

Affiliation and Contact Information:

Dear colleagues,

Dear colleagues,

At present, COVID-19 infection presents a great challenge for all health care workers. A study on the optimization of protection strategies for the COVID-19 infection among health care workers is lacking. This survey covers perceived transmission mechanisms, infection control practices and associated factors of COVID19 among health care workers. Your personal information will be desensitized. If you want to withdraw from the study at any time during the research, your response on the questionnaire will be removed. If you agree to participate in the survey, please check “Yes” and help our data collectors fill the questionnaire. It will take 40_45minutes.

We are looking forward to your support, thank you!

I voluntarily agree to participate in this research program **Yes** **No**

Signature _____ **Date** _____ **Address (Tel no.)** _____

Data collector name _____ **Signature** _____

Questionnaire on assessment of perceived transmission mechanisms and associated factors among COVID 19 infected Health workers managed in Addis Ababa, Ethiopia 2020

1. Health workers information	
1.1 Code	
1.2 Age	
1.3 Sex	1. Male 2. Female
1.4 Marital Status	1. Married 2. Single 3. Widowed 4. Divorced 5. Separated
1.5 Average monthly income	_____
1.6 Address	City : _____ Subcity: _____ Woreda : _____
1.7 Transportation means to and from work before diagnosis of COVID19 (more than one answer is possible)	1. Public Minibus 2. ContratTaxi 3. Public Train 4. Public Bus 5. Public Service 6. Private vehicle 7. Walk 8. Other ,specify -----
1.8 Living status in the preceding 1 month before diagnosis of COVID19	1. Alone 2. With family 3. With friends 4. Camp 5. Other ,specify -----
If you live together with family or other people please answer related questions on the bottom	
1.9 How many people lived together with you in the preceding 1 month before the diagnosis of COVID19? -----	
1.10 Did you have your own separate bedroom in the preceding 1 month before the diagnosis of COVID19? 1. Yes 2. No	
1.11 Did you have your own separate toilet in the preceding 1 month before the diagnosis of COVID19? 1. Yes 2. No	
1.12 If you didn't have a separate toilet, with how many people did you share the toilet with? -----	
1.13 Did you make any change in your living condition before you were diagnosed with COVID 19? 1. Yes 2. No	
1.14 If yes, what sort of changes did you make? (more than one answer is possible)	1. Change residency place 2. Avoid using public services (transport, market, restaurant, café,...) 3. Avoid visiting your family 4. Avoid attending social events (funeral, wedding, . . .) 5. Other,specify _____
1.15 Place of work (Health facility)	
1.16 Year of professional service	

1.17 Occupation in health care facility	1. Medical doctor 2. Specialist, Specify _____ 3. Resident, Specify _____ 4. GP, Specify dept _____ 5. Nurse 6. Anesthetist 7. Radiology/x-ray technician 8. Phlebotomist 9. Laboratory personnel 10. Physical therapist 11. Dentists 12. Midwife 13. Intern 14. Health officer 15. other ,Specify _____	Supporting staffs 16. Admission/reception clerks 17. Patient transporters 18. Catering staff 19. Cleaners 20. Ambulance drivers 21. Guards 22. Admin workers 23. Morgue Professional 24. other ,Specify _____
1.18 Where were you working in the preceding 14 days before you were diagnosed with COVID-19 (more than 1 answer is possible)	1. COVID-19 Isolation Center 2. COVID-19 Treatment Center 3. COVID19 pre triage /fever clinic 4. Emergency 5. Out patient 6. Operation room 7. Bronchoscopy/Endoscopy unit	8. Inpatient Ward 9. ICU 10. Laboratory 11. Pharmacy 12. Cleaning service 13. Other, Specify _____
1.19 When were you confirmed to have acquired COVID19 (DD/MM/YYYY)		____/____/____
1.20 Did you have any history of substance use before diagnosis of COVID19? 1. Yes 2. No		
1.21 If Yes, (tick all that apply) <ol style="list-style-type: none"> 1. Alcohol, Duration _____ Amount _____ 2. Cigarette, Duration _____ Amount _____ 3. Khat, Duration _____ Amount _____ 4. Shisha, Duration _____ Amount _____ 5. Other, Specify _____ 		
1.22 How severe was your infection? 1. Asymptomatic 2. Mild 3. Moderate 4. Severe 5. Critical		
<i>Notation: for Question 1.22</i> <ol style="list-style-type: none"> 1. <i>Mild: clinical symptoms are mild, and no pneumonia manifestations on imaging examination ;</i> 2. <i>Moderate: fever and respiratory related symptoms, pneumonia on imaging examination (sao₂≥90%)(no signs of severe pneumonia)</i> 3. <i>Severe: Meet one of the following conditions:</i> <ol style="list-style-type: none"> A. <i>respiratory distress and RR >30 times / min</i> B. <i>oxygen saturation < 90%;</i> 4. <i>Critical: Meet one of the following conditions:(requiring ICU monitoring and treatment)</i> <ol style="list-style-type: none"> A. <i>Development of ARDS and respiratory failure (need for mechanical ventilation); PaO₂/FiO₂ ≤ 300mmHg</i> B. <i>sepsis(acute life threatening organ dysfunction caused by dysregulated host response to suspected or proven infection)</i> C. <i>shock;</i> 		

