



Assessment of knowledge regarding safe delivery among Primi gravida mothers in SRM Rural health Center at Mamandur village

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ARTICLE HISTORY

Received: 04.01.2017

Accepted: 15.03.2017

Available online: 30.03.2017

Keywords:

Safe Motherhood, Primigravida Mothers, maternal health services, Family planning education, Nutritional status, Reproductive and Health behaviours

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ABSTRACT

Pregnancy requires specialized care generally agreed to preventive activity . Safe delivery [motherhood] is defined as ensuring essential maternal and newborn care during pregnancy and childbirth The aim of the study was to assess the level of knowledge regarding safe delivery and to associate the level of knowledge regarding safe delivery among primigravida mothers with their demographics variables. Quantitative approach and Non Experimental descriptive research design was used. . The tool used for the study comprises of 2 sections. Section A- Demographic Data(which includes age, gender, educational status, occupation, religion, age at married, income, type of family, weeks of gestation, registration of pregnancy) and section B- a structured questionnaire developed by the investigator which includes 30 questions to assess the knowledge on safe delivery. 100 primigravida mothers who fulfilled the inclusion criteria were selected as samples using non-probability convenient sampling technique. The study was conducted at SRM rural health Center at mamandur village, kancheepuram district The data was analyzed and interpreted based on the objectives using descriptive and inferential Statistics. The Study concluded that among 100 primigravida mothers, 0(0%) of them have inadequate knowledge, 54 (54%) antenatal mothers have moderately adequate knowledge regarding safe delivery; 46 (46%) have adequate knowledge. There is a significant association on level of knowledge on safe delivery among primigravida mothers and with their selected demographic variables such as age at marriage and weeks of gestation. The safe motherhood initiative placed special emphasis on the need for better and more widely available maternal health services, the extension of family planning education and services, and effective measures which is influenced by women's health and nutritional status, reproductive and health behaviours and access to family planning and maternal care services.

INTRODUCTION

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. [1] Safe delivery [motherhood] is defined as ensuring essential maternal and newborn care during pregnancy and childbirth and strengthening the management of maternal complication and

obstetric emergencies. Safe motherhood includes antenatal care, intranatal care and postnatal care. The essential safe motherhood induced early registration of all pregnant women. Antenatal checkup at least 3 times and anemia prophylaxis, detection and treatment, immunization with 3 doses of tetanus toxoid. Pregnant women need more essential nutrients has other women. from the beginning of 2nd trimester until delivery, the body needs additional 300 calories each day to support the growth of the baby. The balanced diet is required to maintain growth of the fetus, placenta and maternal tissues. [2] Saving mother's life is a global aim as the health of mothers has long been considered as cornerstone of

public health and attention. Safe motherhood means ensuring women receive care they need to be safe & healthy throughout pregnancy, during & after child birth. [3]

The safe motherhood Initiative aims to enhance the quality and safety of women's lives through the adoption of combination of health and non health strategies. The safe motherhood initiative placed special emphasis on the need for better and more widely available maternal health services, the extension of family planning education and services, and effective measures which is influenced by women's health and nutritional status, reproductive and health behaviors and access to family planning and maternal care services. [4] India's child survival and safe motherhood program seeks to achieve immediate improvements by improving health care. Improvements in health care for all women will occur through the provision of i) essential obstetric care ii) early detection of complication during pregnancy and labour iii) emergency services. [5]

In India Safe-motherhood program was initiated by the Government of India in 1992 in collaboration with WHO & UNICEF. The main purpose is to improve the health status of women & children & to reduce the Maternal, Infant & Child Mortality rate. [6]

