# **Original Research Article**

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# A community-based cross-sectional study to explore awareness about various components of mother and child protection card among mothers utilizing Village Health and Nutrition Day services

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## **ABSTRACT**

**Background:** The mother and child protection card (MCP Card) is a card designed to provide essential health services and benefits to mothers and their children. It serves as a tangible reminder of their rights to healthcare and encourages active participation in maternal and child health programs. Concerted efforts are needed at various levels to promote awareness and utilization of the MCP card.

**Methods:** A community-based cross-sectional study was conducted in the rural and urban field practice area of the Community Medicine Department. 46 mothers having children up to the age of 2 years were enrolled by a convenient sampling method, and a semi-structured closed-ended questionnaire was used for data collection.

**Results:** >70% of the respondents knew about details regarding ANM, AWW, and ASHA workers in their area. 50% of mothers were aware about detailed mentioned on card about health programs related to mother and child care, vaccines during pregnancy, pregnancy care and danger signs, important developmental milestones of the baby, and danger signs of developmental delay etc. 30% of respondents had awareness related to knowledge about investigations during pregnancy and after delivery, newborn care and danger signs, symptoms and treatment of diarrheal and pneumonia diseases, and awareness about different contraceptive methods available at government facilities. Only 10% of respondents had awareness about IFA supplementation and albendazole track record on the MCP card.

Conclusions: Efforts are required at the community level to improve understanding and utilization of the MCP card.

Keywords: Awareness, MCP, Mother, Village Health and Nutrition Day, VHND

### INTRODUCTION

The mother and child protection (MCP) card holds immense significance in safeguarding the health and welfare of mothers and their children. It was launched on April 1, 2010, by the National Rural Health Mission (NRHM) in collaboration with the Integrated Child Development Scheme (ICDS). This essential document facilitates regular health monitoring and access to crucial healthcare services such as prenatal care, vaccinations, postnatal support, and neonatal and child care. The MCP

card enables healthcare providers to deliver personalized care and interventions tailored to the specific needs of mothers and children. It also plays a pivotal role in emergencies by providing vital medical information and ensuring prompt and appropriate responses. Moreover, the MCP card empowers mothers with knowledge about proper health practices and encourages proactive health-seeking behaviors. Overall, the MCP card not only enhances healthcare delivery but also contributes to reducing maternal and child mortality rates, making it an indispensable tool in promoting maternal and child health

outcomes. MCP card is a concise booklet of information on Mother and child care from pre-conception to children up to 5 years.

This study was planned to explore MCP card awareness in the community and identify the gaps in knowledge about various components of the MCP card. Also, assessment of awareness about various components of the Mother and Child Protection (MCP) card among mothers attending Village Health and Nutrition Day (VHND) sessions.

#### **METHODS**

It was a cross-sectional study, conducted in the urban and rural field practice area of the Department of Community Government Doon Medical College, Dehradun. The study was conducted for 1 month (January 2024 to February 2024). House to house survey was done to capture the awareness about various components of the MCP card among mothers attending VHND sessions. 46 mothers having children up to the age of 2 years and who were willing to participate were enrolled by the convenience sampling method, 23 each from the urban and rural field practice area. A pre-tested, semi-structured closed-ended questionnaire was used for data collection. All collected data were entered, compiled, tabulated, and analyzed by using Microsoft Excel 2017. The percentage was calculated for all the variables, and graphs were extrapolated.

## **RESULTS**

The majority of the study participants (mothers having children up to the age of 2 years) were 26-30 years old (57%). There was no teenage pregnancy in my study. The majority of the mothers had children aged between 12-24 months. Most mothers were housewives (85%), followed by professionals (9%). Most of the study participants (46%) were post-graduate, followed by senior secondary level (16%). 13% of the study participants were Ph.D. holders. Most participants belong to the Upper-middle class (52%), followed by the middle class (33%) and lower-middle class (15%), as mentioned in Table 1.

Out of 46 participants, 25 (54%) participants know about the provision given to the pregnant mother under the government health programmes, 34 (74%) participants know about their ASHA, AWW, and ANM, and 23 (50%) participants had information about their bank account details. None of the participants paid money to get an MCP card from any health worker, as shown in Figure 1.

Out of 46 participants, only 23 (50%) were aware of the contraceptive choices available at the government centers. 23 (50%) participants were aware of the antenatal investigations. Danger signs of pregnancy were known by 27 (59%) participants. Major known variables among maternal health were iron and folic acid supplementation,

for which 36 out of 46 (78%) participants were aware, as shown in Figure 2.

