



REVISIONES

Elderly in Prison: A Scoping review of Mental Health Problems

Ancianos en prisión: una revisión de alcance de los problemas de salud mental

Nur Oktavia Hidayati¹

Efri Widianti¹

Iceu Amira D.A¹

Alfiatullatifah¹

Rafdi Herlanda Pratama¹

Rida Rosi Nur Asifa¹

¹ Faculty of Nursing, Universitas Padjadjaran, Bandung, Indonesia. nur.oktavia@unpad.ac.id

<https://doi.org/10.6018/eglobal.563741>

Received: 2/04/2023

Accepted: 8/07/2023

ABSTRACT:

Introduction: Elderly prisoners are a minority in the prison population but their number is increasing compared to other groups. Mental health problems in elderly prisoners can be caused by the length of the detention period, being separated from family and partners, and conflicts that occur between inmates in prison which worsen the mental health conditions of elderly prisoners. Research on mental health problems in elderly prisoners is also still limited.

Method: A scoping review study design was used. Articles searched through PubMed, EBSCO, ProQuest, Sage Journal, and Google Scholar. Articles published from 2000 to 2023. The keywords used in English are "Elderly", "Mental Health Problems", and "Prisoners".

Results: Of the nine articles analyzed, we found the mental health problems of elderly prisoners were anxiety, agoraphobia, depression, bipolar, personality disorders, post-traumatic stress disorder, suicide risk, mood disorders, psychosis spectrum disorders or schizophrenia, and alcohol abuse or dependence.

Conclusions: Based on several findings, it is recommended for further research focus on providing appropriate interventions for elderly prisoners who experience mental health problems, as well as identifying the extent of mental health services for elderly prisoners.

Keywords: elderly, mental health problems, prison, scoping review.

RESUMEN:

Introducción: Los reclusos mayores son una minoría en la población penitenciaria pero su número va en aumento en comparación con otros grupos. Los problemas de salud mental en los reclusos mayores pueden ser causados por la duración del período de detención, la separación de la familia y las parejas, y los conflictos que ocurren entre los reclusos en prisión que empeoran las condiciones de salud mental de los reclusos mayores. La investigación sobre los problemas de salud mental en los reclusos mayores también es todavía limitada.

Método: Se utilizó un diseño de estudio de revisión de alcance. Artículos buscados a través de PubMed, EBSCO, ProQuest, Sage Journal y Google Scholar. Artículos publicados desde 2000 hasta 2023. Las palabras clave utilizadas en inglés son “Elderly”, “Mental Health Problems” y “Prisoners.”

Resultados: De los nueve artículos analizados, encontramos que los problemas de salud mental de los adultos mayores reclusos fueron ansiedad, agorafobia, depresión, trastorno bipolar, trastornos de personalidad, trastorno de estrés postraumático, riesgo de suicidio, trastornos del estado de ánimo, trastornos del espectro psicosis o esquizofrenia y abuso de alcohol o dependencia.

Conclusión: Sobre la base de varios hallazgos, se recomienda que la investigación adicional se centre en brindar intervenciones apropiadas para los reclusos mayores que experimentan problemas de salud mental, así como en identificar el alcance de los servicios de salud mental para los reclusos mayores.

Palabras clave: adulto mayor, problemas de salud mental, prisión, revisión de alcance.

INTRODUCTION

Based on global data there are 11 million people in prison globally an increase of about 8 percent over the last 10 years. Prisons are operating at above capacity in 119 countries, and measures to reduce prison populations are inadequate ⁽¹⁾. Mental disorders are often experienced by prisoners, these disorders are often undiagnosed and not handled properly. Generally, mental health problems experienced by many of these prisoners are depression, hopelessness, alcohol consumption, and drug use. Mental health problems are a challenge for mental health nurses because if left untreated they can lead to poor adjustment to health conditions and life in prison. In addition, life in prison is also a challenge for inmates who have poor mental health conditions ⁽²⁾.

