

A DESCRIPTIVE STUDY TO ASSESS THE LEVEL OF KNOWLEDGE REGARDING HAND WASHING TECHNIQUE AMONG NURSING STUDENTS OF KHALSA COLLEGE OF NURSING, AMRITSAR, PUNJAB.

Alka Badial

Assistant Professor

Khalsa College of Nursing

Amritsar, Punjab

ABSTRACT

Background of study: Hand hygiene is the act of cleaning the hands with or without the use of water with another liquid or soap, for the purpose of removing soil, dirt and micro-organisms which plays a central role among staff nurses in preventing the transmission of various nosocomial infections. Staff nurses and

nursing students' knowledge regarding handwashing effect their practice. Therefore, the study titled "A descriptive study to assess the level of knowledge regarding handwashing technique among nursing students of Khalsa College of Nursing, Amritsar, Punjab" had conducted. Aim: To assess the level of knowledge regarding handwashing technique among nursing students. Methodology: A descriptive study was conducted on 230 nursing students studying in Khalsa College of nursing, Amritsar. Non-probability convenient purposive sampling technique was used. Structured tools were used to collect the data. A socio-demographic sheet, self-structured questionnaire was used to assess knowledge of nursing students regarding hand washing. Results: The findings of study revealed that nursing students have average knowledge regarding handwashing. Chi-square is applied to find statistically significant; The demographic variables Age of students, Previous source of information was significant at $p < 0.05$ and all other demographic variables were non-significant i.e., gender, course. Conclusion: The findings of study concluded that majority of students come under average knowledge with 139(60.4%), Good 70(30.4%), Poor 21(9.1%) with Mean 11.95, S.D 3.446 with minimum and maximum values 3 and 20 respectively.

Keywords: handwashing, nursing students, knowledge.

INTRODUCTION

Infection is the invasive of an organism's body tissue by disease-causing agents, their multiplication & the reaction of host tissue to the infectious agents & the toxins they produce. The invasion & multiplication of micro-organism such as bacteria, viruses & parasites that are not normally present within the body. Infections associated with healthcare was targeted by world alliance for the patient's safety during the first biennial global patients' safety challenge, 'clean care is safety care'.

Nurses constitute the largest percentage of the health care workers and they are the "nucleus of the healthcare system". Because they spend more time with patients than any other HCWs, their compliance with hand washing guidelines seems to be more vital in preventing the disease transmission among patients. Hospital acquired infections are infections acquired in hospital by a patient who was admitted for a reason other than that infection. Hospital acquired infections are one of the important public health problems in many countries.

Despite the fact that health care provider hands might be a source of infection, environment where the healthcare providers is working, another probable source of infection transmission .For example, the use of computers and electronic instruments is increasing in all fields of healthcare, where many professionals may use the same keyboard .Additionally, the fact that professionals eat at their workstation, where food crumbs remaining on the keyboard may form a medium favoring the growth of microbes .Furthermore, there were droplets of saliva that undoubtedly fell on the keyboard during talking, sneezing, and coughing, creating a probable vehicle for infection transmission, implying that all the surrounding things that we touch may serve as a vehicle for HCAs .Therefore, it is advisable to observe the general rules of hygiene and to clean hands before and after each healthcare procedure.

Research methodology:

Aim of the study:

Aim of the study is to assess the level of knowledge regarding hand washing technique among nursing students.

General objective of the study:

To assess the level of knowledge regarding hand washing technique among nursing students.

Specific objectives of the study:

1. To assess the level of knowledge regarding hand washing technique among nursing students.
2. To determine the association between the research finding and selected socio-demographic variables.

Operational definitions:

Handwashing: It refers to the act of cleansing the hands with water and soap for the purpose of removing soil or microorganisms (germs) in order to prevent cross-contamination and to prevent nosocomial infections.

Nursing student: It refers to an individual who is enrolled in a professional nursing or vocational nursing education program.

Knowledge: It refers to the state or fact of knowing about hand hygiene by student nurses.

Assumptions:

- Hand hygiene is imperative in hospital setting.
- Student nurses may not have adequate knowledge on hand hygiene.
- Student nurses are not following adequate hand hygiene & technique for safety of themselves and patients.

