A Randomized Control Trial on Effectiveness of Video Assisted Teaching Programme (VATP) on Knowledge Regarding Essential Newborn Care Among Primipara Mothers in Postnatal Ward of Selected Hospital, Belgaum, Karnataka

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Abstract: *Background: Birth of a baby is one of the most wonderful moments of life for mother or parents or family. Mother is an important primary health care provider. Nurses are the key persons to promote awareness about ENC and they should be strengthened for the beneficial practices regarding ENC among postnatal mothers especially primipara mothers. Objectives: To assess the knowledge of primipara mothers regarding essential newborn care in both study and control group, to evaluate the effectiveness of VATP on knowledge regarding ENC among primipara mothers in study group as compared to control group. Material and Method: A single blind randomized controlled trial design was used. Simple random sampling technique by envelope method was used to enroll 60 subjects into study (30) and control (30) group. Pretest questionnaire was administered on both the group through structured knowledge questionnaire. VATP was administered on study group and post test was done after 7 days on both the groups. Data obtained were tabulated and analyzed in terms of objectives of the study using descriptive and inferential statistics. Conclusion: The findings of the study showed that the mean post test knowledge score 28.47±2.69 was higher than the mean pretest knowledge score 16.33±3.54 of study group as compare to control group. The results showed that VATP was an effective method to increase the knowledge of primipara mothers regarding essential newborn care.*

Keywords: Effectiveness, Essential newborn care (ENC), Video Assisted Teaching Programme (VATP), Primipara mothers.

1. Introduction

Birth of a baby is one of the most wonderful moments of life for mother or parents or family. They are precious gems, adorable and divine gifts that parents get from the almighty.[1]

Newborn mortality is one of the world's most neglected health problems. It is estimated that globally, four million newborns die before they reach one month of age. In India about 26 million babies are born annually in which 1.2 million of these nearly die before completing 4 weeks of life. Thus India accounts for nearly two thirds of all neonatal deaths in the world. The current neonatal mortality rate in India is 42 per 1000 live births as compared to 36 per 1000 live birth in global scenario.[2]

All newborns require essential newborn care to minimize the risk of illness and maximize their growth and development. This care is also instrumental in preventing many newborn emergencies. So the primary goal of essential newborn care is to establish homeostasis i.e. stability in the normal physiological status of the newborn to ensure their intact survival and to reduce neonatal illness and deaths.[3]

Essential care, to ensure that the newborn is normal and healthy, can be best provided by mothers. The knowledge of care of newborn is essential for mothers especially primipara mother. Mother is the best primary care provider. She should participate in the nursing care of the baby to develop self-confidence, through which the health and survival of the newborn baby depends upon the mother's health status, awareness, education and skill.[4]

2. Material and Method

The present study was conducted to evaluate the effectiveness of video assisted teaching programme on knowledge regarding essential newborn care among primipara mothers who had caesarean section and admitted in the postnatal ward in selected Hospital, Belgaum, Karnataka. A single blind randomized controlled trial design was used. Simple random sampling technique by envelope method was used to enroll 60 subjects into study (30) and control (30) group. Pretest questionnaire was administered on both the group through structured knowledge questionnaire. VATP was administered on study group and post test was done after 7 days on both the groups.

The tool used in the study consists of two parts:
Part I: Sociodemographic data containing 8 items.
Part II: Structured knowledge questionnaire of 38 items related to essential newborn care which was divided into 4 aspects:
1. Knowledge items on cleanliness/ personal hygiene: 11 (29%)
2. Knowledge items on thermal protection: 10 (26.3%)
3. Knowledge items on breastfeeding: 11 (29%)
4. Knowledge items on immunization: 6 (15.7%)

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For the 38 items related to essential newborn care , each correct answer was awarded with a score of '1' and a score of '0' was awarded for the wrong answer. The data obtained was analyzed in terms of descriptive and inferential statistics.Data obtained were tabulated and analyzed in terms of objectives of the study using descriptive and inferential statistics.
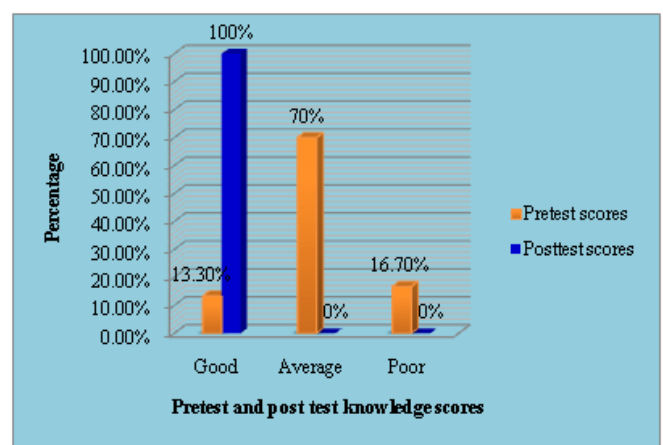
3. Results

I) Finding on knowledge regarding essential newborn care among primipara mothers.