1.23 What symptoms did you have during your illness? (more than one answer is possible)

1. None	7. Loss of smell	13. Confusion(altered mentation)	19. Chest pain
2. Fever	8. Dry Cough	14. Sore throat	20. Muscle aches
3. Shortness of breathing	9. Productive cough	15. Nausea	21. Joint pain
4. Loss of taste	10. Diarrhea	16. Headache	22. Fatigue
5. Skin rash	11. Vomiting	17. Generalized body ache	23. Loss of appetite
6. Red eye	12. Chills	18. Congestion or runny nose	24. Other,_____

1.24 Did you have any co-morbidity? 1. Yes 2. No

1.25 If Yes, specify (more than one answer is possible)

1. Chronic cardiac disease	6. Asthma	11. Chronic neurological/neuromuscular disorder
2. Chronic pulmonary disease	7. HTN	12. Immunodeficiency including HIV- if HIV (1. Yes-on ART 2.Yes-not on ART 3.Unknown)
3. Chronic Kidney disease	8. Diabetes	13. Other, specify_____
4. Post-partum (< 6 weeks)	9. Tuberculosis	
5. Chronic liver disease	10. Malignancy	

1.26 Where were you isolated after diagnosis?

1. Isolated at home 2. Isolated at an Isolation or treatment center. Specify the location _____

1.27 What is Your Current condition after the infection?

- | | |
|--|--------------------------------|
| 1. I have recovered and was discharged from a hospital | 3. I have returned to work |
| 2. I am being treated in hospital | 4. I am being isolated at home |
| | 5. Other,_____ |

1.28 If your answer for Q. 1.27 is choice 1 & 3, Did you have the following symptoms after discharge or returned back to work? (more than one answer is possible)

1. Fatigue	9. Sleep disturbance	16. Difficulty concentrating
2. Fever	10. Loss of smell	17. Joint pain
3. Shortness of breathing	11. Loss of taste	18. Depression
4. Cough	12. Chest pain	19. Anxiety
5. Diarrhea	13. Abdominal pain	20. Generalized body ache
6. Chills	14. Memory loss	21. I did not have any symptoms
7. Myalgia	15. Congestion (nasal)	22. Other_____
8. Headache		

1.29 If you were discharged, for how long did you stay at the treatment center? _____

2. Adherence to infection prevention and control (IPC) measures information

2.1 Have you taken IPC training course **1. Yes** **2. No**

- 2.1.1** If your answer is yes, when did you take the course
 1. Before the diagnosis of COVID 19
 2. After the diagnosis of COVID 19

- 2.2** How much minimum cumulative IPC training (standard precautions, additional precautions) have you had at this health care facility
 1. Less than 2 hours
 2. More than 2 hours

2.3 Do you practice the Ethiopian National/WHO Covid-19 guide? 1. Yes 2.No 3. I don't know it exists

For the following questions, 'Always as recommended' means > 95% of the time; 'Most of the time' means 50% or more but not 95%; 'occasionally' means 20% to < 50% 'Rarely' means < 20% and never 0%.

