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Research Article

**SAGACITY OF HAND CLEANING IN WORKING STAFF OF
HOSPITAL DOCTORS AND NURSING STAFF OF
NEONATOLOGY UNIT OF DIFFERENT GOVERNMENT
TEACHING HOSPITALS****Dr. Farrukh Javed, Dr. Tayyaba Zahoor, Dr. Javairia Aslam
DHQ Hospital Rawalpindi****Abstract:**

Objective: The purpose of this research study was to gather the knowledge about the tendency of washing hands in doctors and nurses of hospital.

Study Design: Observational cross-sectional study.

Place and Duration of Study: The current study was carried out in the period of one month held in March, 2018 at different government medical teaching institutions.

Material and Methods: This study was held to assess the knowledge and tendency of hand wash practice among health care staff of the hospital after getting NOC from ethical committee of hospitals. Doctors and nurses working in different government teaching hospitals were enrolled for study. Total of 146 persons were cross examined in the current study in the duration of one month and a questionnaire was also asked to fill by the participants of the study. After taking informed written consent and without revealing participants identity, one on one interviews were carried out to know their attitude towards hand washing practice and response was recorded on proforma.

Results: According to the observations of this study it was found that 94% doctors and nurses have good knowledge about washing of hands. Among postgraduate resident doctors and in nurses Practice of hand washing technique was 59.6% and 36% respectively and in consultants it was 40.4 percent.

Conclusion: Regardless of familiarity about hand washing benefits and techniques amongst doctors and nurses, hand washing practice rate was too much low. Low frequency of hand washing practice can lead to healthcare provider induced infections. Hence, it is a major cause of hospital acquired infections in infants, new born and less than 4 weeks of age.

Key words: knowledge attitude and practice (KAP), nurses, Hand washing, doctors, infections.

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INTRODUCTION:

Preventing the spread of germs is especially important in hospitals and other facilities such as dialysis centers and nursing homes. Hand hygiene is a great way to prevent infections. Even healthcare providers are at risk of getting an infection while they are treating patients.

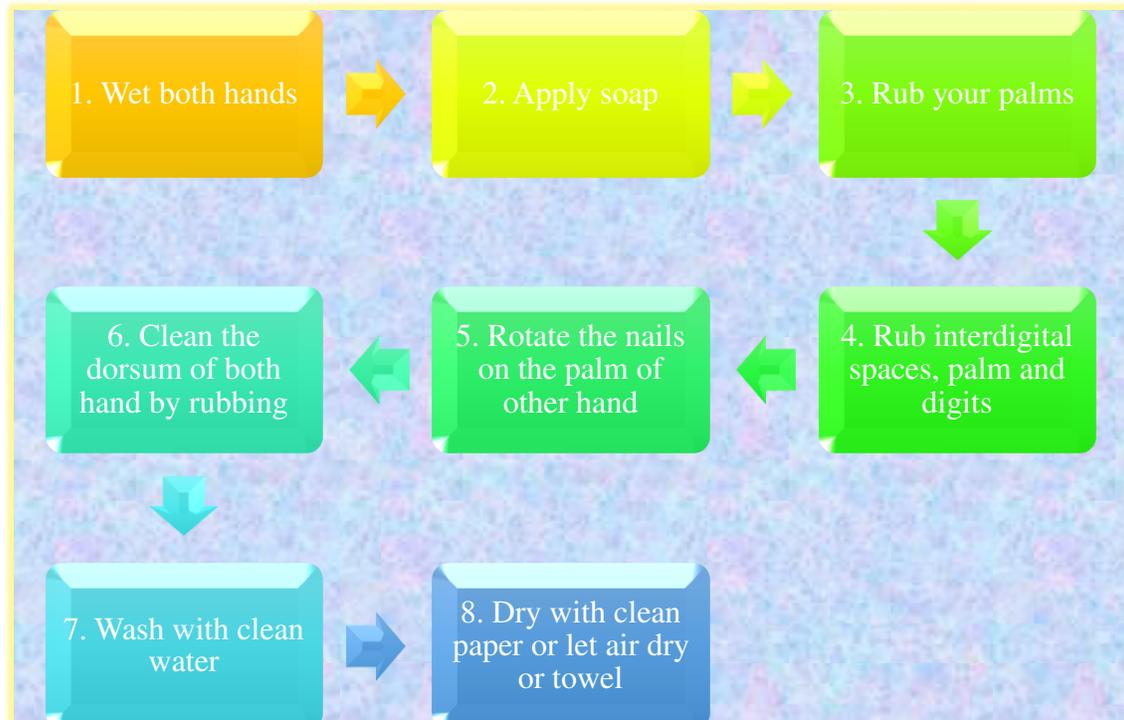
Person to person contact or feco-oral route micro-organisms transmission is common cause of spreading respiratory tract infections and Diarrhoea. practicing hand hygiene protocols can perform effective role in reduction of these diseases. Frequent and effective hand washing techniques for the purpose to decrease disease burden precisely in pediatric age group was emphasized in a study by Friedrich MND, et al.

