

Psychosocial Aspects of the COVID-19 Pandemic in the Mendoza Population

Aspectos psicosociales de la pandemia COVID-19 en la población de Mendoza

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ABSTRACT

Background: In March 2020 the World Health Organization (WHO) declared SARS-CoV-2 coronavirus disease a pandemic, and since then the largest psychological experiment in the world is being carried out: social isolation.

Objectives: The aim of this study was to analyze the psychosocial aspects of confinement and the restrictions imposed by the pandemic in the city of Mendoza, Argentina

Methods: An anonymous survey using social networks (WhatsApp, Instagram, Facebook and e-mail) was designed to assess the psychosocial and behavioral aspects of mandatory confinement due to the pandemic and its impact in the population that attends the Institute of Cardiology and Sports in the city of Mendoza and Greater Mendoza.

Results: The survey was answered by 915 persons within 10 days of sending the link; 49% of participants were between 20 and 40 years old with a majority of female gender. In 80.7% of cases they performed physical exercise during the confinement, but only 3.8% maintained the previous number of hours of weekly activity, 44% increased their time in front of a screen and 61% altered their healthy eating habits. At least 60% of the surveyed population reported symptoms compatible with depression: anxiety, sadness, unwillingness or hopelessness.

Conclusions: Confinement without allowing outdoor activities, notwithstanding the proscription of social contact, is associated with changes in healthy lifestyle.

Key words: Coronavirus Infections - Social Isolation - Mental Health - Healthy Lifestyle - Surveys and Questionnaires - Argentina.

RESUMEN

Introducción: En marzo de 2020 la Organización Mundial de la Salud (OMS) declaró a la enfermedad SARS-CoV-2 coronavirus una pandemia, desde ese momento se está llevando a cabo el experimento psicológico más grande del mundo; el aislamiento social.

Objetivos: Analizar los aspectos psicosociales del confinamiento y las restricciones impuestas por la pandemia en la ciudad de Mendoza-Argentina

Material y métodos: Mediante la utilización de las redes sociales (WhatsApp, Instagram, Facebook, Mail) se realizó de manera anónima con formulario, una encuesta diseñada para valorar aspectos psicosociales y conductuales del confinamiento obligatorio por la situación de pandemia y como afectó a la población. Fue realizada en la ciudad de Mendoza capital y gran Mendoza utilizando la población que asiste al instituto de cardiología y deportes.

Resultados: 915 personas contestaron la encuesta en 10 días de enviado el link, el 49% de los participantes se encontraba entre los 20 y 40 años con mayoría de sexo femenino. Un 80,7% realizó ejercicio durante el tiempo de confinamiento, pero solo un 3,8% mantuvo la cantidad de horas previas de ejercicio semanal. Un 44% de las personas aumento su tiempo enfrente de una pantalla y un 61% alteró sus hábitos alimentarios saludables. Al menos el 60% de la población encuestada refirió síntomas compatibles con depresión, ansiedad, tristeza, falta de voluntad o desesperanza.

Conclusiones: El tiempo de confinamiento sin permitir actividades al aire libre, a pesar de la prohibición de contacto social, se asocia con cambios en el estilo de vida saludable.

Palabras clave: Infección por Coronavirus - Aislamiento social - Salud Mental - Estilo de Vida Saludable - Encuestas y Cuestionarios - Argentina

INTRODUCTION

Since March 2020, the respiratory disease caused by SARS-CoV-2 coronavirus infection has been declared a “pandemic” by the World Health Organization (WHO). In an effort to stop the spread of the virus, governments

around the world have ordered mandatory, preventive and social isolation. While social isolation has proven to be quite effective in terms of physical confinement, mental health appears to be undermined by the onset of feelings of uncertainty, fear, and despair.

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Due to its extreme virulence, different restraint measures were adopted. Such measures included mandatory use of safety glasses, waterproof gowns, face masks, social distancing, cancellation of events (i.e. medical conferences, sports competitions including the Olympics), severe travel restrictions, closure of schools/universities and most workplaces (with a few, notable, exceptions represented by health, press, food, and primary asset providers). On the other hand, although social isolation has proven to be quite effective in terms of physical confinement, in psychological (and psychiatric) terms the situation may reveal itself as insufficient owing to lack of psychological support, mainly due to the appearance of feelings of uncertainty, fear and hopelessness.

The aim of this survey was thus to assess the negative psychological effects of confinement, and how it affects a healthy lifestyle.

METHODS

A questionnaire designed by cardiologists and psychologists was designed seeking to evaluate changes in healthy lifestyle, in addition to negative symptoms associated with mandatory confinement. The questionnaire was digitally developed, using electronic means to voluntarily invite patients who regularly attend the cardiology institute to participate and was shared by e-mail, WhatsApp and social networks.

The survey was answered anonymously and the data were automatically uploaded to a template for further analysis.

Changes in healthy habits such as those in the diet, exercise, cardiovascular risk factors and alcohol consumption, and stressors including length of quarantine, fear of infection, frustration, inadequate information and financial losses, among others, were evaluated.

