

**A STUDY ON KNOWLEDGE, ATTITUDE AND PRACTICE
OF HOSPITAL SANITATION STAFF POST COVID-19
TRAINING IN DISTRICT LAKHIMPUR KHERI, UTTAR
PRADESH**

DISSERTATION 2020

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INTRODUCTION

- Novel Corona virus has become a major threat to the point where it is of utmost importance to take maximum precaution for its control. In an effort to alleviate the outbreak of COVID-19, government is adopting various measures to regulate all the processes. From identifying isolation and quarantine facilities to training of broad array of people from healthcare workers and sanitation staff.
- The aim of this study is to assess the knowledge, attitude and practices of ward boys and sweepers on corona virus and infection prevention and also to identify gaps, if any, in the present training methodology that is being followed to train the Hospital staff.

RATIONALE

- The main rationale of this study is to focus on the Hospital Sanitation staff (ward boys and sweepers) who have been chosen to be the part of the hospital staff team, elected to perform their respective duties at a L1 facility to treat the COVID-19 positive patients. Emphasis has been given to the para-medical staff i.e. the staff who are not directly involved in providing specific healthcare to the patients but are involved in other important activities of keeping the healthcare facility sanitized to prevent further spread of infection.
- The KAP study conducted will assess on all the three measures by using an OSCE checklist that will evaluate them on their infection control practices and a questionnaire that assesses their knowledge and attitude towards COVID-19.

OBJECTIVES

- To assess the knowledge, attitude and practices of ward boys and sweepers on corona virus and infection prevention.
- To identify gaps in the present training methodology that is being followed to train the Hospital sanitation staff.

RESEARCH QUESTION

- What is the present status of Knowledge, attitude and Practices of the ward boys and sweepers post training on COVID-19 and infection prevention protocols to prevent its spread in the community?
- What improvements can be done in the training material as well as the training sessions to improve the knowledge, attitude and practices of the hospital staff that will be serving a corona virus positive patient in future?

LITERATURE REVIEW

1. A study conducted was conducted in Malaysia to assess the Knowledge, Attitude and Practices in the general populace. The respondents had a positive attitude towards control of corona virus and the ability of the government to defeat the disease but were averse to wearing face mask.
2. A Cross-sectional study was done in Henan (China) to assess the knowledge, practices, and attitudes of healthcare professionals with regards to the pandemic of Covid-19. Eighty-Nine percent of healthcare professionals were found to have sound information regarding COVID-19. The attitudes and practice of healthcare workers regarding COVID-19 was found to be dependent upon education levels and work experience

- A study conducted in Pakistan through a questionnaire asked to Healthcare workers. It concluded that doctors and nurses showed intricate knowledge in comparison to sanitary staff on bio-medical waste management.
- A cross-sectional study was conducted to assess the knowledge as well as the training of private hospital cleaners in Etiosa, Nigeria. The study concluded that a knowledge gap exists due to below par training, thereby, increasing the probability of occupational risks in these hospital cleaners and advises development of appropriate training mechanisms to prevent suboptimal practices in order to prevent cross transmission of infections

METHODOLOGY

- A. **Study Design:** A Descriptive Cross-sectional Study
- B. **Study Setting:** The study has been conducted at District Lakhimpur Kheri, Uttar Pradesh, India.
- C. **Duration of study:** The study was conducted by collecting primary data for 60 days from 25-03-2020 to 25-05-2020 as and when the trainings for different teams were conducted.
- D. **Sampling Technique:** Convenience sampling method has been chosen to conduct this study.
- E. **Sample Frame and Size:** Sample frame has been taken out all the sweepers and ward boys posted at various CHC's, PHC's and District Hospitals. The sample frame constitutes of only those ward boys and sweepers who were chosen to be a part of the team. This makes the sample frame to be 99. A total of 40 respondents were chosen from the sample frame for the study, according to the inclusion and exclusion criteria.

F. Inclusion Criteria:

- Ward boys and sweepers that have been chosen to be the team members who will be posted at L1 facility for COVID positive patients.
- The sanitation staff that has received COVID-19 training.
- The sanitation staff who agreed to respond to the OSCE and Questionnaire.

G. Exclusion Criteria:

- Medical Officer's, Staff nurses, Pharmacists and Lab technicians of the same teams.
- Those ward boys and sweepers who have not been chosen as team members posted at any COVID facility in the district.
- Untrained ward boys and sweepers who are team members but could not attend the main training session that was given for the team members.
- The sanitation staff who did not consent to respond to the OSCE and questionnaire.

