



# The experiences of early career geriatricians throughout Europe during the COVID-19 pandemic

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## Key summary points

**Aim** To assess the experiences of early career geriatricians during the COVID-19 pandemic.

**Findings** The respondents reported moderate levels of anxiety, work overload, and strong disruption in their work routine and private lives.

**Message** Many early career geriatricians throughout Europe were involved as frontline workers in the care of older adults with COVID-19, and experienced a major impact on their professional and private lives.

## Abstract

The COVID-19 pandemic has severely affected older adults and brought about unprecedented challenges to geriatricians. We aimed to evaluate the experiences of early career geriatricians (residents or consultants with up to 10 years of experience) throughout Europe using an online survey. We obtained 721 responses. Most of the respondents were females (77.8%) and residents in geriatric medicine (54.6%). The majority (91.4%) were directly involved in the care of patients with COVID-19. The respondents reported moderate levels of anxiety and feelings of being overloaded with work. The anxiety levels were higher in women than in men. Most of the respondents experienced a feeling of a strong restriction on their private lives and a change in their work routine. The residents also reported a moderate disruption in their training and research activities. In conclusion, early career geriatricians experienced a major impact of COVID-19 on their professional and private lives.

**Keywords** COVID-19 · Survey · Early career geriatricians · Training · Anxiety

## Introduction

The COVID-19 pandemic has brought unprecedented challenges to healthcare workers across the globe [1] evoking feelings of anxiety [2, 3], work overload [3], and a disruption of private lives [4]. The availability of personal protective equipment (PPE) is important in preventing disease transmission; its shortage has been associated with worse outbreaks and the fear of getting infected among medical staff members [5].

Since age is an independent risk factor for having severe cases of COVID-19, hospitalizations, and death [6, 7], this

pandemic has been having a major impact on older adults [8]. Considering that geriatricians are trained in the care of frail older adults, geriatric medicine should thus be a natural and fitting specialty for older people suffering from COVID-19 [9]. The overload with work due to the COVID-19 pandemic, including the multitude of patients' experiencing incurable suffering and death [10], increased the likelihood in experiencing significant impact on both a professional and personal level. Disruptions in postgraduate medical training and research were reported in different medical fields [11, 12].

No previous studies have explored the effects of the COVID-19 pandemic on early career geriatricians. Therefore, we aimed to analyze the psychological, social, and educational impact of COVID-19 on early career geriatricians in several European countries.

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## Methods

This was a cross-sectional online survey conducted from February till March 2021 among early career geriatricians throughout Europe. The Early Careers Geriatricians Initiative (ECGI; formerly Young Geriatrician Initiative) [13] was determined to being an ideal medium to run this survey.

Our survey included residents in training or consultants in geriatric medicine with no more than 10 years since becoming consultants. The exclusion criteria were undergraduate students, non-medical healthcare professionals, non-geriatric specialties, and consultants with more than 10 years of experience. The questionnaire (Supplement 1) was translated into 16 different languages. The collected responses were translated back into English.

We processed the data by using Sheets (Google LLC) and Excel (Microsoft Corporation). The Chi-square tests were performed using Prism 9.2.0 (GraphPad Software). The data are given as percentages of the respective groups as well as absolute numbers in the case of frequency data. The continuous variables are shown as median [interquartile (IQ) range]. A  $p < 0.05$  was set as a threshold of significance.

## Results

We obtained a total of 884 responses. After applying both inclusion and exclusion criteria, we evaluated 721 responses (Fig. 1). Most of the respondents were female ( $n = 561$ , 77.8%) and residents in geriatric medicine ( $n = 394$ ; 54.6%). The overall majority of the respondents ( $n = 659$ ; 91.4%) were directly involved in the care of patients with

COVID-19. The demographic characteristics are provided in Table 1. A full set of included responses is provided in Supplement 2.

