



Use of Mamta Card by Pregnant and Lactating Mothers attending Village Health and Nutrition Days in Rural Area of Valsad, Gujarat

Bhavesh R Bariya¹, Mitali G Patel², Darshan K Mahyavanshi³, Sunil Nayak⁴

Financial Support: None declared

Conflict of Interest: None declared

Copy Right: The Journal retains the copyrights of this article. However, reproduction is permissible with due acknowledgement of the source.

How to cite this article:

Bariya BR, Patel MG, Mahyavanshi DK, Nayak S. Use of Mamta Card by Pregnant and Lactating Mothers attending Village Health and Nutrition Days in Rural Area of Valsad, Gujarat. Natl J Community Med 2019; 10(6): 337 - 341.

Author's Affiliation:

¹Tutor; ²Asst Prof, Dept of Community Medicine, GMERS Medical College Valsad, Gujarat; ³Asst Prof, Dept of Community Medicine, GMC Silvassa, DNH- UT; ⁴Professor and Head, Dept of Community Medicine, GMERS Medical College Valsad, Gujarat

Correspondence

Dr. Mitali Gulabbhai Patel
dr.mitali05@gmail.com

Date of Submission: 02-05-19

Date of Acceptance: 29-07-19

Date of Publication: 30-06-19

ABSTRACT

Introduction: The MCP card is a tool for pregnant women, young mothers and family members to learn understand and achieve good health practices. It contains information about antenatal care, danger signs, preparation for delivery, newborn care, immunization and growth chart.

Objective: The study conducted to assess the use of MCP card by beneficiaries attending VHND sessions in rural Valsad.

Methodology: It was a cross sectional study. Total 43 pregnant and lactating mothers were interviewed to know the use of MCP card by them. Their knowledge was checked by asking open ended questions about information provided in MCP card.

Results: 65.1% mothers had read the MCP card. 86.5% of the mothers could tell at least one use of Mamta card of which majority (86.49%) used it as immunization record of the child while 67.57% used it for information. 88% mothers brought the card at every visit to the health center. Mothers were quite aware about emergency signs, but knowledge about vaccination, growth monitoring, hygiene and various government schemes was poor.

Conclusion: Effective use of MCP card is still lacking by beneficiaries. Advocacy by health care providers may improve the knowledge of beneficiaries about various health information provided already in MCP card.

Key words: MCP card, Pregnant mothers, Care in pregnancy

INTRODUCTION

In Gujarat, Mother and Child Protection card (MCPC) is known as Mamta Card, and Village Health and Nutrition day (VHND) is called Mamta Divas. Gujarat has been using Mamta Card since 2005. In year 2013-14, total 1500000 Mamta Cards had been approved to distribute in whole State to help families to know about various types of services which they need to access for the health and well-being of women and children ¹. It provides information on comprehensive package of services addressing the needs of pregnant women and children up to 3 years of age. The card integrates health, nutrition and development along a life cycle continuum, pictorial representations, support easy understanding of positive care practices and developmental milestones.²

The card helps ANMs, AWWs and ASHAs for tracking of each child right from conception till age three; it is also used as an entitlement card for several schemes such as Indira Gandhi Matritva Sahyog Yojana, Home-based new-born care and Janani Suraksha Yojana.²

Sections on antenatal and postnatal care capture critical maternal health parameters. According to the New WHO Child Growth Standards, separate growth charts for boys and girls have been incorporated in the card for assessing the nutritional status of children.²

It is a tool with which families can learn, understand and follow their child's development, and enables them to follow positive practices to achieve good health of mothers and children.³ It was found

that the MCP card facilitates service demand through improving the understanding of mothers on key health and child care issues.³

With above background the present study was conducted to assess the use of Mamta card by Pregnant and Lactating Mothers attending VHND sessions in Rural area of Valsad.

MATERIALS AND METHODS

It was a descriptive cross sectional study carried out at Rural Health Training Centre (RHTC) practice area of Community medicine department of GMERS Medical College Valsad. The Data collection was done on VHND session sites during the time period of March 2018 to May 2018. We attended 8 VHND sessions of different subcentres and collected data from 43 pregnant and lactating mothers. The mothers visiting the VHND session either for antenatal care or for her baby were approached for the study. The convenience sampling method was used to enroll the mothers in the study. Mothers attending the session for the first time and mothers not willing to participate were excluded from the study.

