

Persons in helping professions in social assistance facilities and their fears related to COVID-19 using the example of Poland and Spain

BACKGROUND

The aim of the research was to collect opinions on concerns related to COVID-19 among persons in helping professions in social assistance facilities.

PARTICIPANTS AND PROCEDURE

The study involved 407 people, including 207 from Poland and 200 from Spain (346 women and 61 men). The research tool was the authors' questionnaire. Employees of social welfare institutions located in Poland and Spain were selected using purposive sampling. Respondents completed paper and electronic versions of the survey questionnaire.

RESULTS

The relationship between each helping profession and concerns about the threat to one's own life and that of loved ones in connection with COVID-19, as well as the relationship between each profession and the fear that the financial situation would deteriorate due to COVID-19, showed a statistically significant relationship only in the

study of employees from Poland. The relationship between each profession and the fear of losing one's job due to COVID-19 showed a statistically significant result only in the study of employees from Spain.

CONCLUSIONS

Our study showed that the COVID-19 pandemic affected employees in helping professions in social assistance institutions. Employees from Poland feared more that their financial situation would deteriorate, and felt a threat to their health and the health of their relatives and charges. On the other hand, many more workers from Spain expressed a fear of losing their jobs. Occupational therapists most often indicated fears related to the COVID-19 pandemic except for concerns about charges, which were expressed most often by psychologists.

KEY WORDS

social welfare facilities; COVID-19; pandemic; helping professions; job loss

ORGANIZATION – 1: University of Physical Education, Krakow, Poland · 2: University of Malaga, Malaga, Spain

AUTHORS' CONTRIBUTIONS – A: Study design · B: Data collection · C: Statistical analysis · D: Data interpretation · E: Manuscript preparation · F: Literature search · G: Funds collection

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BACKGROUND

The outbreak of the pandemic in the city of Wuhan in 2019 caused a number of changes in the functioning of societies around the world. Initially, it seemed that the COVID-19 epidemic would be local and short-lived. Unfortunately, the virus entirely entered the life of every individual, regardless of their nationality or country of residence, due to not only health concerns but also restrictions on movement and the need to isolate as well as several changes in the functioning of enterprises and organisations, including those related to social assistance and health care (Choi et al., 2020).

The consequences of COVID-19 are visible in many areas, including the provision of work. For example, in social assistance entities, it was necessary to partially or completely switch to remote work. It became the 'new standard' almost overnight, although neither of these organisations nor their employees were sufficiently prepared for this. Remote work became a necessity, not a choice (Wang et al., 2020). At present, social assistance facilities operate on the same organisational terms as before (Garzillo et al., 2022). However, it is worth asking a question about the situation of people employed in these institutions.

Representatives of helping professions occupy an important place in social assistance entities. In general, the term 'helping professions' refers to a group of professions that are characterised by high utility and a focus on serving people. A helping profession is defined as a professional interaction between a helping expert and a client, initiated to nurture the growth of, or address the problems of, a person's physical, psychological, intellectual or emotional constitution, including medicine, nursing, psychotherapy, psychological counselling and social work (Graf et al., 2014). These professions are characterised by a specific nurturing nature, with professional activity addressing people's problems, manifested in helping, meeting the need for security, providing knowledge and skills necessary for their proper social functioning and ensuring well-being in the future (Czerw & Borkowska, 2010). On the one hand, people in these professions are exposed to high mental and physical strain resulting from the nature of their duties. On the other, these people should be characterised by a specific sensitivity to the needs of patients and the ability to provide social support. Although the term 'helping professions' includes many professions, each of them is specific, with professionals fulfilling distinct sets of roles and responsibilities. It is worth considering how the outbreak of the pandemic affected people in helping professions and in particular their beliefs regarding their health and life, fears for patients and possible fears related to the deterioration of their financial situation.

