

Original Research Article

Awareness about mother and child health services among tribal women of reproductive age group in Kurnool division of Kurnool district, Andhra Pradesh

Renuka Biyyala¹, Ram Sagar Reddy Moola^{1*}, Sreedevi Arepalli²

Department of Community Medicine, ¹Rajiv Gandhi Institute of Medical Sciences, Kadapa, ²Kurnool Medical College, Kurnool, Andhra Pradesh, India

Received: 01 May 2018

Accepted: 01 June 2018

*Correspondence:

Dr. Ram Sagar Reddy Moola,
E-mail: sagarspm@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Maternal and neonatal mortality and morbidity continue to be high in tribal areas despite the existence of various national programmes in India especially due to lack of awareness about MCH services among tribal women. This study was planned with the aim of assessing the knowledge of married tribal women of reproductive age group about MCH services.

Methods: This community based longitudinal study was carried out in January to June 2014 in Bairluti, tribal area at Kurnool district in Andhra Pradesh. 168 married women of reproductive age group were selected by simple random sampling. All the participants were interviewed using a predesigned pretested semi structured questionnaire.

Results: Awareness about vitamin A supplementation, family planning temporary methods, birth waiting homes, JSY, 108 services was observed to be poor among participants. Awareness about postnatal services, institutional delivery, family planning permanent methods was found to be inadequate. Whereas more than 50% of the study subjects had knowledge regarding antenatal services, home delivery by trained person, complete immunization and feeding practices. Health workers and family members were the major source of information. Literacy status had statistically significant association with knowledge about MCH services. Statistically significant improvement in awareness is observed after educational intervention.

Conclusions: Knowledge of tribal women about MCH services was observed to be inadequate. Maternal literacy plays a key role in better utilization of MCH services. IEC activities with health education sessions will help to increase awareness.

Keywords: MCH services, Knowledge, Educational intervention, Tribal area

INTRODUCTION

Maternal mortality & morbidity are significant health problems in developing countries. Improving maternal health has been an essential element for achieving health for all & has been included in Millennium Developmental Goals.¹

Quality antenatal, intranatal, and postnatal care is the single most important determinant of infants as well as

mothers morbidity and mortality. The inequality in the health and well-being of women in the developing world is a cause of immense concern. Despite an array of national programs since independence for improving the health of the child as well as the mother, inadequate access and underutilization of modern health services are among the prime reasons for the high maternal mortality rate in India. Other common reasons include high illiteracy among females, early marriages, ignorance, low quality as well as high cost of service, social structure,

detrimental health beliefs, personal characteristics, and malnutrition, especially among the rural and tribal populations. So, utilization of these services by the beneficiaries remains unsatisfactory.²⁻⁴

Awareness of women regarding their health assumes special significance in the Indian context because the maternal health problems are mainly due to ignorance, poverty, and lack of knowledge regarding the issue. It is therefore very important to first focus on services for increasing the awareness level of the mother.⁵

Thus this study was planned with the aim to assess the knowledge and awareness among the married tribal women of reproductive age group in Kurnool division of Kurnool district about MCH services. This will therefore help in identifying the lacunae in the awareness levels in antenatal care, new born and child care which can be related to the utilization of these services and hence contribute to bring down the mortality indicators.

Objectives

- To study the socio-demographic profile of married tribal women of reproductive age group.
- To assess the knowledge of married tribal women of reproductive age group about MCH services.
- To assess the impact of educational intervention on their knowledge regarding MCH services.

METHODS

This was a community based longitudinal and educational intervention study conducted in tribal area, Bairluti in Kurnool division of Kurnool district. The study subjects were married women of reproductive age group. 168 married women of reproductive age group between 15-45 years were selected using simple random technique. Data was obtained by personal interview using predesigned pretested semi structured questionnaire. House to house visit was done for the data collection. Informed verbal consent was taken from each participant. Group communication approach was followed for educational intervention. For reinforcement of their knowledge, educational intervention was conducted in three sessions with an interval of one month between the sessions by using flip charts, video shows, role plays, demonstrations. Each session lasted for three hours. Pretest & Posttest was done to assess their knowledge. The study period was 6 months, January to June 2014. The data entry and analysis was done using spss version 17 software. Results were presented as percentage of number of study subjects with correct responses. Chi-square test was used for comparison between the groups and p values were calculated.

