Abstract
The COVID-19 pandemic has focused health systems on supporting patients affected by this virus. Meanwhile in the community, many other contained patients could only use self-care strategies, especially in countries that have set up a long and strict containment such as France. The study aimed to compare coping strategies deployed by patients with Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS; a poorly recognised syndrome) to those with better known and referenced chronic conditions. An online flash survey was conducted during the containment period in partnership with French Patients Organizations including ME/CFS national association. Therefore, ‘Brief COPE’ version of Lazarus and Folkman’s Ways of Coping Check List has been adapted to the specificity of the containment. The survey was e-distributed in France from 15 April to 11 May 2020. Differences of coping strategies were analyzed using Wilcoxon–Mann–Whitney test. Amongst 637 responses, 192 were complete, presenting a wide variety of diseases, including 93 ME/CFS. The latter have significantly different coping strategies than recognised diagnosed diseases patients: similar uses of emotion focused coping but less uses of seek social support and problem-focused copings. In conclusion, coping strategies are different for those who deal with the daily experience of ME/CFS, highly disabling chronic condition with diagnostic ambiguity, low degree of medical and social recognition and without treatment. Better understanding of those strategies is needed to provide the means for health promotion researchers, managers and clinicians, to accompany those patients.

KEYWORDS
chronic diseases, chronic fatigue syndrome, containment, coping skills, COVID-19 Pandemic, social isolation within the community

What is known about this topic?
- People living with a long-term condition (LTC) faced with the stress of COVID-19 have mostly mobilised coping strategies centered on emotion.
- People living with a LTC need the support of the social network in the daily adaptation to their pathology.
CFS remains insufficiently known by physicians, and medical care
(2.2% of the general population) (Estévez-López et al., 2018). ME/
and unable to care for one’s self. This disease is not rare (0.5%–
least by half, struggling with daily activities, to constantly bedrid-
on patient’s performance range from reducing overall activities at
medical imaging to eliminate a common cause of fatigue such as viral
consensus classifications, including different clinical, biological and
markers. Diagnosis is based on vaguely defined criteria by different
maintenance concerning coping strategies adopted by people living with
lack of effectiveness of past actions on their fatigue (Ray et al., 1995). This has already been shown by Carver for whom dis-
experience of encountering relevant difficulties in one's goal-related
effects and exists when an individual perceives the achievement of
management of pain and sleep disorders. Patients with ME/CFS experience especially debilitat-
ing fatigue that is unlike everyday fatigue and can be triggered by
minimal activity. This exhaustion greatly impairs quality of life (Chu
CFS can be seen as an emblematic disease with a low degree of social
for syndromes for which it is already extremely difficult to find relevant medical and educational
impact of COVID-19 pandemic on stress and coping strategies
measured by a LTC, being poor. However, Umucu and Lee have already identified
the results of his or her management (Carver et al., 1989).
At present, we suppose literature related to the COVID-19 con-
concerned specific pathologies as pain or identified the correlation
factors between coping strategies and quality of life or individual
measured by a LTC. Studies mainly
to stress (Folkman et al., 1986). Literature increasingly refers to cop-
how these patients coped with their condition during the
Coping is a process of managing pressures, demands and emotions in response to
a stressor. Stress is viewed as the ex-
coping has been described as an individual’s attempt to use cognitive and behavioural strategies to
managing and regulating pressures, demands and emotions in response to
is very limited, mainly consisting in management of pain and sleep
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to coping. Thus, coping has been described as an attempt to use cognitive and
engagement occurs when a person has negative expectations about
stress (Folkman et al., 1986). This has already been shown by Carver for whom dis-
the achievement of a desired goal as impossible or detects possible future punish-
factors between coping strategies and quality of life or individual
factors as pain or identified the correlation
special coping strategies for recognized diagnosed diseases (RDDs) face of the stress of
The ongoing COVID-19 pandemic has been declared a public health
emergency of international concern. Several countries have an-
nounced containment to reduce the spread of the virus and advised physical distancing. In France, the population was strictly confined
from 17 March to 11 May 2020. In this context, having access to
the caregivers has become a challenge for people living with a long-
term condition (LTC). In addition, they were not encouraged to go
hospital except emergency. The containment situation prevents basic needs from being taken into account. Combined with the lack
of support from the chronic disease teams they usually encounter,
people living with a LTC are more likely to be vulnerable, stressed
and anxious. As a result, coping with a LTC has become a difficult
task, especially for people with poorly stabilised or unknown dis-
eases. The question arises particularly for syndromes for which it is
an already extremely difficult to find relevant medical and educational
under normal circumstances in order to further improve
their support.

