

A Study to Assess the Practice Regarding Selected Aspects of Barrier Nursing Among Clinical Nursing Students at ERA's Lucknow Medical College and Hospital, Lucknow

Madhu Gupta¹, Arpita Phillips Jacob², Sakshi Chaurasia³,
Monika Yadav⁴

¹Associate Professor, Era College of Nursing Lucknow

²Nursing Tutor, Era College of Nursing Lucknow

^{3,4}Nursing Student, Era College of Nursing Lucknow

Abstract

A study to assess the practice regarding selected aspects of barrier nursing among clinical nursing students at selected areas of ERA's Lucknow Medical and College Hospital, Lucknow. □ Quantitative research approach with Discriptive research design was used on 80 clinical nursing students were included in the study, each students were given informative programme on barrier nursing. The socio-demographic data was collected. The practice was assessed by self structured checklist. Discriptive statics and inferential statistics were used to analyze the data. Results: The finding related to the practice regarding selected aspects of barrier nursing. There are significant exists in term of practice at p value>0.05. According to practice 28.75% initial stage of skill and 71.75% are full fleshed skill. The data shows there is significant with demographic variables Academic performance, Duration of practice and Area of work and not significant with demographic variable Qualification. The following conclusions were made on the basis of the finding of the study: The clinical nursing students are having full fleshed skill regarding barrier nursing. There was significant association existing in clinical nursing students at p value>0.05. according to practice 28.75% initial stage of skill and 71.75% are full fleshed skill, regarding barrier nursing .The future study should enhance and promote the practice regarding barrier Nursing among clinical nursing students worldwide.

Keywords: Practice, Selected Aspects, Clinical Nursing Students

INTRODUCTION

Barrier nursing is a largely archaic term for a set of stringent infection control techniques used in nursing. The aim of barrier nursing is to protect medical staff against infection by patients and also protect patients with highly [infectious disease] from spreading their pathogens to other non- infected people. Barrier nursing is one way of preventing the spread of infection from one person to another in hospital. It means that if you have an infection or are more prone to catch an infection, you may need to be nursed in a room on your own. The paper is divided into six parts. The paper's introduction has been

presented in section. In section2, A review of literature on barrier nursing ,Section 3 and section 4 has examined the research methodology. It has been followed by result and analysis section 5 and discussion and finding of results in section 6 Conclusion , implication, Limitation and recommendation for further studies have been included in section 6. At last, reference have been represented.

Barrier nursing is a largely archaic term for a set of stringent infection control techniques used in nursing. The aim of barrier nursing is to protect medical staff against infection by patients and also protect patients with highly [infectious disease] from spreading their pathogens to other non- infected people. Entire for Disease Control (CDC) to describe early infection control methods in the late 1800s.[2] From the mid-1900s to early 2000s, 15 new terms had emerged and were also being used to describe infection control. The variety of terms that described infection care led to a misunderstanding of practice recommendations and eventual low adherence to isolation precautions; this eventually forced the CDC to combine all 15 terms into one term called isolation.[3] Nowadays barrier nursing is becoming a less commonly used term and is not even recognized by most reputable databases or online scientific journals. Yet when it is seldom used, itrelates mostly to circumstantial protocols for situations regarding isolation health care.[4][5] The lack of constant use of the term is why there are no systematically reviewed articles on the topic and also why most of the sources that include the topic are from the late 1900s.

The prevention of spread of infection from one patient to another can be guaranteed only by the complete isolation of each patient. There must be no common services, no shared staff, and no possibility of communication through the air. In hospital such isolation is normally impossible to attain, for services and staff must be shared and aerial transmission cannot be wholly prevented: doors must be opened and shut, and staff, food, laundry, and equipment must go in and out of wards and cubicles. But compromise does not mean carelessness. While complete structural isolation is not possible in hospital, every effort must be made to block those gaps through which infection will otherwise inevitably spread. This means barrier nursing, some aspects of which haverecently been discussed by Margaret Gibson and T. P. Mann. The four walls of a cubicle offer only limited protection against the spread of infection. The more effective barrier is an invisible one, built on technique, and it is required equally in cubicle and in open-ward nursing.

The most rigid application of barrier nursing is scen probably in the smallpox hospital. Here the patients, if not isolated from one another, are usually isolated from patients with every other type of disease, often by miles of open country. The staff are also kept in isolation, and within the smallpox compound every attempt is made to erect a barrier between the inside and the outside of the ward. Staff going on duty remove all outer clothing in the changing room, pass through an air- lock, and don a new set, including shoes, gloves, and cap, before entering the ward. The reverse process, supplemented by a thorough wash or shower, takes place before they leave the ward. Nothing that is taken into the ward is allowed to leave it except in a sealed container on its way to disinfection or destruction. This rigid discipline is enforced not wholly because of the high infectivity of smallpox-for that is a matter of some con- troversy but because of the serious consequences to all concerned if infection does pass through the barrier.

