

“Systematic Educational Program On Knowledge Regarding Selected Home Based Postnatal Care Among Primi Postnatal Mothers”

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ABSTRACT

Background And Objective: The first six weeks after childbirth are frequently referred to as the postnatal phase. The postnatal period is referred to by the WHO as the most crucial and yet the most neglected stage in the lives of mothers and newborns. Most maternal and newborn fatalities take place during this time. Because there is a higher risk of death during the postnatal period, it is crucial for increasing survival rates, lowering morbidity rates, and raising quality of life. The study aimed to evaluate the effectiveness of a structured teaching program on knowledge regarding selected home-based postnatal care among primi postnatal mothers at Adichunchanagiri hospital and research B G Nagara.

Materials And Methods: A pre-experimental design (one group pre-test post-test design) and evaluative approach was used in the study. A total of 60 samples (primi postnatal mothers) are estimated with confidence level of 95% and margin of error 05% using finite population formula with non-probability convenient sampling method. Data was collected using standadized tool. The data collection period was one month from 01-07-2022 to 30-07-2022. Data was collected using demographic Performa and structured knowledge questionnaire. The structured knowledge questionnaire was validated by experts and its reliability was established. **Results:** The results showed that the subjects had pre-test mean of 14.01 and mean percentage of 40% with standard deviation of 3.54. The post test score revealed that the subjects had a mean of 29.8 and mean post-test percentage is 85% with standard deviation of 1.67 and t value of 60.69 and p value was significant at 0.05 level of significance. **Conclusion:** According to the study's findings, there was a significant difference between the knowledge scores of primi postnatal mothers on the pre- and post-test. This leads to the conclusion that the SEP is successful in raising the knowledge scores of primi postnatal mothers. There was a noteworthy correlation observed between the knowledge scores of primi-postnatal mothers and some socio-demographic characteristics, such as the family type and the mother's educational status.

Keywords: Home based postnatal care, Primi postnatal mothers, SEP(systematic educational programme)...

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INTRODUCTION

Mothers cannot give from a depleted source. Every mother needs emotional, mental, physical and spiritual validation, nourishment and support. When a mother is respected and well cared for, she, and her whole family, will benefit. The postnatal period or puerperium are commonly used to refer the first six weeks following childbirth. The World Health Organization (WHO) describes the postnatal period as the most critical and yet the most neglected phase in the lives of

mothers and babies; most maternal and newborn deaths occur during this period. (Dr. Colin tidy, MRCGP-2021).

Post-natal care is specialized care for the mother that starts within an hour after the delivery and lasts through the following six to eight weeks. During this time, women are recovering from their delivery and are beginning to care for the newborn. This period is used to make sure the mother is stable and to educate her in the care of her baby especially the first-time mother. (Hamilton BE, Martin JA, Ventura SJ-2011).

The postnatal period carries a higher risk of mortality that supports the importance of postnatal care for improving survival, reducing morbidity and improving quality of life. Timely and appropriate management of life-threatening conditions immediately after childbirth has been shown to prevent mortality and morbidity. (Dr. Hayley Willacy, FRCGP-2021).

During the post-natal period essential care is a necessary outcome for both mother and child. Mothers and newborns are crucial not only to survival but also to the future. Lack of postnatal care has been associated with death and disability due to birth-related complications that have long term consequences for mothers and their children. Delays in recognizing or identifying danger signs in either mothers or newborns can lead to untimely health seeking decisions and delays in reaching health facilities which in turn can impede the timely management of preventable causes of death. (K Park-2005)

Lack of knowledge about postpartum care can lead to maternal postpartum problems. Common problems experienced by the mother includes postpartum infections, back pain, breast augmentation, breast infections, hemorrhoids and constipation, urinary or stool incontinence, depression, discomfort during sex. So, to prevent all these postnatal problems, necessary postnatal care is essential throughout the postnatal period. During the post-natal period the health of both mother and baby depends upon the health care practice adopted by the family, especially by the mothers. (Meharban Singh-1999)

