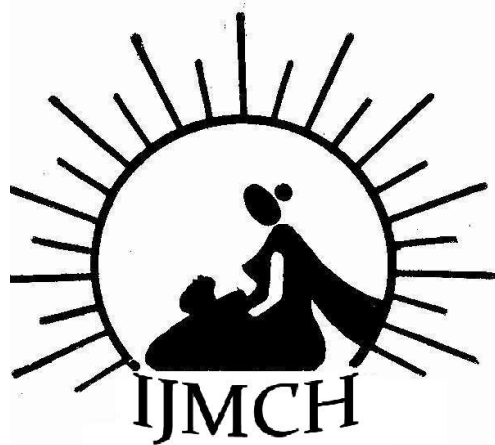


A study on Utilization of Antenatal care services among pregnant women in urban slum of Raichur district

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What are the antenatal care practices and factors influencing them among urban slum area in Raichur District?

A study on Utilization of Antenatal care services among pregnant women in urban slum of Raichur district

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ABSTRACT: Research question: What are the antenatal care practices and factors influencing them among urban slum area in Raichur District?

Study setting: Urban slum area (Harijanwada) of Raichur Town.

Study design: Cross sectional study.

Sample size: A total of 380 mothers.

Methodology: House to house survey among mothers who delivered during June 2010 to May 2011.

Results: Out of 380 mothers 375(98.7%) had registered for Antenatal checkups. Majority of the mothers 348 (92.8%) registered their pregnancy in first trimester, 304(80.8%) of the mothers utilized full ANC (> 3 antenatal visits, atleast one dose of TT,> 100 IFA Tab) The sociodemographic factor like literacy, status, occupation, type of family socio economic status were found to influence the pattern of utilization

Key words: Utilization: - Antenatal checkups , sociodemographic factor, mothers, urban slum.

INTRODUCTION

Women are not dying because of diseases we cannot treat...They are dying because societies have yet to make the decision that their lives are worth saving.

-Mahmoud Fathalla

Mother and child in a community constitute vulnerable group or special risk group. But during this period they are more vulnerable to disease and death¹.India contributes to 26% of the global burden of maternal deaths with nearly 1,36,000 women dying annually due to causes related to pregnancy and childbirth ². Childbirth is universally celebrated event, an occasion for dancing, fireworks, flowers and gifts. Yet, for many thousands of women each day, childbirth is experienced not as the joyful event it as should be, but as a private hell that may end in death. Childbirth is a memorable event and death in childbirth even more³

Motherhood is the basis of family life, which in turn is the backbone of all order of society. Promoting women's health improves not only individual health but also the health of the family, community and the nation ⁴

The major causes of maternal deaths are hemorrhage, puerperal sepsis, complications of abortion, obstructed labor, and hypertensive disorders associated with pregnancy. Many of these deaths could have been avoided if the pregnant women had sought full antenatal and timely delivery care⁵

Most of the pregnant in these countries live where poverty, illiteracy, mal-nutrition, poor sanitation, gender bias, unequal feeding practices, religion taboo and lack of availability of medical facilities render them prone for health hazards which are preventable ⁶

Raichur is a district in North Karnataka. Not many studies were carried out so far in Raichur, Hence this study was carried out in an urban slum of Raichur town to study the utilization of Maternal Health services.

OBJECTIVES

- To study the utilization pattern of maternal health services.
- To find out the factors influencing the utilization of maternal health services.

METHODOLOGY

Study area: The study was conducted in an urban slum (Harijanwada) of Raichur town; the headquarters of Raichur district in Karnataka which is located at 16.2° N 77.37° E. It comes under the Hyderabad-Karnataka region and is one of the backward districts according to Nanjundappa Commission⁷. According to 2011 census, the total population of the district is 19, 24,773.

Study Design: Community based cross sectional study

Study period: The present study was conducted for a period of one year from June 2010 to May 2011

Study population: All married women residing in Harijanwada slum area, who had delivered in one year period (June 2010 to May 2011).

Inclusion criteria Women who had delivered during one year period (June 2010 to May 2011)

Exclusion criteria Women who were not willing to participate in the study were excluded.

Study Setting: The study was undertaken in the Harijanwada slum area in Raichur city

Sample Size calculation: With a Prevalence of 56%.⁸, allowable error of 5%, the calculated sample size is 378 by using the formula $n = Z^2pq/d^2$.

Sampling in each sub center:

Women who have delivered in last one year			Women enrolled in the study
Sub center names	Total population	Total no of deliveries conducted in last one year	
Harijanwada	11435	311	171
Madipet	9700	161	87
Devinagar	10,567	221	122
Total	31,702	693	380

Sampling Technique: Total population was divided into subcenters (strata) by using stratified random sampling with proportion allocation method then from each stratum the sample was selected by using simple random sampling.

Method of collection of data

A list of women, who had delivered during the last one year (June 2010 to May 2011) according to the subcenter was prepared with the information obtained from ANM/MPHW(F) and anganwadi worker and study was conducted for 3 days in a week from 9:00 AM to 12:30 noon. Informed consent was obtained, data was collected according to predesigned and pretested questionnaire which includes information on antenatal care along with socio-demographic variables.

Statistical Analysis

Descriptive statistics -Mean, Standard deviation and proportion were used to present the data.

