Original short

# RESP

# Psychological distress of inmates at a women's prison in Lima after the first wave of COVID-19 in November 2020

Silvia Esteban-Febres, Santos Guzmán-Gamarra, Melisa La Cunza-Peña, Yovana Quispe-Gutiérrez

Women's Prison of Chorrillos. Lima. Peru.

#### ABSTRACT

**Objectives:** A descriptive study was carried out to establish the levels of psychological distress amongst female inmates at a high-security prison in Lima in November 2020, after the first wave of COVID-19.

Material and method: The Brief Symptoms Inventory-18 (BSI-18) was applied to a representative sample of 314 female inmates who agreed to participate in the study.

**Results:** Results showed that 34.6% of the inmates could be considered as cases of psychological distress. Moreover, the depression subscale had the highest score, followed by the anxiety and the somatisation subscales. The most prevalent symptom was "feeling blue".

**Discussion:** The prevalence of distress symptoms was analyzed, taking into account the effects of the first wave of COVID-19, the suspension of family visits, the restriction of treatment and leisure activities, etc. Gender aspects were also taken into consideration.

Key words: prison; women; depression; COVID-19; psychological distress.

Text received: 28/06/2022

Text accepted: 06/02/2023

#### **INTRODUCTION**

The outbreak of COVID-19 in Peru highlighted the instability of the country's health system and its lack of prepare dness for the new normality caused by the measures to reduce infection. On 16 March 2020, the government of Martín Vizcarra declared a national quarantine that lasted 107 days, after which additional measures were set in motion that imposed local quarantines according to the level of alerts in the provinces.

The effects of these measures on the prison system included the suspension of family visits and restrictions on activities for the prison population. Psychological treatment, and social, legal, educational and occupational activities were also suspended.

Riots and protests took place at several prisons in March and April 2020. The protestors demanded better medical care and measures to release inmates<sup>1</sup> as a way to reduce overcrowding, which increased to 143% (97,493 inmates in a prison system designed to house 40,137)<sup>2</sup>.

COVID-19 in Peru was characterised by a growth in the number of cases from April to August 2020, after which there was a steady decline from September to December<sup>3</sup>. The final balance in terms of mortality for that year was 95,334 deaths<sup>4</sup>.

The Women's Prison of Chorrillos is located in the city of Lima. The prison is characterised by high levels of overcrowding<sup>2</sup>, and one of its functions is to house high-risk prisoners sentenced to over 14 years imprisonment. This imposes the need to impose stringent security measures. In 2020, levels of infection amongst inmates stood at 89.13%, and figures from prison records show five deaths in May and June, according to the prison's historical release record. Although resources were made available during the national lockdown to make phone calls by landline and to receive packages containing toiletries, clothes, non-perishable foodstuffs, etc., the restrictions, physical distancing from the family and news about their health, led to an increase in symptoms of anxiety, insomnia, interpersonal difficulties and other issues.

Factors such as maternity, economic responsibility for the family, lack of access to educational activities and employment, the suspension of visits and other issues related to gender roles intensified the negative experiences in prisons caused by COVID-19.

The situation described above is an important one because a number of studies have highlighted the fact that the prevalence of disorders such as severe depression, psychosis and drug abuse and dependence is higher in prisons than in the community<sup>5</sup>. Findings have shown that the prevalence of mental illness amongst the Peruvian prison population is high: 9.6% suffer from depression, 8.6% from anxiety and 2.9% are addicted to psychoactive substances, while inmates with such diseases are more likely to lack access to medical care in prisons<sup>6</sup>.

In Latin America, women are 50% more likely than men to suffer from depression, and twice as likely to suffer from anxiety disorders<sup>7</sup>. The rates of depression and anxiety amongst women in the Peruvian prison population are twice those observed in men, although women generally have more access to treatment<sup>6</sup>. However this does not mean that there are adequate treatment provisions.

This research project forms part of a study on the effects of a video-call programme on inmates at a maximum-security women's prison. The aim of the study is to describe the levels of psychological distress amongst inmates of the Women's Prison of Chorrillos in November 2020, at the end of the first wave of COVID-19 in Peru, identifying the most Noteble clinical syndromes, psychopathological symptoms with the greatest impact and possible cases of psychological distress in the prison population with a view to prioritising the provision of healthcare.

## MATERIALS AND METHOD

A cross-sectional descriptive study including all the inmates of the Women's Prison of Chorrillos was carried out. The target population consisted of 378 inmates, of whom 314 were willing to participate. No exclusion criteria were used, and participants were asked to complete an informed consent procedure, which included signing a written consent form. Authorisation to carry out the research project was given by the prison technical board.