One of the most important steps we can take to avoid getting sick and spreading germs to others is keeping hands clean. Many diseases are spread by not washing hands with soap and clean water. Commonly in many parts of the world clean, running water is not accessible, use soap and available water. Use an alcohol-based hand sanitizer that contains at least 60% alcohol to clean hands if soap and water are

unavailable. The question arises here is when hands should be washup? Here is a list for those who do not know the answer.

1. Before, during, and after preparing food
2. Before eating food
3. Before and after caring for someone who is sick
4. Before and after treating a cut or wound
5. After using the toilet
6. After changing diapers or cleaning up a child who has used the toilet
7. After blowing your nose, coughing, or sneezing
8. After touching an animal, animal feed, or animal waste
9. After handling pet food or pet treats
10. After touching garbage

Significant reduction in disease burden was observed by conducting educational awareness seminars and community survey in Nigeria. Training results were compared with the pre-training disease data of that particular community. Emphasis is not only about spreading out knowledge about hand washing practices but awareness about the effective hand washing techniques is needed. Effective hand washing steps of WHO are shown below.



Different monitoring techniques must be utilized to improve compliance such as, infection control, soap utilization, sanitizers utility because although the knowledge and awareness about benefits of hand washing the compliance is very poor. Improving the compliance to hand hygiene protocols can effectively reduce hospital acquired infection transmission rate. According to World Health Organization recommendations and communicable disease control program, educational sessions should be carried out in community by the outreach medical rep working at primary healthcare level and the effective hand washing technique must be displayed outside wash basins or lavatories in a language simply understood by the native population.

MATERIAL AND METHODS:

