

ORIGINAL ARTICLE

Use of Mother Child Protection Card in Medical College Setting: Our Experience

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ABSTRACT

Background: The Mother Child Protection Card (MCP Card) is a user friendly, visual tool designed to provide concise, actionable guidance on specific tasks to the community health workers. **Aims & Objectives:** The present study intended to use MCP card for empowerment of parents. This can be a sustainable solution for holistic child development and safety in medical college. **Methodology:** This was a prospective cross-sectional study conducted in a tertiary care hospital. The study population comprised children between 0-2 years of age. An informed written consent was obtained from the mothers prior to inclusion in the study. Participants were selected based on predefined inclusion criteria and were administered a pre-validated semi structural proforma in vernacular language. Data collected in preformed data collection form was entered in Microsoft Excel and analyzed using IBM Statistical package for social sciences (SPSS) version 26. **Results:** The Mother and Child Protection (MCP) Card was used for parental counselling and the most common form of affectionate interaction with babies was hugging or skin-to-skin contact (33.2%). This tool offers a valuable guidance and practical support. **Conclusion:** The study emphasizes that for MCP cards with structured training of frontline health workers and counselling sessions at key maternal-child contact points.

KEYWORDS

Mother Child Protection Card, Maternal-Child Contact Points, Parental Counselling

INTRODUCTION

The Mother Child Protection Card (MCP Card) is a vital instrument designed to enhance the health and development of children by empowering parents. National Rural Health Mission (NRHM) introduced the mother and child protection card (MCP card) by the to improve mother child health. Early childhood programs are critical for meeting the Sustainable Development Goals (SDGs) of the nation. To achieve Sustainable Development Goals for 2030, we need to focus maternal and child health on it.(1) The health status of mothers and children in India have improved over the past two decades.(2) The MCP Card plays an important role in empowerment of community health workers. It

offers a wealth of information on health practices, developmental milestones, and available community services, enabling parents to make informed choices.(3) This community-oriented approach enhances service delivery and creates dialogue about maternal and child health issues within communities.(4) Such collaboration is essential for improving ability of parents to reach to full potential of children.(5) Training programs should focus on building supportive relationships between providers and families.(6) The present study intended to use MCP card for empowerment of the parents. This can be a sustainable solution for holistic child development.

Aim & Objective(s)

The present study intended to use MCP card for parental empowerment as a sustainable solution for holistic child development and child safety tips in medical college.

- To understand the knowledge of child rearing practices
- To improve the child rearing practices by empowering the care givers by increasing the confidence.

MATERIAL & METHODS

Study Type & study Design: This was a prospective cross-sectional study conducted in a tertiary care hospital.

Study setting: hospital set up.

Study population: The study population comprised children between 0-2 years of age.

Study duration: An informed written consent was obtained from the mothers prior to inclusion in the study. (Annexure A) Participants were selected based on predefined inclusion criteria and were administered a pre validated semi structural proforma in vernacular language (Marathi) (Annexure B). This included knowledge and practices about pregnancy, antenatal check-up, nutrition, immunization, breastfeeding, complementary feeding, play therapy and child rearing practices. Milestone awareness questions were developed using the HBYC job aid and MCP card, Ministry of health and family welfare, Government of India was used for the study. Telephonic feedback was taken from mothers to assess the development of the child and utility of MCP card in child's development. **Data Collection:** A structured proforma was developed to comprehensively document patient information. Mothers were interviewed using the structured proforma (Annexure B) during their hospital visits. Data regarding demographic details, socio-economic status, anthropometry, breastfeeding patterns, new-born care practices, and parenting rearing practices were recorded systematically.

Statistical Analysis: Data collected in preformed data collection form was entered in Microsoft Excel and analysed using IBM Statistical package for social sciences (SPSS) version 26 with the help of clinical statistician. Results were presented in tabular and graphical forms Mean, median, standard deviation, and ranges for continuous data, and frequencies and percentages for categorical data. Continuous variables were expressed as mean +/- standard deviations, while categorical variables were presented as frequencies and percentages. Student t test (Two Tailed) was used to test the significance of mean, and P value <0.05 was

considered a significant value. Appropriate tests of statistical significance such as chi square, t test, and paired t test were used for statistical analysis.

RESULTS

Mothers who had completed secondary education was 42%, indicating that this is the most common educational attainment level among them. 38.9% of mothers had only primary education might be due to urban settings and 19.1% of mothers had pursued higher education (graduate or postgraduate levels). The highest proportion of babies (43.6%) were under 1 month old, reflecting active healthcare engagement during this critical period. Babies aged 1 month to 1 year accounted for 29.2%, indicating continued need for regular check-ups and vaccinations. Those aged 13 months to 2 years made up 27.2%, showing sustained but slightly reduced healthcare utilization as children grow older.

