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Differences in Mean Quality of Life Scores in Inhabited Residents Experiencing Substance Addiction Those who Get Psychosocial Rehabilitation and Those Who Don't

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Abstract

This study intends to analyze differences in quality of life by looking at the average World Health Organization Quality of Life (WHOQOL) scores of inmates who receive psychosocial rehabilitation and those who do not. The purpose of this study was to identify and analyze the differences in the average WHOQOL score in inmates who are addicted to substances, who receive psychosocial rehabilitation and those who do not. The benefit of scientific research is that it can provide data on differences in the average WHOQOL scores in inmates who are addicted to substances, who are receiving psychosocial rehabilitation and who are not so that it can be used for further research development. The practical benefit of this research is to provide input to health services regarding the importance of carrying out psychosocial rehabilitation for drug users to improve their quality of life. This study used a cross-sectional design on inmates with drug addiction who were undergoing treatment at the Denpasar Kerobokan Prison polyclinic that met the inclusion and exclusion criteria. The inclusion criteria are inmates who are addicted to substances and who are willing to participate in the research. Exclusion criteria were those with severe physical and mental illness.

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Contents

1 Introduction

The prevalence of people experiencing addiction disorders is increasing every year, so it is necessary to seek promotional, preventive, and curative actions, both for those without problems and those with problems. Two treatments can be done, first, namely pharmacological and second non-pharmacological (Daley, 2013; Copeland & Martin, 2004). To be able to provide good treatment, it is necessary to know the factors that cause addiction. Addiction is usually used in a clinical context and is refined by excessive behavior. The concept of addiction can be applied to a broad range of behaviors, including addiction to substances and information communication technology (Ducci & Goldman, 2012).

The aetiology of addiction consists of biological and psychosocial factors. Many factors can influence the clinical manifestations of addiction. Various environmental factors (cultural, socioeconomic, parental and external stressors), individual factors (comorbid psychiatric disorders including depression, anxiety and other disorders), and personality (characteristics and aspects of development). Related factors contribute to the clinical manifestations of drug addiction. An addictive disorder is a condition that has a complex aetiology resulting from several genetic and environmental risk factors (Ducci & Goldman, 2012).

One of the non-pharmacological therapies is a psychosocial rehabilitation

Drug circulation in Indonesia at this time is very apprehensive. It can be said that Indonesia is in a drug emergency. Based on data collected from the Drug Information System (SIN) application, the number of narcotic cases uncovered over the last 5 years from 2012-2016 per year is 76.53 percent. The highest increase was in 2014, namely 161.22 percent. In 2016 the number of drug cases that were uncovered was 868 cases, this number increased by 16.67 percent from 2015 (Kementerian Kesehatan RI, 2017). Rehabilitation is a process of recovering patients with drug use disorders both in the short and long term which aims to change their behavior so that they are ready to return to society (Kementerian Kesehatan RI. 2010). Another definition says that drug rehabilitation is a repressive measure carried out for drug addicts. Rehabilitation measures are aimed at victims of drug abuse to restore or develop the physical, mental and social abilities of the sufferer concerned. Apart from recovering, rehabilitation is also a treatment for narcotics addicts, so that addicts can recover from their addiction to narcotics (Psycologimania, 2013).

Psychosocial rehabilitation is a service to restore and improve the patient's mental health so that the patient's quality of life and independence can be improved. In general, this service aims to: Increase patient knowledge and skills, so that they can live independently, and confidently and have self-esteem. The goal is to help clients maintain a drug-free state (abstinence) and restore physical and psychological and social functioning. Various models of rehabilitation management can be carried out at rehabilitation service delivery facilities, according to the type of drug use disorder and individual needs (Griffiths et al., 2016; Koob & Volkow, 2016).

As a health practitioner, quality of life is one thing that must be considered in treatment. The difficulty lies in the different needs of each individual to achieve a good quality of life. The treatment carried out must also be adjusted to the instruments used in measuring the quality of life itself (Netuveli & Blane, 2008). The World Health Organization Quality of Life (WHOQOL) BREF is the result of the development of the WHOQOL-100 instrument. This instrument is a shortened version of the WHOQOL-100 which is used to describe the quality

of life through the scores of the four domains, which are measured in the physical domain, psychological domain, social relations domain and environmental domain. The instrument consists of 26 questions (Wardhani, 2006).