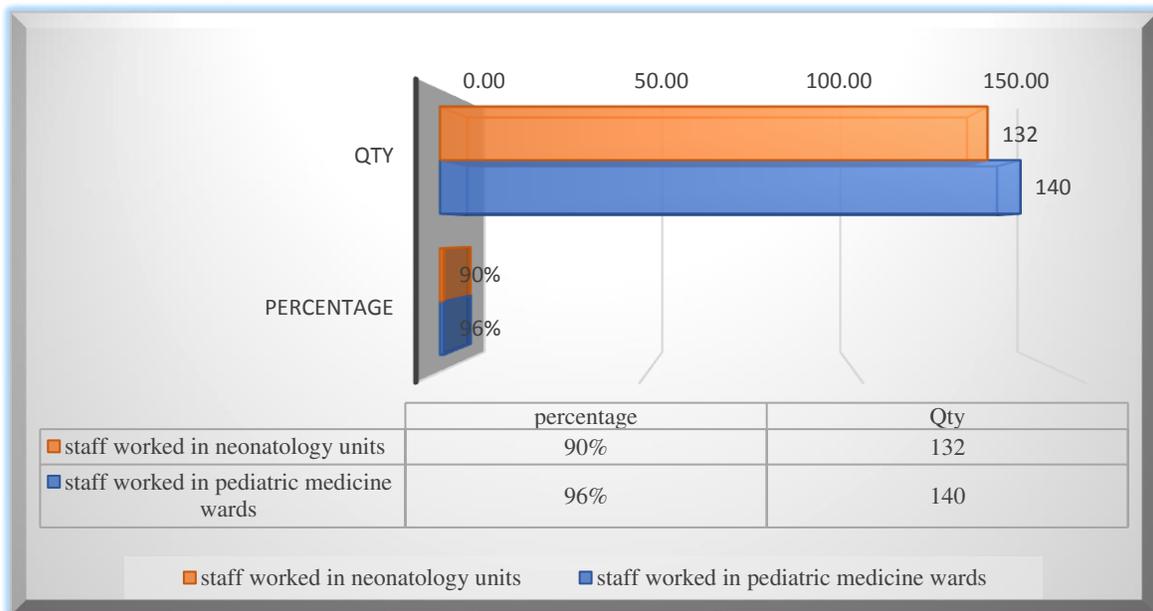
Current cross-sectional study was carried out in March 2018 for the period of one month to assess the awareness and tendency of hand wash practice among health care staff of the hospital after getting no objection certificate from ethical committee of hospitals. Doctors and nurses working in different government teaching hospitals were enrolled for study. Total of 146 persons were cross examined in the current study in the duration of 4 weeks and a questionnaire was also asked to fill by the participants of the study for the collection of different data like, awareness about effective hand washing protocols as defined by WHO, benefits of hand

washing and attitude of participants towards hand hygiene and demographic profiles. After taking informed written consent and without revealing participants identity, one on one interviews were carried out to know their attitude towards hand washing practice and response was recorded on proforma.

All participants were directly interviewed one by one to reduce the chance of mistake. Data analysis was done by using SPSS version 25. Chi-square test was applied to find variables association. Those staff nurses who had patient contact and doctors either consultants or post graduate residents were observed in the present study. patients' attendants, sanitary staff, ward boys or any other miscellaneous ward staff was not included in this study.

RESULTS:

According to the observations of this study it was found that 94% doctors and nurses have good knowledge about washing of hands. Among postgraduate resident doctors and in nurses Practice of hand washing technique was 59.6% and 36% respectively and in consultants it was 40.4 percent. In this study a total number of 146 persons were selected from medical staff for observation. 96% (140) staff worked in pediatric medicine wards while 90% (132) staff worked in neonatology units.



68.5% doctors take care of washing hands before examining patients. 59.6% medical staff carried out skin cleaning by using spirit sabs prior to sampling. Before IV-line maintenance 59.6% staff nurses cleaned child's skin with spirit swab. hand washing statistics data about knowledge and practice of all participants was collected and described below in tabular and graphical form.

Table No 1: Material consumed for washing of hands

<i>Material</i>	Percentage
<i>Plane Water</i>	6%
<i>Hand Rubbing or Sterilium</i>	32%
<i>Soap and Water</i>	62%