	Always, as recommended	Most of the time	Occasionally	Rarely	Never
2.4 Do you follow recommended hand hygiene practices?					

2.5 Do you use alcohol-based hand rub or soap and water before touching a patient?							
2.6 Do you use alcohol-based hand rub or soap and Water before cleaning/aseptic procedures?							
2.7 Do you use alcohol-based hand rub or soap and water after (risk of) body fluid exposure?							
2.8 Do you use alcohol-based hand rub or soap and water after touching a patient?							
2.9 Do you use alcohol-based hand rub or soap and water after touching a patient’s surroundings?							
2.10 Do you use alcohol-based hand rub or soap and water outside your health care facility?							
2.11 Do you follow IPC standard precautions when in contact with any patient during routine practice? <i>(hand hygiene, gloves, facial protection, gown, respiratory hygiene and cough etiquette etc)</i>		<ol style="list-style-type: none"> 1. Always, as recommended 2. Occasionally 3. Most of the time 4. Rarely 5. Never 6. I don’t know what IPC standard precautions are 					
2.12 What PPE do you use when indicated based on risk assessment during your routine practice?	Always, as recommended	Most of the time	Occasionally	Rarely	Never	I don’t know the recommendation	
A/ Medical masks							
B/ Single use gloves							
C/ N95 respirators or equivalent							
D/ Face shields /goggles							
E/ Cover all suit /Disposable gowns							
F/ Boot covers							
G/ Head cape							
2.13 If you selected occasionally, rarely or Never to any of the items in question 2.12, specify the reasons?		<ol style="list-style-type: none"> 1. Insufficient supply of PPE 2. Don’t believe use of PPE would protect me 3. Believe that PPE should only be used for care of suspected or confirmed cases of COVID 19 4. Other specify _____ 					
2.14 What PPE is recommended by your health care facility during the following activities?	Medical Mask	N95	Gloves	Face shield/ Google	Cover all /disposable gowns	Head cape	Boot covers
A/ <i>When evaluating/caring for patients in non COVID areas</i>							
B/ <i>When evaluating/caring for suspected or confirmed COVID 19 patients</i>							
C/ <i>When touching patient materials surface(refer to questions 3.18 and 3.19 to see definitions of surfaces and patient materials</i>							
D/ <i>When in contact with patient’s body Fluids(refer question 3.17 for definition of body fluids)</i>							
E/ <i>When performing aerosol generating procedures?(refer to question 3.16.1, to see definition of aerosol generating procedures)</i>							

2.15 Do you wear medial face mask outside your health care facility?

1. Always, as recommended
2. Most of the time
3. Occasionally
4. Rarely
5. Never

3. Analysis of mechanism of Infection

3.1. What is the most likely route of your infection: (More than one answer is possible)

1. Droplet transmission (transmission when an infected person coughs, sneezes and talks etc...)
2. Contact transmission(transmission when touching surfaces/objects contaminated by secretions of infected persons)
3. Aerosol transmission (e.g. during tracheal intubation, non-invasive ventilation, tracheotomy, cardiopulmonary resuscitation, dental procedures, endoscopy, bronchoscopy etc.)
4. Digestive tract transmission
5. Not sure
6. Other, _____

3.2. Which is the most likely perceived source of your infection (More than one answer is possible)?

1. Community
 - 1.1 During transport or commutation (select this choice if you believe that your perceived source of infection is during transport within the community)
2. Working environment in health care facility
3. I don't yet know how I got infected
4. Other, _____

(If your answer is community ,please answer the questions from 3.3 to 3.7 and skip questions from 3.8- 3.21

If your answer is health care facility, answer questions 3.6 to 3.21 and skip questions from 3.3 to 3.5

If your answer is both community and health care facility, please answer questions from 3.3 to 3.21)

3.3 If you choose “Community”, What do you think has played a role for you acquiring COVID 19 infection (multiple answers are possible)

1. Suboptimal use of face mask
2. Inappropriate and/or inconsistent hand hygiene practice
3. Not implementing social distancing
4. Other _____

3.4 If you choose“ Community” as the most likely perceived source of your infection and if you select “not implementing social distancing” to play a role for you acquiring COVID 19 infection, please mention the events/activities(can choose more than one)

