



Descriptive Study on the Hand Washing among Nurses in Allied Hospital Faisalabad

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ABSTRACT

Introduction: Hand washing is very important topic in hospital area. There is infection area contaminated, there are many chance of contamination with pathogenic microorganisms. Microorganisms are source of infection on the other hand patient. Hygienically we have hand wash routinely. There is need of training hand washing hygienically for control of disease. These infections are life threatening and make healthy life to poor healthy life.

Objectives: To improve the knowledge and practice about hand hygiene among nurses. To investigate hand washing behavior among doctors and nurses.

Methodology: A Descriptive cross sectional study was conducted at Allied hospital Faisalabad. The study duration was for 4 months from 14-1-2019 to 22-4-2019 in Allied hospital Faisalabad. Total 50 participants were included to assess the knowledge and practice about hand washing among medical and surgical nurses. Structured questionnaire was used to estimate patient's satisfaction by asking question regarding nursing care. The data collected was analyzed using SPSS version 20.

Results: The need to wash hands, 48 (96%) participants agree to wash hands after using toilets, before preparing medicine and after taking medicine. 12 (24%) participants wash hands with alcohol based hands rubbing for 1-2 mints to prevent infection. 49 (98%) participants support that hands hygiene reduces the chances of spreading infection. 18 (36%) participants believed that purpose of soap use is to produce just lather and 22 (44%) said its purpose is to produce bubbles.

Conclusion: Hands of medical professionals are a great source of infection worldwide. We can save many times with infections and diseases which are spread contaminated. These infections are life threatening and make healthy life to poor healthy life. This study emphasizes on knowledge and practices which so necessary for health care worker for hygiene hand washing.

Keywords: Hand washing; Hospital; Microorganisms; Infections

INTRODUCTION

Hand washing is very important topic and in hospital area. There is infection area contaminated there are many chance of contamination with pathogenic, microorganisms. Microorganisms are source of infection on the other hand patient. Hygienically we have hand wash routinely. We can save many times with infections and diseases which are spread contaminated.

(WHO) Annually report on hygienic hand washing published. Diseases are source of contamination germs microorganisms. There is prevention of this disease hygienically hand wash at this environment [1].

Transmission of infection in health care institution mostly transmitted with microorganism's specific medicine and stain patient sample health care workers in the environment,

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prevention of these infections simple hand washing routinely and make habit hand washing. It is notices that in some health institution there is not proper hand washing their resident staff other workers are mostly seen they have not habit of hand washing. There is a need to trained them hygienically hand wash routinely at duty places and there homes respectively. Health care associated disease infections e.g. tuberculosis, hepatitis, meningitis, flu and others disease which are transmitted one person to another with contamination for prevention of these health care associated disease we should hand wash punctually and guide to other patient attendant forward workers. Hand hygiene is the most important source to reduce the infection [2].

It represents that there is major issue in the world to source of infection when health care professional not properly hand wash in developing countries patient disease transmits from one patient to another patient. There is need of training hand washing hygienically for control of disease. These infections are life threatening and make healthy life to poor healthy life. One patient infected many person contact with him for his treatment care so all the person those are attending patient wash their hand hygienically. In health care institution infection control agents when the use for hand washing like so liquid form scrubs, sanitizer, alcohol and waiting agents.

Hand washing with specific technique prevent us nosocomial disease and build our immune system and make healthy life. We should neat and clean everything and hand washing before and after used routine changed. There is constant relationship between health care professional and patient. There is need of proper hand washing when attending the patient are leave the ward. Prevention of nosocomial infection to health care profession is specially operation theaters, patient recovery area and at waiting area properly hand wash with scrub and hand sanitizer in medical ward specially gastro ward commonly contaminated ward [3].

MATERIALS AND METHODS

Study design

A descriptive cross sectional study was conducted at Allied hospital Faisalabad.

Study area

This study was conducted at Allied hospital medical and surgical ward. Allied hospital is registered with Punjab Healthcare Commission (PHC). It is providing free of cost comprehensive medical treatment to patients. It provide services to humanity. Allied hospital acts as a model institute to alleviate the sufferings of ailing humanity. It offers free treatment for the suffering of humanity. The hospital provides good care to client [4].

Duration of study

The study duration was for 4 months from 14-1-2019 to 22-4-2019 in Allied hospital Faisalabad.

Data sources

The research was obtained from different internet search engine, Google Scholar and PubMed and books.

Study population

The study population was included medical and surgical ward nurses coming in Allied hospital Faisalabad.