DELIMITATIONS:

The study was limited to:

1. Nursing students only.
2. 230 sample sizes.
3. Nursing students who were available during the time of data collection.

RESEARCH APPROACH

A quantitative research approach was chosen for the present study in order to assess the level of knowledge regarding hand washing technique among nursing students of Khalsa college of nursing, Amritsar.

RESEARCH DESIGN

Descriptive research design was adopted in this study to assess the level of knowledge regarding hand washing technique among nursing students of Khalsa college of nursing, Amritsar.

TARGET POPULATION

The target population for the study were Nursing students of Khalsa Nursing College, Amritsar.

SAMPLE SIZE

The sample size for present study was 100 nursing students of Khalsa Nursing College, Amritsar.

SAMPLING TECHNIQUE

The sampling technique for the present study was non-probability convenient purposive sampling technique.

DESCRIPTION OF THE TOOL

Section A: Demographic Variables

This section consists of 6 items for obtaining personal information about rural people i.e., age, gender, course of Nursing, Year in Nursing, Exposure in clinical area, previous source of Information.

Section B: Self Structured questionnaire regarding the techniques of Handwashing.

Questions were framed to assess knowledge of nursing students regarding the the techniques of Hand washing. It consisted of total 30 questions; each question had 4 options out of which 1 was correct. Each item carried a one (1) mark for correct answer and zero (0) mark for incorrect answer. Maximum knowledge score was 30 and minimum knowledge score was zero (0).

SECTION I

DEMOGRAPHIC VARIABLES

Table 1

Frequency and percentage distribution of students according to sample characteristics

N=230			
S.No.	Variables	f	%
1.	Age		
	17-19	98	42.6
	20-22	112	48.7
	23-25	20	8.7
2.	Gender		
	Male	27	11.7
	Female	203	88.3
3.	Course		
	B.Sc. Nursing	210	91.3
	Post Basic	20	8.7
4.	Previous source of Information		
	Mass Media	65	28.3
	Lecture	140	60.9
	Peer Group	25	10.9

Table 1 revealed that the demographic variables of the 230 nursing students.

The result showed that, majority of the students, 112 (48.7%) were in the age group of 20-22 years, 98(42.6%) students were in the age group of 17-19 years, 20(8.7%) students were in the age group of 23-25 years.

According to Gender, 203(88.3%) students were female and 27(11.7%) were male.

According to Course, 210(91.3%) students were studying in B.Sc. Nursing and 20(8.7%) were in post basic nursing.

According to Previous source of information, 140(60.9%) get Information from lecture, 65(28.3%) from mass media and 25(10.9%) students get information from Peer group.

SECTION II

Objective 1: To assess the level of knowledge regarding hand washing technique among nursing students.

Table 2

Frequency and percentage distribution of level of knowledge regarding hand washing technique among nursing students.

N=230

Level of Knowledge	n	%	Mean	Std. Deviation
Good (14-20)	70	30.4		
Average (8-13)	139	60.4	11.95	3.446
Poor (0-7)	21	9.1		

Maximum score =20

Minimum score = 0

Table 2: depicts shows the level of knowledge of nursing students regarding Hand washing. It depicts that majority of students comes under average knowledge with 139(60.4%), Good 70(30.4%), Poor 21(9.1%) with Mean 11.95, S.D 3.446 with minimum and maximum values 3 and 20 respectively.

Objective 2: To determine the association between the research finding and selected socio-demographic variables.

Table 3

Frequency and percentage distribution of the association between the research finding and selected socio-demographic variables

N=230

S.No.	Variables	f	Level of knowledge			Chi square	df	P value
			Good	Average	Poor			
1.	Age							
	17-19	98	19	67	12			
	20-22	112	43	63	6	12.537 ^a	4	.014
	23-25	20	8	9	3			
2.	Gender							
	Male	27	12	11	4			
	Female	203	58	128	17	5.019 ^a	2	.081
3.	Course							
	B.Sc. Nursing	210	64	129	17	3.230 ^a	2	.199

Post Basic	20	6	10	4			
4. Previous source of Information							
Mass Media	65	10	45	10			
Lecture	140	50	81	9	12.091^a	4	.017
Peer Group	25	10	13	2			
Maximum score = 20					S = Significant at p<0.05		
Minimum score = 0					NS = non-Significant		

Table 3, depict that association between the research finding and selected socio-demographic variables. Here chi-square is applied to find statistically significant; The demographic variable Age of student, Previous source of information was significant at $p < 0.05$ and all other demographic variables were non-significant i.e., Gender, Course and previous source of information.

