A Study of structured teaching programme on active management of third stage of labour among staff nurses working in DR. Tandon Nursing college and Test tube IVF center at Agra (U.P)

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Abstract— *The third stage of labour is the period of time from the birth of the baby until the placenta is delivered. During this stage, the uterus contracts & placenta begins to separate from the uterine wall. This stage lasts between 5 and 15 minutes. After 30 minutes, it is considered prolonged indicating potential problem. If the uterus is atonic and does not contract normally, several bleeding occurs then to anaemia which affects breast feeding and may leads to septicemia and death. A series of procedures conducted during this stage are collectively called as "**Active Management of Third stage of Labour" (AMTSL)** which consists of interventions designed to speed the delivery of placenta by increasing the uterine contractions and postpartum harmorrhage by adverting uterine atony.*

Maternal mortality is perhaps the most important cause of loss of healthy life years and cause that could be readily reduced through improved quality of care. One of the reason for maternal mortality is the poor performance health care personnels in the management of labour and childbirth.

Keywords— Teaching Programme, Test tube center, AMTSL, Test tube baby.

I. INTRODUCTION

Data analysis is a dynamic process that involves interaction between the researcher and his experience of the data, whether the data is communicated orally or in writing. During this process, the researcher explores personal feelings and experiences that may influence the study and integrates this understanding into the study.

This chapter represents the analysis and interpretation of data collected from 60 staff nurses working in maternity wards of Dr.kamlesh Tandon hospital IVF Center and research institute to assess the effectiveness of structured teaching programme on knowledge regarding Active management of third Stage of labour (AMTSL). The main objective of the analysis is to reduce the data to a manageable and interpretable form, so that the research problem can be studied and tested. The investigator administered structured knowledge questionnaire for staff nurses working in maternity wards of dr.kamlesh tendon hospital to collect the data.

The data collected were analyzed according to the plan for data analysis which included both descriptive and inferential statistics. The data findings have been tabulated according to the plan for data analysis and interpreted under the following study objectives.

The following are the study objectives:

1) To assess the knowledge of staff nurses regarding the active management of III rd stage of labour by pre-test.

2) To prepare and introduce structured Teaching programme on AMTSL to staff nurses.

3) To evaluate the effectiveness of structured teaching programme regarding AMTSL through post-test knowledge score.

4) To find out the association between pre-test knowledge scores with selected demographic variables.

To achieve above objectives the collected data were analysed interpreted and presented.

1.1   Need of the Study

Severe bleeding is the single most cause of maternal deaths worldwide. Postpartum hemorrhage is un predictable and a rapid cause of maternal death. More than half of all maternal deaths occur within 24 hours of delivery. It is estimated that, worldwide 140,000 women die of PPH each year –one every 4 minutes. In addition to death serious morbidity may follow PPH is one of the most frightening and challenging emergencies faced by the midwife. It should be fought on an emergency basis as the fire-fighters fighting a blazing inferno; otherwise it would snuff out the lives of many young women.

Since 1987, the safe motherhood initiative has stated that, maternal mortality is an issue of health infrastructure. Active management of third stage of labour (AMTSL) is highly measurable, evidence based and life saving aspect of the health infrastructure. Given that, post partum hemorrhage is a leading cause for maternal mortality. There is important and urgent need for information on current practice regarding AMTSL.

1.2   Hypothesis

H_1:The mean post-test scores of subjects exposed to STP will be greater than their mean pre-test scores measured by structured knowledge questionnaire at 0.05 levels of significance.

H_2: There will be significant association between pretest knowledge score and selected demographic variables.

II.   MATERIALS AND METHOD

This evaluative approach was considered appropriate for the present study which was carried out on 60 deliveries in Dr. Tandon Nursing college and test tube IVF Center. Agra (U.P)

The main focus of the study was to test the knowledge of staff nurses on Active management of Third stage of labour (AMTSL) through pretest and post test which are depicted as O_1 & O_2 respectively. The experimental variable administered was structured teaching programme on knowledge of staff nurses regarding AMTSL. The schematic representation of research study design used by the investigator is given below.

TABLE 1
ONE GROUP PRE-TEST POST TEST DESIGN

Group	Pretest	Intervention	Posttest
Experimental group (staff nurses)	O_1	X	O_2

Schematic representation of research design.

Key:

O_1 =Pre test for assessment of knowledge through structured questionnaire. X = Intervention through structured teaching programme.

O_2 = post test for assessing the knowledge through structured questionnaire

Refers to the area where the study is conducted. The present study was conducted in maternity wards which includes antenatal ward, postnatal ward, OBG operation theater, OBG OPD, Sterilization ward and gynaec wards of Dr.Tandon nursing college and test tube IVF Center The target population of the present study was the staff nurses working maternity wards of Dr.Tandon nursing college and test tube IVF Center. The technique used was non probability sampling- convenient sampling.

