

A Community Based Survey to Assess the Prevalence of Antepartum Risk Factors Among Women in A Rural Area, Salem, Tamilnadu.

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Date of Submission : 30.01.2020

Date of online Publication : 31-03-2020

Date of Acceptance : 06.03.2020

Date of Print Publication : 31-03-2020

ABSTRACT

Background: The maternal and child health has been one of the most important matters of concern, mainly in the developing countries because of higher maternal morbidity and mortality. So this was conducted to assess the prevalence of antepartum risk factors among women in a rural area of Salem, Tamil Nadu. **Objectives:** To study the pattern of antepartum morbidity among pregnant women and the factors influencing it; To study the health seeking behaviour among pregnant women. **Methods:** A Cross sectional study was done among pregnant women (n= 164) in all three trimesters registered in Poolavari PHC which is attached to Vinayaka Missions Kirupananda Variyar Medical College, Salem using a structured questionnaire. **Results:** The prevalence of antepartum risk factors among the study participants is as follows. Out of them 13.4% were teenagers while 0.6% were elderly primi. 15.9% were anemic and 7.9 had preeclampsia. Of them 5.5% had previous miscarriages, 0.6% had previous stillbirth, 11.8% delivered their previous child through LSCS. **Conclusions:** Most of the antepartum risk factors and their outcomes are preventable with proper prenatal care which should be ensured at the primary health care level.

Key word: Antepartum risk factor, rural area, LSCS, Anemia, MCH**INTRODUCTION**

Pregnancy is a state of high physiological demand. The maternal and child health has been one of the most important matters of concern, mainly in the developing countries because of higher maternal morbidity and mortality¹. Maternal and neonatal mortality is still very high at a global level, even though its reduction is a goal established among the Sustainable Development Goals by the United Nations². Women in less developed countries have, on average, many more pregnancies than women in developed countries but the quality of care that women has received during pregnancy is also not upto the mark and their lifetime risk of death due to pregnancy is higher. FOGSI listed out around 16 causes for high risk pregnancy, which would eventually affect the outcome of pregnancy³, both the mother and child. Lack of proper birth plan and lack of access to health services and its underutilisation are also the major causes of maternal morbidities, especially in the rural areas. So this was conducted to assess the prevalence of antepartum risk factors among women in a rural area of Salem, Tamil Nadu.

METHODS

The survey was done with the objectives to study the pattern of antepartum morbidity among pregnant women and the factors influencing it and to study the health seeking behaviour among pregnant women.

It was conducted as a Cross sectional study among pregnant women (n= 164) in all three trimesters registered in Poolavari PHC which is attached to Vinayaka Missions Kirupananda Variyar Medical College, Salem. This study included all pregnant women registered in Poolavari PHC in two years, 2017 and 2018 excluding the pregnant women who were hospitalised. Structured questionnaire was used to collect data on antepartum risk factors and certain socio-demographic factors of the study participants who gave consent for the study. The data was collected after getting approval from the Institutional Ethical Committee (IEC) for a period of two years (2017-2018, 2018- 2019) and analysed with software package SPSS version 16.0.

RESULTS

A total of 164 pregnant women gave consent and participated in the study. The age distribution of the participants was between 19 to 34 years. The mean age of the participants was 24.5 years. Out of the total participants 5.5% were illiterates, 57.2% were employed and majority of them 62.2% belong to class 2 socioeconomic status based on modified B G Prasad scale. (Table 1).

