



## Factors Associated with Depression among Prisoners in Women's Class II-A Prison Jakarta

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### Abstract

Depression is a common mental disorder, characterized by persistent sadness and a loss of interest in activities that you normally enjoy, accompanied by an inability to carry out daily activities, for at least two weeks. Female prisoners represent groups at risk of depression where depression in prisoners is more vulnerable to female prisoners than men. This study aims to determine the factors associated with depression among prisoners in Women's Class II-A Prison Jakarta. The study design used was cross-sectional with multivariate analysis, multiple logistic regression. The number of research samples is 200 prisoners taken using random sampling techniques. The results showed that the prevalence of depression among prisoners in Women's Class II-A Prison Jakarta is 56,5%. Based on the results of the multivariate analysis, it can be seen that factors related significantly to depression are age ( $p$ -value = 0.012; POR = 2.144; 95% CI = 1.185 - 3.879) and recidivism status ( $p$ -value = 0.043; POR = 3.926; 95% CI = 1,047 -14,729) which the most influential factor on the incidence of depression is recidivism status. Government attention needs to be given to the mental health of prisoners by conducting various mental health programs and services such as regular screening and rehabilitation programs. .

### Introduction

The conditions at Prison are certainly much different from the conditions in the community. The difference in conditions is not easy to be lived and accepted by prisoners (Gulo, 2015). Under these conditions, prisoners are required to be able to adjust to life in prisons (Gulo, 2015). Situations and conditions that are full of demands and pressures due to sudden environmental changes often result in prisoners becoming vulnerable and potentially experiencing various kinds of mental health disorders, including depression (Gulo, 2015).

Depression is a mental disorder, characterized by persistent sadness and a loss of interest in activities that you usually enjoy, accompanied by an inability to carry out daily activities, for at least two weeks (World Health Organization, 2018). Depression is a common

mental disorder worldwide, with more than 300 million people affected (World Health Organization, 2018). Moreover, depression is also the leading cause of disability worldwide and is a significant contributor to the overall global burden of disease (World Health Organization, 2018). Also, The WHO also predicts that in 2020, depression will occupy the second largest cause of health problems after cardiovascular disease (Thabrany & Pujiyanto in (Nora, 2011). In Indonesia, the prevalence of depression in people aged  $\geq 15$  years has reached 6.1% (Risksdas, 2018).

Research that has been carried out in various countries reveals that the prevalence of depression in prison populations is higher than the general population (T.K Beyen, 2017). Also, the World Health Organization (WHO) estimates that out of 9 million prisoners

worldwide, at least 1 million (11%) suffer from significant mental disorders, where the most common mental health problems are depression (World Health Organization, 2008). However, most studies report the incidence of depression in prisoners as more vulnerable to female prisoners than men (Gunenthira Rao, 2018). This can occur because several factors, including that women, are more sensitive to their feelings, so they tend to face feelings based on beliefs rather than rational considerations (Utami, 2011).

The above situations show that prisoners, especially women, are at risk for depression (Gunenthira Rao, 2018). Based on a systematic review involving 24 western countries, 14.1% of female prisoners experience depression (Seewald, 2012). However, until now, mental health problems are still a problem that seems to be neglected in prisons. In fact, if the condition is not detected and dealt with, it can lead to increasingly severe mental health disorders, disability, and the worst that can lead to suicide in prisoners (Gunenthira Rao, 2018). The purpose of this study was to determine the factors associated with the level of depression in prisoners at the Women's Class II-A Prison Jakarta.

#### **Method**

This research is an observational type with a quantitative approach. The research design used was cross-sectional, where the independent variables and dependent variables were obtained at the same time. The population in this study were all Prisoners in Women's Class II-A Prison Jakarta. The samples used in this study were 200 prisoners who met the inclusion criteria and obtained using random sampling techniques.

The study was conducted from January to April 2019. The dependent variable in this study was the level of depression in prisoners in Women's Class II-A Prison Jakarta with independent variables such as age, education level, marital status, current disease status, social support status, participation in coaching status, types of violations, length of sentence, duration of prison stay, and recidivism status for prisoners in Women's Class II-A Prison Jakarta.

This study uses two data sources, which

are primary data sources and secondary data sources. The primary data sources are obtained using instruments in the form of a questionnaire consisting of three parts. The first part is the sociodemographic questionnaire, the second part is a questionnaire to assess the depression level variable using the Indonesian version of the Beck Depression Inventory-II (BDI-II) questionnaire and the third part is a questionnaire to assess social support variables using a questionnaire adapted from Sulastri (2013), which the questionnaire was developed based on the Interpersonal Support Evaluation List (ISEL) of Cohen & Hoberman (1983).