Table 1: Socio-demographic details of study participant (n=46).

Variable	Sub-variables	Frequency (%)
Age of the mother (respondent) in years\	20-25	08 (17)
	26-30	26 (57)
	31-35	10 (22)
	>35	02 (4)
Age of the child in months	0-6	08 (17)
	6-12	05 (11)
	12-24	33 (72)
Profession	Clerical/shop owner	2 (4)
	Semi-Professional	1 (2)
	Professional	4 (9)
	House-wife	39 (85)
Education	Illiterate	1 (2)
	5 <sup>th</sup> pass	1 (2)
	8 <sup>th</sup> pass	5 (11)
	12 <sup>th</sup> pass	7 (15)
	Graduate	5 (11)
	Post-graduate	21 (46)
	Ph.D.	6 (13)
Socio-economic class	Upper middle class	24 (52)
	Middle class	15 (33)
	Lower middle class	07 (15)

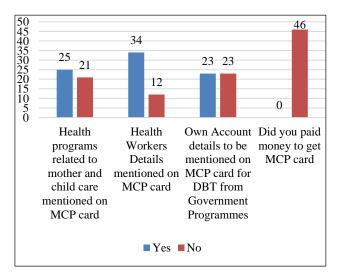


Figure 1: Awareness of mother about various basic components of MCP card (n=46).

Out of 46, 18 (39%) participants knew about how to monitor height for age in the MCP card. Whereas weight for age was known by 21 participants (46%). Very few participants, 13 (28%), know about the IFA and albendazole provision in the children and their track records on the MCP card. 25 (54%) participants were aware of the danger signs mentioned in the MCP card. It

is one of the most well-known variables among childcare components.

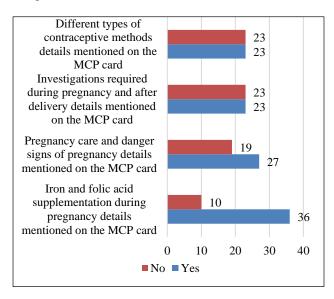


Figure 2: Awareness of mothers regarding various components related to maternal health of MCP card (n=46).

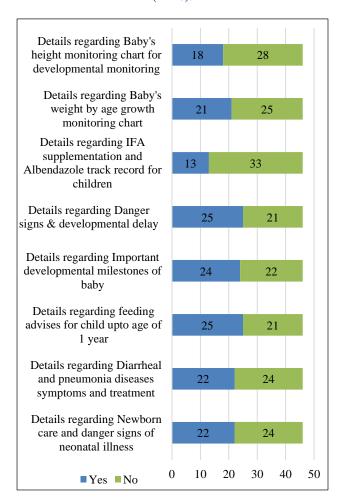


Figure 3: Awareness of mothers regarding various components related to child health mentioned on MCP card (n=46).

More than 54% of participants were aware of the developmental milestone via the MCP card. Child feeding practice was also one of the most well-known components in child care, which 25 (54%) participants knew. Details regarding symptoms of pneumonia and diarrhea were known by 22 (48%) participants. Newborn care and danger signs of neonatal illnesses were also known by 22 (48%) participants. 24 (52%) were unaware of the danger signs of neonatal illnesses, diarrheal, and pneumonia symptoms, as shown in Figure 3.

Most of the participants (30, 65%) know about the vaccine provided during the ANC period. While vaccines given to the children were known by 29 (63%) of participants. Very few participants know about the diseases prevented by the vaccine, as shown in Figure 4.

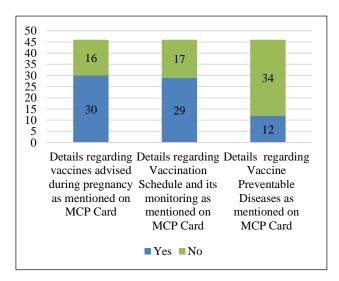


Figure 4: Awareness of mothers regarding various components related to vaccines mentioned on MCP card (N=46).

The primary source of information regarding the use of MCP cards for the beneficiary is ASHA (74%), followed by self-reading and understanding (13%), AWW (9%), and ANM (4%), as shown in Figure 5.

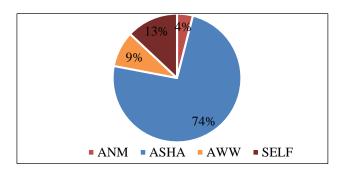


Figure 5: Source of information about the MCP card (n=46).

