

A Descriptive Study to Assess the Knowledge and Practice Regarding Hand Hygiene among Health Workers in Community Health Centre Uchana (Jind)

Sudesh Devi

Research Scholar, JJTU University Rajasthan

Abstract: Background and aim: Hand washing, also known as hand hygiene, is the act of cleaning one's hands with soap and water to remove viruses/ bacteria / microorganisms, dirt, grease, or other harmful and unwanted substances stuck to the hands. Drying of the washed hands is part of the process as wet and moist hands are more easily decontaminated. In the study the aim was to assess the knowledge and practice regarding hand hygiene among health workers in community health centre Uchana (Jind). Materials and Method: A descriptive study was conducted to assess the knowledge and practice regarding hand hygiene among health workers in community health centre Uchana Jind, Haryana. 50 samples were selected by means of non probability; convenient sampling technique. Data was collected with the help of self-administered knowledge questionnaire. Data was analyzed by descriptive (Mean, Mode, Median and Standard Deviation). Results: The study reveals that there is a disparity between the opinion and the practice of hand hygiene among health workers. The overall observed compliance was 85.93% (50 HCWS are included in observation study 64, number of opportunities. Are given only 55 opportunities of hand hygiene being performed). The physiotherapist shows higher compliance rate 100%. The nurse shows 62.5% and resident shows 95% and technician shows 80% and unit helpers show low rate 66.67%. Doctors show 100% and ashwani workers 86.95%. The reported hand hygiene compliance among HCW was above 90% (Questionnaire given to 50 HCW they were might or may not be included in observation study). Nurse reported 62.5% compliance rate technician reported 80% and the other reported between 80 - 95%.

Keywords: Descriptive, Knowledge, Practice, Hygiene, Health worker

1. Introduction

Hand hygiene is a core element of patient safety for the prevention of Health Care Associated Infection and spread of antimicrobial resistance. Most nosocomial infections are thought to be transmitted by the hands of health care workers. It has long been known that hand hygiene among health care workers plays a central role in preventing the transmission of infectious agents. Alcohol based hand rub may be better than traditional hand washing as they require less time, acts faster, are less irritating, and contribute to sustained improvement in compliance associated with decreased infection rates. Hand washing is the most effective way of preventing the spread of infectious diseases. But despite a Joint Commission requirement that Centre for Disease Control and Prevention hand hygiene guidelines be implemented in hospitals, compliance among health care workers remains low.

1.1 Objective of the study

- 1) To assess the hand hygiene practices among Health care workers.
- 2) To assess the reasons for non compliance in hand hygiene practice.

1.2 Research Hypotheses

H1 There will be significant association between level of knowledge on hand hygiene among health care workers.

1.3 Assumptions

Health care worker will be having some knowledge and practice regarding hand hygiene.

1.4 Delimitations

- 1) The study is limited to health care worker at community health centre Uchana Jind.
- 2) The study is limited to single setting is Uchana.

2. Review of Literature

- 1) Literature related to assess knowledge regarding hand hygiene.
- 2) Literature related to hand hygiene practice.
- 3) Miscellaneous.

3. Methodology

- **Research approach:** Quantitative approach.
- **Research design:** Experimental descriptive design will be adopted for this study.

Variables

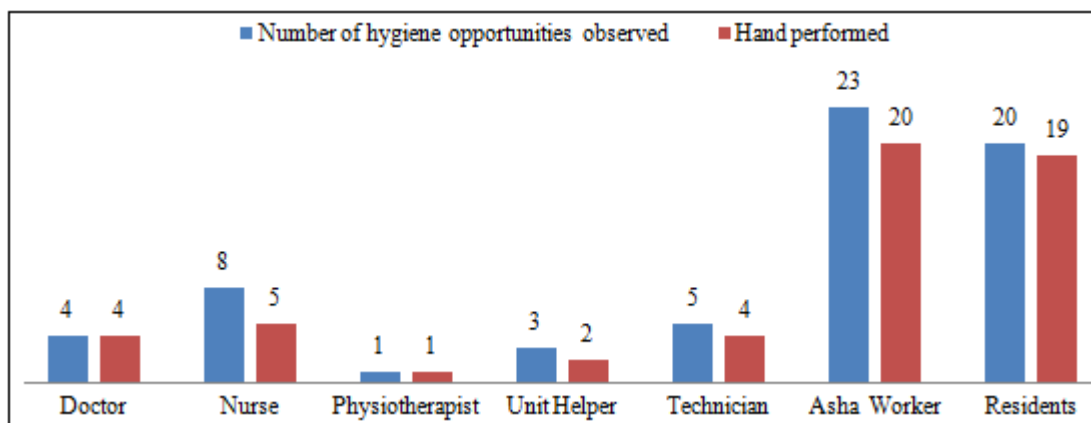
Dependent variables: knowledge and practice of hand hygiene among health care worker.

- **Setting of the study:** community health centre at Uchana (Jind).

- **Population:** health care workers at community health centre Uchana (Jind).
- **Sample:** health care workers who fulfill the inclusion criteria will be consider as a sample.
- **Sample size:** sample size consists of 50 health care workers at community health centre Uchana, (Jind).
- **Sampling technique:** purposive sampling technique has been used for selection of the subjects.