PARTICIPANTS AND PROCEDURE

PARTICIPANTS

The study involved 407 people, including 207 from Poland and 200 from Spain. The respondents included 346 women and 61 men. Gender inequality results from the fact that in both Poland and Spain, professions related to social care are feminised. The employment structure of the respondents was as follows: physicians ($n = 5$, 1.2%), psychologists ($n = 25$, 6.1%), nurses ($n = 19$, 4.7%), social workers ($n = 27$, 6.6%), occupational therapists ($n = 142$, 34.9%), physiotherapists ($n = 44$, 10.8%), carers ($n = 95$, 23.4%) and other ($n = 50$, 12.3%) (Table 1). All respondents – both from Poland and Spain – worked with their patients personally. The study was conducted according to the guidelines of the Declaration of Helsinki and approved by the Bioethics Committee at the Regional Medical Chamber in Krakow (OIL/KBL/73/2021, approval date: 16 July 2021).

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PROCEDURE

Main research problem: What pandemic-related concerns characterize helping professionals in Poland and Spain?

Table 1

Demographic data

	Poland		Spain		Total	
	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
Gender						
Women	181	87.5	165	82.5	346	85
Men	26	12.5	35	17.5	61	15
Age (years)						
< 20	0	0	23	11.5	23	5.5
21-30	28	13.5	92	46	120	29.5
31-40	83	40.1	23	11.5	106	26
41-50	72	34.8	35	17.5	107	26.5
51-60	19	9.2	24	12	43	10.5
61-70	5	2.4	2	1	7	1.7
> 70	0	0	1	0.5	1	0.3
Education						
Vocational	4	1.9	7	3.5	11	2.7
Secondary	74	35.8	26	13	100	24.5
Higher	129	62.3	167	83.5	296	72.8

Detailed research problems:

Is there a relationship between each helping profession and concerns about the threat to one's own life and that of loved ones in connection with COVID-19?

Is there a relationship between each profession and the fear that the financial situation would deteriorate due to COVID-19?

Is there a relationship between each profession and the fear of losing one's job due to COVID-19?

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Table 2

Occupation and the fear of a threat to one's own life and that of loved ones in connection with COVID-19

	No	Yes	Differences between occupations
Poland			$p < .001$
Psychologist	<i>n</i> 6 % 54.5	5 45.5	
Nurse	<i>n</i> 4 % 44.4	5 55.6	
Social worker	<i>n</i> 0 % 0	26 100	
Occupational therapist	<i>n</i> 23 % 53.5	20 46.5	
Physio-therapist	<i>n</i> 3 % 50	3 50	
Caregiver	<i>n</i> 23 % 29.9	54 70.1	
Other	<i>n</i> 6 % 17.6	28 82.4	
Spain			$p = .204$
Psychologist	<i>n</i> 13 % 92.9	1 7.1	
Nurse	<i>n</i> 8 % 72.7	3 27.3	
Occupational therapist	<i>n</i> 90 % 90.9	9 9.1	
Physio-therapist	<i>n</i> 29 % 76.3	9 23.7	
Caregiver	<i>n</i> 15 % 83.3	3 16.7	
Other	<i>n</i> 13 % 86.7	2 13.3	

Is there a relationship between each profession and concern about the charges of whom the tested person took care in connection with COVID-19?

The research tool was the authors' questionnaire. Employees of social welfare institutions located in Poland and Spain were selected using purposive sampling. Respondents completed paper and electronic versions of the survey questionnaire (a Google Form). The questionnaire was identical for respondents from both countries. The questionnaire was created in Polish, translated by one translator into Spanish and then translated back into Polish by another translator. In this way, the accuracy of the translation was verified. The questionnaire consisted of 23 closed-ended, single- or multiple-choice questions. The questions included in the research tool concerned the activities of respondents during the pandemic, changes in working time, professional tasks performed, interpersonal relations and issues related to the area of mental functioning and health understood in a broad sense. At the end of the questionnaire, there was a data sheet containing basic socio-demographic data. The questionnaires (in Polish and Spanish languages) are available from the corresponding author.

All the results obtained were analysed using Statistica software, version 25 (StatSoft, Hamburg, Germany). It was applied to perform Mann-Whitney *U* tests, Kruskal-Wallis tests, Fisher's exact tests and chi-squared tests. Post-hoc analyses were also performed using the Dunn-Sidak test. The significance level was $p = .05$.

