



ACCESSIBILITY AND UTILIZATION OF MATERNAL HEALTH CARE SERVICES BY FISHER FOLK: A STUDY IN CHEPALUPPADA VILLAGE OF VISAKHAPATNAM DISTRICT

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Abstract

To assess the accessibility, utilization and satisfaction of Maternal and Child Health services (MCH) provided by government health facility, community based study was conducted in a sub-centre area of the Chepala uppada village of Visakhapatnam District. About 181 Vadabalija women of age 15-45 years were selected for the study. The study focuses on most recent births to ever-married women that took place during the four years prior to the date of the survey. Chi-square test was used to study the association between categorical variables and utilization of Maernal and Child Health care services. Results of this study indicate that even though availability and accessibility of health care services in the village are relatively low when compared to urban areas, this higher likelihood for Vadabalija rural women receiving antenatal care could be due to the role of AHSA workers, Anganwadi workers and also ANM who visit and provide antenatal care at home.

Key words: Accessibility, healthcare, Maternal Utilization

Introduction

Improving maternal health is one of the eight Millennium Development Goals, the target for which is to reduce the maternal mortality ratio (MMR) by three quarters from 1990 to 2015. According to the World Health Organization, every minute, at least one woman dies from complications due to preventable causes related to pregnancy and childbirth – that means 529 000 women a year. In addition, for every woman dying in childbirth, around 20 more suffer injury, infection or disease – approximately 10 million women each year.

It is widely accepted that the use of maternal health services helps in

reducing maternal morbidity and mortality and influenced by many factors. Various studies conducted worldwide have recognized socio-economic factors and service delivery environment as important determinants for the use of maternal health services. Among several many reasons, the lack of maternal health care utilization has been marked as an important cause for the large number of maternal deaths. In addition, medical causes like hemorrhage (both ante and post partum), sepsis, toxemia during pregnancy, abortions obstructed labor and non medical causes like illiteracy/low levels of education among females, early marriage, short birth intervals, women belonging to unprivileged sections and poor economic



status, short birth intervals, access to skilled birth attendants, emergency obstetric care, prenatal care, levels of anaemia, availability, distance, cost, and quality of services, and personal health beliefs. It is seen that, while 75 per cent of pregnant women use any type of ANC, the institutional delivery ended up in merely 47 per cent (IIPS,2010). The figures were even lower in rural areas in general and backward section in particular reflecting non-acceptance or poor utilization/underutilization of maternal health care services

Vadabalija is one among marine fishing community in Visakhapatnam of Andhra Pradesh, and educationally economically and also socially backward and are different from general population with their own physical, socio economic and cultural environment. Due to high levels of poverty, ignorance, and life style they are highly vulnerable to various health problems. Poverty, consequent low purchasing power, poor environmental sanitation and hygiene lack of safe drinking water, lack of access to health facilities in resulting in high morbidity and mortality in fishing communities.

Though the utilization of maternal and child health services is important from medical and public health point of view, very limited regional/community studies were conducted on this problem in India specifically among caste populations of Andhra Pradesh. With this back drop the present study has been carried out with the objective of to document maternal health status and analyse the patterns in

utilization of antenatal care and satisfaction, skilled birth assistance and health seeking behavior of women belonging to Vadabalija caste of Chepala Uppada village of Bheemili mandal. The study was conducted in 2010-11. This empirical study was carried out by me as research assistant in UGC sponsored Centre for study of social Exclusion and Inclusive Policy at Andhra University; I acknowledge the UGC, New Delhi for giving me an opportunity to conduct this study.

Materials and Methods

A village 'Chepalauppada*', 22 Km away from Visakhapatnam city, has been selected for the present study. Fishermen (Vadabalija- listed backward classes) constitute an overwhelming majority of the population in the village. The study village has **one sub centre** and was administered by single nurse (ANM) and no other paramedical staff was available.

