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Mental health and the COVID-19 pandemic in Ecuador

Salud mental y pandemia COVID-19 en Ecuador

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Abstract

Introduction: The COVID-19 pandemic has become one of the largest health, economic and social disasters in human history. In this context, there is a substantial increase in various emotional disorders such as anxiety, depression, use of psychotropic substances, loneliness, irritability, stress, insomnia, anger, emotional exhaustion, domestic violence, child abuse, among others. As a result of these problems, mental health professionals in Ecuador developed a protocol for Tele-assisted Mental Health care. The Universidad de Especialidades Espíritu Santo (UEES) welcomed the initiative and created the psychological help line. **Objective:** To describe the main symptoms that are related to depression, anxiety, burnout syndrome and caregiver syndrome registered in the psychological help line in the context of the COVID-19 pandemic in Ecuador **Methodology:** A descriptive study was carried out, based on the information collected in the main database of the psychological helpline. Each of the interventions were recorded and all psychological care from the first month of operation of the psychological helpline (March 27 to April 27, 2020) was considered as the reference time. A total of 597 interventions are included, excluding requests related to information and medical requirements. To collect the information, a card previously validated in its content by expert criteria was used. In addition, sociodemographic variables, symptoms, a risk classification and type of consultations are included as main items. **Results:** 62% of the users correspond to the female sex, the age range between 20 to 30 years prevailed, most of the individuals resided in the province of Guayas. A group of 41 symptoms were established. In particular, symptoms of distress, sleep disturbances, agitation, tension, alertness and sadness stand out.

Conclusions: Indeed, all these alterations [1] are related to depression, anxiety, burnout syndrome and caregiver syndrome.

Key Words: COVID-19, depression, anxiety, Psychology

Resumen

Introducción: La pandemia de COVID-19 se ha convertido en uno de los mayores desastres sanitarios, económicos y sociales de la historia de la humanidad. En este contexto, existe un aumento sustancial de diversos trastornos emocionales como ansiedad, depresión, consumo de sustancias psicotrópicas, soledad, irritabilidad, estrés, insomnio, ira, agotamiento emocional, violencia intrafamiliar, maltrato infantil, entre otros. A raíz de estos problemas, los profesionales de la salud mental en Ecuador desarrollaron un protocolo de atención en Salud Mental Teleasistida. La Universidad de Especialidades Espíritu Santo (UEES) acogió la iniciativa y creó la línea de ayuda psicológica. Objetivo: Describir los principales síntomas que se relacionan con los trastornos de depresión, ansiedad, síndrome de Burnout y síndrome del cuidador registrados en la línea de ayuda psicológica en el contexto de la pandemia del COVID-19 en Ecuador Metodología: Se realizó un estudio descriptivo, basado en la información recopilada en la base de datos principal de la línea de ayuda psicológica. Se registró cada una de las intervenciones y se consideró como tiempo de referencia toda la atención psicológica desde el primer mes de funcionamiento de la línea de ayuda psicológica (27 de marzo al 27 de abril de 2020). Se incluyen un total de 597 intervenciones, excluyendo solicitudes relacionadas con información y requerimientos médicos. Para recolectar la información se utilizó una ficha previamente validada en su contenido por criterio de expertos. Además, los ítems principales incluyen variables sociodemográficas, síntomas, una clasificación de riesgo y tipo de consultas. Resultados: El 62% de los usuarios correspondió al sexo femenino, predominó el rango de edad entre 20 a 30 años, la mayoría de los individuos residían en la provincia del Guayas. Se estableció un grupo de 41 síntomas. En particular, destacan los síntomas de angustia, alteraciones del sueño, agitación, tensión, estado de alerta y tristeza. Conclusiones: Efectivamente, todas estas alteraciones están relacionadas con la depresión, la ansiedad, el síndrome de burnout y el síndrome del cuidador. alteraciones del sueño, agitación, tensión, estado de alerta y tristeza. Conclusiones: Efectivamente, todas estas alteraciones están relacionadas con la depresión, la ansiedad, el síndrome de burnout y el síndrome del cuidador. alteraciones del sueño, agitación, tensión, estado de alerta y tristeza. Conclusiones: Efectivamente, todas estas alteraciones están relacionadas con la depresión, la ansiedad, el síndrome de burnout y el síndrome del cuidador.