The elderly are a population that is vulnerable to mental health impacts, especially in prison environments. Research conducted by Tarbuck ⁽³⁾. explains that older inmates will be at higher risk of experiencing violence than other inmates which result in high levels of chronic stress and can worsen physical and mental health problems. The United States has the highest number of incarcerated individuals worldwide, as well as its elderly inmates who reached 200,000 incarcerated people aged 55 and over in 2017. Therefore, the elderly are at risk of developing mental health problems ⁽⁴⁾.

Mental health in the elderly generally occurs with dementia. When mental health problems affect elderly prisoners, more complex health problems will arise including depression, Alzheimer's, anxiety, bipolar disorder, schizophrenia, and alcohol use ⁽⁵⁾. Mental health problems in elderly prisoners should be addressed as soon as possible. So that further research is needed on interventions for mental health problems in the elderly and the factors that influence them, especially to prevent more serious mental disorders. Meanwhile, research or literature review studies on mental health problems in elderly prisoners are still minimal. Therefore, the authors conducted a scoping review study to identify mental health in elderly prisoners.

METHODS

Design

The research design used is a scoping review from the Arksey & O'Malley framework. Scoping review is a type of research using a method of identifying literature that is used in-depth and thoroughly by using various sources and research methods that are

tailored to the research topic ⁽⁶⁾. This study aims to analyze any mental health problems that arise in elderly prisoners.

