

Original Research Article

Effectiveness of structured teaching programme on knowledge about postnatal care among mothers

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Received: 08 September 2017

Accepted: 02 October 2017

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ABSTRACT

Background: Mothers and new-borns are vulnerable to illness and deaths during the postnatal period. Care during postnatal period is the important part of maternal health care as the serious and life-threatening complications can occur in postnatal period.

Methods: A Quantitative approach with pre- experimental design was used to study the effectiveness of STP on postnatal care. Sixty postnatal mothers were selected from tertiary care hospital. The Purposive sampling techniques was used to select the study subjects. Data was collected by using Structured Knowledge questionnaire.

Results: The results show that the overall mean pre-test knowledge score of postnatal mothers was 19.8 ± 2.98 and mean post-test knowledge score of postnatal mothers was 26.28 ± 1.89 and the mean difference was 6.48. This revealed that the STP was an effective method in improving mother's knowledge on postnatal care. There was no significant association found between pre-test knowledge score with their demographic variables except occupation.

Conclusions: The findings of the study revealed that STP was effective in enhancing the knowledge of postnatal mothers on postnatal care.

Keywords: Knowledge, Postnatal mothers, Post-natal care, Structured teaching programme

INTRODUCTION

Mothers and children represent more than half of the total population in our country. Besides they are vulnerable groups as the morbidity and mortality rates are higher. Delivery of a new baby is one of the happiest times in woman's life. But it also crucial period for both physical and emotional challenges.¹

Postnatal care is regarded as one of the most important maternal health care services for the prevention of impairment and disability resulting from child birth. The World Health Organization (WHO) describes the postnatal care as the most critical and most neglected phase of the life of the mothers and babies as most of the death occur during the postnatal period.²

Postnatal period is a six-week interval between birth of a new born and the return of the reproductive organs to their normal non- pregnant state. Postnatal period is a vulnerable time because most maternal and new born deaths occur during this period.³

The postpartum period or puerperium begins as soon as the placenta is expelled and lasts for approximately 6 weeks when the uterus becomes regressed almost to the non-pregnant state. By six weeks after delivery, most of the changes of pregnancy, labour and delivery have resolved and the body has reverted to the non-pregnant state.⁴

Maternal mortality is unacceptably high. About 830 women die from pregnancy- or childbirth-related

complications around the world every day. It was estimated that in 2015, roughly 303 000 women died during and following pregnancy and childbirth. Almost all of these deaths occurred in low-resource settings, and most could have been prevented.⁵ Karpagam J, Shangeetha D also stated that educational programme has been an effective method of increasing the knowledge of the postnatal mothers.⁶

METHODS

The Quantitative approach and Pre-experimental design with one group pre-test – post-test design was used. Non-probability purposive sampling technique was used to collect the 60 postnatal mothers. The study was conducted tertiary care hospital Utrakhand. The postnatal mothers who were willing to participate in the study, present at the time of data collection and able to understand and speak Hindi language were included in the study. Postnatal mother who were Health care professionals and Suffering from any postnatal complications were excluded from the study. Women were explained the purpose of the study and written informed consent was taken. Pre-test was done by using Demographic Performa and knowledge questionnaire. Structured Teaching Program (STP) was implemented after pre-test. Post test was conducted seven days after pre-test. Descriptive statistics includes frequency, percentage, mean, standard deviation was used to describe the result. Inferential statistics like paired t test, Chi square test, chi square test with Yates correction and Fisher exact test were used to find the effectiveness and association.

RESULTS

Table 1 Illustrates the frequency and percentage distribution of socio-demographic characteristic of postnatal mothers. Study included 60 postnatal mothers. The majority of the postnatal mothers (63.3%) were between the age group of 26 and above. In a view of education highest and equal percentage of postnatal mothers (26.6%) had secondary and higher secondary education. With regards of occupation most (83.3%) of the mothers were housewife. Among 60, majority (60%) of the postnatal mothers were living belongs to joint family. Gravida and parity of the postnatal mothers shows that approximately half of the postnatal mothers were primigravida (51.6%) and primipara (55%) respectively. Regarding the types of delivery majority of the postnatal mothers (60%) had normal vaginal delivery. Regarding the area of living, most of the postnatal mothers (80%) belongs to rural area. Majority of the postnatal mothers (55%) had no previous knowledge about postnatal care.