Palabras clave: COVID-19, depresión, ansiedad, Psicología

Introduction

In general terms, in the history of mankind there are countless pandemics that triggered significant changes in the way of life of the population. The black plague, cholera and the Spanish flu are clear examples of epidemics that society faced without the necessary resources. At the end of 2019 and the beginning of 2020, alarming signs were observed about the evolution of a series of physical alterations attributed to the now already known COVID-19, a pathology that triggers affectations also observed in SARS and MERS. Indeed, the Republic of Ecuador has been affected by the COVID-19 pandemic. Until June 2020, more than 39,000 positive cases were reported with an approximate 8.5% mortality. The province of Guayas is the most affected with 36% of the total affected by the epidemic. In fact, the country has a higher incidence in men in the age range of 20 to 49 years. The country declares a state of health emergency on March 11, 2020 and then a group of containment measures are adopted that also involves social isolation in order to stop the spread of the virus [1].

According to PAHO, epidemics represent health emergencies that cause a large number of sick and deceased.Consequently,localresourcesareoverloaded and the security and functioning of society are affected [2].

From a mental health perspective, a large epidemic implies a psychosocial disturbance that may exceed the management capacity of the affected population.

It has even been considered that the entire population suffers tension and anguish to a greater or lesser extent. Thus, an increase in the incidence of mental disorders is estimated (between a third and a half of the exposed population may suffer some psychopathological manifestation, according to the magnitude of the event and the degree of vulnerability). Although it should be noted that not all psychological and social problems that arise can be classified as diseases; most will be normal reactions to an abnormal situation [2].

In the context of the COVID-19 epidemic, there is a substantial increase in various emotional disorders, anxiety, depression, use of psychotropic substances, loneliness, irritability, stress, insomnia, anger,

emotional exhaustion, domestic violence, child abuse, among others. [3,4,5,6].

The particular case of social isolation, which has its maximum expression in the so-called quarantine, is a triggering factor for certain psychological disorders.

Some studies suggest that 73% of the population subjected to quarantine could present emotional conditions. In other research that compared post-traumatic stress symptoms in quarantined parents and children with those who were not in quarantine, it described that mean post-traumatic stress scores were four times higher in quarantined children than in quarantined children. those who were not in quarantine [7, 8, 9,10].

In this context of isolation, and taking into account the psychological symptoms described above, mental health professionals in Ecuador developed a protocol for Tele-assisted Mental Health care in COVID-19 [11].

In fact, the Espiritu Santo Specialty University quickly embraced this initiative. In this house of studies the professionals of the psychology career designed a protocol of attention in crisis in the Help Line modality. In effect, its implementation began on March 26, 2020 with the aim of providing intervention support to the different cases and psychological problems arising from the population's coping with COVID-19. This article describes the main results of this helpline. What's more,

Materials and methods

A descriptive study of the information collected in the main database of the psychological help line implemented by the UEES was carried out. The database recorded each of the psychological interventions and care for the first month of operation of the psychological help line (March 27 to April 27, 2020). A total of 597 interventions were included. Requests related to information and medical requirements were excluded.

The psychological help line, its justification, as well as the methodology and formats that were used, were built by professors from the school of psychology of the Universidad de Especialidades Espíritu Santo of the canton of Samborondón, province of Guayas.

To collect the information, a file validated in its content by expert criteria was used, and which details in its items the main sociodemographic variables, symptoms, a risk classification and type of consultations. The information of each user was not stored, and personal identification information was not requested at any point in the process. It should be noted that the fundamental principles of confidentiality of information were monitored.