After taking their informed verbal consent, a pre-tested, semi-structured questionnaire was administered for assessing their knowledge about Mamta card. Their knowledge was checked by asking open ended questions about information provided in the card like antenatal care, postnatal care, government schemes, growth charts, vaccination of children and other health education details and their responses were recorded.

Microsoft Office Excel was used for data entry and analysis. This being a descriptive study it reports actual numbers and proportions in the form of percentages of the study variables. Prior permission of Institutional review and ethical committee was taken.

RESULTS

In this study, 25 (58.1%) antenatal mothers and 18 (41.9%) postnatal mothers were interviewed. Of them, 95.3% had mamta card, while two mothers had lost it. 81.4% of the mothers received their Mamta card when they newly registered for pregnancy and the remaining received during their antenatal period. 65.1% mothers had read the Mamta card. 35% mothers didn't read the Mamta card ever. Around 60.5% mothers had been instructed to read the Mamta card by health care provider. 88% mothers were aware that Mamta card has to be brought at every visit to the health center.

Table 1: Awareness about usefulness of Mamta Card

Uses of Mamta Card	Frequency (%)
Vaccination Record	32 (86.5)
Information tool	25 (67.6)
Health and Nutrition education	17 (46.0)
Services available	15 (40.5)
other	6 (16.2)

*Multiple responses possible

Table 2: Knowledge of mothers about emergency signs in pregnancy:

Emergency signs in Pregnancy	Frequency
Labour pain	32 (80.0)
Bleeding p/v	29 (72.5)
Watery discharge	22 (55.0)
Fever	17 (42.5)
Convulsions	10 (25.0)
Breathlessness	7 (17.5)

*Multiple responses possible

Table 3: Knowledge of mothers about different aspects of care during and after pregnancy (N=43)

Component	Response (%)
Care during pregnancy	
Knew all aspects	11 (25.6)
Partially Knew	28 (65.1)
Didn't know	4 (9.3)
Gap between two subsequent pregnancies	
Knew correctly	24 (55.8)
Didn't know	19 (44.2)
Duration of exclusive breast feeding	
Knew correctly	36 (83.7)
Didn't know	7 (16.3)
Vaccination schedule of the child	
Knew all aspects	16 (37.2)
Partially Knew	18 (41.9)
Didn't know	9 (20.9)
Knowledge about growth chart	
Knew all aspects	8 (18.6)
Partially Knew	14 (32.6)
Didn't know	21 (48.8)

86.5% of the mothers could tell at least one use of Mamta card. Out of these, majority of them (86.49%) replied that it is used for immunization record of the child while 67.57% told that Mamta card is a good tool for information and also about various mother and child health and services available for them (40.54%). 40.54% of them used the card for health & nutrition education (Table 1).

More than 90% of the mothers could tell at least one emergency sign during antenatal period. Of these, majority stated labour pain (80%), followed by bleeding from vagina (72.5%) as danger sign for which emergency care should be taken during antenatal period. They were not aware about breathlessness and convulsions as the emergency sign (Table 2).

Table 4: Stratified analysis by reproductive status of mother

Component	Pregnant mothers (n=25) (%)	Lactating Mothers (n=18) (%)	P Value
Mother read mamta card	14 (56.0)	14 (77.8)	0.144
Bring mamta card at every visit	21 (84.0)	17 (94.4)	0.291
Uses of Mamta Card*			
Information tool	14 (56.0)	11 (61.1)	0.735
Health & Nutrition education	8 (32.0)	9 (50.0)	0.233
Services available	7 (28.0)	8 (44.4)	0.264
Vaccination	17 (68.0)	15 (83.3)	0.255
Emergency signs during in ANC*			
Bleeding p/v	19 (76)	10 (55.5)	0.158
Fever	10 (40.0)	7 (38.8)	0.941
Labour pain	18 (72.0)	14 (77.7)	0.668
Emergency signs postpartum*			
Heavy Bleeding	18 (72.0)	13 (72.2)	0.987
Foul smell discharge with fever	9 (36.0)	9 (50.0)	0.358
Immediate care of newborn*			
Weighing child	14 (56.0)	9 (50.0)	0.697
Breast feeding	21 (84.0)	14 (77.7)	0.604
Kangaroo Mother Care	10 (40.0)	8 (44.4)	0.770
Gap between subsequent pregnancy	9 (36.0)	10 (55.5)	0.202
Janani Suraksha Yojana	15 (60.0)	10 (55.5)	0.770