Sampling technique

A convenient sampling technique was used for research study purpose.

Sample size calculation

Total 50 participants were included to assess the knowledge and practice about hand washing among medical and surgical nurses.

Sample recruitment: Inclusion and exclusion criteria

Inclusion criteria: Inclusion criteria include medical and surgical ward of nurses in Allied hospital Faisalabad.

Exclusion criteria: Head nurses, students nurses, ward boys, sweepers; lab technician of Allied hospital was excluded from this study [5].

Data collection technique

Questionnaire used as a tool for data collection. Structured questionnaire.

Pretest or pilot study

Pilot study sample size 5% of sample size.

Issues of reliability and validity

Pretesting was done to measure the validity of my instrument and Cronbach's alpha test was used to measure the reliability of my instruments.

RESULTS

Table shows the demographic data of total participants (n=50). Response rate is 100% and all participants were female. 70% (n=35) are of 20 to 30 year of age and remaining 30% (n=15) are of 40 years of age (n=30) participants are diploma holders, 24% (n=12) have specialization and 16% (n=8) have done BS nursing. Out of these 92% (n=46) are muslim and 8% (n=4) are christian. Working experience less than 2 years of 30% (n=15) and two to five years of 38% (n=19) and above five years of 32% (n=16). The participants 58% (n=29) are working in medical wards and remaining 42% (n=21) are working in surgical wards (Tables 1 and 2) (Figures 1-8) [6].

Table 1: Distribution of sample according to socio-demographic data.

Variables	Frequencies	Percentage
Gender		
Male		
Female	50	100%
Age of the participant		
20-30 years	35	70%
31-40 years	15	30%
Above 40 years		
Education level of participants		
Diploma	30	60%
Specialization	12	24%
BS Nursing	8	16%
Religious of the participants		
Muslim	46	92.00%
Christian	4	8.00%
Work experience		
<2 years	15	30.00%
2-5 years	19	38.00%
>5 years	16	32.00%
Ward		
Medical	29	58.00%
Surgical	21	42.00%

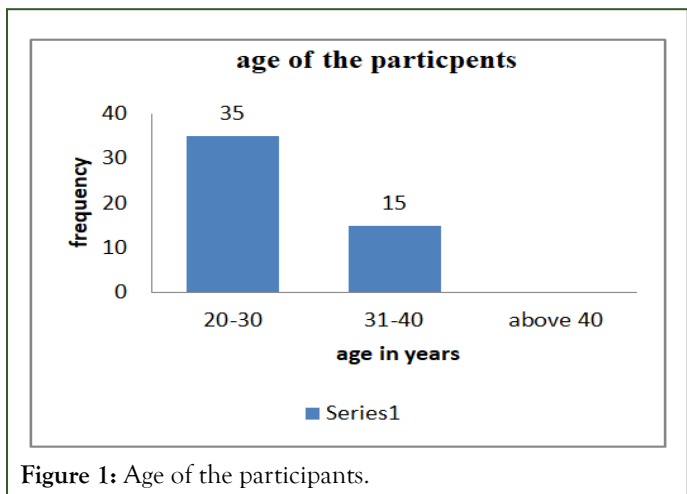


Figure 1: Age of the participants.

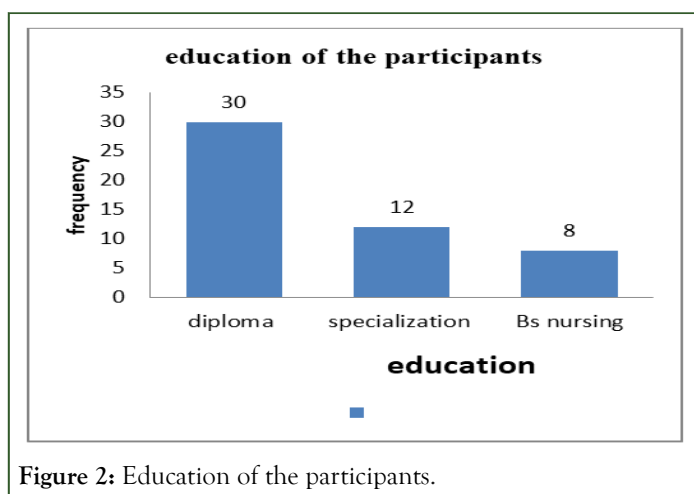


Figure 2: Education of the participants.