RESULTS

The first relationship to be analysed was between each helping profession and concerns about the threat to one's own life and that of loved ones in connection with COVID-19. A statistically significant result was noted in the analysis performed on a group of employees from Poland. Compared with other groups, social workers and occupational therapists pointed out fears about life-threatening conditions most frequently. In the analysis performed on a group of employees from Spain, no statistically significant result was recorded (Table 2).

Another relationship analysed was between each profession and the fear that the financial situation would deteriorate due to COVID-19. As was the case with the first correlation, a statistically significant relationship was noted in the study of employees from Poland. Social workers indicated this fear less frequently than other professions. In the group of employees from Spain, there were no statistically significant relationships (Table 3).

The relationship between each profession and the fear of losing one's job due to COVID-19 was also analysed. In the study of employees from Poland, no sta-

Table 3*Occupation and the fear that the financial situation would deteriorate due to COVID-19*

		No	Yes	Differences between occupations
<hr/>				
Poland				$p = .015$
Psychologist	<i>n</i>	8	3	
	%	72.7	27.3	
Nurse	<i>n</i>	5	4	
	%	55.6	44.4	
Social worker	<i>n</i>	25	1	
	%	96.2	3.8	
Occupational therapist	<i>n</i>	25	18	
	%	58.1	41.9	
Physio-therapist	<i>n</i>	5	1	
	%	83.3	16.7	
Caregiver	<i>n</i>	51	26	
	%	66.2	33.8	
Other	<i>n</i>	18	16	
	%	52.9	47.1	
<hr/>				
Spain				$p = .039$
Psychologist	<i>n</i>	11	3	
	%	78.6	21.4	
Nurse	<i>n</i>	10	1	
	%	90.9	9.1	
Occupational therapist	<i>n</i>	81	18	
	%	81.8	18.2	
Physio-therapist	<i>n</i>	22	16	
	%	57.9	42.1	
Caregiver	<i>n</i>	13	5	
	%	72.2	27.8	
Other	<i>n</i>	9	6	
	%	60	40	

Table 4*Occupation and the fear of losing a job due to COVID-19*

		No	Yes	Differences between occupations
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Poland				$p = .122$
Psychologist	<i>n</i>	7	4	
	%	63.6	36.4	
Nurse	<i>n</i>	8	1	
	%	88.9	11.1	
Social worker	<i>n</i>	21	5	
	%	80.8	19.2	
Occupational therapist	<i>n</i>	30	13	
	%	69.8	30.2	
Physio-therapist	<i>n</i>	5	1	
	%	83.3	16.7	
Caregiver	<i>n</i>	64	13	
	%	83.1	16.9	
Other	<i>n</i>	32	2	
	%	94.1	5.9	
<hr/>				
Spain				$p < .001$
Psychologist	<i>n</i>	9	5	
	%	64.3	35.7	
Nurse	<i>n</i>	11	0	
	%	100	0	
Occupational therapist	<i>n</i>	56	43	
	%	56.6	43.4	
Physio-therapist	<i>n</i>	35	3	
	%	92.1	7.9	
Caregiver	<i>n</i>	13	5	
	%	72.2	27.8	
Other	<i>n</i>	12	3	
	%	80	20	

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tistically significant result was recorded. A statistically significant result was noted in the study of employees from Spain. Spanish occupational therapists indicated this risk more often than other professions (Table 4).

The last relationship to be analysed was between each profession and concern about the charges of whom the tested person took care in connection with COVID-19. In the study conducted on a group of employees from Poland, a statistically significant result

was noted. In the analysis of data collected among employees from Spain, no statistically significant result was recorded (Table 5).

