

Epidemiology

Psychosocial effects of the quarantine during the first wave of the COVID-19 pandemic on the residents of the island of Brač

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Abstract

Background: An unprecedented health and economic crisis in small island communities during the COVID-19 pandemic indicated the importance of studying its harmful effects on residents' mental health.

Objectives: To examine the differences in negative affectivity, perceived stressors, and social support both on the quarantined and not quarantined islands.

Methods: A web-based survey and correlational cross-sectional research design were used, based on a nonprobabilistic convenience sampling method to select 613 Croatian islands' residents during May 2020. The participants completed the Depression, Anxiety and Stress Scale (DASS-21) and the General Information Questionnaire, data on their exposures to stressors during the COVID-19 pandemic and the perceived social support.

Results: Compared with the nonquarantined residents of other islands, the island of Brač residents scored significantly higher on the symptoms of depression ($M = 11.61$; $t = 2.13$, $P < 0.05$) and stress ($M = 13.06$; $t = 3.21$, $P = 0.001$) subscales, receiving more support from religious communities ($t = 2.34$, $P = 0.02$) and less from the physicians ($t = -2.68$, $P = 0.01$). Lower sociodemographic status was associated with higher levels of depression, anxiety, and stress.

Conclusion: The COVID-19 pandemic highlighted the urgent need to protect mental health in isolated island areas specially for singles and people of low socioeconomic status.

Lay Summary

Background: This study contributed to the recognition and understanding of the pandemic's impact on the mental health of the isolated island population. The aim was to examine the differences in perceived stressors, perceived social support, and negative affectivity (symptoms of depression, anxiety, and stress) between residents of Brač directly affected by the COVID-19 pandemic and residents of other islands not directly exposed to the pandemic.

Methods and examinees: A total of 613 inhabitants of the Croatian islands were included in the analysis during pandemic in May 2020. All participants answered web-based survey about perceived stressors, social support, and psychological symptoms.

Results: Staying on the quarantined island during the pandemic significantly contributed to the levels of depressive, anxiety, and stress symptoms. It also highlighted the positive impact of

Key Messages

- Quarantine presents a threat to the mental health of the island community.
- Isolation during the pandemic negatively affects the island population.
- Quarantine is tolerated better by the people living in large households.
- Island communities need psychological assistance during quarantine.

connections with family members and the religious community as well as the negative impact of lower socioeconomic status on adaptation in times of pandemic.

Conclusion: Despite the short duration, the psychological effects of a pandemic were more visible in residents of an island affected by a pandemic compared with residents of other islands not exposed to COVID-19 pandemic.

Key words: COVID-19 pandemic, family medicine, islands, mental health, quarantine

Introduction

On 14 November 2020, 53,164,803 confirmed cases of COVID-19, including 1,300,576 deaths, were reported to WHO. The outbreak of COVID-19 pandemic and epidemiological measures has many negative effects on mental health.¹ The stressors are as follows: danger of virus SARS-CoV-2, self-isolation, quarantine duration, concerns about future, inadequate supplies, inadequate information, financial loss, reduced job security, and stigma.²⁻⁴ The factors independently associated with negative mental health outcomes are: having confirmed or suspected COVID-19, having a relative with confirmed or suspected COVID-19, being involved in occupational exposure risks, living in the area with the highest prevalence of infected people and experiencing quarantine.⁵

A chain mediation model on COVID-19 symptoms and mental health outcomes has explained how the physical symptoms resembling COVID-19 infection trigger reaction and affect ultimately adverse mental health outcomes (i.e. anxiety, depression, insomnia, post-traumatic stress disorder, and stress).^{6,7}

In the Vietnamese study, factors that were associated with negative affectivity were being single, separated, or widowed, a higher education level, a larger family size, loss of jobs, and being in contact with potential COVID-19 patients.⁸ Staying at home was correlated with decrease in brain frontal face asymmetry and increase in depressive symptoms. Differing policies on face mask usage during the initial stage of pandemic have had an influence on mental state as well.^{9,10} A study of seven middle-income countries in Asia showed that the protective factors for mental health include male gender, staying with children or more than six people in the same household, employment, confidence in doctors, high perceived likelihood of survival, and less exposure to health information.¹¹

According to the United Nations, the COVID-19 pandemic is posing an unprecedented health and economic crisis for small island economies because of their small economic base, high degree of openness, and extreme dependence on economic performance of a few developed economies as well as sharp falls in tourism revenues and remittances flows.¹²

In Croatia, there are 1244 islands, but only 50 of them are inhabited. The survey about mental health and health-related quality of life on Croatian islands shows that social functioning of islanders was significantly lower than in the general population. Moreover, there was a significant variation in health status among the islanders according to the isolation level, with the largest differences in general health perception and mental health. High isolation group reported

the lowest score of all groups on mental health, physical functioning, general health, and vitality dimension.¹³ These results provide evidence about the importance of studying harmful effects of the pandemic on mental health of the residents on the islands.