H. Data Collection and Tools used:

- Structured phone interview
- The data was collected over the phone
- The data was collected after 3-5 days of the training session.
- During data collection 25 sweepers and 14 ward boys were interviewed depending upon the inclusion and exclusion criteria.

Tools Used:

1. OSCE Checklist to assess the practices for Hand washing, Use of face mask and 1% Chlorine solution. Preparation of chlorine solution was asked only to the ward boys out of the total sanitation staff.
2. Questionnaire to assess the knowledge and attitude of the staff towards COVID-19 and Infection prevention.

Analysis Tool- MS-EXCEL

RESULTS AND DISCUSSION

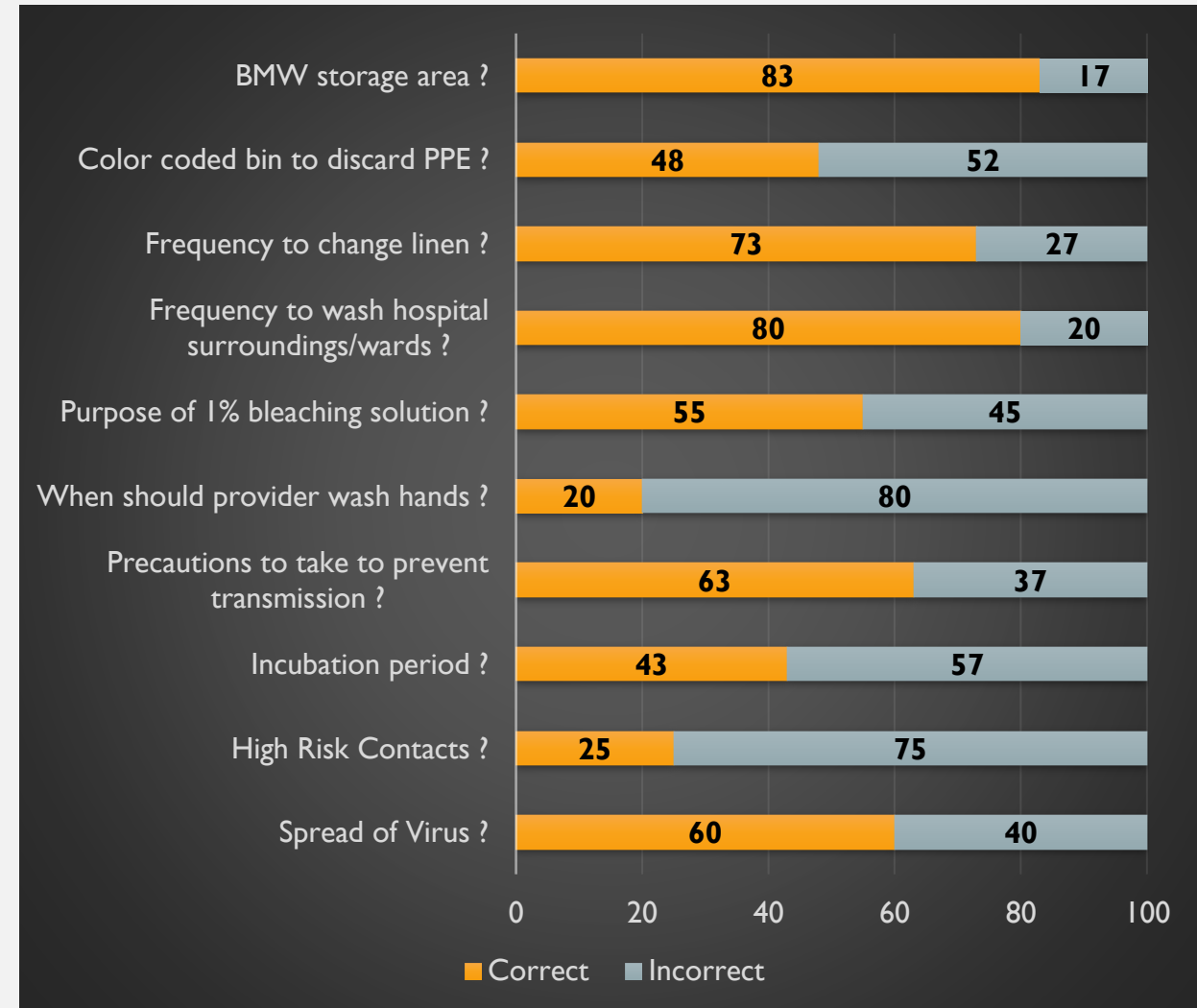
A. ASSESSMENT OF KNOWLEDGE

B. ASSESSMENT OF PRACTICES

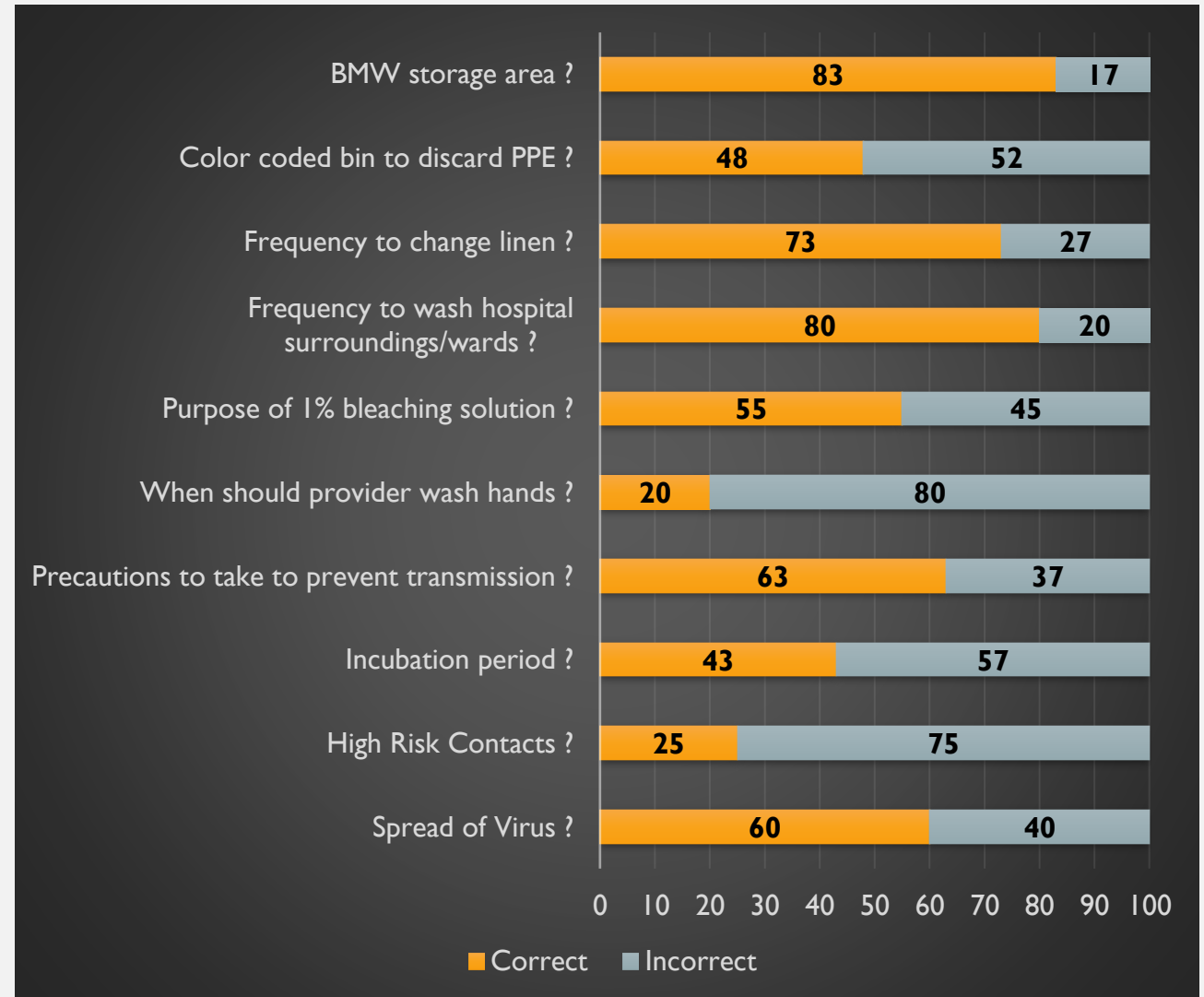
C. ASSESSMENT OF ATTITUDE

A. ASSESSMENT OF KNOWLEDGE

- Participants - 40 respondents, all male
- Average age -32 years (Range 20-45 years, SD= 6.4)
- **When asked about means of spread** - the respondents missed the indirect spread through linen and other items that were used for or by the patients.
- Majority of the respondents were **confused about high risk contacts**.
- **Incubation period** were also unclear in terms of number of days.



