Perceptions of secondary care healthcare workers regarding local IPC procedures for COVID-19 and their emotional wellbeing during the peak pandemic wave in Europe

WP3 Cross-sectional survey Social Sciences

Extended Scientific Committee Meeting 17 July 2020

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# Acknowledgements

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Barriers and facilitators to healthcare workers' adherence with infection prevention and control (IPC) guidelines for respiratory infectious diseases: a rapid qualitative evidence synthesis (Review)



Cochrane Database of Systematic Reviews

Version published: 21 April 2020

Houghton C, Meskell P, Delaney H, Smalle M, Glenton C, Booth A, Chan XHS, Devane D, Biesty LM







Organizational factors





**Environmental factors** 





Individual factors





Houghton C, Meskell P, Delaney H, et al. Barriers and facilitators to healthcare workers' adherence with infection prevention and control (IPC) guidelines for respiratory infectious diseases: a rapid qualitative evidence synthesis. *Cochrane Database Syst Rev.* 2020;4(4):CD013582. Published 2020 Apr 21. doi:10.1002/14651858.CD01358



Contents lists available at ScienceDirect

#### Psychiatry Research

journal homepage: www.elsevier.com/locate/psychres





#### Review article

The psychological and mental impact of coronavirus disease 2019 (COVID-19) on medical staff and general public – A systematic review and metaanalysis



Min Luo<sup>a</sup>, Lixia Guo<sup>b</sup>, Mingzhou Yu<sup>c</sup>, Wenying Jiang<sup>d</sup>, Haiyan Wang<sup>e,\*</sup>

- Review of 62 studies with 162,639 participants from 17 countries
- Prevalence anxiety and depression 33% and 28%, similar between HCW and public
- Risk factors for depression and anxiety: being women, being nurses, working in front-line with direct contact with COVID-19 patients
  - Medical doctor risk factor for depression: Zhang et al. 2020
  - Non-frontline HCW and non-medical staff at risk for mental health issues: Li et al. 2020

Luo M, Guo L, Yu M, Jiang W, Wang H. The psychological and mental impact of coronavirus disease 2019 (COVID-19) on medical staff and general public - A systematic review and meta-analysis [published online ahead of print, 2020 Jun 7]. Psychiatry Res. 2020;291:113190. doi:10.1016/j.psychres.2020.113190

#### SPOTLIGHT ON GENDER, COVID-19 AND THE SDGS



# WILL THE PANDEMIC DERAIL HARD-WON PROGRESS ON GENDER EQUALITY?









#### SDG 17: PARTNERSHIPS FOR THE GOALS

Gender data

Disaggregated data on COVID-19 cases and deaths as well as on hospitalization and testing is vital to understand the gender impacts of the pandemic. Women and girls must be at the centre of COVID-19 global prevention, response and recovery efforts.

Ginette Azcona, Antra Bhatt, Sara Davies, Sophie Harman, Julia Smith, and Clare Wenham. Spotlight on gender, COVID-19 and the SDGs: Will the pandemic derail hard-won progress on gender equality? Report United Nations Entity for Gender Equality and the Empowerment of Women (UN Women). 2020. Available via: LINK

# WP3 Study aim



Rapid assessment of perceptions and preparedness of European hospital HCW regarding local infection prevention and control procedures for COVID-19 (IPC) and their emotional wellbeing (exploratory: assess effect of gender and institutional trust)

Study design: cross-sectional survey (10 min)

Round 1: sampling in existing research HCW networks

Round 2: convenience sampling

# 1st sampling round of survey

RECOVER PARIOR ON DISPLANT ON

- Invitations sent to 2436 European hospital HCW from 41 countries
  - COMBACTE
  - PREPARE
  - CIBER (Spain)
- Between 31 March 17 April 2020

