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**“A STUDY TO ASSESS THE KNOWLEDGE REGARDING MOTHER
AND CHILD PROTECTION CARD AMONG ANTENATAL MOTHERS
VISITING ANTENATAL OPD AT TERTIARY CARE TEACHING
HOSPITAL, KUPPAM, AP.”**

**Mrs.M.N.Pavithra¹, Mrs. V Divya sri², Dr. M Abhirami³, Mr.Melvin David⁴,
Prof.K.Daniel Arun Kumar⁵, Ms. Sona Benny⁶, Ms. Tania Eldhose⁷, Ms. V ruby⁸, Ms.
V Renuka⁹, Ms. S Maheswari¹⁰.**

¹Associate Professor, Dept. of Obstetrics and Gynecology Nursing¹, PES College of Nursing,
Kuppam, AP

²Assistant professor, Dept. of Obstetrics and Gynecology Nursing², PES College of Nursing,
Kuppam, AP

³Principal PES College of Nursing, Kuppam, AP

⁴Assistant professor, Department of Community Health Nursing⁴, PES College of Nursing,
Kuppam, AP

⁵Professor, Dept. of Medical Surgical Nursing, PES College of Nursing, Kuppam, AP
^{6,7,8,9,10} 4th year B.sc nursing students, PES College of Nursing, Kuppam, Andhra Pradesh,
India.

International Journal of Pediatric Nursing

Research Article

Vol: 10 / Issue:2/ Year: 2024

Received date: July 02, 2024

Accepted date: August 29, 2024

Published date: September 05, 2024

Corresponding Author E-mail: pavibabu94@gmail.com

ABSTRACT:

Background and aims: Mother and child protection card is a maternal and child health indicator and tracking system, the main aim of the study is assess the knowledge regarding mother and child protection card among antenatal mothers admitted at Tertiary care hospital.

Material and Methods: Quantitative research design was used and selected 90 antenatal mothers were who met with the inclusion criteria, received structured questionnaire on MCP

card for 45 minutes. **Results:** Showed the analysis of posttest knowledge scores of postnatal mothers revealed the comparisons of calculated paired t test values of mean SD and “t” and p-values of pre -test and post- test knowledge scores on kangaroo mother care reveals that the post –test mean score were 40.09 with a SD of 19.8 and pre-test mean 25.1 with a SD of 12.43 the “t” value 2.02 was and p value were significant at the level of 0.023. This shows effectiveness of structured teaching programme on kangaroo mother care among post natal mother. **Conclusion:** The study was carried out to assess the knowledge regarding mother and child protection card among antenatal mothers. The overall percentage and mean knowledge scores on Mother and Child Protection Card among antenatal mothers in the study was low. So it can concluded that the knowledge of antenatal mothers regarding Mother and Child Protection Card is inadequate.

Key words: mother and child protection card, antenatal mothers, quantitative method.

Introduction:

Maternal and child health indicators are crucial for assessing the well-being of any nation and are integral to the Sustainable Development Goals for 2030. Despite improvements in maternal and child health in India over the last twenty years, the maternal mortality ratio stands at 122 per 100,000 live births, the neonatal mortality rate at 23 per 1,000 live births, and the infant mortality rate at 30 per 1,000 live births, which are still alarmingly high.

The Mother and Child Protection (MCP) card and the Mother and Child Tracking System were introduced as part of the National Rural Health Mission (NRHM) in 2010 by the Ministry of Health and Family Welfare. These initiatives aim to enhance the coverage and utilization of maternal and child health services. The MCP card serves as a comprehensive record detailing antenatal visits, immunizations, infant growth monitoring, and other services provided during pregnancy, postpartum, and childhood. Additionally, it functions as a health education tool, helping families learn, understand, and adopt positive health practices. The MCP card is also used by village level workers such as ANMs, ASHA workers, doctors, nurses, and ICDS supervisors.

Need for the study:

UNICEF (2012)¹² carried out a study to assess the status of rollout of WHO–CGS and common MCP Card, in ICDS and NRHM in 13 States of India, namely, Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Jharkhand, Karnataka, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh and West Bengal. The study found that the MCP Card was available

at the community level in at least 75 percent districts of most of the sample States except in Uttar Pradesh, Rajasthan, Madhya Pradesh and Maharashtra¹²

A significant effort to reduce maternal, neonatal, and infant mortality rates and combat child undernutrition involved the adoption of WHO Child Growth Standards (WHO-CGS). Starting from August 15, 2008, both the Integrated Child Development Services (ICDS) and the National Rural Health Mission (NRHM) implemented these standards. This initiative was reinforced through a joint circular dated August 6, 2008, issued by the Secretaries of Women and Child Development and Health and Family Welfare, Government of India. To further strengthen care continuity for pregnant mothers and children under three years of age, both ministries introduced a unified Mother and Child Protection Card (MCP Card), incorporating the new WHO Child Growth Standards.¹³

The MCP Card serves as both an entitlement card for maternal and child care and a tool for counseling and empowering families. It ensures the tracking of mother-child pairs for health-related purposes.