The pandemic may therefore provide an opportunity to deepen
works on different coping strategies for different types of diseases
including those ‘unknown’ syndromes, such as myalgic encephalo-
myelitis/chronic fatigue syndrome (ME/CFS).

ME/CFS is a complex neurological chronic disease with a wide
range of disabling symptoms without any diagnostic laboratory
markers. Diagnosis is based on vaguely defined criteria by different
consensus classifications, including different clinical, biological and
medical imaging to eliminate a common cause of fatigue such as viral
infecteds (Strand et al., 2019). Medical management of ME/CFS
is very limited, mainly consisting in management of pain and sleep
problems. Various works are describing coping in general as the process
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problems. Various works are describing coping in general as the process
of coping is the process of managing pressures, demands and emotions in response to

containment. Later, it focused on a comparison between ME/CFS coping strategies and other diseases (RDD: recognised diagnosed disease). Indeed, due to a strong involvement of French ASFC patients’ organization, the panel who answered the survey provided an opportunity to specifically assess the strategies of those patients. In addition to Umucu and Lee, our study aims at looking at the coping strategies implemented during this crisis by these people taking into account the specificities of their disease on a daily basis whilst their access to care is limited.

2.2 Study design

Our research is based on an anonymised online flash survey, accessible from 15 April to 11 May 2020, during containment period in France. Its distribution method was twofold: by ‘Snowball Sampling’ (« Snowball Sampling », 2008) method and by distribution via ‘France Associations Santé’ patient network, a partner involved in participative research perspectives (Karazivan et al., 2015). The aim of the ‘Snowball Sampling’ method was to include a varied panel of patients, members and nonmembers of patients’ associations (Figure 1).

The questionnaire explored links between coping strategies and experiential knowledge and is composed of three themes: (a) coping strategies of people living with a LTC, (b) their relationship to medical knowledge and (c) their individual data both on their disease(s) and on their socio-demographic situation. Our data analysis is focused on the dependence of coping strategies of people living with a LTC (especially ME/CFS) on their diseases specifics (part 1 of the questionnaire).

2.3 Patient and public involvement

Inclusion criteria were, to volunteer to participate, to be older than 18 years, to live in France during containment and to have a chronic disease or symptoms. Noninclusion criteria were inability to communicate in French, severe mental illness and other medical reasons. Individuals could interrupt survey at any time and complete it later to take into account the respondents’ state of health.

2.4 Outcome measurements

The used questionnaire was based on Lazarus and Folkman’s WCC List (Folkman et al., 1986; Lazarus & Folkman, 1984), reclassified by Vitaliano who grouped some items in a specific ‘seeking social support’ coping dimension. It refers to three main coping strategies:
(a) emotion-focused; (b) problem focused and (c) focused on seeking social support. To address the need for a short survey, Brief COPE Scale (28 items instead of 68) of Carver was used retaining Vitaliano's three-dimension organization as proposed by Bruchon-Schweitzer (Bruchon-Schweitzer et al., 1996; Carver et al., 1989; Muller & Spitz, 2003).

1. Emotion-focused coping is characterised by the fact that, when faced with stressful situation, individual can direct regulate his or her reaction to stress.

2. Problem-focused coping is characterised by individual's action to resolve the stressful situation by managing or modifying his or her relationship to the environment. To do this, he can either make cognitive efforts to solve problem or try to modify or manage the source of problem.

3. The third coping strategy introduced by Vitaliano (Vitaliano et al., 1985) concerns coping focused on seeking social support which for Bruchon–Schweitzer is a strategy, not a perceived social resource: seeking social support requires ‘efforts to seek and obtain help from others’ (Bruchon-Schweitzer et al., 1996). In the case of ME/CFS, social support includes informing peers through social networks and patient associations, as shown in studies of adolescents and adults with ME/CFS (Brigden et al., 2018; Grue, 2016).

We chose to follow this Vitaliano perspective in three dimensions because we estimated it as more relevant to describe the different behaviours during confinement.

Concerning the items list, Muller's French version of Brief COPE was adapted to take into account Vitaliano's clarifications on seeking social support and some specificities of people living with a LTC during containment. Indeed, original formulations were very general and therefore irrelevant in the very oppressive context of containment (Figure 2).