Efforts are being made through these programs to bring down Infant Mortality Rate (IMR) below 60 per 1000 live births, Child Mortality rate below 10 per 1000 live births, low birth weight children below 10 per 1000 live births, Maternal death below 2 per 1000 live births [7]. The pillar of Safe-motherhood reduces the burden of Maternal & Infant Mortality particularly in developing countries like India. [8] Postnatal care means "Care after the Birth" during the postnatal period which aims to promote the well-being of both the mother and child. A lot of need to be done to make the motherhood safe both in rural & urban areas. [9] Giving birth is both exhausting & emotional. After the birth the mother feels tired & due to hormonal changes becomes very emotional. It is essential to provide guidance on how to maintain a healthy lifestyle regarding the mother's health & the health of the baby during this period. To reduce newborn & maternal mortality, essential postnatal care should be promoted & supported into existing health programs. The obvious ways to provide postnatal care are Safe-motherhood & Child Survival Programs which are important programs to provide mother & newborn with essential postnatal care through a variety of service delivery strategies. [10] To improve the health and survival of both the newborn & the mother, many policies and programs have largely overlooked this critical time, hindering efforts to meet the Millennium Development Goals (MDG's) for maternal & child survival. These goals can be advanced, however by integrating postnatal care for newborn & mother who is a practical & feasible strategy for reducing maternal death. [8] In all countries, providing integrated postnatal care is an important opportunity to bridge common policy & programming gaps between child health and maternal health including family planning. Monitoring postnatal care indicators is becoming increasingly recognized as necessary steps and is positively required to improve the health status of both the mother and the baby. [11]

A study reveals that new motherhood brings so many new emotions and experiences, yet it also initially brings a various range of physical problems for the new mother, that they individually require a good knowledge which could be able to manage by them. This will help to promote a positive health condition. [12]

In India majority of mothers are poor and malnourished and live under unsanitary conditions. Maternal (301/1,00,000 live births) and infant mortality rates (57/1000 live births) are high compared to other developing countries. In the light of this fact, we need to improve the health of the antenatal mothers (UNICEF 2006)

A study of 2.7 million deliveries across seven developing countries found that only 1/3rd of mothers who needed life saving care for a complication received it. The majority of women die because of severe bleeding after child birth. This complication can kill women in less than 2 hours. But evidence shows that maternal mortality can be reduced even in the poorest countries. The study reveals that early postnatal care is essential to prevent complications of both the mother and baby to make the motherhood and child safe by imparting essential knowledge to the mother. [11]

The aim of the study was to assess the level of knowledge regarding safe delivery and to associate the level of knowledge regarding safe delivery among Primigravida mothers with their demographic variables

METHODS

Quantitative approach and Non Experimental descriptive research design was used. The tool used for the study comprises of 2 Sections. Section A- Demographic Data (which includes age, gender, educational status, occupation, religion, age at marriage, income, type of family, weeks of gestation, registration of pregnancy) and section B- a structured questionnaire developed by the investigator which includes 30 questions to assess the knowledge on safe delivery. 100 Primigravida mothers who were attending antenatal outpatient department in SRM rural health center at mamandur village and who fulfilled the inclusion criteria were selected as samples using non-probability convenient sampling technique. The study was conducted at SRM rural health center at mamandur village, kancheepuram district. The study variable was Knowledge on safe delivery, the demographic variables include Age, education, occupation, religion, income, type of family, age at marriage, weeks of gestation, registration of pregnancy in months and the Extraneous variable was Mass media.

The criteria for sample selection

The investigator approached the primigravida mothers based on the following selection criteria. The inclusion criteria were Primigravida mothers with any weeks of gestation, who are attending visits at selected settings and who are willing to participate in this study. The exclusion criteria were Multi gravida mothers, Antenatal mothers who are at high risk and Medical and nursing personnel mothers.

Ethical consideration

Formal approval was obtained from the Institutional review board and Institutional ethical committee of SRM University, Kattankulathur, Chennai, Tamilnadu, India. In addition, the participants were informed of their right to withdraw anytime during the course of the study.