Health Care Workers	Number of hand need hygiene situations	Reported Hand	Over all Compliance
Doctor	4	4	100
Nurse	8	5	62.5
Physiotherapist	1	1	100
Unit Helper	3	2	66.67
Technician	5	4	80
Asha Worker	23	20	86.95
Residents	20	19	95
Total	64	55	85.93

Majority of HCWs identified and reported that situations/patient care activities that require hand hygiene. All categories of HCWs except technician identified and reported more than 90% of situation requires hand hygiene.



Bia diagram with reported and observed hand hygiene compliance.

hygiene were observed in certain situations like use of gloves.

Distribution of sample according to observation of hand hygiene practices.

Situations	Number of Opportunities	Hand Hygiene observed performed	
		Number	%
Before clean and aseptic procedures	22	16	72.73
Before putting on gloves	04	04	100
After contact with body fluids	15	15	100
After handling soiled linen and objects	30	21	70
After removing gloves	12	11	91.67
Before patient contact	16	15	93.75
After Patient Contact	16	13	81.25
Before patient equipment contact	24	23	95.83
After patient equipment contact	25	18	72
Gloves used whenever potential for hand contact with body fluids	19	09	47.37
Gloves removed after use	13	07	53.85

The table shows over all observed hand hygiene compliance, all sample performed hand hygiene before putting on gloves and after contact with body fluids. Hand hygiene compliance was more than 64% in eight out of eleven situations. About eighteen percent samples perform hand hygiene before patient equipment contact only. However lapse in hand

4. Nursing Implications

The findings of the study will help the investigator in the following ways:

- Gaining the more knowledge regarding hand hygiene among health care workers.
- Encourage the health care workers to improve their practice regarding hand hygiene.

Nursing Education

The health care workers play a key role in educating people regarding hand hygiene. Increasing awareness and understanding of the phenomena among the general population will result in high level of hand hygiene among health care worker and that will spontaneously reduce the chance of cross infection due to contaminated hands. The investigator as a nurse felt the need that nurse should act as facilitators to educate general population and clinical patients regarding hand hygiene.

Nursing Research

Health care workers being the largest group in health care delivery system should take initiative to conduct further studies in hand hygiene. The study will motivate the beginning researcher to conduct same study with different variables on a large scale considering individual aspects. The findings of the present study are helpful for the nursing professionals and nursing teachers to conduct further studies to find out the effectiveness of various methods of providing

education on improving the knowledge regarding hand hygiene.

Nursing Administration

Nursing administrators should take interest in motivating the nursing personnel to improve their professional knowledge and skill by attending the workshops, conference, and seminars on hand hygiene. Nurse administrator should arrange regular in - service education program to the health care workers for gaining knowledge. The nurse administrator should explore their potentials and encourage innovative ideas in the hand hygiene among health care workers.

Nursing Practices

Health care workers owe a great responsibility in educating the people regarding hand hygiene. Nurse by getting knowledge and impact into their clinical practice. Many nurses can conduct evidence based nursing practice by referring to these results. Nurses can use to assess the level of knowledge regarding hand hygiene in clinical as well as community settings that will play a vital role in reducing the chance of cross infection.

5. Recommendations

On the basis of findings following recommendations are offered for further research:

- A similar study can be conducted in large sample in different areas.
- A comparative study can be conducted in different setting like hospitals and primary health centers.

References

- [1] Larson E, Girard R, Pessoa - Silva CL, Boyce J, Donaldson L, and Pittet D. Skin reactions related to hand hygiene and selection of hand hygiene products. *American Journal of Infection Control* 2006; 34: 627 - 35.
- [2] Pittet D, Allegranzi B, Sax H, Dharan S, Pessoa da Silva C, Donaldson L, Boyce J. Evidence - based model for hand transmission during patient care and the role of improved practices. *Lancet Infectious Diseases* 2006; 6: 641 - 52.
- [3] Sax H, Allegranzi B, Uçkay I, Larson E, Boyce J, Pittet D. "My five moments for hand hygiene" – a user - centered design approach to understand, train, monitor and report hand hygiene. *Journal of Hospital Infection* 2007; 67: 9 - 21.
- [4] Allegranzi B, Pittet D. The role of hand hygiene in healthcare associated infection prevention. *Journal of Hospital Infection* 2009 (in press).
- [5] Pittet D, Allegranzi B, Boyce J; on behalf of the WHO World Alliance for Patient Safety First Global Patient Safety Challenge Core Group of Experts. The WHO guidelines on hand hygiene in health care and their consensus recommendations. *Infection Control and Hospital Epidemiology* 2009; 30: 611 - 22.
- [6] Pittet D. Hand hygiene promotion: 5 moments, 5 components, 5 steps, and 5 May 2009. *International Journal of Infection Control* 2009; 5: 1 - 3.

- [7] H Sax, B Allegranzi, M - N Chraïti, J Boyce, E Larson, D Pittet. The World Health Organization hand hygiene observation method. *American Journal of Infection Control* 2009 (in press).