



A STUDY TO STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE AND PRACTICE REGARDING INFECTION CONTROL STANDARDS AMONG HEALTH CARE PERSONNEL WORKING IN LABOUR UNIT AT SELECTED HOSPITALS, ERODE DISTRICT

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ABSTRACT

Infection prevention and control is integral to safe, effective and ethical nursing practice. Ensuring the use of infection control standards is an important component of nursing. Worldwide escalation of the use of infection control standards will endorse quality promotion of health care which is safe for mother and health care personnel in labour unit. The aim of the study was to evaluate the effectiveness of infection control standards on knowledge and practice among health care personnel working in labour unit at selected hospitals. The selection of sampling technique is purposive sampling technique and the sample consists of 60 health care personnel working in labour unit, Erode. The research approach used in this study was quantitative research design. The research design adopted for the present study was one group pretest posttest pre experimental design.

INTRODUCTION

Women are special creatures of god because she has the capability to give birth. She is crossing many developmental stages such as newborn, infancy, childhood, adolescence, adulthood and many vital events such as attaining menarche, pregnancy, childbirth and menopause. Women are typically capable of giving birth. Childbirth is momentous occasion in the life of couple. There is no greater gift for a mother than a healthy newborn baby and being healthy thereafter the delivery. More over healthy women are the foundation of a strong community and healthy newborns are the future.

The **WHO (2005)** launched an infection control campaign “**clean care is safer care**” as part of its global patient safety challenge. The infection control campaign placed hand hygiene as its first priority and guidelines in hand hygiene have been developed using recommendations based on evidence. The centre of disease control and prevention (CDC’s) (2006) “Guideline for hand hygiene in health-care setting “recommends that gloves must be worn according to standard and contact precautions. Over them, many studies have demonstrated the effectiveness of gloves in allowing health care workers to avoid introducing infection to patients and as well as personal protective measure. The other major concern emerged as an issues in health care setting is biomedical waste management which has become a worldwide humanitarian topic today. **The Biomedical waste (Management and rules 2011)** has clarified the ambiguity and allotted one color to each category of waste which was inculcated in infection control policy.

NEED FOR STUDY

Pregnancy is a time of joy and excitement. Labour, the culmination of pregnancy, is the start of an incredible journey with great psychological, social and emotional, meaning for the mother and her family. During this incredible journey of childbirth, a women’s genital tract. A bare surface prone to infections which are introduced by certain invasive procedures routinely done in labor unit such as vaginal examination, urinary catheterization, and artificial rupture of membrane, instrumental deliveries and also by the substandard level of infection control practice.

The burden of this disease resulting from infection has led to a revival of general interest in infection control. Infection prevention and control is integral to safe, effective and ethical nursing practice. Ensuring the use of infection control standards is an important component of nursing. It aims to avoid infection (i.e. primary prevention) by enhancing practices of hand hygiene, surgical asepsis, environmental hygiene, clean equipments’ and training of health care

OBJECTIVES OF THE STUDY

1. To assess the pre-test level of knowledge and practice scores regarding infection control standards among health care personnel working in labour unit.
2. To assess the post-test level of knowledge and practice scores regarding infection control standards among health care personnel working in labour unit.
3. To compare pre and post-test level of knowledge and practice scores regarding infection control standards among health care personnel working in labour unit.

4. To correlate the post test level of knowledge and practice scores regarding infection control standards among health care personnel working in labour unit
5. To associate post test level of knowledge and practice on infection control standards with their selected demographic variable among health care personnel working in labour unit.

RESEARCH VARIABLES

Independent variables

Independent variable in this study was infection control standards.

Dependent variables

The dependent variable in the study was knowledge and practices on infection control in labour unit among health care personnel.

Extraneous variables

The extraneous variables were age, professional qualification, designation, and total year of experience in labour unit.