Statistical analysis

A descriptive analysis was performed using conventional statistics. Quantitative variables are expressed as mean and standard deviation, and qualitative variables as n and percentage. SPSS® 17 statistical software package was used for the analysis.

Ethical considerations

The protocol was approved by the institutional ethics committee and the patients signed an informed consent.

RESULTS

Among patients invited to freely participate, 915 responded the survey. Baseline population characteristics (Figure 1) were: 49% of respondents were between 20 and 40 years old, 36% between 40 and 60 years and only 12% were over 60 years of age, with predominance of female gender (54%) and 68% with university studies (50% with a university degree and 18% a postgradu-

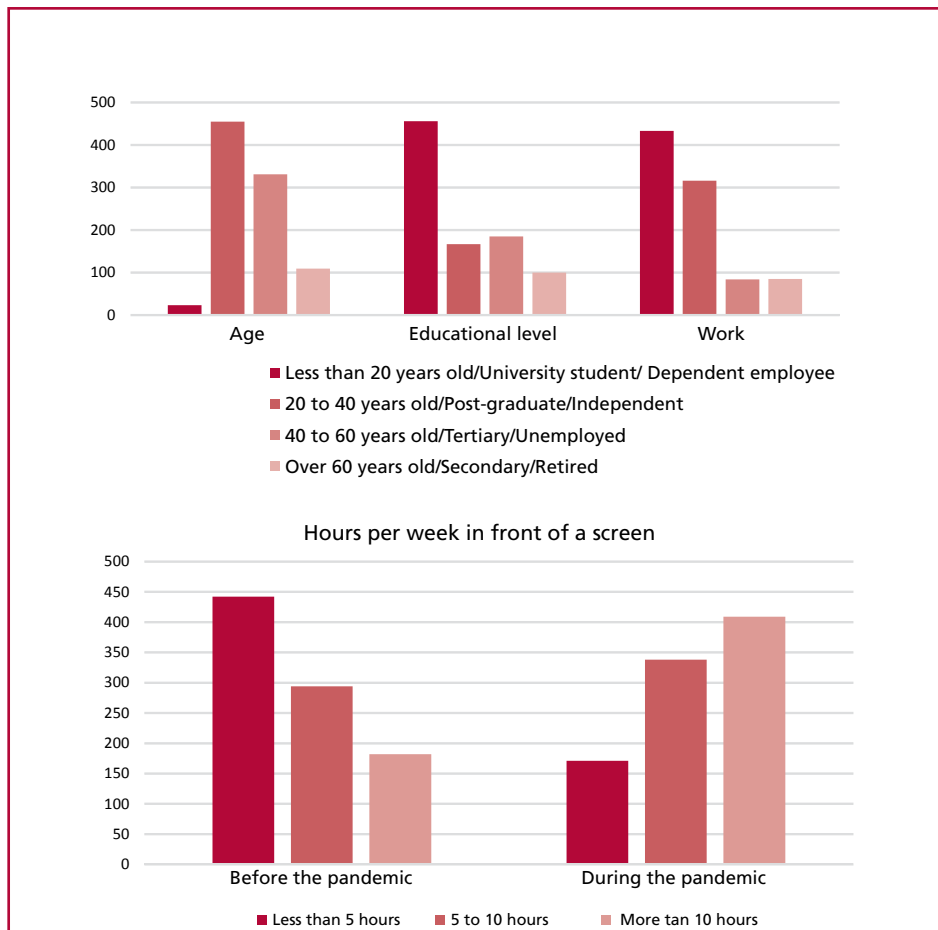


Fig. 1. Baseline population characteristics

ate degree). Forty-seven percent of respondents were dependent employees, 34% were independent workers, 9% were retired and 9% unemployed. During the pandemic, 28% lived with persons at risk for coronavirus infection. At the time of the survey, the mean confinement period was 40 days. Only 56% of respondents referred having correctly complied with the isolation, leaving 43% who had had contact with persons outside their family nucleus. Ninety-three percent of the surveyed sample practiced a sport prior to the quarantine; 49% trained 3 to 6 hours and 34% more than 6 hours per week. Only 80% of this group continued exercising during the 40 days of isolation, but 50% reduced their training to less than 3 hours per week.

In this sample there was low prevalence of cardiovascular risk factors: 9% had hypertension, 8.6% were smokers, 5.3% presented dyslipidemia and 1.1% diabetes. In 94% of cases, there was no history of cardiovascular diseases.

Fifty-two percent of respondents spent 5 to 10 hours (32%) or more than 10 hours (19%) in front of a screen prior to the confinement, and 82% increased the hours of use during the isolation (44.5% more than 10 hours and 37% from 5 to 10 hours). In 61% of cases, the study population reported having modified their healthy eating habits and 28% referred having increased alcohol consumption during the isolation (Figure 2).

Twenty-five percent of the population received the influenza vaccine this year, and considering that the population over 60 years of age is 11% and that 94% of the population had no history of cardiovascular diseases, we believe that the fear of infection increased the rate of vaccination.

