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Scoping Review of Mental Health Problems among Female Prisoners

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Abstract

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Competing Interests: The authors have declared that no competing interests exist Open Access: This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0) **BACKGROUND:** Detention can cause problems and stressors for prisoners, one of which is mental health problems. Female prisoners have a high rate of mental health needs in prisons. Awareness and the ability to recognize prisoners' health problems are important. Therefore, the mental welfare of female prisoners is the responsibility of each prison.

AIM: This review aimed to identify mental health problems among female prisoners.

METHODS: The method used was a scoping review. A systematic searched of the literature between 2000 and August 2021 on several databases and search engines, namely, PubMed, CINAHL, SAGE Journals, and Google Scholar using keywords in English, namely, mental health, female prisoners, and prison.

RESULTS: Of the 112 articles found, nine were eligible for inclusion. It was found that the mental health problems of female prisoners were anxiety, depression, substance abuse, stress, loss and grief, trauma, and suicide attempts that put them at risk of psychological distress. There was still limited study on female prisoners, especially to explore mental health problems in prison, and there were few studies discussing adjustment to female prisoners in prison, as well as mental health services which are still rarely carried out in prisons.

CONCLUSION: Based on the findings, it is recommended for future research to focus more on how female prisoners can access mental health services in prisons to overcome their mental health problems, conduct a deeper exploration of the extent to which mental health services in prisons have been carried out so far.

Introduction

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More than 10 million people worldwide are imprisoned and the prevalence of mental disorders in prisoners is higher than in the general population. Although mental disorders are often experienced by prisoners, these disorders are often undiagnosed and not treated properly [1]. Some of the mental health problems that many prisoners experience are depression, life dissatisfaction, consuming alcohol, and using narcotics. These problems are related to the poor facilities of public health workers [2]. The experience of detention for inmates is a challenge for mental health nurses. Untreated mental health conditions lead to poor adjustment to life in prison. In addition, prison conditions are also a challenge for inmates who have mental health conditions [3].

Research that has been conducted shows that the demographic characteristics, health, and forms of crime in female prisoners is different from those of men [1]. Bureau of Justice Statistics Special Report in the edition of the Diagnostic and Statistical Manual of Mental Disorders states that female prisoners have higher mental health problems than male prisoners [4].

Studies show that mental health-care facilities in prisons are rarely available. The mental welfare of prisoners is the responsibility of each prison; therefore, awareness and ability to recognize prisoners' health problems are very important [5].

Women are a vulnerable group, both physically and psychologically. Likewise, female prisoners are vulnerable to mental health problems. Some of the most common mental health problems among female prisoners are psychological distress and depression. Mental health symptoms in female prisoners need to be checked from time to time, this can be done together with appropriate medication and treatment to prevent chronic mental illness. Chronic mental illness and poor psychological health lead to destructive behavior while in prison [6].

Female prisoners have a high level of mental health needs in prison, thus further research is needed on what mental health problems and the factors that influence them are, especially to prevent more serious mental disorders [6]. Meanwhile, research or review on mental health problems in female prisoners is still minimal and difficult to find. Therefore, the authors conducted a scoping review to identify mental health problems in female prisoners.

Methods

We conducted a scoping review using the methodology described by Arksey and O'Malley [7] which consists of five stages: (1) Identifying the research question, (2) identifying relevant studies, (3) study selection, (4) charting the data, and (5) collecting, summarizing, and analyzing the included literature. This review decision process was presented in a PRISMA flow diagram.

Identifying the research question

The research question in this study was "what are the mental health problems in female prisoners?"

Identifying relevant studies

We conducted a systematic literature search in several databases and search engines: CINAHL, PubMed, SAGE Journals, and Google Scholar between 2000 and August 2021. This study used keywords in English: Mental health OR mental health problems OR mental illness OR mental disorder AND female prisoners OR female inmates OR incarcerated women AND prison OR jail.

Study selection

We selected articles by reading abstracts and titles and then sorted them by inclusion criteria: Articles describing mental health problems among female prisoners, any countries, and full texts.