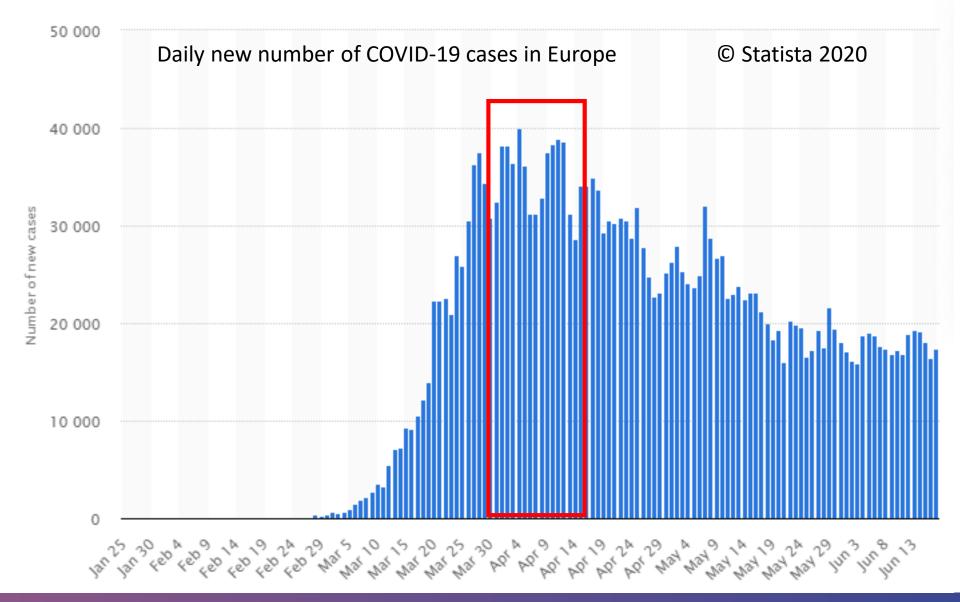








# Timing of survey

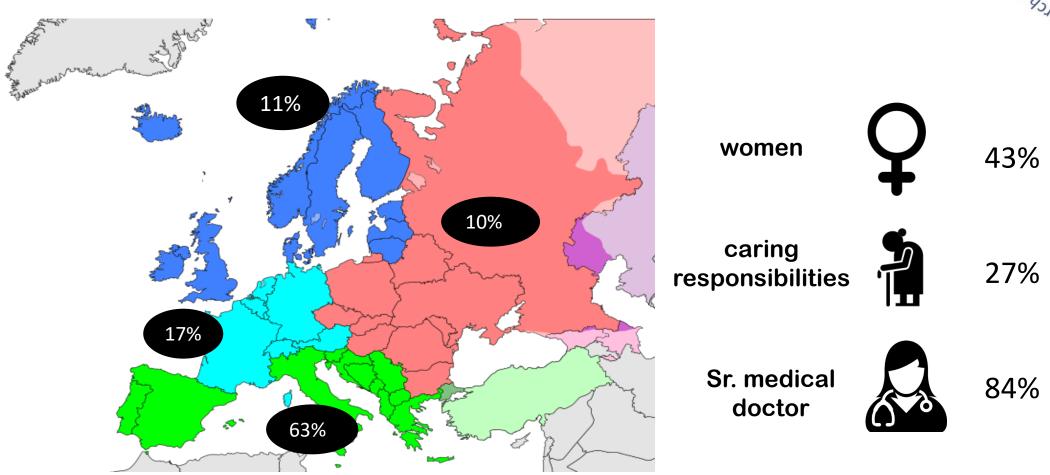




N = 190 (response rate ~8%); most (71%) personally cared for COVID-19 patients

# N = 190 European respondents





# Summary of perceptions on IPC



#### **Facilitators for IPC adherence:**

Overall high institutional trust







#### **Barriers for IPC adherence:**

88% Indicated increased workload due to IPC guidelines 21% Did not receive general IPC training

88% dedicated isolation facilities in place 82% indicated clear policies and protocols







**Environmental** 

28% indicated limited access to PPE

Most often limited or no supply: - N95 masks

- Gowns
- Aprons
- Eye protection

High confidence (85%) in using PPE Positive social influences at work, i.e. peer pressure 96% intend to always use recommended PPE