Material Methods:

Research Approach- Quantitative Research Approach

Research Design- Discriptive Research Design

Setting of study- ERA's Lucknow Medical and College and Hospital, Lucknow.

Sample size- 100 Clinical nursing students

Sampling Technique- Purposive sampling technique

INTERPRETATION TOOLS:

PRACTICE:

S. No.	Clinical nursing students	Interpretation of Tools	
		Initial stage of skill (0-10)	Full fleshed skill (11-18)

CRITERIA MEASURE OF PRACTICE LEVEL:

LEVEL OF PRACTICES N=80	FREQUENCY	PERCENTAGE(%)
INITIAL STAGE OF SKILL(0-10)	23	28.75
FULL FLESHED SKILL(11-18)	57	71.25
Maximum=18	Minimum=0	

The result shows the frequency and percentage of practice regarding barrier nursing among clinical nursing students.

Discriptive statistics table:

Discriptive statistics	Mean	S.D.	Median score	Maximum	Minimum	range	Mean%
Practice score	12.412	2.745	14	16	6	10	68.95

Maximum= 18

Minimum= 0

Table depicts Mean (12.412), S.D.(2.745), Median Score(14), Maximum Score(16), Minimum Score(6), Range(10), and Mean% of practice regarding barrier nursing among clinical nursing students.

Table 3:This section deals with the findings related to the association between practice and selected demographic variables. Chi-square test was used to determine the association between score and selected demographic variables.

DEMOGRAPHIC DATA		LEVELS (N=80)		ASSOCIATION WITH THE PRACTICE SCORE			
Variables	Opts	Initial stage of skill	Full Fleshed skill	Chitest	df	Tablevalue	Result
Academic Performance	Below50%	1	2	36.27	3	7.815	Significant
	60-70%	9	24				
	70-80%	6	21				
	>80%	7	10				
Duration of Practice	6months	0	3	30.59	3	7.815	Significant
	1 years	7	18				
	2 years	10	25				

	3 years	6	11				
Qualification	ANM	8	20	6.84	3	7.815	Not Significant
	GNM	5	23				
	BSC. Nursing	7	12				
	Post BSC. Nursing	3	2				
Area of Work	Medical ward	12	32	33.84	1	3.841	Significant
	Surgical ward	11	25				

Table 3: Show the association between the practice score and socio- demographic variables. Based on the objectives and chi-square test used to associate the level of practice and selected demographic variables. There is the significant association between the level of score and other demographic variables. The chi-square values were more than the table value at 0.05 level of significant.

ASSOCIATION BETWEEN SELECTED DEMOGRAPHIC VARIABLES AND THE LEVEL OF PRACTICE SCORE AMONG CLINICAL NURSING STUDENTS

S.NO.	Demographic variables	Category	F	Initial stage of skill	F	Full Fledged Skill
1.	Academic Performance	Below 50%	1	1.25	2	2.5
		60-70%	9	11.25	24	30
		70-80-%	6	7.5	21	26.25
		>80%	7	8.75	10	12.5
2.	Duration of Practice	6 months	0	0	3	3.75
		1 years	7	8.75	18	22.5
		2 years	10	12.5	25	31.25
		3 years	6	7.5	11	13.75
3.	Qualification	ANM	8	10	20	25
		GNM	5	6.25	23	28.75
		Bsc. Nursing	7	8.75	12	15
		PB.Bsc. Nursing	3	3.75	2	2.5
4.	Area of work	Medical ward	12	15	32	40
		Surgical ward	11	13.75	25	31.25

DISCUSSION

The purpose of the study was to assess to the practice regarding barrier nursing among clinical nursing students the sample were selected by purposive sampling technique. The data was collected from 80 clinical nursing students by using self structure checklist and the Data was assessed by using self structure checklist.

The analysis of data is organised and presented under the following objectives:

- Assess the practice regarding selected aspects of barrier nursing.

- To associate demographic variables with practice regarding selected aspects of barrier nursing .

Objective 1: Assess the practice regarding selected aspects of barrier nursing .

The scoring among 80 clinical nursing students 28.75% initial stage of skill and 71.75% are full fleshed skill, The overall mean for practice was 12.412% and the standard deviations was 2.745% it reveal that clinical nursing students having good practice regarding barrier nursing . This study is supported by a study conduct to assess the practice regarding barrier nursing among clinical nursing students. aim to assess the practice regarding barrier nursing among the clinical nursing students. Method descriptive research design an Qualitative research approach was conduct among nursing students . Result 71.25% of students have Full fleshed skill. Conclusion the student have good practice regarding barrier nursing.

Objective 2: Associate the demographic variables with selected aspects of barrier nursing.

The association between selected demographic variables and practice regarding barrier nursing among selected aspects of barrier nursing , showed statistically there was significant association between demographic variables of Academic Performance, Duration of practice, Area of work. Except Qualification which shows that there is not significant association between the demographic variables and level of practice at $p > 0.05$.