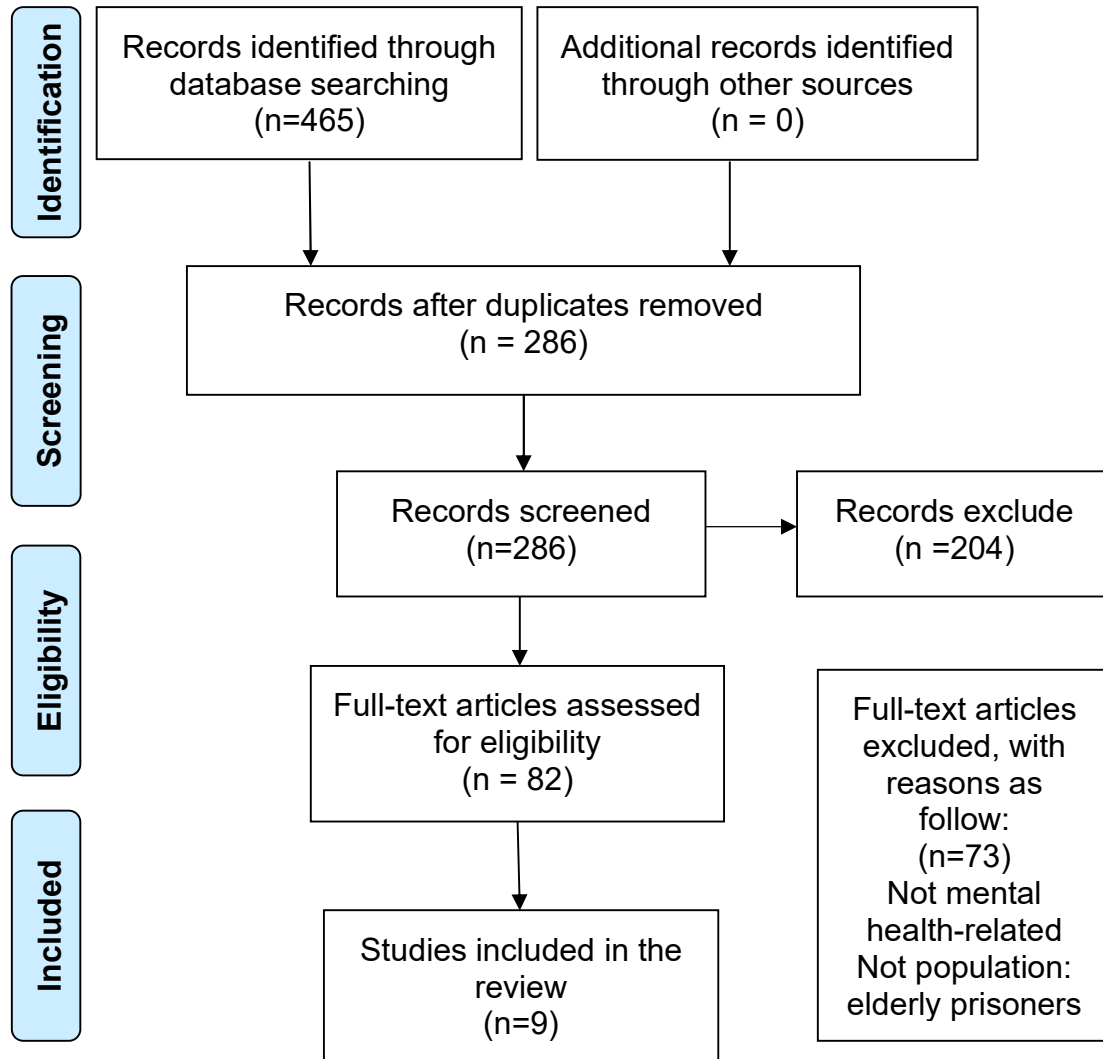
Search strategy

We have carried out several processes in searching for relevant articles regarding mental health problems in elderly prisoners. Search for articles using the keywords namely "Older OR elderly OR aging AND Mental Health issues OR mental health problems OR mental disorder OR mental illness OR psychological problems OR psychiatric problems AND prisoners OR inmates OR detainee OR convicts" through PubMed, EBSCO, ProQuest, Sage Journal, and Google Scholar.

Study selection

We carried out the study selection process using the PRISMA Flow Diagram (**Figure 1**). From the results of the selection of articles according to keywords, then we validated according to the inclusion criteria, namely free full-text articles, English, types of research: qualitative and quantitative study, research design with publication time from 2000 to 2023, and focuses on the population of elderly prisoners. The exclusion criteria were documents, and review article. Four authors (NOH, AF, RHP, RRNA) mapped and created extraction table. The data listed in the extraction table were: authors and year of publication, research design, country, sample size, and instruments (**Table 1**). Furthermore, the results of performed analysis were reviewed by three authors (NOH, EFW, IA).

Figure 1: PRISMA Flow Diagram



RESULTS

A total of 465 articles were located using databases and search engines, and after removing duplicates and doing preliminary screening, 82 of these papers were examined against the exclusion criteria, with nine being declared eligible for inclusion.

Study characteristics

A total of nine articles were selected based on established criteria and analyzed for various types of mental health problems in elderly prisoners. From the results of the analysis, there are various types of mental health problems, both psychosocial and psychotic. Most of the research articles are descriptive studies, the quantitative study consists of two articles, and one article is qualitative. In addition, when viewed by location, the research was carried out in various countries including the United States of America (n=3), United Kingdom (n=4), and one article from Australia and France. The publication years of the nine articles ranged from 2001 to 2018.

Mental health problems of elderly prisoners

Depression and suicide attempts

Based on the results of a literature study, depression is a mental health problem that most often occurs in elderly prisoners. Of the nine articles, eight of them stated that elderly inmates were depressed when they were in prison. Sixty prisoners (50%) had a diagnosable mental disorder, with depression being the most common ⁽⁷⁾. Research conducted by Regan et al ⁽⁸⁾ had the highest result where out of 671 elderly inmates in Tennessee state prisons 33% of them experienced depression. Over half of the prisoners scored above the threshold for mild depression ⁽⁹⁾. More than half of the elderly prisoners had a psychiatric diagnosis ⁽¹⁰⁾. Depression is the most common disorder in elderly prisoners that is associated with the risk of suicide. The risk of suicide is the most prevalent disorder in elderly prisoners (80%) in 138 elderly samples⁽¹¹⁾. As for other studies, a history of attempted suicide was found (15.7%) in 166 samples ⁽¹²⁾.

