Knowledge and Compliance Among Nursing Staff Towards Hand Hygiene in General Ward Unit in Selected Hospitals

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ABSTRACT

INTRODUCTION

Hand hygiene is a practice that involves cleansing one's hands in a manner that significantly diminishes the presence of possible pathogens, which refer to hazardous germs, on the hands. This technique is widely recognized as a fundamental approach to mitigating the potential transmission of infections between patients and healthcare professionals (Centers for Disease Control and Prevention, 2023).

METHODS

The research is a quantitative and will utilize a descriptive-comparative research design. World Health Organization Hand Hygiene Questionnaire for Health Care Workers was administered to elicit information from the respondents which includes the general ward Nurses in selected Hospitals and analysis was done using the Jamovi Version 2.3.28. Variables was tested using Frequency, Percentage Distribution, Weighted Mean, Likert Scale, T-test, One Way Anova and Post Hoc Test Tukey.

RESULTS

Firstly, with regards to age we have a “Sig” value of 0.176 for the Level of Knowledge and 0.620 for the Level of Compliance. For the gender the “Sig” value of 0.194 on the Level of Knowledge with Equal Variance assumed and the “Sig” value of 0.873 on the Level of Compliance with Equal Variance Assumed which is greater than the p ≥ .05. In regards with The hospital sector, the “Sig” value of 0.171 for the Level of Knowledge and 0.527 for the Level of Compliance which is greater than the 0.05 alpha level. It is all evident that there is no significant difference in the Level of Knowledge and Level of Compliance among staff nurses across different groups.

In terms of years of experience, the “Sig” value of the Level of Knowledge with 0.755 which is greater than the 0.05 alpha level while the “Sig” value for the Level of Compliance with the “Sig” value of 0.005 which is lesser than 0.05 alpha level denotes statistically there is a significant difference when group according to years of experience. The study reveals that while there is no significant difference in the Level of Knowledge, there is a significant difference in the Level of Compliance based on years of experience especially on the above 9 years of experience. The decision to accept the Null Hypothesis is supported by the T-TEST and the Post hoc Test Tukey.

CONCLUSION

The findings of this study provide valuable insights for healthcare organizations aiming to enhance hand hygiene practices among staff nurses. The results suggest the effectiveness of age-inclusive, gender-neutral interventions and the need for targeted strategies to address compliance variations among staff with different levels of experience.

INTRODUCTION

Infections caused by pathogens and other harmful elements commonly linked to hospital settings have been widely recognized as a significant emerging issue. Patients acquire healthcare-associated infections while obtaining treatment for various diseases, which can potentially occur in any healthcare facility (Sartelli et al., 2018). Healthcare-associated infections substantially hinder patient safety, extending hospital stays and increasing reliance on costly antibiotics. Consequently, this can contribute to developing additional health complications, disability, elevated healthcare expenses, and heightened mortality rates (Kleinpell et al, 2018). These factors collectively impose a significant economic burden on healthcare systems.
METHODOLOGY

Research Design
The research is quantitative and will utilize a descriptive-comparative research design. It is descriptive because it will determine the demographic profile, including age, sex, length of service, and hospital sector, whether government or private. Also, the paper will describe the extent of knowledge and compliance of general ward nurses in selected hospitals.

Furthermore, the study will also employ a comparative design as it will compare the knowledge and compliance among nurses in the general ward unit when grouped according to profile. Richardson (2018) suggests that comparative research design involves comparing two groups to reach a conclusion about them. In this instance, the researchers endeavor to ascertain and scrutinize resemblances and disparities among groupings.

Population and Sampling Technique
The target respondents are all the nurses assigned to the general ward of selected hospitals. All of the respondents will be invited to participate in this study.

The total population of nurses that will be participating in the survey is 25 nurses in Tayabas Quezon, 16 nurses in Maimbung, Sulu; and 9 nurses in Agusan Del Sur. In summation, fifty individual respondents will be the study's respondents, considering their willingness and capability to participate.