Development and description of the tool

A structured questionnaire was used as a tool for data collection. The tool was formulated by the investigator after an intense review of literature and guidance from experts in the field of obstetrics and gynecology. The self administered question was

The Scoring interpretation was

Level of knowledge	Score	Percentage
Inadequate knowledge	1 to 10	1 to 33%
Moderately adequate knowledge	11 to 20	34 to 67%
Adequate knowledge	21 to 30	68 to 100%

used to assess the knowledge on safe delivery among primigravida mothers.

Description of the tool

The tool consists of 2 sections. Section-A deals with demographic details of primigravida mothers such as age, education, occupation, religion, income, age at married, type of family, weeks of gestation, registration of pregnancy in month. Section-B consisted of 30 questions to assess the knowledge on safe delivery among primigravida mothers.

Method of Data collection

After obtained formal approval from the in charge staffs of SRM rural health centre at mamandur village. The investigator explained the objectives and methods of data collection to the antenatal mothers. Data collection was done within six days with effect from month of February of 17.02.2016 to 22.02.2016 in the antenatal outpatient department and in 100 antenatal mothers who satisfied the inclusion criteria were selected using non probability convenient sampling technique. The investigator communicated with Tamil language, introduced self to the antenatal mothers, initially the antenatal mothers were made comfortable at the outpatient department and structured questionnaire tool was given to them. The investigator collected information regarding section-A [demographic data] and section-B [knowledge assessment tools] and the responses marked simultaneously. It took around 15 minutes from each sample to obtain the necessary data. The investigator thanked the antenatal mothers, nursing personnel for extending their fullest co-operation.

RESULTS

The analysis of the findings showed that among 100 samples, 24% of mothers were under the age group of less than 21 years, 54% of mothers were under the age group of 21 to 25 and 22% of mothers were under the age group of above 30 years. In educational qualification 29% of mothers are illiterate, 20% mothers are primary, 33% of mothers are higher secondary level, 18% of mothers are under graduates. Considering the occupation, 77% are house wives, 5% are Government employees, 13% are self employees and 5% are coolies. Considering the religion, 57% are Hindus, 22% are Christians and 21% are Muslims. Considering the age at which married, 7% are married below 18 years, 18 are married (18-21) years, 34% are married (22-26) years and 41% are married above the age of 26 years. Regarding the income, 58% are earning (1590-4726) rupees, 26% are earning (4727-7877) rupees, 7% are earning (7878-11876) rupees and 9% are earning in between (15754-31506) rupees. Considering the type of family, 17% are nuclear families, 29% are joint families, 40% are extended families and 14% are singles. Considering the gestational period, 18% are 16-20 weeks, 62%

are 20-25 weeks and 24% are 25-30 weeks of gestational period. Considering the registration of pregnancy, 40 women registered during second month of pregnancy, 25 women registered as soon as conceived, 28 women registered during third month and 7 are not registered.

Inference: Table 2 shows frequency and percentage of level of knowledge on primigravida mother among 100 primigravida mothers, 54 (54%) mothers have moderately adequate knowledge safe delivery, 46 (46%) have adequate knowledge and 0% mothers have in adequate knowledge.

Tables 3 Shows the association on the knowledge on safe delivery among primigravida mothers with demographic variables. Table reveals that there is a significant association between the knowledge of primigravida mothers with any their selected demographic variables of age at married and gestational weeks. There is no association with respect to other demographic variables.