2 Materials and Methods

This research is a cross-sectional study. Observation (measurement) of the variables studied without intervention was carried out and then an analysis of the relationship between the independent and dependent variables was carried out. The research was conducted at Kerobokan Prison. Time of study: July to October 2022

Sampling and participant

The target population is inmates who are addicted to substances and who have undergone psychosocial rehabilitation and who have not. The reachable population of this study is inmates who were addicted to substances who have undergone psychosocial rehabilitation and who were not in Denpasar. The sample in this study were inmates who experienced substance addiction who received psychosocial rehabilitation who were not in the Denpasar Kerobokan Prison and who met the criteria. Inclusion criteria are inmates who experience substance addiction in Kerobokan Prison and are willing to cooperate in participating in research programs. In the first group, subjects were addicted to substances who have undergone psychosocial rehabilitation the subjects in the second group were addicted to substances who have not undergone psychosocial rehabilitation The exclusion criteria are if they have a serious physical illness or severe mental disorders and disabilities (Rodnyansky et al., 2021).

Procedure and analysis

The first step was to record patients with addiction disorders according to the inclusion and exclusion criteria. Introduce the patient concerned and provide informed consent about the aims and objectives of the study. After that, each group was interviewed with a quality of life questionnaire (WHOQOLBref). Quality of life is measured using a measuring tool developed by WHO, namely WHOQOL – BREF. This tool is in the form of a questionnaire containing 26 questions from each dimension of quality of life. The WHOQOL – BREF measurement tool does not provide a single score or a combined score for each dimension, what is obtained is only a score for each dimension to find out which dimension best supports quality of life. The score obtained from the subject (raw score) is then transformed first so that the calculation uses the score that has been transformed (the resulting score is a score of 0-100).

The WHOQOL-BREF measurement tool only provides one type of score for each domain. So 4 scores describe each domain. The WHOQOL-BREF measurement tool does not provide an overall score or a total score for the entire domain, but only a score for each domain (Skevington et al., 2004). After changing the 3 unfavourable items, then the score per domain is calculated and transformed into a 4-20 scale using SPSS (Statistical Package for Social Science). After that, the scores per domain are transformed into a 0-100 scale using the formula determined by WHO, so that the scores from this measurement tool can be compared with the scores on the WHOQOL-100 measuring instrument. The scores for each dimension are transformed into a 0-100 scale using the standard formula set by WHO. The following is the formula for transforming scores into a 0-100 scale: Transformed Score = (Score – 4) x (100 / 16)

Domain	Facet
1. Physical Health	1. Pain and discomfort
	2. Energy and fatigue
	3. Sleep and rest
	4. Mobility
	5. Daily activities
	6. Dependence on medication and medication

	7. Working capacity
2. Psychological health	1. Positive affect 2. Thinking, learning, memory and concentration 3. Sense of self-esteem 4. Self-image and appearance 5. Negative affect 6. Spirituality/religion
3. Social welfare	1. Personal relations 2. Social support 3. Sexual activity
4. Environment	1. Physical security and protection 2. Living environment 3. Source of finance 4. Maintenance of social health 5. Opportunity to get information and new skills 6. Participation and opportunities for recreation/free time activities 7. Physical environment (pollution, noise, traffic, climate) 8. Transportation

Data selection, namely editing, coding and tabulation are included in the Statistical Package for the Social Sciences (SPSS) program navigator file. Descriptive statistical analysis to describe the general characteristics and distribution of various variables. Categorical scale data is described in the form of frequency and percentage, while numerical scale data is in the form of mean and standard deviation. One Sample Kolmogorov-Smirnov or Shapiro Wilk test for data normality. Unpaired t-test if data is normally distributed or Mann Whitney test if data is not normally distributed to differentiate the quality of life scores. The significance level is set at $p < 0.05$

3 Results and Discussions

3.1 Results

Data collection for examining samples who received rehabilitation and did not receive rehabilitation was carried out at the Kerobokan Correctional Institution by providing the WHOQOL questionnaire. The number of samples is 20 people for each group, according to the calculation of the number of samples. The research was conducted in July-October 2022.

Table 1
The sample characteristics

Characteristics	N (%)	
	Rehab (20)	Non Rehab (20)
Age (median).	33,3+ 6,2	
Sex		
Male	20 (100)	20(100)
Female	0	0
Education		
Elementary School	4 (10)	4 (10)

Junior High School	9 (22,5)	9 (22,5)
Senior High School	25 (62,5).	24 (60,0)
Bachelor	0	0
Profession		
Employees	20 (100)	20 (100)

Sample characteristic data showed that 20 people in each group were all male (100%) with an average age of 33.3 + 6.2. From Table 1, it can be seen that the education of the majority of the sample is high school graduation, namely 25 people (62.5%) in the group that received rehabilitation and 24 people (60%) in the group that did not receive rehabilitation. Employment status includes all (100.0%) as private workers.