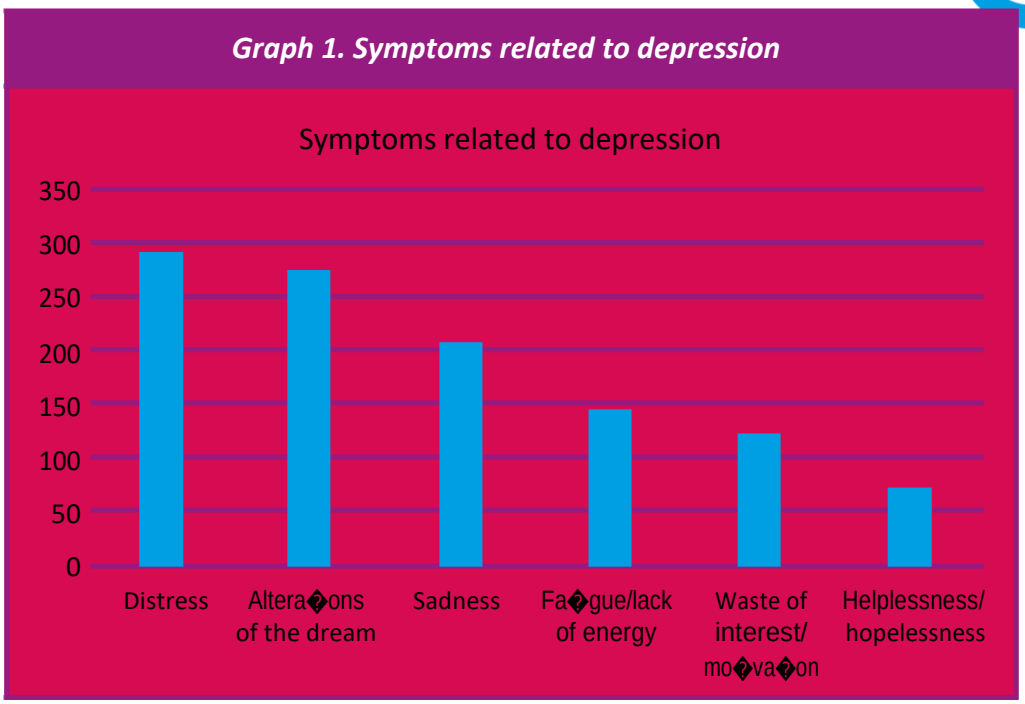
Once the call was received, the professional in charge of the help process at that time was formally presented. Next, the user was asked for data such as age, sex, profession, city from which you make the call, and reason for the call. The interactions had an average duration of 20 minutes and closed with an encouraging and hopeful message for the user.

Descriptive statistics were used, specifically frequency analysis. And the results of the information are displayed in a bar diagram.

Results

It was evidenced that 62% of individuals corresponded to the female sex. The age range of the individuals who most frequently used the help desk was 20 to 30 years. Among the country's provinces, Guayas was the most represented. Another important area that the psychological help line addresses is related to the symptoms presented by the users. A group of 41 different symptoms related to depression, anxiety, and syndromes such as Burnout and Caregiver were established. He highlighted the symptoms related to depression. Anguish and sleep disturbances are highlighted as the most frequent in this group

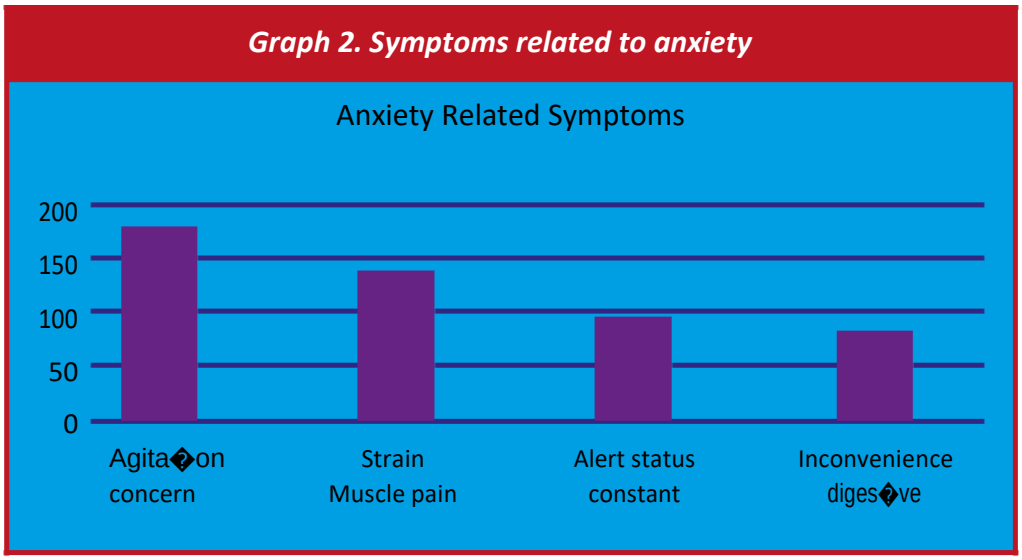
Graph 1. Symptoms related to depression



Source: Information collection matrix. Psychological Helpline, UEES 2020

Another interesting fact is provided by the symptoms related to anxiety. Agitation / restlessness and muscle tension / pain were the most frequent in this group (Graph 2).

