



DISSERTATION PRESENTATION ON

ASSESSMENT OF KNOWLEDGE AND PRACTICE FOR INFECTION PREVENTION OF TRAINED HEALTH CARE WORKERS FOR COVID-19 IN CHITRAKOOT DISTRICT, UTTAR PRADESH.

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DISSERTATION PRESENTATION 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.

AGENDA

I	Aim and Objectives
2	Research Methodology
3	Results
4	Conclusion
5	Suggestions
6	Annexure

AIM- The aim of this study Assessment of knowledge and practice for infection prevention of trained health care workers for covid-19 in Chitrakoot district, Uttar Pradesh.

■ **OBJECTIVE 1-**

To assess the knowledge and practice of infection prevention among health care workers for covid-19 in Chitrakoot district, Uttar Pradesh.

• **OBJECTIVE 2-**

To identify the gap between actual practice and ideal practice of health care workers for infection prevention practices for covid-19 in Chitrakoot district, Uttar Pradesh.

RESEARCH METHODOLOGY

- **1. Research question-**what is the status of knowledge and infection prevention practices of trained Health Care Workers in the current scenario of the Corona Virus COVID 19 pandemic?
- **2. Inclusion criteria-** Trained health care worker for covid-19 including medical officer, staff nurse, ward boy, sweeper, lab technician.
- **3. Exclusion criteria-** Untrained health care workers, staff indulging in administrative work
- **4. Study design-** A Descriptive Cross-sectional Study
- **5. Sample size – 50,** Convenience Sampling done to select the sample size as the responses of only those staff was recorded who were available out of the sample frame of all the staff who were chosen to be a part of the team and trained for the same.

RESEARCH METHODOLOGY

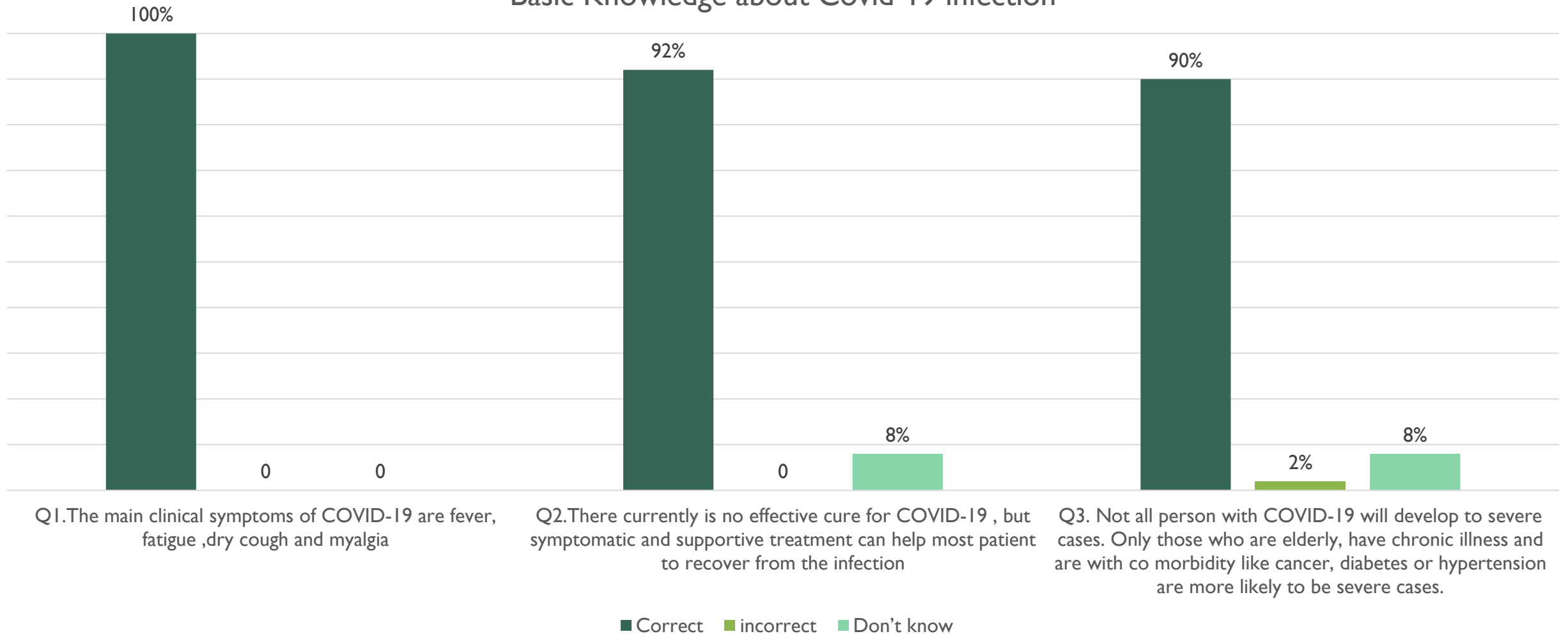
- **5 Study tool** – The survey instrument consists of two main tools
- **5.1. OSCE Checklist-** for
 - Hand hygiene
 - Preparation of 1% chlorine solution
 - Donning of personal protective equipment
 - Doffing of personal protective equipment
 - Use of mask
- **5.2 Questionnaire:** The questionnaire consists of 14 questions that helped in assessing the Knowledge of the sanitation staff regarding COVID19. Each question has multiple options and one correct answer