Table 2 shows that the pre-test mean score of postnatal mothers on knowledge about postnatal care in all components. The highest pre-test mean percentage (83%) was found in the component of “Basic concepts of

postnatal period” and the lowest pre-test mean percentage (1.6%) was found in the component of “care of newborn”.

Table 1: Frequency and percentage distribution of the socio-demographic characteristics of the postnatal mothers.

Variable	Frequency (f)	%
Age in years		
15-25 year	22	37
26 and above	38	63
Educational status		
No formal education	11	18.3
primary education	13	21.9
secondary education	16	26.6
higher secondary education	16	26.6
graduate and above	04	6.6
Occupation		
Housewife	50	83
Working-yes private employee	10	17
Types of family		
Nuclear family	24	40
Joint family	36	60
Gravida		
Primigravida	31	52
Multigravida	29	48
Parity		
Primi para	33	55
Multipara	27	45
Types of delivery		
Normal vaginal delivery	36	60
Assisted/instrumental delivery	24	40
lower segment cesarean section		
Postnatal day		
1- 4day	33	55
5 and above	27	45
Area of residence		
Urban area	12	20
Rural area	48	80
Do you have any knowledge about postnatal care?		
No	33	55
Yes	27	45
Source of information (n=27)		
Family members	24	89
Mass media	03	11

Table 3 shows that the mean of post-test knowledge score (26.28±1.89) of the postnatal mothers was higher than that of the mean pre-test knowledge score (19.8±2.98) and the mean difference was 6.48. Paired t-test was performed to compare the mean of pre-test and post-test knowledge score. The t calculated value (23.98) was higher than the tabulated value. So, the scores predicted that the significant difference between the mean of pre-test and post-test at p<0.05 level. Hence the null hypothesis was rejected and research hypothesis was

accepted. This significant improvement in the knowledge can be attributed by the intervention.

Table 2: Component wise comparison of Mean, SD and Mean percentage of pre-test knowledge of postnatal mothers on postnatal care.

Component wise knowledge related to postnatal care	Maxi. score	Mean ±SD (pre – test)	Mean (%)
Basic concept of postnatal care	4	2.56±0.863	83
Care of mother	20	10.6±2.30	04
Care of newborn	10	6.6±1.330	1.6

Figure 1 Bar diagram illustrated that component wise comparison of mean percentage of pre-test and post-test

knowledge score of postnatal mothers regarding postnatal care. In all component, post-test mean percentage was higher than the pre-test mean percentage. Hence it can have interpreted that structured teaching programmed on postnatal care was effective.

Table 4 Shows that comparison of pre-test and post-test level of knowledge score of postnatal mothers. It includes three categories. Majority of the postnatal mothers were having poor (28) and average (29) knowledge on postnatal care before implementing structured teaching module. After implementing teaching module majority (38) of the postnatal mothers were having very good knowledge on postnatal care. Hence it can have interpreted that structured teaching programmed is effective method the enhance the knowledge of postnatal mothers regarding postnatal care.

Table 3: Comparison of mean of pre-test and post-test knowledge score on postnatal mothers regarding postnatal care. (N=60)

Knowledge scores	Pre-test Mean ±SD	Post –test Mean ±SD	Mean Difference	‘t’ value	P value
	19.8±2.98	26.28±1.89	6.48	23.98	0.001

df59=2.00 at p<0.05

Table 4: Comparison of pre-test and post-test level of knowledge of postnatal mothers on postnatal care. (N=60)

Arbitrary scoring	No. of postnatal mothers (pre-test)	No. of postnatal mothers (post-test)	Interpretation
14-19	28	0	Poor
20-25	29	22	Average
26-31	3	38	Good

Table 5 Shows the association of pre-test knowledge scores with socio-demographic variable. There was no significant association found between pre-test knowledge score and socio-demographic variable except occupation (p=0.027) ($\chi^2=4.835$).

Hence, it can be interpreted that knowledge of postnatal mothers was not influenced by socio-demographic variables except occupation and may interpreted that working mothers were having significantly higher knowledge than the house wife.

DISCUSSION

In the present study significant difference between the mean of pre-test and post-test score and t calculated value was higher than tabulated value. That indicate the structured teaching programmed was effective method to improve the knowledge of postnatal mother regarding postnatal care.