SETTING OF THE STUDY:

The study was conducted at

- Adithya hospital-bhavani 50 bedded for maternity and 25-30 deliveries per month are conducted. 10 health care personnel are working in labour unit.
- Ashok Krishna hospital-bhavani 60 bedded for maternity and 40-45 deliveries per month are conducted. 20 health care personnel are working in labour unit.
- Surya maternity and children's hospital-bhavani 50 bedded for maternity and 25-30 deliveries per month are conducted. 15 health care personnel are working in labour unit.
- Kalyani nursing home-bhavani 60 bedded for maternity and 30-35 deliveries per month are conducted. 15 health care personnel are working in labour unit

RESEARCH DESIGN

The research design adopted for the present study was one group pretest posttest pre experimental design. The researcher conducted the study in selected hospitals at Erode District. The aim of the study was to evaluate the effectiveness of infection control standards on knowledge and practice among health care personnel working in labour unit using purposive sampling technique.

SAMPLE SIZE

A sample of 60 health care personnel who fulfilled the sample criteria were selected for the study

SECTION-I

Table - 4.1 Frequency and percentage distribution of demographic variables of health care personnel with respect to age, professional qualification, designation and total year of experience in nursing services.

N= 60

S.NO	DEMOGRAPHIC VARIABLES	NO. FREQUENCY	PERCENTAGE E[%]
1.	AGE IN YEARS		
	21-25 yrs	18	30%
	26-30 yrs	12	20%
	> 30 yrs	30	50%
2.	PROFESSIONAL QUALIFICATION		
	ANM	0	0.00%
	GNM	18	30%
	B.Sc [n]	42	70%
	Post B.Sc[n]	0	0.00%
3.	DESIGNATION		
	staff nurse	26	43.33%
	Senior staff	29	48.33%
	Ward in charge	5	8.33%
4.	TOTAL YEAR OF EXPERIENCE IN LABOUR UNIT		
	1-5yrs	18	30.00%
	6-10yrs	19	31.67%
	>10 yrs	23	38.33%

Table 4.1.1 depicts the frequency and percentage distribution of demographic variables of health care personnel with respect to age, professional qualification, designation and total years of experience in nursing service. With regard to age in year 30[50%] were in age group of > 30 years, 42[70%] were educated up to B.Sc, 29[48.33%] were designated as senior staffs and 23[38.33%] had > 10 years of experience in nursing service.