*Multiple answers possible

Table 5: Stratified analysis by reading of Mamta card by mother

Component	Read card (n=28)	Didn't read (n=15)	P Value
Uses of Mamta card*			
Information tool	17 (60.7)	8 (53.3)	0.640
Health & Nutrition education	15 (53.6)	2 (13.3)	0.024
Services available	11 (39.3)	4 (26.7)	0.407
Vaccination	22 (78.6)	10 (66.7)	0.393
Emergency signs in pregnancy*			
Bleeding from Vagina	23 (82.1)	6 (40.0)	<0.01
Fever	13 (46.4)	4 (26.7)	0.207
Labour pain	23 (82.1)	9 (60.0)	0.113
Watery discharge	15 (53.6)	7 (46.7)	0.666
Emergency signs postpartum*			
Heavy Bleeding	21 (75.0)	10 (66.7)	0.561
Foul smell discharge with fever	13 (46.3)	5 (33.3)	0.407
Immediate care of newborn*			
Weighing child	16 (57.1)	7 (46.7)	0.512
Breast feeding	25 (89.3)	10 (66.7)	0.159
Gap between subsequent pregnancy	16 (57.1)	3 (20.0)	0.019
Janani Suraksha Yojana	19 (67.9)	6 (40.0)	0.078

*Multiple answers possible

Figure in bracket indicate percentage.

Mothers were asked about basic care during pregnancy. A pregnant lady should eat nutritious food at frequent intervals, she should increase the amount of green leafy vegetables and fruits in her food and use only iodised salt. She should take minimum two hours rest at short intervals during the daytime. These messages are prominently displayed with pictures in mamta card. 25.6% moth-

ers recalled all these instructions. 9.3% mothers could not recall any of these messages, while 65% could recall some of these messages (Table 3).

Only 55.80% of the mothers were aware that there should be minimum three years gap between two subsequent pregnancies. 83.70% mothers knew that only breast milk has to be given to the baby till six months of age. 37% mothers knew about vaccination schedule, 42% knew it partially and 21% didn't know about it. 86% mother knew that seven visits are required for complete vaccination of the child. Some of them also replied that the child should be brought for vaccination whenever they are called by HCP.

72% of the mother replied that excessive bleeding in postnatal period is emergency as well as foul smelling discharge with fever (41.9%) should warrant visit to health centre after delivery.

65.1% mothers were aware about free transportation services from government hospital to their home after delivery. One mother was not aware that it is free of cost.

All mother had some knowledge about newborn care. 81.4% were aware that the baby should receive breast feeding as early as possible after birth and also birth weight should be recorded (53.5%). Knowledge about Kangaroo Mother Care (KMC) was found only in 23.3%.

The difference in knowledge regarding information provided in Mamta card among pregnant and lactating mothers were not statistically significant. (Table 3)

The mothers who have read the Mamta card could tell the use of card for health and nutrition education, bleeding from vagina as an emergency signs in pregnancy and there should be minimum three years gap between subsequent pregnancies compared to mothers who didn't read the card. This difference was statistically significant. (Table 5)

DISCUSSION

Pregnant woman when registered is given MAMTA card and her pregnancy and subsequent events are recorded regularly in e-Mamta to track her health and nutrition status as well as services provided to her.¹ 95% of the mothers had Mamta card in present study, 81.4% of them received it when they newly registered for pregnancy. According to National Family Health Survey (NFHS IV), 89.3% and 89.0% of the pregnant women received Mamta Card in India and Gujarat respectively⁴⁻⁵. In study by Govani KJ in rural Ahmabad 79% mothers were having mamta card.⁶

In this study, 65.1% mothers had read the Mamta card, while 35% mothers didn't read the Mamta card ever. Around 60.5% mothers had been instructed to read the mamta card by health care provider. This was comparatively higher than the study results by Jena D et al⁷ in which 14% mothers had never read the MCP card and 86% mothers had read the MCP card.