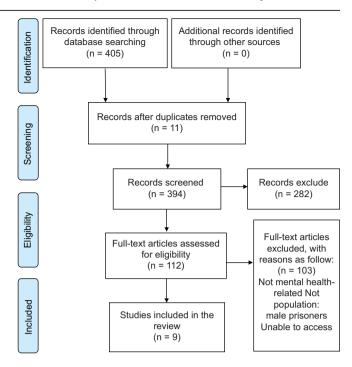
Charting, collecting, summarizing, and analyzing the data

Three authors (NOH, NSD, and LR) mapped the data and created an extraction (Table 1), consisting of authors, year of publication, research location, objective, sample size, study design, and assessment tools. Two authors (SY and NOH) reviewed and refined the results of the analysis that had been made.

Results

Study selection

Based on searches of databases and search engines found 405 articles, after removal of duplicate and initial screening, we reviewed 112 articles. After reviewing these articles against the exclusion criteria, nine papers were included in the study.



Study characteristic

Most of the articles were quantitative studies, two cross-sectional studies, three correlation studies, one mix-method study, one critical study, one survey study, one clinical interview study, and one qualitative study. Research was conducted in various countries, such as the USA (4), Spain (2), and one article from the UK, Poland, and Indonesia year of publication of the nine articles between 2011 and 2021. Most studies use assessment tools (eight articles), such as Depression Anxiety Stress Scale-21. Millon Clinical Multiaxial Inventory Third Edition, Severity of Dependence Scale, Alcohol Use Disorders Identification Test (AUDIT-PC), Suicide Behavior Questionnaire-Revised, SCOFF, Prison Health Survey, Clinician-Administrated PTSD Scale, Structured Clinical Interview for DSM-IV Non-patient Version, Trauma History Questionnaire and The Life Stressor Checklist-Revised, The Resilience Measurement Scale-RMS-25, Hospital Anxiety and Depression Scale, Medical Outcomes Study Social Support Survey, AUDIT-C, Life stressor Check list Revised, and Global Appraisal of Individual Needs, Spielberger's The State Anxiety Inventory and one article was a qualitative study.

Mental health problems

From the results of research that has been carried out (Table 2), several mental health problems were found. In the study of Tyler *et al.* [8], as many as 34.4% of female prisoners experienced anxiety, 32.8% experienced depression, and 22.9% had PTSD. Substance abuse and alcohol misuse are the highest compared to other mental health problems.

Table 1: Data extraction

Authors, year, country	Objectives	Sample size	Study design	Assessment tools
Tyler <i>et al.</i> , (2019) UK [8]	To measure the prevalence and comorbidity of mental health needs	131 female prisoners	Cross-sectional study	Millon Clinical Multiaxial Inventory Third Edition (MCMI-III), Severity of Dependence Scale (SDS), Alcohol Use Disorders Identification Test (AUDIT-PC), Suicide Behavior Questionnaire-Revised (SBQR), and SCOFF
Harner and Riley (2013)	To examines, women's perceptions of how	900 incarcerated women in	Descriptive surveys and	Prison Health Survey (PHS)
USA [9]	incarcerated had affected their mental health	Stage One 65 incarcerated women in Stage Two	focus groups	
Sanchez <i>et al.</i> (2019) Spain [10]	To examines, the prevalence and magnitude of the associations between ACEs, social support, and negative emotional states (that is, anxiety, depression, and stress) among incarcerated women.	174 incarcerated women.	Cross-sectional study	Medical Outcomes Study's Social Support and Depression Anxiety Stress Scale (DASS-21)
Nancy Wolff <i>et al.</i> (2011) USA [11]	To examines the traumatic and stressful event exposure history and psychiatric health characteristics of soon-to-be released female inmates who self-referred to specialty posttraumatic stress disorder (PTSD) treatment.	209 female inmates	Structured diagnostic clinical interviews.	Clinician-Administrated PTSD Scale, Structured Clinical Interview for DSM-IV Non- patient Version (SCID-NP), Trauma History Questionnaire, and The Life Stressor Checklist- Revised (LSC-R)
Sygit-Kowalkowska <i>et al.</i> (2017) Poland [12]	To analyze how psychological resilience differentiates mental states of incarcerated women and to identify the predictor of mental well-being in these groups.	46 incarcerated women.	Descriptive correlational	The Resilience Measurement Scale-RMS-25 and Hospital Anxiety and Depression Scale (HADS-M) scale
Harner <i>et al</i> . (2011) USA [13]	To explore the experience of grief and loss among incarcerated women.	15 incarcerated women	Qualitative research	-
Sanchez <i>et al.</i> (2021) Spain [14]	To examines the prevalence of suicide attempts among incarcerated women.	174 incarcerated women	Descriptive correlational	Depression Anxiety Stress Scale (DASS-21), Medical Outcomes Study Social Support Survey (MOSS-SSS), and AUDIT-C
Scott <i>et al.</i> (2015) USA [15]	To examines patterns of trauma exposure and the relationship between trauma exposure and mental disorders.	810 incarcerated women	Descriptive correlational	Life stressor Checklist Revised, Global Appraisal of Individual Needs (GAIN)
Bina <i>et al.</i> (2020) Indonesia [16]	To determine the level of anxiety.	128 women in prison	Critical study	Spielberger's The State Anxiety Inventory (STAI)