Objectives of the study:

1. To assess the level of knowledge regarding Mother and Child Protection Card among Antenatal mothers, visiting antenatal OPD at tertiary care teaching Hospital, Kuppam.
2. To associate level of knowledge regarding Mother and Child Protection Card among antenatal mothers with their selected socio demographic variables and maternal variables.

Hypotheses:

H0 1: There will be no significant association between the levels of knowledge of antenatal mothers regarding maternal and child protection card with selected demographic variables at 0.05 level of significance.

Material and methods:

Research approach: A Quantitative approach was used to assess the knowledge regarding Mother and Child Protection card among antenatal mothers visiting antenatal OPD at Tertiary Care Teaching Hospital.

Research design: The study used a cross-sectional descriptive research design.

Research setting: The present study was conducted at antenatal OPD at Rural Tertiary Care Teaching Hospital Kuppam Andhra Pradesh.

Poulation: All the antenatal mothers who were visiting antenatal OPD in the Tertiary Teaching Hospital.

Sample: The samples of present study includes all the antenatal mothers visiting antenatal OPD and who fulfill the inclusion criteria at Tertiary Care Hospital.

Sample size: The sample size for the study was determined using power analysis. A total of 90 samples was included in the study.

Sampling technique: Non probability purposive sampling among antenatal mothers visiting antenatal OPD at Tertiary Care Teaching Hospital.

Sampling criteria

Inclusion criteria:

- Antenatal mother in 1st trimester.
- Those who are willing to participate in the study.
- Antenatal mother who can understand Telugu and English.
- Antenatal booked at PES hospital.

Exclusion Criteria:

- Antenatal mother with co- morbid conditions like PIH, GDM, Twin pregnancy.
- Antenatal mother with any communicable diseases.
- Antenatal mother with history of abortion.
- Antenatal mother with ectopic pregnancy.
- Antenatal mother who came for MTP.

Research variables.

Dependent variables: Knowledge regarding Mother and Child Protection Card among antenatal mothers which was assessed by using structured questionnaire.

Development and description of tools: A structured knowledge questionnaire was developed by investigator, based on the review of literature and expert opinion by content validity.

Description of the tool: In this study the structured knowledge questionnaire consist of 30 questions,

Section A: Demographic variables which include age of the mother, religion, educational qualification, Type of family, family income, occupation of the antenatal mothers.

Section B: Maternal variables which includes gravid, gestational age in weeks, total number of antenatal visits of the antenatal mothers.

Section C: Structured knowledge questionnaire on mother and child protection card was prepared under the components of mother and child protection card like antenatal care, birth

preparation, intra-natal care, postnatal care, immunization, of baby and weaning. It consists of 30 multiple choice questions related to mother and child protection card with four options was prepared with one correct response, the correct response was given a score of 'one' and incorrect was scored as 'zero'.

Validity: The tool was given to nursing experts of OBG and child health department. A few questions were modified on the basis of expert's suggestions and 100% agreement was included in the tool, there by content validity was ascertained.

Reliability:

The reliability of the tool was assessed by Test-Re test method among antenatal mothers. The tool was administered the co-relation coefficient was calculated by using Karl Pearson and the 'r' value was 0.807. Hence the tool was found to be correlation reliable.

Ethical clearance: Ethical approval was obtained from the institutional human ethics committee at a tertiary teaching hospital, A.P. The researcher explained the procedure to the postnatal mothers and got verbal consent.

Data collection procedure: The data collection procedure was done for a period of three week from 06.09.2023 to 20.09.2023. Demographic variables, maternal variables and knowledge questionnaires was collected by face to face interview method for a time period of 40-45 minutes, the confidentiality of the response was maintained throughout the procedure.

RESULTS:

The data is organized and presented under the following sections.

Section-I: Frequency and percentage distribution of the socio-demographic variables among antenatal mothers.

Section-: II Frequency and percentage distribution of the maternal variables among antenatal mothers.