The population was characterised by an average age of 40 years, while 25% of the inmates had served more than one prison sentence. Other additional data can be seen in Table 1.

The questionnaire used was the BSI-18, which is an abbreviated version of the symptom checklist-90-revised (SCL-90-R). It is an 18 item self-report with five alternative answers that go from 0 to 4. It enables responses to stress in the previous week to be evaluated<sup>8</sup>. It is organised into three subscales: somatisation, depression and anxiety, the sum total of which gives a global severity index (GSI). According to the test manual, a GSI that is equal to or greater than the T score of 63 or two subscales with a T score equal to or over 63 identify a clinical case.

Table 1. Characteristics of the sample.

Variable	Frequency	Percentage			
Time in prison					
Up to 6 months	6 1.9				
7 to 23 months	117 37.3				
2 to 4 years	93 29.6				
5 to 10 years	81 25.8				
11 to 15 years	8	2.5			
16 to 20 years	4	1.3			
More than 20 years	5	1.6			
Total	314	100			
Legal situation					
Prosecuted	187	59.6			
Sentenced	127	40.4			
Total	314	100			
Educational level					
Illiterate	5	1.6			
Primary	47	15.0			
Secondary	146	46.5			
Diploma	55	17.5			
Graduate	61	19.4			
Total	314	100			
Receives psychiatric treatment?					
No	292	93			
Yes	22	7			
Total	314				

The effectiveness of the BSI-18 has been analysed in several studies. The conclusion is that the tool's convergent and discriminant validity, combined with its high level of reliability, make it very useful as a screening instrument ( $\alpha = 0,93$ )<sup>9</sup>.

### RESULTS

The results obtained (Table 2) show that the depression subscale was the one with the highest average score, while somatisation did not reach 24, which is the maximum obtained in each subscale.

The item by item analysis (Table 3) showed that the most common symptom was "feeling blue", while "thoughts of ending one's life" had the lowest score. 31% declared that they felt nervous or shaky.

To identify the cases of psychological distress amongst inmates, the cut-off point proposed by Derogatis (2001) was used as a benchmark. It was located at T point 63, which in terms of gross score is equal to 23<sup>10</sup>. After applying this benchmark, we found that 34.4% of the inmates had a high enough score to be regarded as "cases".

Mean SD\* Percentage of answers to items 2 0 1 3 4 1. Faintness or dizziness 0.93 1.14 49.4 24.2 13.4 9.9 3.2 2. Feeling no interest in things 7.3 1.12 1.28 43.9 24.5 14.3 9.9 3. Nervousness or shakiness 1.24 1.34 42.7 20.1 16.6 12.1 8.6 4. Pain in heart or chest 1.44 1.31 31.8 24.5 21.0 13.1 9.6 5. Feeling lonely 1.75 1.40 25.5 22.3 19.1 14.6 18.5 6. Feeling tense or keyed up 1.42 1.23 31.5 22.0 10.8 8.6 27.17. Nausea or upset stomach 1.31 7.3 1.31 38.9 20.1 20.1 13.7 8. Feeling blue 16.9 25.2 2.49 1.19 5.4 25.8 26.8 9. Suddenly scared for no reason 1.04 1.29 49.4 21.7 9.2 7.6 12.1 10. Trouble getting one's breath 1.02 1.19 48.1 20.1 17.5 10.8 3.5 11. Feeling worthless 12.1 6.7 0.61 1.16 71.3 7.3 2.5 12. Spells of terror or panic 0.53 1.02 72.0 13.4 7.6 3.5 3.5 13. Numbness or tingling in parts of one's body 1.64 1.34 25.2 25.5 22.3 14.3 12.7 14. Feeling hopeless about the future 0.69 1.14 64.6 17.5 6.7 6.4 4.8 15. Feeling so restless that one could not sit still 0.94 1.18 49.7 24.5 12.7 8.0 5.1 16. Feeling weak in parts of on's body 1.27 25.5 1.26 37.3 18.8 10.8 7.6 17. Thoughts of ending one's life 0.44 1.05 81.8 5.7 3.2 5.4 3.8 18. Feeling fearful 1.21 1.30 40.1 25.5 16.9 8.6 8.9 **BSI-18** 19.84 13.730 43.5 32.4 16.2 7.3 0.6

Table 3. Analysis of items in BSI-18.

Table 2. Results of inmates' BSI-18.

	Min.*	Max.†	Mean	SD‡
Somatisation	0	20	6,33	4,725
Depression	0	24	7,12	5,036
Anxiety	0	24	6,39	5,723
BSI-18	0	68	19,84	13,730

Note. \*Min.: Minimum; †Max.: Maximum ‡SD: Standard deviation.