TABLE 2
FREQUENCY AND PERCENTAGE DISTRIBUTION OF STAFF NURSES ACCORDING TO DEMOGRAPHIC DATA

Sl. No.	Demographic data	Frequency (F)	Percentage (%)
1.	**Age in years**		
1.1	21-30	32	53.3
1.2	31-40	16	26.7
1.3	41-50	10	16.7
1.4	51-60	2	3.3
2.	**Gender**		
2.1	Male	3	5.0
2.2	Female	57	95.0
3	**Qualification**		
3.1	Diploma in nursing	48	80.0
3.2	B.Sc. Nursing	9	15.0
3.3	M.Sc. Nursing	3	5.0
4.	**Clinical experience (years)**		
4.1	<5year	33	55
4.2	5-10years	12	20
4.3	10-15years	10	16.7
4.4	>15years	05	8.33
5.	**Training programme attended**		
5.1	Yes	14	23.3
5.2	No	46	76.7

The data presented in table (2) shows that maximum number 32 (53.3%) of staff nurses belongs to the age group of 21-30 years and minimum 2 (3.3%) staff nurses were belongs to 50-60 years of age group.

Majority of staff nurses 57 (95%) were females; while a minimum 3 (5.0%) were male. Most of the staff nurses 48(80.0%) were diploma (GNM) holders, 9 (15%) were graduates (B.SC) and 3 (5.0%) were M.Sc nursing holders. Majority of staff nurses 33 (55.0%) had a clinical experience of less than 5 years, while 5 (8.33%) had experience above 15 year in the labour room.

TABLE 3
DISTRIBUTION OF STAFF NURSES ACCORDING TO MEAN AND STANDARD DEVIATION OF PRE-TEST SCORE AND POST-TEST SCORE REGARDING THE KNOWLEDGE ON AMTSL (n=60)

Sl. No.	Area of knowledge	Maximum score	Pre text scores			Post test scores			Mean Difference	%	T	P-Value
			Mean	±SD	%	Mean	±SD	%				
1	Review of Physiology	5	2.7	0.7	54%	4.1	0.6	82%	1.4	28%	12.98	<0.05(S)
2	Components of AMTSL	20	10.1	1.6	50%	17	0.8	85%	6.9	35%	34.35	<0.05(S)
3	Complications of Third Stage of labour	10	4.5	1.4	45%	9	1	90%	4.5	45%	25.7	<0.05(S)

Paired t-test, table value – 2.00 P < 0.05 significant

Data presented in the above table 3 shows that, maximum mean in gain of knowledge on components of AMTSL i.e. 6.9 and minimum gain of knowledge was 1.4 regarding review of physiology of third stage of labour.

III. FINDING

The present study revealed that the mean percentage obtained for overalls knowledge in the pre-test was (17.3) and in post-test (30.1) the gain mean for overall knowledge was (12.8), with 't' value at 'df' 59= 37.78 which was highly significant at p<0.05. This showed the effectiveness of structured teaching programme on active management of third stage of labour.

IV. CONCLUSION

The present study assessed the knowledge of staff nurses regarding the knowledge on AMTSL and found that only (13) had good knowledge and (23) had average knowledge and (24) had poor knowledge in the pre-test. The overall mean percentage in the pre-test was (17.3) with the standard deviation (3.1) and in the post- test it was (30.3) with the standard deviation (1.4) with a positive difference of (12.8) and (2.6) respectively. This showed that there was a significant improvement in knowledge of staff nurses in the active management of third stage of labour. Thus providing that the structured teaching programme was effective method for improving the knowledge of staff nurses.

The conceptual framework used for study was based on Modified Ernestine Weidenbachs helpings art of clinical nursing theory. A quasi- experimental approach was adopted for this study.

A total of 60 staff nurses were selected by convenient sampling method. The study was adopted one group pre-test post test design. Data were collected by using structured questionnaire method. Impact knowledge to staff nurses by using structured teaching programme.

The study revealed that staff nurses gained knowledge after the structured teaching programme. Analysis data shows that the post-test knowledge score has significantly higher than the pre-test knowledge score at P<0.05 level of significance.

The present study assessed the knowledge of staff nurses regarding knowledge on active management of third stage of labour and found that only 13(22%) had good knowledge 23(38%) had average knowledge and 24 (40%). had poor knowledge in the pre-test. The overall mean percentage in the pre-test was 17.3(49%) with standard deviation of 3.1 and in the post-test it was 30.3 (86%) with the standard deviation (1.4) with a positive difference of (12.8) and (2.6) respectively. This showed that there was a significant improvement in knowledge of staff nurses in the active management of third stage of labour.

Then the investigator concluded that the structured teaching prorgramme was a good method of conveying information to staff nurses and it is very effective in order to gain knowledge.

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