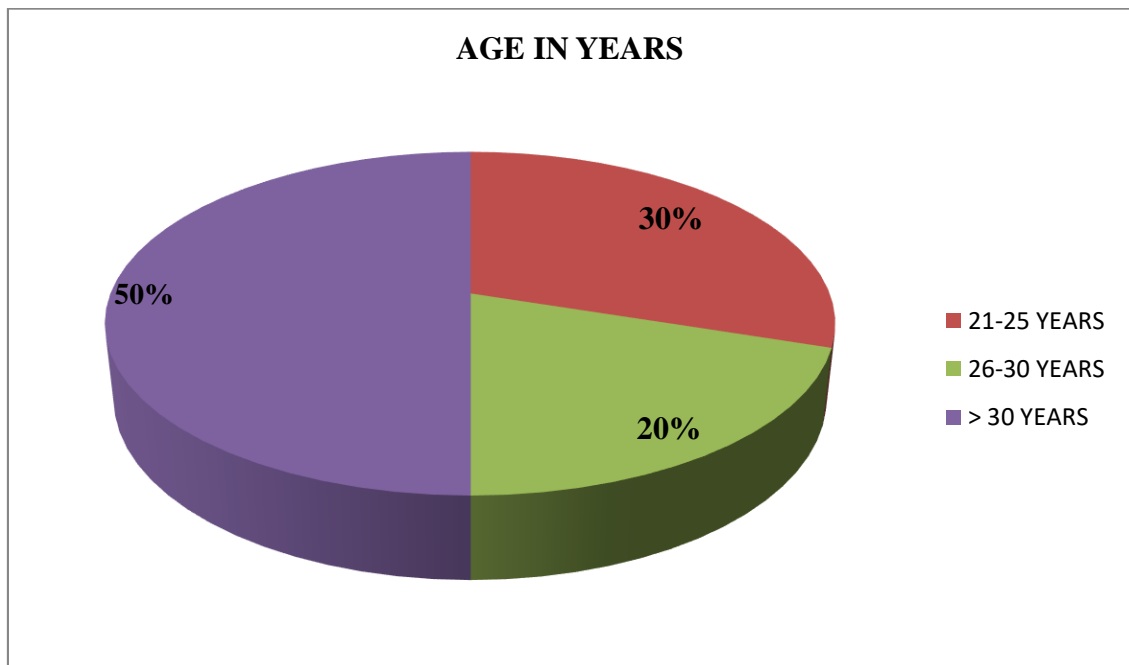


Fig: 4.1.1 Pie diagram showing the percentage distribution of health care personnel working in labour unit according to their age

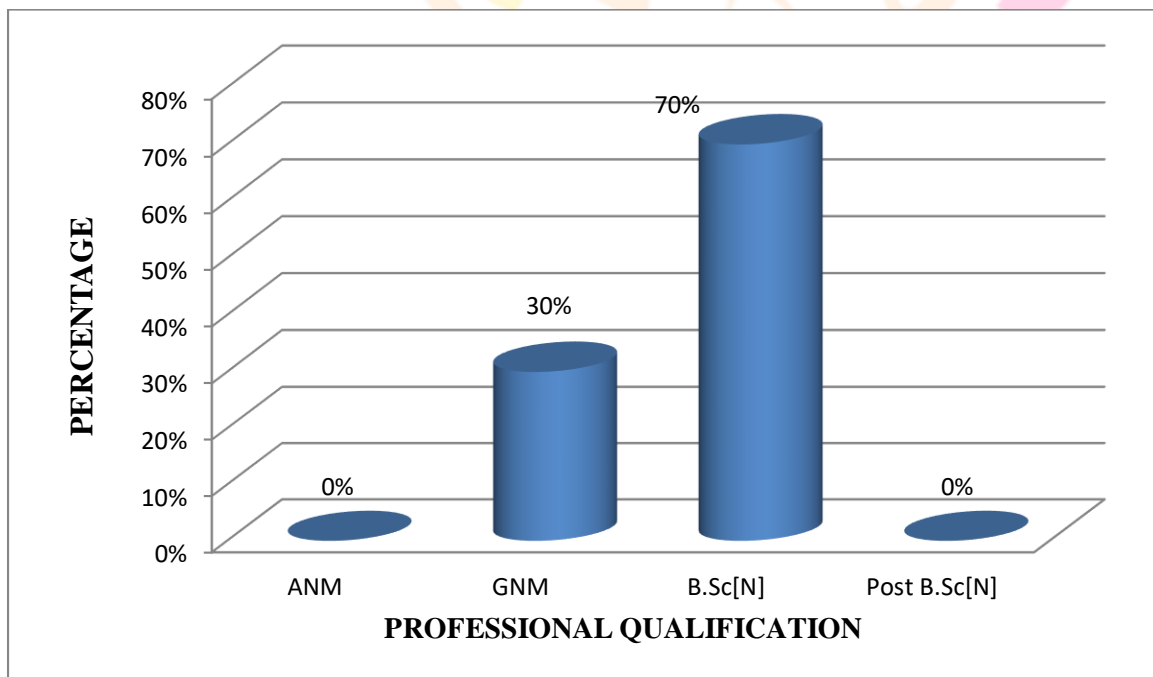


Fig: 4.1.2 Bar diagram showing the percentage distribution of health care personnel working in labour unit according to their professional qualification.

