There will be significant association in the pre-test level of knowledge with selected socio-demographic variables.

Conceptual framework: The theory chosen for the study is “Arthur Combs”, Humanistic Learning Theory.

Review of Literature

Hina Ahmed and Iram Manzoor (2017) ^[28] conducted a study to assess the knowledge about the importance of antenatal care among females of child bearing age living in a suburban community of Lahore. Females of reproductive age (15-49 years) living in Kot-Lakhodare were enrolled. Through a structured questionnaire, using convenient sampling technique, 1224 females of childbearing were interviewed through a cross sectional survey. The study was completed between January till August 2016. Question pertaining to their sociodemographic characteristics, perception about the importance of antenatal care services and comorbid conditions during the last pregnancy were asked. Data was analyzed by using SPSS version 21. The ethical approval both institutional and individual were duly taken. Results revealed that Mean age was 32 ± 7.8 SD years with education up to primary. Three quarter of females were un- employed with monthly income less than rupees 25,000 / month. All females 869(73%) who had perception about importance of antenatal checkup during their last pregnancy had no history of anemia, hypertension, diabetes and abortion ($p < 0.05$). These females coming for the antenatal checkup delivered uneventfully by normal vaginal route and preferred government and private hospital for delivery and were vaccinated against Tetanus Toxoid ($p < 0.05$).

Hailemichael Gebremariam, Berhe Tesfai, Seltene Tewelde, Yonas Kiflemariam, and Fitsum Kibreab (2029) ^[3] conducted a study on Level of Knowledge, Attitude, and Practice of Pregnant Women on Antenatal Care in Amater Health Center, Massawa, Eritrea. A cross-sectional study with systematic sampling was conducted. All pregnant mothers who were resident of Massawa city and visiting Amater Health Center for their current pregnancy were included in the study. An interviewer-administered structured questionnaire was used as data collection tool. Results were presented using descriptive statistics, percent, and frequencies. Results revealed that A total of 289 pregnant mothers were enrolled in the study with a mean age of 27.7 years. Most mothers reported that high blood pressure (92.4%), maternal smoking (97.6%), alcohol consumption (97.2%), infection (92.7%), and medicines (98.3%) had affected fetal growth during pregnancy. Practically, two- thirds (59.4%) of the mothers were visiting the health facility during the first three months of their pregnancy. Majority of mothers had good knowledge (84.1%) and attitude (99%), but they had low level of practice (45%). Marital status, occupation, gravidity, and parity had showed statistically significant association to their comprehensive knowledge ($p < 0.001$). And their gravidity ($p < 0.003$) and parity ($p < 0.001$) had also showed statistically significant association to their level of practice.

Materials and Methods

The investigator selected “Evaluative research” as research approach was adopted in the study. The research design

selected for the present study was pre-experimental one group pretest- post-test design. The study was conducted among 40 pregnant women by using Non-probability purposive sampling technique. Data collection tool was demographic characteristics and structured knowledge questionnaire which includes 30 questions. Pilot study was conducted at urban primary health center, New Delhi. The investigator collected data in urban Primary Health center, New Delhi.

Data Analysis and Interpretation: Data was organized as follows:

Section I: Frequency and percentage distribution of pregnant women according to their selected socio-demographic variables.

Section II: Pretest knowledge scores of pregnant women on antenatal services.

Section III: Posttest knowledge scores of pregnant women on antenatal services.

Section IV: Comparison of knowledge scores of pregnant women on antenatal services in pre-test and post-test.

Findings: The findings are based on the objectives of the study.

Objective: (1) To assess the pre-test and post-test level of knowledge regarding antenatal services among pregnant women attending outpatient department at urban primary health center, New Delhi.

Majority of Pregnant women (62.5 percent), were married at the age of 20years-25 years; 62.5% were Hindus, 67.5% were with secondary education, 52.5% were home-makers, 55% were from nuclear family, 42.5% were getting Rs.10001-15000/- income per month and 50% had information from health personnel.