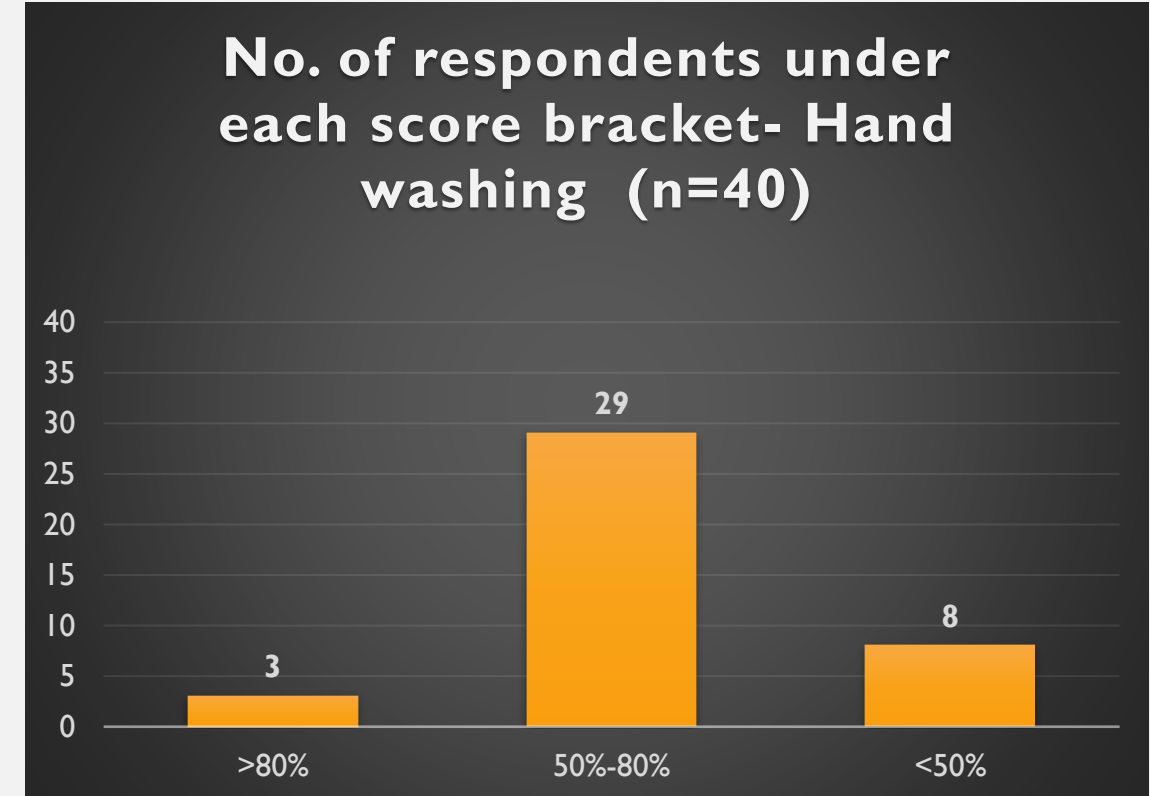
- Respondents were less confident on the color of dustbin in which used PPE has to be discarded. Most of them answered yellow but according to the guidelines it has to be discarded in the red bin.
- Knowledge on the use of 1% chlorine solution was retained amongst the ward boys but sweepers were lacking of that, especially missing out on cleaning of door handles and counter tops.