Nurse (ANM), who visits once/twice a month, who is assisted by the Anganwadi worker for family health delivery services. She gives vaccination and medicines. There are no private nursing homes or clinics in the village; the nearest town is Bheemunipatnam, where such facilities are available. The nearest district hospital is located at a distance of 20 km from Chepalauppada, in Visakhapatnam. If there was an obstetric emergency, they have to go to PHC or KGH or Registered Medical Practitioner (RMP who lived in Nerlavalasa) by bus, auto or 108 health services. Women have great faith on him



and the RMP have been able to cure almost all reported illness. Further, village has **2 AWCs** and **2 ASHA** workers to educate women health related issues.

The present study was conducted on Vadabalija women aged 15-45 years. A total of 181 ever-married women were selected at random from Chepala Uppada village of Bheemili mandal, 25 km away from the city of Visakhapatnam, on the basis of purposive sampling. Along with their demographic profile details relating to utilization of ante natal care and post natal care facilities, delivery care, and health seeking behavior are collected through interview method. Data was coded, entered and analyzed by using SPSS (version 11.0) package. Data was presented in percentage and frequency. Chi-square test was used for evaluating association between antenatal care (ANC) and categorical variables. The study was mainly focused on the utilization of four maternal health care services during pregnancy and the birth of the reference child. They are:

1. ANC registration, at any time
2. Received required TT injections
3. Consumption of Iron Folic Acid tablets
4. Place of delivery

Results

The mean age of women was 25.32 ± 5.28 years. Majority of women

and their husbands were illiterates. 81.8 per cent were housewives, in 70.2 per cent families husband was sole breadwinner, had fish catch as primary occupation (56.9 per cent) and coolie (worked as a daily wage laborer) as secondary occupation (44.8 per cent) and total monthly family income ranges from Rs.1000/- to 6000/- The mean family size is 4.63 ± 1.47 members and 71.8 per cent these families are of nuclear type.

Table 1 shows utilization of Antenatal services by studied mothers. Out of the total 181 mothers studied 171 (94.5 per cent) had received any antenatal check-up while 5.5 per cent had not received any antenatal check-up. ANM was the service provider for antenatal care in only 2.3 per cent of cases while 97.1 per cent of the women preferred a doctor for antenatal check-ups. Overall, only 34.8 per cent of the pregnant women had received full ANC, i.e. two doses of TT, consumed required number of IFA tablets and at least 3 ANC visits during their pregnancy period. As regards the place of delivery, 40.9 per cent of the deliveries were conducted at home, while 38.1 per cent of deliveries were conducted at government health facility and 21.0 per cent in private hospitals. Out of total women 63.0 per cent had their delivery conducted by health professional while 37.0 per cent of the deliveries were conducted by non health professional.



Table 1: Percentage Distribution of pattern of maternal health care utilization of Vadabalija women

Antenatal care (N=181)	Frequency	Per cent
Approach for ANC		
Yes	171	94.5
No	10	4.5
ANC Provider		
Doctor	166	97.1
ANM	4	2.3
Lady health visitor	1	0.5
Place of ANC		
Govt. Hospital	111	64.9
PHC	2	1.2
Sub centre	2	1.2
Private hospital	54	31.6
At home by ANM	2	1.2
IFA tablets		
Yes	171	94.5
No	10	5.5
TT vaccine		
Yes	170	93.9
No	11	6.1
Place of delivery		
Home	69	38.1
GHF	38	21.0
PHF } (Institutional delivery)	114	63.0
	67	37.0
Birth attendant		
Health professional(Doctor/Nurse etc)		
Non health professional(UTBA/elder person etc)		

Perceived barriers to maternal health-care utilization in hospitals/ health centers among the participants were they did not feel the necessity to go to a health care provider/ customary and did not allow the family/husband to receive antenatal care, also it cost too

much, apprehensions regarding check up, lastly, unaware of these importance of check-ups. Traditional practices were the single most important reason for conducting the deliveries at home. Other main reasons were availability of elder women at home, , better care at their



homes, fear about hospital delivery i.e cost is too much, if they go for hospital delivery, they (health personnel) will conduct delivery by episiotomy (fear about hospital services). During Post partum period, 48.1 per cent of the mothers had received postnatal care, the routine checkups by Doctors, Nurses, ANMs and TBAs. Mostly they received advises on follow-up care of the new born and on breast feeding and also about aspects of birth control in certain instances.

