



EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME REGARDING NESTING AND SWADDLING ON THE KNOWLEDGE AND PRACTICES OF STAFF NURSES.

Nursing

Ms. Vaishali Hiwale

Clinical Interactor / tutor, MGM, Mother Teresa college of nursing, Chh. Sambhajinagar Maharashtra, India.

Dr. Amarja Gosavi

Associate professor, MGM Mother Teresa College of Nursing Aurangabad, Maharashtra, India.

ABSTRACT

Prematurity is a term used for all neonates born less than 37 week's or 259 days of their gestation and is consider the direct cause for 24% of neonatal deaths. "To assess the effectiveness of structured teaching programme regarding nesting and swaddling on the knowledge and practices of staff nurses working in NICU and maternity unit of selected hospitals in city" A pre-experimental one group pre-test post-test design was used in this study. A purposive sampling technique was used to select 100 staff nurses. Considering the objectives and hypothesis of the study conceptual framework was prepared based on Imogene king goal attainment theory. Data were collected through one tool that includes; 1st part demographic data, 2nd part; knowledge questionnaire, 3rd part was a self- reported practice checklist before and after structured teaching program. The data collection was analysed using descriptive and inferential statistics. There were 100 staff nurses working in NICU and maternity units, each of them had received structured teaching program on nesting and swaddling for newborn. Their pre and post-test correct assessment were recorded and mean and standard deviation of the test scores are calculated. It was found that, the mean posttest score was 26.77 which was greater than mean pretest score 10.95. The paired 't' test value was at the level of P 0.05, Since P value is less than 0.05 (P value = <0.0001) difference in scores is statistically significant. Researcher conclude at 5% level of significance and 99 degrees of freedom that the above data gives sufficient evidence to conclude that nurses after receiving structured teaching program on nesting and swaddling for newborn is effective in improving knowledge. Hence reject null hypothesis and accept research hypothesis. At 5% level of significance.

KEYWORDS

Nesting, swaddling, structured teaching programme, effectiveness.

INTRODUCTION:

Prematurity is a term used for all neonates born less than 37 week's or 259 days of their gestation and is consider the direct cause for 24% of neonatal deaths. Whereas, the rates of preterm birth have been reported to range from 5-7% of live births in some developed countries and are estimated to be substantially higher in developing countries.¹ Premature infants are particularly a vulnerable group who require advanced medical interventions, and highly specialized nursing care in order to thrive and survive. Whereas, their early birth interrupts the maturity of their lungs, gut, brain and immune system, this lack of development interferes with the most basic function of airway control and breathing, impacts digestive ability, jeopardizes brain function and impairs immune function. In addition, their lack of self-regulatory behaviours, inability to make purposeful movements and lack of communication abilities leave them extremely vulnerable.

Neonatal nurses are central in NICUs efforts to improve quality of care. Comforting intervention in the field of nursing care will contribute to high neonatal outcomes and eventually will lead to hospital development. Nursing curriculum also should be equipped with the recent advances in neonatal care and students should also be trained to provide developmental care in a NICU setting. Nurse administrators should provide and recommend the interventions like Nesting in the setting like NICU of the hospital.

OBJECTIVES:-

- To assess the knowledge of nurses regarding nesting and swaddling for newborn in NICU and maternity unit.
- To assess the practice of staff nurses regarding nesting and swaddling.
- To assess the effectiveness of structure teaching programme on knowledge and practice regarding nesting and swaddling.
- To co-relate the knowledge and practice regarding nesting and swaddling.
- To find a significant association between pre -test knowledge and practice with selected demographic variable.

MATERIALS AND METHOD:

The design adapted for the study was pre- experimental study. A one-group pretest post-test design was selected for data collection. Study sample comprised of 100 staff nurses who were selected through a *A purposive sampling technique* technique from the selected hospital in the city. *self- reported practice checklist* and Knowledge questionnaire was used to evaluate the level of knowledge and practice among nurses. In structure teaching program was administer to assess the knowledge and practice among staff nurses in the NICU. And after the

STP program administer the post test Knowledge questionnaire is used to determine the staff nurses awareness related to nesting and swaddling techniques. It contains of 30 items of multiple choice questions. Total score is 30. Right answer- 1 Wrong answer- 0 The knowledge level has been arbitrarily divide in to three categories based on the knowledge questionnaire. And Practice Checklist Self reported checklist was used to determine the practice of staff nurses related to nesting and swaddling techniques use. It contain 10 items. Total score is 10. Right answer- 1 Wrong answer- 0 The practice level of score has been arbitrarily divide into three categories. Good: 6-10, Average: 4-6.

Data Analysis

Section I: Frequency distribution of socio demographic variables among staff nurses

Table No. 1 Frequency Distribution Of Staff Nurses Working In NICU And Maternity Units According To Their Socio Demographic Characteristics

Demographic Variable	Frequency	Percentage
Age	21-30 years	18
	31-40 years	48
	41-50 years	30
	>51 years	4
Year of experience	1-3 years	30
	4-6 years	32
	7-9 years	28
	10 years and above	10
Religion	Hindu	30
	Muslim	3
	Christian	34
	Any other	33
Education	ANM	0
	GNM	60
	B.sc nursing	40
		40
Monthly Income	Rs.15000-Rs. 16000/-	36
	Rs. 16001-Rs. 30000/-	30
	Rs. 31000-Rs. 39000/-	30
	Rs. >40000/-	4
Type of Hospital	Private Hospital	100
	Public Hospital	0
Any Training attended	Yes	45
	No	55

Section II: Assessment of knowledge among staff nurses regarding nesting and swaddling for newborn in NICU and maternity unit

Table 2- Frequency And Percentage Distribution Of Level Of Knowledge Among Staff Nurses

Level of knowledge with regards to nesting and swaddling for newborn.	Score	Frequency	Percentage (%)	Mean Score	SD
Inadequate knowledge	0-10	63	63	10.95	2.55
Moderate knowledge	11-20	37	37		
Adequate knowledge	21-30	0	0		

Table no 3 and figure 9 shows that, in pretest majority of the sample 76(76%) were had poor practice, 24(24%) had average practice and none of the sample had poor practice.