A small percentage of respondents (19%) had problems to contact their general practitioner or have access to their usual medication (6%). Sixty percent of the surveyed population considered that physical activity should be allowed during the quarantine, as it would improve their well-being and mental health (33%) or enhance their general health status (30%).

In 68% of cases, respondents reported having felt a desire to cry, sadness, affliction or anxiety. Around 58% of the sample responded feeling listless, lethargic or miserable (symptoms of depression). Fourteen percent of the population received violence or mistreatment, either emotional, verbal or physical. Practically 70% of respondents suffered symptoms of anxiety, but only 31% presented fear of virus infection. Conversely, 73% feared that a relative or loved one would be infected. Sixty-two percent of the population was worried about their financial situation.

Concerning recreational physical activity, 87% considers that it would improve their well-being during the pandemic and would assume using a face mask (83%) and respecting the social distance of two meters (98%) during sports practice.

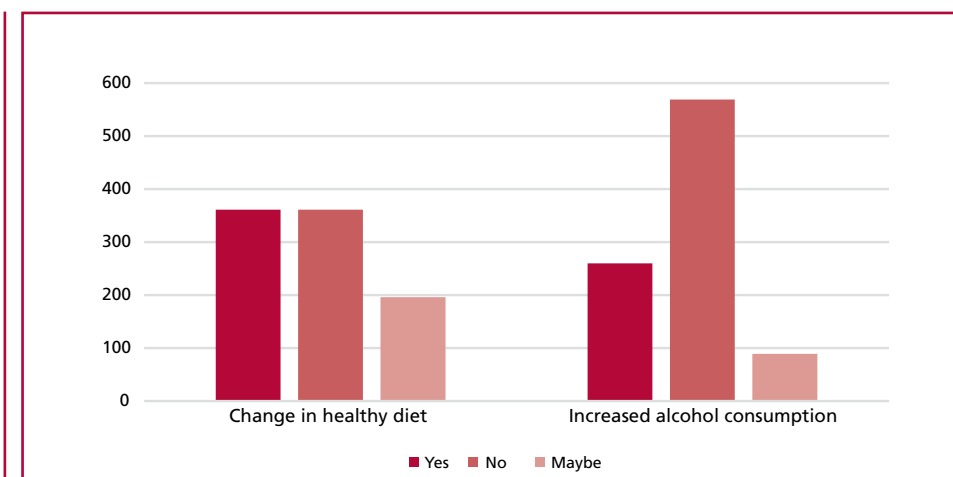
DISCUSSION

Quarantine can be a disagreeable experience. Separation from loved ones, loss of freedom, uncertainty about the state of the pandemic and boredom are some of the consequences that, occasionally, can lead to dramatic effects. The potential benefits of compulsory confinement should be carefully weighed against the possible psychological costs in the population. (1) Suicide, generalized anguish and demands (3) have been reported after imposed quarantine in other breakouts.

Some studies have compared the psychological results of persons under quarantine versus those that were not isolated, (4-6) and most of them agree that confinement is a predictive factor of disorders such as acute and post-traumatic stress. As this survey shows, 60% of the study population presented symptoms compatible with anxiety or sadness. Other symptoms reported are emotional disorders, (7) depression, (8) irritability, insomnia and low mood. (9)

Other points to consider are stressful factors during the quarantine, as for example, its duration. It has been observed that the longer the confinement the worse the psychological outcome of the population, with increased post-traumatic stress. (8) Fear of in-

Fig. 2. Change in healthy habits during the quarantine.



fection is another contemplated factor, especially of a relative (4, 8), as in 73% of our population.

Loss of routine, physical as well as social segregation have been frequently associated with boredom, frustration and feeling isolated from the rest of the world, causing significant distress. (10,11) Another important factor reflected in this pandemic is lack of reliable information, information overload or disinformation, generating confusion in the population. (11) The economical situation is another important stressful factor; the inability to work or generate an income during the confinement causes significant socioeconomic stress (12) and has been associated with affliction and anxiety, even months after quarantine ending. (13)

We should not disregard that in addition to all the symptoms related with stress, we observed changes in the healthy habits of the population during this quarantine, such as reduction of physical activity, increased use of screens, changes in healthy diet and even increased alcohol consumption.

What could be proposed to decrease these symptoms and preserve healthy habits? As seen from this survey, almost 90% of the population considers that doing outdoor exercise would improve the well-being. Respondents would even assume it keeping protection measures as face masks and social distancing.

CONCLUSIONS

As seen from this survey and in the review carried out, the symptoms due to confinement are real and may last for a period of time after its ending. This does not mean that the quarantine should not be carried out, as probably this would lead to virus propagation with even worse results. However, to deprive people of the freedom to be outdoors for the common benefit- must be done with caution. We consider that performing outdoor exercise, keeping the necessary protection measures, would not only improve the symptoms of stress and anxiety observed in this survey, but would also collaborate with the preservation of a healthy lifestyle.

Conflicts of interest

None declared.

(See authors' conflicts of interest forms on the website/ Supplementary material)

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