B. ASSESSMENT OF PRACTICES

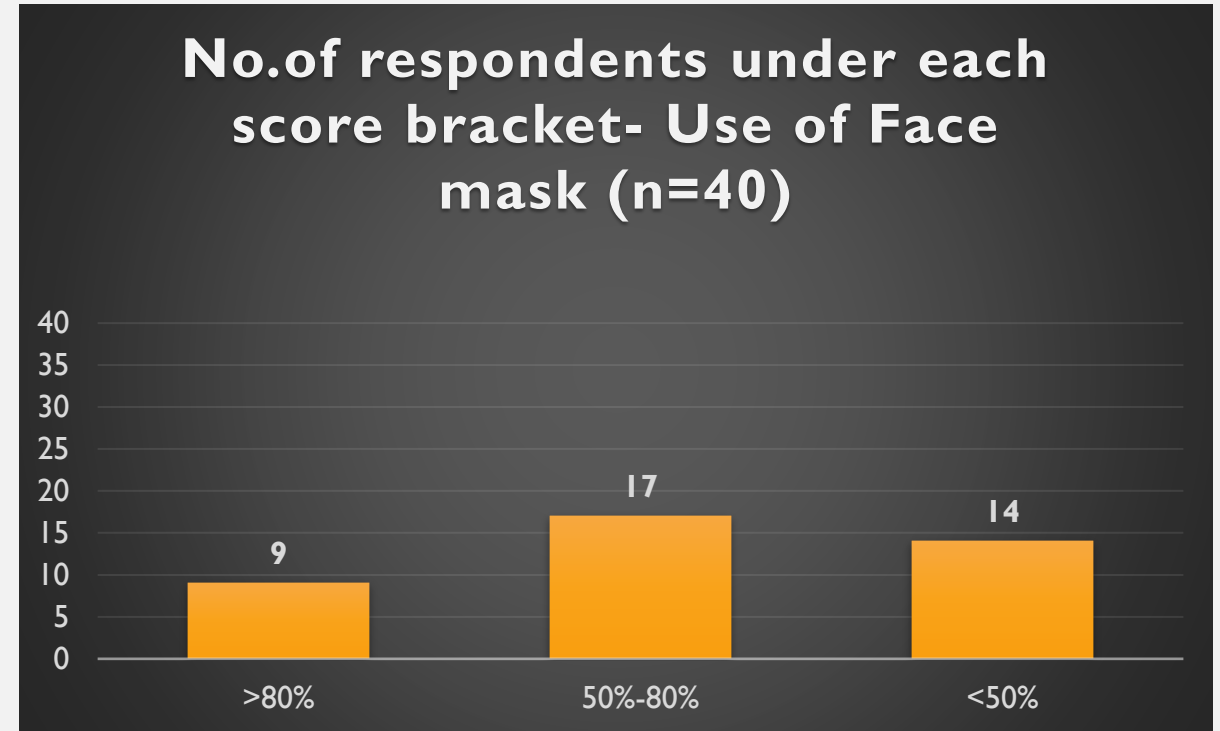
HAND WASHING

- The respondents were able to describe most of the steps but did not retain protocols of hand washing before touching the patient, and only focused what they had to do after coming in contact.
- In OSCE, majority of them got less than 80% as they were missing out on a few steps like removal of ornaments before washing hands.