The common postnatal home based care include provision of adequate rest and ambulation, diet, adequate breastfeeding ,newborn care and importance of postnatal exercise. After pregnancy, a mother’s body has undergone a tremendous amount of change and stress. Recovering from birth requires patience and support through postnatal nutrition. There should be a strong focus on recovery and healing through proper diet and healthy habits. For mothers that are breastfeeding, the connection to her baby remains very intertwined, making proper nutrition ever more vital.(Yvonne Cargill , Marie-Jocelyne Martel-2007). Lactation makes considerable nutritional demands on the mother. Nutritional food during lactation period builds a healthy baby and protects the women’s own nutritional health. An inadequate diet for breast feeding mother can hurt the ability to take care of both mother and baby. These deficiencies should be avoided by improving the diet or providing supplements to the mother. Nutritional education should be made available to the postnatal mothers to improve their knowledge. (Romano M, Cacciatore A, Giordano R, La Rosa B-May 2010).

Breastfeeding is an art and skills which need to be learnt and mastered. This skill has to be learnt and followed by mothers not only to feed their newborns but also to avoid breastfeeding complications. One of the important steps in breastfeeding technique is helping the baby to latch on the breast correctly. A good latch eliminates the problem of sore nipples and proper breastfeeding reduces the chances of other breastfeeding complications. The primiparous inexperienced mothers need some help and should be made aware about the importance of breastfeeding and its

techniques during the antenatal period, so as to prevent complications in the later periods.(Carla AbouZahr-2002)

Essential newborn care is a set of comprehensive recommendations designed by the World Health Organization to improve newborn’s health. Newborn care also includes breastfeeding initiation within the first hour of birth, immunization, eye care, recognition of danger signs, care of the preterm/low birth weight newborn, and management of newborn illnesses. There is a great role for mothers to participate in all these effects. People’s involvement is essential, for it is “awareness leading to action” but this awareness and involvement can only come through self-care especially at home during postnatal period according to WHO in 2011 and updated in 2024.

Home based postnatal care is essential because of the high proportion of newborns that die in the first month of life and the fact that all women, regardless of where they deliver, will be at home for most of their postnatal period, here the woman caring for herself and her baby, supported by her family. Many women who give birth in facilities are discharged within hours after childbirth without any indication where they can obtain further care or support. (Laurie Garrett. -2022). Also, harmful health care practices are still prevalent and contribute to mortality. Therefore, it is necessary for mother and family to understand aspects of home-based postnatal care to ensure a healthy outcome for mother and baby.

Therefore, it is imperative that the mother and family understand the home-based postnatal care of the mother and child. Saving the mother's life is a global goal that has long been regarded as the cornerstone of public health. The mother's timely care in behavior is critical to her and her ill child. Such demanding behavior does not take place unless the mother recognizes the signs and symptoms of the illness and the severity of the situation and takes action to obtain timely care. (Bergholt. T. Danish-2007)

While there have been innovative efforts to improve the availability and quality of postnatal care in low-resource settings, additional research to identify the most effective models is needed. Continuity of care from pregnancy through the postnatal period is essential for preventing maternal and newborn deaths. So, home based postnatal care is very important for the primi postnatal mothers, it helps the mother to take care of herself and her newborn without any further complications. (WHO-2013)

MATERIALS AND METHODS:

METHODS

Designs and samples:

This study employed a pre-experimental design, specifically a one-group pre-test and post-test approach, to assess the effectiveness of a structured teaching program. The research was conducted at Adichunchanagiri Hospital and Research Centre, B G Nagara, due to its geographical proximity and familiarity. The target population comprised Primi Postnatal mothers who met the inclusion criteria. A total of 60 samples (primi postnatal mothers) are estimated with confidence level of 95% and margin of error 05% using finite population formula with non-probability convenient

sampling method , providing an accessible and representative sample for the research investigation.