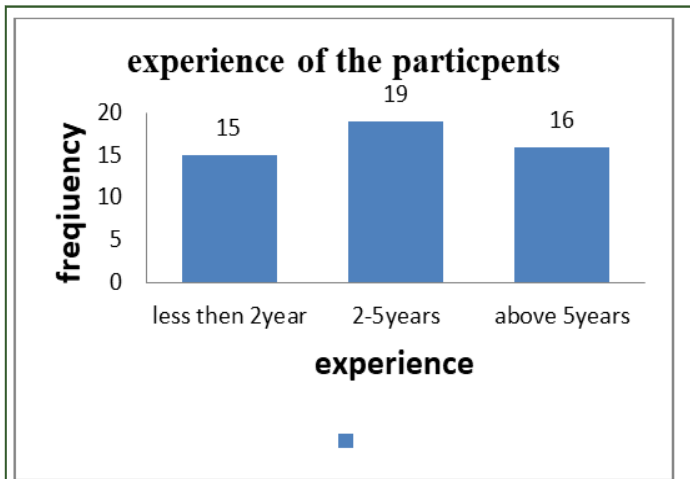


Figure 3: Experience of the participants.

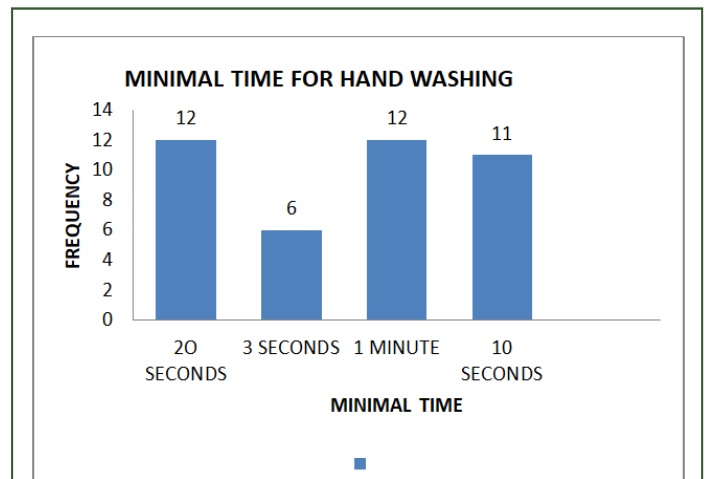


Figure 6: Minimal time for hand washing.

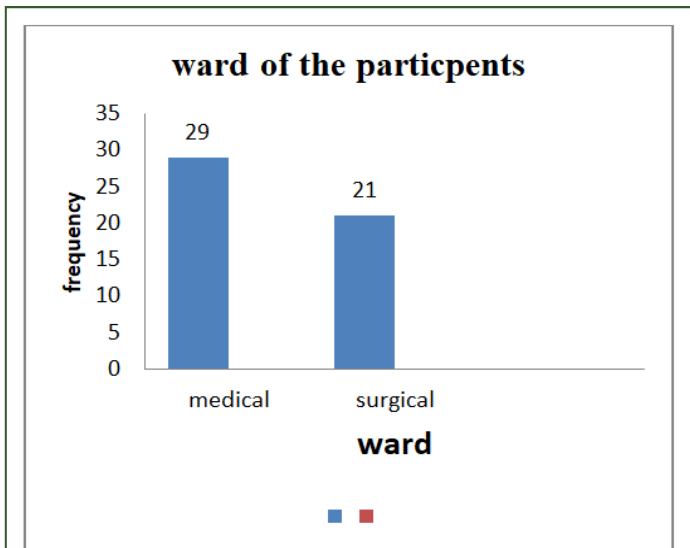


Figure 4: Ward of the participants.

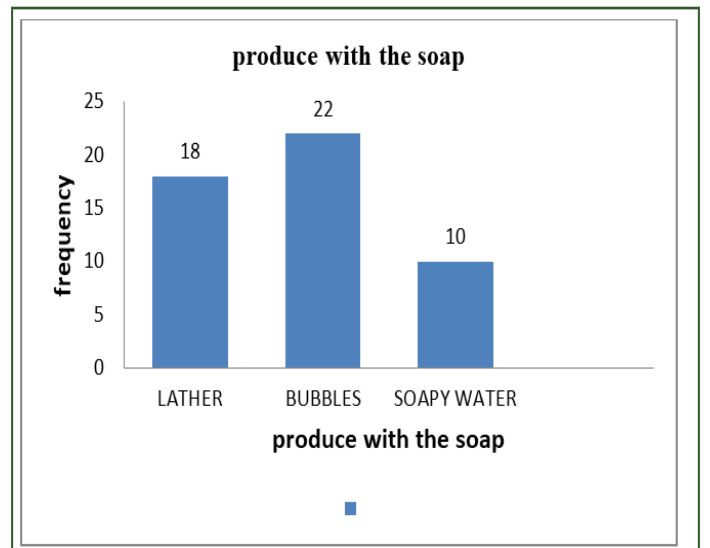


Figure 7: Produce with the soap.

