Original Article

UTILIZATION ASSESSMENT OF BASIC MATERNITY HEALTH SERVICES THROUGH MAMTA CARD IN RURAL AHMEDABAD

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ABSTRACT

Introduction: Mamta card is a comprehensive MCH card as it provides the information of pregnant / lactating women and 0-3 years of Children.

Objectives: To find the utilization of antenatal, Intranatal and postnatal health services by rural mothers and to assess completeness of records in the Mamta card.

Methodology: Community based cross sectional study was conducted at nine villages of seven sub centres under two PHCs of rural Ahmedabad district during October-2011 to January-2012. Proforma was prepared covering various components of Mamta card. Total 130 mothers having infants (<1 year) were interviewed. Information was assessed primarily from the Mamta card or by directly asking the mother whenever the card was unavailable.

Result: Out of total 130 mothers, 103 (79%) having mamta card. Majority (52%) were educated up to primary level. Documentation of treatment and advice was 82.5% for antenatal and only 3.9% for postnatal details. Date of birth was noted in 78.6%, birth weight in 67% and Growth chart mapping in 44.6% of mamta cards. Majority (76.9%) had taken at least 3 ANC visits. Around 95% mothers were fully immunized for TT, as per requirement. 52% mothers had taken IFA for at least 3 months. Majority (53%) delivered at private hospital. Beneficiaries of Janani-Suraksha Yojna were 32%. Preferable contraception was condom (16%) followed by Cu-T(7%), whereas majority(67%) were not using or did not reply.

Conclusion: The coverage of basic maternity health services is unsatisfactory. Documentation was satisfactory only for antenatal details but not for rest of the services. Relevant steps are required to improve services and its documentation.

Key words: Basic Maternity Health Services, Mamta card, Documentation.

INTRODUCTION

A Mamta card or mother and child care booklet designed for providing information and guidance to caregivers about care for pregnant, lactating women and 0-3 years of Children.[1,2] Mamta card is more comprehensive than MCH card as it includes various details like complete family details, birth details, Health organization details, various ANC record and notes on

treatment, follow up and referral advice during antenatal, intra natal and post natal period by doctors or health workers.[3] For growth monitoring of child, gender wise Growth chart is also available in card. Thus it covers almost all Maternal and Child components e.g. ante-natal, intranatal, new born care, post natal, exclusive breastfeeding, infant and young child feeding, immunization, regular weight and growth monitoring of Children (0-3 years). Mamta card also serves as a very good tool for evaluating the service delivery by various health workers.[4,5]

OBJECTIVES

Objectives of the study are to find the utilization of antenatal, Intranatal and postnatal health services by rural mothers and to assess completeness of records in the Mamta card.

MATERIALS AND METHODS

Out of total 43 PHCs in rural Ahmedabad, 2 PHCs were selected from one block of Ahmedabad district. Using the purposive sampling method, a cross sectional community based study was conducted in nine villages of seven sub centres of these PHCs during October 2011 to January 2012. Proforma was prepared taking various components of Mamta card which includes family details; birth details and growth chart status of baby; health organization details; various ANC record details; etc. It also has notes on treatment, follow up and referral advice during antenatal, intra natal and post natal period by doctors or health workers. As the Proforma was specially prepared for the study, field testing was done and necessary modifications were applied to make it standardized. Those mothers with <1 year old children were selected and interviewed for the study after their informed consent. As the data was collected within limited time, only 130 mothers were taken for study purpose. Regarding basic maternity health services, information was assessed primarily from mamta card. If mamta card was not available, Information was obtained by asking the mothers after informed verbal consent. Analysis of study was done by using appropriate statistical software applying suitable statistical tests.