In this paper, the research interest is focused on the psychological reactions of island communities. The availability of necessary items for daily needs as well as hospital health services depends on regular ferry connections. At the beginning of the pandemic, when this research was conducted, the number of regular ferry lines was limited. There was even a risk of canceling them, which was an additional concern to the island population. A major problem occurred on the island of Brač when a significant number of inhabitants became infected with the coronavirus. Therefore, we were interested in investigating the psychological reactions of the island population in general and in comparing them with the reactions of the residents of the island of Brač who were quarantined due to the spread of the pandemic.

The aims of the study:

1. To examine the differences in negative affectivity (symptoms of depression, anxiety, and stress), perceived stressors, and perceived social support between the residents of the island of Brač (a quarantined island) and the residents of other islands who were not quarantined, during the first wave of the COVID-19 pandemic.
2. To examine the individual and joint contribution of residence and living status during the quarantine period to the negative affectivity between the residents of the island of Brač and other islands.
3. To determine the association between negative affectivity and types of stressors in relation to the characteristics of respondents and perceived support.

Patients and methods

Study design

A correlational cross-sectional research design was used in this study. A web-based survey was used to collect data. The study was based on a nonprobabilistic convenience sample of participants. This web-based survey of the COVID-19 was sent on the Internet through the Google docs platform and the mainstream media. Participants completed the questionnaire by clicking the relevant link.

Participants

A total of 613 residents of the Croatian islands of both genders (76.8% women and 23.2% men), aged from 21 to 75 years, were

included in the analysis. Nearly half of the participants had a college/graduate/postgraduate (48.3%) education, while 51.7% completed secondary/elementary education. Most of them were employed (64.7%), while the others were unemployed (55.3%). All participants completed the questionnaires anonymously on the Internet from 14 May 2020 to 23 May 2020, during the peak of the pandemic on the island of Brač. The participants were divided into two groups consisting of residents of the island of Brač ($n = 452$), who were directly affected by the SARS-CoV-2 virus at the time of the study, and of residents of other Adriatic islands where the virus was not detected ($n = 161$). The groups did not significantly differ considering gender ($\chi^2 = 0.1, P > 0.05$), age ($\chi^2 = 9.17, P = 0.057$), education ($\chi^2 = 0.76, P > 0.05$), and employment status ($\chi^2 = 5.7, P > 0.05$).

All subjects reported their demographic data, COVID-19-related information, and completed questionnaires which assessed their current mental health status.

This study was conducted in accordance with the Declaration of Helsinki and was approved by the Ethics Committee of the University of Split, University Department of Health Studies. Electronic informed consent was obtained from all participants prior to starting the research. Participants could withdraw from the survey at any moment without providing any justification.

Measurement

Within the present study, the participants completed the Depression, Anxiety and Stress Scale (DASS-21).¹⁴ This scale has been widely used for measuring negative affectivity. It consists of 21 items and three subscales measuring depressive, anxiety, and stress symptoms. The responses are influenced by situational factors and reflect the current circumstances of the respondent. On a four-point Likert-type scale, ranging from 0—Did not apply to me at all/3—Applied to me very much or most of the time, respondents were asked to indicate how much each statement applied to them. A total score was calculated as a linear combination of subscale scores. DASS-21 was validated in different cultures during the pandemic.^{15–17} This study used a validated Croatian scale that confirmed the three-factor structure of the original questionnaire and showed the following internal reliability coefficients: 0.89 for the depression subscale, 0.89 for the anxiety subscale, and 0.92 for the stress subscale.

In addition, the participants completed the General Information Questionnaire prepared for the purpose of this research in which they reported their demographic data (age, gender, education, socioeconomic, and working status), information on their exposures to stressors during the COVID-19 pandemic, the perceived social support and history of psychotherapeutic/psychiatric treatment.