Table 1.a: Distribution of knowledge scores among primipara mothers about essential newborn care in study group, n=30

Knowledge scores	Pretest		Post test	
	Frequency	Percentage	Frequency	Percentage
Good (> 20) $(\overline{X} + SD)$	04	13.3%	30	100%
Average (15 – 20) $(\overline{X} - SD)$ to $(\overline{X} + SD)$	21	70%	-	-
Poor (< 15) $(\overline{X} - SD)$	05	16.7%	-	-

Table 1.a Revealed that in pretest primipara mothers 21 (70%) had average knowledge and 5 (16.7%) had poor knowledge whereas 4 (13.3%) had good knowledge. In post test all primipara mothers 30 (100%) had good knowledge. This shows that there is gain in knowledge scores after administering video assisted teaching programme regarding essential newborn care.
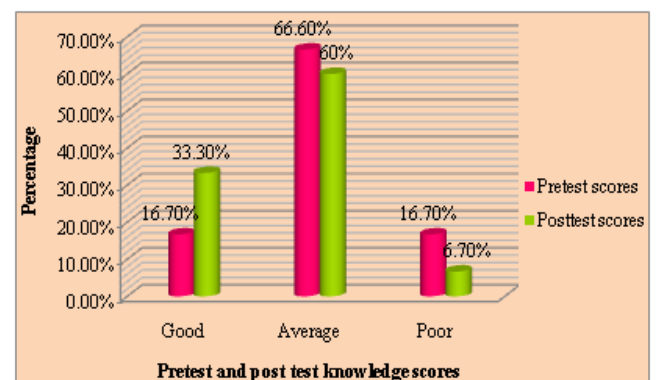

Graph 1: Cylindrical graph showing percentage distribution of primipara mothers according to pretest and post test knowledge scores in study group

Table 1.b: Distribution of knowledge scores among primipara mothers regarding essential care in control group, n = 30

Knowledge scores	Pretest		Post test	
	Frequency	Percentage	Frequency	Percentage
Good (> 20) $(X + SD)$	05	16.7%	10	33.3%
Average (15 – 20) $(X – SD)$ to $(\overline{X} + SD)$	20	66.6%	18	60%
Poor (< 15) $(\overline{X} – SD)$	05	16.7%	02	6.7%

Table 1.b Revealed that in pretest test primipara mothers were 20 (66.6%) had average knowledge and 5(16.7%) had good knowledge whereas 5 (16.7%) had poor knowledge. In post test 18 (60%) had average knowledge and 10 (33.3%) had good knowledge whereas only 2 (6.7%) had poor knowledge.

Graph 2: Cylindrical graph showing percentage distribution of primipara mothers according to pretest and post test knowledge scores in control group.

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II: Pretest and post test mean percentage of knowledge scores in different areas of knowledge.

Table 2.a: Pretest and post test mean percentage knowledge scores of primipara mothers on different components of essential newborn care in study group, n=30

Area of knowledge	Total scores	Total pretest scores	Total post test scores	Pretest mean%	Post test mean%	Actual gain score %
Cleanliness/ Personal hygiene	330	149	265	45.15%	80.30%	35.15%
Thermal Protection	300	99	211	33%	70.33%	37.33%
Breastfeeding	330	153	240	46.36%	72.72%	26.36%
Immunization	180	89	180	49.44%	76.66%	27.22%

Table 2.a Revealed that there was 35.15% of actual gain in knowledge in cleanliness/ personal hygiene, thermal protection was 37.33%, breastfeeding was 26.36% and immunization was 27.22%.

Table 2.b: Pretest and post test mean percentage knowledge scores of primipara mothers on different components of essential newborn care in control group, n=30

Area of knowledge	Total scores	Total pretest scores	Total post test scores	Pretest mean%	Post test mean%	Actual gain score %
Cleanliness/ Personal hygiene	330	159	180	48.18%	54.54%	6.36%
Thermal Protection	300	85	119	28.33%	39.66%	11.33%
Breastfeeding	330	148	185	44.84%	56.06%	11.22%
Immunization	180	95	109	52.77%	60.55%	7.78%

Table 2.b Revealed that in cleanliness/ personal hygiene the actual gain of knowledge was 6.36%, thermal protection was 11.33%, breastfeeding was 11.22% and immunization was 7.78%.