The socioeconomic and demographic characteristics of the participant women in relation to utilization of antenatal care, IFA tablets and TT injection are shown in Table 2. The study results indicated that the utilization of ANC services for the most recent birth was significantly associated and higher among younger age group, among those who are house wives, and among educated fathers. But no significant association was found with education of women, type of family, birth order and family income.

Likewise, it was observed that the consumption of IFA tablets and used of TT injection was significantly higher among younger age mother, housewives, and also among mothers of higher order births(2 or more), but it was not associated with education of the mother, education of the father, type of family and family income. Type of family was not associated with ANC services utilization, consumption of IFA tablets, taken of TT injection, but it was found to be significantly associated with delivery

practices. Nuclear families preferred to institutional deliveries. However, the proportion of births occurring in health facility is significantly higher for mothers under 30 years of age (Table: 3), among non-working women and lower order births. The proportion of births that were delivered in a health facility decreases as birth order increases. Further Illiterate women were significantly more likely to deliver a baby at home compared to literate mother. No significant association was observed between delivery care and education of husband and family income.



Table:2 Socioeconomic and demographic characteristics of the participants

characteristics	Total no.	Antenatal care		'p' value		IFA tablets		'p' value	TT Injection		P. Value *Significant at 0.05 level; **significant at 0.01 level
		Yes (n=171) No(%)	No(n=10) No (%)	Yes (n=154) No(%)	No(n=27) No(%)	Yes (n=170) No(%)	No(n=11) No (%)				
Age(years)											
<=20	30	29(17.0)	1(10.0)	29(18.8)	1(3.7)	0.022*	0.000**	29(17.1)	1(9.1)	0.000**	
21-30	119	115(67.3)	4(40.0)	105(68.2)	14(51.9)			117(68.8)	2(18.2)		
>30	32	27(15.8)	5(50.0)	20(13.0)	12(44.4)			24(14.1)	8(72.7)		
Education of women											
Illiterate	120	111(64.9)	9(90.0)	97(63.0)	23(85.2)	0.235	0.078	109(64.1)	11(100.0)	0.051	
Primary	35	34(19.9)	1(10.0)	33(21.4)	2(7.4)			35(20.6)	0		
Above primary	26	26(15.2)	-	24(15.6)	2(7.4)			26(15.3)			
Education of husband											
Illiterate	77	68(39.8)	9(90.0)	65(42.2)	12(44.4)	0.007**	0.856	70(41.2)	7(63.6)	0.076	
Primary	49	48(28.1)	1(10.0)	41(26.6)	8(29.6)			45(26.5)	4(36.4)		
Above primary	55	55(32.2)	-	48(31.2)	7(25.9)			55(32.4)			
Occupation of women											
Housewife	148	143(83.6)	5(50.0)	131(85.1)	17(63.0)	0.007**	0.006**	142(83.5)	6(54.5)	0.016*	
working	33	28(16.4)	5(50.0)	23(14.9)	10(37.0)			28(16.5)	5(45.5)		
Type of family											
Nuclear	130	122(71.3)	8(80.0)	111(72.1)	19(70.4)	0.408	0.756	121(71.2)	9(81.8)	0.387	
Joint	25	25(14.6)	-	22(14.3)	3(11.1)			25(14.7)	-		
Extended	26	24(14.0)	2(20.0)	21(13.6)	5(18.5)			24(14.1)	2(18.2)		
Birth order											
1	63	63(36.8)	-	59(38.3)	4(14.8)	0.055	0.000**	63(37.1)	-	0.001**	
2	68	63(36.8)	5(50.0)	62(40.3)	6(22.2)			65(38.2)	3(27.3)		
3	43	38(22.2)	5(50.0)	29(18.8)	14(51.9)			35(20.6)	8(72.7)		
4	7	7(4.1)	-	4(2.6)	3(11.1)			7(4.1)	-		
Family income(monthly)											
<= Rs.1500/-	112	105(61.4)	7(70.0)	91(59.1)	21(77.8)	0.586	0.065	104(61.2)	8(72.7)	0.445	
>Rs.15001	69	66(38.6)	3(30.0)	63(40.9)	6(22.2)			66(38.8)	3(27.3)		



