

Introduction page (first page in electronic survey)

This study aims to understand how prepared healthcare workers feel in delivering effective infection prevention procedures when managing patients during the COVID-19 pandemic and how this affects their emotional wellbeing. This information will be used to protect and support healthcare workers and to prevent the spread of COVID-19.

Please note that we are looking for European healthcare workers (nurses, doctors, or others) that provide, or expect to provide, direct medical care to patients.

This survey will take approximately 10 minutes and can be completed on a mobile device or desktop. Please forward this survey to other colleagues who may be interested in participating in this survey.

All study data will be stored and processed in accordance with EU General Data Protection Regulation (GDPR). Study data will be kept for 15 years and stored on protected servers of the University Medical Center Utrecht. **Please note that no personal data will be collected.** Study participation is completely voluntary.

This study is part of the project Rapid European COVID-19 Emergency Research Response ([RECOVER](#)) funded by the European Union under the Horizon 2020 research and innovation programme, under grant agreement No 101003589. For more information about this project, click [here](#). Please direct any questions about this study to the coordinating investigator: Denise van Hout (University Medical Center Utrecht, the Netherlands) via D.vanHout-3@umcutrecht.nl or to Jelle Lyskawa via J.Lyskawa@umcutrecht.nl.

Consent

I understand that no personal data will be collected and that my participation in this study is completely voluntary. Yes/No

I consent to take part in this study Yes/No

Demographic information

Screening question: do you currently provide direct medical care to hospital patients, or do you expect to provide direct medical care to hospital patients during the upcoming 4 weeks?	Yes No* * If NO: cannot participate → end of survey
What is your age? (in years)	Number, range 16-99
What is your gender?	Female Male Prefer not to say
In which country do you currently work?	Standardized dropdown field
What hospital type are you currently working in?	Academic hospital Non-academic hospital Unsure
What is your current* living situation? <i>*Please select the option that was best applicable during the majority of the time during the past 2 weeks.</i>	Living alone Living with others Prefer not to say
Do you have caring responsibilities* for any adults, including those with disabilities or those over the age of 70 years? <i>*With caring responsibilities we mean if you regularly look after someone, which is not part of your medical profession.</i>	Yes No Prefer not to say
What is your current job role*? <i>*With current job role we mean the role in which you currently provide medical care to patients.</i>	Student doctor (undergraduate) Junior medical doctor Senior medical doctor Retired doctor (returned to practice) Student nurse Junior nurse Senior nurse Retired nurse (returned to practice) Student allied health professional (i.e. physician assistant) Junior allied health professional Senior allied health professional Retired allied health professional Other
In what medical specialty do you currently provide medical care to patients*? <i>*Select the option that best applies during your current work in the COVID-19 pandemic.</i>	Acute medicine (i.e ICU, anaesthesiology) Internal medicine Surgery Paediatrics Other (i.e. gynaecology, neurology)
In your current job role, how frequently do you have direct patient contact*? <i>*Select the option that best applies during your current medical work in the COVID-19 pandemic</i>	Daily More than one day per week Less than five days per month Rarely Don't know

Experience of previous epidemic and COVID-19

1. Have you previously worked in a clinical setting during an acute respiratory epidemic or pandemic, for example, SARS (2002), MERS Co-V (2012), H1N1 (2009)? Yes/no/unsure

IF "YES" OR "UNSURE" TO 1:

2. In a clinical setting, did you personally care for patients with suspected or confirmed infection caused by a previous novel respiratory pathogen for example, SARS (2002), MERS Co-V (2012), H1N1 (2009)? Yes/no/unsure

3 Have you personally provided direct (medical) care to a hospital patient with suspected or confirmed COVID-19 infection? Yes/no

IF YES TO 3:

4. Did your most recent medical contact with a suspected or confirmed COVID-19 patient include an aerosol generating procedure? For example tracheal intubation, non-invasive ventilation, bronchoscopy, tracheotomy, manual ventilation before intubation, cardiopulmonary resuscitation. Yes/no/unsure

5. At your most recent contact with a suspected/confirmed COVID-19 patient, what kind of infection prevention procedures did you use? Yes/no/unsure

- Hand hygiene
- N95 respirator (FFP2 or equivalent)
- Other type of face mask (i.e. surgical mask)
- Eye protection (i.e. goggles, face shield)
- Fluid-resistant long-sleeved gown
- Disposable apron
- Full-body suit
- Gloves
- If applicable: other (namely)

The following questions relate to your experience of managing patients in the healthcare setting where you work. Please think about your experience **over the past week** when responding to these questions.