Whereas for variables such as age, education level, type of violation, length of sentence, duration of a prison stay, and recidivism status are sourced from secondary data obtained from the database belonging to the registration division of Women's Class II-A Prison Jakarta. In this study, data analysis was carried out in univariate, bivariate using chi-square analysis and multivariate analysis using logistic regression analysis.

#### **Result and Discussion**

The distribution of respondents based on the characteristics that can be found in table 1 shows that the prevalence of depression in prisoners at the Women's Class II-A Prison Jakarta is 56.5% so that it can be said that more than half of prisoners are depressed. In addition, table 1 also shows that the majority of prisoners are at the age of <40 years (62%), have high education level (44.5%), have married marital status (45%), have no current disease status (74%), has a low social support status (50.5%), is active in coaching (64%), has a type of narcotics violation (78%), and is a non-recidivist prisoner (92.5%).

Based on the bivariate analysis that can be found in table 2, the variables significantly associated with the level of depression were age ( $p$ -value = 0.029). While the variables such as education level, marital status, current disease status, social support status, participation in coaching status, types of violations, length of sentence, duration of a prison stay, and recidivism status did not show a significant relationship with the level of depression ( $p$  value > 0.05).

Variables that entered into multivariate

Table 1. Univariate Distribution of Respondent's Characteristics

Variables	n	%
<b>Level of Depression</b>		
Normal	87	43,5
Depression	113	56,5
<b>Age</b>		
>=40	76	38
<40	124	62
<b>Education Level</b>		
High	111	55,5
Low	89	44,5
<b>Marital Status</b>		
Married	90	45
Single	34	17
Divorce	76	38
<b>Current Disease Status</b>		
No	148	74
Yes	52	26
<b>Social Support Status</b>		
High	99	49,5
Low	101	50,5
<b>Participation in Coaching Status</b>		
Active	128	64
Less Active	72	36
<b>Types of Violations</b>		
Criminal	44	22
Narcotics	156	78
<b>Length of Sentence</b>		
>5 years	78	39
<=5 years	122	61
<b>Duration of Prison Stay</b>		
>=2 years	154	77
<2 years	46	23
<b>Recidivism Status</b>		
Non Recidivist	185	92,5
Recidivist	15	7,5

Source: Primary Data, 2019

modeling after bivariate selection were age and recidivism status with  $p$ -value  $\leq 0.25$ . Based on the latest multivariate modeling that can be found in Table 3, It shows that from the results of multivariate analysis two variables are statistically significant with the level of prisoner depression, which are age variable ( $p$ -value = 0.012) and recidivism status variable ( $p$ -value = 0.043). Therefore, it can be concluded that the independent variable that can predict the incidence of depression in prisoners at Women's Class II A Prison Jakarta is age and recidivism status and it showed that the most dominant variable is the recidivism status variable. The results of the analysis showed that adjusted odds ratio (AOR) of recidivism status variables was 3,926 (95% CI: 1,047 -14,729), meaning recidivist prisoners (having previously held

detention for repetition of crime) were 3,926 times or almost four times as likely to be depressed than non-recidivist inmates (inmates who have been detained for the first time).

The prevalence of depression in prisoners at Women's Class II-A Prison Jakarta is 56.5%. The Riskesdas 2018 data shows that the prevalence of depression in people aged  $\geq 15$  years in Indonesia reaches 6.1%. So when compared with the results of the 2018 Riskesdas, the prevalence of depression in prisoners at Women's Class II-A Prison Jakarta is very different and falls into the reasonably high category. However, this can occur because this research is not carried out in healthy populations but in populations at risk namely, prisoners whose prevalence is higher than the healthy population can occur due to differences

Table 2. Analysis on Independent Variable with Level of Depression

Variables	Level of Depression				Total		P-value	POR (95% CI)
	Depression		Normal		N	%		
	n	%	n	%				
Age								
<40	78	62,9	46	37,1	124	100	0,029*	1,986
>=40	35	46,1	41	53,9	76	100		(1,112 – 3,547)
Education Level								
Low	54	60,7	35	39,3	89	100	0,356	1,360
High	59	53,2	52	46,8	111	100		(0,772 – 2,394)
Marital Status								
Divorce	43	56,6	33	43,4	76	100	0,948	1,042
Single	20	58,8	14	41,2	34	100		(0,563 – 1,929)
Married	50	55,6	40	44,4	90	100		(0,514 – 2,542)
Current Disease Status								
Yes	31	59,6	21	40,4	52	100	0,716	1,188
No	82	55,4	66	44,6	148	100		(0,625 – 2,257)
Social Support Status								
Low Social Support	61	60,4	40	39,6	101	100	0,327	1,378
High Social Support	52	52,5	47	47,5	99	100		(0,787 – 2,415)
Participation in Coaching Status								
Less Active	41	56,9	31	43,1	72	100	1,000	1,029
Active	72	56,3	56	43,8	128	100		(0,574 – 1,842)
Types of Violations								
Criminal	90	57,7	66	42,3	156	100	0,640	1,245
Narcotics	23	52,3	21	47,7	44	100		(0,636 – 2,437)
Length of Sentence								
>5 years	42	53,8	36	46,2	78	100	0,646	1,193
£5 years	71	58,2	51	41,8	122	100		(0,673 – 2,115)
Duration of Prison Stay								
³2 years	86	55,8	68	44,2	154	100	0,863	1,124
<2 years	27	58,7	19	41,3	46	100		(0,576 – 2,190)
Recidivism Status								
Recidivist	12	80	3	20	15	100	0,101	3,327
Non Recidivist	101	54,6	84	45,4	185	100		(0,909 – 12,180)

