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Original Research Paper

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A STUDY TO ASSESS POST NATAL MOTHERS AND UTILIZATION OF POST NATAL SERVICES IN THE RURAL COMMUNITY OF KAMRUP DISTRICT OF ASSAM-A COMMUNITY BASED STUDY

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ABSTRACT

Introduction: Post natal period begins immediately after birth of the baby and extends up to six weeks (42 days) and overall expectation is that all the system in the women's body will recovered from the effects of pregnancy and return to their non-pregnant state. Though most pregnancies results in normal birth, it is estimated above 15% may develop complications which cannot be predicted, some of these may be life threatening for the mother and/or her baby. Most maternal death could be prevented if women had access to appropriate health care during pregnancy, child birth and immediately afterwards. **Objectives:** Objective of the study is to assess the physical and mental health of the post natal mother and utilization pattern of post natal services by the mothers of rural community. **Materials and Methods:** A community based descriptive study conducted Kamrup District, semi structured interview schedule was applied to 400 post natal mothers during the period of June 2012 to December 2013. The sample selection was done by multistage stratified random sampling. **Results and Observations:** Findings regarding institutional delivery 98% delivered in the institution and conducted by skilled health worker. Physical health status pallor was absent for 90.25%, uterus within cervix for 80.75% of the mother, 73% of the post natal mothers resumed their daily activities. Mental health status: 69% of post natal mothers EPDS score more than 10 which indicate possible post natal depression. Regarding utilization of post natal services: 88% of the mothers received post natal check up within 42 days of delivery and 73.75% have got three or more than three visits. **Conclusion:** To change the health seeking behavior as prevalent in rural areas and promoting utilization of quality services provided through public health infrastructure.

KEYWORDS : Post natal mother, Utilization, Post natal service, EPDS

INTRODUCTION

Postpartum period begins immediately after the birth of a child and extends till six weeks. Overall expectation is that during this time all the system in the woman's body will recovered from the effects of pregnancy and return to their non-pregnant state (Myles 2010).[1]

In India mother and children represent more than half of the total population, are vulnerable in terms of morbidity and mortality. Delivery of a new baby is one of the happiest times in woman's life but it also presents both physical and emotional challenges (Senarath 2007).[2]

Post partum maternal health care that is typically provided during six week period after child birth is very important to the health of the mother and newborn (Chinh-Yu Cheng).[3]

The postpartum period is considered as a very critical for both women's and her child's health; utilization of postpartum care is perceived as an effective tool to alleviate the burden of maternal mortality. Yet, maternal health care services are underutilized by women in most developing countries (WHO 2014).[4]

The first hours, days and weeks after childbirth are a dangerous both for mother and newborn infant. Research has shown that small and affordable measures can significantly reduce the health risks and deaths could be prevented if women had access to appropriate health care during pregnancy, childbirth, and afterwards. (Workineh & Hailu, 2014).[5]

Nurses as health professionals practiced in a wide range of health-care settings, in a pivotal position to contribute to health-care policies and practices that may improve care for postpartum women. (Mercer, 1985).[6]

During clinical experience investigator observed that lower utilization of post natal care in some mothers who had suffers from back pain, weakness, and vertigo, low use of family planning devices, poor post natal hygiene and child rearing.

MATERIALS AND METHODS

Study design and setting

A community based descriptive study conducted in Kamrup District having 6th to 8th week's newborn infant, interview schedule was applied to 400 post natal mothers by multistage stratified random sampling during June 2012 to December 2013.

Study population, sample size and technique

To decide upon the unbiased representative sample $n=4pq/E^2$ formula is used, where p is the positive character i.e. percentage of study population. E=permissible error of "p" q= (1-p) or 100-p=50, In this study E is considered as 10% of p=50*10/100=5, Considering health problems among the post natal mothers 50 percent with 10 percent permissible error, sample size comes as $n=4pq/E^2=4*50*50/5*5=400$

Under the process of multi-stage stratified random sampling technique, entire population is divided into homogenous groups or types of classes called strata (Nirmala V. 2011).[7] In the first stage 4 development blocks were selected randomly and in the second stage all four BPHC then in the third stage investigator collected the list of post natal mothers from the Integrated RCH register maintained by FHW. Sampling frame was prepared and a proportionate number of post natal mothers 15 % of the samples were drawn randomly to comprise the desired sample size of 400.

An average of 10-15 visits were paid to each selected BPHC, explained the purpose and usefulness of the study to the post natal mothers and informed consent was obtained before administering the tool. Assurance was given to maintain confidentiality about the study.

