



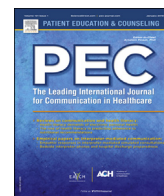
Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Contents lists available at ScienceDirect

Patient Education and Counseling

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

Correspondence

Empathic communication as a “Risky strength” for health during the COVID-19 pandemic: The case of frontline Italian healthcare workers



The COVID-19 outbreak has been extraordinarily demanding for healthcare systems worldwide. During the first months of 2020, Italy has faced one of the heaviest outbreak, with over 100179 confirmed cases and around 28884 deaths [1,2]. Furthermore the Italian healthcare system was on the verge of total collapse – at least in the regions most affected by the virus spread, such as Lombardy – and more than 4,500 healthcare professionals were infected as of April 30.

While specialized intensive care units in Italy were overwhelmed by the increasing number of cases, healthcare providers who did not have expertise in infectious disease treatment stepped up to provide care for patients with COVID-19 [1]. As the epidemic curve increased, many healthcare providers voluntarily joined the epidemic control efforts, and 1500 healthcare providers (including 300 physicians and 500 nurses) from across Italy voluntarily came to the most affected Italian regions to offer their support. Unanimous – across healthcare specialties – was their sense of responsibility to relieve patients and families' suffering and the need to put coordinate efforts to safeguard the whole country from the virus spread.

In the face of this unpredictable disease and its related safety risks, healthcare providers feared infection and worried about their loved ones, but they still joined the institutional call to give their professional contribution to contain the epidemic and showed a limitless spirit of empathy. Finset and colleagues [3] suggested that this characteristic is expected to be a key factor in fighting the COVID-19 pandemic in order to guarantee the healthcare systems' survival during and after this unprecedented healthcare crisis. Nonetheless, although empathy is essential in patient-doctor interactions, it might also be a challenging task for clinicians, often helped by mutual trust [3]. Indeed, the high exposure and involvement in emotionally distressing situations and the need to acknowledge patients and families' negative emotions risk to drain healthcare providers' psychological and physical resources with possible consequences on the long run [4,5].

The authors of this letter encourage to take into serious consideration the fact that, while some studies have shown that

clinicians' empathy positively impacts on quality of care, it should not be forgotten that more empathic clinicians might be at higher risk of distress [6]. We had proof of this phenomenon in a cross-sectional study that we recently conducted on 1150 Italian health professionals during the early outbreak of the COVID-19 Italian pandemic. Here, we summarize details of the 376 healthcare workers who directly assisted COVID-19 patients. They were invited to fill an online questionnaire including – in addition to information on demographic and professionals aspects – the following items: self-report items designed to assess healthcare professionals' empathic attitude in terms of their perspective taking ability (e.g. item: *A health care professional who is able to view things from another person's perspective can provide patients' with better care*) and a list of psychosomatic symptoms adapted from the Copenhagen Psychosocial Questionnaire [7]. Table 1 describes more in details the sample characteristics. Results revealed that clinicians' higher empathy exposed them to suffer from more psychosomatic symptoms as demonstrated by significant correlations between the average experience of symptoms and the Perspective Taking score ($r = .149$, $p = .008$). This finding might complement reflections by Finset and colleagues by adding knowledge about the implications of empathic communications for the clinicians' wellbeing and demonstrates its possible “side effects” as a “risky strength” of health professionals.

The crucial role of healthcare providers in this unprecedented crisis is not in doubt; still healthcare professionals face great challenges and are at high risk of distress due to their empathic response. While attitude to empathy is an key personal feature of healthcare professionals and buffers the effects of burnout, it also seems to expose personnel to more frequent psychosomatic symptoms. Our study provides early insight into the psychophysical consequences that Italian healthcare workers are experiencing. This shows the need to supply them with “psychological self-protective equipment” capable of mitigating the massive impact of this emergency on their actual and future wellbeing [8,9]. Post-pandemic research has suggested to provide healthcare workers with psychological supports based on models of psychological adjustment and resilience. The efficacy of debriefing and psychological first aid, help-lines and support groups for professionals has also been documented. Healthcare institutions have ethical duties to reflect on the work-related stressors when the Covid-19 emergency will be over [10,11].