Anxiety and agoraphobia

The second most common mental health problem that occurs in elderly prisoners in this literature study is anxiety. Research conducted by Baidawi ⁽¹²⁾ in Australia resulted in the prevalence of elderly prisoners experiencing anxiety was 27 (16.3%) (n = 166), while Regan's research ⁽⁸⁾ mentions that the prevalence of elderly prisoners experiencing anxiety was 13%. While the research conducted by Combalbert et al ⁽¹¹⁾ and Allen et al ⁽¹³⁾ said that anxiety is a mental health problem that often occurs in elderly prisoners. Another thing related to this anxiety is agoraphobia, which is one of the most common disorders in elderly prisoners in the study. Agoraphobia occurred (19%) in men over 50 years of age who were on probation at Probation Services Berkshire, Oxfordshire, and Buckinghamshire, England ⁽¹⁴⁾.

Post-traumatic stress disorder

In addition, two articles found post-traumatic stress disorder or post-traumatic stress disorder as a mental health problem found in elderly prisoners. In the study of Combalbert et al ⁽¹¹⁾, the prevalence of PTSD was higher (9.4%) when compared to the results of the study by Baidawi ⁽¹²⁾ which was (2.4%).

Bipolar

Two articles also discuss bipolar of some elderly inmates at 9 (18%) ⁽¹⁵⁾. While research conducted by Baidawi ⁽¹²⁾ in Australia, there were 6 (3.6%) of 166 elderly prisoners who experienced bipolar.

Schizophrenia

As many as 12 elderly (24%) of the 360 samples were diagnosed with schizophrenia. In this study, the incidence of schizophrenia in elderly inmates was higher than the rates of community-dwelling adults found in other studies ⁽¹⁵⁾. Meanwhile, Baidawi ⁽¹²⁾ found in 7 elderly (4.2%) out of 166 samples experienced psychosis/schizophrenia.

Alcohol and drug dependence

Fitton et al ⁽¹⁴⁾ found (19%) of 32 elderly people had alcohol dependence. A history of alcohol dependence and drug use was also found in 36 elderly (20.9%) of the total sample of 172 elderly prisoners ⁽¹²⁾.

Personality and mood disorders

While the prevalence of mental disorders is relatively small based on literature studies, namely personality disorders and mood disorders. Research conducted by Baidawi ⁽¹²⁾ found that elderly prisoners may have personality disorders with a prevalence of 6 (3.6%) out of a total of 166 elderly prisoners. Meanwhile, Combalbert et al ⁽¹¹⁾ said that mood disorders were also the most common disorder in elderly prisoners aged 50 years and over, but the prevalence was not stated.

Elderly prisoners characteristics

Participants who were included in the study were elderly prisoners, most of whom were aged 50 years and over, with a total number of participants from all articles amounting to 1,895.

Table 1: Summary of studies

Authors, Year	Country	Sample size	Design	Instrument
Caverley (2006) ⁽¹⁵⁾	USA	360	Quantitative study	-
Fazel et al., (2001) ⁽¹⁰⁾	UK	203	Quantitative study	Geriatric (GMS); Mental State semi-structured interview.
Baidawi (2016) ⁽¹²⁾	Australia	173	Qualitative Study	Kessler Psychological Distress Scale (K10).
Allen et al., (2008) ⁽¹³⁾	USA	76	Quantitative Study	Brief Multidimensional Measure of Religiousness and Spirituality; Brief Symptom Inventory–Third Edition; Hastened Death Scale–Modified.
Murdoch et al., (2008) ⁽⁹⁾	UK	121	Quantitative study	The Geriatric Depression Scale (GDS); The Mini Mental State Examination (MMSE)
Combalbert et al.,(2016) ⁽¹¹⁾	France	138	Quantitative study	The Mini International Neuropsychiatric Interview