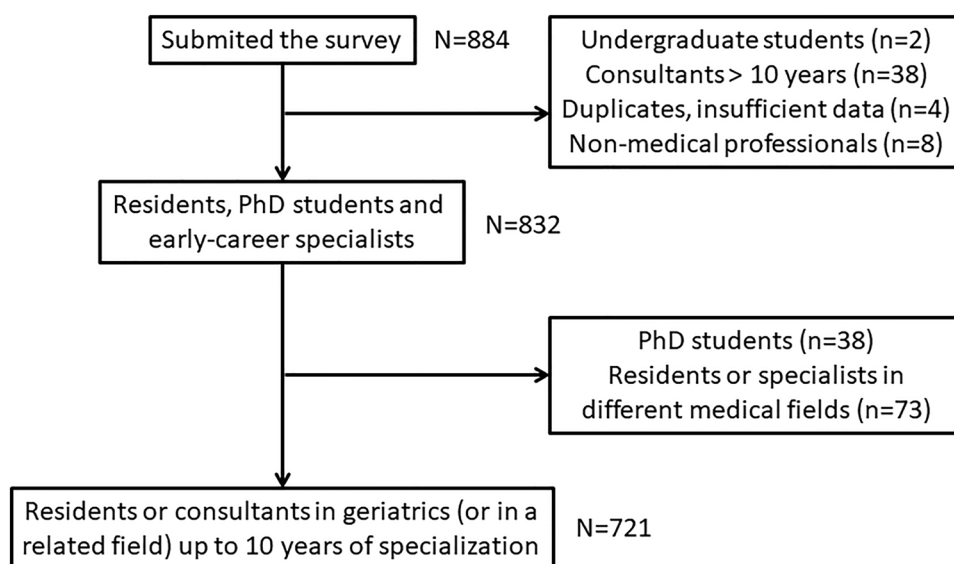
The respondents reported a moderate level of anxiety and work overload (median of 3, IQ range of 2 for both). We found the female gender as a risk factor compounding both variables ( $p < 0.05$ ). There were 59.2% of respondents ( $n = 427$ ) who stated that their daily routine has “strongly” or even “very strongly” changed. Looking at the impact on their personal lives, 66.7% of the respondents ( $n = 481$ ) experienced a strong or very strong disruption of their private lives. Most of the respondents answered that they had good access to diagnosis and treatment policies as well as to PPE (median of 4 and IQ range of 1 for all). The residents in geriatric medicine reported a moderate disruption in training and research (median of 3 and IQ range of 2 for both).

Most (90.4%) of the respondents indicated at least one positive consequence of the pandemic. Markedly, 28% of the respondents found greater recognition of geriatric medicine as a specialty and 18.3% felt that there was an increased focus on care of older adults (Table 2).

## Discussion

The majority of the early career geriatricians involved in the survey were at the forefront of the care of older adults with COVID-19. The respondents reported a moderate level of anxiety and work overload. In addition, the respondents strongly agreed with having experienced changes in their work routine and restrictions in their private lives. The

Fig. 1 Flowchart of respondents



**Table 1** Demographic characteristics of the respondents

Parameter	Option	% (n)
Age	< 25 years	3.5 (29)
	25–29 years	18.3 (152)
	30–34 years	30.0 (250)
	35–39 years	21.3 (177)
	> 40 years	26.8 (223)
Gender	Male	22.1 (159)
	Female	77.8 (561)
	No answer	0.1 (1)
Professional group	Resident in training, geriatric medicine	54.6 (394)
	Consultant in geriatric medicine	45.4 (327)
Years as consultants		Median (IQ range)
		3 (3)
Work site		% (n)
	University hospital	50.3 (363)
	Regional hospital	23.2 (167)
	Local hospital	18.3 (132)
	Private clinic	4.2 (30)
Working environment	Other facility	4.0 (29)
	Pre-hospital emergency medical care	2.1 (15)
	Emergency department	15.8 (114)
	Acute ward (general)	16.2 (117)
	Acute ward (geriatric)	60.6 (437)
	Long-term care	10.5 (76)
	Rehabilitation ward	10.4 (75)
	Nursing home	7.5 (54)
	Palliative care	8.9 (64)
	Geriatric mobile team	8.2 (59)
	Primary care (family doctor, general practitioner)	3.3 (24)
	Outpatient clinic	18.3 (132)
	Other	4.3 (31)
Country where the participants are working		% (n)
	Albania	0.1 (1)
	Austria	0.3 (2)
	Belarus	0.1 (1)
	Belgium	6.2 (45)
	Croatia	0.1 (1)
	Czech Republic	2.9 (21)
	Denmark	1.2 (9)
	Estonia	0.4 (3)
	Finland	2.1 (15)
	France	11.5 (83)
	Germany	1.4 (10)
	Greece	0.1 (1)
	Hungary	0.3 (2)
	Iceland	0.1 (1)
	Ireland	0.7 (5)
	Israel	0.3 (2)
Italy	8.0 (58)	
Latvia	0.1 (1)	
Lithuania	1.4 (10)	