Mother and Child Protection (MCP) Card was used to varying extents across different healthcare settings for parental counselling. The highest acceptance was in the Postnatal Care (PNC) unit (32.1%), followed by urban clinics (29.8%). In the Neonatal Intensive Care Unit (NICU), 15.9% of parents—primarily those with babies off ventilatory support and receiving Kangaroo Mother Care—were counselled using the MCP card along with the HBYC job aid. Usage was lower in the Paediatric Ward (11.5%) and the Paediatric Intensive Care Unit (PICU) (10.7%), where the card was used to educate parents, particularly mothers, on child development and care.

The most common form of affectionate interaction with babies was hugging or skin-to-skin contact (33.2%), emphasizing the crucial role of physical touch in early development. Talking to babies was the second most frequent method (23.2%), underlining the importance of verbal communication in cognitive and emotional stimulation. Other interactions such as playing (17.0%) and showing videos (12.3%) were also practiced, indicating awareness of visual and auditory engagement strategies. These findings suggest that parents are generally informed about effective ways to interact with their infants. In this study, these positive practices were further supported and reinforced through the use of the mother and Child Protection (MCP) Card.

93.2% of mothers felt more confident in caring for their second baby after using the MCP card and HBYC job aid, compared to their first parenting experience. This suggests that these tools offer valuable guidance and practical support, enhancing parenting skills even among experienced mothers by providing targeted knowledge and improved

caregiving strategies. There is possibility of the previous experience of mothers with first baby which may have influence which we could not compare.

There was no statistically significant association between a mother's education level and her responses to key survey questions, as all p-values are above 0.05. This indicates that the effectiveness of the picture card, HBYC job aid, and health education in increasing knowledge, boosting confidence, and improving childcare practices is consistent across all education levels—from primary to postgraduate. This finding underscores the inclusive value of the picture card as an educational tool. Its impact is not limited by literacy level, making it especially useful for reaching and empowering mothers with limited formal education.

The fathers of all age groups found the picture card helpful in gaining knowledge, age significantly influenced how confident they felt and how useful they found the intervention. Fathers aged 25–35 showed greater improvement in confidence and caregiving abilities, particularly when caring for a second child. This suggests that the MCP card and HBYC job aid are especially effective in enhancing confidence and parenting practices among older fathers

DISCUSSION

Mother and Child protection card and Home-based young child care job aid serves as a comprehensive record-keeping tool that tracks essential health information from pregnancy through early childhood. By providing structured guidance and resources, the MCP Card encourages parents to engage actively in their children's health journey, thus fostering a sense of responsibility and ownership over their well-being. Empowering parents is crucial for promoting effective decision-making regarding their children's health and education. This study aimed to assess the knowledge of mothers about the child development and safety. We also wanted to create awareness amongst parents about child safety, development by using picture cards. Findings from this study not only reaffirm the MCP card's potential in knowledge dissemination and behavioural change but also underscore key gaps in awareness, service delivery, and contextual barriers that influence its effectiveness. The findings of this study also provide valuable insights into the current state of mother's knowledge, attitude and practice about complementary feeding, immunization, child rearing practices and child development and highlight areas where improvements can be made.

The data demonstrated that maternal education was not significantly associated with perceived benefits of the MCP card ($p > 0.05$), a finding that may seem counterintuitive. Traditionally, higher maternal education correlates with improved health-seeking behaviours. However, the study's results suggest that thoughtfully designed, pictorial tools like the MCP card may mitigate the disadvantages posed by low literacy, a concept echoed by WHO's recommendations on visual health education tools in low-resource settings. A substantial 95.6% of mothers in the present study agreed that the picture-based MCP card enhanced their knowledge, and 94.5% mothers felt more confident in caregiving—a compelling indicator of the card's acceptability and perceived utility. This is consistent with Jena et al who reported that 86% of mothers had read the MCP card, particularly when pictorial content was used. However, this study goes further by revealing that even among illiterate mothers, understanding and confidence were high—suggesting that the visual design of the card can successfully bridge literacy gaps.(7) This affirms findings from Dora et al. who emphasized that comprehension of the card was possible across varying education levels.(8)