				(MINI DSM-IV); The Frontal Assessment Battery (Batterie Rapide d'Efficiency Frontale); The Mini Mental State Examination.
Regan et al.,(2002) ⁽⁸⁾	USA	671	Quantitative study	-
Kingston et al., (2011) ⁽⁷⁾	UK	121	Quantitative study	The Geriatric Mental State Examination (GMSE); The Mini-Mental State Examination (MMSE); The Short-Form 12 (SF-12).
Fitton et al., (2018) ⁽¹⁴⁾	UK	32	Quantitative Study	The Test of Premorbid Functioning (TOPF); The Verbal Fluency test: Delis–Kaplan Executive Function System (D–KEFS); The Color-word interference test (D–KEFS); The Mini-International Neuropsychiatric Interview (MINI); The Geriatric Depression Scale–short form (GDS-15); The Alcohol Use Disorders Identification Test (AUDIT); The Drug Abuse Screening Test–short form (DAST-10); The Six-Item Cognitive Impairment Test (6CIT).

Table 2: Cecklist mental health problems among elderly prisoners

Auth ors	Mental health problems									
	Anxiety	Depression	Bipolar	Agorap hobia	PD	PTSD	Schizo	Suicide attempt	Mood disorder	Alcohol and drug
(15)	-	✓	✓	-	-	-	✓	-	-	-
(10)	-	✓	-	-	-	-	-	-	-	-

(12)	✓	✓	✓	-	✓	✓	✓	✓	-	✓
(13)	✓	✓	-	-	-	-	-	-	-	-
(9)	-	✓	-	-	-	-	-	-	-	-
(11)	✓	-	-	-	-	-	-	✓	✓	-
(8)	✓	✓	-	-	-	-	✓	-	-	-
(7)	-	✓	-	-	-	-	-	-	-	-
(14)	-	✓	-	✓	-	-	-	-	-	✓

PD: Personality disorder; PTSD: Post-traumatic stress disorder

DISCUSSION

This review study aims to analyze various mental health problems that arise in elderly prisoners. Based on the analysis of nine articles, it was found that mental health problems of elderly prisoners include anxiety, agoraphobia, depression, bipolar, personality disorders, post-traumatic stress disorder, risk of suicide, mood disorders, psychosis or schizophrenia spectrum disorders, and alcohol abuse or dependence.

From the results of a literature review, mental health problems that often occur in elderly prisoners are depression with anxiety. Depression and anxiety are psychological symptoms of stress ⁽¹⁶⁾. Approximately 85% of patients with depression may experience significant symptoms of anxiety, while comorbid depression occurs in up to 90% of patients with anxiety disorders ⁽¹⁷⁾. Mental health in the elderly is an indicator of achievement of the quality of life lived by the elderly ⁽¹⁶⁾. Elderly prisoners usually have poor stress coping compared to other inmates so the risk of experiencing health problems is more likely to occur in elderly prisoners ⁽¹⁸⁾. Research conducted by Baidawi ⁽¹²⁾ resulted that female prisoners over 50 years of age experienced more mental health problems. While the research conducted by Regan et al ⁽⁸⁾ resulted in the number of elderly prisoners who were male, experiencing more mental health problems.

Of all the articles analyzed, eight of them stated that elderly inmates were depressed when they were in prison. Depression is most common in elderly prisoners ^(7, 9, 10). This is in line with a study from Hayes et al ⁽¹⁹⁾ that the majority of elderly prisoners in the UK (34% suffer from major depression and 19% experience anxiety disorders). In several studies, Combalbert et al ⁽¹¹⁾ observed that this disorder is often not detected and is not specifically intervened by health services in prisons. The high prevalence of depression in the prison environment can generally be associated with support from strong family problems and personal problems, or because of the loss of social relationships with the closest people who act as support systems. In addition, this is

because older inmates tend to have difficulty adapting to changes (in this case changes in life patterns and the environment before and after staying in prison) than younger inmates which has an impact on increasing levels of stress and anxiety.