RESULTS

Findings regarding demographic variables of the post natal mothers: 84.5% were in between age group of 20-30 years, 90% of post natal mothers were literate, 78% of the mothers per capita per month income were less than Rs. 2935/-, 98% of the mother were from Hindu religion, number and order of 59% of the mothers were 1st child, 74.5% of the mothers belong to

nuclear family, ASHA escorted 93% of the post natal mothers to health facilities, 99% of the mother received antenatal care, 98% delivered in the institution and conducted by skilled health worker. Physical health status pallor was absent for 90.25%, uterus within cervix for 80.75% of the mother, perineal region was moist for 84.75% of the mother, vaginal discharge was absent for 90% of the mother, 97.75% of the mother had normal urinary output, burning in micturation was absent for 94%, tiredness was absent for 91.75%, breathlessness was absent for 98.25%, constipation was absent for 84.5% of the post natal mothers and 73% of the post natal mothers resumed their daily activities. Mental health status: 69% of post natal mothers EPDS score more than 10 which indicate possible post natal depression and 361 post natal mothers scored less than 10 which indicate healthy mental status. Regarding utilization of post natal services: 88% of the mothers received post natal check up within 42 days of delivery whereas 12% were not, 76.25% mothers have got two post natal visits, 73.75% have got three post natal visits, and 73.75% have got three or more than three visits.

Table: 1. Chi-square test for testing association between education and post natal check up

Education	post natal check up			Chi square	df	Tabulated Value	remarks
	Yes	No	Total	11.042	4	9.478	*S
Illiterate	19	11	30				
Primary	24	5	29				
HSLC	216	39	255				
HSSLC	25	8	33				
Graduate	47	6	53				
Total	331	69	400				

***S-Significant**

The calculated chi square test statistics with 95%confidence level at 4 degrees of freedom is 11.042. However, the tabulated chi square value with 95% confidence level at 4 degrees of freedom is 9.487 which less than calculated chi square value. Therefore we reject our null hypothesis and conclude that there is a significant association between education and post natal check up that is higher in education more post natal check up.

Table: 2-Chi square test for testing association between number of child and information on family planning

Number of child	Information on FP			Chi square	df	Tabulated Value	Remarks
	Yes	No	Total	19.52	3	7.815	*S
One	207	27	234				
Two	125	10	135				
Three	16	5	21				
Four	5	5	10				
Total	353	47	400				

***S-Signicant**

The calculated chi square test statistics with 95%confidence level at 3 degrees of freedom is 19.52. However, the tabulated chi square value with 95% confidence level at 3 degrees of freedom is 7.815 which less than calculated chi square value. Therefore we reject our null hypothesis and conclude that there is a significant association between number of child and information on family planning.

Table: 3 Chi-square test for testing association between Age and Post-natal depression among postnatal women

Age in years	EPDS score more than 10	EPDS score less than 10	Chi square value calculated	Tabulated value	Df	Remarks
<20	15	31	6.921	5.991	2	*S
20-30	60	278				
>30	4	12				
Total	79	321	400			

***Significant at .05 level**

The calculated value of chi-square test statistics with 95% confidence level at 2 degrees of freedom is 6.921 however, the tabulated chi-square value is 5.991 which is less than calculated chi-square value at.05 level of significance. Therefore, we reject our null hypothesis and conclude that there is a significant association between age and post-natal depression of postnatal mothers' that is more the age of post natal mother more chances of post natal depression.

DISCUSSION

In the present study analyzing 400 mothers it was found that, all the mothers' age group in between the 18-40 years. 46 mothers under 20 years, 16 mothers above 30 years and 338 mothers age in between 20-30 years. Regarding post natal check up 88% of mothers received post natal check up within 42 days of delivery whereas 12% were not. 76.25% of mothers have got two post natal visits, 73.75% have got two or more than three post natal visit. The chi square test for testing association between education and post natal check with 95% confidence level at 4 degrees of freedom shows that there is a significant relationship between education and post-natal check-up.

Study conducted by Sharma *et al* (2014),[8] Among 210 mothers, 82.4% were 15-24 years of age and 71.9% of mother received post natal check-up within 10 days of delivery. 36.6% of mothers received one postnatal check-up, 18.5% two, 14.7% three and only 1.9% received four post natal check-up. The education/occupation of mothers, cast, education of husband, place of delivery, person conducting delivery and level of knowledge of mother about need of postnatal check-up were significantly associated (P<0.001) with utilization of post natal check-up.

Study conducted by Jose JA *et al* (2014), [9] among equal numbers of tribal and non-tribal ante-natal woman. The determinants of utilization in tribal women were general awareness, affordability, accessibility and quality of services along with motivation by health workers. Among tribal antenatal women, 85% utilized maternal health care facilities fully compared to 100% among non-tribal women. Lower levels of education and lack of transport facilities were prime factors contributing to under utilization by tribal women.

Study carried out by Bhattacherjee S *et al* (2013),[10] Utilization of maternal health care services including antenatal care during pregnancy, provision of safe delivery and postnatal care after delivery, show that the utilization of full antenatal care was 48.6% (463/953), institutional delivery 73.5% (700/953) and adequate postnatal visit was 72.6% (692/953) among the study population. The important factors associated with low utilization of services were belonging to Islam, Scheduled tribe, lower socio-economic status, and lower literacy level of both the husband and wife. The major barrier towards utilization of these services was ignorance followed by distance to the health care center.

