

Study of Referral Pattern of Women for Safe Confinement to a Tertiary Care, Government Teaching Hospital in Karnataka

Manjunatha SN^{1,*}, Chandrakumar SG¹, Moray KV² and Revathi Devi ML³

¹Department of Community Medicine, Mysore Medical College and Research Institute, India

²Mysore Medical College and Research Institute, Mysore, India

³Department of Physiology, Mysore Medical College and Research Institute, India

*Corresponding author: Manjunatha SN, Assistant professor, Department of Community Medicine, Mysore Medical College and Research Institute, Mysore-570001, India, Tel: 919845151961; E-mail: Drmanju.mmcri@gmail.com

Received date: May 22, 2015; Accepted date: December 22, 2015; Published date: December 31, 2015

Copyright: © 2015 Manjunatha SN, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

Abstract

Introduction: The focus of NRHM is to reduce maternal and child morbidity and mortality with emphasis on rural health care. The major strategies under RCH-II are: Essential Obstetric care, Institutional delivery, skilled attendant at a delivery place, Emergency Obstetric care, Operationalising FRUs and Operationalising PHCs and CHCs for 24-hour delivery services (2).

With the above background, we tried to determine the criteria for referral of obstetric cases to our hospital. The study will help reviewing the structure and pattern of referrals.

1. Objectives: To study the obstetric and socio-economic profiles of study subjects.
2. To study the referral criteria adopted by peripheral institutions and doctors.
3. To study the maternal and perinatal outcome of referrals.

Materials and methods: Cross sectional study was conducted in a tertiary care teaching hospital among 30 pregnant women referred from periphery for safe confinement. Criteria for referral, mode of delivery and immediate outcome was studied.

Results: Absence of doctors in the periphery was the most common cause for referral. Among the cases referred 46% belonged to low risk group

Conclusion: 24/7 emergency obstetric care as envisaged in yet to be achieved.

Keywords: Referral pattern; Safe confinement; Maternal outcome

Introduction

A fundamental and necessary function of health care system is to provide a sound 'referral system'. It must be a two way exchange of information and returning patients to those who referred them for follow-up care. It will ensure continuity of care and inspire confidence of the consumer in the system [1].

Our study tried to look into one section of this 'referral system'. We chose to study the referral pattern of women for safe confinement from the various taluks in and around Mysore district to Cheluvamba Hospital, Mysore. Among its many goals, the three goals of NRHM relevant to our study are upgrading the community health centres to Indian Public health standards, Increase utilization of First Referral Units (FRUs) from less than 20% to 75% and Engaging 2, 50,000 female ASHAs in 10 states [2].

The focus of NRHM is to reduce maternal and child morbidity and mortality with emphasis on rural health care. The major strategies

under RCH-II are: Essential Obstetric care, Institutional delivery, skilled attendant at a delivery place, Emergency Obstetric care, Operationalising FRUs and Operationalising PHCs and CHCs for 24-hour delivery services [2].

With the above background, we tried to determine the criteria for referral of obstetric cases to our hospital. The study will help reviewing the structure and pattern of referrals.

Aims and Objectives

1. To study the obstetric and socio-economic profiles of study subjects.
2. To study the referral criteria adopted by peripheral institutions and doctors.
3. To study the maternal and perinatal outcome of referrals.

Materials and Methods

Study design: Cross sectional study.

Study site: Cheluvamba Hospital, Mysore, Karnataka, India.

Period of study: September-October 2011

No. of subjects: Thirty

Inclusion criteria: The in-patients of Cheluvamba Hospital who have been referred to Mysore from neighbouring taluks, hobli and villages for safe confinement.

Exclusion criteria: Women from city corporation limits.

Methodology: Complete history was taken from each study subject. Criteria for referrals were determined. Mode of delivery was documented. Maternal and perinatal outcome were documented. Physical and obstetric examination was carried out on all study subjects.

Data analysis: Data was analyzed using SPSS version 17 software. Descriptive statistics was computed for all categorical variables.

