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Original Article

KNOWLEDGE ATTITUDE AND PRACTICES FOR ANTENATAL CARE AND DELIVERY OF THE MOTHERS OF TEA GARDEN IN JALPAIGURI AND DARJEELING DISTRICTS, WEST BENGAL

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ABSTRACT

The present study aimed to access the influence of socioeconomic factors on antenatal care and delivery practices of the mother of North Bengal. A community based study was carried out among 1772 families of the 7 blocks of the two districts. Various socio economic factors were considered for the antenatal care and delivery practices. We also tried to find out the relationship between antenatal check up with perinatal mortality. The study shows that the muslim mothers, Scheduled tribe mothers, non -educated and mothers with higher age group are less interested about ANC. Family income 2000/- month showing 62.42% ANC coverage. We found that only 7.11% mother used Govt. hospital and 2.65% used private clinic. The mother with medical problems and obstetric problems has high ANC coverage. So, socioeconomic factors significantly influence the antenatal coverage and delivery practices. Hence initiative may be taken at Government and non government levels to raise knowledge, attitude and practices for the improvement of antenatal care and delivery practices of the mother at these zones.

Key words: Mother, Antenatal care, Delivery, Perinatal mortality, North Bengal

INTRODUCTION

The National Population Policy (NPP) proposes a reduction in the infant mortality rate to 30 per 1000, and of maternal mortality rate to 100 per 100000 by the year 2010.[1] The goal is to reduce infant mortality by nearly 60 (from about 72 per 1000 in 1996 to 30 per 1000 in 2010) in a span of about 14 years considering that it took almost 20 years for the infant mortality rate to decline from about 125 per 1000 in 1978 to 72 per 1000 in 1996.

On the positive side, the basic institutional mechanism for achieving lower infant mortality levels is already in place. The ICDS (Integrated Child Development Services), instituted in the mid- 1970's, has proven effective in reducing infant mortality in the areas where it has operated. The program offers supplementary nutrition and basic health care to children less than 3 years of age, pregnant women, and mothers of young children. In the mid-1990's, the ICDS program to all Community Development Blocks and Urban Slums, and funding to ICDS was increased substantially. Although the program serves 22 million women and children, a large percentage of women and children eligible to receive ICDS services do not receive them.[2] Expanding the coverage to include more beneficiaries is clearly necessary if rapid reductions in infant and child mortality are to be effected over the next decade.

The ICDS program has the potential for greatly expanding the distribution of folic acid and iron supplements to pregnant women who suffer from nutritional anaemia. .According to NFHS, only about 50% of women received folic

acid/iron supplements during pregnancy for India as a whole, and the percentage receiving these supplements was lower still in Rajasthan, Uttar Pradesh., Bihar and Nagaland i.e. less than 30%. [3] A study shows that in West Bengal 67.5 % mother have 3 or more ANC visit, 97% got TT-1, 91.4% got TT-2 or booster, 87.3% got Iron and Folic Acid (IFA) and 61.6% received 3 ANC, IFA and TT-2. [4] Another study in rural North zone showed that 78.6% visited health centre for antenatal care but 35% received 3 antenatal cares.[5] Reductions in maternal mortality will also require a rapid expansion of antenatal and obstetric services for pregnant women, particularly in rural areas where only a minority of births are supervised by trained health personnel.

Non-utilization or under-utilization of maternal health-care services, especially among the rural poor and urban slum population are high due to either lack of awareness or access to health-care services. Understanding of the knowledge and practices of the community regarding maternity care during pregnancy, delivery is required for program implementation. Common people of North Bengal are generally tea garden workers and farmers. Most of them are illiterate and poor. We do not have information about the ANC of the mothers of the two districts of North Bengal. Therefore, the present study was carried out to evaluate the socio-demographic correlates and barriers of maternal health-care utilization among married women aged 18-42 years living in seven blocks of Jalpaiguri and Darjeeling districts.

MATERIAL AND METHODS

The study was conducted in the seven blocks of two districts of North Bengal (Darjeeling and Jalpaiguri) in the period of March 2007 to August 2008.