This adaptation was based on five patients living with a LTC semidirected interviews conducted by one of the authors at the end of March. The 28 Brief COPE items were thus replaced by 28 illustrative formulations resulting from patient verbatims related to their experience of confinement and their behaviour. For instance, item six of ‘emotion' dimension 'I’ve been trying to forget everything’ turned into ‘I'm trying to forget the pandemic’ and item 2 of ‘social support' dimension 'I sought professional help and did what I was advised to do' turned into ‘I'm able to keep in touch with my regular caregivers and/or therapists.’ Finally, 28 adapted items composed the questionnaire. Despite the use of a five-level Likert notation, the items were not created in a standard psychometric perspective as components of a measurement scale but just to allow an exploratory ‘in real life' study.

2.5 Data management and analysis

1. An initial descriptive statistical analysis was performed to define three groups of respondents according to their health problems. (a) All patients without ME/CFS and those with RDD-type poly-pathologies were included in ‘RDD' type. (b) Patients with ME/CFS, were included in the group ‘ME/CFS.' (c) Patients presenting several pathologies including ME/CFS were grouped together in ‘Mixed ME/CFS and RDD' type.

This third group has not been taken into consideration whilst verification of coping dependence on disease types to avoid confusing the analysis of ME/CFS specificities.

2. The means of each Vitaliano's coping strategy set of items were calculated for RDD and ME/CFS groups. Nonparametric Wilcoxon–Mann–Whitney test was performed (using Wilcox. Test function of R statistical environment) to evaluate significant differences of those means between both groups.

3. In addition, three analyses were conducted to get an idea of the relevance of the item's adaptation: (a) series of simple linear
regressions were performed between the couples of means. (b) Cronbach's alpha values were calculated for the three strategies. (c) Principal component analysis (PCA, in R FactoMiner Package) was performed to confirm the independence of coping dimensions. Insofar as the authors are not in a psychometric application of the scale used, item 2 of problem dimension and item 6 of emotion dimension were not retained because their correlation with other items was too low.

3 | RESULTS

A total of 637 people responded to survey; only 192 answered the survey completely and have given enough precise information about their pathologies to be taken into account in the study. They were used here: Characteristics of those participants are summarised in Table 1. A total of 86 were classified in 'RDD.' 13 'Mixed ME/CFS + RDD' and 93 'ME/CFS' as shown in Table 2.

3.1 | Coping strategies adopted by people living with a LTC during the COVID-19 containment

Table 3 shows the main result: During containment, ME/CFS patients do not cope as RDD patients for two of Vitaliano’s dimensions. Thus, ME/CFS patients declare significantly less use of coping focused on seek social support (difference = 0.23, $p$-value = 0.015*) and problem focused (difference = 0.13, $p$-value = 0.009**) than, RDD patients. There is also a discrepancy between emotion-focused strategies, but it is not statistically significant, due to wide dispersion of values of the items concerned for both groups.

**TABLE 1** Baseline characteristics of participants overall ($n = 192$)

| Characteristics                      | Overall ($n = 192$) | RDD ($n = 86$) | ME/CFS ($n = 93$) | Mixed ME/CFS + RDD ($n = 13$) |
|--------------------------------------|---------------------|----------------|------------------|-------------------------------|
| Gender of patients                   |                     |                |                  |                               |
| Woman                                | 148                 | 56             | 81               | 11                            |
| Man                                  | 43                  | 30             | 11               | 2                             |
| Other                                | 1                   | 1              | 1                | 0                             |
| Patient age group                    |                     |                |                  |                               |
| 18 and 24 years old                  | 10                  | 7              | 3                | 0                             |
| 25 and 34 years old                  | 13                  | 2              | 10               | 1                             |
| 35 and 49 years old                  | 62                  | 17             | 39               | 6                             |
| 50 and 64 years old                  | 77                  | 34             | 38               | 5                             |
| 65 years old and over                | 30                  | 26             | 3                | 1                             |
| Patient education level              |                     |                |                  |                               |
| Vocational certificate               | 19                  | 10             | 9                | 0                             |
| Bachelor's degree                    | 24                  | 12             | 12               | 0                             |
| Bachelor's degree + 2 years          | 42                  | 21             | 16               | 5                             |
| Bachelor's degree + 3 years          | 25                  | 9              | 11               | 5                             |
| Bachelor's degree + 4 years          | 13                  | 7              | 4                | 2                             |
| Bachelor's degree + 5 years and more | 69                  | 27             | 41               | 1                             |
| Socio-professional category of patients|                    |                |                  |                               |
| Craftsman, trader, company director  | 4                   | 3              | 0                | 1                             |
| Executive and senior intellectual profession | 51                  | 23             | 23               | 5                             |
| Intermediate profession              | 9                   | 2              | 6                | 1                             |
| Employee                             | 28                  | 10             | 17               | 1                             |
| Worker                               | 1                   | 0              | 1                | 0                             |
| Retired                              | 33                  | 25             | 8                | 0                             |
| On disability                        | 41                  | 14             | 25               | 2                             |
| No professional activity             | 25                  | 9              | 13               | 3                             |