#### DISCUSSION

A significant percentage of the inmates may be defined as cases of psychological distress. This outcome matches the results of studies carried out with similar samples, which indicate that depression, anxiety and stress are common symptoms amongst inmates<sup>6,11</sup>. However, it has yet to be established if such levels are so high because stressors such as risk of infection and restrictive measures still existed in the prison shortly after the first wave of COVID-19. What is evident is that the inmates experienced two

Note. \*SD: Standard deviation.  $^{\dagger}0 = \text{not at all}; ^{\ddagger}1 = a \text{ little}; ^{\$}2 = \text{moderately}; ^{\$}3 = \text{quite a lot}; ^{\$}4 = a \text{ lot}.$ 

forms of isolation in this period: imprisonment and the lockdown imposed as a result of medical measures and restrictions to prevent infection.

The loss of freedom and confinement in a penitentiary setting require prisoners to undergo a process of adaptation to a complex reality that often involves a loss of independence and privacy, major changes in social and intimate relationships, and a situation of vulnerability that can affect an inmate's mental health. Other studies concur with our results and indicate that medical restrictions and other measures had a negative impact on mental health in the prison population<sup>12</sup>.

In gender terms, it is evident that female inmates have greater needs for mental health treatment than men. However, such differences are often ignored<sup>13</sup>, given that the penitentiary system offers little in the way of effective responses to the needs of women, who are generally made invisible since they form a small proportion of the prison population.

The COVID-19 pandemic had a particularly severe impact on female inmates, because of the interiorised roles that they take on of "carers" and "being close to their family". The suspension of visits, which made contact with the family almost impossible, stopped inmates from being able to fulfil these roles.

The depression subscale was the one with the highest score. This may be due to the fact that the inmates had not seen any family members for more than eight months. Many inmates also had family members who died and communication in such cases was also impossible. In cases like these, depression forms part of the grieving process, and the fact that they could not share the leave-taking process for the deceased person with the family may act as an influence in this regard. Another factor to take into consideration is that mood can be contagious<sup>14</sup>, and the depressions observed may have been caused by empathy for fellow inmates who were grieving.

Mandatory social isolation meant that there were no educational and occupational workshops, no group leisure activities, and prison medical services and personnel were restricted to the extent that healthcare provision was inadequate. This may also have had an influence on the results obtained, since research has shown that spending time on purposeful activities outside the cell has a positive effect on mental health and reduces the risk of suicide<sup>15</sup>.

Another aspect that may have had an influence on the high score for depression is related to the inmates' judicial procedures, especially in cases where inmates were held under pre-trial detention orders, and whose proceedings were paralysed or delayed by the national emergency.

There were high scores in the anxiety subscale, given that many inmates were concerned about the family and the possibility that they might be infected. Although the evaluation was carried out when many inmates had already had the disease, other inmates who were diagnosed as negative in screenings were scared about being infected.

The high scores in the somatisation subscale may be related to the consequences of COVID-19, especially when the high percentage of inmates who caught the disease in 2020 is taken into consideration.

It should also be borne in mind that the inmates' lifestyle was affected, with drastic reductions in physical and sports activities. Another factor that should not be ruled out is that inmates were more suggestible and so paid more attention to the physical symptoms that they experienced.

The most common symptoms included feelings of sadness, which inmates explained as the result of the deaths of family members and fellow inmates, and "feeling lonely" caused by inmates not seeing their family, despite the considerable overcrowding in the prison where they were housed.

It was found that thoughts of ending one's life was the lowest scoring item in the entire scale, which could be explained by the fact that the pandemic may have helped inmates to better appreciate their life, their families and the importance of their lives for their families. Only one inmate declared that she wanted to die, since she had lost a child. This greater appreciation of life could be seen in many pro-social behaviours during the mandatory lockdown, such as sharing food and consumables, cooking food together and generally showing solidarity.

The limitations of this study include the design, which did not enable relationships between the scores obtained and other variables such as overcrowding to be established. However, some of the circumstances in which these results have appeared have been described. The importance of this study resides in the fact that it provides information about an issue that is hardly ever considered from a gender perspective: the mental health of female inmates and their experiences during a pandemic such as COVID-19.

The results show the impact on female inmates' mental health at a maximum security prison after the first wave of the COVID-19 pandemic. As many medical restrictions were still in place when the BSI-18 was utilised, it is difficult to indicate which factor had the greatest influence on our results. More research is needed to identify the main stressors that

affect female inmates' mental health, given the lack of studies on prisons that apply a gender perspective.