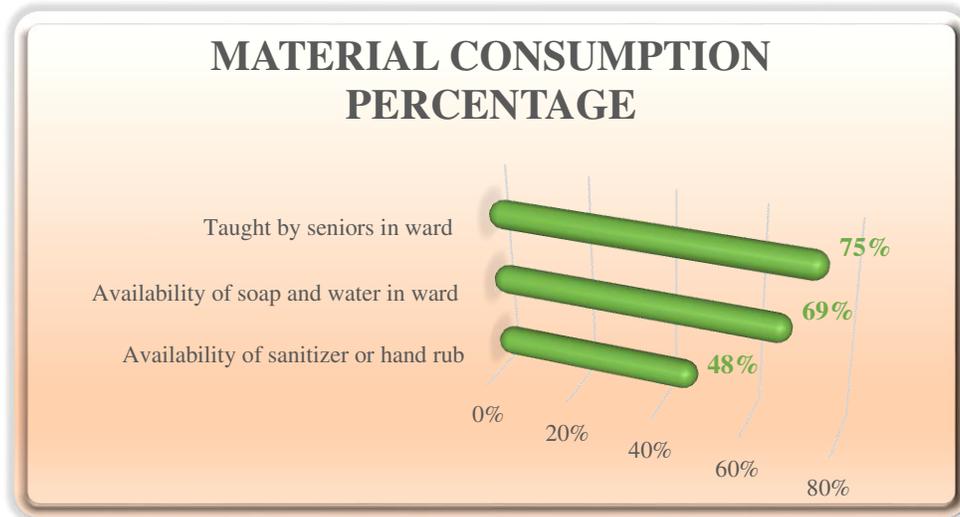
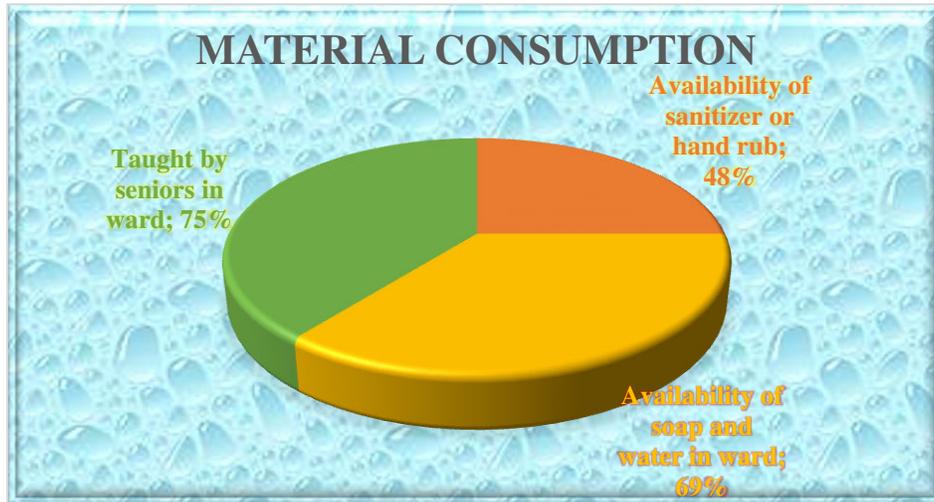
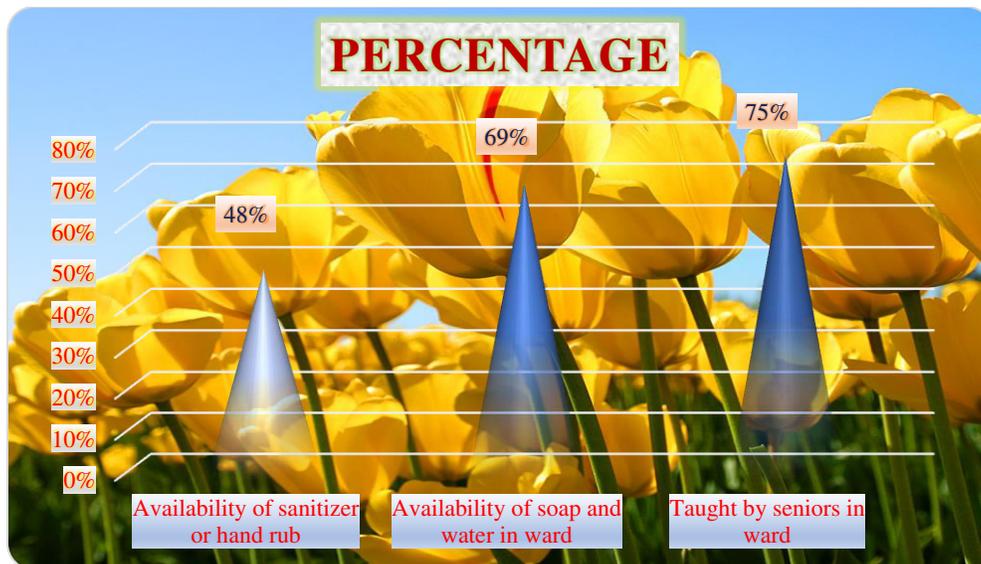
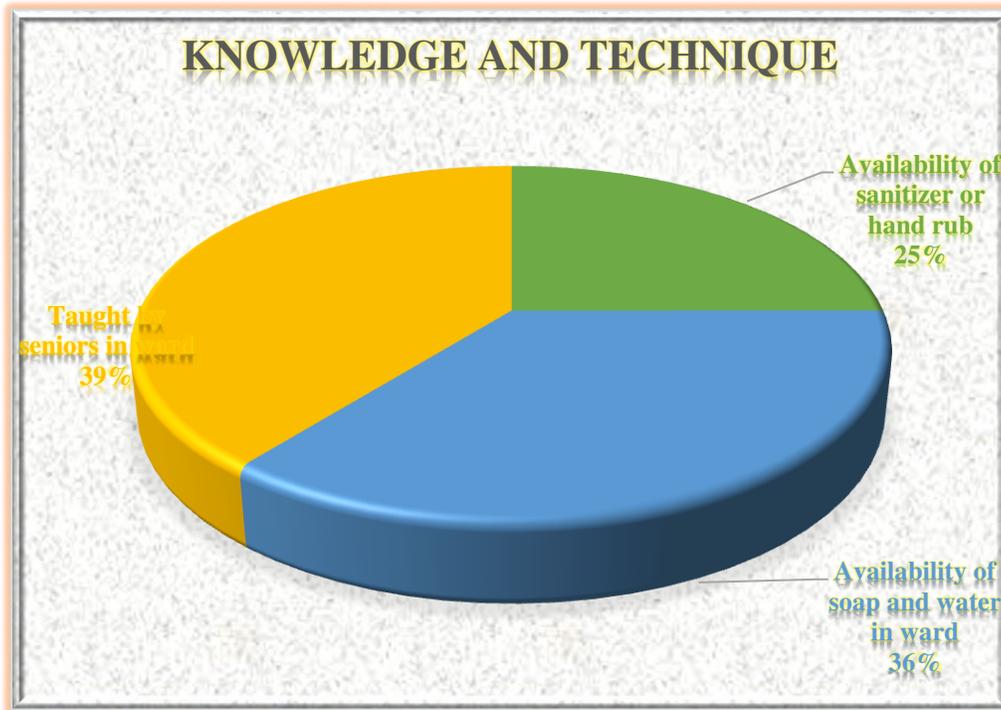