Abbreviations: ME/CFS, myalgic encephalomyelitis/chronic fatigue syndrome; mixed ME/CFS + RDD, myalgic encephalomyelitis/chronic fatigue syndrome and RDD; RDD, recognised diagnosed disease.
Some of the items are particularly demonstrative of this phenomenon as shown in Table 3:

Seek social support: Items in seek for social support dimension show that coping strategies were more difficult to implement for ME/CFS patients. This is very significant for item 2 ‘I am able to keep in touch with my usual caregivers and/or therapists.’ (difference = 0.03/5, p-value = 0.0005***).

Problem focused: ME/CFS patients are more often to agree with item 2 ‘I had to fight to get my appointments (care and/or treatment)’ (difference = 0.10/5, p-value = 0.0133*) than RDD patients. ME/CFS patients agree less often than other patients with item 3 ‘My health seems to have improved since the first day of containment’ (difference = 0.07/5, p-value = 0.0058**), item 9 ‘I have found ways to continue to take care of myself as I wish despite containment’ (difference = 0.09/5, p-value = 0.0047**) and item 10 ‘I know what it takes to live with my disease, so I’m doing everything I can to make it happen.’ (difference = 0.07/5, p-value = 0.0034**).

### TABLE 2 Type of disease of participants overall (n = 192)

| Type of disease | Number of patients |
|-----------------|--------------------|
| RDD             |                    |
| Allergy (and no other RDD) | 1               |
| Asthma (and no other RDD) | 2               |
| Autoimmune disease (and no other RDD) | 2           |
| Cancers (and no other RDD) | 5               |
| Chronic Obstructive Bronchitis (and no other RDD) | 9               |
| Crohn's disease (and no other RDD) | 2               |
| Depression (and no other RDD) | 1               |
| Diabetes (and no other RDD) | 5               |
| Endometriosis (and no other RDD) | 1               |
| Grafters (and no other RDD) | 2               |
| Heart Diseases (and no other RDD) | 7               |
| HIV (and no other RDD) | 1               |
| Kidney failure (and no other RDD) | 4               |
| Parkinson’s Syndrome (and no other RDD) | 4               |
| Spondylarthritus (and no other RDD) | 6               |
| Poly-pathologies RDD (patients suffering of two or more RDD) | 34             |
| Total RDD (number of patients suffering of one or more RDD) | 86             |
| ME/CFS and no RDD | 93              |
| Patients with ME/CFS and also one or more RDD | 13             |

Abbreviations: ME/CFS, myalgic encephalomyelitis/chronic fatigue syndrome; RDD, recognised diagnosed disease.

### TABLE 3 Means by coping strategies by disease type and Wilcoxon p-values

| Means by Vitaliano's coping strategies | Problem-focused coping | Seek social support coping | Emotion-focused coping |
|---------------------------------------|------------------------|---------------------------|------------------------|
| RDD (n = 86)                          | 3.46                   | 2.98                      | 3.28                   |
| ME/CFS (n = 93)                       | 3.33                   | 2.75                      | 3.44                   |
| Difference between means by disease types | 0.13                  | 0.23                      | -0.16                  |

Wilcoxon test between means by disease type: p-value

|Wilcoxon test between means by disease type: p-value |
|-----------------------------------------------------|
| 0.009**                                             |
| 0.015*                                              |
| 0.135 ns                                             |

Abbreviations: eq., equivalent; ME/CFS, myalgic encephalomyelitis/chronic fatigue syndrome; ns, not significant; RDD, recognised diagnosed disease.