**Table 1** (continued)

Parameter	Option	% (n)
	Malta	0.7 (5)
	The Netherlands	4.2 (30)
	North Macedonia	0.3 (2)
	Norway	0.7 (5)
	Poland	1.1 (8)
	Portugal	0.6 (4)
	Romania	0.4 (3)
	Russia	7.4 (53)
	Serbia	0.1 (1)
	Slovenia	1.8 (13)
	Spain	22.3 (161)
	Sweden	5.1 (37)
	Switzerland	3.2 (23)
	Turkey	4.7 (34)
	United Kingdom	5.0 (36)
	No answer	4.9 (35)
Directly involved in the care of patients with COVID-19	Yes	91.4 (659)
	No	8.3 (60)
	Other	0.3 (2)
Where did the care for patients with COVID-19 take place	At the regular work site	65.5 (472)
	Mobilized to other work locations	8.0 (58)
	Combination of both	18.0 (130)
	Other or no answer	8.5 (61)

The frequency data are given as percentages (absolute number). The continuous variables are shown as median value [interquartile (IQ) range]

residents in geriatric medicine reported a moderate disruption in their training and research activities.

As apparent from our survey, most of the early careers geriatricians have been working directly with the patients infected with COVID-19. Care workers directly involved in the medical care of patients with COVID-19 are at a higher risk of experiencing psychological burden [2], [3]. This is in line with our observations that most of

our respondents reported having strong changes in their work routines. Additionally, the disruption in their personal lives reported is similar to the observations of other authors [4].

A strength of this study is that the participants came from a large number of countries throughout Europe. Also as far as we know, this is the first survey among early career geriatricians who are involved in the care of frail older adults.

**Table 2** Optimistic insights/benefits of the pandemic

Option	% (n)
Nothing good came out of it	7.6 (55)
The abundance of free online educational material	35.5 (256)
Easy access to the EuGMS E-Congress 2020	19.0 (137)
The fast development of telemedicine	41.6 (300)
A wave of solidarity	29.7 (214)
A new feeling of appreciation and/or respect toward healthcare workers	21.8 (157)
An opportunity to learn something new	43.6 (314)
An opportunity to work alongside health care professionals of other specialties	41.3 (298)
The impression that there was an increased focus on the care of older people	18.3 (132)
I found that the specialty of geriatric medicine was further recognized by other medical specialties	28.0 (202)
Others, please specify	6.2 (45)

However, there were some limitations to our study. First, we did not use validated scales or instruments. Second, there was an uneven representation of countries with Spain representing over 20% of the respondents and some countries having only a small number of respondents. Third, responses reflected the subjective feelings of the respondents [2] and might not exactly reflect the objective situation (e.g., in case of PPE shortage). Fourth, there might have been a selection bias, i.e., only people having strong (especially negative) experience having filled in the survey.

Many early career geriatricians throughout Europe were among the frontline workers in the care of COVID-19. This has led to disruptions in their private lives as well as changes in their work routines, but also caused moderate levels of anxiety and a feeling of being overloaded with work. Interestingly, a vast majority of respondents were able to find at least one positive consequence of the pandemic. A positive result of the pandemic was that for almost 30% of the respondents, the field of geriatrics has gained more respect and recognition among other medical specialities.

**Supplementary Information** The online version contains supplementary material available at <https://doi.org/10.1007/s41999-021-00605-1>.

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**Data availability** It is available in the supplemental material's section.

**Code availability** Not applicable.

## Declarations

**Conflict of interest** On behalf of all authors, the corresponding author states that there is no conflict of interest.

**Ethics approval** Not applicable.

**Consent to participate** The respondents agreed to have their responses processed in an anonymous fashion by filling and submitting the questionnaire.


**Consent for publication** All authors have given their consent for publication.

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