Study conducted by Srivastava A *et al* (2014),[11] Most (88.6%; 343/387) of pregnancies had registration for antenatal care (ANC). Majority (69.7%; 239/343) of them were registered between 16 and 24 weeks. Only 28.5% (110/343) of women received ANC from a private doctor. Maternal health care service utilization from health personnel was significantly associated with age at marriage ≥18 years, family size ≤3, birth order ≤2, nuclear family and higher socio-economic status. Most of the pregnancy related complications were found among women aged >30 years, with birth order ≥3,

having birth interval <24 months, among Muslims, working mothers and among those belonging to joint family. Mother's education and husband's occupation were found to be strong predictors for the utilization of maternal health care using the logistic regression.

Study conducted by Paudel DP *et al* (2014),[12] shows that 54.6% were 20-24 years of age, and 61.6% were having secondary level of education, 89.8% house wives and 91.6% Hindus. About 69.7% were from joint family with low economic status. Regarding postnatal service use; 79.0% use properly, Almost; three-fifth met with nurse/health workers at least three times, four-fifth got advice about breast/nipple care, and 92.5% about breast-feeding, 67.9% about post-natal exercise, 89.0% on nutrition education, and 85% got the advice of uterus care. About 29.8% perceived some health problems. Education, income, awareness, and delivery places were found most significant determinants ($P < 0.01$) of postnatal services use. More than three quarters of mothers had used the proper postnatal maternity services. Education, family income, awareness, and delivery place were found as most significant factors.

It is observed that in most of the studies education plays an important role in utilization of post natal services. Educating girl child utilization of post natal services may be increased which will contribute to reduce maternal and infant mortality and morbidity.

In the present study 99.5% mothers have got antenatal check up. 99.5% mothers delivered at institution and 2(.5%) mothers delivery assisted by unskilled worker.

Study conducted by Dabade KJ *et al* (2011),[13] shows that only 40.8% respondent women had their first antenatal visit in 1st trimester. Majority of the women 90.3% had institutional delivery. Out of 8(3.9%) deliveries assisted by untrained person in 4(1.9%) deliveries umbilical cord cut with unsterile instrument and of these 4(1.9%) deliveries in 2(1.0%) untrained person applied cow dung to umbilical stump.

CONCLUSION:

To change the health seeking behavior as prevalent in rural areas and promoting utilization of quality services provided through public health infrastructure, it is vital to organized IEC activities at community level with information on health services and their rights.

REFERENCES:

1. Fraser Daine M. Cooper Margaret A. Myles Text Book for Midwives. 15th ed. Edinburg: Churchill Livingstone Eksevior; 2010. p. 651-52
2. Senarath U, Fernando DN, Vimpani G, Rodrigo I. Factors associated with maternal knowledge of newborn care among hospital delivered mothers in Sri Lanka. Trop Med Hyg 2007 101(8):823.
3. Ching- Yu Cheng , Eileen R Fowels, Lorraine O Walker. Post partum Maternal Health Care in the United States : A Critical Review. The Journal of Perinatal Education 2006; 15 (3): 34-42
4. Maternal Mortality. Media Centre : WHO [2014 May] Available from: http://www.who.int/mediacentre/factsheets/fs348/en/
5. Workineh, Y. G. & Hailu, D. A. (2014). Factors affecting post natal care service in Amhara Region, Jabitena District, Ethiopia, Science Journal of Public health, 2(3): 169-176.
6. Mercer RT The process of maternal role attainment over the first year. Nurs Res. 1985 Jul-Aug; 34(4):198-204.
7. V Nirmala, EditionJ Silva. Research Methodology in Nursing. Koch: Jaypee Brothers Medical Publishers; 2011. p.34, 56,, 68, 99
8. Sharma A, Thakur PS, Kasar PK, Tiwari R, and Sharma R (2014) Utilization of post natal care in tribal area of Madhya Pradesh, Int J Med Sci Public Health. Online First: 18 Jul
9. Jose JA, Sarkar S, Kumar S G, Kar SS (2014) Utilization of maternal health-care services by tribal women in Kerala. J Nat Sc Biol Med Available from: URL:http://www.jnsbm.org/text.asp?2014/5/1/144/127314
10. Bhattacherjee S, Datta S, Saha JB, & Chakraborty M (2013) Maternal health care services utilization in tea gardens of Darjeeling, India. J Basic Clin Reprod Sci 2:77-84)
11. Srivastava A, Mahmood S E, Mishra P, Shrotriya V P. (2014)Correlates of maternal health care utilization in Rohilkhand Region, India. Ann Med Health Sci Res 4:417-25
12. Paudel DP, Nilgar B. & Bhandankar M. (2014). Determinants of post natal maternity care service utilization in rural Belgaum of Karnataka, India: Int J Med Public Health 2014; 4:96-101.
13. Dabade KJ, Dabade SK, Khadilkar HA. (2013)A Study on Utilization of Maternal Health Care Services in Rural Area of Aurangabad District, Maharashtra. Natl J Community Med 4(4): 579-83.