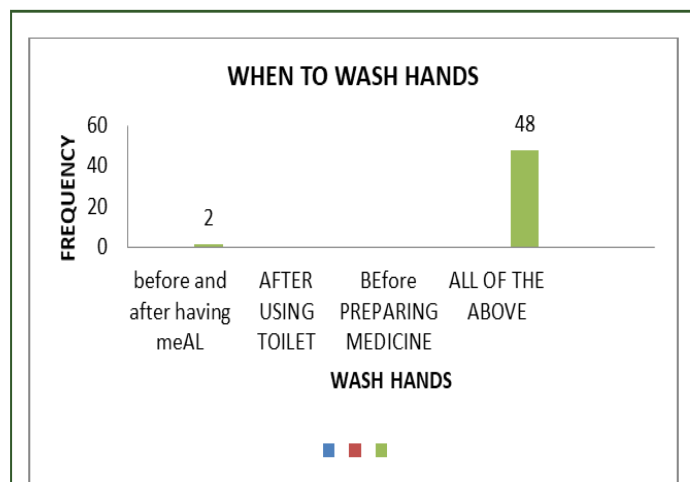


Figure 5: When to wash hands.

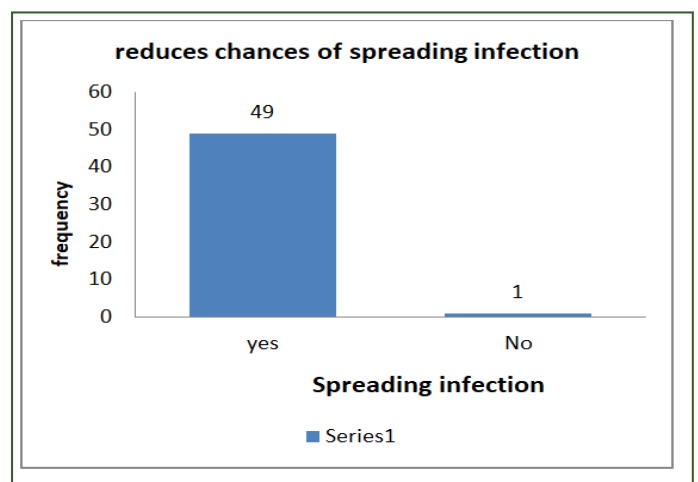


Figure 8: Reduces chances of spreading infection.

Table 2: Practice section of variables.

Variables	Frequency	Percentage
Have you do formal training of hand hygiene in the last three years?		
No	7	14.00%
Yes	43	86.00%
Do you daily use in alcohol-based hand rubs		
No	9	18.00%
Yes	41	82%
Do you wear gloves while providing care?		
Yes	46	92.00%
No	4	8.00%
If your hands are visible soiled, hand hygiene using alcohol using alcohol-based hand rub is the preferred method		
Yes	43	86.00%
No	7	14.00%
Do you use alcohol based rubs in a typical day at trauma center?		
Yes	41	82.00%
No	9	18.00%
Washing blood from your hands helps prevent infection		
Yes	44	88.00%
No	6	12.00%
How do you like use of alcohol based rubs over hand washing?		
No	5	10.00%
Yes	45	90.00%
Posters of hand hygiene displayed at the fix place of care for remember		
Yes	40	80.00%
No	10	20.00%
Institution management support and have openly promote and development of hand hygiene		
No	8	16.00%
Yes	42	84.00%

You should practice hand hygiene before and after hand washing		
A patient	3	6
Patient items and equipment	5	10
Both are correct	40	80
What should you throw in the bin after hand washing?		
Gloves	15	30.00%
Soap	20	40.00%
Waste	15	30.00%
Do you need to have a separate basin for hand washing?		
Yes	43	86.00%
No	7	14.00%

This section demonstrate 43 (86%) participants receive formal training of hand washing in surgical and medical ward. 41 (82%) participants routinely use alcohol-based hand rub for hand washing. 46 (92%) participants use gloves when providing nursing care and other procedures. 41 (82%) participants use alcohol based hand rubs in a typical day and other participants 9 (18%) do not use alcohol hand rubs in a typical day. 44 (88%) participants wash blood immediately from hands to prevent infection and other. 45 (90%) participants like the use of alcohol based hand rubs for hand washing and other 5 (10%) do not like use of alcohol based hand rubs on hand washing. Poster displayed at working area helped 40 (80%) participants in education of hand washing techniques (Figures 9-13) [7].