DISTRIBUTION OF PARTICIPANTS ACCORDING TO THEIR DESIGNATION

Sr NO	Designation	Total NO
1	Medical officer	13
2	Staff nurse	12
3	Ward boy	5
4	Sweeper	10
5	Pharmacist	5
6	Lab Technician	5
	Total no of Staff	50

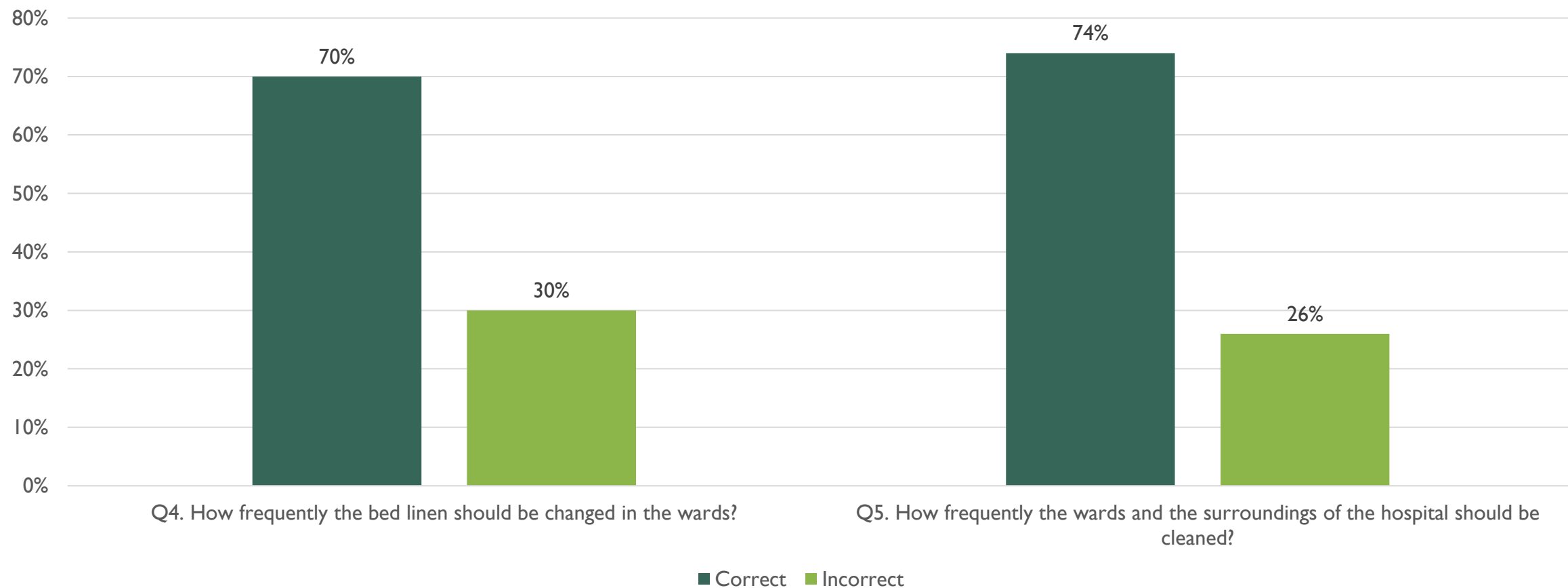
RESULTS

Basic Knowledge about Covid-19 infection



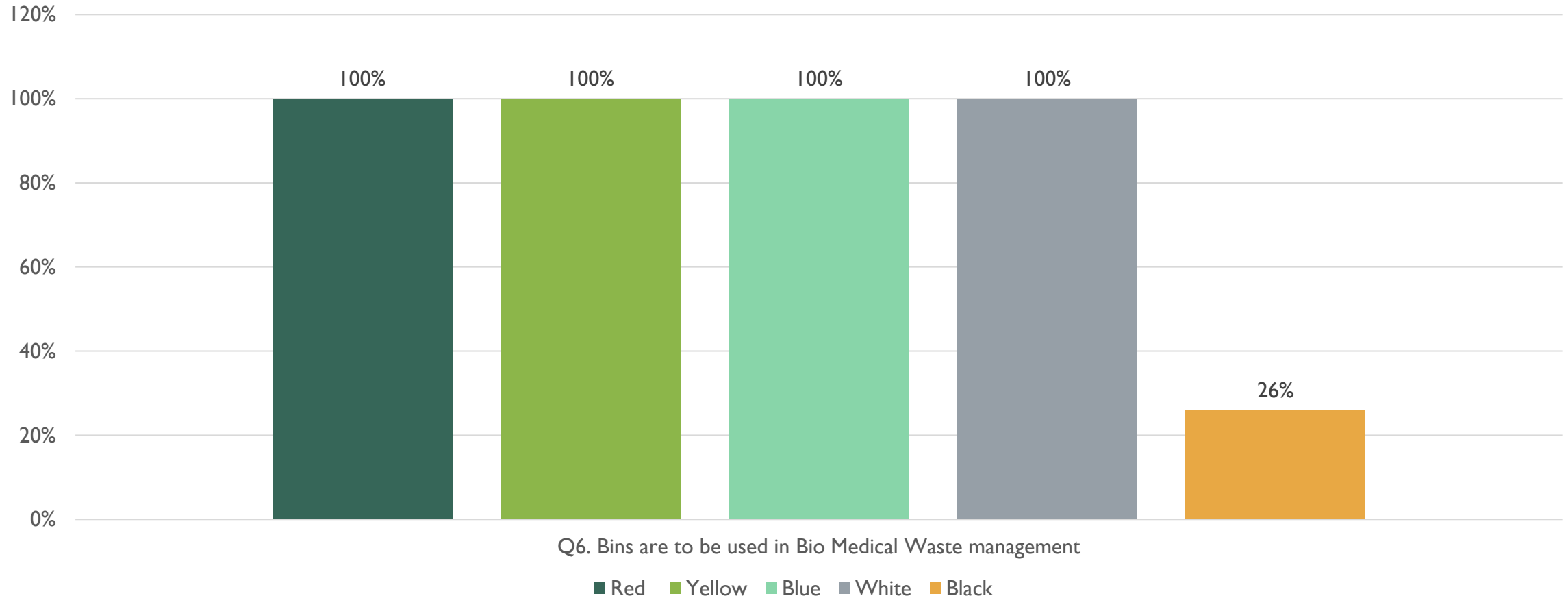
FREQUENCY OF CLEANING OF WARDS AND SURROUNDINGS

Frequency of changing linen and cleaning of wards and surroundings (N=50)

