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Prevalence of Passive Suicidal Ideation in the Early Stage of the Coronavirus Disease 2019 (COVID-19) Pandemic and Lockdown in a Large Spanish Sample

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Concern about negative secondary outcomes of the coronavirus disease 2019 (COVID-19) pandemic, including risk of increased suicide mortality, has recently been reported.^{1,2} The main objective of this study was to determine the prevalence of passive suicidal ideation in a sample of the general Spanish population early in the COVID-19 pandemic and lockdown and to characterize factors associated with such thoughts.

Methods

This study is a secondary analysis of a cross-sectional online survey that was designed to assess the early psychological impact of the COVID-19 pandemic and lockdown in the Spanish population aged 18 years or over and conducted between March 19 and 26, 2020. Detailed study procedures are described elsewhere.³ The study was conducted according to the ethical principles of the Declaration of Helsinki. The survey consisted of an ad hoc sociodemographic and clinical questionnaire and the Spanish version of the Depression, Anxiety and Stress Scale (DASS-21).⁴ Logistic regression models (forward stepwise selection) were estimated to determine independent factors associated with “passive suicidal ideation during past 7 days” (no/yes), and odds ratios (ORs) and 95% confidence intervals (CIs) were calculated. IBM SPSS 24.00, IBM Corp, was used for all data analyses, and the *P* value for significance was set at *P* < .05.

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J Clin Psychiatry 2020;81(6):2013421

To cite: Sáiz PA, de la Fuente-Tomas L, García-Alvarez L, et al. Prevalence of passive suicidal ideation in the early stage of the coronavirus disease 2019 (COVID-19) pandemic and lockdown in a large Spanish sample. *J Clin Psychiatry*. 2020;81(6):2013421.

To share: <https://doi.org/10.4088/JCP.2013421>

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Results

The total sample included 21,207 participants (mean age [SD] = 39.7 years [14.00]; females, *n* = 14,768 [69.6%]). Survey responses showed that 1,873 responders (8.8%) had experienced passive suicidal ideation during the past 7 days. The “yes” and “no” groups of responders were statistically differentiated with regard to all study variables with the exception of having family/friends infected with COVID-19 and living with people infected with COVID-19 (Table 1). A logistic regression model, including all significant variables from bivariate analyses, was run to assess variables associated with passive suicidal ideation.

Protective factors against passive suicidal ideation were female sex (OR [95% CI] = 0.675 [0.589–0.774], *P* < .001), being married or living as married (OR [95% CI] = 0.767 [0.653–0.902], *P* = .001), working (employed: OR [95% CI] = 0.711 [0.567–0.891], *P* = .003; self-employed: OR [95% CI] = 0.706 [0.533–0.935], *P* = .015; civil servant: OR [95% CI] = 0.650 [0.494–0.857], *P* = .002), living with 1 other person (OR [95% CI] = 0.799 [0.660–0.968], *P* = .022); having dependent children (OR [95% CI] = 0.581 [0.482–0.701], *P* < .001), and being able to enjoy free time (OR [95% CI] = 0.371 [0.319–0.431], *P* < .001).

Risk factors for passive suicidal ideation were very low income (<€500: OR [95% CI] = 1.269 [1.023–1.573], *P* = .030), having elderly dependents (OR [95% CI] = 1.217 [1.010–1.467], *P* = .039), having a personal history of past/current mental disorder (OR [95% CI] = 1.578 [1.361–1.828], OR [95% CI] = 2.313 [2.008–2.665], respectively, *P* < .001), and experiencing DASS-21 depression, anxiety, or stress symptoms (OR [95% CI] = 12.193 [9.891–15.031], OR [95% CI] = 1.815 [1.577–2.088], OR [95% CI] = 1.826 [1.599–2.085], respectively, *P* < .001).

Discussion

To our knowledge, this study is the first to show sociodemographic and clinical factors associated with passive suicidal ideation in a sample of the general population during the COVID-19 pandemic and lockdown. Prior data suggest a lifetime prevalence of suicidal ideation in the general Spanish population of around 3.7%.⁵ Unfortunately, no data about passive suicidal ideation in the general Spanish population are available. This prevents us from discussing the possibility that the rate of passive suicidal ideation may or may not have risen during the first weeks of the pandemic

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Table 1. Sociodemographic and Clinical Characteristics for the Total Sample and According to the Presence or Absence of Passive Suicidal Ideation (Past 7 Days)^a