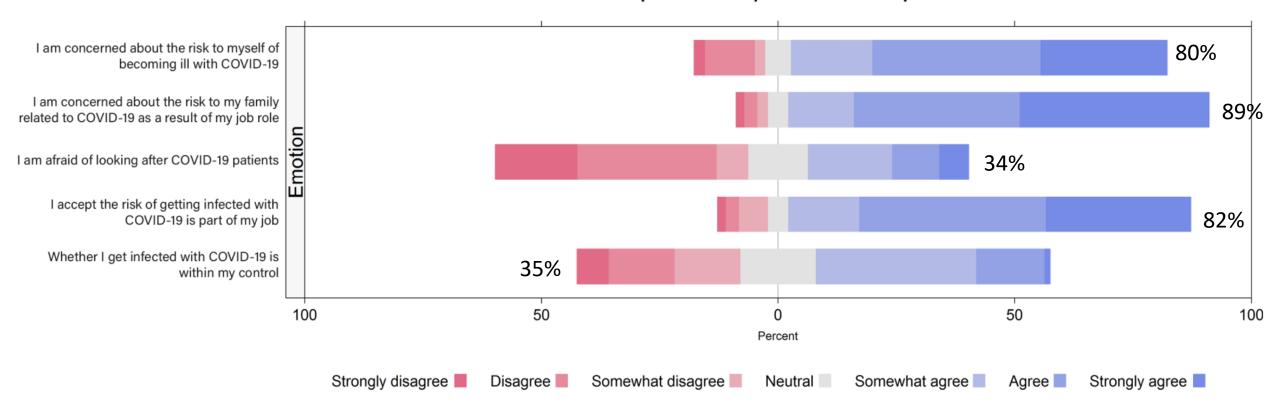


Personal

# Emotional aspects



#### Perceptions and experience over the past week:



# Emotional wellbeing by WHO-5 index

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	Mean WHO-5 (±SD)	P value
All (N=180)	51.9 (22.0)	NA
Gender		
Male	55.8 (22.0)	<.01
Female	46.7 (21.1)	
Living situation		
Living alone	45 (20.5)	NS
Living with other(s)	52.6 (20.5)	
Job role		
Nurse	64.3 (19.6)	NS
Medical doctor	51.1 (21.9)	
Other	40 (21.9)	
Hospital type		
Academic hospital	50.5 (22.7)	NS
Non-academic hospital	53.3 (21.3)	
Region		
Eastern Europe	52.0 (22.6)	<.05
Northern Europe	52.7 (22.9)	
Southern Europe	48.6 (21.4)	
Western Europe	63.6 (20.1)	
COVID-19 patient care / frontline healthcare worker		
Personally cared for COVID-19 patient	53.9 (22.1)	NS
Not personally cared for COVID-19 patient	47.4 (21.3)	

- WHO-5 = scale 0-100
- <50 points: screen for depression
- Overall prevalence WHO-5 score <50 points: 44%</li>

• Females: 54% (95% CI 42%-65%)

• Males: 38% (95% CI 28%-48%)

# Multivariable linear regression for the effect of gender on emotional wellbeing by the WHO-5 index (N=180)

	95% confidence interval	
ß	Lower bound	Upper bound
62.9	37.6	86.5
0.2	-0.1	0.6
-7.8*	-14.9	-0.7
-1.5	-11.4	8.3
ref	ref	ref
-14.6*	-27.3	-1.9
-18	-42.8	6.9
-1.3	-7.9	5.4
ref	ref	ref
-8.4	-22.1	5.3
-8.5	-21.4	4.5
-10.5*	-19.6	-1.4
4.6	-2.6	11.8
	62.9 0.2 -7.8* -1.5 ref -14.6* -18 -1.3 ref -8.4 -8.5 -10.5*	B       Lower bound         62.9       37.6         0.2       -0.1         -7.8*       -14.9         -1.5       -11.4         ref       ref         -14.6*       -27.3         -18       -42.8         -1.3       -7.9         ref       ref         -8.4       -22.1         -8.5       -21.4         -10.5*       -19.6

- Predefined covariables: age, region, living situation, job role, hospital type, frontline HCW
- Adjusted R<sup>2</sup> 0.085....