- The researcher will observe the following step-by-step process in conducting this descriptive study: The researcher will send a letter of permission to conduct the study to the Program Chair of the Master of Arts in Nursing of St. Bernadette of Lourdes College. After the granted permission, a researcher-made questionnaire will be formulated first to gather data for this study. This questionnaire will be submitted for validation to three research experts.
- Once the validity and reliability of the researcher-made questionnaire are established, the researcher will commence with the actual data gathering, and a letter will be made to ask permission from the management of the selected hospitals.
- Next, the researcher will send a letter to the Human Resource Department of the health institution asking for permission and securing the approval to proceed with conducting the study.
- The respondents will be reached out personally. The researcher will hand over the questionnaires through Google form to the respondents, giving them ample time to answer intelligibly and truthfully.
- The data will then be collated, analyzed, and interpreted afterward. Based on the findings that will be generated, an intervention program will be formulated.

Research Instrument
The Researcher used an adopted researcher-made questionnaire for the variables to suit the context of the study. The gathered data from the discourse was correlated to the literature to aid in the questionnaire construction, which the panel of internal and external validators will validate. The respondents will be given a questionnaire that contains the participants demographic information and two sets of questionnaires to measure the knowledge and compliance among nurses in the general ward on hand hygiene in the selected hospitals.

Data Analysis
The collected data were analyzed using the Jamovi Version 2.3.28. Variables was tested using Frequency, Percentage Distribution, Weighted Mean, Likert Scale, T-test, One Way Anova and Post Hoc Test Tukey by the Statistician.
Ethical Considerations

The researchers ensured that throughout the search for persons who would be respondents in this study, the respondents were not compelled or pushed to go through the data collection process. As a result, the researchers respected the respondent's options to participate in the survey. Hence, the researchers also assured the following respondents of this study that the research itself is bounded by the Data Privacy Act or the Republic Act 10173, which aims to protect all forms of information, be it private, personal, or sensitive. It is meant to cover both natural and juridical persons involved in processing personal information.

Ethical Considerations cont.

The study used a formal letter of consent to the selected Hospitals to allow the researcher to let their healthcare workers participate in this study. This study does not intend to contradict other works or research.

The benefit of the study is that, it ultimately leads to a better prognosis and further curtailing of possible health harm such as infections while present in the institution and through this assessment, management may gauge, identify problems, plan, and develop regulations and standards to improve the institution's infection control and prevention efficacy.

RESULTS

1: Demographic Profile of General Ward Nurses in term of:

1.1 AGE

<table>
<thead>
<tr>
<th>AGE</th>
<th>Counts</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 – 25 years old</td>
<td>7</td>
<td>14.0 %</td>
</tr>
<tr>
<td>26 – 30 years old</td>
<td>10</td>
<td>20.0 %</td>
</tr>
<tr>
<td>31 – 35 years old</td>
<td>17</td>
<td>34.0 %</td>
</tr>
<tr>
<td>36 years old and above</td>
<td>16</td>
<td>32.0 %</td>
</tr>
</tbody>
</table>

The table presents the distribution of participants across different age groups, providing a comprehensive overview of the age demographics in the studied population. The largest proportion of respondents falls within the age range of 31 to 35 years old, with frequency of 7 constituting 34.0% of the total sample. Following closely, the largest group comprises those aged 36 years and above, frequency of 16 representing 32.0% of the total, followed by individuals aged 26 to 30 years old account for frequency of 10 equivalent of 20.0% of the participants. The smallest group consists of participants aged 21 to 25 years old, making up frequency of 7 with 14.0% of the sample.