The study is supported by a study to conduct a practice on barrier nursing among clinical nursing students. Aim of the study will be to assess the practice regarding selected aspects of barrier nursing among clinical nursing students. Method Descriptive cross-selection study design among clinical nursing among 80 respondents.

Result

Association between level of practice with selected demographic variables who was calculated by using chi-square test and revealed that ethnicity is significant with the academic performance, duration of practice, area of work and whereas there was no association between level of practice and Qualification social-demographic variables.

Conclusions:

The study attempts to find out the practice regarding selected aspects of barrier nursing among clinical nursing students. The data shows that selected clinical nursing students are having 28.75% initial stage of skill and 71.25% are full fleshed skill regarding barrier nursing.

Nursing Implications:

- The findings of the present study have brought out certain facts that have far reaching implications for nursing in the areas of, practice, education, and Medical practitioners, nurses, student nurses, and other health professionals should be practice regarding selected aspects of barrier nursing.
- The nurses should have practice regarding selected aspects of barrier nursing.
- The research carried out shows that the clinical nursing students having good practice regarding selected aspects of barrier nursing.

Nursing education:

- Nursing is an evolving profession every practice based on evidenced based with adequate

knowledge.

- The nurse educators should teach about barrier nursing.
- The educator should provide in service education regarding barrier nursing and its procedure steps.

Nursing administration:

- Nursing administrator should implement teaching programs to make the nursing students practice about barrier nursing.
- Nursing administrator should conduct conferences and educational program regarding barrier nursing.
- The study finding will help the administrator to arrange the continuing education program for clinical nursing students regarding barrier nursing. It helps to prepare adequate learning material for giving education regarding barrier nursing.
- The nurse administrator should take active part in the policy making, developing protocol, standing orders related barrier nursing.

REFERENCE:

1. Lona Mody and Saint Sanjay assess the knowledge of recommended urinary catheter care practices among nursing home (2011).
2. Chimaobi Ezekiel Ijiom Isaiah Abali to assess the knowledge, attitude, practices, and challenges faced by primary healthcare workers (2023).
3. Kathiresan jeyashree, Sundramurthy Raja, Genesan Vithiya Ramesh Arunagiri infection control practices (2017).
4. Megha and Bachani Rishika knowledge, attitude, and practice of standard precautions (SPs) (2017).
5. Banks, Hannah Willmann, Yasmine determine the perceived barriers underlying the noncompliance with SPs among future healthcare profession (2016).
6. Dr. Mr. Shivram Verma and Dr. Ashok yadav descriptive study to assess the knowledge and practice on aseptic technique (2018).
7. Derek R Smith and Peter A Legat needle stick injury (2005).
8. Pratap Sarvendra and Majumder Rajdip regarding Bio-medical waste management (2021).
9. Sahbanathul Missiriya Jal and Akter Fahima assess the knowledge, practice, and attitude on BMW management (2021).
10. Triveni S Inganakal, Shivaraj Inganakal the Bio-Medical Waste Management practices (2018).
11. Dhasarathi Kumar regarding bio medical waste management (2018).
12. Sankar Seema, Khati Prerna and Sushmita Chaudhary awareness of BMW (2022).
13. Sydnor E.R.M., Perl T.M. Hospital epidemiology and infection control in acute-care settings 2011.
14. Parmeggiani C., Abbate R., Marinelli P., Angelillo I. Healthcare workers and health care-associated infections 2017.
15. Welden, L. 2013. Electronic Health Record: Driving Evidence-Based Catheter-Associated Urinary Tract Infections (CAUTI) Care Practices. OJIN: The Online Journal of Issues in Nursing 18.
16. Tsan L, Davis C, Langberg R, et al. Prevalence of nursing-home associated infections in the Department of Veterans Affairs nursing home care units. Am. J Infect Control. 2008;
17. Rogers MA, Mody L, Kaufman S, et al. Use of urinary collection devices in skilled nursing facilities in five states. J Am Geriatr Soc. 2008.

18. Maki DG, Tambyah PA. Engineering out the risk of infection with urinary catheters. Emerg Infect Dis.2001.
19. World Health Organization. WHO guidelines on hand hygiene in health care. Geneva: World Health Organization; 2009.
20. Weber, D.J., Sickbert-Bennett, E.E., Gould, C.V., Brown, V.M., Huslage, K. & Rutala, W.A. 2011. Incidence of catheter-associated and non-catheter-associated urinary tract infections in a healthcare system.
21. Annama Jacob Rekha R Jadhav Sonali Tarachand clinical nursing procedure: The arts of science 5th edition.
22. Sandhya Ghai clinical Nursing procedures 3rd hybrid edition.
24. <https://www.healthlinkbc.ca/health-topics/care-indwelling-urinary-catheter>