Table3: Knowledge about hand washing technique

<i>Knowledge and technique</i>	Percentage
<i>Availability of sanitizer or hand rub</i>	47.9%
<i>Availability of soap and water in ward</i>	68.5%
<i>Taught by seniors in ward</i>	75.3%
<i>Know proper technique</i>	94.5%



DISCUSSION:

Washing of hands is very important to reduce the hospital acquired infection amongst the patients of all age groups. The sense of washing hands is very poor equally in persons related to medical and in general public, regardless of awareness and knowledge about the benefits of using safe hands technique. Proper gowning and gloving technique and the pre-surgery washup techniques must be carried out by all surgeons and paramedic staff employed in operation theaters. The surgical theaters should be thoroughly cleaned before every procedure to avoid acquired

infection. Hence, the skin contact infections can be reduced to a greater level.

Most important steps we can take to avoid getting sick and spreading germs to others is keeping hands clean. Many diseases are spread by not washing hands with soap and clean water. Commonly in many parts of the world clean, running water is not accessible, use soap and available water. Use an alcohol-based hand sanitizer that contains at least 60% alcohol to clean hands if soap and water are unavailable. In order to avoid food borne diseases,

the food handlers should also be very attentive in hand washing. soap utilization, alcohol utilization and many other monitoring methods have been formulated to assess the hand hygiene compliance amongst general public. Awareness must be provided to the community by community health workers through educational sessions.

CONCLUSION:

Low frequency of hand washing practice can lead to healthcare provider induced infections. Regardless of familiarity about hand washing benefits and techniques amongst doctors and nurses, hand washing practice rate was too much low. Hence, it is a major cause of hospital acquired infections in new born babies.

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