



“A Study To Assess The Knowledge And Expressed Practices Regarding Care Of Infants Among Mothers Of Selected Community, Ambala, Haryana.”

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Abstract A descriptive study to assess the knowledge and expressed practices regarding care of infants among mothers of selected community of Ambala, Haryana was conducted by B.Sc. Nursing 4th Year (Group 7) for the partial fulfilment of requirements for the degree of Bachelor in Nursing at Maharishi Markandeshwar Institute of Nursing, Maharishi Markandeshwar (Deemed to be) University during the year 2020-2021. The objectives of the study were to assess the knowledge and expressed practices regarding care of infants among mothers, To determine the relationship between the knowledge mean score and practice mean score regarding care of infants among mothers, To determine the association of knowledge mean score and practice mean score regarding care of infants among mothers with selected demographic variables. The research approach used in the study was quantitative research approach with descriptive survey research design. The study was conducted in community of Haryana. The sample comprised of 200 mothers of infants. Convenience sampling technique was used. The tools used for data collection were structured knowledge questionnaire regarding care of infant and checklist to assess the expressed practices regarding care of infants. Interview technique was used. Reliability of the structured knowledge questionnaire was established by cronbach's formula and expressed practices checklist was established by KR₂₀. The tools were found to be valid, reliable and feasible for the purpose of the study. The final study was conducted on August 2021. The obtained data was analyzed by using SPSS in terms of frequency, percentage, mean median and standard deviation, chi squares and coefficient of correlation. The result of the study revealed that the mean median and standard deviation of knowledge mean score regarding care of infants among mothers were (14.53) .The mean median and standard deviation of expressed practices mean score regarding care of infants (23.16). The Conclusion of the study shown that Mothers have very good knowledge and had following good practices regarding care of infant.

Keywords: knowledge and expressed practices.

Background of the study

“Infancy is the vulnerable stage of development, therefore, it’s not enough that babies receive good care, the care must be excellent”

Infant mortality rate for India in 2021 is 28.77 deaths per 1000 live births, Haryana infant mortality rate is 33 deaths/1000 live births and the IMR of Ambala is 30/1000 live births in 2017² Infancy period is the grown up period of the child who is in infancy. Infants are from 1 month to 12 months. During this period proper nutrition is essential for proper growth of child³ Mortality rate is high among infants malnutrition has been responsible, directly or indirectly for over 50% of the 10.6 million deaths annually among infants⁴ Over 2/3rd of these deaths occur in first year of life infant care practices can differ in significant way between cultures or social groups and yet be justified in similar ways⁵ Infectious diseases continue to be significant cause of neonatal and infant mortality even in developed countries.⁶

Infant health care practices are to prevent infections & maintain well being vary across different civilization & cultures¹

During infancy effective child rearing practices and parenting are important for the growth and development of child which are influenced by traditional norms & beliefs⁹ Across India, there were 721,000 infant deaths in 2018, as per the United Nations’ child mortality estimates. That’s 1,975 Infant deaths every day, on average, in 2018² India spend analyzed health data from 13 states to understand why so many infants and children die across the country moreover in states Bihar, Jharkhand, Uttar Pradesh, Uttarakhand, Rajasthan, Odisha, Chhatisgarh.²

Although child survival programs have helped reduce death rates among children under five years over the past 25 years, the biggest impact has been on reducing mortality from diseases that affect infants and children over one month old²⁰ As a result, greater proportions of infant mortality occur during the first month of life. Most of the death of infants occur due to prematurity (35%), Neonatal infection (35%)³

Knowledge of the disease covered by the national vaccination programs revealed that a high proportion of mothers were not fully informed about certain diseases targeted by the programs. A Saudi research revealed no statistically significant co-relation between mothers knowledge score and their level of education, age, number of children⁴

Behaviours and attitude about health that begin during childhood were responsible for most of the deaths, illnesses and disability²³ In the context of care giving, attenuate describes variations between caregivers in the extent to which they value and rely on children’s cues to hunger and satiety, drowsiness and wakefulness, and soothing⁵

Methodology: The methodology of this include research approach, research design, variables , setting of the study, population , sample, sample criteria,, sampling technique, development and description of the tools, content validity of the tools, test retest, pilot study, data collection process, final study and plan analysis. On the whole it gives general pattern for gathering and processing research data⁶.