Section -III: Frequency and percentage distribution of knowledge on mother and child protection card among antenatal mothers.

Section-I: Frequency and percentage distribution of the socio-demographic variables among antenatal mothers.

S.NO	DEMOGRAPHIC VARIABLES OF ANTENATAL MOTHERS	Frequency	Percentage (%)
1	Age in years		
	a.<25 years	61	67.7%
	b.26-30 years	25	27.7%
	c.>31 years	4	4.4%
2	Religion		
	a. Hindu	76	84.4%
	b. Muslim	9	10.0%
	c. Christian	2	2.2%
	d. Any other	3	3.3%
3	Educational status of the mother		
	a. Primary school	57	63.3%
	b. undergraduate	22	24.4%
	c. post graduate	11	12.2%
4	Occupation of the mother		
	a) Housewife	79	87.7%
	b) Coolie	5	5.5%
	c) Private Job	2	2.2%
	d) Government	4	4.4%
5	Type of family		
	a. Nuclear family	46	51.1%
	b. Joint family	44	48.8%
6	Family income per month (Rupees)		
	a. < 10000	6	6.6%
	b. 10001 to 20000	31	34.4%
	c. 20001 to 30000	31	34.4%
	d.>30001	22	24.4%

Section-: II Frequency and percentage distribution of the maternal variables among antenatal mothers.

N=90

SL.NO	MATERNAL VARIABLES	Frequency	Percentage (%)
1	Gravida		
	a. Primi	36	40.0%
	b. G2	37	41.1%
	c.G3	13	14.4%
	d.G4	4	4.4%

2	Gestational age of mother		
	a.<30 weeks	44	48.9%
	b.>30 weeks	46	51.1%
3	Health condition of mother		
	a) Healthy	87	96.7%
	b) Unhealthy	3	3.3%
4	History of minor disorder during pregnancy		
	a) Yes	46	51.1%
	b) No	44	48.8%
5	weight of the mother in kgs		
	a.<50kg	22	24.4%
	b.>50kg	68	75.5%
6	Total number of antenatal visits visited		
	a. 1	14	15.5%
	b. 2	29	32.2%
	c. >3	47	52.2%
7	History of infertility		
	a) Yes	7	7.7%
	b) No	83	92.2%

Section -III: Frequency and percentage distribution of knowledge on mother and child protection card among antenatal mothers.

N=90

S.NO	LEVEL OF KNOWLEDGE	Frequency	Percentage (%)
1	Adequate knowledge	8	8.89%
2	Moderate knowledge	29	32.22%
3	Inadequate knowledge	53	58.89%

The above table showed the knowledge scores of antenatal mothers. In this majority 53(58.89%) of the antenatal mothers had inadequate knowledge scores, 29(32.22%) of them had moderate knowledge scores, 8(8.89%) of had adequate knowledge scores.

Section –IV: Association of pre-test knowledge scores of mother and child protection card among antenatal mothers with their selected socio-demographic and maternal variables.

N=90

SLNO	ASSOCIATION WITH DEMOGRAPHIC VARIABLES	CHI SQUARE	P-VALUE	REMARKS
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		Adequate knowledge		Moderate knowledge		Inadequate knowledge				
		F	%	F	%	F	%			
1	demographic variables									
	Age in years									
	a.<25 years	4	5%	19	65.5%	38	71.7%	2.38	0.66	NS
	b.26-30 years	3	37.5%	9	31%	13	24.5%			
	c.>31 years	1	12.5%	1	3.4%	2	3.7%			
2	Religion									
	a. Hindu	8	100%	25	86.2%	43	81.1%	5.0336	0.54	NS
	b. Muslim	0	0%	4	13.7%	5	9.4%			
	c. Christian	0	0	0	0%	2	3.7%			
	d. Any other	0	0	0	0	3	5.6%			
3	Educational status of the mother									
	a. Primary school	4	50%	14	48.2%	39	73.5%	11.8223	0.001	S
	b. undergraduate	1	16.9%	2	41.3%	9	12.5%			
	c. post graduate	3	37.5%	3	10.3%	5	9.4%			
4	Occupation of the mother									
	a. House wife	7	87.5%	28	96.5%	44	83%	6.5644	0.36	NS
	b) Coolie	0	0%	0	0%	5	9.4%			
	c) Private Job	0	0	0	0	2	3.77%			
	d) Government	1	12.5%	1	3.4%	2	3.7%			
5	Type of family									
	a. Nuclear family	5	62.5%	17	58.6%	24	45.2%	1.7902	0.40	NS
	b. Joint family	3	37.5%	2	41.3%	29	54.7%			