Statistical methods

A *t*-test was used to determine if there was a significant difference between the means of two groups (quarantined vs nonquarantined islands) in perceived pandemic-related stressors and social support.

Individual and joint contribution of residence and living status during COVID-19 pandemic to the negative affectivity was investigated by using two-way ANOVA test. In doing so, residence and living status were used as independent variables, while the variables of symptoms of depression, anxiety, and stress were used as dependent variables.

In order to determine the association between negative affectivity and types of stressors in relation to characteristics of respondents and perceived support we used a stepwise regression analysis. Sociodemographic status, types of pandemic-related stressors, and

social support have been included as independent variables, while depression, anxiety, and stress were used as dependent variables.

Results

The residents of the island of Brač scored significantly higher on the symptoms of depression ($M \pm SD$, Brač vs other islands; 11.61 ± 5.06 vs 10.64 ± 4.73 ; $t = 2.13, P < 0.05$) and stress (13.06 ± 5.80 vs 11.41 ± 5.05 ; $t = 3.21, P = 0.001$) subscales in comparison to the residents of other islands who were not quarantined. Although the differences on the anxiety scale did not reach the statistical significance, it was evident from the average values that the residents of the island of Brač scored higher in anxiety (10.03 ± 4.55 vs 9.35 ± 3.83 ; $t = 1.71, P > 0.05$) compared with the residents of other islands (Fig. 1).

As can be seen from Table 1, the residents of the island of Brač reported significantly higher scores on items indicating concerns about the possible duration of social isolation, frustration for being isolated from other people, inability to move freely outside their homes and boredom, compared with the residents of other islands who were not directly affected by the pandemic. Considering perceived support, the residents of the island of Brač received the greatest support from family members (parents and partners) and friends as well as through online sources and social networks. They received significantly more support from religious communities and less support from the physicians than residents from other islands (Table 2).

To examine the effects of the (residence) and living status (single vs family life) during the COVID-19 pandemic on the negative affectivity, three separate two-way ANOVAs were conducted. Only the individual contribution of residence on the quarantined island to the degrees of depressive, anxiety, and stress symptoms was determined. The joint effect of residence and living status was not determined. Nevertheless, the average values indicated a noticeable trend of more pronounced negative affectivity among the residents of the island of Brač who lived alone during the quarantine period compared with those who lived in the family environment. The models explain 84% of the variance in the symptoms of depression, anxiety, and stress separately (Table 3).

By using stepwise regression analysis, the factors indicating effects of the pandemic on the negative affectivity among the residents of the islands were identified. As can be seen from Table 4, lower sociodemographic status was associated with higher levels of depressive, anxiety, and stress symptoms, while staying on the island throughout the quarantine contributed to more pronounced depressive and stress symptoms in residents. Considering the effects of stressors, the increase in all aspects of negative affectivity was due to concerns about the possibility of being left without food and other necessities for life and a sense of boredom during the quarantine period. Fear of infection and isolation from others significantly contributed to higher levels of anxiety and stress symptoms, while uncertainty due to the duration of isolation and fear of being stigmatized if tested positive for COVID-19 contributed to higher depressive and stress symptoms. Finally, greater partner support was associated with lower levels of anxiety and stress symptoms, while greater religious community support was associated with lower anxiety levels. Among these groups of factors, stressors were found to be the most significant factor explaining 15%–25% of the variance in the levels of depressive, anxiety, and stress symptoms (Table 4).

Discussion

The quarantined residents of the island of Brač compared with the inhabitants of other islands who were not quarantined showed