In study by Gopalakrishnan S, 46% of the study participants had adequate knowledge about the danger signs/symptoms of pregnancy while 45% had adequate knowledge about antenatal care and only 13% had adequate knowledge on obstetrics care⁸. Agarwal N et al, found that 71.4% and 31.4% of mothers had received diet advice and informed danger signs during pregnancy by healthcare provider respectively⁹. In Present study, more than 90% of the mothers could tell at least one emergency sign during antenatal period. Of these, majority stated labour pain (80%), followed by bleeding per vagina (72.5%). 25.6% mothers recalled all the instructions regarding basic care during pregnancy.

In present study, 81.4% mothers were aware that the baby should receive breast feeding as early as possible after birth and also birth weight should be recorded (53.50%). Knowledge about Kangaroo Mother Care was found only in 23.30%. 83.70% mothers knew that only breast milk has to be given to the baby till six months of age. It was in contrary to finding by Elavarasan, et al. where 49.48% percent mothers were aware that breast feeding is started in the first one hour of birth and 34.02% knew that exclusive breast feeding should be given for first six months¹⁰. Rama R et al. also reported 48% of the mothers knew that breast feeding should be started with in 1 hour of child birth, but 64% of the participants not aware of the duration of exclusive breastfeeding¹¹.

The result of Timilsina S. illustrates that highest knowledge was in the area of danger signs of mothers and newborn, the mean percentage was 82.70 with mean and SD of 8.27 ±1.48. In that study, 98.47% and 47.45% mentioned that heavy bleeding and puerperal infection were the danger sign of postnatal mothers respectively¹². In present study, mother replied that excessive bleeding (72%) and foul smelling discharge with fever (41.9%) in postnatal period should warrant visit to health centre after delivery.

Kagoné M et al reported that although most of the women knew the EPI target diseases well, many informants reported that mothers don't know the EPI program itself, i.e. the schedule of the vaccinations, and their different appointments. For every immunization session, the parents of children need to be called by health workers to participate, and

not every woman participates¹³. We found that 37% mothers knew about vaccination schedule, 42% knew it partially and 21% didn't know about it. Some of them also replied that the child should be brought for vaccination whenever they are called by HCP.

It was contrary to finding by Tubachi AP et al where only 20 out of 134 (14.9%) mothers had seen the growth chart before and 13 of them had seen it in MCP card. Only 5 could tell the use of growth chart in that study¹⁴. Bag S et al found none of the MCP card with record maintenance of growth charts in study at rural area of Kolkata¹⁵.

Main reasons for inadequate utilization of ANC services were financial (16.22%), unawareness about ANC services (16.22%), unavailability of transport facilities (13.51%) in study by Mumbare SS et al¹⁶. In a study by Sharma N et al. 85 (31.0%) did not have knowledge about ANC services, 47 (17.2%) reported financial constraints and 20 (7.3%) said that no transport facility was available¹⁷. It was noted that 65.1% mothers were aware about free transportation services from government hospital to their home after delivery, One mother was not aware that it is free of cost in current study. Quarterly Monitoring Report of Janani Shishu Suraksha Karyakram Karyakram (JSSK) 2013 mentioned that Women became aware of free drop back by the facility vehicle during their stay in the health facility in Gujarat¹⁸.

CONCLUSION AND RECOMMENDATION:

Nealy two third mothers had read the Mamta card ever and majority of them perceive it as an immunization record of the child. Effective use of Mamta card is still lacking by beneficiaries. All efforts should be made to ensure that the functionaries explain the MCP Card in totality to the beneficiaries, so that they are better aware of the benefits of the Card.

LIMITATIONS:

The sample size is small so the study findings cannot be extrapolated to all pregnant and lactating women.