Table: 3 Socioeconomic and demographic characteristics of the participants in relation to Place delivery

characteristics	Total no.	Place of delivery			'p' value
		home	GHF	PHF	
Age(years)					
<=20	30	5(6.8)	19(27.5)	6(15.8)	0.000**
21-30	119	47(63.5)	47(68.1)	25(65.8)	
>30	32	22(29.7)	3(4.3)	7(18.4)	
Education of women					
Illiterate	120	59(79.7)	40(58.0)	21(55.3)	0.029*
Primary	35	10(13.5)	16(23.2)	9(23.7)	
Above primary	26	5(6.8)	13(18.8)	8(21.1)	
Education of husband					
Illiterate	77	37(50.0)	24(34.8)	16(42.1)	0.486
Primary	49	18(24.3)	21(30.4)	10(26.3)	
Above primary	55	19(25.7)	24(34.8)	12(31.6)	
Occupation of women					
Housewife	148	54(73.0)	63(91.3)	31(81.6)	0.018*
working	33	20(27.0)	6(8.7)	7(18.4)	
Type of family					
Nuclear	130	54(73.0)	43(62.3)	33(86.8)	0.039*
Joint	25	7(9.5)	14(20.3)	4(10.5)	
Extended	26	13(17.6)	12(17.4)	1(2.6)	
Birth order					
1	63	14(18.9)	38(55.1)	11(28.9)	0.000**
2	68	28(37.8)	25(36.2)	15(39.5)	
3	43	26(35.1)	6(8.7)	11(28.9)	
4	7	6(8.1)	-	1(2.6)	
Family income(monthly)					
<= Rs.1500/-	112	49(66.2)	40(58.0)	23(60.5)	0.587
>Rs.15001	69	25(33.8)	29(42.0)	15(39.5)	

*Significant at 0.05level; **significant at 0.01 level

As shown in table 4, the prevalence of medical problems like anemia, odema, frequent vomiting, high B.P, Jaundice, Malaria, weak/no moment of foetus found to be significantly higher among women without ANC(64.3 per cent) than those seeking ANC(20.0). Obstetric problems like prolonged labour, obstructed labour, excessive bleeding were observed to be more frequent among antenatal clinic attendees than non attendees. Institutional deliveries were found to be significantly more among women who had ANC (61.4 per

cent) than who had not received ANC (20.0 per cent). However, significantly more number of deliveries was conducted by health professional among ANC receivers (58.5 per cent) than non receivers (10.0 per cent). Initiation of Breastfeeding within 24 hours of delivery was better in women who had ANC (50.3 per cent) than in women who had not had ANC (20.0 per cent). Discarding of colostrums was significantly low among women who had received ANC (35.7 per cent) than in women who have not received ANC (80.per cent).



Table: 4 some factors in relation to utilization of maternal health-care services by the women

characteristics	Total no.	Antenatal care		'p' value
		Yes (n=171) No(%)	No(n=10) No (%)	
Health problems during pregnancy No Yes	112 69	110(64.3) 61(35.7)	2(20.0) 8(80.0)	0.005*
Obstetric problems during delivery No Yes	144 37	135 (78.9) 36(21.1)	9 (90.0) 1(10.0)	0.400
Place of delivery Home Institutional	74 107	66(38.6) 105(61.4)	8(80.0) 2(20.0)	0.010*
Delivery conducted by Health professional Non health professional	101 80	100(58.5) 71(41.5)	1(10.0) 9(90.0)	0.003*
Mode of delivery Normal Episiotomy C-section	146 25 10	136(79.5) 25(14.6) 10 (5.8)	10(100.0)	0.281
Postnatal care visit Yes No	87 94	81(47.4) 90(52.6)	6(60.0) 4(40.0)	0.437
Breastfeeding within 24 hours Yes no	88 93	86(50.3) 85(49.7)	2(20.0) 8(80.0)	0.062
Squeezed colostrums Yes no	69 112	61(35.7) 110(64.3)	8(80.0) 2(20.0)	0.005*