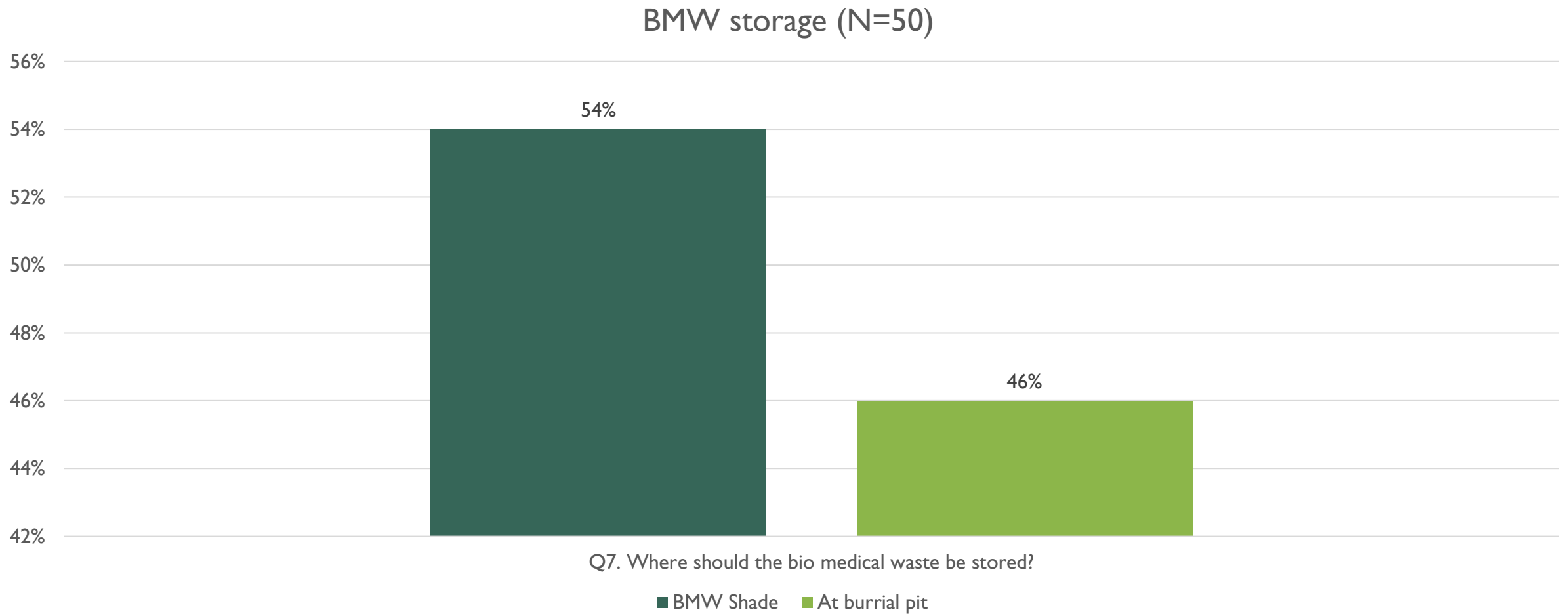


BIO MEDICAL WASTE MANAGEMENT

Bins use in BMW (N=50)