In addition, based on the analysis of the articles conducted, there is a positive relationship between the measure of religiosity/spirituality with negative mental conditions. In particular, positive religious coping was associated with increased feelings of depression. This is due to the possibility of depressed prisoners trying to overcome their negative emotional state by drawing closer to God. From the various works of literatures that have developed, there is a relationship between religious participation and the improvement of better mental health among the elderly. Religiosity/spirituality can reduce the number of stressors, provide meaning or coherence that counteracts stress and helps to cope with stress, and provide a relationship of like-minded people who can serve as a support system and promote psychological development, including self-esteem and a sense of personal worth ⁽¹³⁾.

Depression faced by elderly prisoners is often associated with the risk of suicide. The risk of suicide is also a disorder with the greatest prevalence in elderly prisoners, which is as much as (80%) ⁽¹¹⁾. A history of attempted suicide was found (15.7%) ⁽¹²⁾. Another study found that between 2000 and 2013 the suicide rate of prisoners in Germany aged 50 years and over was higher than the suicide rate of prisoners under 50 years of age. Relevant factors related to this include female gender, detention status, and life sentences. These factors were shown to be independent predictors in the group of elderly inmates who committed suicide. The increased risk of suicide in elderly prisoners is also an expression of hopelessness and unmet social needs ⁽²⁰⁾.

Liem & Kunst ⁽²¹⁾ introduced the idea that elderly prisoners often exhibit a range of mental health problems related to post-traumatic stress disorder. Two articles found post-traumatic stress disorder prevalence of PTSD (9.4%) ⁽¹¹⁾, and (2.4%) ⁽¹²⁾. Most prisoners are exposed to potentially traumatic events during childhood ⁽²²⁾.

Based on review studies related to psychiatric problems in elderly prisoners that have been carried out, several articles have their advantages and disadvantages. In terms of shortcomings, most of the articles include participants who are classified as few, Fitton's study only took a sample of 32 ⁽¹⁴⁾. Related to this shortcoming was that some participants did not agree to participate in the study, and elderly prisoners tended to spend more time in detention. Some articles have a large sample of 671 elderly prisoners ⁽⁸⁾, but the research uses secondary data.

Other shortcomings and limitations of the articles studied include some studies that do not consider dependence disorders or abuse of alcohol or illegal drugs, the number of prisoners is disproportionate to sexual offenses and must be reviewed for suitability, some instruments are less accurate and relatively new, one of which (level depression determined by the use of the actual GDS instrument has limitations because it is known to lack emphasis on physical symptoms), and the study did not analyze treatment interventions for psychiatric disorders that occur in elderly prisoners.

Of the various shortcomings above, there are also advantages found in the various articles analyzed. One of these is from Baidawi's study ⁽¹²⁾, which is the first quantitative study of elderly inmates in Australia and could cover two states which together hold a significant portion of the prison population in Australia. The sampling

strategy in this study also included female prisoners who were often excluded or minimally represented in research related to elderly prisoners. In addition, a study from Allen et al ⁽¹³⁾ used a measure that showed adequate internal consistency to the good category in its research sample.

Of all the articles, most of them use several types of mental disorder instruments in conducting their research for measuring results, explanations related to the comparison of results between instruments or between research variables are presented clearly and in detail according to their classification, as well as many research articles that include the results of previous research.

CONCLUSIONS

Based on the results of this literature study, research that discusses mental health problems in elderly prisoners is still in the small category when compared to research conducted on general/adult prisoners. Of the nine articles that discuss mental health problems in elderly prisoners, only one article uses a qualitative approach. Research in several articles was carried out in various countries but no research came from Asia. There are recommendations for further research more focused on handling or providing appropriate interventions for elderly prisoners who experience mental health problems and identifying the extent of mental health services for elderly prisoners in prison. In addition, there is a need for research with a qualitative approach to further explore the mental health problems of elderly prisoners and how to solve them.

