



Utilization of Maternal Health Care Services Among the Karbis of Guwahati City

DR. MOUSUMI NATH MAZUMDER

ABSTRACT

Utilization of antenatal care service and institutional delivery is essential to improve maternal and child health. The present paper attempts to find out the possible factors influencing the use of maternal health care services with emphasis on the antenatal service and the institutional delivery among the Karbi tribe of Guwahati city. The study was carried out in the year 2009-10 among 354 ever married Karbi women belonging in the age group of 15-49 years in Guwahati city. Quantitative data and qualitative data were collected by structured questionnaire method and in-depth interview method, respectively. Although the institutional delivery service is gradually improving as the younger generation are giving more preference to institutional deliveries rather than home deliveries but utilization of ANC service is poor as only 31% of women avail for ANC services. Mothers education has a positive relation with awareness of ANC and place of delivery, which is statistically significant as proved by Pearson's chisquare test and likelihood ratio test.

KEYWORDS

Karbi , Institutional delivery, Antenatal care, Education

Introduction

Antenatal care and skilled health attendance at delivery are essential for eliminating every preventable maternal death. Maternal mortality is unacceptably high, 99% of all maternal deaths occur in developing countries. Maternal mortality between 1990 and 2015, dropped by about 44% and between 2016 and 2030, as part of the Sustainable Development Agenda, the target is to reduce the global maternal mortality ratio to less than 70 per 100 000 live births. It is higher in women living in rural areas and among poorer communities. (WHO, 2015). All women need access to antenatal care in pregnancy, skilled care during childbirth, and care and support in the weeks after childbirth. Maternal health and newborn health are closely linked. Approximately 2.7 million newborn babies die every year, and an additional 2.6 million are stillborn (UNICEF, 2015). It is particularly important that all births are attended by skilled health professionals, as timely management and treatment can make the difference between life and death for both the mother and the baby (Cousens et al. 2011).

It is a well established fact that giving birth in a medical institution under the care and supervision of trained health-care providers promotes child survival and reduces the risk of maternal mortality. India accounts for more than one-fifth of all maternal deaths from causes related to pregnancy and childbirth worldwide. In India, both child mortality (especially neonatal mortality) and maternal mortality are high. Seven out of every 100 children born in India die before reaching age one, and approximately five out of every 1,000 mothers who become pregnant die of causes related to pregnancy and childbirth. India accounts for more than one-fifth of all maternal deaths from causes related to pregnancy and childbirth worldwide (NFHS -2001). Though India has made substantial improvement in maternal health, it still accounts for 25% of global maternal deaths (Pandey et al. 2007).

In India, the reproductive child health programme was launched in 1997 to improve the ante-natal care, institutional deliveries or deliveries with trained health worker and also post-natal mother as well as child health care services (NIH-FW 1999- 2000) . Special provisions have been made for the most vulnerable groups population like scheduled caste, tribe, adolescent and urban slum. The government of India had recognized MCH services as an important thrust area for rural population and urban slum dwellers under National Population Policy 2000 which aims to achieve 80% institutional deliveries and 100% deliveries to be assisted by skilled health

personnel by 2015 (Park, 2009). Despite the many benefits associated with institutional delivery, India's maternal and child health programmes have not aggressively promoted institutional deliveries, except in high-risk cases. The insufficient use of health services especially the prenatal care and place of delivery influences the high rate of infant and child mortality (Gaminiratne 1991; Forste 1994).

In 1992-93, according to NFHS-1, the proportion of mothers receiving antenatal check-ups ranged from 31 percent in Bihar to 94 percent in Tamil Nadu, and the proportion giving birth in medical institutions ranged from 11 percent in Rajasthan and Uttar Pradesh to 88 percent in Kerala (IIPS 1995). In 1998-99, according to NFHS-2, the proportion receiving antenatal check-ups ranged from 34-36 percent in Uttar Pradesh and Bihar to 98 percent in Kerala and Tamil Nadu, and the proportion giving birth in medical institutions ranged from 22-23 percent in Uttar Pradesh and Bihar to 95 percent in Kerala (IIPS and ORC Macro 2000a). Utilization of health services is affected by a multitude of factors including not only availability, distance, cost, and quality of services, but also by socioeconomic factors and personal health beliefs. (Sugathan et al. 2001).

Study Area:

The Karbis, previously known as Mikirs, is one of the scheduled tribes of Assam as given in the schedule caste and schedule tribes Lists Modification Order, 1956. The Karbis are principally hill dwellers but due to various reasons they are distributed over different parts of Assam. Karbis residing in the plains of Kamrup and Morigaon district of Assam, and the Ri-Bhoi districts of Meghalaya identify themselves as the Dumrali or plains Karbis (Medhi, 1988). Assam is the gateway of North east India and Guwahati is the capital of Assam. Kamrup district is situated between 25.43 and 26.51 North latitude and between 90.36 and 92.12 East latitude was earlier known as Pragjyotishpur. The plain Karbi from which data for the present study was collected falls within Kamrup District.