RESULTS

Out of total 130 mothers, mamta card was available with 103 (79%) mothers. Regarding the education status, 32 (25%) mothers were illiterate. Majority 68 (52%) of mothers studied up to primary level; followed by 19 (14%) secondary level; 6 (5%) higher secondary level; and 5 (4%) up to graduate level. Various sections of the Mamta Card were checked for the documentation status (Table-1). In the available 103 mamta cards, documentation in birth detail section showed, birth date in 81(78.64%), birth weight in 69 (66.99%) and birth registration in 19 (18.45%). Among those 69 babies whose birth weight was recorded, 17 (24%) babies had weight less than 2.5 kg. Growth chart mapping was done in only 46 (44.66%) of mamta cards. Complete documentation for family details (including mother's name, age, ID No., address etc.) was seen in 24 (23.3%). Health facilities' details (including name of PHC, sub centre, Anganwadi etc.) were found to be completed in 31(30.09%).

Table 1: Status of documentation of various components in Mamta card (N=103)

Documentation Details	Mamta cards having details (%)
Complete Family details	24 (23.30)
Complete Birth details	16 (15.53)
a. Date of Birth detail	81 (78.64)
b. Birth Weight detail	69 (66.99)
c. Birth Registration detail	19 (18.45)
Complete Health facilities' details	31 (30.09)
Ante natal Weight detail	92 (89.32)
Ante natal Blood Pressure detail	86 (83.49)
Treatment, advice, follow up and Referral notes for Antenatal	85 (82.52)
Treatment, advice, follow up and Referral notes for Post natal	4 (3.88)
Treatment, advice, follow up and Referral notes for New born care	0 (0)
Growth chart mapping	46 (44.66)

Record of ANC services in the mamta card showed documentation of weight in 92 (89.32%) and blood pressure in 86 (83.49%). Documentation of treatment, advice & follow up notes in mamta card were found in 85 (82.52%) for antenatal details, in 4 (3.88%) for postnatal details and in none for new born care details. Assessment of ANC visits showed that 30 (23%) mothers had <3 ANC visits; 34 (26%) mothers had 3 ANC visits while the remaining 66 (51%) mothers had >3 ANC visits. Assessment of ANC services revealed that 124/130 (95%) mothers had complete TT coverage (TT_1 & TT_2 or TT

Booster according to their requirement) and 117 (90%) mothers had received IFA tablets. Out of 117 mothers 68 (58%) mothers had continued IFA tablets for at least 3 months and 26 (22%) mothers had taken tablets before meal.

Table 2: Comparison of Maternal Health indicators of present study (n=130) with DLHS3.[6]

Indicators	Present study (Ahmedabad Rural) (%)	DLHS3 (2007-08)					
		Ahmedabad		Gujarat		India	
		Rural	Total	Rural	Total	Rural	Total
At least 3 ANC visits	76.9	-	-	48.0	54.9	44.1	49.8
At least 1 TT inj. in antenatal	100.0	47.9	79.9	63.1	68.6	68.7	73.4
BP noted in antenatal period	83.0	-	-	44.8	51.0	38.0	45.7
Consume 100 IFA tablets	58.0	-	-	52.3	50.7	47.3	46.6
Institutional delivery	98.5	37.3	80.3	48.1	56.5	37.9	47.0
Home delivery by skilled health personnel	0.0	13.3	9.7	6.4	5.6	5.7	5.7
Beneficiaries of JSY	32.0	-	-	10.4	9.5	13.6	13.3
Female sterilization (TL)	5.0	50.0	36.6	43.7	41.5	34.1	34
Copper –T (IUD)	8.0	1.8	4.9	2.5	3.5	1.4	1.9
O.C. – pills	3.0	3.1	5.1	2.4	3.0	4.1	4.2
Condoms	16.0	2.8	6.6	3.0	4.5	3.8	5.9

'-'indicates 'Data Not Available'

The commonest place of delivery was private hospitals (69, 53.1%) followed by Government hospitals (43, 33%) & municipal hospitals (16, 12.3%). Home deliveries were reported to be 2 (1.5%). Normal deliveries were 112 (86%) and the rest were by caesarian section. Majority of deliveries were conducted by doctors (80, 61.5%) followed by nursing staff (48, 37%) and trained dais (2, 1.5%). Gender distribution of babies showed, 69 (53%) males and 61 (47%) females. Beneficiaries of Janani Suraksha Yojna were 42 (32%) and Chiranjeevi yojna were 4 (3.07%). For birth spacing, preferred method of contraception was condom (16%), followed by copper T (8%), tubal ligation (5%) and oral contraceptive pills (3%). However, majority (68%) women were either not using any method or preferred not to answer.