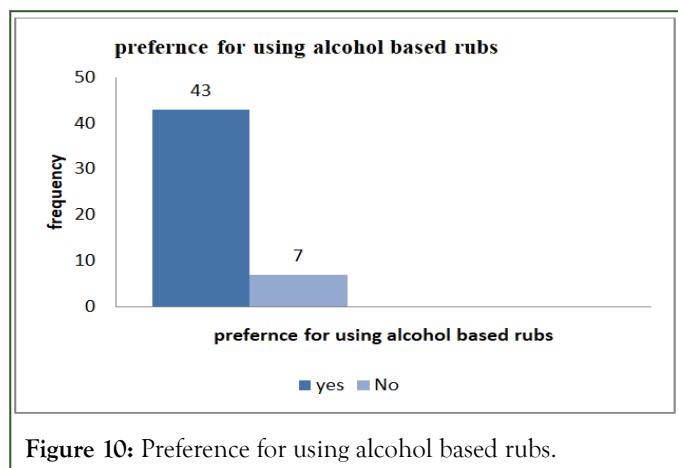
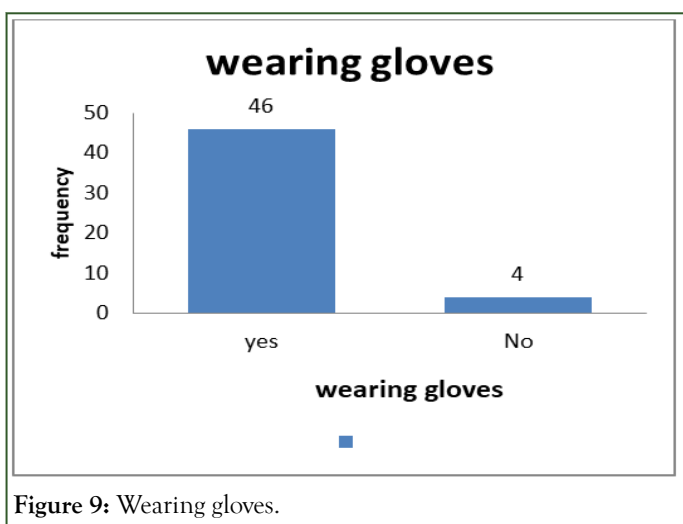


Figure 10: Preference for using alcohol based rubs.

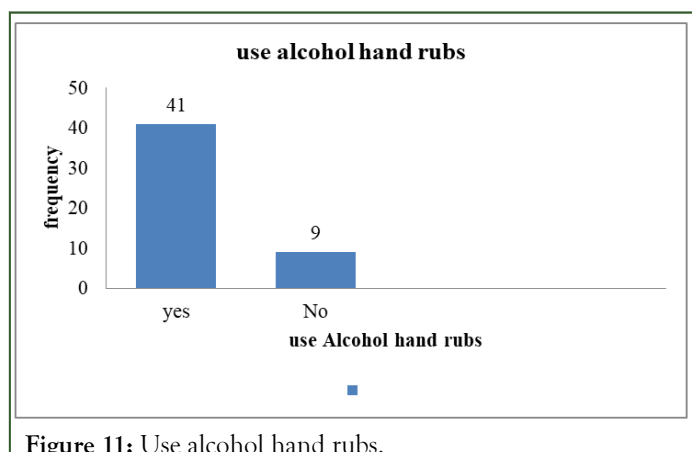


Figure 11: Use alcohol hand rubs.