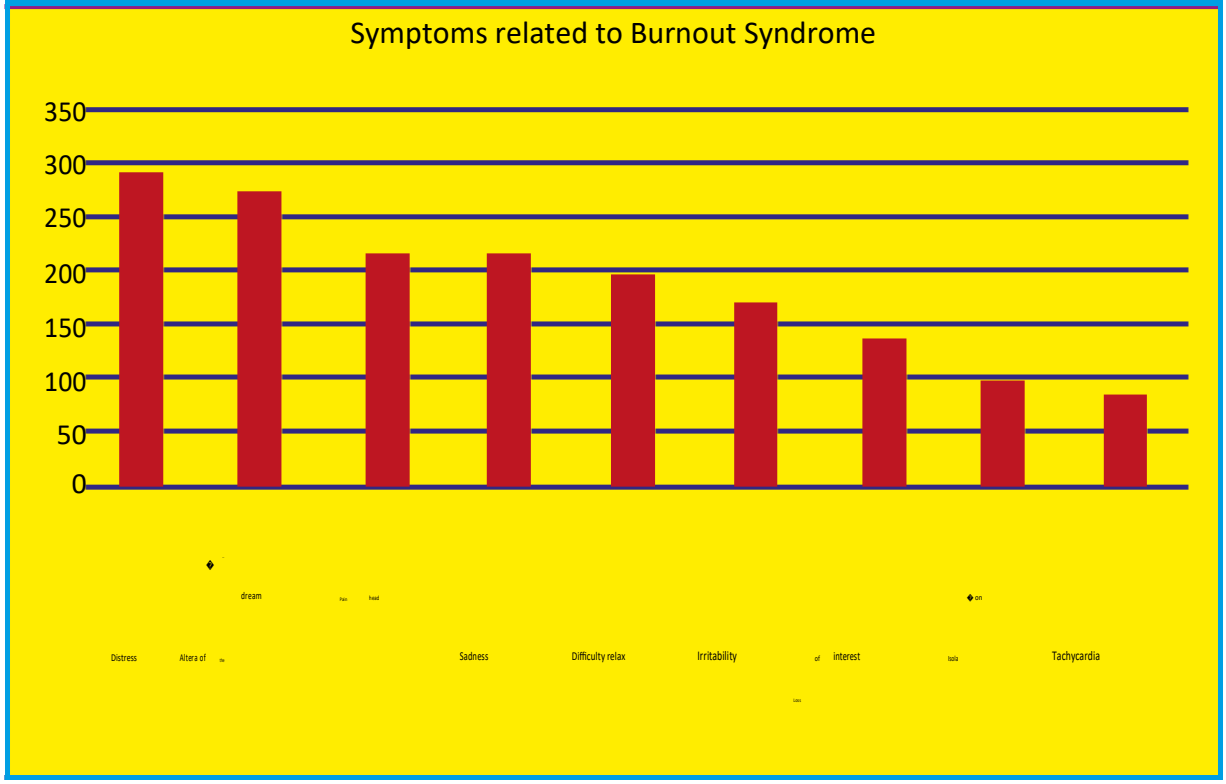
Graph 2. Symptoms related to anxiety



Source: Information collection matrix. Psychological Helpline, UEES 2020

A very diverse group of symptoms were detected in users and were related to Burnout syndrome. Anxiety, sleep disturbances, headaches, among other symptoms, externalize the problems experienced in the workplace. (Graph 3).