DISCUSSION

Since March 2020, when the World Health Organization announced the coronavirus pandemic, all so-

Table 5

Occupation and concern about the charges of whom the respondent took care in connection with COVID-19

		No	Yes	Differences between occupations
Poland		$p = .045$		
Edyta Janus, Raquel Cantero Télez, Katarzyna Filar-Mierzwa, Paulina Aleksander- Szymanowicz, Aneta Bac	Psychologist	<i>n</i> 6	5	
		% 54.5	45.5	
	Nurse	<i>n</i> 9	0	
		% 100	0	
	Social worker	<i>n</i> 21	5	
		% 80.8	19.2	
	Occupational therapist	<i>n</i> 22	21	
		% 51.2	48.8	
	Physio-therapist	<i>n</i> 5	1	
		% 83.3	16.7	
	Caregiver	<i>n</i> 50	27	
		% 64.9	35.1	
	Other	<i>n</i> 23	11	
		% 67.6	32.4	
Spain		$p = .354$		
	Psychologist	<i>n</i> 12	2	
		% 85.7	14.3	
	Nurse	<i>n</i> 11	0	
		% 100	0	
	Occupational therapist	<i>n</i> 94	5	
		% 94.9	5.1	
	Physio-therapist	<i>n</i> 38	0	
		% 100	0	
	Caregiver	<i>n</i> 17	1	
		% 94.4	5.6	
	Other	<i>n</i> 14	1	
		% 93.3	6.7	

cities have faced a unique situation. The first case of COVID-19 infection in Poland was recorded on 4 March 20 and the first public restrictions were introduced on 13 March 2020, when the Polish government announced the Risk of Pandemic Status (Online Database of Polish Legislation, 2020a), followed by the Pandemic Status on 20 March 2020 (Online Database of Polish Legislation, 2020b). In Spain, the first case of COVID-19 was recorded on 31 January 2020,

but it was not until 12 March that the country took significant measures, including social restrictions. On 14 March, a state of emergency was declared in Spain by Royal Decree (463/2020) (Legido-Quigley et al., 2020). In Spain, the total lockdown of the population (excluding those providing essential services: nurses, doctors, farmers, food traders, etc.) was in place from March 14th, 2020, until the end of the 'state of alarm' decreed by the government in June 2020. The decision was made because the lockdown of people was considered the most effective non-clinical measure to curb the spread of the pandemic (Kim et al., 2020).

The pandemic posed many threats and so various types of organisations, including health and social care entities, took actions to counteract it, particularly in the first phase. The first steps taken were to quickly assess additional risks from the spread of the virus and exclude vulnerable workers from potential exposure to COVID-19 in the workplace (Garzillo et al., 2022). Changes related to the functioning of social assistance entities differed depending on not only the country but also the type of entity. For example, in Poland, in the face of the significant pandemic threat to which residents of nursing homes were particularly exposed for somatic (diseases, age, weakened immunity) and organisational reasons (numerous groups of people living in one place, which might increase the number of infections), temporary restrictions on the activities of residential homes were introduced. These restrictions involved: prohibiting residents from leaving the premises, except for health situations requiring medical consultations; a ban on visiting residential homes and prohibiting residents from going on holiday. The recommendations also concerned the conduct towards persons employed in social care entities. For example, in nursing homes, it was recommended to: introduce a ban on employment for staff in other workplaces, particularly in health care institutions; consider quarantining staff in provinces with a higher number of infections and transmission of infections in hospitals; wear protective masks; and measure body temperature before starting work. If the temperature was above 38°C and the number of breaths was above 22/min, the staff was recommended to contact the primary care physician, who should consider implementing diagnostics for COVID-19 and notifying the field health department about the action taken. Considering these examples, the situation of persons in helping professions employed in social assistance entities can certainly be described as difficult (Glac & Zdebska, 2020).

According to available research, healthcare workers are particularly vulnerable to mental stress, which was further exacerbated by the pandemic (Esteban-Sepulveda et al., 2022; Santabarbara et al., 2021). Risk factors include the perceived increased risk of COVID-19 infection, an insufficient supply of personal protective equipment, limited treatment op-

tions for COVID-19 patients and the fear of infecting loved ones (Perez-Raya et al., 2021). In our study, it was also found that the respondents feared for their own life and that of relatives. In Poland, statistically significant differences were observed between individual professions, with the greatest fears expressed by social workers, which might have been due to the frequency of contact with people staying in the facility as well as the performance of tasks in the patients' environment. In Spain, there was no correlation between individual occupations.

Fear for life in the context of the pandemic is unquestionably related to the category of health. Health concerns, although very clearly expressed by respondents from Poland and Spain, cannot be related to the profession performed – no statistically significant result was recorded in our study.

