RESEARCH LETTER

French General Practitioners Frequently See Patients with Long-COVID

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A second epidemic has appeared among some patients infected with COVID-19 persistent disorders, commonly called "long COVID syndrome." Our study sought to identify the proportion of French GPs dealing with patients with potential long COVID syndrome and their symptoms in an online cross-sectional questionnaire-based survey among a representative national panel of GPs. The majority (53.8%) reported at least 1 patient with COVID-19 and persistent symptoms, and 33% 2 or more such patients. Their most frequent symptoms were respiratory difficulties (60.6%), psychological distress (42.8%), and anosmia-dysgeusia (40.8%). Long COVID syndrome's recognition, management, and rehabilitation are priorities requiring effective coordination between primary and secondary care. (J Am Board Fam Med 2021;34:1010–1013.)

Keywords: COVID-19, Cross-Sectional Studies, Family Medicine, France, Primary Health Care, Secondary Care, Surveys and Questionnaires

Introduction

During a pandemic, primary care professionals play a key role in reinforcing public health messages, helping patients manage at home, and identifying those needing hospital care.¹ From the beginning of the COVID-19 pandemic, general practitioners (GPs) have played an important role in patient management. They have had to adapt their practices to deal with a situation constantly evolving^{2,3} as this new disease's characteristics and management are discovered. Among these characteristics is a secondary epidemic among people who have already been infected with COVID-19: persistent disorders manifested as a wide variety of disabling symptoms affecting up to 30% of patients for several months after the onset of their illness, and known as long COVID

syndrome.⁴ The magnitude of long COVID syndrome is a growing international issue: between May and July 2020, the proportion of patients reporting long-term symptoms in different studies increased sharply⁵; in France, 60% of patients with COVID-19 included in a longitudinal prospective cohort had at least 1 symptom 6 months after infection.⁶

Our study sought to identify the proportion of French GPs with patients with potential long COVID syndrome and the symptoms they reported.

Methods

Between October 6 and November 15, 2020, we conducted an online cross-sectional questionnaire-based survey among a representative national panel of 2755 French GPs, randomly selected from the national register of health professionals, about their opinions and practices related to the COVID-19 pandemic. Data were weighted for sex, age, workload, region, and density of health care workers in the area of practice and calibrated to take nonresponse into account. The questionnaire asked whether GPs had seen (in person or video) patients with COVID-19 (confirmed cases with PCR testing) whose symptoms persisted for at least 2 months and the types of symptoms they had observed.

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Table 1. Characteristics of General Practitioners According to Long COVID Patients (n = 1209, Weighted Data)

Have You Had 1 or More Patients Coming for a Consultation, at Least 2 to 3 Months after a Confirmed COVID-19 Infection Because of Persistent Symptoms?

Characteristics*	Total (N = 1209)		Yes (N = 651)		No (N = 558)		P value
	Sex						
Male	736	60.9	388	52.7	348	47.3	.51
Female	473	39.1	263	55.6	210	44.4	
Age, years							
< 50	377	31.2	216	57.2	161	42.8	.44
50 to 59	390	32.2	212	54.3	178	45.7	
≥ 60	442	36.6	223	50.4	219	49.6	
$Workload^{\dagger}$							
Low	282	23.3	145	51.5	137	48.5	.44
Intermediate	614	50.8	322	52.4	292	47.6	
High	313	25.9	184	58.7	129	41.3	
Intensity of the COVID-19 epidemic in the GPs area (French départements) [‡]							
Low	411	34.0	176	42.9	234	57.1	.002
Moderate	527	43.5	306	58.2	220	41.8	
High	272	22.5	168	61.8	104	38.2	
Perceived medical severity of COVID-19 for the population ^f							
Low	332	27.5	144	43.4	188	56.6	.006
Moderate	612	50.6	339	55.4	273	44.6	
High	265	21.9	168	63.2	98	36.8	

GP, general practitioners; Q; quartile.