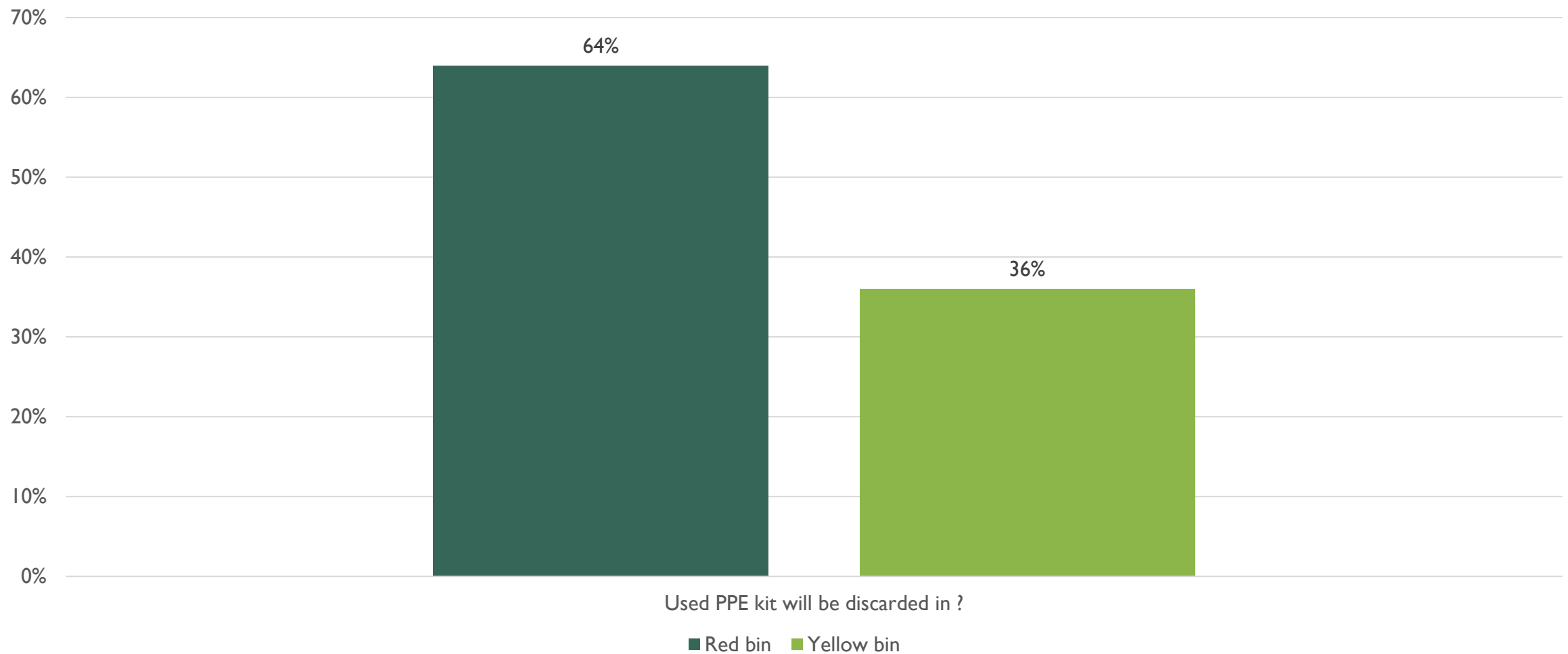


STORAGE OF BMW



PPE KIT

PPE Kit Disposal



KNOWLEDGE ASSESSMENT TOWARDS INFECTION PREVENTION

Knowledge assessment	Medical Officer(N=13)	Staff Nurse(N=12)	Sweeper(N=10)	Ward Boy(N=5)	Pharmacist(N=5)	LA/LT(N=5)
The main clinical symptoms of COVID-19 are fever, fatigue ,dry cough and myalgia	13(100%)	12(100%)	10(100%)	5(100%)	5(100%)	5(100%)
There currently is no effective cure for COVID-19 , but symptomatic and supportive treatment can help most patient to recover from the infection	13(100%)	11(92%)	8(80%)	4(80%)	5(100%)	5(100%)
Not all person with COVID-19 will develop to severe cases. Only those who are elderly, have chronic illness and are with co morbidity like cancer, diabetes or hypertension are more likely to be severe cases.	