As a global public health emergency that required drastic control measures, COVID-19 disrupted every aspect of daily life (Brooks et al., 2020). The COVID-19 pandemic also left a significant mark on the work environment. Changes related to work, such as the use of remote working, reorganisation of working time and the need to use personal and individual protective equipment, undoubtedly required employees to adapt to the new situation. Researchers have found that changes in the organisation of work lead to feelings of helplessness and isolation. Moreover, they might have increased uncertainty related to economic aspects (Ornell et al., 2020). Our study showed that both Polish and Spanish employees feared that their financial situation would deteriorate. This might have resulted from the recommendations to limit the employment of respondents to one entity, which reduced the possibility of earning extra money (Glac & Zdeb-ska, 2020). In Poland, people in certain medical professions received financial allowances in connection with work during the pandemic. Unfortunately, this did not cover, for example, occupational therapists, which is reflected in the results of our study – in the Polish group, it was occupational therapists who most often feared that their financial situation would deteriorate. In the Spanish group, such fears were most often expressed by physiotherapists. This might have resulted from the fact that in Spain rehabilitation services were closed, treatment suspended and physiotherapists redistributed to other entities without prior training (Chaler et al., 2020). This mainly concerned physiotherapists working in health care (mainly in hospitals) but could have also affected physiotherapists employed in other entities.

Another problem related to the COVID-19 pandemic was the loss of jobs experienced by employees in various sectors of the economy. Spoorthy et al. (2020) confirmed that occupational therapists, like other professional groups, also had to change their way of working to meet new organisational needs under the pandemic conditions. Research carried out

by Pozzi et al. (2022) in Europe with the support of the Council of Occupational Therapy for European Countries (COTEC) showed that more than two-thirds of occupational therapists experienced a change in work function and about half also changed departments. These reports were reflected in our study, where Spanish occupational therapists were the professional group that feared most that they would lose their job. In our study we can note that in Poland no concerns about job loss were observed in this group. The low unemployment rate in Poland compared to Spain could be attributed to general socio-economic factors. In Poland, jobs in the public sector, especially those involving care work, are generally lower paid than in other sectors. However, they are often seen as more stable and secure. Overall, this may also stem from differences in worldview, historical experiences, and religiosity among people. Cultural differences can significantly impact anxiety and coping during COVID-19 (Mueller-Haugk et al., 2023).

The available research shows that the provision of work in a pandemic situation affects the mental condition of employees, including those in helping professions (Lai et al., 2020; Tahara et al., 2021). However, there are few reports on the relationship between the stress experienced by employees during a pandemic and concerns about the people with whom they work or for whom they are responsible at work. Our study showed that psychologists and caregivers were most concerned about the charges with whom they worked. This result may be related to the specific nature of the psychologist's work, as the patient may verbalise their fears and concerns and thus give a better opportunity for the specialist to know them (Gniadek et al., 2020).

Certainly, some people showed resilience in the face of the psychological challenges associated with the COVID-19 pandemic. However, for many people, the situation exacerbated existing problems and contributed to the emergence of many new ones related to stress. The COVID stress is associated with poorer use of coping mechanisms (Shivak et al., 2024). Therefore, it is worth spending time and resources to analyse the impact of COVID-19 on the mental functioning of individuals and help people who are most affected by the psychological consequences of the pandemic, including those who work in helping professions (Dymecka, 2021).

STUDY LIMITATIONS

This study is not without limitations. The authors are aware that differences between countries may have been influenced by factors, such as age differences (younger respondents from Spain) or level of education (more respondents from Spain had higher education). An important aspect that could have affected

the trial results is the relatively small number of people in the study subgroups. This sample size could be a cause of e.g. the potential lack of comparisons for individual professions.

CONCLUSIONS

Our study showed that the COVID-19 pandemic affected employees in helping professions in social assistance institutions. Employees from Poland feared more that their financial situation would deteriorate, and felt a threat to their health and the health of their relatives and charges. On the other hand, many more workers from Spain expressed a fear of losing their jobs. Occupational therapists most often indicated fears related to the COVID-19 pandemic except for concerns about charges, which were expressed most often by psychologists.