+ In separate multivariable analyses <u>higher institutional</u> trust was associated with higher emotional well-being scores

# Conclusions first sampling round



Rapid cross-sectional survey among hospital healthcare workers performed during peak pandemic wave in Europe

Suggested factors for improvement to increase adherence to infection prevention and control (IPC):

- → General IPC training
- → Reduce workload associated with use of PPE
- → Improve availability of and access to several PPE materials

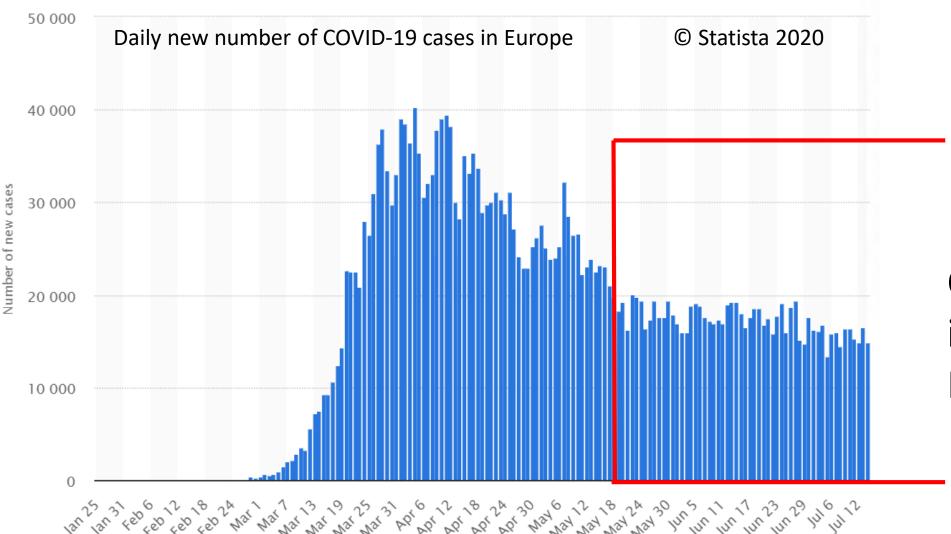
#### Furthermore:

- → Alarmingly: 44% of HCW scored <50 points on WHO-5 wellbeing index
- → Differences in emotional wellbeing between men and women

#### Study learning points:

- Probability-based sampling method: too low yield of respondents
- Shortening of survey tool

# Current sampling round



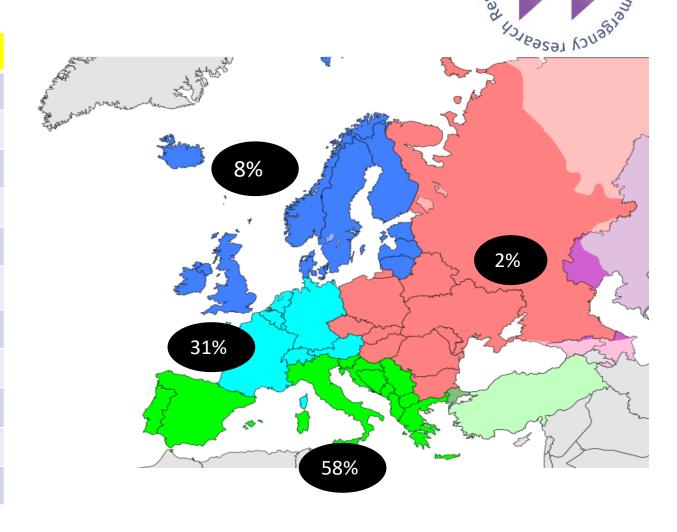


Current inclusions:

N = 1466

# Current HCW recruitment

Country	N = 1466 (%)
Portugal	486 (33)
Netherlands	222 (15)
Germany	156 (11)
Malta	132 (9)
Spain	83 (6)
United Kingdom	55 (4)
Italy	49 (3)
Greece	44 (3)
Belgium	42 (3)
Estonia	30 (2)
Other 28 countries	167 (11)
Italy Greece Belgium Estonia	49 (3) 44 (3) 42 (3) 30 (2)



# Any questions?