This study also supported by J. Karpagam and D. Shangeetha. This study findings showed that a significant difference between pre-test and post-test knowledge was found (t =27.94, p<0.05). Which indicate that educational programmed has been an effective method of increasing the knowledge of the mothers.⁶

A similar study conducted by Angel Rajakumari G, Sheela R, Soli T and Malathy D.

The study findings are pre-test knowledge had an overall mean score of 19.8 and the post-test knowledge had an overall score of 11.4 which showed that there is significant difference in the level of knowledge following the administration of education.

The study findings revealed that planned teaching program was highly effective in improving knowledge of postnatal mothers regarding postnatal diet.⁷

A similar study conducted by Kanchan Bala, RajKumari Sylvia Devi, Gomathi B. The study finding showed that overall mean pre-test knowledge score of postnatal mothers was (30±4.3) which reveals that mothers had good level of knowledge and mean post-test knowledge score of postnatal mothers was (42±1.1) which revealed that mothers had very good level of knowledge and ‘t’ value for total pretest and posttest was 22.22.

The findings of the study concluded that ‘Instructional Teaching Programme’ (ITP) was effective to increase the knowledge of postnatal mothers regarding newborn care.⁸

Table 5: Association of pre-test knowledge score with selected socio-demographic characteristics of postnatal mothers (N=60).

Socio-demographic variables	Below median	At and above median	X ²	P-value
Age in years				
15-25 year	09	13	0.4	0.50
26 and above	19	19		
Educational status				
Educated	22	27	0.3	0.50
Uneducated	06	05		
Occupation				
Working	01	09	#4.83*	0.027*
Non-working	27	23		
Types of family				
Nuclear family	13	10	1.4	0.50
Joint family	15	22		
Gravida-				
Primigravida	14	17	0.05	0.50
Multigravida	14	15		
Parity				
Primi para	14	19	0.9	0.50
Multipara	14	13		
Types of delivery				
Normal vaginal delivery assisted/instrumental	15	21	0.9	0.50
Delivery-lower segment cesarean section	13	11		
Postnatal day				
1-4 day	16	17	0.09	0.50
5 and above	12	15		
Area of residence				
Urban area	21	26	0.3	0.50
Rural area	07	06		
Do you have any knowledge about postnatal care?				
Yes	09	14	3.5	0.05
No	19	18		

df1= 3.84 at p<0.05, #Yates correction test

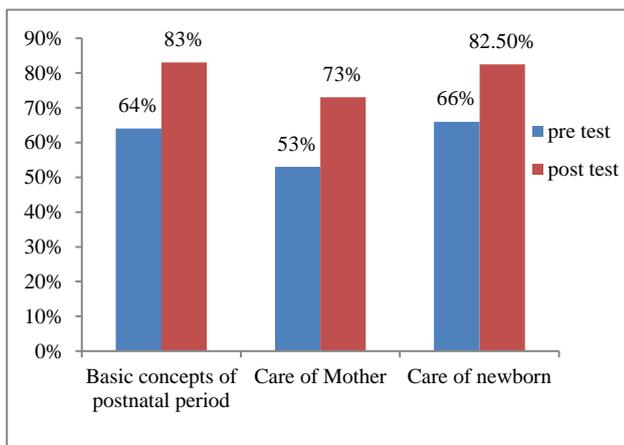


Figure 1: component wise comparison of mean percentage of pre-test and post-test of knowledge score regarding postnatal care.

CONCLUSION

Based on the findings of the study, it is concluded that most of the mothers had good knowledge regarding postnatal care after implementation of Structural Teaching Programme. So structured teaching programme was effective for improving the knowledge of postnatal mothers.

ACKNOWLEDGEMENTS

Authors would like to thank Dr. Kathleen Mckeehan, Nursing Consultant and Dr. Sanchita Pugazhendi, Professor and Principal of Himalayan College of Nursing, Dehradun for their help, guidance and contributions. We express our gratitude for the guidance provided by the Research Committee of HIHT.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the SRHU Ethical committee

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Cite this article as: Joshi N, Gomathi B, Bala K, Mahalingam V. Effectiveness of structured teaching programme on knowledge about postnatal care among mothers. *Int J Res Med Sci* 2017;5:4993-7.