	General Population (N=21,207)	No Passive Suicidal Ideation (N=19,334)	Passive Suicidal Ideation (N=1,873)	Statistical Test Result	P Value ^b
Sociodemographic variables					
Age, mean (SD), y	39.7 (14.00)	40.31 (14.00)	33.96 (13.12)	19.893 ^c	< .001
Sex, female	14,768 (69.6)	13,364 (69.1)	1,404 (75.0)	27.527 ^d	< .001
Marital status				276.637 ^d	< .001
Never married	9,867 (46.5)	8,662 (44.8)	1,205 (64.3)		
Married/living as married	9,630 (45.4)	9,107 (47.1)	523 (27.9)		
Separated/divorced/widowed	1,710 (8.1)	1,565 (8.1)	145 (7.7)		
Education level				138.234 ^d	< .001
Primary	333 (1.6)	293 (1.5)	40 (2.1)		
Secondary	7,688 (36.3)	6,784 (35.1)	904 (48.3)		
Higher	13,186 (62.2)	12,257 (63.4)	929 (49.6)		
Work status				413.723 ^d	< .001
Unemployed	1,829 (8.6)	1,554 (8.0)	275 (14.7)		
Working					
Employed	7,679 (36.2)	7,129 (36.9)	550 (29.4)		
Self-employed	2,048 (9.7)	1,914 (9.9)	134 (7.2)		
Civil servant	4,099 (19.3)	3,885 (20.1)	214 (11.4)		
Retired	1,312 (6.2)	1,239 (6.4)	73 (3.9)		
Student/homemaker	3,392 (16.0)	2,861 (14.8)	531 (28.4)		
Other	848 (4.0)	752 (3.9)	96 (5.1)		
Income				487.313 ^d	< .001
No income	3,349 (15.8)	2,837 (14.7)	512 (27.3)		
Less than €500	1,462 (6.9)	1,216 (6.3)	246 (13.1)		
€500–999	2,667 (12.6)	2,376 (12.3)	291 (15.5)		
€1,000–1,499	4,201 (19.8)	3,877 (20.1)	324 (17.3)		
€1,500–1,999	3,799 (17.9)	3,584 (18.5)	215 (11.5)		
More than €1,999	4,404 (20.8)	4,229 (21.9)	175 (9.3)		
Prefer not to answer	1,325 (6.2)	1,215 (6.3)	110 (5.9)		
Change in work status due to COVID-19				30,635 ^d	< .001
No	17,764 (84.7)	16,236 (84.9)	1,528 (82.7)		
ETLA/EPLO	1,871 (8.9)	1,693 (8.8)	178 (9.6)		
Termination	390 (1.9)	326 (1.7)	64 (3.5)		
Furlough	954 (4.5)	876 (4.6)	78 (4.2)		
Change in income due to COVID-19				22,765 ^d	< .001
No	15,677 (73.9)	14,359 (74.3)	1,318 (70.4)		
Reduction, ≤ 25%	2,292 (10.8)	2,080 (10.8)	212 (11.3)		
Reduction, 26%–50%	1,367 (6.4)	1,239 (6.4)	128 (6.8)		
Reduction, 51%–100%	1,738 (8.2)	1,534 (7.9)	204 (10.9)		
Increase	133 (0.6)	122 (0.6)	11 (0.6)		
Living situation				13,305 ^d	.004
Alone	2,580 (12.2)	2,311 (12.0)	269 (14.4)		
With 1 other person	7,534 (35.5)	6,914 (35.8)	620 (33.1)		
With 2 to 4	10,722 (50.6)	9,778 (50.6)	944 (50.4)		
With more than 4	371 (1.7)	331 (1.7)	40 (2.1)		
Dependent children				201.871 ^d	< .001
None	14,207 (67.0)	12,680 (65.6)	1,527 (81.5)		
1	3,357 (15.8)	3,164 (16.4)	193 (10.3)		
2	3,050 (14.4)	2,918 (15.1)	132 (7.0)		
More than 2	593 (2.8)	572 (3.0)	21 (1.1)		
Elderly dependents				11,119 ^d	.011
None	19,203 (90.6)	17,540 (90.7)	1,663 (88.8)		
1	1,379 (6.5)	1,243 (6.4)	136 (7.3)		
2	521 (2.5)	456 (2.4)	65 (3.5)		
More than 2	104 (0.5)	95 (0.5)	9 (0.5)		
Able to enjoy free time				1,009.800 ^d	< .001
No	1,605 (7.6)	1,116 (5.8)	489 (26.1)		
Yes	19,571 (92.4)	18,190 (94.2)	1,381 (73.9)		
March survey response day				145.645 ^d	< .001
19	5,763 (27.2)	5,362 (27.7)	401 (21.4)		
20	3,735 (17.6)	3,453 (17.9)	282 (15.1)		
21	1,640 (7.7)	1,481 (7.7)	159 (8.5)		
22	1,432 (6.8)	1,298 (6.7)	134 (7.2)		
23	1,804 (8.5)	1,530 (7.9)	274 (14.6)		
24	635 (3.0)	547 (2.8)	88 (4.7)		
25	1,203 (5.7)	1,096 (5.7)	107 (5.7)		
26	4,995 (23.6)	4,567 (23.6)	428 (22.9)		

(continued)

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Table 1. Sociodemographic and Clinical Characteristics for the Total Sample and According to the Presence or Absence of Passive Suicidal Ideation (Past 7 Days)^a