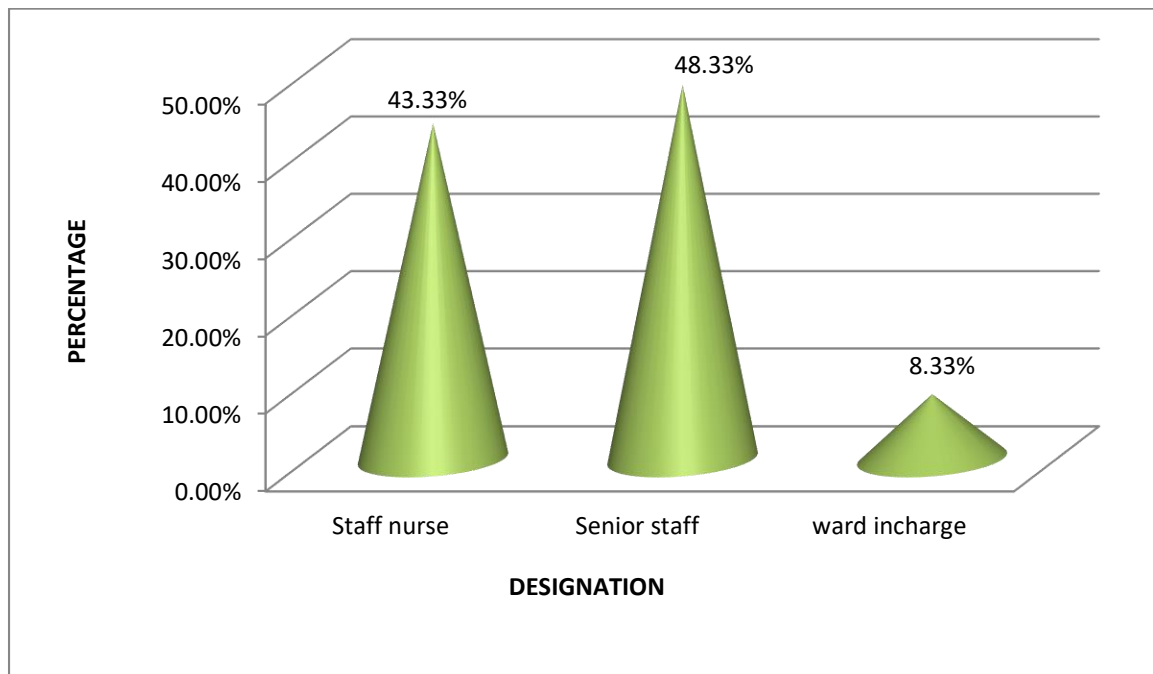


Fig: 4.1.3 Bar diagram showing the percentage distribution of health care personnel working in labour unit according to their designation.