*Significant at 0.05level; **significant at 0.01 level

Discussion:

Utilization of maternal health care services can have significant consequences for both the safe transition of mother through pregnancy and child birth, and the survival and health of the child during the early years of life. In the present study, maternal health care utilization has been analyzed under three categories namely the use of antenatal care, received of IFA tablets, taken of TT injection and place of delivery. The predictive factors studied were age of the women, education of the women and her

husband, type family birth order and family income. In was observed from the present study, 94.5 % of the women had received at least one or any antenatal checkup during the last pregnancy. This is higher than the national rural average figures like 70.6% from DLHS-3(2007-08 India) and similar to sate level data. Utilization of individual ANC service like received TT injection(92.2%) during last pregnancy was more than the national rural average (68.7%) and district rural data (79.4%) and equal to state(92%) rural utilization rates as



found in DLHS-3. The proportion of women received full ANC (34.8%) was less than the national rural average (50.2%) and similar to state rural data (35.2%) reported in DLHS-3 for India and Andhra Pradesh. It was observed from the study 59.1% of the study subjects had institutional deliveries and home deliveries (40.9%) conducted by a trained person was 9.5% was more than the corresponding figures of 37.9% and 5.7% for India rural data (DLHS-3), 46.6% and 1.3% for Visakhapatnam rural data reported in DLHS-3 (2007-08).

The results of the study showed, various socioeconomic factors such as age of the women, education of the mother and father, occupation of the women, and birth order showed a significant association with respect of utilization of antenatal care services and delivery care. Maternal age may play an important role in maternal health care utilization, though the direction of the effect is often contradictory. The age group of 21-30 years had the highest proportion of institutional delivery.

Education of mother and husband also plays a significant role in utilization of antenatal care. Educated mothers are considered to have a greater awareness of the existence of maternal healthcare services and benefited in using such services. In the present study there was no association between mother education and antenatal care utilization and delivery care. Working women were less likely to use maternal health care services, consume IFA tablets and received TT injection compared to non

working women in Vadabalija caste and found that significant association between occupation of women and antenatal care utilization, consume IFA tablets, TT injection and place of delivery. This shows that women's work does not necessarily influence the utilization of some maternal health care services. One of the interesting findings in the present study was the significant association of the type of the family and delivery practices, though the type of family was not associated with ANC service utilization. It was found that the home deliveries, either by trained or untrained person, were significantly more in joint families as compared with the nuclear families. This explains the impact of the traditional practices in this community.

Caste can have an important effect on antenatal care utilization. It is generally believed that the demographic behaviour of members of 'socially excluded' communities such as scheduled caste and scheduled tribes and other backward castes are different from that of other communities. Poverty, illiteracy and ignorance are the major causes for not availing health services fully by the fishing community, apart from the poor health care delivery system of government at the door steps of stakeholders. It is a felt need to strengthen public health system and its delivery mechanism at door steps especially in rural areas by assessing the health needs of people.

Conclusion

Our study concludes that, utilization of antenatal care and its



components (IFA tablets and TT injection) was good (around 95 %) but, delivery care and received full ANC was poor among the study population. It was also revealed by the study that the poor vadabalija pregnant women what they got was only due to the efforts of ASHA and Anganwadi worker who gather pregnant women at the centre on immunization day. It also highlights the ignorance, poverty, and lack of knowledge and socio-cultural barriers impeding women's utilization of maternal health services in this community. Despite recent efforts to augment the health infrastructure, manpower and providing logistic support to the health sector under different national programs, sub centre in study village (the first health contact for delivering the health care in a community) is still lacking some basic facilities, fall short of logistic support, have lopsided staff with lack of supervision. The findings can assist health managers to identify bottlenecks in the provision of services and can provide new insight for policy makers to devote resources for achieving the best possible quality of maternal and child health services as per the felt need of community.

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