0 < *** < 0.01 < ** < 0.05 < * < 'ns' < 1.
trying to forget everything, as proposed in Brief COPE scale, in a context of pandemic as proposed in item 6 of emotion dimension. Similarly, the context made it difficult to translate item 2 of problem dimension. It proposed to fight for what an individual wanted to solve the problem he was facing. As we conducted an exploratory survey rather than a psychometric study, the nonvalidated adaptation of these items was used. However, a PCA was performed to visualise the gain of relevance of those new item’s groups. Two analyses were done: one with all items including item 2 ‘problem dimension’ and item 6 ‘emotion dimension’ and a second without these two items. Results were achieved without two contentious items. Results with all items are presented in an e-published appendix. In fact, the results differ very slightly between the two methods and confirm conclusions of our study.

4 | DISCUSSION

4.1 | Limitations

The main result is that ME/CFS patients are using significantly less coping that focus on seek social support and problem focused compared to RDD patients. Coping focused on emotion is the main strategy revealed by our study during pandemic-related containment, whatever the LTC. This is also the coping strategy that people living with a LTC normally mobilise to cope with their disease (de Ridder & Schreurs, 2001). However, the used methodology is a study limit. When questioned at a specific time of crisis, the COVID-19 pandemic, the responses of people living with a LTC should be cross-referenced with their baseline of coping with stressful situations in the health-related daily life to affirm the different coping strategies between RDD and ME/CFS patients. Furthermore, general means of the three dimensions differ significantly for all patients (problem-focused coping is the one with highest item scores, followed by emotion-focused coping and finally seek social support coping). However, given the difficulty of comparing coping scales in absolute terms, this discrepancy is not the main result.

Another bias comes from the fact that only those who completed the entire questionnaire in full were considered. It is possible that these people are different from the others: They may be more compliant or better able to cope with their emotions to answer a questionnaire in a stressful context: the COVID-19. But this does not change the differences observed between subgroups with respect to pathology.

4.2 | Strengths and positioning of this study in relation to previous ones

The main strength of this study comes from the fact that it can help professionals to identify the most relevant coping strategies to improve the quality of life of ME/CFS patients in the context of therapeutic education, to identify their daily life coping strategies, to manage their pain as well as to understand coping strategies to use by resource persons of these patients to accompany them in living with their disease.

Former studies relative to quality of live or pain management in people living with a LTC revealed the use of emotion-focused but also problem-focused coping strategies (Amer et al., 2017; Cheng et al., 2020; Mittinty et al., 2017). Recently, Umucu and Lee (2020) have shown that using emotional-focused coping is associated with well-being in patients. In addition, differential coping highlighted in our study relates to ME/CFS group versus RDD group in the pandemic context.

In fact, former studies on coping strategies in ME/CFS rather compared these patients with healthy people. They are discussed in the context of pain and illness management, relationship with fatigue severity and functional impairment and their results may be contradictory (Ray et al., 1995). For instance, results of a population-based survey suggest that coping style differed between ME/CFS patients and healthy people, with higher confrontative coping, responsibility taking and escape avoidance in the CFS group (Doerr et al., 2017). People with ME/CFS show significantly less emotion-focused coping and problem-focused coping compared with healthy controls in an exploratory study using the brief COPE tool (Krzeczkwoska et al., 2015). According to findings based on another scale WCC, they are also more likely to employ maladaptive strategies (Nater et al., 2012). These opposing results make it difficult for primary care professionals to accompany ME/CFS patients.

4.3 | The seek for unavoidable social support

Our results show a specific use of social support strategy (Brigden et al., 2018; Knudsen et al., 2012) In this disease, main social support is done with peers, social networks and patients’ associations (Jason et al., 2002). In France, patient communities overlap and are closely linked to ASFC, which contributes to sharing of experiential knowledge amongst peers and to diffusion of scientific breakthroughs. As they face a misunderstood and denied disease, patients frequently turn to self-care practise and resources they find in patient networks. Negative social representations linked to chronic fatigue, the lack of medical cure and guidelines, likely contributes to reinforce peer support versus physician support. Complementary data (ASFC volunteer coordinator’s personal communication) indicate that ME/CFS French association received far fewer requests during containment period (30 calls/3 months during hotlines vs. 95, usual monthly average). However, the number of contacts via Facebook® page was steady. This social and medical isolation, specific for people with ME/CFS, could explain the less use of social support coping as not being specific of containment context, but perhaps reinforced by it.