Table 1: Frequency and percentage distribution of pregnant women according to Socio demographic variables. (N=40)

S. No	Socio demographic variable	Frequency	Percentage
1.	Age at marriage		
	20-25 years	25	62.5%
	26-30 years	11	27.5%
	31 -35 years	4	10%
	Above 36 years	0	0%
2.	Religion		
	Hindu	25	62.5%
	Muslim	7	17.5%
	Christian	8	20%
	Others	0	0%
3.	Education		
	Primary education	4	10%
	Secondary education	27	67.5%
	Graduation	7	17.5%
	Post-graduation	2	5%
4.	Occupation		
	Home maker	21	52.5%
	Daily wager	16	40%
	Govt. employee	0	0%
	Private employee	3	7.5%
5.	Type of family		
	Nuclear family	22	55%
	Joint family	14	35%
	Extended family	4	10%
	Other	0	0%
6.	Monthly family income		
	>Rs.25000/-	0	0%
	Rs.20001-25000/-	5	12.5%
	Rs.15001-20000/-	7	17.5%
	Rs.10001-15000/-	17	42.5%
	<Rs.10000/-	11	27.5%
7.	Source of information		
	Television	12	30%
	Magazine	8	20%
	Internet	0	0%
	Health personnel	20	50%

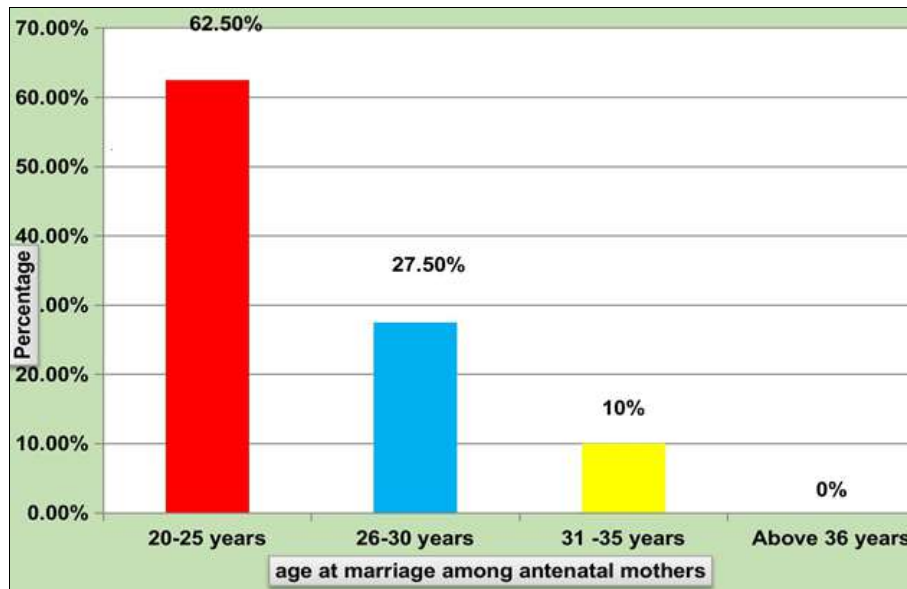


Fig 1: Percentage distribution of pregnant women according to their age at marriage (N=40)

In area of pre-test knowledge regarding antenatal care, the mean score obtained by the subjects was 7.10 with SD 3.15. In the area of pre-test knowledge variable regarding intranatal and postnatal care the mean score obtained by the subjects was 8.0 with SD 3.33. In the area of pre-test knowledge variable regarding overall knowledge the mean score obtained by the subjects was 15.10 with SD 5.91. In pre-test 23 (57.5%) had below average knowledge, 16(40%) had average knowledge and 1 (2.5%) had above average knowledge on Antenatal care among Pregnant women. Regarding Intra-natal and postnatal care 22 (55%) had below average knowledge, 14 (35%) had average knowledge and 4 (10%) had above average knowledge in pre-test. Regarding overall knowledge 21 (52.5%) had below average knowledge, 17 (42.5%) had average knowledge and 2 (5%) had above average knowledge in pre-test.

Table 2: Frequency and percentage distribution of pregnant women according to the grading of their knowledge scores on maternal services in pre test

Knowledge variable	Below average		Average		Above average	
	F	%	F	%	F	%
Antenatal care	23	57.5%	16	40%	1	2.5%
Intranatal and Post natal care	22	55%	14	35%	4	10%
Overall knowledge scores	21	52.5%	17	42.5%	2	5%