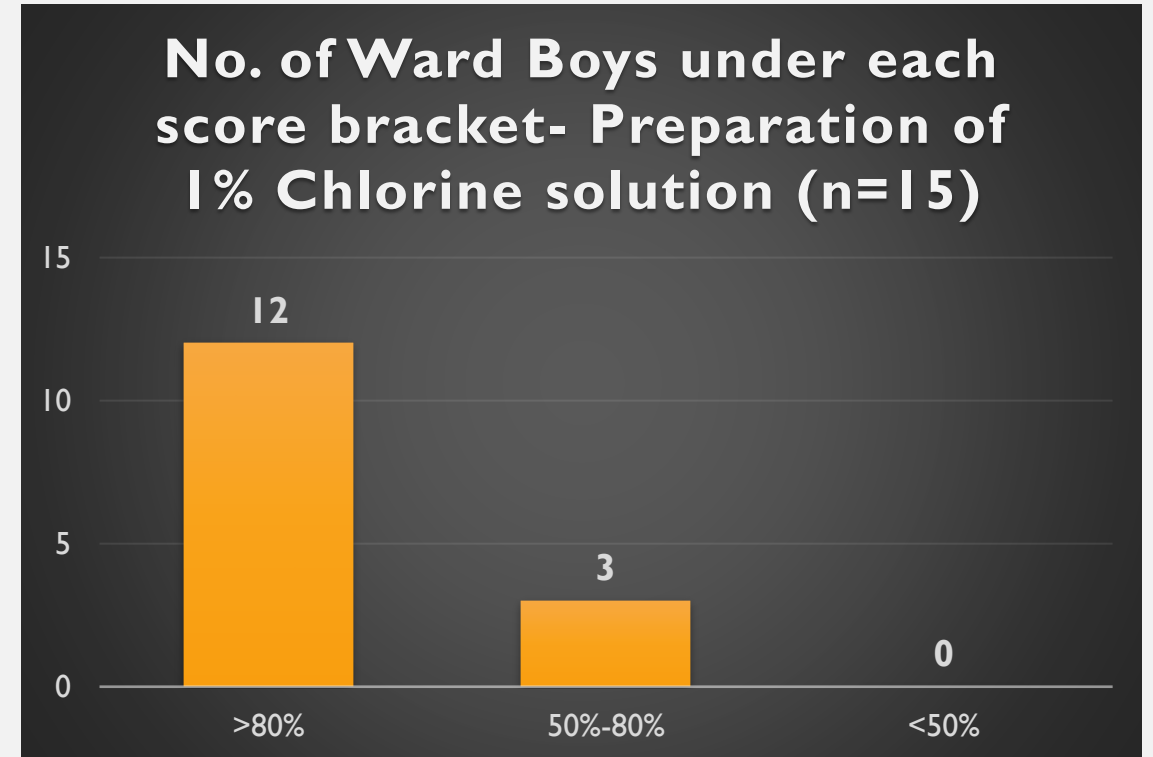
USE OF FACE MASK

- Some very crucial steps were not mentioned by them during the interview such as washing hands before wearing a mask and removal of face mask by lace instead of the front part.