Section IV: Assessment of effect of structured teaching program on knowledge and practice regarding nesting and swaddling for newborn in NICU and maternity unit.

Table 4- Effectiveness Of Structured Teaching Program On Nesting And Swaddling Among Staff Nurses

Domain	Test	Mean	SD	SEM	T	DF	P-value
Knowledge on Nesting & Swaddling	Pre-test	10.95	2.55	0.26	47.018	99	P<0.0001
	Post-test	26.77	1.80	0.18			

The table no.4 shows that there were 100 staff nurses working in NICU and maternity units, Pre-test Results: Participants had a mean score of 10.95, with a standard deviation (SD) of 2.55 and a standard error of the mean (SEM) of 0.26. The test statistic (T) was 47.018, with 99 degrees of freedom (DF), and the p-value was P<0.0001, indicating a highly significant result. Post-test Results: The mean score increased significantly to 26.77, with a lower SD of 1.80 and SEM of 0.18.

Table 5- Effectiveness Of Structured Teaching Program On Nesting And Swaddling Among Staff Nurses

Domain	Test	Mean	SD	SEM	T	DF	P-value
Practice on Nesting & Swaddling	Pre-test	3.32	0.77	0.08	38.135	99	p<0.0001
	Post-test	8.08	0.81	0.08			

The table no.5 shows that there were 100 staff nurses working in NICU and maternity units, Pre-test Results: Participants had a mean score of 3.32, with a standard deviation (SD) of 0.77 and a standard error of the mean (SEM) of 0.08. The test statistic (T) was 38.135, with 99 degrees of freedom (DF), and the p-value was <0.0001, indicating a statistically significant result. Post-test Results: The mean score increased to 8.08, with a slightly higher SD of 0.81 and the same SEM of 0.08.

Section V: Correlation between knowledge and practice regarding nesting and swaddling among staff nurses

Table 6- Correlation Between Pretest Knowledge Score And Practice Score Among Staff Nurses

PARTICULARS	MEAN SCORE	SD	KARL PEARSON CORRELATION COEFFICIENT (r)	P
Knowledge Score	10.95	2.55	r=0.521	P<0.0001
Practice Score	3.32	0.77		

The table no 6 depicts that the relationship between knowledge and practice score was positive correlation and p is significant at 0.05 level (p<0.0001).

The table no 7 depicts that the relationship between knowledge and practice score was positive correlation and p is significant at 0.05 level (r=0.21, p<0.034).

Table 7- Correlation Between Posttest Knowledge Score And Practice Score Among Staff Nurses

PARTICULARS	MEAN SCORE	SD	KARL PEARSON CORRELATION COEFFICIENT (r)	P
Knowledge Score	26.77	1.80	r= 0.21	P=0.034
Practice Score	8.08	0.81		

Section VI: Determine the association between level of knowledge and practices with selected demographic variables

Table no 8: Association between pretest level of knowledge with selected demographic variables

Any Training attended							
Yes	35	10	0	1	7.665	0.001	S
No	28	27	0				

DISCUSSION

The research study finding has been discussed with relevance to the objectives and with other research study findings.

In this research study pre-test knowledge and practice result reveals that maximum samples of pre-test 63(63%) staff nurses had Inadequate knowledge 37(37%) staff nurses had moderate level of knowledge. Similarly, in pre-test majority of the sample 100 were had average practice, 24(24%) had average practice, poor practice 76(76%) and none of the sample had good practice. No respondents had adequate knowledge and practice on nesting and swaddling newborn in staff nurses.

Similarly, The study was conducted at NICU in Abha Maternity and Child Hospital (AMCH), Abah city, Kingdom of Saudi Arabia. 77 nurses who work in the previously mentioned NICU as a convenience sample. two tools used to collect the study: A Structured questionnaire sheet to assess nurses' knowledge regarding nesting and swaddling and the observation sheet to assess nurses' performance of nesting and swaddling in NICU. There was a statistically significant difference regarding nurses' knowledge and performance about nesting and swaddling immediately after and three months later compared with before learning package. There was a significant positive effect of implementing learning package in improving nurses' knowledge and performance about nesting and swaddling in NICU for premature infants.

Quantitative approach and quasi-experimental to comparative group with waitlist control group design used, 90 sample collected by Non-Probability Purposive sampling technique. The pre-test and post-test done by using Brazelton (1999) Neonatal Behavioural Assessment Scale the reliability of the tool value was r=0.86. Nested verses swaddle positioning. The analyses depicted that the swaddled positioning effective on very low birth weight neonates with p=0.001 and association found in the study group I and II for weight of the neonates, gestational weeks of the neonates in control group there is no association. The result of the study concluded that swaddle positioning was highly effective in improving the good behaviour pattern among very low birth weight neonates. Therefore, the investigator felt that knowledge gained can be achieved by nested verses swaddle positioning among very low birth weight neonates.

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