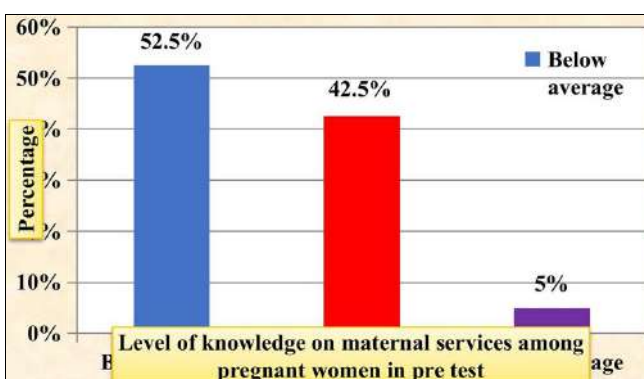


Fig 2: Percentage distribution of pregnant women according to level of knowledge on maternal services in pre-test (N=40)

Objective

(2) To develop and administer the structured teaching programme for pregnant women regarding antenatal services.

In area of post-test knowledge regarding antenatal care, the mean score obtained by the subjects was 13.35 with SD 3.91. In the area of posttest knowledge variable regarding intra- natal and postnatal care the mean score obtained by the subjects was 15.82 with SD 4.36. In the area of post-test knowledge variable regarding overall knowledge the mean score obtained by the subjects was 29.18 with SD 7.99. In post-test none of them had below average knowledge, 18(45%) had average knowledge and 22 (55%) had above average knowledge on Antenatal care among Pregnant women. Regarding Intra-natal and postnatal care none of them had below average knowledge, 12(30%) had average knowledge and 28 (70%) had above average knowledge in pre-test. Regarding overall knowledge none of them had below average knowledge, 17 (42.5%) had average knowledge and 23 (57.5%) had above average knowledge in post-test.

Objective

(3) To find out the association between post-test level of knowledge regarding antenatal services among pregnant women of selected socio-demographic variables.

The post-test mean was 15.10 with 5.91 standard deviation and that of post-test was 29.18 with 7.99 standard deviation and with 14.07 mean difference and the calculated ‘t’ value was 10.94, which is higher than the table ‘t’ value 2.71 at 39df with 0.001 level of significance. It shows that there is significant difference ($p<0.01$) in pre-test and post-test knowledge scores. There is significant association between the post-test knowledge of pregnant women with socio demographic variables such as education where the obtained chi square value (12.83) was significant at 0.05 level of significance. There is no significant association between the post-test knowledge of pregnant women with socio-demographic variables such as age, religion, occupation, type of family, monthly income and source of information where the obtained chi square values were not significant at 0.05 level of significance.

Nursing Implications**Nursing Practice**

- Community health nurses play an important role in educating and preparing pregnant women to utilize the maternity services.
- The structured teaching program developed in the present study will serve to improve the pregnant women' knowledge on antenatal services.
- Mass education programs can be organized by the health professionals to make the pregnant women to utilize antenatal services provided and available at government sector.
- Birth preparedness classes and high-risk approach for pregnant women to be conducted for safe motherhood.
- Nurses are in a better position to provide knowledge to the community. Nurses should take keen interest in preparing the community. Education is the key for making awareness in the prevention and promotion of health among mothers.

Nursing Education

- Nursing curriculum should incorporate a vast section on antenatal services.
- Nursing students should impart knowledge on antenatal services as a part of health education.
- Nursing education should prepare nurses with the potential for imparting high-risk management among perinatal period information effectively and assist the high risk pregnant women to prevent complications by providing best antenatal services.
- Nursing students should be made aware of the role in management of high-risk pregnancy, intra natal and post-natal mothers to prevent complications.

Nursing Administration

- Nursing education should prepare nurses with the potential for imparting management information effectively and assist pregnant women in developing self-care potentials for high risk pregnancy.
- The learning experience should focus on prevention of maternal morbidity and mortality in various community settings
- Administrators should arrange for in service education programme for health personnel for organizing counseling sessions for high risk antenatal, intra natal and post natal mothers.

Nursing Research

- The findings of the present study can be utilized by the nurse researchers in the future to conduct extensive studies to identify or assess knowledge regarding antenatal services.
- The present study helps the nurse researcher to understand the level of knowledge of pregnant women on Antenatal services.

Recommendations

- The study can be replicated on a larger sample for community professionals.
- Similar study can be done in community, and hospitals.
- A study can be undertaken to compare the knowledge between the urban and the rural populations on antenatal services.

A similar study can be conducted by using a control group design.

Conflict of Interest

Not available

Financial Support

Not available

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