13(100%)	11(92%)	8(80%)	3(60%)	5(100%)	5(100%)

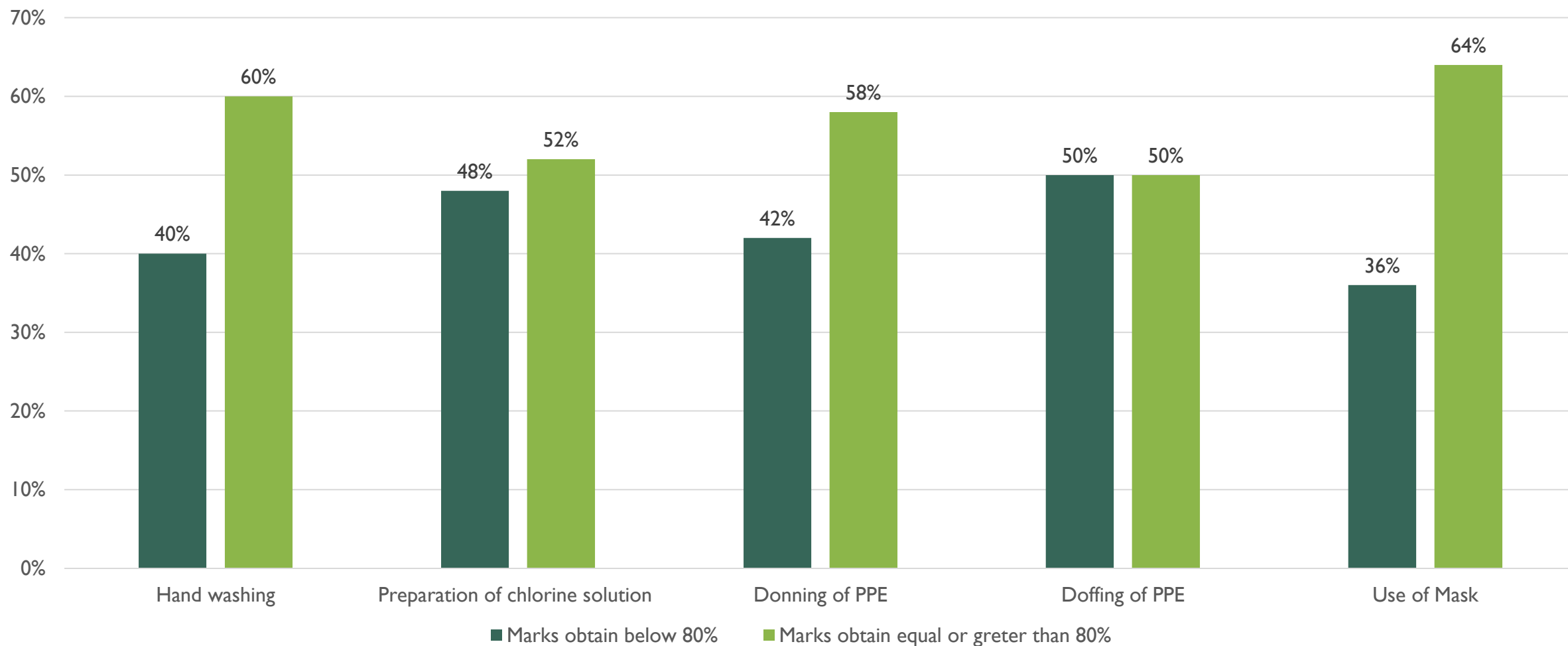
Knowledge assessment	Medical Officer(N=13)	Staff Nurse(N=12)	Sweeper(N=10)	Ward Boy(N=5)	Pharmacist(N=5)	LA/LT(N=5)
Persons with COVID-19 cannot infect the virus to other when a fever is not present.	10(77%)	10(83%)	6(60%)	5(100%)	4(80%)	5(100%)
People who have contact with someone infected with COVID-19 should be immediately isolated in proper place . in general observation period is 5 days.	10(77%)	9(75%)	6(60%)	3(60%)	2(40%)	3(60%)
How frequently the wards and the surroundings of the hospital should be cleaned?	10(77%)	9(75%)	7(0%)	3(60%)	3(60%)	4(80%)