# CORRESPONDENCE

Silvia Esteban-Febres E-mail: estebanfebres19@gmail.com

# REFERENCES

- 1. Comisión Interamericana de Derechos Humanos. [Internet]. CIDH condena hechos de violencia en cárceles peruanas. [Note de prensa]. En: Oas. org. Washington; CIDH. 8 May 2020. [Consultada 30/04/2020]. Disponible en: https://www.oas. org/es/cidh/prensa/comunicados/2020/107.asp
- Oficina del Planeamiento y Presupuesto. [Internet]. Informe Estadístico: marzo 2020. Instituto Nacional Penitenciario de Perú; 2020. [Consultada 03/11/2020]. Disponible en: https://siep.inpe. gob.pe/Archivos/2020/Informes%20estadisticos/informe\_estadistico\_marzo\_2020.pdf
- 3. Mayta-Tristán P. Los tsunamis por Covid-19 en Perú: El primero malo, segundo peor. Rev Cuerpo Med HNAAA. 2021;14(3):260-1. http://dx.doi. org/10.35434/rcmhnaaa.2021.143.1249
- Fallecidos por COVID-19-[Ministerio de Salud -MINSA]. [Internet]. En: Plataforma Nacional de Datos Abiertos. Miraflores: Ministerio de Salud del Perú; 2022. [Consultada 23/01/2023]. Disponible en: https://www.datosabiertos.gob.pe/dataset/fallecidos-por-covid-19-ministerio-de-saludminsa
- López Marcelino LM, Saavedra FJ, López A. Problemas de salud mental en población penitenciaria. Un enfoque de salud pública. Rev Asoc Esp Neuropsiq. 2021;41(140):87-111. https://dx.doi. org/10.4321/s0211-57352021000200005.
- Hernández-Vásquez A, Rojas-Roque C. Enfermedades y acceso a tratamiento de la población penitenciaria peruana: un análisis según el sexo. Rev Esp Sanid Penit. 2020;22(1):9-15. https:// dx.doi.org/10.18176/resp.0002
- 7. Organización Panamericana de la Salud. [Internet]. Líderes mujeres llaman a integrar la salud mental en la respuesta al COVID-19. En: Paho.

org. Washington: OPS. 17 Jul 2020. [Consultada 30/04/2021]. Disponible en: https://www. paho.org/es/noticias/17-7-2020-lideres-mujeres-llaman-integrar-salud-mental-respuesta-alcovid-19

- Calderón Garrido C, Navarro González D, Lorenzo Seva U, Ferrando Piera PJ. Multidimensional or essentially unidimensional? A multifaceted factor-analytic approach for assessing the dimensionality of tests and items. Psicothema. 2019;31(4):450-7. doi:10.7334/psicothema2019.153
- Landa-Blanco M, Mejía CJ, Landa-Blanco AL, Martínez-Martínez CA, Vásquez D, Vásquez G, et al. Coronavirus awareness, confinement stress, and mental health: Evidence from Honduras, Chile, Costa Rica, Mexico and Spain. Soc Sci Med. 2021;277:113933. doi:10.1016/j.socscimed.2021.113933
- Miaja Ávila M, Moral de la Rubia J. Distribución del Inventario Breve de Síntomas (BSI-18) en una muestra de mujeres con cáncer de mama en México. Rev Psicol Salud. 2019;7(1):287-305. https:// doi.org/10.21134/pssa.v7i1
- Caravaca-Sánchez F, García-Jarillo M. Alcohol, otras drogas y salud mental en población femenina penitenciaria. Anu Psicol Juríd. 2020;30(1):47-53. https://doi.org/10.5093/apj2019a15
- Plugge E. Mental health among people in prison at the time of COVID-19: all bad news? Eur J Public Health. 2021;31(3):iii196. https://doi.org/10.1093/eurpub/ckab164.519
- Tyler N, Miles HL, Karadag B, Rogers G. An updated picture of the mental health needs of male and female prisoners in the UK: prevalence, comorbidity, and gender differences. Soc Psychiatry Psychiatr Epidemiol. 2019;54:1143-52. doi:10.1007/s00127-019-01690-1
- Belli S, Alonso CV. COVID-19 pandemic and emotional contagion. [Internet]. Digithum. 2021;27:1-9. https://doi.org/10.7238/d.v0i27.374153
- 15. Stephenson T, Leaman J, O'Moore É, Tran A, Plugge E. Time out of cell and time in purposeful activity and adverse mental health outcomes amongst people in prison: a literature review. Int J Prison Health. 2021;17(1):54-68. doi:10.1108/ IJPH-06-2020-0037