Table 2
WHOQOL score in the group that received rehabilitation and did not receive rehabilitation

Domain	Median Minimum-Maximum		95% Confidence Interval		P value (Rehabilitation Group Non-Rehabilitation
	Rehabilitation	Non-Rehabilitation	Rehabilitation	Non Rehabilitation	
Domain 1	96,00 (84-144)	66 (-18-96)	92,20-98,30	57,66-69,54	0,000*
Domain 2	96 (78-96)	60 (42-96)	89,76-93,54	58,32-67,68	0,000*
Domain 3	36,00 (12-60)	36,00 (6-66)	33,89-41,41	31,83-40,77	0,693
Domain 4	96,00 (78-96)	81,00 (54-150)	91,58-94,72	77,20-88,10	0,000*

*Significant

3.2 Discussion

Table 2 shows that the average age of the respondents in the two groups who received psychosocial rehabilitation and those who did not receive psychosocial rehabilitation was 33.3 + 6.2 years. There are the following references which state that there are an estimated 167 to 315 million people who abuse psychoactive substances in the world's population aged 15-64 years who use illegal drugs at least once in the year 2013. The 2014 University of Indonesia Health Research has produced a general drug abuse prevalence rate of 2.21% or the equivalent of 4,173,633 people (Manullang & Hutasoit, 2019).

This study showed that there were significant differences between clients who received psychosocial rehabilitation and clients who did not receive psychosocial rehabilitation ($p<0.05$) in domains 1 (physical health), 2 (psychological health) and 4 (environment) and found no significant differences in domain 3 (social welfare). This shows that psychosocial rehabilitation plays a role in improving the quality of life in the three domains above.

This is following a qualitative study conducted in Surakarta which found that the improvement in the quality of life for drug survivors after rehabilitation, which is felt from a physical health aspect, is very clear with physical conditions that are getting fresher and fitter so that they can carry out various daily activities an increase in the psychological aspect is indicated by the feeling of getting better and being able to live life enjoying and relaxing and always being ready to face problems (Mackolil & Mackolil, 2020; Pappas et al., 2009). Survivors can feel good social relations and do not experience problems with friendships and family relations, even though the negative stigma from society is difficult to remove. The quality of life of drug survivors has increased from an environmental aspect when drug survivors no longer feel awkward socializing with society, and society can accept their situation with their various shortcomings (Papakostas et al., 2004; Garrigues et al., 2020). Other aspects also support improving the quality of life of drug survivors,

namely aspects of thinking and spiritual patterns as shown by the ability to think positively and have a strong belief in repentance (Trisnanto & Uyun, 2021).

In this study, no significant difference was found in social welfare, possibly because all clients were fostered members in prisons, so they did not feel any improvement in the domain of social welfare, such as personal relationships with family, social support from family and sexual relations which cannot be done in prison. Social needs are very necessary for an addict. Substances (Sadock et al., 2015).

This research was conducted because it wanted to evaluate the results of psychosocial rehabilitation that had been carried out by final-stage residents and psychiatric specialists who came to visit the prison every Friday and carried out rehabilitation for 3 months before the study. Appropriate methods for rehabilitation techniques to overcome or prevent the aggravation of drug use disorders need to be considered so that later they can reduce prevalence and disability rates (Lang et al., 2009; Stevens & Stoykov, 2003).

4 Conclusion

Psychosocial rehabilitation carried out on clients who experience drug addiction obtained a p-value (0.000) <0.05 so that it can be stated that there is a higher significant difference in the quality of life in the domain of physical, psychological and environmental health in the group receiving psychosocial rehabilitation.

The results of this study have an impact on changes in the treatment of substance addiction disorders, especially in non-pharmacological forms in the form of psychosocial rehabilitation, so that more severe substance addiction disorders can be prevented. This indicates that psychosocial rehabilitation for inmates in Prison can be used as a reference for handling clients who are addicted to drugs so that when they leave prison they can recover and be active in society.

It is necessary to carry out further research with the next stage of experimental methods so that results can be compared with other interventions. WHOQOL BREF screening needs to be carried out on clients who use drugs on an ongoing basis so that prevention and immediate treatment can be carried out and do not cause more severe disabilities.

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