\*signifikan ( $p$  value <0,05)

Source: Primary Data, 2019

Table 3. Final Model Of Multivariate Analysis

Variables	OR Adjusted	95% CI	P-value
Age	2,144	1,185 – 3,879	0,012
Recidivism Status	3,926	1,047 – 14,729	0,043

Source: Primary Data, 2019

in conditions and situations between prisoners with healthy communities such as stressful environment, prisoner limitations to carry out activities, and isolation from family and closest people.

In multivariate analysis, it was found that there was a statistically significant relationship ( $p$ -value = 0.012) between age and level of depression in prisoners at the Women's Class II-A Prison Jakarta. While the results of the risk

analysis obtained an adjusted OR value of 2.144 (95% CI: 1.185 - 3.879), meaning that prisoners aged <40 years have a risk of 2,144 times to become depressed when compared to prisoners aged  $\geq$ 40 years or in other words prisoners with <40 years of age are twice the risk of becoming depressed compared to prisoners aged  $\geq$ 40 years.

The results of the study are in line with research (Datta, et al., 2015) and (Bhuyan & Das,

2012) which shows that there is a significant relationship between age with depression. Both studies have shown that prisoners belonging to the young-adult group have a higher risk of suffering from depression compared to other age groups.

Various studies and surveys showed that depression is more common in these age groups because, in those age groups, they tend to think about how they should look, how they should behave, what they should have, and other needs by comparing them with others (Action Mental Health, 2019). Also, inmates in the young adult group usually have a history of alcohol and other substances before detention, which might cause them to experience depression (Zakir Abdu, 2018).

The results of multivariate analysis in this study showed that there was a statistically significant relationship (p-value = 0.043) between recidivism status and the level of depression in prisoners at the Women's Class II-A Prison Jakarta. While the results of risk analysis obtained OR adjusted value of 3,926 (95% CI: 1,031 - 14,527), meaning that recidivist prisoners have a risk of 3,926 times to become depressed compared to non-recidivist prisoners in other words recidivist prisoners (having previously held detention due to repetition criminal) has a four-fold risk of becoming depressed compared to non-recidivist inmates (inmates who have been detained for the first time).

The results of this study are in line with the research of Abdu, et al. (2018) which showed that there is a statistically significant relationship (p-value = <0.001) between recidivism status and the level of depression of prisoners. The results of the risk analysis found an adjusted OR of 7.45 (95% CI: 2,758 - 20,152), meaning that prisoners who were recidivist or had previously held detention had a risk of 7.45 times being depressed compared to non-recidivist inmates or the first time they were detained.

The results in the study showed that there was a statistically significant relationship between the status of recidivism and the level of depression in prisoners at the Women's Class II-A Prison Jakarta. This can occur because of a variety of possibilities, including recidivist

prisoners who tend to get repeated exposure to the prison environment, which is full of stressors (Shrestha et al., 2017). Also, this can also occur because recidivist prisoners must endure social relations disorders and social isolation again after the previous release process which can cause worse symptoms of depression (Shrestha et al., 2017).

However, there are some limitations to this study. Since the design of the study used is a cross-sectional design so that it did not allow establishing a temporal relationship between depression and associated factors. Also, there is no difference in the proportion between several independent variables and the dependent variable which can occur due to the lack of the number of respondents involved so that further research is recommended to add respondents so that the resulting data is more representative and comprehensive.

#### Conclusion

The prevalence of depression in prisoners at the Women's Class II-A Prison Jakarta is 56.5%. There is a significant relationship between age and recidivism status with the level of depression in prisoners at the Women's Class II-A Prison Jakarta.

This study recommends the Women's Class II-A Prison Jakarta to increase attention to mental health by conducting regular screening for prisoners to monitor and periodically monitor the mental health conditions of prisoners. Also, institutions are expected to be able to carry out preventive and rehabilitative efforts through psychological rehabilitation programs for prisoners such as stress management, counseling and other interventions as well as improving supervision related to guidance followed by prisoners.

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