III. Evaluate the effectiveness of video assisted teaching programme in terms of gain in post test knowledge scores in study group as compared to control group.

Table 3 a: Mean pretest scores, post test scores and standard deviation of both study and control group, and test of significance by using unpaired 't' test, n (30+30) =60

	Pretest Mean ±SD	Post test Mean±SD
Study group	16.33±3.54	28.47±2.69
Control group	17.20±3.17	19.67±2.95
Unpaired 't' value	1.00	12.0742
P value	0.3215	0.00001*

*(P<0.05) t (n_1+n_2-2) = 58

Table 3 a : Comparison of pretest scores between study and control group by unpaired 't' test yielded p value > 0.05 suggesting of no significant difference. While after comparing post test scores between both the groups p value was obtained 0.00001 which was less than 0.05. This suggested that there was significant difference observed between the groups. Therefore it can be inferred that video assisted teaching programme regarding essential newborn care was effective to improve the knowledge of primipara mothers.

Table 3 b: Comparing knowledge scores in study and control group, n (30+30)=60

Group	Pretest	Posttest	Increased Scores	Paired t test	Df
Study	16.33±3.54	28.47±2.69	12.13±1.80	37.0179	29
Control	17.20±3.17	19.67±2.95	2.47± 1.53	8.8578	29

Table 3 b: Revealed that mean post test score of study group was significantly more than the control group. This proved that video assisted teaching programme was effective.

4. Discussion

1. **Finding related to knowledge regarding essential newborn care among primipara mothers in study and control group.**

In the present study findings showed that in study group in pretest primipara mothers 21 (70%) had average knowledge, 5 (16.7%) had poor knowledge whereas 4 (13.3%) had good knowledge. In post test all primipara mothers 30 (100%) had good knowledge. In control group primipara mothers 20 (66.6%) had average knowledge, 5(16.7%) had good knowledge whereas 5 (16.7%) had poor knowledge in pretest. In post test 18 (60%) had average knowledge and 10 (33.3%) had good knowledge whereas only 2 (6.7%) had poor knowledge. This study was supported by a study done by Shrishail B[6]. Finding showed that in pretest postnatal

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mothers 39(65%) had average knowledge, 10(16.66%) had poor knowledge and 11(18.33%) had good knowledge in the pretest. In post test all the mothers 60(100%) had good knowledge score.

2. Findings related to effectiveness of video assisted teaching programme in terms of gain in post test knowledge scores in study group as compared to control group.

In the present study findings in study group after applying paired 't' test results showed that 't' value was 37.017 which was significant at p<0.05 level. This revealed that video assisted teaching programme was effective in gaining knowledge regarding essential newborn care **.** The findings in the control group after applying paired 't' test results showed that 't' value was 8.857 which was significant at p< 0.05 level. This revealed that there was increase in knowledge scores in the post test scores as compared to pre test scores.

The similar findings was supported by the study conducted by M.D Santhi and Kokilavani[6] that the obtained 't' value in the experimental group was 37.26, which was significant at p<0.05 level and in the control group 't' value was 3.77 which was significant at p<0.05.

The findings of the mean post test scores between study and control group by unpaired 't' test yielded p<0.05 suggesting significant difference (t=12.0742). Similar findings were seen in the study conducted by M.D Santhi and Kokilavani[6]. The findings showed that unpaired 't' value between experimental and control group post test knowledge scores was 58.85 which was significant at p<0.05.

5. Conclusion

The study findings showed that there was a significant difference in the knowledge scores of the study group when compared to control group. The unpaired 't' test between post test knowledge score in study group and post test knowledge score in control group showed that there was significant gain in knowledge in study group compared to control group. The results of this study inferred that Video Assisted Teaching Programme (VATP) was the best teaching and learning strategy as it enhanced the knowledge of primipara mothers regarding essential newborn care.

6. Acknowledgment

References

[1] Dhana K. Study on Immediate Newborn Care. StudyMode.com. 9 Jan 2013.
[2] Fernandez G. Importance of a child in the family. Child development Institute: 4 Jan 2012.
[3] Mother Newborn news. Community based management of newborn infections. July 2007 to Dec.2008; vol.3; No.1-2.
[4] Park K. Text Book of Preventive and Social Medicine. 20th ed. Jabalpur: Banarsidas Bhanut publisher; 2008. p.423-25.
[5] Shrishal B. Study to assess the effectiveness of planned teaching programme on knowledge regarding prevention of neonatal hypothermia among postnatal mothers. [PG Nursing thesis]. Belgaum: KLE University; 2013.
[6] Santhi MD and Kokilavani. Effectiveness of video teaching programme on physical care of newborn among primigravida mothers. Reviews of Progress. 2013 June : 1(8); 1-7.

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