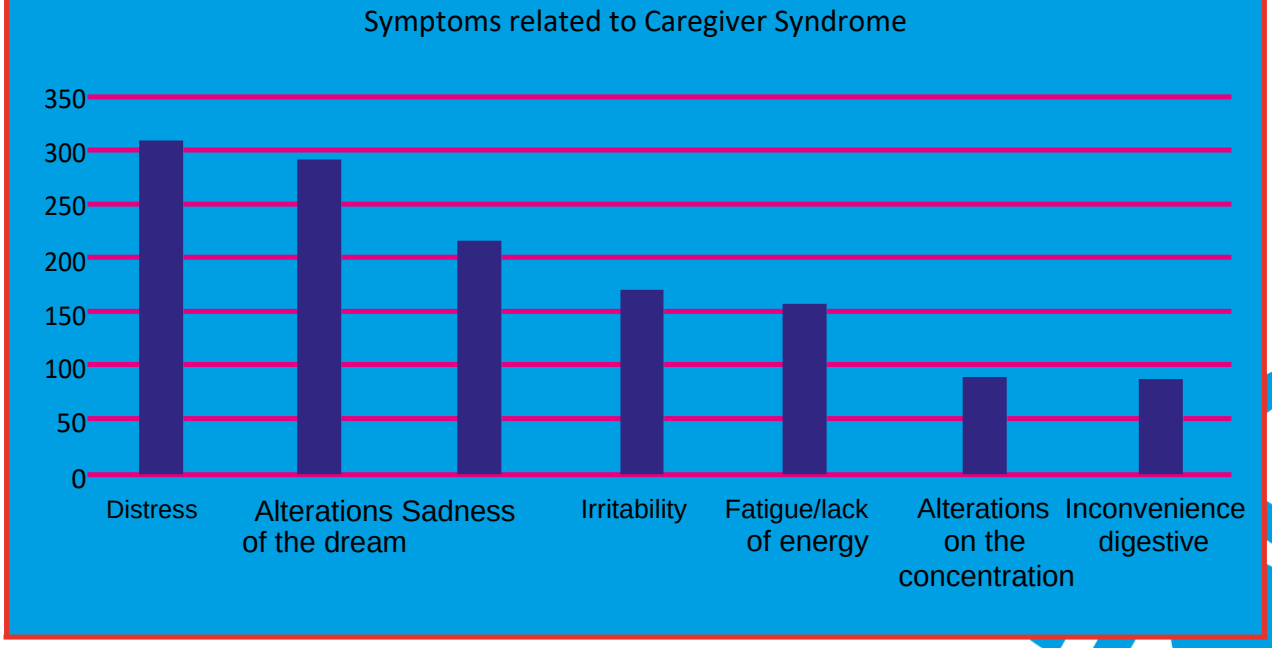
Graph 3. Symptoms related to Burnout syndrome.



Source: Information collection matrix. Psychological Helpline, UEES 2020

Finally, a group of symptoms related to the Caregiver syndrome were detected. In fact, it highlights again the anguish and sleep disturbances among others. (Graph 4).

Graph 4. Symptoms related to the Caregiver syndrome.



Source: Information collection matrix. Psychological Helpline, UEES 2020

Discussion

A. 17-year-old female patient, with a positive study a In the present study, symptoms related to depression and anxiety are the most frequent in the population of users of the psychological help line. International observational mental health studies in the field of COVID-19 by various authors, (Wang et al, 2020, Xiao et al, 2020 a and Xiao et al, 2020b) [12,13,14], show how in the majority of The studied population shows the presence of moderate and severe degrees of depression and anxiety, associated in most cases with stress.

It is important to refer to the context where this line of psychological help is developed, since the state of quarantine decreed by the authorities of the country in the months of the study, undoubtedly prints an important scenario to explain the symptoms found. Quarantine is the separation and restriction of the movement of people who have potentially been exposed to a contagion, to determine if they become ill, thus reducing the risk of infecting others [15].

Some studies in populations subjected to this type of social seclusion show a group of symptoms such as emotional disorders [16], depression [17], stress, low mood, irritability, insomnia [18]. anger, fear, nervousness, sadness [19].

In Ecuador, a study carried out by the University of the Americas [20], agrees with the results of the present, by indicating levels of depression and anxiety in a group of 759 infected and suspected COVID-19 subjects, who were under epidemiological surveillance. The country's statistics reflect a higher proportion of men among confirmed COVID-19 cases. However, in the aforementioned study, the presence of men in both groups was not significant.

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In the present work it was moreThe proportion of female individuals who contacted the telephone line was high. help psychological. This proportion could be explained from the cultural position of women as the entity responsible for family health, who goes to the available means to receive care regardless of the channels they must use.

The COVID-19 pandemic has undoubtedly represented the most important epidemiological phenomenon in the history of humanity, if analyzed from the different affected areas of human life. We find a group of restrictive measures that impact natural freedom. In addition, they highlight unprecedented financial losses, problems in medical response,v school closings, death, insecurity, among many others that could be mentioned [21].

The anxiety and depression reflected in the group of symptoms detected in the helpline, and supported by a number of publications reflect a complex social scenario. Society and its institutions must guarantee spaces for mental health care that respond to the needs of affected individuals. Initiatives should be aimed not only at diagnosis but also at monitoring users seeking help.