DISCLOSURES

This research received no external funding. The study was approved by the Bioethics Committee at the Regional Medical Chamber in Krakow (Approval No. OIL/KBL/73/2021). The authors declare no conflict of interest.

REFERENCES

- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *Lancet*, *395*, 912–920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)
- Chaler, J., Gil Fraguas, L., Gómez García, A., Laxe, S., Luna Cabrera, F., Llavona, R., Miangolarra Page, J. C., Del Pino Algarrada, R., Salaverría Izaguirre, N., Sánchez Tarifa, P., Santandr Eu, M. E., & Garreta Figuera, R. (2020). Impact of coronavirus disease 2019 outbreak on rehabilitation services and physical rehabilitation medicine and rehabilitation physicians' activities: Perspectives from the Spanish experience. *European Journal of Physical and Rehabilitation Medicine*, *56*, 369–371. <https://doi.org/10.23736/S1973-9087.20.06304-2>
- Choi, K. R., Skrine Jeffers, K., & Logsdon, M. C. (2020). Nursing and the novel coronavirus: Risks and responsibilities in a global outbreak. *Journal of Advanced Nursing*, *76*, 1486–1487. <https://doi.org/10.1111/jan.14369>
- Czerw, A., & Borkowska, A. (2010). Praca zawodowa jako obszar realizowania misji społecznej [Professional work as an area of realizing a social mission]. *Psychologia Społeczna*, *54*, 303–315.
- Dymecka, J. (2021). Psychosocial effects of the COVID-19 pandemic. *Neuropsychiatria i Neuropsychologia*, *16*, 1–10. <https://doi.org/10.5114/nan.2021.108030>
- Esteban-Sepúlveda, S., Terradas-Robledo, R., Castro-Ribeiro, T., García-Pagès, E., Sobregreu-Sangrà, P., & Lacueva-Pérez, L. (2022). Pandemia COVID-19 sobre profesionales sanitarios en un hospital de tercer nivel en España: Cambios laborales durante la primera ola, salud mental a los 4 meses y seguimiento a los 9 meses [COVID-19 pandemic on health professionals in a third level hospital in Spain: Job changes during the first wave, mental health at 4 months, and follow-up at 9 months]. *Enfermería Clínica*, *32*, 143–151. <https://doi.org/10.1016/j.enfcli.2021.12.009>
- Garzillo, E. M., Cioffi, A., Carta, A., & Monaco, M. G. L. (2022). Returning to work after the COVID-19 pandemic earthquake: a systematic review. *International Journal of Environmental Research and Public Health*, *19*, 4538. <https://doi.org/10.3390/ijerph19084538>
- Glac, W., & Zdebska, E. (2020). Sytuacja pracowników domów pomocy społecznej w okresie epidemii koronawirusa SARS-CoV-2 (COVID-19) w Polsce [The situation of employees of social welfare homes during the SARS-CoV-2 (COVID-19) coronavirus epidemic in Poland]. *Praca Socjalna*, *2*, 129–142.
- Gniadek, A., Nawara, W., Padykuła, M., & Malinowska-Lipień, I. (2020). Polska pielęgniarka w czasie pandemii zakażeń SARS-CoV-2 – różne perspektywy wykonywania zawodu [Polish nurse during the SARS-CoV-2 infection pandemic – different perspectives on the profession]. *Zdrowie Publiczne i Zarządzanie*, *18*, 149–154.
- Graf, E. M., Sator, M., & Spranz-Fogasy, T. (2014). *Discourses of helping professions*. Benjamins.
- Kim, S., Kim, Y. J., Peck, K. R., & Jung, E. (2020). School opening delay effect on transmission dynamics of coronavirus disease 2019 in Korea: Based on mathematical modeling and simulation study. *Journal of Korean Medical Science*, *35*, 1–9. <https://doi.org/10.3346/jkms.2020.35.e143>
- Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., Wu, J., Du, H., Chen, T., Li, R., Tan, H., Kang, L., Yao, L., Huang, M., Wang, H., Wang, G., Liu, Z., & Hu, S. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Network Open*, *3*, e203976. <https://doi.org/10.1001/jamanetworkopen.2020.3976>
- Legido-Quigley, H., Mateos-García, J. T., Campos, V. R., Gea-Sánchez, M., Muntaner, C., & McKee, M. (2020). The resilience of the Spanish health system against the COVID-19 pandemic. *Lancet. Public Health*, *5*, e251–e252. [https://doi.org/10.1016/S2468-2667\(20\)30060-8](https://doi.org/10.1016/S2468-2667(20)30060-8)