RESULTS

Majority of the respondents i.e. 46% were between 25-34 years of age .Most of them were working as laborers

(89%), Hindu by religion (91%) and belong to nuclear family (68%) and lower socio economic status (96%). Majority of them were illiterates (64%). Only 12% of them had secondary education (Table 1).

Table 1: Socio demographic characteristics of study group.

Characteristics	Frequency (n=168)	Percentage (%)
Age group (in years)		
15-24	51	31
25-34	78	46
35-44	39	23
Occupation		
Home maker	18	11
Working (labourer)	150	89
Religion		
Hindu (chenchu)	153	91
Others	15	9
Type of family		
Joint	54	32
Nuclear	114	68
Literacy status		
Illiterate	108	64
Read & write	7	4
Primary	33	20
Secondary	20	12
Socioeconomic status		
Lower middle	7	4
Lower	161	96

More than 50% of the literates were aware of antenatal, natal, postnatal services, immunization & birth registration services. Statistically significant association was found between literacy status of women and their awareness about MCH services (Table 2).

Regarding knowledge about MCH services it was observed that 55% of study subjects were aware of antenatal services whereas only 30% women knew about postnatal services. 38% of the participants were aware of institutional delivery and 58% women knew about home delivery by trained person.

Regarding the participants' knowledge on family planning and immunization only 16% women knew about temporary methods of contraception and 31% women were aware of permanent methods of family planning. 61% of the respondents knew about complete immunization whereas only 7% women were aware of vitamin A supplementation.

The study subjects' knowledge regarding feeding practices and other MCH services revealed that 63% women knew about feeding colostrum and 69% of the participants were aware of breast feeding immediately after delivery. Only 17% women knew about birth waiting home. 26% and 29% of the respondents were aware of JSY and 108 services respectively.

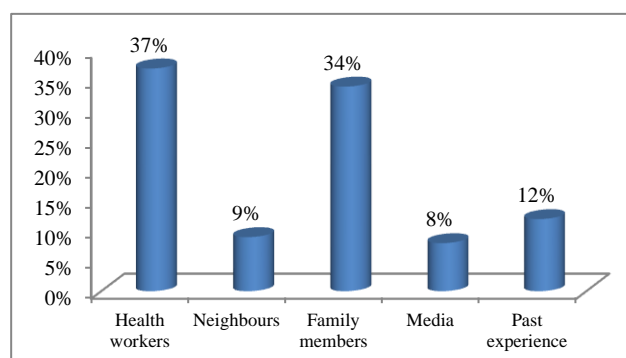
Table 2: Association of literacy status with knowledge of respondents about MCH services.

Characteristics	Illiterates (n=108)	Literates (n=60)	Chi-square (p value)
Antenatal check ups	43 (40)	49 (82)	<0.01
Postnatal check ups	14 (13)	37 (62)	<0.01
Institutional delivery	23 (21)	41 (68)	<0.01
Complete immunization	55 (51)	47 (78)	<0.01
Family planning temporary methods	6 (6)	20 (33)	<0.01
Birth registration of infant	7 (7)	35 (58)	<0.01

Table 3: Awareness regarding MCH services before and after educational intervention.