DISCUSSION

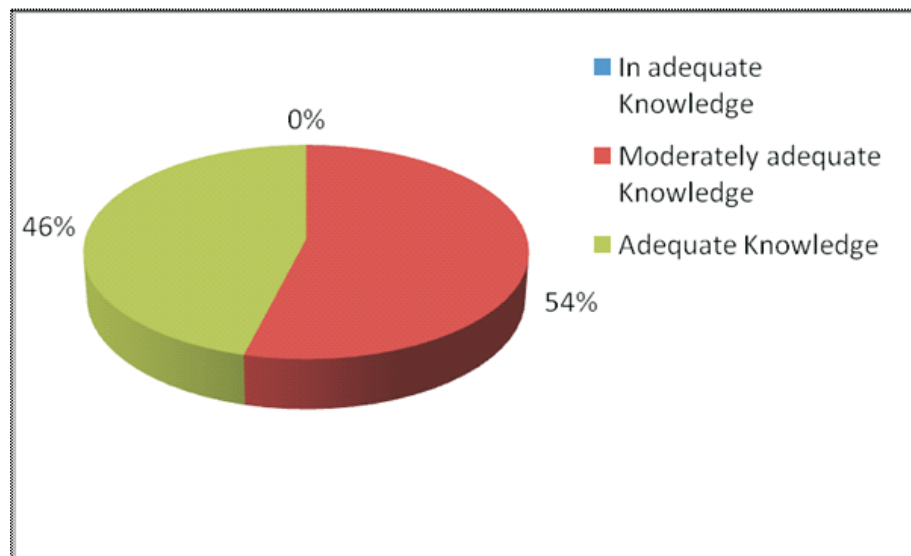
The essential safe motherhood induced early registration of all pregnant women. Antenatal checkup at least 3 times and anemia prophylaxis, detection and treatment, immunization with 3 doses of tetanus toxoid. Pregnant women need more essential nutrients has other women. from the beginning of 2nd trimester until delivery, the body needs additional 300 calories each day to support the growth of the baby. The balanced diet is required to maintain growth of the fetus, placenta and maternal tissues. [2] Saving mother's life is a global aim as the health of mothers has long been considered as cornerstone of public health and attention. Safe motherhood means ensuring women receive care they need to be save & healthy throughout pregnancy, during & after child birth. [3] V. Padubidri (2006) reports that "antenatal care is an excellent example of preventive medicine. Antenatal care is systemic medical supervision of women throughout the pregnancy. The antenatal care avoids as well as detects any complication during pregnancy at the earliest. It then allows adequate and appropriate management of pregnancy complication before these cause harm to mother and of the foetus's proper antenatal care should ensure the birth of a healthy baby as well as maintain health of the mothers". [13] Padubidri (2006) explained that the safe motherhood implies good health of the pregnant women during pregnancy and also ensures good health of the body. In other words safe motherhood is related to maternal and perinatal mortality and morbidity of 100-200 million deliveries occurring worldwide. 5 lakhs women die during pregnancy, childbirth or soon after. [14] Prism's (2006) stated that a good well balanced diet is required in pregnancy to meet the need of fetus and to maintain the mothers health and prepare for lactation. A high proportion of woman in both industrialized and developing countries become anemic during

Table 1 : Frequency and percentage distribution related to demographic variables of primigravida mothers. N = 100

Demographic variables		Primigravida Mothers	
		No.	%
Age	>21	24	24
	21-25	54	54
	26-30	22	22
Education	NFE	29	29
	Primary	20	20
	HSS	33	33
	Graduates	18	18
Occupation	HW	77	77
	Government Job	5	5
	Self Employee	13	13
	Coolie	5	5
Religion	Hindus	57	57
	Christians	22	22
	Muslims	21	21
Age at marriage	< 18 Years	7	7
	18-21	18	18
	22-26	34	34
	>26 years	41	41
Income	Rs 1590 – 4726	58	58
	Rs 4727 – 7877	26	26
	Rs 7878 – 11876	7	7
	Rs 11877 – 15753	9	9
Type of family	Nuclear	17	17
	Joint	29	29
	Extended	29	29
	Single	14	14
Week of gestation	16-20 Weeks	18	18
	20-25 Weeks	62	62
	25-30 Weeks	28	28
Registration of pregnancy in months	Second Month	40	40
	As soon as	25	25
	Third Month	28	28
	Not Registered	7	7

Table 2 : Frequency and percentage distribution of level of knowledge regarding safe delivery among primigravida mothers.