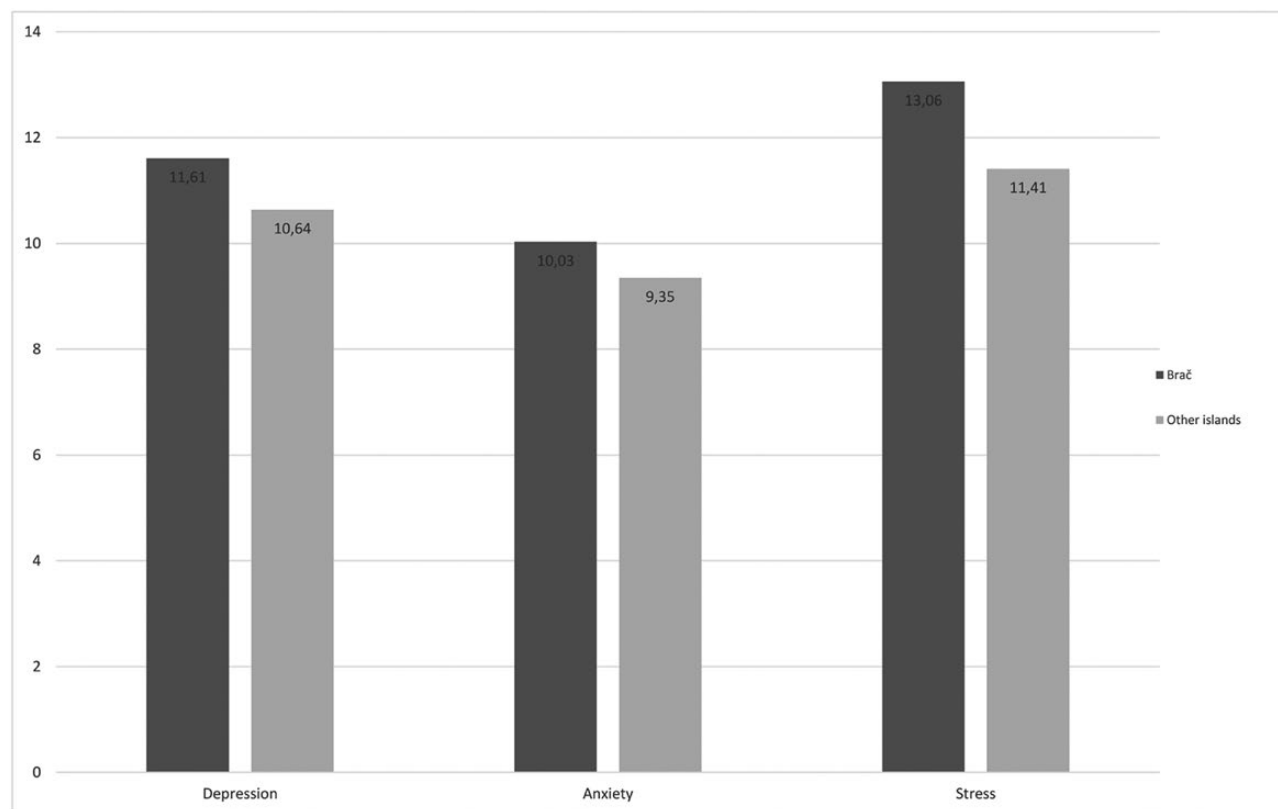


Figure 1. Differences in negative affectivity between 452 residents of Brač affected by quarantine and 161 residents of other Croatian islands (2020). Differences in depression (CI: 0.07–1.07), anxiety (CI: 0.10–1.47), and stress (CI: 0.64–2.66) between quarantined and nonquarantined islands. **M* = means (presented in columns).

significantly higher levels of depressive and stress symptoms. Although the anxiety scale value was also higher, it did not reach the statistical significance. Research of psychological issues of the COVID infection have shown that anxiety and depression were the most common psychological issues during the pandemic period.^{18,19}

In comparison with the residents of other islands, the residents of the island of Brač were significantly concerned about the isolation from other people and its duration, and of being bored. They also experienced concerns about financial consequences of the pandemic and fear of infection, together with the uncertainty of duration of isolation and home confinement as the strongest pandemic-related stressors. This finding is consistent with the results of previous studies in which quarantine was associated with fear of infection, frustration, boredom, and anxiety due to the lack of information.^{2,20}

Comparison between urban and rural health care in times of the COVID-19 pandemic shows further rural deprivation. Resources are mostly directed towards urban areas.²¹ Having been remote and out of the reach of the virus, people on the islands have not experienced any deaths from the coronavirus and have had no cases for a long time, but those people faced mental health issues, boredom, and frustration, which led to weight gain. The pandemic has added an extra layer of difficulty to the everyday life of the island population (unemployment, disrupting food security, and climate change) that has already adjusted to isolation difficulties.^{22,23} According to Vietnamese experience, it is essential to mobilize existing resources and provide village health workers with knowledge, skills, and materials as well as to leave the mobilization and management process under the direction of local organizations.^{24,25}