1.2 GENDER

<table>
<thead>
<tr>
<th>GENDER</th>
<th>Counts</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MALE</td>
<td>8</td>
<td>16.0 %</td>
</tr>
<tr>
<td>FEMALE</td>
<td>42</td>
<td>84.0 %</td>
</tr>
</tbody>
</table>

The table displays the distribution of participants based on gender, with a clear distinction between male and female respondents. The majority of the participants are female, constituting 42 equivalent to 84.0% of the total sample. In contrast, the male participants make up a smaller proportion, accounting for 8 equivalent to 16.0% of the overall population.
1.3 YEARS OF EXPERIENCE

The table provides a breakdown of the participants based on their years of professional experience, offering insights into the distribution of expertise within the study population. The most prevalent group comprises individuals with more than 9 years of experience, constituting of 15 equivalent to 30.0% of the total sample. Following closely, participants with less than a year of experience make up of 11 equivalent to 22.0% of the population. The next two categories, namely 4-6 years and 6-9 years of experience, demonstrate a relatively balanced distribution, representing 9 or 18.0% and 8 or 16.0% of the respondents, respectively. The smallest group consists of individuals with 1-3 years of experience, contributing of 7 equivalent to 14.0% to the overall sample.

1.4 YEARS SECTOR OF HOSPITAL

The table outlines the distribution of participants based on the sector of the hospital where they are employed, providing a comprehensive overview of the representation of government and private healthcare institutions within the study. The majority of respondents work in private hospitals, constituting of 34 equivalent to 68.0% of the total sample. In contrast, the government sector represents a smaller proportion, with frequency of 16 equivalent to 32.0% of participants indicating employment in government hospitals.

2: Level of knowledge among nurses towards hand hygiene practices

<table>
<thead>
<tr>
<th>No</th>
<th>DESCRIPTION</th>
<th>MEAN</th>
<th>RANK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Which of the following is the main route of cross-transmission of potentially harmful germs between patients in a healthcare facility?</td>
<td>1.8</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>What is the most frequent source of germs responsible for healthcare-associated infections?</td>
<td>1.5</td>
<td>8</td>
</tr>
<tr>
<td>3</td>
<td>Which of the following hand hygiene actions prevents transmission of germs to the patient</td>
<td>1.9</td>
<td>3.5</td>
</tr>
<tr>
<td>4</td>
<td>Which of the following hand hygiene actions prevents transmission of germs to the health-care worker?</td>
<td>2.0</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Which of the following statements on alcohol-based handrub and hand washing with soap and water are true?</td>
<td>1.4</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>What is the minimal time needed for alcohol-based handrub to kill most germs on your hands?</td>
<td>1.7</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>When is the best time to do hand rubbing in the following situations?</td>
<td>1.9</td>
<td>3.5</td>
</tr>
<tr>
<td>8</td>
<td>When is the best time to do hand washing in the following situations?</td>
<td>1.2</td>
<td>10</td>
</tr>
<tr>
<td>9</td>
<td>Which of the following should be avoided, as associated with a likelihood of colonisation of hand with harmful germs?</td>
<td>1.9</td>
<td>3.5</td>
</tr>
<tr>
<td>10</td>
<td>How do you do hand washing?</td>
<td>1.9</td>
<td>3.5</td>
</tr>
</tbody>
</table>

The above table shows the level of knowledge among nurses towards hand hygiene practices. Base on the above question no. 4 “Which of the following hand hygiene actions prevents transmission of germs to the health-care worker?” most nurses got it correct which shows that they have knowledge towards hand hygiene practices with a mean score of 2.0 as rank 1, while others got rank 3.5 which includes questions no. 3, 7, 9 & 10. The least among the 10 questions about hand hygiene practices based on knowledge are question no. 5 “Which of the following statements on alcohol-based handrub and hand washing with soap and water are true?” rank 9 & question no. 8 “When is the best time to do hand washing in the following situations?” as rank 10.
3: Level of compliance among nurses towards hand hygiene practices