In addition, fear also arises as a result of discomfort in prison [9]. There was a relationship between anxiety, depression, and stress with social support variables (p < 0.01) [10]. PTSD in female prisoners before their release was reported by Wolff et al. [11] with various forms of trauma: Physical, sexual, and combination of both. Sygit-Kowalkowska et al. [12] in his research found that the minimum and maximum scores on depression were one and 18, anxiety zero and 16. Grief and loss were felt by prisoners [13]. Alcohol misuse was approximately twice as frequent among women reporting suicide attempts (55.6% vs. 25.9%, χ^2 = 9.50, and p = 0.002), and drug consumption was 4 times higher among them when compared with those who have not attempted suicide (55.6% vs. 13.6%, χ^2 = 24.98, and p < 0.001) [14]. Female detainees average 6.1 (SD = 4.9) types of trauma in their lifetimes. In addition, women reporting suicide attempts had higher levels of depression (M = 29.85 vs. M = 12.57), anxiety (M = 29.41 vs. M = 12.86), and stress (M = 30.07 vs. M = 15.48) [15]. Bina et al. [16] in her research found that the highest prisoner's anxiety level was in the moderate category as much as 44.5% and the lowest was in the panic category as much as 5.5%.

Female prisoner characteristic

2652 female prisoners are respondents in this scoping review. Respondents are female prisoners who experience mental health problems in prison, respondents were between 18 and 80 years old, most are married and have children.

Discussion

This review aimed to identify the mental health problems of female prisoners in prison. Based on the analysis of nine articles, it was found that the mental health problems of female prisoners include anxiety, depression, substance abuse, stress, loss and grief, trauma, and suicide attempts that are at risk of psychological distress.

Anxiety reported by female prisoners [12], [16], it is influenced by the ability to adjust to a new place. This anxiety has an impact on psychological and emotional stress that cause violence in prison in the form of sexual and physical violence such as beatings, slapping, and being threatened with weapons. The

Table 2: Checklist mental health problems

Author, year	Mental Health Problems								
	Anxiety	Depression	Stress	Substance abuse	PTSD	Loss and grief	Suicide attempts	Fear	
Tyler et al. (2019)	√	√	N/A	√	√	N/A	V	N/A	
Harner and Riley (2013)	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Caravaca-Sanchez et al. (2019)	√	\checkmark	√	N/A	N/A	N/A	N/A	N/A	
Nancy Wolff et al. (2011)	N/A	N/A	N/A	N/A	√	N/A	N/A	N/A	
Sygit-kowalkowska (2017)	√	\checkmark	N/A	N/A	N/A	N/A	N/A	N/A	
Harner et al. (2011)	N/A	N/A	N/A	N/A	N/A	$\sqrt{}$	N/A	N/A	
Caravaca-Sanchez et al. (2021)	√	\checkmark	\checkmark	√	N/A	N/A	$\sqrt{}$	N/A	
Scott et al. (2015)	N/A	N/A	N/A	N/A	N/A	N/A	\checkmark	N/A	
Bina <i>et al</i> . (2020)	√	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