Level of knowledge	Frequency	Percentage [%]
In adequate knowledge	0	0
Moderately adequate knowledge	54	54
Adequate knowledge	46	46

Fig. 1 : Shows percentage distribution of level of knowledge on safe delivery among primi gravida mothers

pregnancy. Estimates from the WHO reports that from 35% to 75% (56% on average) of pregnant women in developing and 18% of women from industrialized countries are anemic. In India over 54% of pregnant women are anemic and for every 1,00,000 live birth there are 301 maternal death in India. This can be reduced by registering the pregnancy in hospital or centre and mainly should counselled to come for follow up visit till the baby is born safely. [15]

Rosaliza and Muhamad (2011) on knowledge, attitude and practice on antenatal care among orang Asli women in Jempol, Negeri Semilan recorded that, of 104 women who participated in the study, that the knowledge score of the respondents ranged between 7-18 with the mean of 13.5 (SD-2.7) and the median of 14.0 (interquartile range, IQR=3). The proportion of respondents with good knowledge was 44.2 percent with 95% confidence interval of 34.7 to 53.7%. The study recorded that majority of women know that pregnant women need to go for antenatal check up should be done in the first three months. About a quarter did not know, half of the women did not know the complication which may arise with hypertension and diabetes in pregnancy. Only 80% of the Orang Asli women knew that primigravida should deliver in the hospital. [16]

Chandrasekar (2008) reveals that there is a clear association between infant mortality rate and lack of antenatal care. He analyzed the factors which determine the utilization of antenatal care and show the association between quality of antenatal care

and maternal literacy, occupation, age and parity. Factors which are significantly associated are socio economic status, religion and those who do not receive any antenatal care are poor, illiterates, multipara, unskilled mothers over 30 years of age and who live far away from a medical facility. [17]

CONCLUSION

The study concluded that among 100 antenatal mothers, 54 (54%) antenatal mothers have moderately adequate knowledge regarding safe delivery; 46 (46%) have adequate knowledge and 0% of them have inadequate knowledge. And the study reveals that there was a significant association on demographic variables and level of knowledge on safe delivery among primigravida mothers.

Acknowledgement:

The author acknowledges Dr. Jaya Mohan Raj, Former Dean, SRM College of Nursing for constant guidance, We would like to thank study participants and Mr. Karnamurthy P and friends for their constant support.

Conflict of Interest:

Dr. Abirami.P, Ms. Rajathi declares that no conflict of interest. In addition, this study was not funded.

Statement of Human and Animal Rights

All procedures followed were in accordance with the ethical

Table 3 : Association on knowledge on safe delivery among primi mothers with their demographic variables. N = 100