	General Population (N = 21,207)	No Passive Suicidal Ideation (N = 19,334)	Passive Suicidal Ideation (N = 1,873)	Statistical Test Result	P Value ^b
Physical disease and COVID-19 variables					
Current physical disease ^c				12.561 ^d	<.001
No	14,017 (71.8)	12,864 (72.1)	1,153 (68.1)		
Yes	5,514 (28.2)	4,973 (27.9)	541 (31.9)		
Days with COVID-19 symptoms				43.432 ^d	<.001
None	18,761 (88.5)	17,188 (88.9)	1,573 (84.0)		
1 or 2	1,143 (5.4)	997 (5.2)	146 (7.8)		
3 to 5	600 (2.8)	527 (2.7)	73 (3.9)		
6 to 14	559 (2.6)	499 (2.6)	60 (3.2)		
More than 14	144 (0.7)	123 (0.6)	21 (1.1)		
COVID-19 test taken				9.190 ^d	.027
No	20,894 (98.6)	19,034 (98.5)	1,860 (99.4)		
Yes, negative results	180 (0.8)	172 (0.9)	8 (0.4)		
Yes, positive results	64 (0.3)	62 (0.3)	2 (0.1)		
Yes, results pending	59 (0.3)	57 (0.3)	2 (0.1)		
Family/friends infected with COVID-19				.212 ^d	.645
No	16,669 (78.7)	15,206 (78.8)	1,463 (78.3)		
Yes	4,502 (21.3)	4,097 (21.2)	405 (21.7)		
Living with people infected with COVID-19				.185 ^d	.667
No	20,848 (98.3)	19,009 (98.3)	1,839 (98.2)		
Yes	251 (1.2)	325 (1.7)	34 (1.8)		
Personal history of mental disorder				1,213.494 ^d	<.001
No lifetime mental disorder	15,053 (71.0)	14,220 (73.5)	833 (44.5)		
Past mental disorder	3,665 (17.3)	3,293 (17.0)	372 (19.9)		
Current mental disorder	2,489 (11.7)	1,821 (9.4)	668 (35.7)		
DASS-21 subscales					
Depression					
No	11,294 (53.3)	11,177 (57.8)	117 (6.2)	1,823.766 ^d	<.001
Yes	9,913 (46.7)	8,157 (42.2)	1,756 (93.8)		
Anxiety					
No	18,936 (89.3)	17,744 (91.8)	1,192 (63.6)	1,413.595 ^d	<.001
Yes	2,271 (10.7)	1,590 (8.2)	681 (36.4)		
Stress					
No	14,156 (66.8)	13,622 (70.5)	534 (28.5)	1,353.705 ^d	<.001
Yes	7,051 (33.2)	5,712 (29.5)	1,339 (71.5)		

^aData expressed as n (%) unless otherwise noted.

^bBoldface indicates statistical significance.

^cStudent *t* test.

^d χ^2 test.

^ePhysical disease includes hypertension, diabetes, cardiovascular disease, respiratory disease (asthma, chronic obstructive pulmonary disease, etc), and cancer.

Abbreviations: DASS-21 = Depression, Anxiety and Stress Scale; EPLO = employee permanent layoff; ETLA = employee temporary layoff; SD = standard deviation.

and lockdown. However, it has been reported that passive suicidal ideation could be the first rung on a ladder toward suicidal behavior.⁶ Paykel et al⁶ confirmed that steps between “feeling that life is not worth living” and a suicide attempt are additive in Faravelli’s sense⁷; that is, a suicide attempt must be preceded by such feelings.

The main limitation is the cross-sectional online nature of the study, which precludes establishing causality. The low percentage of people who were tested (PCR and antibody tests) at the beginning of the pandemic could contribute to the lack of association between being personally affected by COVID-19 and passive suicidal ideation. Finally, no questions about personally knowing someone who died of COVID-19 were included in the questionnaire. However, in line with Pfefferbaum and North,⁸ our data suggest the

existence of some protective and risk factors associated with passive suicidal ideation early in the COVID-19 pandemic and lockdown in Spain and could contribute to better monitoring of psychosocial needs.

Published online: October 6, 2020.

Author contributions: Concept and design: Drs García-Alvarez, de la Fuente-Tomás, García-Portilla, Sáiz, and Bobes. Acquisition, analysis, or interpretation of data: all authors. Drafting of the manuscript: Dr Sáiz. Statistical analysis: all authors. Critical revision of the manuscript for important intellectual content: all authors reviewed all drafts and gave the final approval.

Potential conflicts of interest: None reported.

Funding/support: This work was partly supported by the Government of the Principality of Asturias PCTI-2018-2022 IDI/2018/235, the CIBERSAM, and Fondos Europeos de Desarrollo Regional (FEDER), and Fundación para la Investigación e Innovación Biosanitaria del Principado de Asturias (FINBA).

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Role of the sponsor: The funding organizations had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, and approval of the manuscript; or decision to submit the manuscript for publication.

Acknowledgments: The authors thank Sharon Grevet for her English assistance.

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