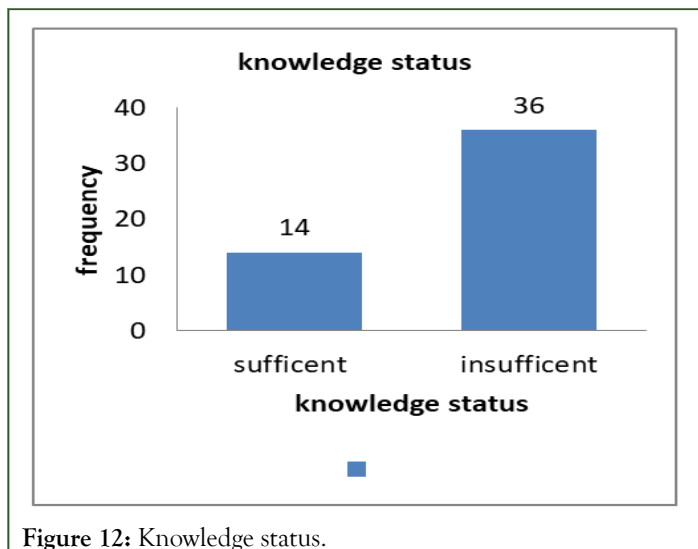


Figure 12: Knowledge status.

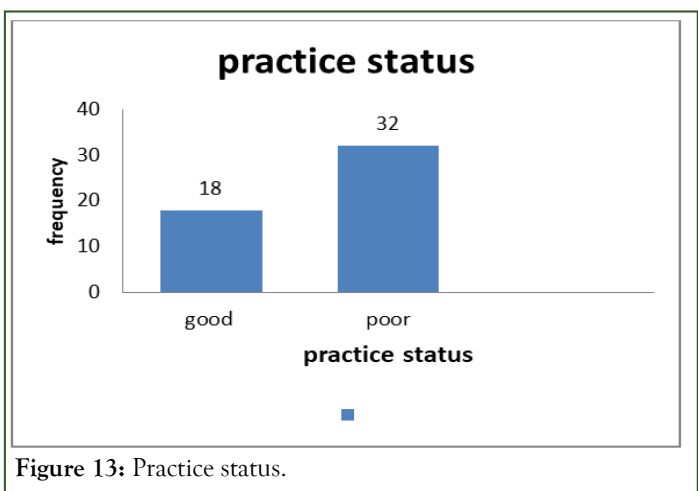


Figure 13: Practice status.

DISCUSSION

Many studies are found related to knowledge and practice on hand washing among nurses. Hand washing is a popular way of evaluation to nursing care with hand washing practice. This study is meaningful for prevention of infection like nosocomial infection from staff nurses who working at high risk ward and surgical and trauma center. This descriptive cross sectional study is conducted at Allied hospital Faisalabad on staff nurses. There are total n=50 samples which are used in this research. There are 27 question based on aspects of various technique on hand hygiene and checklist. There is sufficient knowledge 28% into n=14 staff nurses and insufficient knowledge 72% into n=36 staff nurses. A descriptive cross sectional study is to assess knowledge of hand hygiene among staff nurses working in community health centers of Manikaka Popawala institute of nursing Gujarat. Researcher select total 50 samples true to research on hand washing hygiene of staff nurses. Researcher used a validate research tool that consist structure to assess knowledge of hand hygiene, here 26 questions based on aspect of various techniques of hand washing. The study finding that 76% staff nurses has average knowledge, 14% has good knowledge and 10% have poor knowledge, whereas 72% staff nurses and average level of complains, 22% into had good level of complains and 8% and poor level of complains regarding hand hygiene [8].

A cross sectional study was design. Hygiene hand washing practice so essential for staff nurses to reduce the transmission of nosocomial infection in medical surgical and critical wards. There is need of proper training and proper knowledge of hygiene hand washing and others things like alcohol hand rubs etc.

Another article which is published on hand hygiene hand washing on staff nurses and other health care workers in Indian hospital Puducherry. Health care workers are the basic and major source of mortality and morbidity among the hospitalized patient contributing 7%-10% of the hospital admission. Hospital working staff have caused to transmission of this infection through contaminated hands. Hygiene hand washing and other antiseptic agent like alcohol hand rubs reduce chance of transmission of infection. The study was conducted in Indian research center these were 140 members of WHO 140 members of who were participants. There were five different parts on multiple choices yes or no or attitude measure using 10 statements agree and disagree. A specific system of scoring used for each correct response of knowledge. There were good score of knowledge of hand hygiene to staff nursing that was 63% comparing both the researches, total sample was 50 staff nurses in this research. There is sufficient knowledge 28% into n=14 staff nurses and insufficient knowledge 72% into n=36 staff nurses. A descriptive cross section study.

This study has been conducted from Saudi Arabia on hand hygiene among health care workers. This study has been conducted from Saudi Arabia on hand hygiene among health care workers during this hospital duty place to hygiene hand washing routinely before and after attending patients and other patient related things. This is a meaningful research which assesses the knowledge of hand hygiene among health care workers at health care unit at Arar city of Saudi Arabia. There were total 116 members which are enrolled including 37 staff nurses. There was good result of nurses in this study. This study highlighted that there is more need of training knowledge and practice to health care worker for infection control in health care units.