Association between utilization of maternal health services and sociodemographic profile was done by using Chi-square test and fisher's test for small sample size.

The variables which have shown association with utilization of maternal health services are included in the Logistic regression to find out the factors influencing the utilization of maternal health services.

Microsoft office word and Microsoft office excel have been used to generate the tables and graphs.

Results and discussion

The mean age of the mothers in the present study was 23.07 ± 3.37 years and Majority of the mothers were in the age group of 20-24 years 222(58.4%). In our study 338 (88.9%) of mothers were Hindus, 36(9.5%) were Muslims and 6(1.6%) were Christians. (159) 41.8% were illiterate while 221 (58.1%) were literate. Majority of the mothers belonged to Class IV 216(56.8%) and Class V 98(25.8%), while only 23(6.1%) belonged to Class II according to Kuppaswamy classification

Table 1: Socio demographic characteristics

Demographic characteristics	Frequency	Percent
Age (in years)		
15-19	40	10.5
20-24	222	58.4
25-29	100	26.3
30-34	14	3.7
35-39	4	1.1
Religion		
Hindu	338	88.9
Muslim	36	9.5
Christian	6	1.6
Literacy Status		
Illiterate	159	41.8
Literate	221	58.1
Socioeconomic status		
Class II	23	6.1
Class III	43	11.3
Class IV	216	56.8
Class V	98	25.8

Table 2: Baseline utilization of antenatal services.

Registration of ANC	Frequency	Percent
Yes	375	98.7
No	5	1.3
Time of registration		
1st trimester	348	92.8
2nd trimester	22	5.9
3rd trimester	5	1.3
TT injection received		
Yes	376	98.9

No	4	1.1
IFA consumed		
Inadequate (<100 tabs)	46	12.3
Adequate (>=100 tabs)	327	87.7
Full antenatal care*		
Not Utilized	72	19.2
Utilized full ANC	303	80.8

*Full Package of ANC i.e. 3 or more antenatal visits, at least one tetanus toxoid injection and received 100 or more iron and folic acid tablets.

In the present study, Majority 375 (98.7%) of the mothers had registered for antenatal checkup and 5(1.3 %) were not registered. 348 (92.8%) registered their pregnancy in first trimester, 376 (98.9%) of the mothers were immunized with two doses of tetanus toxoid injection only 4 (1.1%) were not immunized. In our study, majority 327 (87.7%) of the mothers had consumed 100 or more IFA tablets and 46(12.3%) consumed inadequate (<100) IFA tablets.303 (80.8%) of the mothers had utilized full antenatal care during pregnancy.

Table 3: utilization of antenatal services

Religion			χ^2	p-value
	Not utilized (%)	Utilized (%)	2.86	0.09
Hindu	61 (18.2)	274 (81.1)		
Muslim	9(25.7)	26 (74.3)		
Christian	3(50)	3 (50)		
Socioeconomic status				
II	3 (13.04)	20 (86.96)	42.72	0.09
III	5 (11.63)	38 (88.37)		
IV	40 (18.87)	172 (81.13)		
V	25 (25.51)	73 (74.49)		
Occupation				
Housewife	51(15.94)	270(84.38)	17.45	0.00001
Working	22(40.00)	33(60.00)		
Type of family				
Joint family	55 (20.45)	214 (79.55)	0.642	0.423

Nuclear family	18 (16.82)	89 (83.18)		
Literacy status				
Illiterate	40(25.5)	117(74.5)	6.33	0.01
literate	33(63.5)	186(90.2)		

In present study ,When Full ANC was compared based on mothers religion (considering Hindus as one group and non Hindus like Muslims and Christians as another group), it showed that 61(18.2%) mothers belonging to Hindu family did not utilize Full ANC which was less when compared to other religion 12 (75.7%),which was not statistically significant. When Full ANC was compared based on SES status of mothers (middle SES like II and III together considered as one ,class IV and V considered as one group) it was observed that 8(12.1%) of mothers from middle socioeconomic status (class II and III) did not utilize full ANC when compared with 65 (21%) of the mothers among lower socioeconomic status (class IV and V) .The differences was not statistically significant.

In our study, literacy status of mothers (illiterate considered as one group and literate as another group) it was noted that 40(25.5%) of illiterate mothers had not utilized full antenatal care compared to literate mothers which was 33(15.1%), the difference between literacy status and full ANC was statistically significant.

In present study, when full ANC was compared with mothers occupation it was observed that, 51 (15.94%) of housewives did not utilize Full ANC when compared to working mothers 22 (40.00%). The difference in utilization of antenatal service among housewives and working mothers was highly significant. It was observed that 55(20.45%) of mothers belonging to joint family did not utilize full ANC services when compared to 18(16.82%) among mothers belonging to nuclear family. Which was not statistically significant.

Summary and conclusion

The present study has shown that the utilization of antenatal services by the urban women of Raichur District is significantly associated with literacy status of the woman and social-economic class of the family.

The results of the present study reveals that utilization of antenatal services was good but full antenatal care utilization were reduced.

The prime reason for non compliance of IFA tablets was side effects, it has to be tackled.

It was happy to note that mothers had institutional delivery .Doctors conducted most of the deliveries .most of the mothers utilized health services from government hospitals this shows people were aware of health services available at government hospitals.

Health education and creating awareness mainly among the lower socio-economic class and illiterate women will improve the utilization of antenatal services even more

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