Demographic variables		Level of knowledge						Chi square test
		Inadequate knowledge		Moderately adequate knowledge		Adequate knowledge		
		Frequency	%	Frequency	%	Frequency	%	
Age	<21	0	0	13	24.1	11	23.9	X ² =0.89 P= 0.63 NS
	21-25	0	0	31	57.4	23	50	
	26-30	0	0	10	18.5	12	26.1	
Education	NFE	0	0	15	27.8	14	30.4	X ² =3.88 P= 0.27 NS
	Primary	0	0	8	14.8	12	26.1	
	HSS	0	0	22	40.7	11	23.4	
	Graduates	0	0	9	16.7	9	19.6	
Occupation	HW	0	0	43	73.9	34	73.9	X ² =0.89 P= 0.82 NS
	Government Job	0	0	2	3.7	3	6.5	
	Self employee	0	0	6	11.1	7	15.2	
	Coolie	0	0	3	5.6	2	4.3	
Religion	Hindus	0	0	33	61.1	24	52.2	X ² =0.83 P= 0.65 NS
	Christians	0	0	11	20.4	11	23.9	
	Muslims	0	0	10	18.5	11	23.9	
Age at which married	< 18 years	0	0	2	3.7	5	10.9	X ² =8.84 P= 0.031 Significant
	18-21 years	0	0	15	27.8	3	6.5	
	22-26 years	0	0	16	29.6	18	39.1	
	<26 years	0	0	21	38.9	20	43.5	
Income	Rs1590-4726	0	0	35	64.8	23	50	X ² =3.16 P= 0.36NS
	Rs4727-7877	0	0	12	22.2	14	30.4	
	Rs7878-11877	0	0	4	7.4	3	6.5	
	Rs 11877-15753	0	0	3	5.6	6	13	
		0	0	0	0	0	0	
Type of family	Nuclear	0	0	10	18.5	7	15.2	X ² =9.32 P= 0.95 NS
	Joint	0	0	15	27.8	14	30.4	
	Extended	0	0	22	40.7	18	39.1	
	Single	0	0	7	13	7	15.2	
Duration of gestation	16-20 weeks	0	0	7	13	11	23.9	X ² =9.96 P= 0.007 Significant
	21-25 weeks	0	0	41	75.9	21	45.7	
	26-30 weeks	0	0	6	11.1	14	30.4	
Registration of pregnancy	As soon as	0	0	13	24.1	12	26.1	X ² =1.09 P= 0.77 NS
	Second month	0	0	22	40.7	18	39.1	
	Third month	0	0	14	26	14	30.4	
	Not registered	0	0	5	9.3	2	4.3	

standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2008

Statement of Informed Consent

Informed consent was obtained from all the study participants for being included in the study.

REFERENCES

1. www.who.int/reproductivehealth/publications/maternal_perinatal_health/RHR.../en/. WHO antenatal care randomized trial: manual for the implementation of the new model. WHO/RHR/01.30. Geneva, World Health Organization, 2001.
2. Reproductive and child health module for health worker female (ANM) published by National Institute of Health and family welfare Newdelhi ,2005:P177 ,219-228.
3. https://www.unfpa.org/sites/default/files/pub-pdf/annual_report03 United Nation Fund for population Activities: Safe motherhood 2002.
4. Mac.Lean G, Safe motherhood in the united kingdom, Midwife, 1994 :4(6).10-4.
5. Chatterjee A; Strategies for Safe motherhood; Journal Indian Medical Associations 2005:93(2).P43-46
6. D.C.Dutta, Text Book of obstetrics, New Central Book agency (pvt) Ltd, Kolkatta,2004, P 599-605.
7. Park.k Essential of Community Health Nursing, Banarsidas Bhanot publication, Jabalpur, 2004, P 332.
8. Thomson JB, International policies for achieving and safe motherhood, women lives in the balance, Health care women International 2005:26 (6): 472-83
9. Basavanthappa BT, Community Health Nursing, Jaypee Brother Publication,New delhi, P 474- 475
10. Erin Sines, Uzma sayed, Steve Wall and Heidi Worky, Postnatal care A critical opportunity to save mothers and new borns, Population Reference Bureau,2007:1-6
11. Goyal S.K Women and Health services; Journal of social welfare 2002, 21(3).
12. Jusophine, Boobs Bottom and Bunches of Grapes - Postnatal care- review, 2007:20(8),12
13. V. Padubidri. Text book of obstetrics, B.I. publication,Chennai 2006, 215
14. Padubidri ,safemotherhood,The Nursing Journal of India,11(3),2008:42
15. Prism.S,Nutritional status of antenatal mothers and postnatal mothers in selected areas at vellore, Medical journal of Dr.Dy,patil university, 2006: 7(6); 703
16. Rosalia, A. M. & Muhammad, J. J. Knowledge, attitude and practices on antenatal care among orang asli women in Jrempel, Nigeria Sembelian. Malaysian. Journal of public health medicine,2011: 11(2), 13-21
17. Chandrasekar "knowledge and practice among Antenatal care facilities" J Pak med Association, 2008 :55(2),53-56