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References

1. Ministry of Public Health of Ecuador. Update of Coronavirus cases in Ecuador. Consultedonhttps:// www.salud.gob.ec/actualizacion- of-coronavirus-cases-in-ecuador /

2. OPS. Protection of Mental Health in Situations of Epidemics. Mental Health, Technology and Health Services Delivery Unit (THS / MH), 2006

3. Galea S, Merchant RM, Lurie N. The Mental Health Consequences of COVID-19 and Physical Distancing: The Need for Prevention and Early Intervention. JAMA Intern Med. Published online April 10, 2020. doi: 10.1001 / jamainternmed.2020.1562

4. Yoon MK, Kim SY, Ko HS, Lee MS. System effectiveness of detection, brief intervention and refer to treatment for the people with posttraumatic emotional distress by MERS: a case report of community-based proactive intervention in South Korea. Int J Ment Health Syst 2016; 10:51.

5. Hawryluck L, Gold WL, Robinson S, Pogorski S, Galea S, Styra R. SARS control and psychological effects of quarantine, Toronto, Canada. Emerg Infect Dis 2004; 10: 1206-12.

6. Marjanovic Z, Greenglass ER, Coffey S. The relevance of psychosocial variables and working conditions in predicting nurses' coping strategies during the SARS crisis: an online questionnaire survey. Int J Nurs Stud 2007; 44: 991-98.

7. SK Brooks, RK Webster, LE Smith, L Woodland, Prof S Wessely FMedSci, Prof N Greenberg FRCPsych, GJ Rubin. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. Volume 395, ISSUE 10227, P912-920, March 14, 2020.

8. Bai Y, Lin CC, Lin CY, Chen JY, Chue CM, Chou P. Survey of stress reactions among health care workers involved with the SARS outbreak. Psychiatr Serv 2004; 55: 1055–57

9. Liu X, Kakade M, Fuller CJ, et al. Depression after exposure to stressful events: lessons learned from the severe acute respiratory syndrome epidemic. Compr Psychiatry 2012; 53: 15–23.

10. Sprang G, Silman M. Posttraumatic stress disorder in parents and youth after health-related disasters. Disaster Med Public Health Prep 2013; 7: 105-10.

11. Protocol for Tele-assisted Mental Health care in COVID - 19. Ministry of Public Health of Ecuador, 2020.

12. Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, CS, Ho, RC Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. Int. J.Environ. Res. Public Health, 2020, 17 (5), E1729.

13. Xiao, H., Zhang, Y., Kong, D., Li, S., Yang, N. The effects of social support on sleep quality of medical staff treating patients with coronavirus disease 2019 (COVID-19) in January and February 2020 in China. Med. Sci. Monit, 2020a 26, e923549.

14. Xiao, H., Zhang, Y., Kong, D., Li, S., Yang, N. Social capital and sleep quality in individuals who self-isolated for 14 days during the coronavirus disease 2019 (COVID-19) outbreak in January 2020 in China. Med. Sci. Monit, 2020b

15. Manuell ME, Cukor J. Mother Nature versus human nature: public compliance with evacuation and quarantine. Disasters 2011; 35: 417-42., E923921.

16. Yoon MK, Kim SY, Ko HS, Lee MS. System effectiveness of detection, brief intervention and refer to treatment for the people with posttraumatic emotional distress by MERS: a case report of community-based proactive intervention in South Korea. Int J Ment Health Syst 2016; 10:51.

17. Hawryluck L, Gold WL, Robinson S, Pogorski S, Galea S, Styra R. SARS control and psychological effects of quarantine, Toronto, Canada. Emerg Infect Dis 2004; 10: 1206-12.

18. DiGiovanni C, Conley J, Chiu D, Zaborski J. Factors influencing compliance with quarantine in Toronto during the 2003 SARS outbreak. Biosecur Bioterror 2004; 2: 265-72.

19. Reynolds DL, Garay JR, Deamond SL, Moran MK, Gold W, Styra R. Understanding, compliance and psychological impact of the SARS quarantine experience. Epidemiol Infect 2008; 136: 997-1007.

20. Paz C, Mascialino G, Adana-Díaz L, Rodríguez-Lorenzana A, Simbaña-Rivera K, Gómez-Barreno L, Troya M, Paez MI, Cardenas J, Gerstner RM, Ortiz-Prado E. Anxiety and depression in patients with confirmed and suspected COVID-19 in Ecuador. Psychiatry Clin Neurosci. 2020 Jul 1:10.

21. Pfefferbaum B, North CS. Mental Health and the Covid-19 Pandemic [published online ahead of print, 2020 Apr 13]. N Engl J Med 2020; 10.1056 / NEJMp2008017