Sample size estimation- Finite population formula

$$n' = \frac{n}{1 + \frac{z^2 * \hat{p}(1-\hat{p})}{\epsilon^2 * N}}$$

KEYS:

- z - z score
- e- Margin of error
- N- Population size
- p- Population Proportion

MATERIALS

A tool was developed to assess knowledge about home based postnatal care among primi postnatal mothers. To ensure its accuracy, the tool was reviewed by 6 experts in Obstetrics and Gynecological nursing and medicine. The tool has two sections: Section A (7 items) for socio-demographic data and Section B (35 items) for assessing knowledge about selected home based postnatal care. The reliability of the structured knowledge questionnaire was established by using test re-test method. In order to establish the reliability, the tool was administered to 6 primi postnatal mothers at AH and RC Hospital B G Nagara who fulfilled the inclusion criteria. The reliability quotient obtained for the tool was 0.92 indicating high consistency. This validated tool can now be used to effectively assess knowledge about selected home based postnatal care among primi postnatal mothers.

The different levels of knowledge are categorized as follows:

Score (%)	Knowledge
1-18 (≤ 50%)	Inadequate
19-27 (51%-75%)	Moderate
28-35 (>75%)	Adequate

Data Collection Procedure:

Sl.No	Socio Demographic variables	Frequency	Percentage
1.	Age of the mother		
	a) 18-23yrs	31	51.6
	b) 24-29yrs	28	46.6
2.	Religion		
	a) Hindu	56	93.3
	b) Muslim	03	5
3.	Family type		
	a) Nuclear family	14	23.3
	b) Joint family	46	76.6
4.	Education		
	a) Primary education	21	35
	b) Secondary education.	19	31.6

Formal written permission was obtained from The Medical superintendent and HOD of OBG dept AH and RC Hospital . The data collection period was one month from 01-07-2022 to 30-07-2022 at the convenience of the respondents. The subjects 37 were assembled. The purpose of the study was explained to them and confidentiality was taken from all the primi postnatal mothers by explaining the purpose of study. The data was collected in the following phases:

Phase I:

In this phase, pre-test was conducted on a total of 60 primi postnatal mothers by a structured questionnaire regarding selected home based postnatal care.

Phase II:

In this phase, a SEP regarding selected home based postnatal care

Phase III:

In this phase, post test was conducted on 7th day after administration of the SEP; During the conduction of the study there was no problem aroused and subjects were co operative to conduct the study. The collected data was compiled for analysis.

Results of the study:

A thorough investigation of something's components or structure is called an analysis. Analysis in research refers to the combination of specific measurements and the search for patterns of relationships between groups of data.

The results deals with the analysis and the interpretation of data obtained from 60 primi postnatal mothers with the help of structured questionnaires to assess knowledge regarding selected home based postnatal care, before and after administration of structured teaching programme.

SECTION I: ASSESSMENT OF DEMOGRAPHIC VARIABLES OF PRIMI POSTNATAL MOTHERS.

Table 1: Frequency and percentage distribution of selected demographic variables of primi postnatal mothers.

n=60

	c) Graduate	20	33.3
5.	Occupation		
	a) Government job	03	5
	b) Private job	08	13.3
	c) Housewife	49	81.6
6	Source of information		
	a) Family.	14	23.3%
	b) Family members.	12	20%
	c) Mass media.	18	30%
	d) Health workers.	16	26.7%
7	Family income		
	Below 10000	24	40
	10,000to 20,000	32	53.3
	20,000 to 30,000	02	3.3
	30,000 and above	02	3.3

The above table 1 depicts major findings of the study

Majority 51.6% of subjects belong to the age group of 18-23 years, 46.6% belongsto 24-29years and least 1.6% belong to the age group of 30-35 years.

Majority 93.3% of subjects are Hindus, 5% were Muslims 1.6% belongs Christians.

Majority 23.3% belongs to nuclear family and 76.6% belongs to joint family.

Among participants 35% completed their primary education, 31.6% completedtheir secondary education and nearly 33.3% were graduated.

Among the participants 5% were government employee, 13.3% were privateemployees and majority 81.6% were housewives.

Among the participants majority 18(30%) were getting information from mass media; 16(26.7%) were getting information from health workers; 14(23.3%) weregetting information from friends and around 12(20%) were getting information from family members.

Among the participants 40% family income was below 10,000, majority 53.3% family income was between 10,000

to 20,000, 3.3% family income was between 20,000 to 30,000 and around 3.3% belongs to 30,000 and above.

The overall mean pre test knowledge scores obtained by the primi post mothers was 40% (14.01) with standard deviation 3.50.

