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## Short Communication

## Concerns and coping mechanisms during the first national COVID-19 lockdown: an online prospective study in Portugal

Susana Silva <sup>a, b, c, \*</sup>, Helena Machado <sup>a</sup>, Cláudia de Freitas <sup>c, d, e</sup>, Raquel Lucas <sup>c, d, e</sup><sup>a</sup> Department of Sociology, Institute of Social Sciences, University of Minho, Braga, Portugal<sup>b</sup> Centre for Research in Anthropology (CRIA), Lisboa, Portugal<sup>c</sup> Departamento de Ciências da Saúde Pública e Forenses e Educação Médica, Faculdade de Medicina, Universidade Do Porto, Porto, Portugal<sup>d</sup> EPIUnit – Instituto de Saúde Pública, Universidade Do Porto, Porto, Portugal<sup>e</sup> Laboratório para a Investigação Integrativa e Translacional Em Saúde Populacional (ITR), Porto, Portugal

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## ABSTRACT

**Objectives:** The aim of this study was to explore concerns and coping mechanisms during the first national COVID-19 lockdown in Portugal. The general population provided statements via an open comment box as part of an online prospective study.

**Study design:** This was an Internet-based open cohort study.

**Methods:** Individuals aged  $\geq 16$  years were eligible to participate in this study. Inductive content analysis was performed on completed questionnaires submitted between 23 and 29 March 2020 and 27 April and 3 May 2020 (corresponding with the early and late phases of the first national lockdown, respectively).

**Results:** Data suggest the prominence of behavioural and emotional responses to COVID-19; namely, self-compliance with measures promoted by the government; adopting practices of self-care and supporting/protecting others; and enacting hope (both currently and for the future). Concerns were related to the perception of vulnerabilities for oneself, family and others and to challenging situations presenting in society (e.g. physical and mental health, academic/professional careers, income, social inequality, potential discrimination and stigmatisation, inconsistent information and negative approach to the news), coupled with criticism, scepticism or doubts about government policy and performance of the healthcare system. Expressions of fear and worry and non-compliance with mitigation measures by others (e.g. close relatives, employees and general population) emerged as additional concerns.

**Conclusions:** Continuous assessment of behavioural and emotional responses to the COVID-19 pandemic is needed to support effective communication and public health policies that are sensitive to the concerns, motivations and expectations of the population. Awareness of changing public opinions enables governments to continue to effectively mobilise the population to take recommended actions to reduce the transmission of COVID-19.

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## Introduction

The COVID-19 pandemic continues to have disruptive effects on the lives of populations throughout the world.<sup>1</sup> There is a growing body of knowledge about the public's concerns and coping mechanisms in regards to COVID-19 (i.e. behavioural, cognitive and emotional responses to uncertainty and the perception of putting oneself and others at risk).<sup>2</sup> However, most studies investigating public views on COVID-19 during the first lockdown focus on

negative responses, disruptive impacts on psychological status and the fragility of existing mental health services.<sup>3</sup> Other studies suggest a variety of positive and negative coping mechanisms and corresponding effects on mental health.<sup>4</sup>

Knowledge about how the general population responds to severe restrictive measures is useful for future public health actions by informing the design of focused interventions and sensitive communication.<sup>5</sup> Although vaccination coverage is growing in Europe, with Portugal currently having the highest vaccination rate, a high level of uncertainty about the pandemic evolution and future pandemics persists. This complex situation requires more knowledge about the responses of the general population to mitigation measures. This will provide data for future strategies that increase solidarity at interpersonal, group and contractual levels and allow

\* Corresponding author. Instituto de Ciências Sociais, Universidade do Minho, Campus de Gualtar, Braga, 4710-057, Portugal. Tel.: +351 253604212.

E-mail address: [susilva@ics.uminho.pt](mailto:susilva@ics.uminho.pt) (S. Silva).

governments to continue to effectively mobilise the population to take recommended actions to contain the spread of the virus.<sup>6</sup>

This short report analyses statements from the general population in Portugal regarding different aspects of dealing with COVID-19 during the first national lockdown (18 March to 2 May 2020). Comments were received through an open comment box as part of an online prospective study.