Knowledge assessment						
	Medical Officer(N=13)	Staff Nurse(N=12)	Sweeper(N=10)	Ward Boy(N=5)	Pharmacist(N=5)	LA/LT(N=5)
How frequently the bed linen should be changed in the wards?	11(85%)	8(67%)	7(70%)	3(60%)	2(40%)	4(80%)
Bins are to be used in BMW(Can mark multiple)	11(85%)	9(75%)	8(80%)	4(80%)	3(60%)	2(40%)
Which BMW bin is Puncture proof?	13(100%)	8(67%)	4(40%)	3(60%)	2(40%)	4(80%)

Knowledge assessment	Medical Officer(N=13)	Staff Nurse(N=12)	Sweeper(N=10)	Ward Boy(N=5)	Pharmacist(N=5)	LA/LT(N=5)
Used PPE kit will be discarded in ?	10(77%)	8(67%)	7(70%)	2(40%)	3(60%)	2(40%)
Where should the bio medical waste be stored?	9(69%)	8(67%)	5(50%)	2(40%)	1(20%)	2(40%)
According to GO, after use PPE kit will be dip into 0.5 % chlorine solution before dispose into BMW bin	13(100%)	9(75%)	6(60%)	2(40%)	3(60%)	4(80%)

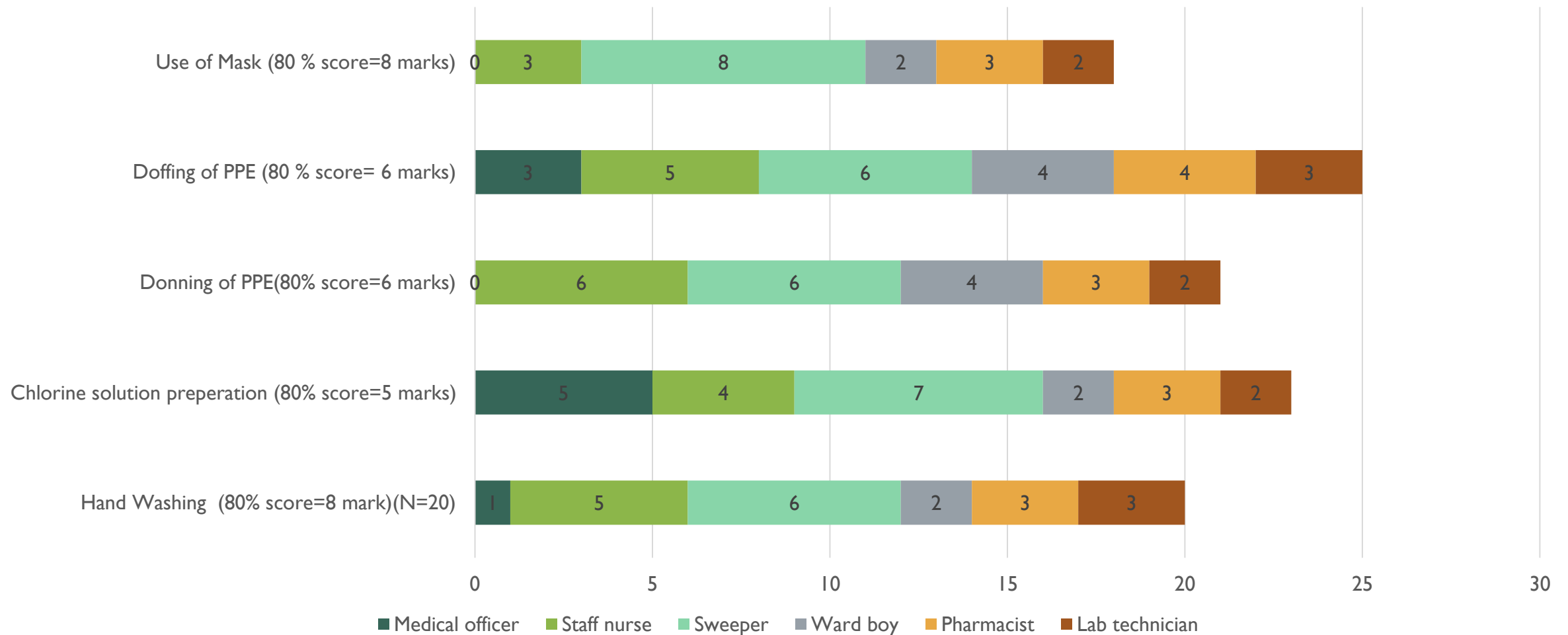