Objectives:

This paper makes an attempt to study analytically the socio-economic and demographic determinants of the use of maternal health care services among the Karbis of Guwahati city. However, the specific objectives are:

1. To study the Karbi women awareness on ANC services and utilization of delivery institutions for safe delivery
2. To study the influence of socio demographic factors such

as education and age at marriage in the utilization of institutional delivery.

Material and Method

The study was carried out among Karbi tribe in certain dominant areas of the Guwahati city of Kamrup district in the year 2009-10. A total of 354 ever married women were covered from 300 households with random sampling method. An in-depth interview was taken from 354 ever married women belonging in the age group 15-49 years and having atleast one child were studied regarding their awareness and utilization of ANC and institutional delivery.

Result and Discussion:

Backgrounds of Respondent:

The mother's background characteristics, such as education, employment status, and standard of living, play a very important role in the utilization of various maternal healthcare services. Therefore, the education and occupation of the respondent was studied and it was observed that 62% of the Karbi women were found to be illiterate and 92% of them were housewife. Their financial condition is also not good as their level of income per month is less than 4000 rupees, which shows that their economic level is hand to mouth.

Table 1. Socio-Demographic Characteristics of Karbi Population

Educational Level	Percentage
Illiterate	62.22
Primary	13.07
Middle school	7.39
High school	5.11
Matriculate	5.68
High secondary	3.13
Graduation	3.41
Occupation	
Housewife	91.5
Government Service	3.2
Private Service	1.4
Business	3.9
Income in Rupees	
3000-3999	58
4000-4999	33.3
5000+	8.6

Antenatal Care and awareness

Antenatal care is the strongest predictor of institutional delivery, as it is possible to promote institutional delivery by promoting antenatal check-ups and associated counseling (NFHS report). It was observed from the study that only 31.6% of the Karbi women had received ante natal check-up at the time of pregnancy whereas 68.3% have never been for any ante natal checkup up at the time of pregnancy. Accordingly a woman should have the knowledge and positive attitude to make atleast three ANC visits for safe delivery.

Table 2. ANC among the Karbi Population

ANC Awareness	Percentage
Received ANC	112(31.6%)
Not Received ANC	242(68.3%)
Number of times ANC visits	
One time	35.3
Two times	39.1
Three times	18.3
More than Three times	7.3
Reasons for not receiving ante-natal check up	
Did not feel necessary	158 (65.3%)
Lack of knowledge	51 (21.2%)
Too far/inconvenient/no time to go	11 (4.5%)
Could not afford	21 (8.5%)
Other reasons	1(.56%)
Total	242(100%)

Delivery Care

Safe delivery is defined as institutional deliveries plus deliveries conducted at home but by skilled staff and do not include deliveries by trained birth attendant (dais) (Park et al. 2007). Age at marriage is one of the factor associated with the type of delivery the pregnant women prefer at the time of delivery. It is observed from the table that Karbis belonging to higher age group i.e 45-49 years mostly had home deliveries attended by untrained dai whereas those women belonging to the age group 15-19years and 20-24 years prefer institutional deliveries. Nowadays, the younger generation prefers institutional delivery at government hospital rather than a private hospital because of the beneficiary schemes provided to the mother at the time of delivery.

Table 3: Distribution of place of delivery on the basis of Karbi womens' Age at marriage

Age Group	Home	Government Hospital	Private Hospital
15-19	0	2(100%)	0
20-24	11(26.2%)	28(66.7%)	3(7.1%)
25-29	22(28.2%)	38(48.7%)	18(23.1%)
30-34	19(36.5%)	29(55.8%)	4(7.7%)
35-39	36(53%)	19(27.9%)	13(19.1%)
40-44	30(53.6%)	18(32.1%)	8(14.3%)
45-49	45(80.4%)	11(19.6%)	0(0%)
Total	163(46%)	145(41.0%)	46(13.0%)

Educational impact on ANC and Delivery

Mother's education is considered to be a significant factor for utilizing health service. As the educational level of women increases, awareness and utilization of ANC services increases along with the institutional delivery. This is mainly due to the fact that an educated mother are more aware of the safety of the mother and child for safe motherhood.

Correlation between Karbi womens' education and ante-natal check up

	Ante natal check up		
	Yes	No	
Mother's Education			
Illiterate	24.2 (52)	75.7 (162)	
Primary-High School	21.4 (15)	78.5 (55)	
Matriculate and above	45 (27)	55 (33)	
Chi Square Tests	Value	df	Asymp. Sig (2-sided)
Pearson Chi-square	11.651(a)	2	0.003
Likelihood Ratio	10.847	2	0.004
Linear by Linear Association	7.144	1	0.008

In this study association

womens' education is positively correlated with ante-natal check-up, as illiterate and undermatric women do not favours ante-natal care of pregnant women. With the higher level of education there is an increasing trend of ante-natal check-ups for wife and this relation is statistically highly significant which is judged by Pearson's chi square test and likelihood ratio test.