Source of the data: Representative national panel of French GPs; participants responded to an online cross-sectional questionnaire-based survey between October 6, 2020, and November 15, 2020.

Results

Among 1209 participating GPs (44.0%), 53.8% reported at least 1 patient with COVID-19 and persistent symptoms, and 33% 2 patients or more. Reporting patients with long COVID syndrome was significantly more frequent when GPs practiced in areas where the epidemic intensity was highest. It was also positively associated with GP's perception of COVID-19's medical severity (Table 1). They reported a variety of persistent symptoms,

most frequently (Figure 1) respiratory difficulties (60.6%), psychological distress (42.8%), and anosmia-dysgeusia (40.8%).

Discussion

More than half of the responding GPs, especially those in areas most strongly affected by the pandemic (62%), have seen patients with what may be long COVID syndrome. Given that the second epidemic wave in France has struck more heavily

^{*}The following variables were tested but were not found significant: region, group practice, occasional practice of complementary and alternative medicine, density of healthcare workers in the GPs area (département). French départements are local administrative areas (there are 96 départements in Metropolitan France).

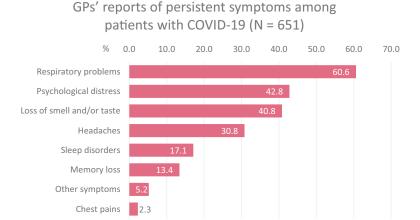
P values represent χ^2 tests with Rao-Scott correction.

[†]The number of consultations in the previous year were calculated on January 1, 2018. Low represents Q1, indermediate represents Q2 and Q3, and high represents Q4.

[‡]Excess mortality in percentage compared to the previous year represented as low (< 1%), moderate (1% to 1.8%), and high (>1.8%) as described in Bergeat M, Chaput H, Verger P, Scronias D. (2021). Comment les médecins généralistes prennent-ils en charge les patients atteints de la Covid-19? DREES Etudes et Résultats n°1177. https://drees.solidarites-sante.gouv.fr/sites/default/files/2021-01/er1177_0.pdf.

^fOn a scale of 0 to 10. Low: [0-4]; moderate: [5-7]; high: [8-10].

Figure 1. General practitioners' reports of persistent symptoms among patients with COVID-19 (n = 651, weighted data).



throughout the country, a higher percentage of GPs may have to deal with this illness. The variety of symptoms mentioned by GPs and the pre-eminence of respiratory and neuropsychological symptoms, loss of smell and/or taste are in line with previous publications; some also identified fatigue as a frequent symptom of long COVID syndrome (symptom not included in our questionnaire).^{4,8}

Because guidelines for diagnosing and managing patients with long COVID syndrome were published only recently in France, GPs and patients have inhabited an evidence-free zone. 10 Patients with long COVID syndrome reported feeling that their GPs frequently did not believe, listen to, or support them, as they endured disabling symptoms.¹¹ The GPs can encounter diagnostic uncertainties when a laboratory test cannot confirm the primary infection because of the unspecific nature of some long COVID symptoms. Diagnosing this syndrome requires eliminating a known identifiable condition, such as pulmonary fibrosis, asthma, decompensation of a comorbidity, and other causes besides COVID-19.12

The World Health Organization has urged countries to prioritize recognition, research, and rehabilitation of long COVID syndrome. 13 A better understanding of the risk factors for long COVID symptoms is an essential research issue to adapt the follow-up and management of these patients. Services should be multidisciplinary, run by primary care professionals to enable continuity in follow-up and rehabilitation, with appropriate links for secondary care referral.¹⁴ The recent French reform based on "territorial professional health

communities" intended to better organize collaboration and coordination between health professionals of primary and secondary care for the patient's path, across the territories, offers an opportunity to manage these new complex patients.

To see this article online, please go to: http://jabfm.org/content/ 34/5/1110.full.

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