**Methods**

At the beginning of the first lockdown, an Internet-based open cohort study was designed by a multidisciplinary team hosted at the Institute of Public Health of the University of Porto and the Institute for Systems and Computer Engineering, Technology and Science (INESC-TEC), Portugal. Study dissemination and a call for participation were made primarily through a national daily newspaper (PÚBLICO) that partnered with the research team. The research institutions involved also promoted the study through their institutional websites, social networks and mailing lists. In addition, key opinion leaders on public health issues were contacted to support dissemination through their networks.

All individuals aged ≥16 years were eligible to participate in the study. After registering online, participants were sent daily reminders by email to complete a questionnaire on COVID-19-related symptoms, healthcare use and daily activities. The final question posed to participants was the following open-ended question: ‘Feel free to use this space for any comments you may have’. Participants could enter and leave the study whenever they wanted and fill in any number of questionnaires within any period.

Based on the analysis of statements written in the survey’s open comment box for questionnaires submitted between 23 and 29 March 2020 and 27 April and 3 May 2020 (corresponding with the early and late phases of the first national lockdown in Portugal, respectively), this study explored concerns and coping mechanisms of the general public. Responses with similar meanings and connotations were inductively synthesised into exhaustive and mutually exclusive categories after *a priori* coding.<sup>6</sup> As comments from an individual may include more than one concern or coping mechanism, responses could be coded into several separate categories, with each idea belonging to only one category. Sociodemographic characteristics of the study participants are summarised in Table S1 in the supplementary material.

**Results**

*Concerns*

Participants mainly expressed negative emotions in both the early and late phases of the first lockdown (see Table 1). Participants reported fear of losing close relatives and of contracting/spreading the virus, as well as fear of using healthcare services or entering indoor public spaces (particularly shops), along with feelings of anxiety towards individuals with symptoms, suspected, infected or exposed to COVID-19. There was also the expression of negative feelings towards the future.

Experiencing vulnerabilities regarding oneself and others constituted an additional topic of concern. Participants mentioned the negative impact of the pandemic on their mental health and how the lack of physical contact with family members and friends was difficult. They also perceived vulnerabilities regarding their children/grandchildren, mainly related to their academic/professional careers and health (physical and mental), highlighting the need to prioritise children’s well-being and to invest in children’s psychological support. Some participants voiced concerns related to an increase in social inequality, discrimination and stigmatisation. In addition, a few participants referred to the loss of individual freedom and autonomy resulting from constant surveillance and sanitation and cleaning of bodies and spaces.

The economic crisis and the wide dissemination of information about COVID-19 were perceived as challenging and difficult situations for society. Worries about job loss and decreasing household incomes were prominent. Respondents frequently expressed concerns related to working remotely from home and the additional stress of having to take care of children and other dependent individuals or feeling that productivity was hampered by adverse working conditions at home. Another issue concerning participants was the lack of consistency in the information conveyed to citizens by the government and the media, as well as the negativity in the news. Participants requested readily available information for people with health conditions who might be at increased risk during the pandemic and urged for increased collaboration among the scientific community.

Participants were also concerned about others not complying with government measures, particularly rules on physical distancing and face coverings. There were reports of non-compliance among

**Table 1**  
Concerns and coping mechanisms reported by the participants during the first COVID-19 lockdown in Portugal.

Concern/coping mechanism	Number of statements			
	Concerns		Coping mechanisms	
	Early phase	Late phase	Early phase	Late phase
Emotions				
Negative emotions	190	63		
Positive emotions			68	25
Perceiving/experiencing crisis				
Perceiving vulnerabilities in oneself/others	106	59		
Perceiving a challenge for society	86	30		
Perceiving privileges for oneself			31	8
Practices				
Changing practices			67	34
Supporting practices			35	11
Protecting practices			6	5
Maintaining routines			7	10
Relationship to institutions				
Self-compliance with government measures			407	224
Trust towards institutions			15	19
Others are not complying with government measures	70	39		
Criticising/doubts/sceptic towards government policy	62	43		
Efficiency and reliability of the healthcare system	44	13		

close relatives, the general population and employers who did not allow their employees to work remotely from home or waived the measures recommended in the workplace.