Despite positive perceptions, only 35.5% of mothers in the study were counselled on newborn danger signs, and just 37.6% received parenting tips—indicating a critical gap in the implementation of the HBYC framework. These figures echo Kalita et al and Mahyavanshi et al who found that although frontline workers had access to MCP cards, their ability to transmit structured knowledge was inconsistent, often due to time constraints, poor training, or fragmented supervision.(9,10) The study revealed significant variation in MCP card usage across clinical contexts. Its acceptance was highest in the postnatal care unit (32.1%) and urban clinics (29.8%), where healthcare engagement is typically more preventive and less time-critical. In contrast, acceptance was markedly lower in NICU and PICU settings (15.9% and 10.7%, respectively), possibly due to heightened parental anxiety, acute care focus, and limited time for counselling. These findings suggest that the success of MCP-based counselling is not merely a factor of availability, but also of timing and context—supporting observations by Sangam et al who noted better MCP card engagement in routine, non-emergent settings. Thus, MCP card distribution alone is insufficient. Its effectiveness hinges on timely, targeted counselling embedded in care workflows that accommodate the psychological and logistical readiness of caregivers.(11) The preference for breastfeeding as a soothing technique highlights

the dual role of breastfeeding—not only as a nutritional imperative but also as a primary bonding behaviour. Interestingly, the use of play (30%) and verbal interaction (as shown in related child-rearing practice data where 23.2% talked to babies) as comfort tools demonstrates a shift towards cognitively stimulating methods. These behaviours are consistent with UNICEF's nurturing care framework, which emphasizes responsive caregiving as foundational to optimal early childhood development. In contrast, studies like Mahyavanshi et al found that health workers themselves often lacked comprehensive knowledge of comforting strategies beyond physical care, suggesting a disconnect between knowledge transfer and parental practice.(10) Moreover, Melwani et al reported that less than 15% of caregivers used verbal or playful interactions for comfort, indicating either under-recognition or undervaluing of such behaviours in traditional care models.(12) The data showed that only 5.8% of caregivers resorted to scolding to correct undesired behaviours, with a majority (68.4%) using comforting and precautionary techniques. This reinforces the emergence of more positive parenting styles, possibly influenced by MCP card counselling which advocates non-punitive behavioural guidance. Comparative studies such as those by Rama et al. (13) found higher prevalence of punitive discipline, especially in resource-constrained communities, indicating that exposure to structured parenting education may significantly influence disciplinary choices.(13) The study found that the most common affectionate interaction used by mothers to comfort their babies was hugging or skin-to-skin contact (33.2%), emphasizing the critical role of physical touch in early development. This aligns with findings from a systematic review and meta-analysis on kangaroo mother care, which concluded that skin-to-skin contact significantly improves newborns vital signs.(14) Verbal communication also emerged as a key method, with 23.2% of mothers talking to their babies, highlighting its importance in stimulating infant development. Other comforting techniques included playing (17.0%) and showing videos (12.3%), suggesting that both visual and auditory stimuli contribute to emotional responses like smiling. Additionally, a report by the National Institute of Public Cooperation and Child Development in 2014 revealed that around 50% of mothers were aware of the developmental benefits of interacting with children under six months through smiling, laughing, eye contact, and talking. The report, which analysed data from 120 mothers across six Indian states—Haryana, Jharkhand, Maharashtra, Kerala, Madhya Pradesh, and

Assam—showed that 86.6% of mothers overall believed that infants could communicate and play. Kerala had the highest belief at 100%, while Assam had the lowest at 55%, with the remaining states ranging between 80% and 95%. These findings suggest a widespread recognition of early infant communication and the developmental value of affectionate and interactive caregiving.(15)

CONCLUSION

The study emphasizes that for MCP cards to be informative and transformative but must be coupled with structured training of frontline health workers with scheduled counselling sessions at key maternal-child contact points to improve child rearing practices.

RECOMMENDATION

The parents and care givers are the main pillar of child care practices. Their empowerment in early child development will be sustainable solution for achieving SDGs focussing on child health. Continuous hand holding and supervision of parents by frontline community health workers will go a long way in quality care of children.

LIMITATION OF THE STUDY

Due to small sample size and limited to one medical college so generalization cannot be predicted be large scale and multicentric studies are needed to formulate the policy.

RELEVANCE OF THE STUDY

To achieve sustainable development goals in respect to child health quality parent empowerment and community health workers trainings need urgent attention.

AUTHORS CONTRIBUTION

Concept design by PM, Data collection by RM, drafting by RM and SH. Review and final approval by PM and PG

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DECLARATION OF GENERATIVE AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

The authors haven't used any generative AI/AI assisted technologies in the writing process.

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