The overall mean post test knowledge score obtained by the primi postnatal mothers was 85% (29.8) with standard deviation 1.67.

The total difference in the mean of overall knowledge scores was 8.217 with the ‘t’ value of 60.69 and found to be significant at the level of p<0.05.

There was a statistically significant association between the knowledge score of primi postnatal mothers with socio demographic variables such as age, religion, family type, education of mother, occupation of mother, source of information , family income at the probability level of p<0.05.

SECTION II: KNOWLEDGE LEVEL OF PRIMI POSTNATAL MOTHERS REGARDING SELECTED HOME BASED POSTNATAL CARE

Table 2: Frequency and Percentage distribution of level of knowledge regardingselected home based postnatal care before and after administration of SEP.

n=60

Level of knowledge	Pre-test		Post test	
	Frequency	Percentage	Frequency	Percentage
Inadequate (<50%)	03	5%	-	-
Moderate (50-75%)	57	95%	04	6.6 %
Adequate (>75%)	-	-	56	93.3%

The above table 2 depicts the frequency and percentage distribution of level of knowledge regarding selected

home based postnatal care among primi postnatal mothers before and after SEP.

In pre-test, 57 (95%) subjects had moderate knowledge and 03(5%) subjects had inadequate knowledge. In post test, 04(6.6%) had moderate knowledge, 56(93.3%) subjects had adequate knowledge.

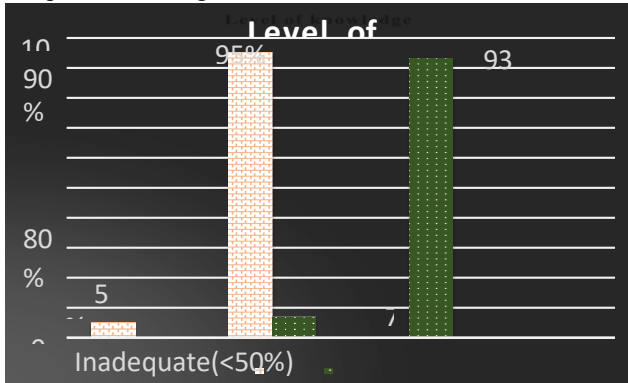


FIGURE N0-01 Percentage distribution of Pre test and Post test level of knowledge

SECTION III

Table 3: Mean and Standard Deviation (SD), and paired ‘t’ test of pre-test and post-test knowledge score of participants.

Domain	Max.score	Respondents knowledge				
		Mean	SD	‘t’ value	Mean percentage	Remarks
Pre-test	35	14.01	3.54	60.69 *S	40%	Significant
Post test	35	29.8	1.67		85%	
Enhancement	35	15.79	2.06			

n=60

Table value t (59)= 2, p<0.05

The above table 3 represents the mean standard deviation and t value of pre- test and post test level of knowledge regarding selected home based postnatal care. It revealed that the subjects had pre-test mean of 14.01 and mean percentage of 40% with standard deviation of 3.54. The post test score revealed that the subjects had a mean of 29.8 and mean post-test percentage is 85% with standard deviation of 1.67 and t value of 60.69 and p<0.05.

Hence ‘t’ calculated value is not less than ‘t’ tabulated value hence we are accepting research hypothesis H₁.

SECTION IV

Table4: Association of pretest level of knowledge of primi mothers regarding selected home-based postnatal care with demographic variables.

n=60

DEMOGRAPHIC VARIABLES	Frequency	%	< Median(19)		≥ Median(41)		Chi-square value	p- value
			No	%	No	%		
1. Age of themother								
a) 18-23yrs	31	51.6	12	63.15	19	46.34	χ ² = 1.73 D.f=2 NS	P<0.05
b) 24-29yrs	28	46.6	07	11.66	21	51.21		
c) 30-35yrs	01	1.6	-	-	01	2.43		
2. Religion								
a) Hindu	56	93.3	18	94.7	38	92.68	χ ² = 2.21 d.f = 3 NS	P<0.05
b) Muslim	03	5	01	5.2	02	4.87		
c) Christian	01	1.66	01	5.2	-	-		