Considering perceived support, the residents of the island of Brač have received the most support from the family members (parents and partners) and friends. In the first wave of the pandemic in May 2020, during the lockdown and the quarantine period on the island of Brač, a ban on movement between municipalities and a ban on gatherings were imposed. Family members mostly relied on each other, whereas the single households relied on their neighbors and friends. As it is a rural area, the help of the locals is still present to a large extent. According to the presented results, the spiritual, religious connection alongside the practical one, were significantly more pronounced on the island of Brač, in comparison to other islands. Religion/spirituality seem to have an important role in the relief of suffering influencing the health outcomes and minimizing the consequences of social isolation.^{26,27} At the same time, a significant difference was observed in the reliance on medical care among the people on the island of Brač, compared with other islanders. It was an unexpected result because the health service on the island of Brač traditionally operates well and the island is completely covered by health care, either by emergency or by a network of family doctors. A possible reason for such result might be the epidemiological measure—the recommendation to close the clinic and switch to online, i.e. telephone or virtual consultations.

At the very beginning of implementing the measures, it took time for patients and doctors to get used to such a change. A great deal of work in general practice was dedicated to learning how to deal with uncertainty and how to manage risk. Working over the telephone without any physical contact certainly presented additional challenge for most patients and doctors.²⁸ The quarantine

Table 1. Differences in perceived stressors between 452 residents of Brač affected by quarantine and 161 residents of other Croatian islands (2020).

Stressors	Residence	M	SD	95% CI ^a	<i>t</i> ^b	<i>P</i>
Uncertainty due to duration of isolation	Brač	3.31	1.37	0.01 to 0.5	2.03	0.04*
	Other islands	3.05	1.37			
Fear of infection for oneself and loved ones	Brač	2.98	1.38	-0.35 to 0.14	-0.83	0.41
	Other islands	3.09	1.34			
Feeling bored	Brač	2.40	1.51	0.07 to 0.6	2.41	0.01*
	Other islands	2.06	1.41			
Lack of information on protection against infection	Brač	1.90	1.15	-0.26 to 0.16	-0.47	0.64
	Other islands	1.95	1.13			
Isolation from other people	Brač	3.04	1.41	0.13 to 0.62	2.96	0.00**
	Other islands	2.67	1.27			
Impossibility to go outside	Brač	2.94	1.50	0.27 to 0.78	3.91	0.00**
	Other islands	2.41	1.38			
Financial consequences of the pandemic	Brač	3.92	1.24	-0.21 to 0.24	0.16	0.88
	Other islands	3.91	1.25			
Fear of avoiding if I get infected	Brač	2.31	1.40	-0.28 to 0.23	-0.21	0.83
	Other islands	2.34	1.46			
The possibility to run out of food and necessities	Brač	2.20	1.33	-0.01 to 0.46	1.86	0.06
	Other islands	1.98	1.26			
Impossibility of quality education	Brač	2.42	1.50	-0.31 to 0.23	-0.27	0.79
	Other islands	2.46	1.44			
Permanent stay with family members in the house	Brač	2.33	1.42	-0.07 to 0.44	1.45	0.15
	Other islands	2.14	1.35			
Job loss	Brač	2.52	1.61	-0.23 to 0.35	0.42	0.67
	Other islands	2.45	1.58			

^aConfidence interval.^b*t*-Test for independent samples.**P* < 0.05.***P* < 0.01.**Table 2.** Differences in perceived sources of support between 452 residents of the island of Brač affected by quarantine and 161 residents of other Croatian islands (2020).

Type of support	Residence	M	SD	95% CI ^a	<i>t</i> ^b	<i>P</i>
Partner support	Brač	3.89	1.42	-0.15 to 0.38	0.86	0.39
	Other islands	3.78	1.44			
Parental support	Brač	3.56	1.48	-0.1 to 0.46	1.27	0.21
	Other islands	3.37	1.61			
Child support	Brač	3.45	1.62	-0.08 to 0.53	1.45	0.15
	Other islands	3.22	1.63			
Support from a friend/smartphone/social network	Brač	4.05	1.12	-0.05 to 0.37	1.51	0.13
	Other islands	3.89	1.18			
Support from religious communities	Brač	2.26	1.49	0.05 to 0.59	2.34	0.02*
	Other islands	1.94	1.36			
Physician support	Brač	2.32	1.49	-0.65 to -0.1	-2.68	0.01*
	Other islands	2.69	1.53			
Support through the media (online psychotherapy, social networks)	Brač	2.06	1.36	-0.33 to 0.17	-0.06	0.54
	Other islands	2.13	1.38			
Pet support	Brač	2.66	1.74	-0.5 to 0.14	-1.11	0.27
	Other islands	2.84	1.78			