Research Approach: Quantitative research approach

Research design: descriptive survey design.

Setting: This study was conducted in settings community setting of Ambala, Haryana

Population: It refers to the total category of person or objectives that meet the criteria for the study. In the present study mothers of infants

Target population: Mothers of infants residing in village of Ambala, Haryana.

Accessible population: mothers of infants residing in community people of Budhiyo, Holi, Mullana & Simla (villages of Ambala (Haryana)

Sampling Technique

In this study convenient sampling technique used to select the sample

Sample Size

The sample for the study comprised of 200 mothers of community people of, Haryana.

Inclusion criteria

Mother who were:-

1. willing to participate in the study.
2. available at the time of data collection
3. able to understand and speak Hindi and English

Exclusion criteria

Mothers who don't had any infant child.

Delimitation

Mothers who had at least one infant child

Data Collection Instruments

Data collection tools are the procedure and instruments used by the researcher to measure the key variables in a research problem. Structured knowledge questionnaire and expressed practices of checklist was prepared on the basis of the objectives of the study.

Development of the Tool

The following steps were adopted in the development of the tool:

- Review of literature
- Discussion with experts
- Construction of the structured Questionnaire
- Content validity
- Pretesting of the tool
- Reliability
- Pilot study

Description of the tool

The tool consists of 3 parts:

Part 1: It comprised of a Socio-demographic Performa of the sample.

Part 2: It comprised of a structured knowledge questionnaire for assessing knowledge of mothers of care of infant.

Part 3: It comprised of expressed practices of checklist for assessing the expressed practices of mothers regarding care of infant.

Validity of the Tools

Validity is the extent to which differences found with a measuring instrument reflect true differences among those being tested Validity of 9 experts: 3 from Child health nursing department, 2 from Community health nursing department, 1 from Obstetrics & gynaecology department, 2 from Nursing foundation department, 1 from Nursing Superintendent. After experts suggestion we have corrected the questions and finalized the questionnaire.

Reliability of the Tool

Reliability refers to the accuracy or inaccuracy rate in measurement device.

The tool was tested for reliability on 20 samples from the Budhiyo after obtaining permission from the Sarpanch of the Budhiyo.

The reliability of Structured knowledge questionnaire regarding care of infants was calculated by **Cronbach's Alpha** (0.77) and Checklist to assess the expressed practices regarding care of infants was checked by **KR-20** (0.99)

Pilot Study

A pilot study is a "small scale replica" of the main study. It is the rehearsal of the main study. It covers the entire process of research. Pilot study was conducted in one of the selected community of Ambala (Haryana). Formal permission was obtained from sarpanch of Holi village of community

Ambala(Haryana).The tool was admitted to 9 students who fulfilled the sampling criteria. The purpose of the study was explained to the subjects prior to the study to get their cooperation.

Procedure for Final Data Collection

Data collection is the gathering of the information to address research problem. The most important and crucial step for any investigation is the collection of appropriate information which provides necessary data for the study. The formal procedure researcher develops to guide the collection of the data in a standardized fashion.

By using snow ball sampling technique total 200 samples were selected as a sample for present study.

- Self -introduction was given to mothers .
- Rapport was developed with her .
- Nature and purpose of the study were explained to mother .
- Informed written consent was taken from the mothers for participation in the study.