OSCE STATUS OF HEALTH CARE WORKERS

OSCE Status (N=50)



LOW PERFORMING HEALTH CARE WORKERS IN OSCE (BELOW 80% SCORE)

OSCE wise status of Health Care Workers



CONCLUSION

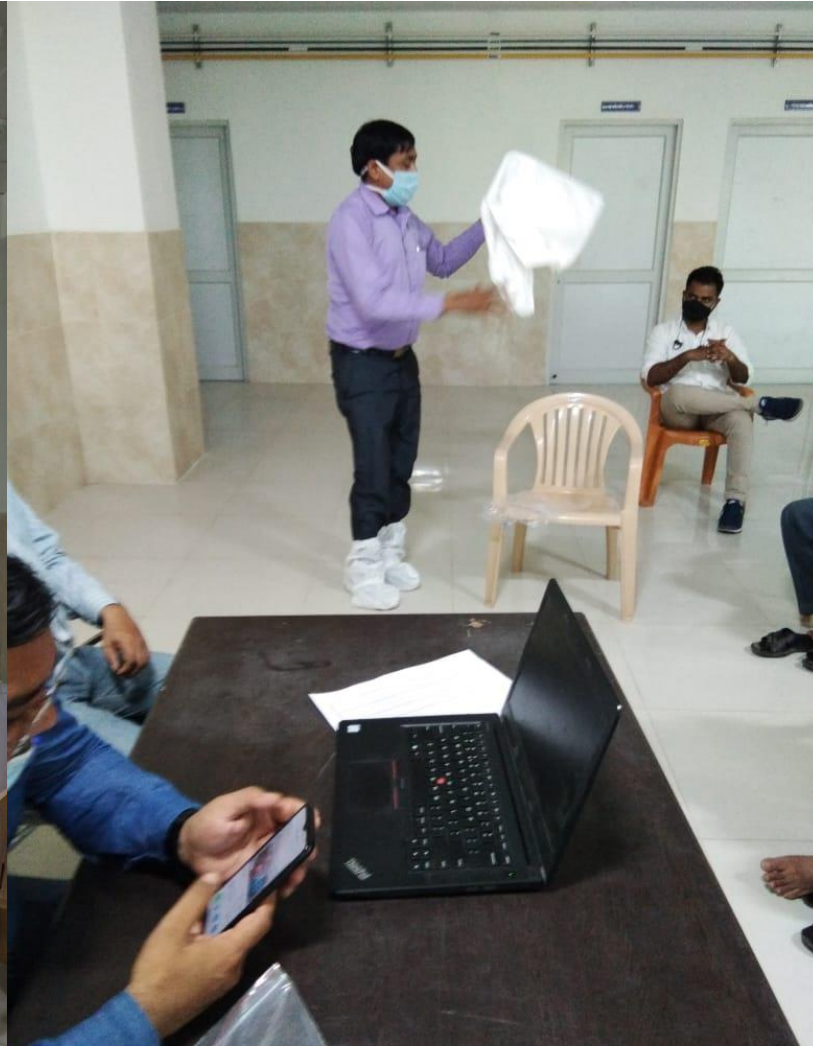
Concluding from results ,

- Health care workers gets one session of training, but to fight corona virus repeat training sessions and close monitoring by team leaders are a must.
- Knowledge about Covid-19 infection among Medical officer is more than other staff. Fourth class and other than MO staff answered incorrect in many questions, they need Refresher training and continuous monitoring for IP practices.
- In OSCE almost same pattern happened, seems even MOs also need refresher training for Chlorine solution preparation, Doffing of PPE and other staff's performance in OSCE was not satisfactory as most of staff get below 80% marks in OSCEs.