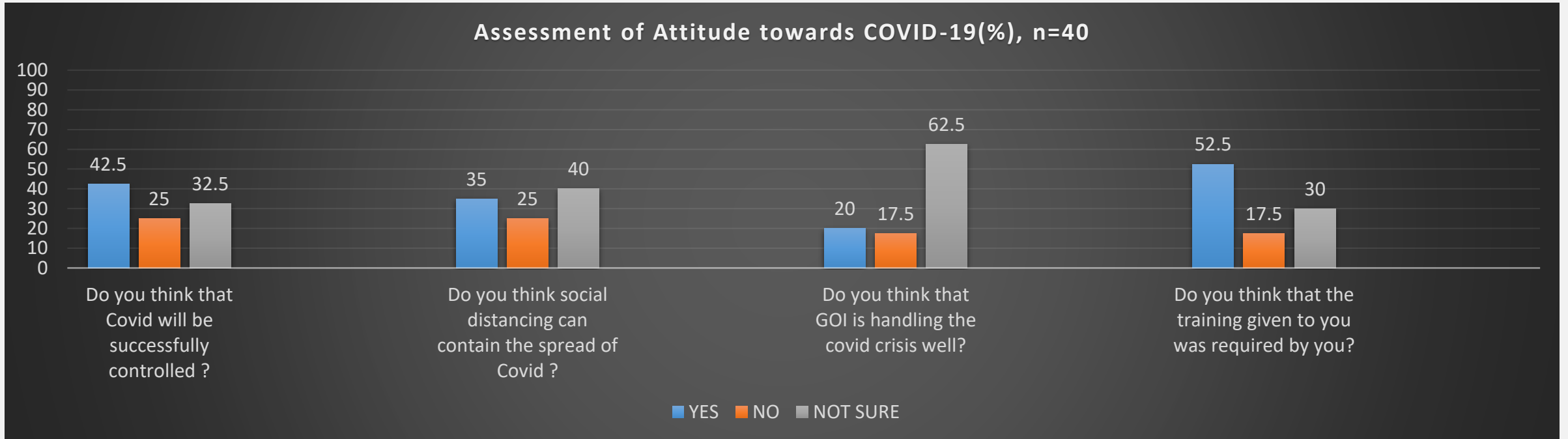


PREPARATION OF 1% CHOLRINE SOLUTION

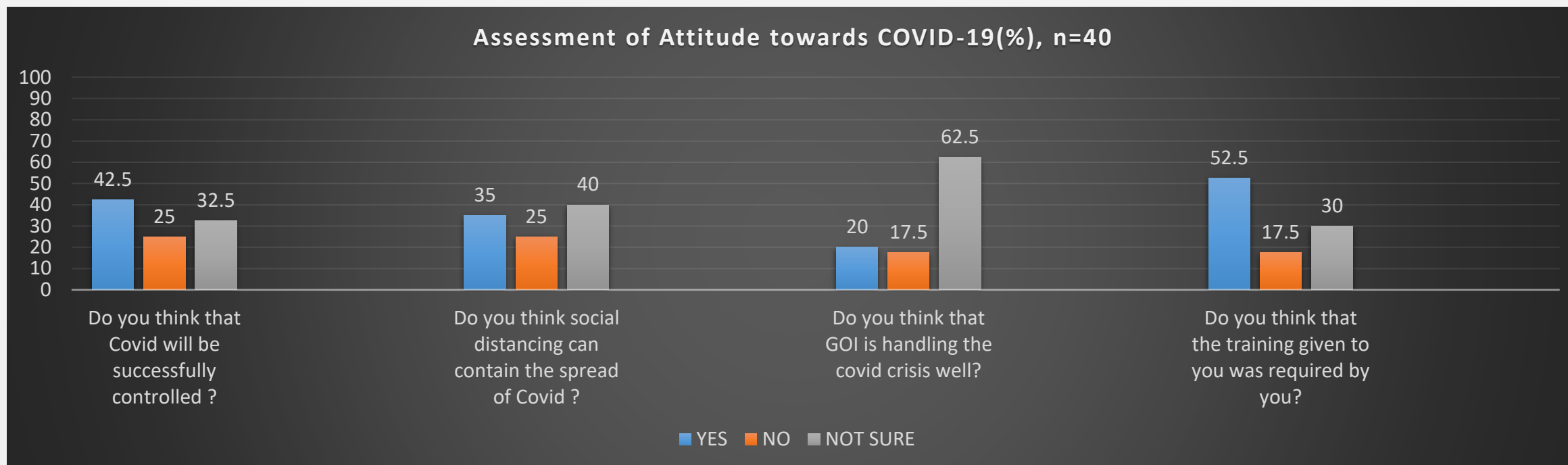
- The results was good and the 3 respondents who scored less than 80% did not mention the use of protective items such as apron and utility gloves before making the solution.



C. ASSESSMENT OF ATTITUDE



- Can COVID-19 will successfully be controlled - Majority of both sweepers and ward boys believe that COVID-19 can be successfully controlled.
- Whether they think that social distancing can contain the spread of corona virus – 40 % not sure and 35% agreed to social distancing
- Whether they agreed that the Government of India is handling the COVID crisis well - Around 17.5% disagreed as they that the government can handle the situation in a better way.
- Whether they think that the training given to them was required or not – Majority ward boys were not sure whether they require the training session on COVID-19.



The present study found that majority of respondents feel that the Government of India could handle the crisis in a better way. Dissatisfaction was seen in the respondents towards the policies followed by government. Many respondents were unsure about control of COVID-19 and that social distancing is a way to reduce the spread. This can also be related to low adherence to infection prevention protocols in the past specially in a rural setting.

CONCLUSION

- In summary, the present study was able to provide a comprehensive examination of knowledge, attitude and practices of ward boys and sweepers who will be taking care of COVID positive patients. The amount of knowledge that they grasped is good considering that the staff attended only one training session initially, but further needs to be augmented. This will help in improved recollection and help in improving the practices in daily life.
- In addition to the knowledge enhancement, Practices of the sanitation staff has to be of major focus. Thorough explanations and demonstrations have to be given and repeated for the hand washing practices so that they can be imbibed and then mimicked while actually performing their respective duties. Message regarding social distancing still needs to be put across as much as possible for the staff to actually accept the new way of living until these times end. Consistent messaging from the Government are key to aid public knowledge and understanding of COVID-19.

RECOMMENDATIONS

- Repeat training sessions were suggested to the government officials as well as the organization.
- Separate training sessions for Hospital sanitation staff and other members of the team (Medical officers, Staff nurses, Pharmacists and lab Technicians). This will help in improved concentration as more emphasis could be given on infection prevention. Also, more relevant matter and videos can be shown.
- Use of audio-visual aids were a challenge in the beginning, hence on behalf of IHAT it was suggested to initiate the concept of online meetings through various applications like Zoom and Cisco WebX. This was accepted and started by the government officials. In those situations where the staff did not have access to smartphones, the MOIC of respective facilities were asked to arrange the required medium.
- Circulation of videos on hand washing and use of face mask through online platforms like Whatsapp, can be also done so that the staff has access to these important contents readily

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THANK YOU