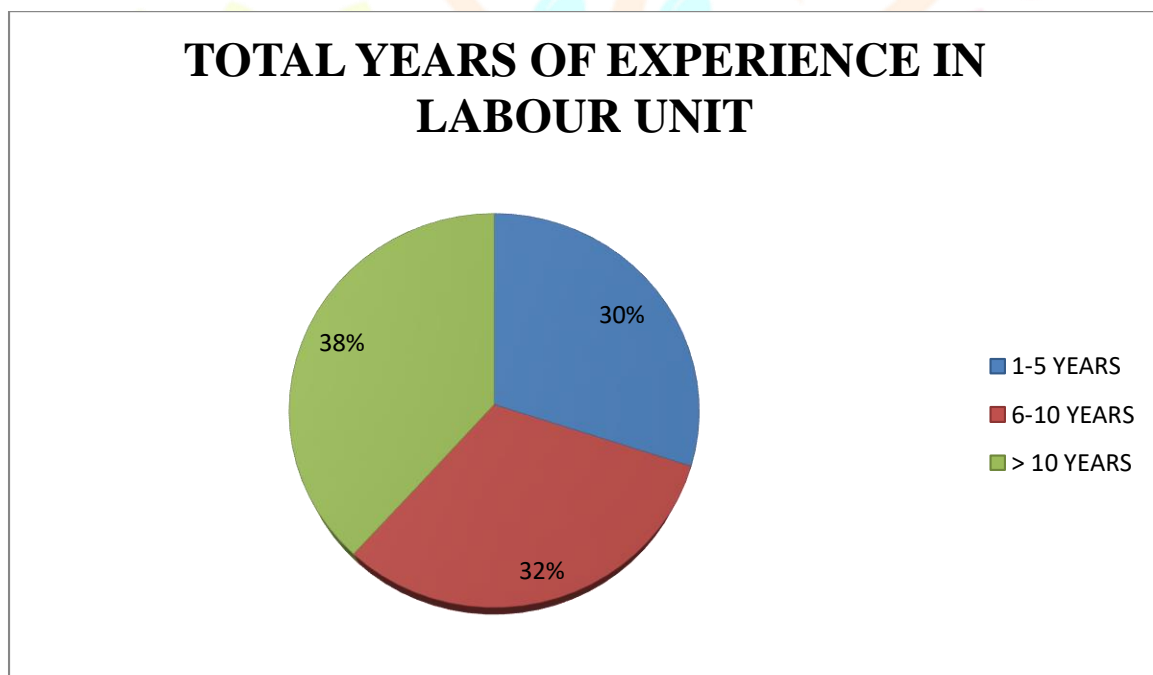


Fig: 4.1.4 Pie diagram showing the percentage distribution of health care personnel working in labour unit according to their total years of experience in labour unit.

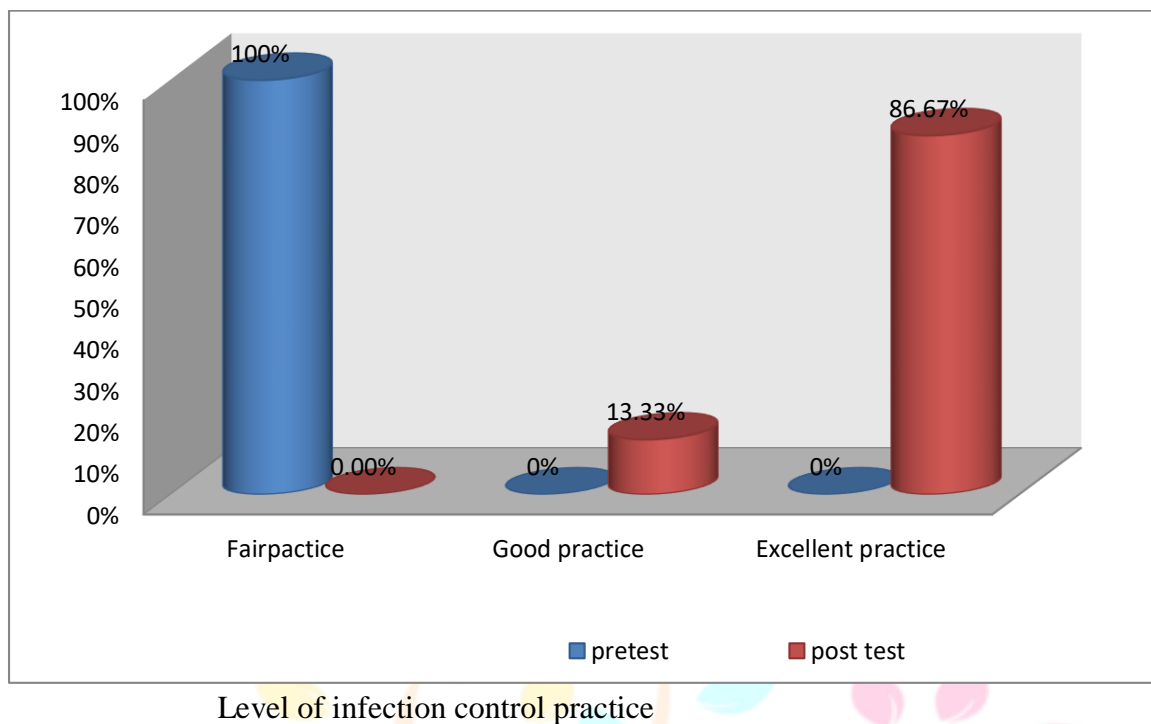
SECTION-II

Table –4.2.1: Frequency and percentage distribution pre test level of knowledge and practice on infection control in labour unit among health care personnel