MCH services	Pre test	Post test	Chi-square (p value)
Antenatal services	92 (55)	150 (89)	<0.01
Postnatal services	51 (30)	141 (84)	<0.01
Institutional delivery	64 (38)	144 (86)	<0.01
Home delivery by trained health professional	98 (58)	146 (87)	<0.01
Family planning temporary methods	26 (16)	152 (91)	<0.01
Family planning permanent methods	52 (31)	155 (92)	<0.01
Complete immunization	102 (61)	149 (89)	<0.01
Vitamin A supplementation	12 (7)	158 (94)	<0.01
Colostrum feeding	106 (63)	148 (88)	<0.01
Breast feeding immediately after delivery	116 (69)	154 (92)	<0.01
Birth waiting home	28 (17)	142 (85)	<0.01
108 services	49 (29)	148 (88)	<0.01
JSY	44 (26)	152 (91)	<0.01

Statistically significant improvement in awareness was observed after educational intervention (Table 3).

**Figure 1: Source of information.**

Health workers and family members were the major source of information. Past experience plays an important role whereas contribution of peers and media is poor (Figure 1).

DISCUSSION

Majority of the respondents i.e. 46% were between 25-34 years of age. Most of them were working as laborers (89%), Hindu by religion (91%) and belong to nuclear family (68%) and lower socio economic status (96%). Majority of them were illiterates (64%). Only 12% of them had secondary education.

Our study found that maternal educational level is a significant factor in determining the knowledge of MCH services. Literacy status had statistically significant association with knowledge about MCH services. This finding is consistent with other studies.⁶⁻¹⁰

In the present study 55% of women had awareness about antenatal services. Radhika et al reported that 42.5% of the mothers had knowledge about minimum number of ante natal checkups required.¹¹ Laishram et al revealed that 55.2% of respondents knew correctly the minimum antenatal checkup during pregnancy.¹² Elayarani et al found that 37% women were aware of minimum three ante natal checkups.¹³

Present study observed that 30% of respondents had awareness about postnatal services. Whereas in a study conducted by Radhika et al it was found that 47.5% of mothers had knowledge about postnatal checkups.¹¹ In the current study 38% of respondents had awareness about institutional delivery whereas 58% had knowledge about home delivery by trained person.

The present study found that 16% of the participants had awareness about temporary methods of contraception whereas 31% had knowledge about permanent methods of contraception. Radhika et al revealed that 62.5% of mothers had knowledge about permanent methods of family planning.¹¹

The current study revealed that 61% of the study subjects had knowledge about complete immunization whereas only 7% had awareness about vitamin A supplementation. In a study conducted by Elayarani et al it was found that very few mothers were aware of names of the vaccines (BCG 15%, DPT 10%, OPV 7%, Measles 4% & Hep B 2%) and not a single mother knew about Vit A.¹³ Rama et al revealed that 76% of the participants were not aware of the names of the individual vaccines given for the new born babies.¹⁴

In the present study it was revealed that 63% of the participants had awareness about feeding colostrums and 69% had knowledge about breast feeding immediately after delivery. Radhika et al stated that 45% of mothers had knowledge about initiation of breast feeding within hr. after delivery.¹¹ Elayarani et al reported that 49.48% of mothers were aware that breast feeding is started in first one hour of birth.¹³ Rama et al found that 48% of mothers knew that breast feeding should start within 1 hr of child birth.¹⁴

In the current study it was found that 17% of the respondents had knowledge about birth waiting home whereas 26% had awareness about JSY and 29% knew about 108 services.

This study result shows that awareness about vitamin A supplementation, family planning temporary methods, birth waiting homes, JSY, 108 services was observed to be poor among participants. Awareness about postnatal services, institutional delivery, family planning permanent methods was found to be inadequate. Whereas more than 50% of the study subjects had knowledge regarding antenatal services, home delivery by trained person, complete immunization and feeding practices. Statistically significant improvement in awareness was found after educational intervention.

Health workers and family members played a major role in providing information. Media and peers had been found to be ineffective in spreading awareness. Other studies had mentioned anganwadi worker and health facilities as main source of information on mother and child care.^{15,16}

CONCLUSION

Knowledge about MCH services was found to be inadequate in the study area. Knowledge of tribal women was found to be associated with literacy status. Statistically significant improvement in awareness was found after educational intervention. To improve community awareness on MCH services information, education and communication activities should be increased through community campaign and mass media like local television channel, radio and local newspapers. There is a need to motivate women to utilize maternal and child care services which are freely available in all the government health setups.