<table>
<thead>
<tr>
<th>No</th>
<th>DESCRIPTION</th>
<th>MEAN</th>
<th>RANK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I wash my hands after removing used gloves.</td>
<td>3.78</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>I wear gloves when exposure of my hands to body fluids is anticipated.</td>
<td>3.92</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>I avoid ‘foreign’ objects on my hands, such as wearing rings, watches, bracelets, etc.</td>
<td>3.50</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>I wash my hands after removing the IV line of my patient.</td>
<td>3.80</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>I wash my hands before the preparation of medication for my patient.</td>
<td>3.72</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>After touching the wound with a gloved hand, I wash my hands with antiseptic soap.</td>
<td>3.86</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>I wash my hands with antiseptic soap and apply alcohol hand rub before and after blood sugar extraction.</td>
<td>3.58</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>I ensure to sanitize my hands after touching wards’ surfaces.</td>
<td>3.76</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>I adhere to hand hygiene before taking vital signs.</td>
<td>3.70</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>I practice hand hygiene after handling food packages in the patient room.</td>
<td>3.68</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td><strong>Average Weighted Mean</strong></td>
<td><strong>3.73</strong></td>
<td></td>
</tr>
</tbody>
</table>

The above table shows the level of compliance among nurses in which item no. 2 got the highest mean of 3.92 wam as rank 1 “I wear gloves when exposure of my hands to body fluids is anticipated”, followed by item description No. 6 with 3.86 wam as rank 2 “After touching the wound with a gloved hand, I wash my hands with antiseptic soap”. However the least among the 10 items is item description No. 3 “I avoid ‘foreign’ objects on my hands, such as wearing rings, watches, bracelets, etc.” got 3.50 wam as ranked 10.

Table 1

One Way ANOVA to determine the significant difference between the Level of Knowledge and the Level of Compliance when grouped according to age.

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level of Knowledge</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.131</td>
<td>3</td>
<td>.044</td>
<td>1.720</td>
<td>.176</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1.169</td>
<td>46</td>
<td>.025</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1.300</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Level of Compliance</strong></td>
<td>.256</td>
<td>3</td>
<td>.085</td>
<td>.598</td>
<td>.620</td>
</tr>
<tr>
<td>Between Groups</td>
<td>6.569</td>
<td>46</td>
<td>.143</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6.825</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows the significant difference between the Level of Knowledge and Level of Compliance when grouped according to age. It shows statistically NOT significant based on the “Sig” value of 0.176 for the Level of Knowledge and 0.620 for the Level of Compliance which is greater than the 0.05 alpha level and therefore the decision is to accept the Null Hypothesis that there is No significant difference in the Level of Knowledge and the Level of Compliance when grouped according to age.

Findings suggest that all ages from 21 up to 36 years old and above had no significant difference in the level of knowledge and compliance to hand hygiene adherence in the workplace. This is also supported by the Post Hoc Test using Tukey HSD Multiple Comparison presented in Table 2 showing the “Sig” results of all ages categorized from 1-4 full rotation had a greater value than 0.05 alpha level which means that there is no significant difference in the level of knowledge and level of compliance when grouped according to age.

Table 2

Post Hoc Tukey HSD to determine which part of the variables played a significant difference.
**Table 3**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level_of_Knowledge</td>
<td>42</td>
<td>1.7071</td>
<td>.16732</td>
<td>.02582</td>
</tr>
<tr>
<td>Level_of_Compliance</td>
<td>8</td>
<td>3.7143</td>
<td>.36664</td>
<td>.05657</td>
</tr>
</tbody>
</table>

T-TEST to determine the significant difference between the Level of Knowledge and Level of Compliance when Group according to Sex (Gender)

This served only as a guide:

- **RULES:** if Levene’s test “Sig” or p ≥ .05, then report the “Equal variances assumed” t-test results. otherwise, report the “Equal variances not assumed” t-test results.

- Greater than p value of .05 are **not statistically significant**.

In addition:
- Larger t scores = more difference between groups.
- Smaller t score = more similarity between groups.
Table 4 shows the significant difference between the Level of Knowledge and Level of Compliance when grouped according to years of experience. It shows statistical NOT significance based on the “Sig” value of the Level of Knowledge with 0.755 which is greater than the 0.05 alpha level while the “Sig” value for the Level of Compliance with the “Sig” value of 0.005 which is lesser than 0.05 alpha level denotes statistically significant difference when group according to years of experience. Therefore, the decision is to accept the Null Hypothesis that there is a significant difference in the Level of Compliance when groups according to years of experience. Post Hoc Tukey HSD Multiple comparison is suggested to determine in which category will define the significant difference based on years of experience.