3. Family type							$\chi^2 = 5.89$	P<0.05
a) Nuclear family	14	23.3	8	16.6	06	50	d.f=1 *S	
b) Joint family	46	76.6	40	83.3	06	50		
4. Education							$\chi^2 = 10.19$	P<0.05
a) Primary education	21	35	10	52.63	11	26.8	d.f = 3*S	
b) Secondary education	19	31.6	06	31.57	13	31.7		
c) Graduate	20	33.3	03	15.7	17	41.4		
5. Occupation							$\chi^2 = 0.18$	P<0.05
a) Government job.	03	5	01	5.2	02	4.87	d.f=2NS	
b) Private job	08	13.3	02	10.5	06	14.6		
c) Housewife	49	81.6	16	84.2	33	80.48		
6. Source of information								
a) Friends.	14	23.3	5	16%	9	30	$\chi^2=2.69$	
b) Family members	12	20	7	23.3%	5	16	d.f=3NS	P<0.05
c) Mass media	18	30	8	26.6%	10	33.3		
c) Health workers	16	26.7	10	33%	6	20		
7. Family income							$\chi^2 = 1.816$	P<0.05
a) Below 10000	24	40	09	47.3	15	36.5	d.f=3NS	
b) 10,000 to 20,000	32	53.3	09	47.3	23	56		
c) 20,000 to 30,000	02	3.3	-	-	02	4.87		
d) 30,000 and above	02	3.3	01	5.2	01	2.43		

NS= not significant. *S= Significant at 5% level (p<0.05 level)

Testing of hypothesis

In order to evaluate the association between pretest knowledge regarding selected home based postnatal care among primi postnatal mothers with their selected demographic variables the following research hypothesis was formulated.

Research hypothesis 2

H2- There will be a significant association between the pretest knowledge scores of primi postnatal mothers regarding selected home based postnatal care with their demographic variables.

Null hypothesis-2

H₀- There is no significant association between the pretest knowledge scores regarding selected home based postnatal care among primi postnatal mothers with their selected demographic variables.

The results of chi square analysis presented in tables indicated that there was significant association between knowledge scores with educational status of the mother and family type of mother. It was evidenced that the knowledge regarding home based postnatal care is associated with demographic characteristics of primi postnatal mothers.

Hence research hypothesis (H2) was accepted, that there is significant association between the pretest knowledge regarding selected home based postnatal care among primi postnatal mothers with their selected demographic variables.

DISCUSSION

A result of the current study revealed that the overall mean pre test knowledge score obtained by the primi post mothers was 14.01 with standard deviation 3.54. The overall post test mean knowledge score obtained by the primi postnatal mothers was 29.8 with standard deviation 1.67. The total difference in the mean of overall knowledge score was 15.79 with the 't' value of 60.69 and found to be significant at the level of p<0.01. It means there is significant difference between pre test and post test level of knowledge of primi postnatal mothers regarding selected home based postnatal care. Hence the hypothesis H1 is accepted.

It was evident that there was a statistically significant association between the pre test and post test knowledge score with socio demographic variables such as Education and type of family at the probability level of p<0.05. It

means that there is a significant association between the knowledge score of the primi postnatal mothers with selected demographic variable. Hence, the hypothesis H₂ is accepted.

A study was conducted to assess the effectiveness of home-based postnatal care. The aim of the study was to explore home based postnatal care in terms of what is currently provided; what women expect; and how prepared midwives are to provide home-based postnatal care. The study comprises three components. Component one is a web-based survey of all managers of public maternity hospitals in Victoria exploring the guidelines, procedures, and practice of home-based postnatal care. Component two involves interviews with new mothers whose babies are approximately four to five months of age, and who received home-based postnatal care. Component three comprises focus groups with Victorian midwives who provide home-based postnatal care. Study concluded that urgently needed information concerning the structure and content of home-based postnatal care.

CONCLUSION

According to the study's findings, there was a significant difference between the knowledge scores of primi postnatal mothers on the pre- and post-test. This leads to the conclusion that the SEP is successful in raising the knowledge scores of primi postnatal mothers. There was a noteworthy correlation observed between the knowledge scores of primi-postnatal moms and some socio-demographic characteristics, such as the family type and the mother's educational position..

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