DISCUSSION:

The findings of the study revealed that the level of knowledge of nursing students regarding Hand washing, comes under average knowledge with 139(60.4%), Good 70(30.4%), Poor 21(9.1%) with Mean 11.95, S.D 3.446 with minimum and maximum values 3 and 20 respectively. The findings of the study revealed that the association between the research finding and selected socio-demographic variables. Here chi-square is applied to find statistically significant; The demographic variable Age of student, Previous source of information was significant at $p < 0.05$ and all other demographic variables were non-significant i.e., Gender, Course.

CONCLUSION:

Majority of students comes under average knowledge with 139(60.4%), Good 70(30.4%), Poor 21(9.1%) with Mean 11.95, S.D 3.446 with minimum and maximum values 3 and 20 respectively.

The demographic variable Age of student, Previous source of information was significant at $p < 0.05$ and all other demographic variables were non-significant i.e. gender, course.

REFERENCES

1. Celik S, Kocasli S. Hygienic hand washing among nursing students in Turkey. Applied Nursing Research 2008 Nov; 21(4): 207-11
2. Lusardi G. Hand hygiene. A small study of nursing students' experiences of hand hygiene on clinical placement suggests that students have few positive role models. Journal of Nursing Management (Harrow) 2007; 14(6): 26-33
3. Felix CC, Miyadahira. Evaluation of the hand washing technique held by students from the nursing graduation course. Esc Enferm USP 2009; 43(1): 139-45

4. Supreet Rupam (2014). to Assess the Knowledge Regarding Hand Hygiene among Students of Selected Nursing College in Ludhiana, Punjab” J Caring Sci. 2014 Mar: 4(1);45-53.
5. International Journal of Science and Healthcare Research Vol. 9; Issue: 1; January-March 2024 Website: ijshr.com Original Research Article ISSN: 2455-7587
6. Siji jose, January 2013 The Nursing journal of India CIV (05):223-227, DOI:10.48029/NJI. 2013.CIV505
7. [Veena Maheshwari](#) (2014) Aug; 8(8): DC04–DC07. Published online 2014 Aug 20. doi: 10.7860/JCDR/2014/8510.4696
8. Shivateerthayya Hiremath. Evaluate the Knowledge and Practice of class four workers regarding Hand washing in selected Hospitals. International Journal of Advances in Nursing Management. 2022; 10(3):243-8. doi: 10.52711/2454-2652.2022.00056
9. International Journal of Engineering Science Invention (IJESI) ISSN (Online): 2319-6734, ISSN (Print): 2319-6726 www.ijesi.org ||Volume 9 Issue 11 Series I || November 2020 || PP 01-07
10. February 2014, International Journal of Science and Research (IJSR) 3(2):311-321
11. March 2024, 4(2):387-392, DOI:10.62225/2583049X.2024.4.2.2501
12. Dr. Didier Pittel (2017)..Hand hygiene practice after brief encounters with Patients: An important opportunity for the prevention. Journal of Infection Control hosp epidemiol. 2017; 28(3): 341-5.
13. Gould DJ, Chudleigh JH, Moralejo D, Drey N. Interventions to improve hand hygiene compliance in patient care.AMJ Crit 2007; 18;(2): CD005186
14. M Hoffiman, G Sendhofer V Gombotz (2020). Hand hygiene practices in a neonatal intensivcare unit: a multimodal intervention and impact on nosocomial infection. Pediatrics. 2020; 114(5): 565-71.
15. Asare A, Enweronu – Laryea CC, Newman MJ. Hand hygiene practice in neonatal Intensive care unit in Ghane. JinfectControl.2009; 1: 3(5): 352-6.
16. Gilbert K, Stafford C,Crosby K, Fleming E, Gaynes R. Does hand hygiene compliance among health care workers change when patients are in contact precaution rooms in ICUs?. AMJ of infection control. 2010; 38(7): 515-7.