Data analysis

Data was analysed using SPSS 24.0 version statistical software. Descriptive statistics (mean, standard deviation, frequencies and percentages) was used to describe the quantitative and categorical variables. Bivariate statistical analysis was carried out using appropriate (Chi-square) statistical tests, based on the type of study and outcome variables. A P value of < 0.05 and 95% was used to report the statistical significance and precision of results.

RESULT:

The findings showed that mothers were distributed according to age of child in months, age of child in years, educational status, maternal occupation, last mode of delivery, facility of delivery, number of live children, type of family, religion, family income, duration of marriage, source of information regarding care of infant. Data shows that 31% of mothers were in age group of 22-24 years, 30% of mothers belongs to 25-27 years in the age group, 32.5% mothers belongs to 28-30 years in the age group and 6.5% of mothers belongs to 31-33 years of age group. Among the whole population 78.5% mothers were educated and 21.5% mothers were non-literate. Among the whole population 37.5% mothers were employed while 62.5% mothers were home maker, 52% mothers were undergone Normal vaginal delivery while 48% by C- section. 3% of mothers delivered at home while 97% delivered at hospital. 97% of mothers having less than 4 children and 3% of mothers having 4 or more than 4. 39% mothers have nuclear family, 54% mothers have joint family, 3.5% mothers have single mother family and 3.5% mothers have extended mother family. 64% mothers belongs to Hindu religion, 3% belongs to Muslim 30.5% belongs to Sikh and 2.5% belongs to Christian religion. 1% mothers have less than 6000 family income, 27.5% mothers have 6001-15000 family income, 56.5% mothers have 15001-24000 family income and 15.5% mothers have more than 24000 family income. 57% of mothers have less than 3 years of duration and 43% of mothers have 4 or more than 4 years of duration. 5.5% of mothers follows the source of information regarding care of infants by newspaper, 17.5% of mothers follows the source of information regarding care of infants by television, 53.3% of mothers follows the source of information regarding care of infants by ASHA worker and 23.5% of mothers follows the source of information regarding care of infants by any others like internet, family members etc.

The data revealed that the Mothers had excellent knowledge 12.5%, good knowledge 26.5%, average knowledge 33.5% below average knowledge is 27.5%. and 28% of mothers have good practices, 71% mothers have average practices and 1% mothers have poor practices regarding care of infant.

According to area wise distribution of knowledge the data depicts 28% mothers have good practices, 71% mothers have average practices and 1% mothers have poor practices regarding care of infant and practices that 82.25% mothers have good practices regarding Thermoregulation, 17.4% mothers have good practices regarding prevention from infection, 79.50% mothers have good practices regarding diarrhoea, 69% mothers have good practices regarding breast feeding, 53.5% mothers have good practices regarding complementary

feeding, 47.63%
 mothers have good
 practices regarding bottle feeding, 97.25% mothers have good practices regarding immunization, 56.25%
 mothers have good practices regarding other

Relationship between knowledge scores and expressed practices score regarding care of infant among mothers the findings revealed that the mean $\pm$ SD of correlation between knowledge scores and expressed practices regarding care of infants among mothers is 14.53 ± 3.503 ; 32.16 ± 3.166 respectively.