^aConfidence interval.^b*t*-Test for independent samples.**P* < 0.05.

was declared only for the island of Brač, which might have been the reason for more serious and stricter implementation of measures, resulting in the feeling/fear that the doctor was no longer available to the extent he had been before. Furthermore, the ferry services were significantly reduced, thus, increasing the fear of limited hospital access.^{21,29}

Only the individual contribution of residence on the quarantined island to the degrees of depressive anxiety and stress symptoms was determined wherein the persons who lived alone had higher levels of symptoms. Nevertheless, the average values indicated a noticeable trend of a more pronounced negative affectivity among the inhabitants of the island of Brač who lived alone during the quarantine

Table 3. Individual and joint contribution of residence and living status to the negative affectivity of 452 residents of Brač affected by quarantine and 161 residents of other Croatian islands (2020).

	Residence	Living status	M	SD	95% CI ^a	Variables	F ^b	R ^{2c}
Depression	Brač	Alone	13.13	5.56	11.6–14.7	Residence	7.07*	0.84
		With partner	11.18	4.49	9.98–12.4	Living status	0.56	
		With partner and children	11.32	5.04	10.51–12.14	Residence and living status	0.49	
		With partner and seniors	11.71	5.36	10.74–12.68			
	Other islands	Alone	9.90	3.84	6.84–12.96			
		With partner	10.04	5.23	7.98–12.11			
		With partner and children	10.00	3.91	8.59–11.14			
		With partner and seniors	10.84	4.47	9.3–12.4			
Anxiety	Brač	Alone	10.77	4.77	9.41–12.13	Residence	4.77*	0.84
		With partner	9.47	4.02	8.41–10.53	Living status	0.83	
		With partner and children	9.95	4.45	9.24–10.55	Residence and living status	0.80	
		With partner and seniors	10.15	4.81	9.3–11			
	Other islands	Alone	7.9	2.23	5.22–10.58			
		With partner	8.6	3.75	6.79–10.4			
		With partner and children	9.19	3.17	7.96–10.43			
		With partner and seniors	9.95	4.21	8.59–11.3			
Stress	Brač	Alone	14.54	6.30	12.8–16.28	Residence	12.30*	0.84
		With partner	12.42	5.31	11.06–13.78	Living status	1.44	
		With partner and children	12.70	5.84	11.79–13.62	Residence and living status	1.10	
		With partner and seniors	13.55	5.78	12.46–14.64			
	Other islands	Alone	9.5	3.72	6.06–12.94			
		With partner	10.41	5.38	8.09–12.73			
		With partner and children	11.06	4.25	8.48–12.65			
		With partner and seniors	12.51	5.12	10.77–14.26			

^aConfidence interval.^bF-Test (two-way ANOVA).^cCoefficient of determination.

*P < 0.01.

Table 4. Sociodemographic factors and pandemic-related stressors associated with negative affectivity in 613 inhabitants of Croatian islands (2020).

Factors	Depression (β) ^c	Anxiety (β) ^c	Stress (β) ^c
Socioeconomic status	-0.15**	-0.14**	-0.15**
Residence (Brač/other islands)	-0.09*	—	-0.13**
^a R ²	0.03	0.02	0.04
^b F (df)	9.46** (2)	11.52** (1)	12.77** (2)
Stressors			
Fear of infection for oneself and loved ones	—	0.21**	0.17**
Uncertainty due to duration of isolation	0.16**	—	0.17**
Feeling bored	0.13**	0.13**	0.13**
Lack of information on protection against infection	—	—	-0.10*
Isolation from other people	—	0.08*	0.09*
The possibility to run out of food and necessities	0.20**	0.17**	0.17**
Impossibility of quality education	—	0.08*	—
Permanent stay with family members in the house	0.11**	—	—
Fear of stigma if get infected	0.08*	—	0.08*
^a R ²	0.20	0.15	0.23
^b F (df)	29.66 (5)**	23.28 (5)**	25.38 (7)**
Support			
Partner support	-0.16**	-0.12**	—
Support from religious communities	—	-0.13**	—
^a R ²	0.03	0.03	—
^b F (df)	13.49 (1)**	6.68 (2)**	—

Stepwise regression analysis:

^aCoefficient of determination.^bF-Test (one-way ANOVA).^cStandardized regression coefficients.

*P < 0.05.