Table 1: The role of different character in ANC coverage

Character		Total	Ante natal care			p-value
			Fully N0 (%)	Partially N0 (%)	Not N0 (%)	
Age	18-25	636	437(68.71)	145(22.80)	54(8.50)	χ^2=104.95
	26-33	712	368951.69)	217(30.48)	127(17.73)	p < ∞
	>33	424	177(41.75)	126(29.72)	121(28.53)	
Religion	Hindu	1158	793(68.48)	202(17.44)	163(14.08)	χ^2=312.61
	Muslim	614	189(30.78)	286(46.58)	239(38.94)	p < ∞
Caste	Gen	840	512(60.95)	220(26.19)	108(12.86)	χ^2=67.94
	SC	533	316(58.29)	117(21.95)	100(18.76)	p < ∞
	ST	399	154(38.60)	151(37.84)	94(23.56)	
Education level of mother	Illiterate	673	305(45.32)	250(37.15)	118(17.53)	χ^2=128.65
	Primary	782	419(53.58)	202(25.83)	161(20.59)	p < ∞
	above	317	258(81.39)	36(11.36)	23(7.29)	
Education level of father	Illiterate	723	352(48.69)	225(31.12)	146(20.19)	χ^2=32.59
	Primary	646	371(57.43)	184(28.48)	91(14.09)	p< ∞
	above	403	259(64.27)	79(19.60)	65(16.13)	
Occupation	Farmer	530	308(58.11)	112(22.13)	110(20.75)	χ^2=18.38
	Garden worker	1242	674(54.27)	376(30.27)	192(15.46)	p< ∞
Family Income	1200/month	1160	600(51.72)	335(28.88)	225(19.40)	χ^2=21.37
	2000/month	612	382(62.42)	153(25.00)	77(12.58)	p< ∞

Four blocks of Darjeeling district (Kharibari-214, Naxalbari-263, Matigara-318, Phansidewa-244) and three blocks of Jalpaiguri (Malbazar-210, Haldibari-284 and Dhupguri-239) were selected by random selection method.1772 families of two districts were considered randomly for data collection. The mothers were interviewed using a pre-structured interview schedule including details of ANC, socio-demographic profile, delivery practices and infant mortality to assess the antenatal care and delivery practices of the mothers. We also tried to find out the reasons for perinatal mortality.

OBSERVATIONS

Table-1 showing the age, religion, caste, education, occupation and income wise distribution of mothers and their ante natal care. Table shows that mothers of 18-25 years of age have taken more ante natal care. Mother belongs to Hindu religion, general caste, highly educated, farmers and higher income group also taken more antenatal care than the other group. Higher age group, Muslims, Scheduled tribes, illiterate and poor economic group mothers have taken less ante natal care. All the variables have significant relationship with the antenatal care.

Table-2 shows the status of antenatal care of the mothers. We found that 67.95% mothers used garden hospital and 22.29% mothers used local PHC. Only 2.65% mothers used private clinics.

Table-3 represent that the mothers come to the health centers or hospitals for ANC mostly because they found some problems during early pregnancy. Delivery place, delivery type, Doctor, Postnatal visit etc plays some role in having ANC. All the variables have significant relationship with the ante natal care coverage of the mothers.

Table 2: The percentage distribution of ANC receiving place and TT schedule

ANC place/ TT Characteristics	No (%)
Place where ANC taken	
Garden hospital	983(67.95)
Local PHC	323(22.29)
Government hospital	103(7.11)
Private clinic	38(2.65)
Tetanus Toxoid Schedule	
TT-1	409(23.08)
TT2/Booster	1038(58.58)
None	325(18.34)