anxiety of female prisoners arises because of negative emotions due to the problems they face, stressors, feelings of failure, feelings of insecurity [16], and length of detention [12]. Most of the respondents are married and have children: marital status is one of the stressors for female prisoners caused by limitations in maintaining family integrity, the role of mothers in raising children, and conflicts in marriage with husbands [17]. In addition, most prisoners who are currently in detention carry out their role as sole caregivers, causing stress because they think about their children in the future [18]. The conditions in prison play an important role in the anxiety of female prisoners because prisoners have to adapt to their new place and role. Women's prisons have mandatory rules and activities that must be followed so that female prisoners feel that their freedom is very limited. The prison environment has a deep and negative impact on the physical, mental, and emotional well-being of inmates [19], [20].

Moderate to severe anxiety will cause feelings of stress so that it will cause mental health problems associated with various physical and mental disorders. Moderate stress levels will result in normal adaptation to daily demands; however, excessive manifestations of psychological stress with physical and emotional reactions, and symptoms vary. Stress experienced in prison environments is strongly associated with anxiety and depression, and more often occurs among new prisoners, thus increasing the risk of suicide in prison [21].

Anxiety and depression caused by poor emotional support are negatively associated with readiness for care and treatment [22]. However, Harner and Riley [9] mentioned that several female prisoners stated that while in detention, their mental health tended to improve. In addition, depression can cause mood swings that affect physical and somatic conditions such as disturbed sleep patterns, fatigue, and decreased concentration [23]. As for the increase in death due to drug abuse, mental disorders, sexual violence, and the occurrence of complex chronic diseases such as hypertension, asthma, diabetes, heart disease, and sexually transmitted diseases [24]. The occurrence of depression can be influenced by internal and external factors. Internal factors include age, education level, marital status, and length of sentence, while external factors are the existing programs in prisons.

The traumatic experiences of some female prisoners made their mental health problems even more severe. Wolff *et al.* [11] said that more than 50% of female prisoners were exposed to traumatic events, they reported experiencing at least one incident of physical and sexual violence perpetrated by someone they knew, and this made them experience serious mental health problems. This is reinforced by Caravaca-Sanchez [10] which stated that 21.8% of female prisoners reported experiencing sexual violence in their childhood. In

another article, trauma can be caused by the loss of a loved one [15]. The process of grieving and loss is often associated with the loss of a loved one, for some female prisoners, it is very difficult because they feel prison is not a place to grieve, so they bury their feelings of loss, so it adds to problems in their mental health [13].

Drug abuse is a serious problem for female inmates in prisons. Two articles mention that the prevalence of drug and alcohol use among female prisoners is the highest in mental health problems [8], [14].

Suicidal ideation is an early expression of vulnerability to self-injurious behavior [25]. The average suicide rate among female inmates is higher than male inmates [26]. However, Caravaca-Sanchez et al. [14] stated that of several mental health problems, suicide attempts were still lower than alcohol and drug abuse. In addition, when compared with studies on male prisoners, studies related to the prevalence of suicide among female prisoners and the factors that discuss suicidal behavior contribute to suicide much less [26].

Conclusion

This review highlights some of the mental health problems found in female prisoners: There are still very few studies related to mental health problems in female prisoners when compared to research conducted on male prisoners, from nine articles discussing mental health problems in prisoners, only one article used a qualitative approach, a qualitative approach is needed to further explore mental health problems for female prisoners and how to solve it. Articles are dominated by the USA and several European countries, only one article was from Asian represented by Indonesia. Based on the findings, it is suggested for further research to focus on how female prisoners can access mental health services in prisons to overcome their mental health problems, conduct a deeper exploration of the extent to which mental health services in prisons have been carried out so far.

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