Results

Discussion

This cross sectional survey was intended to assess the criteria for referral of women for safe confinement to Cheluvamba Hospital, Mysore. Thirty in-patient women were interviewed in the wards. They were referred from various FRUs in and around Mysore district. A detailed questionnaire was used and the results documented. The maximum number of referral was from K.R. Nagar i.e. 10 (33.34%). The cause for referral was non-availability of doctors in 40% (12) of the cases. Out of the 30 women, 13 (43.34%) were high risk. Out of the 13, 6 (53.34%) had had a previous lower segment caesarean section. 14 (46.67%) women of the 30 subjects were multi-gravidas. In a study by Swain, et al. in 1992, in Varanasi it was seen that Grand Multi-gravida status in 57 cases (34.13%) and bad obstetric history in 41 cases (24.56%) were the main risk factors for referral [3]. Hypertention and eclampsia was the commonest cause for reference in a study conducted by Ganatra BR, et al. at Maharashtra [4].

26 subjects (86.67%) had to travel greater than 25 km to reach Cheluvamba hospital. In a study by Ganatra BR, et al. in Pune in 1998 shows that the women travelled significantly greater distances through a greater number of health facilities before appropriate treatment was started. Multivariate analysis showed the negative effect of excessive referrals and the protective effect of the following: residing in and not away from the village; presence of a resident nurse in the village; having an educated husband and a trained attendant at delivery; and being at the woman's parents' home at the time of illness [4]. Lack of doctors and infrastructure at primary health centres was the

commonest cause for referral and maternal mortality in a village in Karnataka [5].

16 (53.34%) of the women who were referred underwent LSCS in Cheluvamba Hospital. Only 2 (6.64%) delivered normally. The remaining 12 (40%) underwent assisted deliveries. There was no perinatal mortality in the group studied. Availability of paediatrician and neonatal intensive care units is one of the important cause of reference according to many studies [6-8]. Very high perinatal mortality rate of 81.3/1000 live births and a neonatal mortality rate of 63.7/1000 live births was observed in the study conducted in Pune in 1993 by Bhardwaj N, Hasan SB [9]. In our study, one (3.34%) death occurred.

Suggestions

1. A large scale retrospective study to determine a detailed work-up of referral pattern over the last few years in Cheluvamba Hospital, Mysore.
2. Visiting FRUs to find out the set-backs they face in carrying out their responsibilities.
3. Upgrading FRUs and operationalizing to meet Indian public health standards.
4. Effective triage strategies to be implemented in FRUs to avoid negative effect of excessive referrals.

References

1. WHO (1987) Techn Rep Ser 746: 14-18.
2. Govt. Of India (2006) Annual report 2005-06. Ministry of health and family welfare, New Delhi. 45-59.
3. Swain S, Prakash A (1992) Utilisation of referral services by high risk pregnant population in rural Varanasi. *Indian J Matern Child Health* 3: 74-76.
4. Ganatra BR, Coyaji KJ, Rao VN (1998) Too far, too little, too late: a community-based case-control study of maternal mortality in rural West Maharashtra, India. *WHO bulletin* 76: 591-598.
5. George A (2007) Persistence of high maternal mortality in Koppal district, Karnataka, India: observed service delivery constraints. *Reproduction health matters* 15: 91-102.
6. Shantharam Baliga B, Raghuvveera K, Vivekananda Prabhu B, Shenoy R, Rajeev A (2007) Scaling up of facility-based neonatal care: a district health system experience. *Journal of tropical paediatrics* 53: 107-112.
7. Bhattacharyya SK, Majhi AK, Seal SL, Mukhopadhyay S, Kamilya G (2008) Maternal mortality in India: a 20-year study from a large referral medical college hospital, West Bengal. *J Obstet Gynaecol Res* 34: 499-503.
8. Iyengar K, Iyengar SD (2009) Emergency obstetric care and referral: experience of two midwife-led health centres in rural Rajasthan. *India Reprod Health Matters* 17: 9-20.
9. Bhardwaj N, Hasan SB (1993) High perinatal and neonatal mortality in rural India. *J R Soc Health* 113: 60-63.