REFERENCES

1. International PR. Global Prison Trends 2021: Special Focus Prisons in crises 2021.
2. Hidayati NO, Suryani S, Rahayuwati L, Dewi NS. Scoping Review of Mental Health Problems among Female Prisoners. Open Access Macedonian Journal of Medical Sciences. 2021;9(T6):80-4.
3. Tarbuck A. Health of elderly prisoners. Oxford University Press; 2001. p. 369-70.
4. Carson EA. Prisoners in 2020—Statistical tables. Bureau of Justice Statistics. 2021;302776.
5. Annisa DF, Ildil, I. Konsep Kecemasan (Anxiety) pada Lanjut Usia (Lansia). Konselor. 2016;5(2):93-9.
6. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. International Journal of Social Research Methodology. 2005;8(1):19-32.
7. Kingston P, Le Mesurier N, Yorston G, Wardle S, Heath L. Psychiatric morbidity in older prisoners: unrecognized and undertreated. International Psychogeriatrics. 2011;23(8):1354-60.
8. Regan JJ, Alderson A, Regan WM. Psychiatric disorders in aging prisoners. Clinical Gerontologist: The Journal of Aging and Mental Health. 2002;26:117-24.
9. Murdoch N, Morris P, Holmes C. Depression in elderly life sentence prisoners. International Journal of Geriatric Psychiatry: A journal of the psychiatry of late life and allied sciences. 2008;23(9):957-62.
10. Fazel S, Hope T, O'Donnell I, Jacoby R. Hidden psychiatric morbidity in elderly prisoners. The British Journal of Psychiatry. 2001;179(6):535-9.
11. Combalbert N, Pennequin V, Ferrand C, Vandevyvere R, Armand M, Geffray B. Mental disorders and cognitive impairment in ageing offenders. Journal of Forensic Psychiatry & Psychology. 2016;27:853-66.

12. Baidawi S. Older prisoners: psychological distress and associations with mental health history, cognitive functioning, socio-demographic, and criminal justice factors. *International psychogeriatrics*. 2016;28(3):385-95.
13. Allen RS, Phillips LL, Roff LL, Cavanaugh R, Day L. Religiousness/spirituality and mental health among older male inmates. *The Gerontologist*. 2008;48(5):692-7.
14. Fitton L, Bates A, Hayes A, Fazel S. Psychiatric disorders, substance use, and executive functioning in older probationers. *Criminal Behaviour and Mental Health*. 2018;28(6):447-59.
15. Caverley SJ. Older mentally ill inmates: A descriptive study. *Journal of Correctional Health Care*. 2006;12(4):262-8.
16. Babazadeh T, Sarkhoshi R, Bahadori F, Moradi F, Shariat F. Prevalence of depression, anxiety and stress disorders in elderly people residing in Khoy, Iran (2014-2015). *Journal of Research in Clinical Medicine*. 2016;4(2):122-8.
17. Tiller JW. Depression and anxiety. *The Medical Journal of Australia*. 2013;199(6):S28-S31.
18. Majekodunmi OE, Obadeji A, Oluwole LO, Oyelami O. Depression and associated physical co-morbidities in elderly prison inmates. *International Journal of mental health*. 2017;46(4):269-83.
19. Hayes AJ, Burns A, Turnbull P, Shaw JJ. The health and social needs of older male prisoners. *International journal of geriatric psychiatry*. 2012;27(11):1155-62.
20. Opitz-Welke A, Konrad N, Welke J, Bennefeld-Kersten K, Gauger U, Voulgaris A. Suicide in older prisoners in Germany. *Frontiers in psychiatry*. 2019;10:154.
21. Liem M, Kunst M. Is there a recognizable post-incarceration syndrome among released "lifers"? *International journal of law and psychiatry*. 2013;36(3-4):333-7.
22. Greene CA, Ford JD, Wakefield DB, Barry LC. Posttraumatic stress mediates the relationship between childhood victimization and current mental health burden in newly incarcerated adults. *Child abuse & neglect*. 2014;38(10):1569-80.

ISSN 1695-6141

© [COPYRIGHT](#) Servicio de Publicaciones - Universidad de Murcia