Findings suggest that all staff nurses respondents had no variance in the level of knowledge in adherence to hand hygiene when grouped according to years of experience. However, it shows that there is a significant difference in the level of compliance to hand hygiene adherence when group according to years of experience. This is supported by the Post Hoc Test using Tukey HSD Multiple Comparison presented in Table 5 showing the “Sig” results of item 5 (with more than 9 years of experience) with a lesser value than 0.05 alpha level which means that there is a significant difference in level of compliance when grouped according to years of experience as to “Sig” value for item 5 (with more than 9 years of experience) against item 1 (1-3 years) with “Sig” value 0.011, item 2 (4-6 years) with “Sig” value 0.040, item 3 (7-9 years) with “Sig” value 0.036. See table 5. This denotes that most staff nurses with higher years of experience have variation in the level of compliance to adherence to hand hygiene. Probably because of their area of assignment.

According to Hamza Umar Et al 2022. In this study, work experience was one of the factors that had a significant association with the hand hygiene compliance of nurses. Those who had 6–10 years of working experience had 1.71 times more hand hygiene compliance than those who had ≤ 5 years of experience. Having training on hand hygiene was also one of the factors that was significantly associated with compliance. The result reveals that those who were trained on hand hygiene had 0.45 times more practice on hand hygiene compliance than those who did not have training.

Table 5
POST HOC TEST – TUKEY HSD
Legend:

<table>
<thead>
<tr>
<th>Code</th>
<th>Row Labels</th>
<th>Count of Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 - 3 years</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>4 - 6 years</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>6 - 9 years</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>less than a year</td>
<td>11</td>
</tr>
<tr>
<td>5</td>
<td>More than 9 years</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Total</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

Table 6

T-TEST to determine the significant difference when group according to Sector of Hospital as to Government or Private.

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>Sector Hospital</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level_of_Knowledge</td>
<td>1.00</td>
<td>16</td>
<td>1.7063</td>
<td>.14361</td>
<td>.03590</td>
</tr>
<tr>
<td>Level_of_Compliance</td>
<td>2.00</td>
<td>34</td>
<td>1.7265</td>
<td>.17287</td>
<td>.02965</td>
</tr>
</tbody>
</table>

Table 6 shows the significant difference between the Level of Knowledge and Level of Compliance when grouped according to hospital sector. It shows statistically NOT significant based on the “Sig” value of 0.171 for the Level of Knowledge and 0.527 for the Level of Compliance which is greater than the 0.05 alpha level and therefore the decision is to accept the Null Hypothesis that there is No significant difference in the Level of Knowledge and the Level of Compliance when grouped according to the hospital; sector.

Findings suggest that staff nurses both government and private hospital have the same level of knowledge and compliance to hand hygiene adherence in the workplace.

RECOMMENDATION

Based on the findings of the study, the recommendations can be tailored to guide healthcare organizations in enhancing hand hygiene practices among their staff.

Firstly, with regard to age (Table 1 and Table 2), it is evident that there is no significant difference in the Level of Knowledge and Level of Compliance among staff nurses across different age groups. Therefore, interventions aimed at improving hand hygiene adherence can be uniformly implemented for all age categories, from 21 years old and above. Specialized training programs or awareness campaigns may be designed to address the needs of all age groups collectively, fostering a consistent level of knowledge and compliance.

Regarding gender (Table 3), the study suggests that there is no significant difference in the hand hygiene practices between male and female staff nurses. Consequently, organizations may focus on implementing gender-neutral strategies for improving hand hygiene, such as regular training sessions, reminders, and feedback mechanisms.