Acknowledgement:

Authors would like to thank all the mothers who agreed to participate in the study, without their participation the study would not have been possible. We are also thankful to Medical officer, Female health workers, Anganwadi workers and ASHA workers whose cooperation made this

study a success. We also thank internee doctors posted in community department during the study period for their help in data collection process.

REFERENCES

- Mamta Card. Maternal Health. RMNCH+A. Programmes. NHM Gujarat. [Internet]. [cited 2018 Dec 29]. Available from: <https://nhm.gujarat.gov.in/mamta-card.htm>
- Government Of India. Potential Good Practices: The ICDS Experience. 2013;
- Snowden H, Kalita G, Ghosh S. The Effectiveness of the Mother and Child Protection Card as a Community Management tool A Case Study. 2006.
- National Family Health Survey IV (NFHS IV) 2015-16: Factsheet-India.
- National Family Health Survey IV (NFHS IV) 2015-16: State Factsheet-Gujarat.
- Govani KJ, Sheth JK, Bala DV. Utilization assessment of basic maternity health services through Mamta card in rural Ahmadabad. *Natl J Community Med*. 2013;4:40-3.
- Jena D, Sabat S, Tripathy RM, Mahapatra DK. Utilization of MCP card for enrichment of knowledge on antenatal care by mothers attending immunization clinic: a hospital based cross-sectional study. *Int J Adv Med* 2017;4:1466-72.
- Gopalakrishnan S, Rama R. Assessment of knowledge regarding 'essential obstetrics care' among rural pregnant women in Kancheepuram District of Tamil Nadu, India. *International Journal Of Community Medicine And Public Health*. 2017 Feb 6;2 (4):526-30.
- Agarwal N, Galhotra A, Swami HM. A study on coverage utilization and quality of maternal care services. *National J Community Med*. 2011;2 (1):32-6.
- Elavarasan E, Padhyegurjar MS, Padhyegurjar SB. 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.
- Rama R, Gopalakrishnan S, Udayshankar PM. Assessment of knowledge regarding new-born care among mothers in Kancheepuram district, Tamil Nadu. *Int J Community Med Public Health* 2014;1:58-63. [Internet]. Pazūhishā-i Farhangī; [cited 2019 Jul 1]. Available from: <https://ijcmph.com/index.php/ijcmph/article/view/1055/923>
- Timilsina S, Dhakal R. Knowledge on postnatal care among postnatal mothers. *Saudi J Med Pharm Pci*. 2015 Dec;1:87-92.
- Kagoné M, Yé M, Nébié E, Sié A, Müller O, Beiersmann C. Community perception regarding childhood vaccinations and its implications for effectiveness: a qualitative study in rural Burkina Faso. *BMC public health*. 2018 Dec;18 (1):324. [cited 2018 Dec 30]; Available from: <http://www.ncbi.nlm.nih.gov/pubmed/29510684>
- Tubachi AP, Nooyi S, Murthy NS. Correlation of weight for age of children and knowledge about growth chart among mothers. *Int J Community Med Public Health* 2018;5:2011-5.
- Bag S, Datta M. Evaluation of mother and child protection card entries in a rural area of West Bengal. *Int J Community Med Public Health* 2017;4:2604-7. [Internet]. Pazūhishā-i Farhangī; [cited 2019 Jul 1]. Available from: <https://mail.ijcmph.com/index.php/ijcmph/article/view/1527/1284>
- Mumbare SS, Rege R. Ante natal care services utilization, delivery practices and factors affecting them in tribal area of North Maharashtra. *Indian J Community Med* 2011;36:287-90.
- Sharma N, Kumar HVK, Devgan S. A study on utilization of antenatal care services in urban slums of Amritsar city, Punjab, India. *Int J Community Med Public Health* 2017;4:698-703. [cited 2019 Jul 1]; Available from: <http://www.ijcmph.com>
- Quarterly Monitoring Report of Janani Shishu Suraksha Karyakram. April -June 2013 NHSRC [Internet]. [cited 2018 Dec 30]. Available from: http://nhsrcindia.org/sites/default/files/JSSK_Report_Apr_Jun_2013-14.pdf