This descriptive cross sectional study is conducted at from Allied hospital Faisalabad on staff nurses. There are total n=50 samples which are used in this research. There are 27 question based on aspects of various technique on hand hygiene and checklist. There is sufficient knowledge 28% into n=14 staff nurses and insufficient knowledge 72% into n=36 staff nurses [9].

This study has been conducted from Textila American university Pakistan. In the starting time of medicine in history, hand hygiene start and make it forcefully, hand washing prevents us with microorganisms which produce nosocomial infection with health care worker at health care units. There is emphasize to hand hygiene for health care workers and they should hand wash with alcohol based pad which one provide in hospital and in typical wards like ICU, surgical and medical emergencies. According to WHO, nosocomial infection can be control with proper hygiene hand washing of health care workers.

Hand washing is the important way to prevent infection from microorganisms which are found in health care units. Hospital acquired infection may result in millions of dollars in cost of to the health care units. Health care associated infection are serious problem in health care services as may cause prolonged hospital stay, high mortality, long term disability and excess health care cost. In other words health care workers hands due to poor hand washing are the most usual type of vehicle are the transmission of health care associated infections. The knowledge about good hand washing and complains of the its practice according to WHO for guidelines among health care workers is essential for lowering the health care associated infections, nosocomial infection, cross transferring and contagious infection.

Although hand washing is a very simple procedures and has long been deemed one of the most important infection control measures complains rates by health care workers are generally reported to be low. For the purpose of getting information regarding hand washing practice all participants were asked about how many times they washed their hands per day in a normal routine most of the participants *i.e.*, 46.7% (n=42) answered that they washed their hands whenever it is needed. While 27 out of from all study population responded that it is 5 to 6 times a day. They washed their hands the least no of participants were 21 (23%) who replied with the answer of washing hands 3-4 times per day. With regard to hand washing practice respondents were asked that what the condition in which hand washing practice is should do necessary.

They answered by on perspective that what are their conditions in which they are washing their hands. 18.4% of the participants (n=28) which was the least no of participants replied that they are suggest there should be 3 to 4 times hand washing done where as 29.6% of the population (n=45) respondents that they washed their hands 5-6 times in a day. 79 participants (59%) were those who told that they washed their hands whenever it is needed they are having the practice of hand washing. From practice part of the questionnaire respondents were inquired about the washing material they are using for hand washing in their duty routine. 85 of participants (55.99%) replied that they are using hand washing get for daily routine hand washing. Whereas 34 respondents (22.4%) replied that they were using hand sanitizer for their hand hygiene. 33 participants (21.7%). When those using antiseptic soap for washing their hand.

This descriptive cross sectional study is conducted at from Allied hospital Faisalabad on staff nurses. There are total n=50 samples which are used in this research. There are 27 question based on aspects of various technique on hand hygiene and checklist. There is good practice 36% into n=18 staff nurses and poor practice 64% into n=32 staff nurses [10].

This study has been conducted from armed forces military hospital Taif, Saudi Arabia on hand hygiene among health care workers. Hand hygiene is an important health care issues globally and is a single most cost effective and partial measure to come down the incidence of health care workers and the spread of the nosocomial infection, hand washing save health care system to primary and secondary health care centers. These cross-sectional studies implemented include a representative sample of armed forces military hospital, Taif region.

Two questionnaires was used to gathering data based mainly on data collection instrument developed and validated by the WHO and CDC. The first questionnaire was self-administered questionnaire and composed of 24 points regarding demographics and hand hygiene knowledge. The second questionnaire was fulfilled by infection control staff to assess instruments and practice of participants regarding hand washing by observation and decided whether these items other met or not met the guidelines. A total of 347 HCW in Taif military hospital participated in the study with a response rate of 996.1%. The age of 45.2% of them was <30 year most of them (75.5%) were females subjects. Most of the survey on health care workers (83.3%) reported getting formal training in hand hygiene in the last 3 year. The hand hygiene knowledge score was very good among 19% of health care workers, while it was very good among 60% of them. There was insufficient hand hygiene knowledge was reported among 21% of them. Those who were working in Al-Hada hospital and joined this health facility since more than 3 months should better significant knowledge of hand hygiene. On the other hand, practice score was excellent among more than three quarters of the participants (76.1%). Females subjects, nurses and those working at Al-Hada hospital and in the department of gynae and obstetrics and intensive care units should better guides hand hygiene make it difficult for them to carry it out as often as necessary and that there are some practical barriers to hand hygiene because of their particular job/role. Overall hand hygiene knowledge score was good and above among 79% of health care works in Taif Armed forces hospital. On the other hand practice score was excellent among more than three quarters of the participants. Insufficient hand hygiene knowledge was reported among considerable proportion of health care workers.