1. Attending social events
2. Dinning together
3. Other _____

3.5. If you choose “A. Community”, as a source of your infection, what is the most likely perceived mechanisim of your infection: (you can choose more than one answer) (where exactly in the community did you acquired the infection)

1. Have been to a place where there were cluster of cases infected by COVID-19, If you choose this, please provide the place name: _____
2. Had close contact with confirmed or suspected cases of COVID-19
3. Have attended large parties or visited crowded places, e.g. transport stations, market places, eder, etc.
4. Other, _____

3.6. Was there a family member suspected with COVID19 in the preceding 14 days before the diagnosis of COVID19?

1. Yes
- 2.No

3.6.1. If yes, how many people have been suspected? _____

3.7. Was there family member diagnosed with COVID-19 in in the preceding 14 days before the diagnosis of COVID19?

1. Yes
2. No

3.7.1. If yes, how many people have been diagnosed? _____

If you choose “B. Working environment in health care facility”, please answer the following questions

3.8 What do you think has played a role for you acquiring COVID 19 infection (multiple answers are possible)

1. Delayed recognition or suspicion of COVID19 infection
2. Long working hours
3. Suboptimal use of PPE
4. Stressful working environment
5. Inappropriate and/or inconsistent hand hygiene practice
6. Delay in laboratory results diagnostic of COVID 19
7. Not implementing social distancing
8. Other _____

3.8.1 If you select suboptimal use of PPE to the above question 3.8, what do you think is the most important cause of Infection related to personal protective equipment? (multiple answers are possible)

1. Improper use of protective equipment (concerning the technique during PPE utilization)
2. Insufficient protection (Inappropriate level of protection for that particular risk example being using only medical mask for aerosol generating procedures)
3. Broken protective clothing or defective quality
4. Not enough protective equipment
5. Failure to be protected for a short period time(examples of such scenario include sudden lapse in concentration leading to inappropriate usage of the PPE, removal of your PPE by an aggressive patient and so on)
6. Other, _____

3.8.2 If you choose “not implementing social distancing” to question no. 3.8, please mention the events(can choose more than one)

1. Dinning together
2. Duty rooms
3. Congested work places
4. Other _____

3.9. Which patient interaction is most likely responsible for your infection?

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Physical examination 2. Nasopharyngeal/or oropharyngeal sample collection 3. Contact with patient secretion/body fluid 4. Contact with patient material | <ol style="list-style-type: none"> 5. Nursing care 6. Aerosol generating procedure 7. Contact with patient environment 8. Other, _____ |
|---|--|

3.10. Did you work in an isolation ward or COVID19 treatment center in the preceding 14 days before you were diagnosed with COVID19?

1. Yes 2. No

3.11. Was there a suspected patient with COVID19 in your department (place of work) in the preceding 14 days before you were diagnosed with COVID19?(Questions 3.11-11.4 are not applicable for those who worked at the treatment or isolation center)

1. Yes 2. No
 3. I don't know 4. NA (treatment center)

3.11.1 If yes to Q 3.11, how many people have been suspected? _____

3.11.2. If yes to the above question, did any of them later confirmed to have COVID19?

1. Yes 2. No
 3. I don't know 4. NA (treatment center)

3.11.3. If yes to (Q 3.11.2), how many people have been confirmed positive? _____

3.11.4. If yes to (3.11.2) how was the patient/patients' COVID19 status confirmed?

1. NA (not applicable), patient was at treatment center
2. Patient was kept at isolation center after identified at triage
3. Patient was suspected to have COVID19 after initial evaluation in EMPOD/OPD
4. Patient developed signs and symptoms of COVID19 after admission and sample was sent
5. Patients was not initially suspected and diagnosed after sample was sent following random screening
6. I don't know
7. Other _____

3.12. Did you have face-to-face contact (within 1 meter) with suspected /confirmed COVID-19 patient/patients in your department /place of work in the preceding 14 days before you were diagnosed?