Correlation between womens' education and place of delivery

Mother's Education	Place of Delivery			
	Home	Government Hospital	Private Hospital	
Illiterate	50.2	45.8	29.5	
Primary-High School	36.5	40.2	59	
Matriculate and above	13.2	13.8	11.45	
Chi Square Tests	Value	Df	Asymp. Sig (2-sided)	

Pearson Chi-square	10.514(a)	4	0.003
Likelihood Ratio	10.843	4	0.003
Linear by Linear Association	3.348	1	0.067

In the study association it is observed that womens' education has a positive relation with the place of delivery, which is statistically significant as proved by Pearson's chisquare test and likelihood ratio test. As the educational level of the mother rises the preference for institutional deliveries also increases.

Conclusion:

Earlier, the Karbis did not give much importance to gynaecological problems as they consider to be a part of womanhood. They considered delivery to be a natural process and a mid-wife/dai is can perform the task at home. They visit the hospital when some difficulties or complications arises or the dai is unable to tackle those cases. But the trend is gradually changing as younger women now prefer to have institutional delivery at government hospital. In the study it was observed that mothers' education has a positive effect on the utilization of maternal and child health services and this view was also supported earlier by various scholars such as Mason (1986) and Chatterjee (1991) who pointed out that women's education is associated with the later age at marriage, contraceptive use, and lower fertility.

It was observed that a positive attitude in preference for institutional delivery is gradually increasing among the younger Karbi generation but at the same time an inadequate utilization of ANC service (31%) was also found among them which will certainly have an impact on morbidity and mortality of mother as well as child. The reason could be due to lack of awareness on the importance of proper maternal health checkup for safety of mother and child. Secondly, the Karbis inspite of being a part and parcel of urban life they have low economy and low education and this maybe another cause for low health status among them. Therefore, steps should be taken to enhance utilization of ANC services, educate the Karbi women and spread the knowledge regarding JSY by enhancing IEC activities.

Reference:

- Chatterjee M,(1991), Towards Better Health for Indian Women. South Asia Country Department II. Washington DC: World Bank.
- Cousens S, Blencowe H, Stanton C, Chou D, Ahmed S, Steinhardt L et al.(2011) National, regional, and worldwide estimates of stillbirth rates in 2009 with trends since 1995: a systematic analysis. *Lancet*, 377(9774):1319-30.
- Forste R(1993). The effects of breastfeeding and birth spacing on infant and child mortality in Bolivia. *Popul Stud*, 48: 497-511.
- Gaminiratne KHW (1991), Socioeconomic and Behavioural Determinants of Diarrhoeal.
- Maryland: Macro International Inc, Calverton, pp. 757-784. International Institute for Population Sciences (IIPS). 1995. National Family Health Survey (MCH and Family Planning), India 1992-93. Bombay: IIPS.
- International Institute for Population Sciences (IIPS) and ORC Macro. 2000a. National Family Health Survey (NFHS-2), 1998-99: India. Mumbai: IIPS.
- International Institute for Population Sciences (IIPS) and ORC Macro. 2000b. National Family Health Survey (NFHS-2), 1998-99: Andhra Pradesh, Mumbai: IIPS.
- Mason KO (1986). The status of women: conceptual and methodological issues in demographic studies. *Socio Forum*, 1: 284- 300.
- Medhi Birinchi K, (1988). The Karbi Society at a Glance In Souvenir: Anthropological Society of North-East India, 1987-88, 8-13.
- NCMH background papers (2005), Financing and delivery of health care services in India. National Commission on Macroeconomics and Health, Ministry of Health and Family Welfare, Government of India, New Delhi, 187, 242, p 39-71.
- NIHFW Report (1999-2000). National Institute of Health and Family Welfare, India.
- Pandey S, Shankar R, Rawat C, Gupta V. (2007) Socioeconomic factors and delivery practices in an urban slum of district Nainital, Uttaranchal. *Indian J Community Med*, p.32:210-1.
- Park, K. (2007). Preventive medicine in obstetrics, paediatrics and geriatrics. In: *Textbook of Preventive and Social Medicine*, Jabalpur (India), Banarsidas Bhanot Publishers, 19th Ed., p. 448.
- Park K.(2009); "Demography and family planning." Chapter 9 in Park's textbook of Preventive and social medicine, 20th ed. Jabalpur: M/s Banarsidas Bhanot Publishers; p. 423.
- Sugathan, K.S., Mishra V, Retherford R. (2001)Promoting Institutional deliveries in Rural India: The role of Antenatal Care Services, National Family Health Survey Subject Reports, No.20, IIPS, Mumbai.
- UNICEF, WHO, The World Bank, United Nations Population Division (2015). The Inter-agency Group for Child Mortality Estimation (UN IGME). Levels and Trends in Child Mortality. Report 2015. New York, USA, UNICEF.