Comments that expressed criticism, scepticism or doubts towards government policy increased over time. Participants highlighted the situations in elderly care homes, social centres and prisons and in the construction work sector. Some participants referred to the scarcity of resources to carry out inspection, policing and enforcement in public and semipublic spaces, including public transport. Several participants mentioned the need to carry out more screening tests and to guarantee the availability of personal protective equipment for the entire population.

Statements about the perceived efficiency and reliability of the healthcare system covered two main concerns. First, focussing on the pandemic could impair the management of other diseases, care during pregnancy and compliance with the national immunisation programme. Second, participants reported delays in feedback from the national health service phone line and in performing COVID-19 tests, absence of a reply from primary care centres, misguidance about referrals/exams, institutional overlapping, and increased vulnerabilities of migrants and disabled people.

### *Coping mechanisms*

Contrasting with concerns about non-compliance by others, self-compliance with government measures emerged as the main coping mechanism. Participants reported establishing personal contacts, travelling only for justifiable reasons (e.g. professional practice, social/family support, health issues and essential goods/services) and the use of self-protective equipment and masks.

Another coping strategy reported by the participants was changing practices, namely, greater investment in home-based leisure activities, the use of social media to communicate with family and friends and online services to purchase essential goods or to contact institutions or companies, the adoption of healthier lifestyles and selection of information about COVID-19 to feel informed without saturation. Several participants reported supporting practices (including providing and receiving functional and emotional support, as well as the maintenance of daily routines) and engaging in protecting practices (e.g. using medically prescribed drugs or seeking out psychological support services and feeling protected by their employer).

The practice of these coping mechanisms was linked with expressions of positive emotions. The manifestation of hope was based on examples of solidarity, cases of people recovering from COVID-19, faith, patience, resilience and the removal of negative thoughts.

Perceiving privileges for oneself (e.g. the possibility of resorting to a second home) and trust towards institutions (e.g. health care, political institutions, police forces and the scientific community) were less frequently mentioned coping mechanisms.

### **Discussion**

Data suggest the prominence of behavioural and emotional responses to COVID-19, namely, self-compliance with government measures, adopting practices of self-care and supporting/protecting others and enacting hope. These results are in line with previous evidence.<sup>7</sup> Concerns were related to the perception of vulnerabilities for oneself, family and others and challenging situations for society (physical and mental health, academic/professional careers, income, social inequality, potential discrimination and stigmatisation, inconsistent information, and negative approach to the news), coupled with criticism, scepticism or doubts towards government policy and the perceived efficiency and reliability of the healthcare

system, as previously observed.<sup>8</sup> Expressions of negative emotions, such as fear and worry, and others (e.g. close relatives, employees and the general population) not complying with government measures emerged as additional sources of anxiety.<sup>9</sup> The results from this study promote positive actions by governments to face future pandemics by adding a culturally sensitive perspective from Portugal to promote the strengthening of social ties, empathy and solidarity at interpersonal, group and contractual levels.<sup>6</sup>

Although this study lacks the generalisability of a representative sample of the Portuguese population, the results may indicate the general concerns and coping mechanisms of Portuguese people with higher levels of education and household incomes, mainly women.

Knowledge about the prevailing concerns and coping mechanisms facilitates the development of targeted actions of risk communication to enhance public awareness and compliance. In turn, risk communication and effective, yet acceptable, infection containment strategies should be produced in collaboration with the wider public.<sup>10</sup> Further research on the views of the general public and continuous assessment of behavioural and emotional responses of the population to restrictions imposed as a result of the COVID-19 pandemic are required.

### **Author statements**

#### *Ethical approval*

This study was approved by ISPUP Ethics Committee (CE20142).

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#### *Competing interests*

None declared.

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### **Appendix A. Supplementary data**

Supplementary data to this article can be found online at [10.1016/j.puhe.2022.03.014](https://doi.org/10.1016/j.puhe.2022.03.014).

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