81% of the patient received an MCP card through their ASHA worker, followed by AWW (15%) and ANM (4%), as shown in Figure 6.

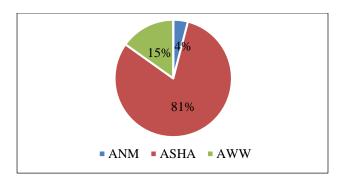


Figure 6: Source OF MCP card (N=46).

#### DISCUSSION

The Mother and Child Protection Card is a vital tool for assessing, managing, and providing care to expectant mothers and children. It serves not only as a resource for mothers but also for the entire family, offering valuable information on beneficial practices and methods to ensure the well-being of pregnant women and children. In addition to benefiting families, healthcare providers, including doctors, also utilize this card.

Based on the information available in the MCP card, this study assessed the knowledge level of postnatal mothers who possessed an MCP card regarding prenatal care, delivery, postnatal care, and childcare. All participants in the study had an MCP card.

In this study, the majority of study participants are postgraduate, housewives, and belong to the upper-middle class.

In this study, the most well-known component from the MCP card is iron and folic acid supplementation taken during pregnancy and the post-partum period (78%), which is better than the study conducted by Sulekha et al (31.4%), and Jena et al (48%).<sup>3,4</sup> Iron-folic acid supplementation and albendazole track records are among the least well-known components (28%). These data clearly show that the community is much more aware of the iron-folic acid supplementation during the ANC period than during the childhood period. This shows that with constant effort in MCH care, the community is raising awareness about IFA in mothers, but anemia in children is still an ignored area. One of the reasons for less awareness is poor availability of syrup iron and folic acid supplementation in the government setup. A study conducted by Ahmed et al found 163 districts out of 704 had IFA syrup supply.5

In this study 65% of the participant is aware of the T.T vaccine/s taken during pregnancy which is better than what is found in study conducted by Sulekha, et al (14.2%) but study conducted by Jena et al shows better awareness (90%) of T.T. vaccine.<sup>3,4</sup> In this study, awareness about infant and childhood vaccination is 63%,

whereas knowledge about the diseases prevented by vaccination is only 26%.

In this study, 59% of participants are aware of the danger signs of pregnancy, which is better than the study conducted by Sangam et al (42.48%) and Gopalakrishnan (46%).<sup>6,7</sup> In contrast, a study done by Timilsina and Dhakal showed the highest (82.7%) knowledge of beneficiaries about danger signs during the antenatal, postnatal, and neonatal period.<sup>8</sup>

In this study 48% of participants is aware of the newborn care and danger signs of neonatal illnesses and similar proportion of participants (48%) are aware of the diarrheal and pneumonia diseases symptoms and its treatment but the study conducted by Sangam et al shows better awareness of danger signs of neonatal illnesses a (51.57%) and treatment of diarrhea and pneumonia (50%).<sup>6</sup>

In this study, 52% of participants knew development milestones of children, which is better than the study conducted by Dora et al (0%).<sup>9</sup>

In this study growth chart is known by only 46% of the participants, which is almost similar to the study conducted by Sangam et al (49.12%) and higher than the study conducted by Sulekha et al.<sup>6,3</sup>

In the present study, 50% of the participants knew the contraceptive methods available at government centers, which is better than the study conducted by Sangam et al (36.28%).<sup>6</sup>

In the study conducted by Sulekha et al ASHA was the primary source of information to 4.9% whereas in my study ASHA was the source of information to 74% of participants, AWW and ANM were primary source of information to 11.1% and 8.8% participants, in my study AWW and ANM was source of information to 9% and 4% of the participants.<sup>3</sup>

26% of the beneficiaries, despite having MCP cards, did not even know about their ground-level service providers like ASHA, AWW, and ANM.

This study has few limitations. The study was conducted for a short period (1 month), and a small sample size was also a limitation of the study.

## **CONCLUSION**

MCP card is a concise booklet of information, required from pre-conception to child upbringing, still it is used by few people, even among educated beneficiaries. A constant effort needs to be made to make people aware of the importance of the MCP card and its utilization as a constant source of information during pregnancy and child-rearing. The language and clarity of the MCP card must be improved. Providing proper training of ASHA

and AWW can help bridge the gap between knowledge and practice.

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Ethical approval: The study was approved by the

Institutional Ethics Committee

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