1. Yes 2. No 3. I don't know

If your answer is no/or I don't know , please proceed to Question number 3.17

3.12.1. If yes to the above question 3.12, how many confirmed patients do you have face to face contact with _____

3.12.2. If yes to Question (3.12) what is the estimated total duration of contact (total)?

1. <5min 2. 5-15min 3. 15-30min 4. 30min-1hr 5. >1hr

3.13 If yes to question 3.12 , What was the type of interaction with the patient (more than one answer is possible)?

1. Laboratory environment	10. NG tube insertion	16. Pleural/Peritoneal tap /LP
2. Sample collection	11. IV line placement	17. Delivery
3. Sample processing and	12. UB catheterization	18. ENT and Eye examination
4. handling of specimen	13. Present during	19. Surgery, specify-----
5. History taking	aerosolizing procedure	20. Patient transportation
6. Physical examination	14. Contact with patient	21. Death care
7. Measurement of vital signs	secretion/body fluid	22. Other, Specify -----
8. Medications administration	15. Contact with patient	
9. Wound care	material	

QUESTION 3.14 Assesses the type and consistency of PPE use when you interacted with the suspected or confirmed case of COVID19. Please tick what applies to your situation. Always as recommended' means > 95% of the time; 'Most of the time' means 50% or more but not 95%; 'occasionally' means 20% to < 50%and 'Rarely' means < 20%, never 0%

	Always As Recommended	Most Of The Time	Occasionally	Rarely	Never
A/ Medical masks					
B/ Single use gloves					
C/ N95 respirators or equivalent					
D/ Face shields /goggles					
E/ Disposable gowns					
F/ Cover all suit					
G/ Boot covers					
H/ Head cape					
I/ Shoe covers					

3.14.1 If you were wearing N95(respirator) during your face to face contact, was it test fitted?(Was fit test done on the N 95 before it was given for use by your health care facility)	1. Yes 2. No 3. I don't know 4. I don't know what fit test is
3.14.2 If you were wearing N95(respirator) during your face to face contact, have you conducted seal check?	1. Yes 2. No 3. I don't know 4. I don't know how to conduct seal check on the N-95
3.14.3. If you were wearing gloves, did you remove them after contact with the patient?	1. Yes 2. No 3. I don't know
3.15 If yes to (3.12), did you perform hand hygiene before contact with the patient?	1. Always, as recommended 2. Most of the time 3. Occasionally 4. Rarely 5. Never

3.15.1. If you performed hand hygiene before contact of a patient, what did you use:

1. Alcohol-based hand rubs 2. Soap and water 3. Water

3.15.2. If yes (3.12), did you perform hand hygiene after contact with the patient?

1. Always, as recommended 2. Most of the time
3. Occasionally 4. Rarely 5. Never

3.15.3. If you performed hand hygiene after contact of a patient what did you use:

1. Alcohol-based hand rubs 2. Soap and water 3. Water

3.16 If yes (3.12), were you present for any aerosolizing procedures performed COVID 19 patients?

1. Yes 2. No 3. I don't know

3.16.1. If yes (to 3.16), check the procedure: (more than one answer is possible)

1. Tracheal intubation/extubation 2. Tracheotomy 3. Tracheal tube removal
4. Sputum suction 5. Cardiopulmonary resuscitation 6. Fiber bronchoscope
7. Endoscope 8. Laryngoscope 9. Other: _____

3.16.2 If yes (3.16), tick what applies to the level of PPE protection you practiced at that time

- | Always As Recommended | Most Of The Time | Occasionally | Rarely | Never |
|-----------------------|------------------|--------------|--------|-------|
|-----------------------|------------------|--------------|--------|-------|

Medical masks

Single use gloves

N95 respirators or equivalent

Face shields /goggles

Disposable gowns

Cover all suit

Boot covers

Head cape

Shoe covers

3.17 Did you come into contact with a suspected or confirmed COVID 19 patient's body fluids?

1. Yes 2. No 3. I don't know

(Body fluid indicates any potential infectious laboratory waste including sputum samples, faces, blood, urine etc.)