Table 3: Comparison of Maternal Health indicators of present study (n=130) with NFHS 3.[6,7]

indicators	Present study 2011-12 (Ahmedabad Rural) (%)	NFHS 3 (2005-06)			
		Gujarat		India	
		Rural	Total	Rural	Total
At least 3 ANC visits	76.9	55.8	64.9	42.8	50.7
Consume 100 IFA tablets	58	28.9	35.7	18.1	22.3
Institutional delivery	98.5	42.2	54.6	31.1	40.8
Female sterilization (TL)	5	47.0	42.9	37.1	37.3
Copper –T (IUD)	8	2.7	4.4	1.1	1.7
O.C. – pills	3	1.5	2.6	2.8	3.1
Condoms	16	3.7	5.8	3.2	5.2

The results was compared with the latest District Level Health Survey (DLHS3) (Table-2).[6] for the district, state and national level for total as well as rural components. The results were also compared with the latest National Family Health Survey (NFHS3) (Table-3).[6,7] It was compared with the state and national level data for total as well as rural components of NFHS3.

DISCUSSION

Mamta card is important documentary evidence as well as a unique tool for assessing the utilization of basic maternity services.[1] Current study showed availability of mamta card to be 79%. Reasons for unavailability of mamta card were misplace, torn, card not available at home etc. Even when the cards were available, the overall condition of the mamta card was poor. This shows the need to emphasize the 4 key messages during service delivery particularly vaccination which includes preserving the card and keeping it safe for documentation. Female literacy is an important indicator as well as a factor affecting health. Even though, the female literacy in the current study is higher than the

national (65.46%) and state (70.7%) female literacy rate (census 2011)[8], it needs to be improved further as the current study showed female illiteracy rate to be 25%. Documentation of birth weight, which was average (66.9%), is very helpful for identification of LBW babies. In the present study, 24% Low birth weight (LBW) babies were documented, which is less than the incidence of LBW babies (28%) of India 2008.[6] Growth chart is very important tool for monitoring the growth and nutritional status of baby.[1] Result shows that growth chart mapping was done in 45% mamta cards, which needs improvement for early identification of malnourished children and for tracking the growth of the baby.

Complete documentation for family details was 23% and for Health organization details was 30%, as E-mamta ID no. in family detail and First Referral Unit (FRU) information in Health organization details were not documented by majority of health workers. The study showed there was drastic difference in documentation of antenatal components (maternal weight-89%, blood pressure-83% and treatment, advice & follow up notes-82.5% etc.) and Intra & postnatal components (treatment, advice & follow up notes for post natal details (3.9%) and none for newborn care details). This shows higher weightage for documentation was given only up to antenatal details.

Mamta cards reveal that 23% mothers had taken <3 ANC visits. Although majority of women had started IFA tablets, the continuation of at least 3 months was 58% and only 22% mothers had taken IFA tablets before meals as per ideal recommendation. More efforts are still required for full coverage of antenatal Tetanus immunization. It reiterates the need to put equal and higher emphasis on all components of ANC during follow up and mamta day sessions.

Improved rate of tetanus immunization and institutional deliveries in current study were might be due to small sample size. Among the institutional delivery, majority were private hospitals deliveries (53%) as compare to government institutions. This could be due to unawareness of various government schemes, poor compliance due to low quality of care at government Health facilities, inadequate referral services, availability of private services at reasonable cost in rural areas etc.

Regarding birth spacing information, majority (68%) women were either not using any method or preferred not to answer. This has not only made the direct comparison difficult but also reflects social stigma, customs, beliefs or even lack of knowledge regarding contraceptive methods. Effective counseling of women for family planning and birth spacing is still a major felt-need in the community. As the target population is women having <1 year old child, the permanent method of contraception (e.g. TL) is not reflected accurately in the comparison with the district and national level data.

CONCLUSION

Higher emphasis needs to be given for better coverage of all RCH services including ANC services. Currently the mamta card is primarily used for documentation of ANC details only, which shows documentation in mamta card is still very poor & requires radical improvement.

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