Table 1
Sample characteristics.

Personal characteristics			Professional characteristics		
Gender	n	%	Length of work experience		
Male	99	26.3	Min	<1	
Female	277	73.7	Max	42	
			Average (SD)	15 (11)	
Age			Occupational role	n	%
Min	23		Nurse	271	72.1
Max	69		Physician	67	17.8
Average (SD)	40 (11)		Other professionals	38	10.1
Marital status	n	%	Main work setting	n	%
Married/living together	228	60.6	Hospital unit	307	81.6
Single	120	31.9	Rehabilitation center	6	1.6
Divorced/separated	23	6.4	Ambulatory	3	0.8
Widow(er)	3	0.8	Private study	1	0.3
Other	2	0.5	Other	55	14.8
			Missing	4	1.1
Personal experience with COVID-19			Professional experience with COVID-19		
Have you been tested for COVID-19?	n	%	Do you work in an hospital with COVID-19 patients?	n	%
No	242	64.4	No	49	13
Yes	126	33.5	Yes	327	87
I'd rather not answer	3	0.8			
Missing	5	1.3	During your interaction with COVID-19 patients, were you wearing adequate PPEs (Personal Protective Equipment)?	n	%
			No	35	9.3
Have you been quarantined?	n	%	Yes	328	87.2
No	335	89.1	I'd rather not answer	12	3.2
Yes	32	8.5	Missing	1	0.3
I'd rather not answer	5	1.3			
Missing	4	1.1	How much are you concerned for the ongoing COVID-19 emergency situation? (1=Not at all; 10= A lot)		
			Average score (SD)	8.17 (1.53)	
One of your familiars has been found positive to COVID-19?	n	%	Min score	3	
No	347	92.3	Max score	10	
Yes	19	5.1			
I'd rather not answer	6	1.6			
Missing	4	1.1			
Empathy - Perspective taking			Perceived impact on psycho- physical health		
Average score (SD)	4.8 (0.60)		Experienced symptoms in the last month (at least sometimes)	n	%
Min score	3		Increased irritability	221	58.8
Max score	6		Change in food habits	209	55.6
			Difficulty falling asleep	208	55.3
			Muscle tension	182	48.4
			Exaggerated reactions to situations	150	39.9
			Nightmares	150	39.9
			Nervous breakdown	142	37.8
			Increased sweating	140	37.2
			Upset stomach	140	37.2
			Gastro-intestinal problems	139	37.0
			Palpitation	112	29.8
			Experienced inexplicable physical sensations	101	26.9
			Shortness of breath	87	23.1
			Chest pain	54	14.4
			Vertigo	43	11.4

Contributors

All authors had full access to all the data in this study and take responsibility for the integrity of the data and the accuracy of the data analysis. SB and LP contributed equally and share the corresponding authorship. SB conceived of and designed the study. LP run the analysis. SB and GG supervised data collection and analysis. All authors contributed to reviewing and editing the manuscript.

Ethics committee approval

The study we mentioned in this letter receive the approval by the Ethic Commission of the Department Psychology of the Catholic University of Milan – Italy (IRB n°: 04_2020).

Declaration of Competing Interest

We declare no competing interests.

Acknowledgments

This work is part of the “C.O.P.E.” project (Covid19-related Outcomes of health Professionals during the Epidemic) conducted by EngageMinds HUB, Consumer, Food & Health Engagement Research Center. We thank Società Italiana di Management e Leadership in Medicina (SIMM), Segretariato Italiano Giovani Medici (S.I.G.M.), Ordine delle Professioni Infermieristiche di Milano Lodi Monza e Brianza for their endorsement to the project.