3.17.1 If yes (3.17) tick what applies to the level of PPE protection you practiced at that time

- | Always As Recommended | Most Of The Time | Occasionally | Rarely | Never |
|-----------------------|------------------|--------------|--------|-------|
|-----------------------|------------------|--------------|--------|-------|

Medical masks

Single use gloves

N95 respirators or equivalent

Face shields /goggles

Disposable gowns

Cover all suit

Boot covers

Head cape

Shoe covers

3.17.2 If yes to (3.17), did you perform hand hygiene before contact with the patient's body fluids?

1. Always, as recommended 2. Most of the time
3. Occasionally 4. Rarely
5. Never

3.17.3 If you performed hand hygiene before contact with the patient's body fluids what did you use:

1. Alcohol-based hand rubs 2. Soap and water 3. Water

3.17.4 If yes (3.17), did you perform hand hygiene after contact with the patient's body fluids?

1. Always, as recommended 2. Most of the time
3. Occasionally 4. Rarely
5. Never

3.17.5. If you performed hand hygiene after contact with the patient’s body fluids what did you use: 1. Alcohol-based hand rubs 2. Soap and water 3. Water						
3.17.6 If yes (3.17) Did you wear gloves? 1. Yes 2. No 3. I don’t know						
3.17.7 If Yes (3.17.6) Did you remove them after contact with the patient’s body fluids? 1. Yes 2. No 3. I don’t know						
3.18 Have you had direct contact with the patient’s materials of a suspected or confirmed COVID 19 patient? <i>Patient’s materials: personal belongings, linen and medical equipment that the patient may have had contact with</i> 1. Yes 2. No 3. I don’t know						
3.18.1 If yes (3.18), which materials?(more than one answer is possible)		1. Clothes 2. Personal items 3. Linen 4. Medical devices used on the patient 5. Medical equipment connected to the patient (ventilator, infusion pump etc.) 6. Other:_____				
3.18.2. If yes (3.18) tick what applies to the level of PPE protection you practiced at that time what type?		Always As Recommended	Most Of The Time	Occasionally	Rarely	Never
Medical masks						
Single use gloves						
N95 respirators or equivalent						
Face shields /goggles						
Disposable gowns						
Cover all suit						
Boot covers						
Head cape						
Shoe covers						
3.18.3. If yes to (3.18), did you perform hand hygiene before contact with the patient’s materials?			1. Always, as recommended 3. Occasionally 5. Never	2. Most of the time 4. Rarely		
3.18.4 If you performed hand hygiene before contact with the patient’s materials what did you use: 1. Alcohol-based hand rubs 2. Soap and water 3. Water						
3.18.5 If yes (3.18), did you perform hand hygiene after contact with the patient’s materials?			1. Always, as recommended 3. Occasionally 5. Never	2. Most of the time 4. Rarely		
3.18.6 If you performed hand hygiene after contact with the patient’s materials what did you use: 1. Alcohol-based hand rubs 2. Soap and water 3. Water						
3.18.7. If yes (3.18) did you wear gloves? 1. Yes 2. No 3. I don’t know						
3.18.8 If Yes (3.18.7) Did you remove them after contact with the patient’s materials? 1. Yes 2. No 3. I don’t know						
3.19. Have you had direct contact with the surfaces around patient confirmed or suspected for COVID19? 1. Yes 2. No 3. I don’t know						
4.19.1. If yes (3.19), which surfaces?(more than one answer is possible)		1. Bed 2. Bathroom 3. Ward corridor	4. Patient table 5. Bedside table 6. Dining table	7. Medical gas panel 8. Other:_____		
3.19.2. If yes (3.19) tick what applies to the level of PPE protection you practiced at that time		Always As Recommended	Most Of The Time	Occasionally	Rarely	Never
Medical masks						