This descriptive cross sectional study is conducted at from Allied hospital Faisalabad on staff nurses. There are total n=50 samples which are used in this research. There are 27 question based on aspects of various technique on hand hygiene and checklist. There is sufficient knowledge 28% into n=14 staff nurses and insufficient knowledge 72% into n=36 staff nurses.

This article taken from two hospitals of Mashhad Iran. Health care associated infection affect many of the patients of in teaching hospitals. This study has been conducted from two teaching hospitals of Iran. There were 27 multiple choice questions were uses to assess the knowledge of hand hygiene hand washing. There were total 161 members that were participating in this research. It was moderate knowledge of hand washing score was 21% which was very poor. There is need of proper training many times of knowledge and practice health care workers. This descriptive cross sectional study is conducted at Allied hospital Faisalabad on staff nurses. There are total n=50 samples which are used in this research. There are 27 question based on aspects of various technique on hand hygiene and checklist. There is sufficient knowledge 28% into n=14 staff nurses and insufficient knowledge 72% into n=36 staff nurses [11].

This study has been conducted from regional referral hospital Uganda health acquired infections is a global problem improper hand hygiene practices source as means of source of infection transmission ward hospital wards and within proper hand washing which is which is most important method to reduce chance of infection. The who recommended five movements of hygiene hand washing, creating the pillars for effective hygiene hand washing. To assess the knowledge availability of essential hand working facilities, essential hand practice and complains among healthcare.

This descriptive cross sectional study is conducted at Allied hospital Faisalabad on staff nurses. There are total n=50 samples which are used in this research. There are 27 question based on aspects of various technique on hand hygiene and checklist. There is sufficient knowledge 28% into n=14 staff nurses and insufficient knowledge 72% into n=36 staff nurses.

This study has been conducted from rural teaching hospital in the district of Ufjain India. Study population of physician's nurses, teaching staff, nursing students of the hospital on hygiene hand washing. Response rate were 53 out of 259 health care workers which were participate in this study. Participants of health care workers reported to practice hygiene on the selected situation varies from 40%-96% among categories. Already training of hand hygiene is statistically significant associated which is very poor. 93% of the participants were interesting for training on hand hygiene in the near future. This descriptive cross sectional study is conducted at Allied hospital Faisalabad on staff nurses. There are total n=50 samples which are used in this research. There are 27 question based on aspects of various technique on hand hygiene and checklist. There is sufficient knowledge 28% into n=14 staff nurses and insufficient knowledge 72% into n=36 staff nurses [12].

CONCLUSION

A study was conducted on assessing knowledge and practice of nurses about hand washing.

Hand washing is very important topic and in hospital area. Hands of medical professionals are a great source of infection worldwide. We can save many times with infections and diseases which are spread contaminated. These infections are life threatening and make healthy life to poor healthy life. There is need of training hand washing hygienically for control of disease. One patient infected many person contacted with him for his treatment care so all the person those are attending patient wash their hand hygienically. In health care institution there must be a large use of infection control agents like liquid form scrubs, sanitizer, alcohol and waiting agents for hand washing.

A descriptive cross sectional study was conducted for 4 months from 14-1-2019 to 22-4-2019 on nurses and doctors of medical and surgical at Allied hospital Faisalabad. The research was obtained from different internet search engine, Google Scholar and PubMed and books. A convenient sampling technique was used for research study purpose. Exclusion criteria include head nurses, student nurses, ward boys, sweepers; lab technician of Allied hospital was excluded from this study.

This study emphasizes on knowledge and practices which so necessary for health care worker for hygiene hand washing. Allied hospital Faisalabad which is a teaching hospital, hospital management has increase efforts for control of nosocomial infection which is basic are of health care associated transmitted infection among patient.

RECOMMENDATIONS

There must be appropriate training on hand washing techniques for all health care providers. Reminder charts and papers should be displayed at areas of focused. Strict checking methods should be applied on instillation of hand washing practice. Knowledge and practice of all health care providers must be improved.

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