ACKNOWLEDGEMENTS

We acknowledge all the tribal women who had participated in the study and also the ASHAs who helped to organize and carry out this study.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. National family health survey –III Ministry of Health and Family Welfare (MOHFW), International institute for population sciences, India, 2005-06.
2. Low P, Paterson J, Woules T, Carter S, Williams M, Percival T. Factors affecting antenatal care attendance by mothers of Pacific infants living in New Zealand. N Z Med. 2005;118:1489.
3. Okunlola MA, Ayinde OA, Owonikoko KM, Omigbodun AO. Factors influencing gestational age at antenatal booking at the University College Hospital, Ibadan, Nigeria. J Obstet Gynecol. 2006;26:195-7.
4. Trinh LT, Rubin G. Late entry to antenatal care in New South Wales, Australia. Reprod Health. 2006;3:8.
5. Mahajan H and Sharma B. Utilization of Maternal and Child Health Care Services by Primigravida Females in Urban and Rural Areas of India. ISRN Preventive Med. 2014.
6. Zhao Q, Kulane A, Gao Y, Xu B. Knowledge and attitude on maternal health care among rural-to-urban migrant women in Shanghai, China. BMC Women's Health. 2009;9:5.
7. Pallikadavath S, Mary Foss RM, Stones RW. Antenatal Care in Rural Madhya Pradesh: Povision and Inequality. Population Resource Centre, Madhya Pradesh. 2007;16:5.
8. Becker S, Peters DH, Gray RH, Gultiano C, Black RE. The determinants of use of maternal and child health services in Metro Cebu, the Philippines. Health Transit Rev 1993;3:77-89.
9. Castalino F, Nayak BS, D'Souza A. Knowledge and Practices of Postnatal mothers on new-born care in tertiary hospital of Udupi district. Nitte Univ J Health Sci. 2014;4(10):98-101.
10. Sharafi R, Esmaeeli H. Knowledge assessment of neonatal care among postnatal mothers. Iranian J Neonatol. 2013;4(1):28-31.
11. Radhika M, Anantha Krishna V and Indira S. Knowledge and Utilization Practices of Reproductive and Child Health Services among Mothers. Int J Appl Res. 2015;1(8):428-32.
12. Laishram J, Thounaojam Ud, PanmeiJ, Mukhia S and Sanayaima Devi H. Knowledge and practice of ante-natal care in an urban area. Indian Med Gazette. 2013: 101-6.

13. Elayarani E, Manasi S, Shekhar B. Cross sectional study of knowledge and awareness among MCH beneficiaries about antenatal and infant care in rural Tamil Nadu, India. *Asian J Med Sci*. 2016;7(1):59-65.
14. Rama R, Gopalakrishnan S and Udayshankar PM. Assessment of knowledge regarding new-born care among mothers in Kancheepuram district, Tamil Nadu. *Int J Comm Med Pub Health*. 2014;1(1):58-63.
15. Petit AI. Perception and Knowledge on Exclusive Breastfeeding among Women attending Antenatal and Postnatal Clinics. A Study from Mbarara Hospital – Uganda, August 2008. *Official Pub Tanzania Med Students Assoc*. 2010;16(1):27-30.
16. Mahalingam S, Soori A, Ram P, Achappa B, Chowta M, Madi D. Knowledge, attitude and perceptions of mothers with children under five years of age about vaccination in Mangalore, India. *Asian J Med Sci*. 2014;5(4):52-7.

Cite this article as: Biyyala R, Moola RSR, Arepalli S. Awareness about mother and child health services among tribal women of reproductive age group in Kurnool division of Kurnool district, Andhra Pradesh. *Int J Community Med Public Health* 2018;5:3111-5.