Sr. No.	Demographic variables	Excellent	Good	Average	Below average	X ²	df	P
1	Age of infants							
1.	1-3 months	4	13	14	10	12.221	9	0.201 ^{Ns}
1.2	4-6 months	12	20	27	15			
1.3	7-9 months	7	15	11	20			
1.4	10-12 months	2	5	15	10			
2	Age of mother							
2.1	22-24 years	3	20	17	22	13.475	9	0.142 ^{Ns}
2.2	25-27 years	10	15	21	14			
2.3	28-30 years	11	17	21	16			
2.4	31-33 years	1	1	8	3			
3	Educational Status of mother							
3.1	Non – literate	1	8	12	24	23.260	9	0.006*
3.2	Primary	10	21	16	12			
3.3	Secondary	9	17	23	16			
3.4	Graduate and above	5	7	16	5			
4	Maternal occupation							
4.1	Home maker	10	37	35	43	23.843	9	0.005**
4.2	Self employed	12	14	20	9			
4.3	Private employed	1	2	9	3			
4.4	Government employee	2	0	3	0			
5	Last mode of delivery							
5.1	NVD	12	32	28	32	5.290	3	0.152 ^{Ns}
5.2	C- Section	13	21	39	23			
6	Facility of delivery							
6.1	Home	0	1	5	0	7.285	3	0.063 ^{Ns}
6.2	Hospital	25	52	62	55			
7	No. of living children							
7.1	One	8	36	31	26	21.618	9	0.010*
7.2	Two	13	15	29	22			
7.3	Three	4	2	2	6			
7.4	>4	0	0	5	1			
8	Type of family							
8.1	Nuclear	10	23	23	22	9.432	9	0.398 ^{Ns}
8.2	Joint	12	24	40	32			
8.3	Single mother	1	2	3	1			
8.4	Extended	2	4	1	0			
9	Religion							
9.1	Hindu	14	31	37	46	21.958	9	0.009*
9.2	Muslim	1	0	5	0			
9.3	Sikh	10	19	24	8			

9.4	Christian	0	3	1	1			
10	Family income							
10.1	Rs. <6000	0	0	0	2			
10.2	Rs. 6001-15000	6	9	18	22	18.023	9	0.035*
10.3	Rs. 15001-24000	15	30	40	27			
10.4	Rs. >24000	4	14	9	4			
11	Duration of marriage of mother							
11.1	One year	3	2	5	9			
11.2	Two year	1	21	13	7	30.523	9	0.006*
11.3	Three Year	9	18	17	9			
11.3	>four year	12	12	32	30			
12	Source of information regarding care of infants					15.483	9	0.078 ^{Ns}
12.1	Newspaper	0	5	2	4			
12.2	Television	1	6	18	10			
12.3	ASHA worker	18	32	32	25			
12.4	Any other	6	10	15	16			

Table 1: The association of level knowledge with selected demographic variables

****highly significant (P value :≤0.005)**

Ns Not significant (P value :≥ 0.05)

***significant (P value :≤0.005)**

Table 1:- depicts that highly significant (0.005) with maternal occupation and significant (0.006) educational status, (0.010) no of living children,(0.009) Religion, (0.35) Family Income.

Table 2: The association of expressed practices with demographic variable

Sr. No.	Demographic variables	Good	Average	Poor	X ²	df	P
1	Age of infants	8	31	2			
1.1	1-3 months						
1.2	4-6 months	17	57	0	13.523	6	0.035*
1.3	7-9 months	21	32	0			
1.4	10-12months	10	22	0			
2	Age of mother						
2.1	22-24 years	15	45	2			
2.2	25-27 years	17	43	0			
2.3	28-30 years	22	43	0	6.887	6	0.331 ^{ns}
2.4	31-33 years	2	11	0			
3	Educational Status of mother						
3.1	Non – literate	12	29	2			
3.2	Primary	19	40	0			
3.3	Secondary	20	45	0			
3.4	Graduate and above	5	28	0	10.880	6	0.092 ^{ns}
4	Maternal occupation						
4.1	Home maker	32	91	2			
4.2	Self employed	16	39	0			
4.3	Private employed	6	9	0	2.907	6	0.820 ^{NS}