References

- [1] M. Nacoti, A. Ciocca, A. Giupponi, P. Brambillasca, F. Lussana, M. Pisano, G. Goisis, D. Bonacina, F. Fazzi, R. Naspro, L. Longhi, M. Cereda, C. Montaguti, At the epicenter of the Covid-19 pandemic and humanitarian crises in Italy: changing perspectives on preparation and mitigation, *Catal. Non-Issue Content*. 1 (2) (2020), doi:<http://dx.doi.org/10.1056/CAT.20.0080>.
- [2] A. Remuzzi, G. Remuzzi, COVID-19 and Italy: what next? *Lancet* (2020), doi:[http://dx.doi.org/10.1016/S0140-6736\(20\)30627-9](http://dx.doi.org/10.1016/S0140-6736(20)30627-9).
- [3] A. Finset, H. Bosworth, P. Butow, P. Gulbrandsen, R.L. Hulsman, A.H. Pieterse, R. Street, Effective health communication – a key factor in fighting the COVID-19 pandemic, *Patient Educ. Couns.* 103 (2020) 873–876.
- [4] S. Barello, L. Palamenghi, G. Graffigna, Burnout and somatic symptoms among frontline healthcare professionals at the peak of the Italian COVID-19 pandemic, *Psychiatry Res.* 290 (2020)113129, doi:<http://dx.doi.org/10.1016/j.psychres.2020.113129>.
- [5] S. Barello, G. Graffigna, Caring for health professionals in the COVID-19 pandemic emergency : toward an “epidemic of empathy” in healthcare, *Front. Psychol.* 11 (2020) 1431, doi:<http://dx.doi.org/10.3389/fpsyg.2020.01431>.
- [6] F.B.M. de Waal, Putting the altruism back into altruism: the evolution of empathy, *Annu. Rev. Psychol.* (2008), doi:<http://dx.doi.org/10.1146/annurev.psych.59.103006.093625>.
- [7] T.S. Kristensen, H. Hannerz, A. Høgh, V. Borg, The Copenhagen Psychosocial Questionnaire – A tool for the assessment and improvement of the psychosocial work environment, *Scand. J. Work. Environ. Heal.* (2005), doi:<http://dx.doi.org/10.5271/sjweh.948>.
- [8] F. Anelli, G. Leoni, R. Monaco, C. Nume, R.C. Rossi, G. Marinoni, G. Spata, D. De Giorgi, L. Peccarisi, A. Miani, E. Burgio, I. Gentile, A. Colao, M. Triassi, P. Piscitelli, Italian doctors call for protecting healthcare workers and boosting community surveillance during covid-19 outbreak, *BMJ* (2020), doi:<http://dx.doi.org/10.1136/bmj.m1254>.
- [9] A. Aiello, M. Young-Eun Khayeri, S. Raja, N. Peladeau, D. Romano, M. Leszcz, R. G. Maunder, M. Rose, M.A. Adam, C. Pain, A. Moore, D. Savage, R. Bernard Schulman, Resilience training for hospital workers in anticipation of an influenza pandemic, *J. Contin. Educ. Health Prof.* 31 (2011) 15–20, doi:<http://dx.doi.org/10.1002/chp.20096>.
- [10] J. Fox, F. Burkle, J. Bass, F. Pia, J. Epstein, D. Markenson, The effectiveness of psychological first aid, *Disaster Med. Public Health Prep.* (2012), doi:<http://dx.doi.org/10.1001/dmp.2012.39>.
- [11] R.G. Maunder, W.J. Lancee, R. Mae, L. Vincent, N. Peladeau, M.A. Beduz, J.J. Hunter, M. Leszcz, Computer-assisted resilience training to prepare healthcare workers for pandemic influenza: a randomized trial of the optimal dose of training, *BMC Health Serv. Res.* (2010), doi:<http://dx.doi.org/10.1186/1472-6963-10-72>.

Serena Barello*

Lorenzo Palamenghi

Guendalina Graffigna

EngageMinds HUB – Consumer, Food & Health Engagement Research Center, Department of Psychology, Catholic University of the Sacred Heart – Milano, Italy

* Corresponding author.

E-mail address: serena.barello@unicatt.it (S. Barello).

Received 4 May 2020