6	Family income per month (Rupees)									
	a. < 10000	0	0	3	10.3 %	3	5.6%	4.4788	0.61	NS
	b. 10001 to 20000	3	37.5%	12	41.3	16	30.19			
	c. 20001 to 30000	3	37.50 %	6	20.6	22	41.5			
	d.>30001	2	25.00 %	8	27.5	12	22.6			
7	Gravida							2.1159	0.90	NS
	a. Primi	4	50%	11	37.9 %	21	39.6 %			
	b. G2	2	25%	13	44.8 %	22	41.5 %			
	c.G3	2	25%	4	13.7 %	7	13.2 %			
	d.G4	0	0%	1	3.4%	3	5.6%			
8	Gestational age of mother							5.1761	0.04	S
	a.<30 weeks	2	25%	11	37.9 %	31	58.4 %			
	b.>30 weeks	6	75%	18	62%	22	41.5 %			
9	Health condition of mother							0.3089	0.857	NS
	a) Healthy	8	100%	28	96.5 %	51	96.2 %			
	b) Unhealthy	0	0%	1	3.45 %	2	3.77 %			
10	History of minor disorder during pregnancy							5.1032	0.04	S
	a) Yes	2	25%	12	41.3 %	32	60.3 %			
	b) No	6	75%	17	58.6 %	21	39.6 %			
11	weight of the mother in kgs							3.7565	0.15	NS
	a.<50kg	0	0	6	20.6 %	16	30.1 %			

	b.>50kg	8	100%	23	79.3%	37	69.8%			
12	Total number of antenatal visits visited									
	a. 1	1	12.50%	4	13.7%	9	16.9%	9.4521	0.05	S
	b. 2	2	25%	4	13.7%	23	43.4%			
	c. 3	5	62.50%	21	72.4%	23	39.6%			
13	History of infertility									
	a) Yes	1	12.50%	1	3.45%	5	9.43%	1.2092	0.546	NS
	b) No	7	87.50%	28	96.5%	48	90.5%			

Describes association of knowledge scores of mother and child protection card among antenatal mothers with their selected socio-demographic and maternal variables, showed that there were significant relationship with educational qualification of antenatal mothers at the level of $p < 0.001$, gestational age of mother at a level of $p < 0.005$, history of minor disorders during pregnancy at a level of $p < 0.05$, total number of antenatal visits visited at a level of $p < 0.05$ and remaining variables showed no significance hence, the corresponding hypothesis **RH₀₁ Rejected.**

Discussion:

The first objective of the study was to evaluate how well antenatal mothers understood the Mother and Child Protection Card during their visits to the antenatal OPD at a tertiary care teaching hospital in Kuppam. The study assessed the knowledge scores of these antenatal mothers. In this majority 53(58.89%) of the antenatal mothers had inadequate knowledge scores, 29(32.22%) of them had moderate knowledge scores, 8(8.89%) of had adequate knowledge scores. The second objective of the study is to explore how the knowledge about the Mother and Child Protection Card among antenatal mothers correlates with their socio-demographic and maternal characteristics. Describes association of knowledge scores of mother and child protection card among antenatal mothers with their selected socio-demographic and maternal variables, showed that there were significant relationship with

educational qualification of antenatal mothers at the level of $p=0.01$, gestational age of mother at a level of $p=0.005$, history of minor disorders during pregnancy at a level of $p=0.05$, total number of antenatal visits visited at a level of $p=0.05$ and remaining variables showed no significance hence, the corresponding hypothesis was **H_{01} Rejected**.

Conclusion: The study was carried out to assess the knowledge regarding mother and child protection card among antenatal mothers. The overall percentage and mean knowledge scores on Mother and Child Protection Card among antenatal mothers in the study was low. So it can be concluded that the knowledge of antenatal mothers regarding Mother and Child Protection Card is inadequate.

Acknowledgement:

The authors would like to acknowledge the following contribution:

1. Dr. M ABHIRAMI Principal PESCON, Mrs.MN PAVITHRA Associate professor, Mrs. V DIVYASRI Assistant professor, department of obstetrical and gynecological nursing for their continuous encouragement and support.
2. The management PESIMSR
3. The ethical committee members for giving permission
4. The participants of the study
5. Dr. Pradeep HOD OBG department PESIMSR for giving permission to conduct study in postnatal ward

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