4.4	Government employee	2	3	0			
5	Last mode of delivery						
5.1	NVD	29	73	2			
5.2	C- Section	27	69	0	1.867	2	0.393 ^{NS}
6	Facility of delivery						
6.1	Home	1	5	0			
6.2	Hospital	55	137	2	0.478	2	0.787 ^{NS}
7	No. of living children						
7.1	One	27	74	0			
7.2	Two	24	53	2			
7.3	Three	4	10	0	3.930	6	0.686 ^{NS}
7.4	>4	1	5	0			
8	Type of family						
8.1	Nuclear	11	67	0			
8.2	Joint	35	71	2			
8.3	Single mother	3	4	0	29.363	6	0.00 ^{**}
8.4	Extended	7	0	0			
9	Religion						
9.1	Hindu	30	96	2			
9.2	Muslim	3	3	0			
9.3	Sikh	23	38	0	8.470	6	0.206 ^{NS}
9.4	Christian	0	5	0			
10	Family income						
10.1	Rs. <6000	0	2	0			
10.2	Rs. 6001-15000	14	39	2			
10.3	Rs.15001-2400	29	83	0	9.407	6	0.152 ^{NS}
10.4	Rs. >24000	13	18	0			
11	Duration of marriage						
11.1	One year	4	15	0			
11.2	Two year	15	27	0			
11.3	Three Year	17	36	0	5.525	6	0.478 ^{NS}
11.4	>four year	20	64	2			
12	Source of information regarding care of infants						
12.1	Newspaper	5	6	0	8.951	6	0.176 ^{NS}
12.2	Television	8	27	0			
12.3	ASHA worker	29	78	0			
12.4	Any other	14	31	2			

****highly significant (P value : $\leq$ 0.005)**

Ns Not significant (P value : $\geq$ 0.05)

***significant (P value : $\leq$ 0.05)**

Table 2- depicts that highly significant association of expressed practices (0.000) with type of family, significant are (0.035) with age of infant respectively.

DISCUSSION:

- A study was conducted on knowledge and practice about massage and hygiene practices of mother regarding infant care in Lucknow. The study was carried out among infant in urban areas of Lucknow city. An infant in present study was defined as a child is less than one year of age. Findings show that total of 262 infants were included in the study. There were 139 male children and 123 female children. In the present study majority of mother clean their baby with water after its passed stool and wash their hands with soap and water after cleaning stool. Majority of mother work ok opinion that bones of the baby become strong after massaging. In present study majority of mother had correct knowledge and practices regarding massage and its benefit and about hygiene phighly significantractices regarding handling of feces and hand washing after cleaning of stool.

NURSING IMPLICATION:

The finding of study have several implication directed towards nursing practices, nursing education, nursing research, nursing administration. Health education is an important aspect of nursing practice, nurses in clinical setting can play an important role by educating mothers about care of infant.

- Nursing administrator can provide facilities and promote education programme for mothers regarding care of infant.
- Nursing administrator can make provision for nurse to devote time for giving health education to antenatal and postnatal mothers regarding care of infant.
- Nursing administrator can plan the in service education programme to educate the junior nurses so that they can gain knowledge about care of infant and improve practices in clinical area to educate the mothers admitted in antenatal and postnatal mothers and relatives
- Nursing student should educate the mothers about the care of infant.
- They can make the provision who have journal clubs discussion related to care of infant.
- Nursing student can gave their contribute by educating mothers in the hospital, especially those mothers who are under antenatal period and those, who are going to conceive baby.
- In further, study will help to establish a platform for deep exploration with wide experimental approach
- This study can be helpful in developing hypothesis for further investigation.

LIMITATION

- The study could use experimental study and make it generalized.
- We did not did the tryout.
- Measures were not taken to uplift the knowledge and practices of mothers regarding care of infant.
- The study used only non – experimental research approach.
- The study used only non – probability purposive sampling technique.

RECOMMENDATION

- A similar study can be conducted in different hospitals and also in communities like rural and urban communities to find out the significant difference between like hospitals and communities.
- A planned teaching programme can be conducted to increase the knowledge.
- The study needs to be replicated in a large sample to generalize its findings.
- An Experimental study can be done to assess the knowledge and expressed practices of mothers regarding care of infant.
- A cross sectional study can be conducted for the future research to seek systematic research and intervention to establish a better understanding what intervention models and support services to increasing knowledge and to improve practices.
- A mandatory education programme for mothers regarding care of infant.

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