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Szymanowicz,
Aneta Bac

- Mueller-Haugk, S., Bidzan-Bluma, I., Bidzan-Wiącek, M., Bulathwatta, D. T., & Stueck, M. (2023). Anxiety and coping during COVID-19. Investigation of anxiety management types in a German and Polish sample. *Health Psychology Report, 11*, 282–294. <https://doi.org/10.5114/hpr/171884>
- Online Database of Polish Legislation (2020a). *Regulation of the Minister of Health of 13 March 2020 on the declaration of an epidemic threat in the territory of the Republic of Poland*. Retrieved from <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20200000433> [accessed October 9, 2021]
- Online Database of Polish Legislation (2020b). *Regulation of the Minister of Health of 20 March 2020 on the declaration of an epidemic in the territory of the Republic of Poland*. Retrieved from <https://isap.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20200000491> [accessed October 9, 2021]
- Ornell, F., Schuch, J. B., Sordi, A. O., & Kessler, F. H. P. (2020). “Pandemic fear” and COVID-19: Mental health burden and strategies. *Revista Brasileira de Psiquiatria, 42*, 232–235. <https://doi.org/10.1590/1516-4446-2020-0008>
- Pérez-Raya, F., Cobos-Serrano, J. L., Ayuso-Murillo, D., Fernández-Fernández, P., Rodríguez-Gómez, J. A., & Almeida Souza, A. (2021). COVID-19 impact on nurses in Spain: a considered opinion survey. *International Nursing Review, 68*, 248–255. <https://doi.org/10.1111/inr.12682>
- Pozzi, C., Lanzoni, A., Battain, P., Alvarez, E., Tobar, E., Hersche, R., Cavalli, S., Monsò, A., Llarch, E., Bellelli, G., Morandi, A., & Graff, M. (2022). Occupational therapists and COVID-19 pandemic: an observational survey in Europe. *The Open Journal of Occupational Therapy, 10*, 1–12. <https://doi.org/10.15453/2168-6408.1923>
- Santabàrbara, J., Bueno-Notivol, J., Lipnicki, D. M., Olaya, B., Pérez-Moreno, M., Gracia-García, P., Idoaga-Mondragon, N., & Ozamiz-Etxebarria, N. (2021). Prevalence of anxiety in health care professionals during the COVID-19 pandemic: a rapid systematic review (on published articles in Medline) with meta-analysis. *Progress in Neuro-Psychopharmacology & Biological Psychiatry, 107*, 110244. <https://doi.org/10.1016/j.pnpbp.2021.110244>
- Shivak, S. M., Caissie, D. M., Power, H. A., Asmundson, A. J. N., Wright, K. D. (2024). The relationship between maladaptive health beliefs, pandemic-related stress, and health anxiety during the COVID-19 pandemic. *Health Psychology Report, 12*, 68–78. <https://doi.org/10.5114/hpr/169169>
- Spoorthy, M. S., Pratapa, S. K., & Mahant, S. (2020). Mental health problems faced by healthcare workers due to the COVID-19 pandemic: a review. *Asian Journal of Psychiatry, 51*, 102119. <https://doi.org/10.1016/j.ajp.2020.102119>
- Tahara, M., Mashizume, Y., & Takahashi, K. (2021). Coping mechanisms: Exploring strategies utilized by Japanese healthcare workers to reduce stress and improve mental health during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health, 18*, 131. <https://doi.org/10.3390/ijerph18010131>
- Wang, C., Horby, P. W., Hayden, F. G., & Gao, G. F. (2020). A novel coronavirus outbreak of global health concern. *Lancet, 395*, 470–473. [https://doi.org/10.1016/S0140-6736\(20\)30185-9](https://doi.org/10.1016/S0140-6736(20)30185-9)

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