In terms of years of experience (Table 4 and Table 5), the study reveals that while there is no significant difference in the Level of Knowledge, there is a significant difference in the Level of Compliance based on years of experience. Therefore, healthcare institutions may consider targeted interventions, such as additional training or support, for staff nurses with more than 9 years of experience to address the observed variation in compliance. Post Hoc tests (Table 5) highlight specific comparisons, suggesting that staff nurses with more experience, especially those with more than 9 years, may benefit from tailored strategies to improve adherence to hand hygiene practices.
Finally, when considering the sector of the hospital (Table 6), there is no significant difference in the Level of Knowledge and Level of Compliance between government and private hospitals. This implies that standardized interventions can be implemented across both sectors to ensure a consistent level of knowledge and compliance with hand hygiene practices.

The study recommends implementing organization-wide strategies for improving hand hygiene practices that are age-inclusive, gender-neutral, and considerate of the specific needs of staff nurses with varying years of experience. Standardized interventions across government and private hospitals can contribute to a uniform and enhanced level of hand hygiene adherence in the workplace.

CONCLUSION

This study aimed to investigate the potential associations between age, gender, years of experience, and hospital sector with the Level of Knowledge and Level of Compliance regarding hand hygiene adherence among staff nurses. The results, as presented in Tables 1 to 6, indicate that there is no significant difference in the Level of Knowledge and Level of Compliance based on age, gender, and hospital sector.

Firstly, the analysis of age groups revealed that all ages from 21 up to 36 years old and above demonstrated no significant difference in the level of knowledge and compliance to hand hygiene adherence in the workplace. This was confirmed by the Post Hoc Test in Table 2, further supporting the acceptance of the Null Hypothesis. The study suggests that interventions for improving hand hygiene practices can be uniformly applied across various age groups.

Similarly, when examining gender differences, the study found no significant disparity in the Level of Knowledge and Level of Compliance between male and female staff nurses. The decision to accept the Null Hypothesis is supported by the T-TEST results in Table 3, suggesting that gender-neutral strategies may be effective in enhancing hand hygiene adherence.

Contrary to the lack of significance in the Level of Knowledge, the Level of Compliance exhibited a significant difference when grouped according to years of experience. Staff nurses with more than 9 years of experience showed a variation in compliance levels compared to those with fewer years of experience, as indicated in Table 5. This emphasizes the importance of targeted interventions for experienced staff to address the observed differences in compliance.

Lastly, the study examined the hospital sector and found no significant difference in the Level of Knowledge and Level of Compliance between government and private hospitals. This suggests that strategies to improve hand hygiene adherence can be standardized across both sectors. According to Nura Muhammed Abdella Et al (2014), Hand hygiene compliance among HCPs in Gondar University Hospital was found to be low. Good knowledge of Hand Hygiene Compliance, taking training, the presence of Alcohol Base Hand Rub in working area, the presence of individual towel or tissue paper in working area and Knew the presence of IP committees were found to be the independent predictors for Hand Hygiene Compliance in Gondar University Hospitals. It is better to give training on hand hygiene and provide necessary material like alcohol based hand rub and individual towel or tissue paper.

In summary, the findings of this study provide valuable insights for healthcare organizations aiming to enhance hand hygiene practices across health care working areas.

COMPETING INTEREST

No conflict of interest.

ACKNOWLEDGEMENT

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FUNDING

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AUTHORS CONTRIBUTION

The conceptualization, methodology, validation, formal analysis, inquiry, resources, writing-original draft preparation, writing-review and editing, and visualization were all equally contributed to by the writers. After reading the published version of the manuscript, each author gave their approval.

REFERENCES


https://www.sciencedirect.com/journal/american-journal-of-infection-control


This book by Robert Cialdini is a classic in the field of social psychology and discusses principles of influence, including compliance.


Ajzen's Theory of Planned Behavior is often used to predict and explain human behavior, including compliance with certain practices.


While Milgram's work focuses more on obedience, it can provide insights into compliance within authority structures.


World Health Organization (2009). Result of the Hand Hygiene Knowledge Questionnaire for Health-Care Workers. assets.researchsquare.com › files › rs-9664