Response options: 7 point Likert scale: strongly disagree, disagree, somewhat disagree, neutral, somewhat agree, agree, strongly agree.

Service demand

6. I am confident that the hospital where I work can manage current patient demand related to COVID-19

Skills

7. I have received general training for infection, prevention and control procedures for communicable diseases

8. I have received **sufficient** training in the infection prevention and control practices specifically for COVID-19

9. I am confident in my ability to correctly don and doff personal protective equipment (PPE) to prevent transmission of COVID-19 to others and myself.

Beliefs about capabilities

10. I am confident that I am able to follow recommended procedures related to personal protective equipment (PPE) for COVID-19 e.g. appropriate use and disposal of gloves, apron and fluid resistant surgical mask.

Beliefs about consequences

11. I believe that the protective procedures at work are sufficiently effective to prevent the spread of COVID-19 in my hospital.

12. Following the infection prevention and control recommendations will protect me from becoming ill with COVID-19.

13. Following recommended infection prevention and control procedures adds significant additional strain to my workload.

Intentions*

**If you are currently not providing direct care to COVID-19 patients, please think of a future possible situation where you would, when answering this question*

14. I intend to always use the recommended personal protective equipment (medical mask, eye protection, gown and gloves) when taking care of patients with suspected or confirmed COVID-19 when I have access to these.

Environmental context and resources

15. There are clear policies and protocols in my hospital for everyone to follow related to infection prevention and control procedures for COVID-19

16. I can easily access personal protective equipment (PPE) in line with standard infection control precautions, such as gloves, apron and masks, for COVID-19 in the hospital where I work

17. During your last clinical shift, what was the availability of the following materials (none available, limited supply, moderate supply, full supply, don't know)

- Hand alcohol
- N95 respirators (FFP2 or equivalent)
- Surgical masks
- Fluid-resistant long-sleeved gowns
- Disposable aprons
- Disposable gloves
- Eye protection (i.e. goggles or face shields)

18. In my hospital there are dedicated isolation facilities for patients with COVID-19.

19. There is a designated person in my health facility to contact if I have trouble with PPE, or if I have a body fluid exposure/ unprotected contact with a confirmed case of COVID-19.

20. The hospital where I work receives good support from national/ regional/ local public health authorities, who provide guidance and training on how to manage COVID-19.

Social Influences

21. Most of my colleagues regularly follow infection, prevention and control measures (for example, regular hand washing, use of personal protective equipment, proper disposal of equipment).

22. It is expected that in my role as a healthcare professional I will follow infection prevention and control measures.

23. I am encouraged and supported by senior medical/nurse staff to apply recommended infection prevention and control measures.

Emotion

24. I am concerned about the risk to myself of becoming ill with COVID-19.

25. I am concerned about the risk to my family related to COVID-19 as a result of my job role.

26. I am afraid of looking after patients who are ill with COVID-19.

27. I accept that the risk of getting COVID-19 is part of my job.

28. Whether I get infected with COVID-19 is within my control.

Over the last two weeks (all of the time; most of the time; more than half of the time; less than half of the time; some of the time; at no time):

29. I have felt cheerful and in good spirits

30. I have felt calm and relaxed

31. I have felt active and vigorous

32. I woke up feeling fresh and rested

33. My daily life has been filled with things that interest me

Trust in health facility

Note: these 3 questions are combined in the analysis to create a single “trust” score

34. The health facility where I work is competent to manage COVID-19

35. The health facility where I work are being honest with staff when managing COVID-19

36. The health facility where I work would act in the best interests of its staff when managing COVID-19

End of survey

37. If we may contact you for in-depth interviews on the perceptions of healthcare workers during COVID-19, please leave your email address here.

38. Thank you for completing this survey. If you have any comments about the content of this survey, please let us know in this comment box.