**P < 0.01.

period compared with those who lived in the family environment. Confinement and restriction measures translated to a sudden stop of citizens' normal life. Consequently, a person soon began to present symptoms associated with an anxiety state, produced by social isolation, and repeated exposure to negative news and information.^{30,31} Those who felt they had belonged to their neighborhood and who trusted their neighbors, had lower levels of anxiety and depression.²⁰

Lower sociodemographic status was associated with higher levels of depressive, anxiety, and stress symptoms, while staying on the island in quarantine contributed to more pronounced depressive and stress symptoms in residents. Since the world economy was slipping into recession, a massive loss of employment strongly affected the mental health of workers, which might translate into depression, anxiety, psychological distress, and a decreased life satisfaction.^{31,32} On the contrary, protective factors included sufficient medical resources, up-to-date and accurate information as well as taking precautionary measures (e.g. hand hygiene, wearing a mask) were associated with a lower levels of stress, anxiety, and depression.^{18,19}

Considering the effects of stressors, the increase in all aspects of negative affectivity was due to concerns about the possibility of being left without food and other necessities for life and a sense of boredom during the quarantine period. A tendency to be overly influenced by others, such as buying in a hurry, was more prevalent than relying on your own information.^{33,34} This typical behavior was visible in the first days of the quarantine period on the island of Brač. Shopping malls sold huge amounts of food because people were not sure how long the isolation would last and whether food delivery would be possible. Finally, stronger partner support was associated with lower levels of anxiety and stress, while stronger religious community support was associated with lower anxiety. The feeling of isolation experienced by the residents of the island of Brač was especially strong during the lockdown and the crisis caused by the COVID-19 pandemic. Similar consequences were observed in other studied populations during the COVID-19 crisis.^{20,27}

Voluntary quarantine may be associated with good compliance and less psychological impact, particularly when explained well and promoted as altruistic. On the contrary, the measure of quarantine provokes in the island examinees/population diverse fears and wide spectrum of negative psychological reactions during the lockdown. Moreover, negative societal behaviors will often be driven by fear and distorted perceptions of risk.^{2,20} A number of studies have established the effectiveness of evidence-based treatment of cognitive behavior therapy (CBT), especially Internet CBT in treating psychiatric symptoms during COVID-19 pandemic.^{35,36}

Limitations

The main source of bias refers to sampling method. The online survey does not provide full insight into the general population, but only into the category of Internet users who were willing to participate in the study. This limitation prevents the generalizability of findings to the whole island population. In addition, the limitations of the study are the small number of respondents, a short quarantine period, and the use of self-assessment instruments. The gold standard for establishing psychiatric diagnosis involved structured clinical interview and functional neuroimaging.^{37,38} This study mainly used self-reported questionnaires to measure psychiatric symptoms and did not make clinical diagnosis. The Gotland Scale of Male Depression (GSMD) may be considered to be a valid instrument for measuring nontypical ("suicidality-related") symptoms of depression in both, male and female patients. Furthermore, as COVID infection presents

a risk factor for mental illness and suicide in the future, the education of physician and caregivers, as well as building the evidence base on suicide prevention is crucial.^{39,40}

Finally, for future research designs it is recommended to use more representative samples and more psychological instruments, to explore cultural factors, perception and willingness to receive COVID-19 vaccination.⁴¹

Conclusion

The residents of the island of Brač showed significantly higher levels of depressive and stress symptoms during quarantine, compared with the residents of nonquarantined islands. Furthermore, they experienced significantly more concerns about the potential duration of isolation from other people and were more afraid of being unable to move freely outside their homes as well as of being bored, compared with the inhabitants of other islands. They also received significantly more support from the religious communities and less support from the physicians than the residents from other islands.

Only the individual contribution of residence on the quarantined island to the degrees of depressive, anxiety, and stress symptoms was determined. There was a noticeable trend of more pronounced negative affectivity among the residents of the island of Brač who lived alone during the quarantine period, compared with those who lived in the family environment.

Finally, both sociodemographic characteristics (lower sociodemographic status and staying on the quarantined island) and perceived pandemic-related stressors associated higher levels of negative affectivity during the pandemic in the island communities.

Scientific contribution

This study contributed to the recognition of the peculiarities of the pandemic's impact on the mental health of the isolated island population as well as to the understanding of the factors influencing the psychological health of the residents of the quarantined island. It also highlighted the positive impact of connections with family members and the religious community as well as the negative impact of lower socioeconomic status on adaptation in times of pandemic.

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Conflict of interest

None declared.

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