Thus, seek social support coping mobilised by ME/CFS to manage their illness during confinement uses (a) the same networks as usual: peers rather than professionals and (b) less direct contact with peers by phone and more Facebook®. In addition, having a chronic disease showed an increased declaration of psychological distress during containment for people living with a LTC in France (Gandré,
2020). This is explained by the two fears: to develop a severe form of COVID and not being allowed to access hospital intensive care services because they already have a chronic disease. This was reinforced by the fact that chronic patients required less care during containment. A French Ipsos® survey, during the pandemic, shows that patients have hardly solicited healthcare professionals through digital solutions (Ipsos, 2020). This specific use of ME/CFS as a seek social support coping calls for greater vigilance by primary care professionals towards this population to identify psychological distress for which these patients turn to them even less during confinement than usual.

**4.4 | Emotion as an inseparable dimension of living with ME/CFS**

Ways of dealing with the overall illness cannot be separated from those of dealing with associated emotional distress. The latter is probably consubstantial with recognised medical diagnosis, leading Ray et al. (1995) to propose that coping directed specifically at emotion could be seen as ‘problem focused’ in the context of CFS to the extent that emotional distress is itself considered as part of the syndrome. This is consistent with the finding of Jason et al. who compared four groups (idiopathic chronic fatigue, medically explained fatigue and no fatigue) and noted that CFS patients had the lowest optimism scores and satisfaction with their social support (Jason et al., 2002).

**5 | CONCLUSION**

This raises the question of meaning of coping items for medically unexplained and unrecognised chronic conditions such as ME/CFS. Analysis is therefore to be continued to understand this distinction in the use of people living with a LTC’s RDD and ME/CFS type coping strategies. This requires, to grasp them, to promote a collaborative approach. It appears essential to involve the ME/CFS patients in the refinement of the items, to get better insight into their daily disease experience, towards a model of community-based participatory medicine (Las Vergnas, 2017).

Within chronic conditions, coping strategies are obviously different for patients who deal with the daily experience of ME/CFS, highly disabling chronic condition with diagnostic ambiguity, low degree of medical and social recognition and without treatment. However, as typologies of coping are various and differential illness management realities do not allow generalised use of items, it would be interesting to take increasingly into account the experiential knowledge patients, particularly with regard to ME/CFS, using a popular epidemiology research design built with a patient organization. Better understanding of differential coping strategies will help health promotion researchers, managers and clinicians, to accompany those patients.

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**CONFLICT OF INTEREST**

Authors declare that they have no competing interests. Patients’ organization members are co-authors of research and paper. Florence Moncorps: PhD student Nursing school cursus Supervisor, no competing interest declared. Emmanuelle Jouet: Hospital Researcher, no competing interest declared, member of the board of ME/CFS patient organization. Isabelle Fornasieri: Academic Researcher, no competing interest declared, member of the board of ME/CFS patient organization. Sabine Bayen: Family Physician and Associated Professor, no competing interest declared. Sophie Renet: Hospital Pharmacist and Associated Researcher, no competing interest declared. Olivier Las Vergnas: University Professor, no competing interest declared. Nassir Messaadi: Family Physician and Academic Researcher, no competing interest declared.

**AUTHOR CONTRIBUTION**

Florence Moncorps: conception or design of the work, data collection, data analysis and interpretation, drafting the article and final approval of the version to be published. Emmanuelle Jouet, Sabine Bayen and Isabelle Fornasieri, Sophie Renet: conception or design of the work, data analysis and interpretation and critical revision of the article. Olivier Las-Vergnas: conception or design of the work, data analysis and interpretation and critical revision of the article. Nassir Messaadi: conception or design of the work, data analysis and interpretation and critical revision of the article. In charge of administrative procedures with the ethics committee and the online publication of the questionnaire.

**ETHICS APPROVAL AND CONSENT TO PARTICIPATE**

French CNIL declaration was made by DMG University of Lille on the 17 of April 2020. Positive ethical statement was given by the National Ethics Committee of French Family Medicine Organization under N°200604171 (transmission, 24 June 2020), according to articles L1121-1 and R1121-2 of French code of public health. Participation to the study was voluntary. The online questionnaire was anonymous. All other data were anonymized during transcription.

**CONSENT FOR PUBLICATION**

Not applicable.

**DATA AVAILABILITY STATEMENT**

Anonymous datasets used in current study and complementary results are available and downloadable at http://www.parhelie.org/publis/CovidSFC and on ResearchGate (https://www.researchgate.net/profile/Olivier-Las-Vergnas). French CNIL declaration was made by DMG University of Lille on 17 April 2020. Positive ethical
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**SUPPORTING INFORMATION**

Additional supporting information may be found online in the Supporting Information section.

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