Table 1: Background Characteristics of study population

Age group	Total No.(n=164)	Percentage(%)
15 – 20 yrs	41	25
21 – 25 yrs	83	50.6
26 – 30 yrs	37	22.6
31 – 35 yrs	3	1.8
Marital Status		
Yes	164	100
Age at Marriage		
≤ 18 yrs	28	17.1
> 18 yrs	136	82.9
Duration of Married life		
< 1 yr	50	30.5
1 – 5 yrs	92	56.1
> 5 yrs	22	13.4
Educational Qualification		
Illiterate	9	5.5
Primary Education	26	15.9
Secondary Education	103	62.8
Graduate	25	15.2
Professionals	1	0.6
Occupation		
Unemployed	84	51.2
Employed	80	48.8
Husband's Educational Status		
Illiterate	11	6.7
Primary Education	9	5.5
Secondary Education	120	73.2
Graduate	24	13
Husband's Occupation		
Unemployed	14	8.5
Employed	150	91.5
Socioeconomic Status		
Class 5	3	1.8
Class 4	20	12.2
Class 3	39	23.8
Class 2	102	62.2

Looking at the antepartum risk factors among the study participants 13.4% were teenagers while 0.6% were elderly primi. 15.9% were anemic and 7.9 had

preeclampsia. Of them 5.5% had previous miscarriages, 0.6% had previous stillbirth, 11.8% delivered their previous child through LSCS. (Table 2).

Table 2: Prevalence of Antepartum risk factors

Risk factor	Total No. (n = 164)	Percentage(%)
Extreme of ages		
Teenage pregnancy	22	13.4
Elderly Primi	1	0.6
Short stature	18	10.97
Co-Morbidities		
Anaemia	26	15.9
Pre eclampsia	17	7.9
Multiple Pregnancy	1	0.6
Previous Miscarriages	9	5.5
Previous Stillbirth	1	0.6
Previous IUDs	3	1.8
Previous LSCS	17	21.8
Previous Instrumental delivery	4	2.4
Previous Instrumental delivery	4	2.4

Table 3: Association of teenage pregnancy to educational status of pregnant women

Educational Status	Teenage pregnancy		Odds Ratio	95% CI	'p' Value
	Yes	No			
Primary education					
Completed	9	9		1.14 –	
Not completed	13	116	3.06	7.9	0.05

Table 4: Association of certain antepartum risk factors with anaemia

Educational Status	Anaemia		Odds Ratio	95% CI	'p' Value
	Yes	No			
Literacy					
Illiterates	2	7			
Literates	24	131	1.6	0.2-7.5	0.75
Age at marriage					
< 18 years	5	23			
>18 years	21	115	1.2	0.4-1.4	0.59

Among the study participants, women who didn't complete their primary education found to have 3 times higher odds of getting married and getting pregnant in their teens compared to those who have completed primary education and the result was statistically significant. On comparing certain antepartum risk factors with anemia, illiterates found to have 1.6 time higher odds of being anemic than literates, women who got married at the age less than 18 years had 1.2 times higher odds of being anemic than women who got married after 18 years.

But these associations were not statistically significant. (Table 3).

DISCUSSION

Most of the antepartum risk factors and their outcomes are preventable with proper prenatal care. This current study was conducted in a primary health centre in a rural area of Salem. The mean age of the study participants was 24.5. A study by Babu G et al⁴ also revealed 75% of the study participants were between 18-25 age group. In the current study 5.5% were illiterate while the study by Babu G et al reported 10% of the participants were illiterates. The current study revealed almost half of the patients were employed but the study by Babu G et al reported only 9% were employed.

In our current study 17% of the women are married before 18 years of age. District Level Health Survey⁵ data 4 revealed that mean age of marriage of women in rural India is 21.5 and around 4% of the women are married before 18 years of age which is very much less than the current study.

A study by Mukhopadhyay et al reported almost 56.6% of the pregnant women had atleast one antepartum risk factor⁶. The current study revealed 15.4% of participants are anemic. On comparing with fourth National Family Health Survey data⁷ for Tamil Nadu which reported 53.4% of pregnant women are anemic our study reported very less prevalence, which might be because of good antenatal care. Our study revealed 7.9% of the study participants had preeclampsia which is almost similar to the study done by Ray⁸ et al reported 7.4% of the pregnancy related complications are due to preeclampsia.

ACKNOWLEDGEMENTS

I would like to thank the Dean of our college and other colleagues of our department for extending their support in conducting this study and the medical officer of Primary Health Centre, Poolaveri, Salem for helping us to carry out this study.

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Conflict of Interest : None

Source of funding support : Nil

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