N=60

ASPECTS	FAIR PRACTICE <50%		GOOD PRACTICE 50-75%		EXCELLENT PRACTICE >75%	
	No.	%	No.	%	No.	%
Clean birthing room environment	40	66.67%	20	33.33%	0	0
Infection control practice during labour and birth	60	100%	0	0	0	0
Storage clean and sterile supplies	0	0	0	0	60	100%
Safe waste management	60	100%	0	0	0	0

Table 4.2.1 depicts the frequency and percentage distribution of pre test level of knowledge and practice on infection control in labour unit among health care personnel. With regard to pre test level of knowledge and practice on infection control, 40[66.67%], 60[100%],60[100%], had fair practice on clean birthing room environment, infection control practice during labour and birth and in safe waste management respectively,60[100%] had excellent practice in storage of clean and sterile supplies.



Level of infection control practice

Fig.4.2.1 Bar diagram showing the percentage distribution of the overall pre test and post test level of knowledge and practice on infection control in labour unit among health care personnel.

With regard to pretest level of knowledge and practice of health care personnel, majority 60[100%] had fair practice and none of them had good and excellent practice on infection control in labour unit.

With regard to post test level of knowledge and practice of health care personnel, 8[13.33%] had good practice and 52[86.67%] had excellent practice on infection control in labour unit.

Table –4.3.1: Comparison of pre and post test level of practice on infection control in labour unit among health care personnel.

Practice	Mean	S.D	Paired 't' value
Pre test	21.47	1.92	t=59.145
Post test	43.73	2.02	p=0.001 [s]

$P < 0.001$, s-significant

Table 4.3.1 depicts the comparison of pre and post test level of knowledge and practice on infection control in labour unit among health care personnel.

When comparing the pre test and post test level of knowledge and practice, the pre test mean score was 21.47 with the standard deviation of 1.92 and the post tests mean score was 43.73 with the standard deviation of 2.02. The calculated 't' value was 59.145 which was greater than the table value and this indicated that there was statistically high significant difference at $p < 0.001$ level.

Table –4.4.1: Association of selected demographic variables with mean differed level of practice on infection control in labour unit among health care personnel N =60

S. N O	DEMOGRAPHIC VARIABLES	Pre test		Post test		Mean diff		ANOVA unpaired 't' test
		Mean	S.D	Mean	S.D	Mean	S.D	
1.	AGE IN YEARS							F = 0.916 P = 0.406 [NS]
	21-25 yrs	21.11	1.78	44.05	1.95	22.94	2.82	
	26-30 yrs	21.42	1.62	42.92	2.15	21.50	3.12	
	> 30 yrs	21.70	2.12	43.87	1.99	22.17	2.90	
2.	PROFESSIONAL QUALIFICATION							F = 0.084 P = 0.933 [NS]
	ANM	-	-	-	-	-	-	
	GNM	21.40	2.12	43.69	2.06	22.28	3.12	
	B.Sc [n]	21.61	1.38	43.83	1.98	22.22	2.46	
	Post B.Sc[n]	-	-	-	-	-	-	
3.	DESIGNATION							F = 0.072 P = 0.931 [NS]
	staff nurse	21.35	1.65	43.61	1.98	22.27	2.89	
	Senior staff	21.38	2.08	43.72	2.12	22.34	2.93	
	Ward in charge	22.60	2.30	44.40	1.95	21.80	3.56	

Table 4.4.1 infers the association of selected demographic variables with mean differed level of knowledge and practice on infection control in labour unit among health care personnel. The demographic variables had shown statistically no significant association with the mean differed level of knowledge and practice on infection control in labour unit among health care personnel.

CONCLUSION:

The present study was assessed the effectiveness of infection control standards on practice among health care personnel working in labour unit. The study findings concluded that there was a significant

difference in the level of practice on infection control in labour unit among health care personnel after the administration of infection control standards.

NURSING IMPLICATIONS

The investigator has drawn the following implications from the study, which is of vital concern in the field of nursing practice, nursing administration, nursing education and nursing research

RECOMMENDATIONS

In future the hospital nursing administration staff can utilize the infection control standards in labour unit to strengthen the quality of maternity services. Similar study can be replicated with large sample. A study can be conducted to evaluate the quality of nursing care.

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