Table 3: Relationship of different variables with antenatal care

Variables	Total	Ante natal care		p-value
		Yes (%)	No (%)	
Medical problems				
Yes	961	826(85.95)	135(14.05)	χ^2=12.17
No	755	601(79.60)	154(20.40)	p< ∞
Obstetric problems				
Yes	496	456(91.94)	40(8.06)	χ^2=39.18
No	1220	969(79.43)	251(20.57)	p< ∞
Delivery place				
Home	1054	816(77.42)	238(22.58)	χ^2=58.50
Garden/Local Hospital	662	607(91.69)	55(8.31)	p< ∞
Delivery type				
Vaginal	1452	1217(83.82)	235(16.18)	χ^2=5.28
Caesarean	264	206(78.03)	58(21.97)	p<0.02
Done by				
Doctor/Nurse	712	614(86.24)	98(13.76)	χ^2=9.42
Dhai	1004	809(80.58)	195(19.42)	p<0.002
Breast feeding within 24 hour				
Yes	667	629(94.30)	38(5.70)	χ^2=98.58
No	1049	794(75.69)	253(24.31)	p< ∞
Postnatal visit				
Yes	421	408(96.91)	13(3.09)	χ^2=77.08
No	1295	1015(78.38)	280(21.62)	p< ∞

Table-4 shows the perinatal death rate in relation to antenatal care taken by the mothers. It clearly shows that the perinatal death rate is very much related to the antenatal care. Our study shows that the mothers who have taken less than two antenatal cares are having perinatal death rate of 82.40, but the mothers with two and more antenatal care are having less perinatal death rate (67.07).

Table – 5 Represents the delivery places of the poor economic people, Muslims, scheduled castes and tribes. The mothers of Joint family and illiterate mothers do not like to go to hospital for delivery.

We found that the socio economic characters play some role in delivery practices of the mothers of our study area. Economy, religion

family and education of the mother significantly related to the delivery practices of the mothers. We also found that caste does not play any role with the delivery practices of the mothers.

Table 4: Relationship of Antenatal Checkup with Perinatal Mortality

No of ANC	No of live birth	No of perinatal death	Perinatal death rate
>2	1968	132	67.07/1000
<2	1784	147	82.40/1000

DISCUSSION

Antenatal care is most important health care for the maintenances of sound health of pregnant mother and intrauterine baby. Poor antenatal care may results severe health problems of both the mother and prenatal baby [6]. In the survey zone, the overall antenatal care level is poor, may be due to economical factor [7] geographical barriers as primary health center are located far way from their villages. The level is comparatively less in Muslim than Hindu [8] which may be due to low educational level [9,10] social customs [11] and wrong ideas as proposed by others. The previous facts have been supported here by the results of this report where home delivery of the pregnant mother is comparatively less in educated family than the illiterate or low educated family. Similarly the antenatal care of mother is also high in nuclear family. Economical status of the family is also one of the factors of antenatal and intra natal care of the mother which has been reflected here as proposed by others [7].

Table 5: Socio economic characters in delivery pattern

Character	Hospital delivery No (%)	Home delivery No (%)	Total	p-value
Economy				
Very lower	402(35.96)	716(64.04)	1118	χ^2=9.30
lower	260(43.48)	338(56.52)	598	p<0.002
Religion				
Hindu	489(42.20)	643(56.80)	1132	X^2=29.90
Muslim	173(29.62)	411(70.38)	584	p< ∞
Caste				
Gen	335(41.36)	475(58.64)	810	X^2=0.27
SC	209(40.04)	313(59.96)	522	P<0.8720
ST	118(30.13)	266(69.27)	384	
Family				
Joint	314(32.81)	643(67.19)	957	X^2=30.37
Nuclear	348(45.85)	411(54.15)	759	p< ∞
Education of Mother				
Illiterate	241(37.48)	402(62.52)	643	X^2=6.06
Primary	319(41.43)	451(58.57)	770	P<0.0484
above	102(33.66)	201(66.34)	303	

CONCLUSION

From above discussion it may be cleared that antenatal care and delivery practices of the mother in tea garden areas of North Bengal is very poor. Social educational and economical features are responsible for such results. Steps may be adopted at Government and non government levels to raise knowledge, attitude and practices for the improvement of antenatal care and delivery practices at this zone to develop as sound health for future generation.

RECOMMENDATIONS

1. The economic status, education of the families must be improved.
2. Parents will be acknowledged about the values of ante natal care.
3. Health worker need to identify the pregnant mother and to give reminder before a particular dose of ante natal care.

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