Single use gloves					
N95 respirators or equivalent					
Face shields /goggles					
Disposable gowns					
Cover all suit					
Boot covers					
Head cape					
Shoe covers					
3.19.3. If yes (3.19), did you perform hand hygiene before contact with these surfaces?	1. Yes	2. No	3. I don't know		
3.19.4 If you perform hand hygiene before contact with the surfaces around patient, what did you use: 1. Alcohol-based hand rubs 2. Soap and water 3. Water					
3.19.5 If yes (3.19), did you perform hand hygiene after contact with these surfaces?	1. Yes	2. No	3. I don't know		
3.19.6 If you perform hand hygiene after contact with the surfaces around patient, what did you use: 1. Alcohol-based hand rubs 2. Soap and water 3. Water					
3.19.7 If yes (3.19) did you wear gloves?	1. Yes	2. No	3. I don't know		
3.19.8 If Yes (3.19.7) Did you remove them after contact with the patient's materials? 1. Yes 2. No 3. I don't know					
3.20. If you selected occasionally, rarely or never to any of the items to question (3.14,3.16.2,3.17.1,3.18.2,3.19.2) what are you reason(s) for not using PPE(more than one answer is possible)					
1. Patient was not initially suspected to have COVID19(did not use the particular PPE since the patient was not a COVID19 suspect at that moment in time) 2. The facility doesn't provide sufficient supply of PPE 3. Hospital protocol didn't recommend use of the particular PPE for the specific patient interaction 4. I didn't believe use of PPE would have protect me from acquiring COVID19 in that situation 5. Other ,Specify _____					
3.21.If yes to Questions(3.14,3.16.2,3.17.1,3.18.2,3.19.2) did you follow the recommended steps of donning and doffing PPE			1. Always as recommended 2. Most of the time 3. Occasionally 4. Rarely 5. Never 6. I don't know the recommend steps of donning and Doffing		
3.21.1. If you select occasionally or rarely to Question (3.21`) what are some of your reasons?(more than one answer is possible)					
1. No visual aid to assist in donning and doffing procedures 2. No assistant buddy that help with donning and doffing procedure 3. Following the recommended step takes time or its tiresome 4. No designated area assigned for donning and doffing 5. Other ,Specify -----					

4. Health facility information

4.1 Does your health care facility have infection Prevention and control (IPC) program and team or at least a dedicated and trained focal point?	Circle all that apply: 1. IPC focal person 2. IPC program 3. IPC training 4. IPC team/service 5. I don't know 6. Other _____
4.2 Does your health care facility have IPC guidelines for health workers?	1. Yes 2. No 3. I don't know
4.3 Does your health care facility have IPC Guidelines for standard and additional (transmission-based) precautions?(<i>transmission based precautions are: contact, droplet and airborne precautions</i>)	1. Yes 2. No 3. I don't know
4.4 Does your health care facility have regular IPC training for health workers (at least once a year)?	1. Yes 2. No 3. I don't know
4.5 Does your health care facility provide you Sufficient personal protective equipment (PPE)?	1. Yes 2. No 3. I don't know
4.6 How often do you change your medical mask in your health care facility?	1. Between patients 2. Every shift 3. More than Every shift 4. Other _____
4.7 If your answer is more than every shift, specify the reason?	1. Shortage of medical mask 2. Other _____
4.8 How often do you change your N95 (respirator)?	1. Single use and discard 2. Extended use for a single shift and discard 3. Reuse for more than a shift 4. Other _____
4.9 If you choose Reuse for more than a shift, what disinfection techniques did you/ health facility use?	1. Rotating use 2. UV light 3. Dry Oven 4. Alcohol based 5. I don't know any disinfection technique 6. Other _____
4.10 Does the health care facility do fit test on the N-95(respirator) to assure that the mask fits and seals properly before giving it to health care workers for use?	1. Yes 2. No 3. I don't know 4. I don't know what Fit test is 5. Other _____

For the following questions, 'Always as recommended' means > 95% of the time; 'Most of the time' means 50% or more but not 95%; 'occasionally' means 20% to < 50% and 'Rarely' means < 20%, never means 0%

	Always as recommended	Most of the time	Occasionally	Rarely	Never	I don't Know
4.11 Is alcohol-based hand rub easily available (that is, at the point of care) for hand hygiene within the health care facility?(eg during patient evaluation)						
4.12 Are soap and water available for hand hygiene (at the point of care) within the health care facility?						
4.13 Are routinely used medical equipment's being disinfected every time after contact with a patient(BP cuffs, pulse oximetry,...etc)						
4.14 Are high touch surfaces decontaminated at least 3 times daily? (<i>high touch surfaces: bed rails, bed frames, moveable lamps, tray table, bedside table, handles, IV poles(stand), blood-pressure cuff</i>)						