SUGGESTIONS:-WHAT TO DO WITH POOR PERFORMING HEALTH CARE WORKERS?

1. The amount of knowledge that they grasped can be further augmented by providing repeated training sessions
2. Segregate them and plan for re-training?
3. Plan refresher training for all
4. Plan to conduct refresher training with audio visual aids.
5. Continuous, day to day monitoring and supervision of forth class and third class staff by team leader on IP Practices .
6. Can display IEC of donning, doffing of PPE in changing room.
7. IEC of preparation of chlorine solution at point of preparation.
8. Can make a WhatsApp group including all team members .
9. Mock Drill for IP Practices
10. Plan games for learning.

GLIMPSE OF TRAINING



PPE DEMONSTRATION





“STAY POSITIVE WITH THOUGHTS AND STAY HEALTHY WITH HEART “





THANK YOU



GO BY GOVERNMENT OF UTTER PRADESH FOR COVID-19 L-1 PREPERATION

QUESTIONER

Questioner for knowledge towards COVID-19 infection Prevention	
Name	
Designation	
Place of posting	

1	The main clinical symptoms of COVID-19 are fever, fatigue ,dry cough and myalgia	True.....A False.....B Don't Know.....Z
2	There currently is no effective cure for COVID-19 , but symptomatic and supportive treatment can help most patient to recover from the infection	True.....A False.....B Don't Know.....Z
3	Not all person with COVID-19 will develop to severe cases. Only those who are elderly, have chronic illness and are with co morbidity like cancer, diabetes or hypertension are more likely to be severe cases.	True.....A False.....B Don't Know.....Z
4	Persons with COVID-19 cannot infect the virus to other when a fever is not present.	True.....A False.....B Don't Know.....Z
5	People who have contact with someone infected with COVID-19 should be immediately isolated in proper place . in general observation period is 5 days.	True.....A False.....B Don't Know.....Z
6	How frequently the wards and the surroundings of the hospital should be cleaned?	Every 3-4-hour.....A Once in a day.....B Every shift of duty in 8 hours....C Don't know.....Z
7	How frequently the bed linen should be changed in the wards?	With every shift of duty in 8 hours.....A Every 12 hours.....B Every 24 hours.....C Don't Know.....Z
8	Do you aware about BMW segregation?	Yes.....A No.....B
9	Bins are to be used in BMW(Can mark multiple)	Red.....A Yellow.....B Blue.....C Black.....D White.....E Green.....F Don't Know.....Z
10	Which BMW bin is Puncture proof?	Red.....A Yellow.....B Blue.....C Black.....D White.....E Green.....F Don't Know.....Z

OSCE CHECKLISTS

OSCE CHECKLIST FOR HAND WASHING- 1

Let the participant demonstrate the steps of hand washing

#	Steps	Score	Participant				
			1	2	3	4	5
1	Remove rings, bracelets, threads and watch.	1					
2	Wet hands in clean running water. Applies soap.	1					
3	Vigorously rub hands on both sides in following manner • Palms, fingers and web spaces • Back of hands • Knuckles • Thumbs • Fingertips and creases • Wrist and forearm up to the elbow	6					
4	Thoroughly rinse hands in clean running water.	1					
5	Allows air dry keeping the hands above waist level.	1					
Total		10					

OSCE CHECKLIST: PREPARATION OF 1% CHLORINE SOLUTION - 2

Let the participant demonstrate the steps to prepare of 1% Chlorine solution.

#	Steps	Score	Participants				
			1	2	3	4	5
1.	Keep the necessary items ready (plastic bucket and mug, wooden stirrer, tea spoon, bleaching powder in an airtight container, 1 litre water, plastic apron, utility gloves)	1					
2.	Wear plastic apron and utility glove	1					
3.	Take 1 litre water in a plastic bucket	1					
4.	Put 6 level tea spoonful of bleaching powder (30 gm) in the plastic mug and add little water to make thick paste	1					
5.	Add this paste to 1 litre water in the bucket to make 1 % chlorine solution	1					
6.	Stir the solution with a wooden stirrer – a milky white solution will appear. Keep it covered.	1					
Total		6					