

The Effect of Outpatient Rehabilitation Program on the Quality of Life of Drug Abuse Patients in the National Narcotics Agency of North Sumatra Province in 2023

Cindy Lydia Ivana^{1*}, Donal Nababan², Siska Evi Martina³
Program Studi Magister Kesehatan Masyarakat, Universitas Sari Mutiara
Indonesia

Corresponding Author: Cindy Lydia Ivana cindyli1810@gmail.com

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ABSTRACT

Improving outpatient rehabilitation enhances the lives of those battling substance abuse. This study evaluates its impact at the National Narcotics Agency, North Sumatra. The study aims to assess outpatient rehabilitation's effectiveness on individuals with substance abuse history, focusing on physical health, psychological well-being, social support, and the environment. Using quantitative methodology with pre-post design, the entire patient population (n=54) was included. Research findings reveal significant and positive impacts of the rehabilitation program on physical health, psychological well-being, social support, and patient environmental conditions. Statistical analysis, with a significance level of ($p < 0.001$), confirms the remarkable success of the intervention, emphasizing the crucial role of the program in enhancing the overall quality of life for patients. This study delves into outpatient rehabilitation program effectiveness, highlighting the need for multidimensional support in the recovery journey.

INTRODUCTION

Drug abuse poses a serious global challenge, with UNODC reporting 275 million drug users in 2020, over 36 million experiencing abuse-related problems. Despite a rise in cannabis use, there's a 40 percent decrease in teenagers' perception of drug dangers, with projections indicating an 11 percent global increase in drug use by 2030 (UNODC, 2019). In Indonesia, surveys by BNN and LIPI found a 1.95 percent prevalence of drug abuse last year, with a portion of the population aged 15-64 discontinuing usage (BNN, 2021). P4GN BNN 2020 data reported an addition of 803 cases in Indonesia.

The first quarter of 2021 saw 12,890 drug abuse cases in Indonesia, with North Sumatra topping the list. Drug abuse can profoundly impact physical, psychological, and social aspects (Mei Wulandari et al., 2015). Despite government efforts, drug abuse cases persist (Suradi, 2017). Occurring without medical indication, drug abuse can result in various negative impacts, from heightened sensitivity to severe harm to oneself and others (Nevid, Rathus, & Greene, 2016).

The Indonesian government established BNN to address the drug problem. BNN notes an increase in teenage drug abuse. Environmental factors, especially peer influence, trigger relapses after rehabilitation (Heru, 2019). According to Salsabilla (2021), environmental factors, such as peer influence, trigger relapses in former drug users. "The Stage of Substances Use" theory emphasizes the role of peer pressure in substance abuse. BNN provides drug rehabilitation, including outpatient care in North Sumatra.

Preliminary surveys show significant variations in patients' quality of life before outpatient rehabilitation. This research focuses on the outpatient drug rehabilitation program of BNNP North Sumatra and aims to analyze its impact on the quality of life of drug-abusing patients. Thus, the study discusses the implementation of the rehabilitation program and its effects on patients' quality of life.

LITERATURE REVIEW

The impact of drug abuse affects the quality of life, both physically and mentally (Donovan et al., 2018). Research shows a negative correlation between drug abuse and psychological well-being (Hall et al., 2019), but participation in rehabilitation programs results in significant improvements (Andrianto & Widodo, 2020). The significant impact of drug abuse significantly affects the quality of life. Rehabilitation efforts aim to improve individual capabilities (Hidayati, 2017).

METODOLOGY

This research employs a quantitative experimental approach with a Quasi-Experiment One Group Pretest-Posttest design. It was conducted at the National Narcotics Agency (BNN) of North Sumatra Province on outpatient rehabilitation patients. The sample, consisting of 54 individuals, was selected using the G*Power application with a t-test, alpha of 0.05, power of 0.95, and an effect size of 0.5. Inclusion and exclusion criteria were established, involving adult patients with a history of drug abuse. Data were collected using the WHOQOL-BREF

questionnaire through interviews. Primary data were obtained from respondents, while secondary data were derived from relevant documents. Data analysis involved the processes of editing, coding, scoring, and tabulation. Univariate, bivariate, and multivariate analyses were performed, with t-tests for inferential analysis, considering data normality beforehand. This study was conducted by ethical clearance number 304b/01/01/E/USM/VIII/2023. The results will be utilized to describe the impact of outpatient rehabilitation programs on the quality of life of drug abuse patients at the National Narcotics Agency of North Sumatra Province in 2023.

RESULT AND DISCUSSION

From the 54 respondents, the majority were male (90.7%), and the respondents had diverse occupations, with 16.7% being entrepreneurs, 25.9% unemployed, and 57.4% having other occupations. The age distribution indicated that 55.6% were <35 years old, and 44.4% were >35 years old. Educational backgrounds varied, with 5.6% having incomplete primary education, 42.6% completing junior high school, and 37% completing high school. The majority belonged to the Batak ethnic group (38.9%), followed by Javanese and Karo ethnic groups (22.2% and 12.9%, respectively). In terms of income, 51.9% had an income <1,400,000, while 48.1% had an income >1,400,000. The analysis of respondent characteristics provides a comprehensive understanding of the population, highlighting gender imbalance, occupational diversity, age distribution, educational levels, ethnicities, and income. This understanding is crucial for designing interventions and recommendations tailored to the needs and characteristics of each group, thereby enhancing the effectiveness of rehabilitation programs and the quality of life for drug abuse patients.

Table 1. Respondent Characteristics

Characteristics	Total Respondents	Percentages
Gender		
Male	49	90,7
Female	5	9,3
Occupation		
Self-employed	9	16,7
Unemployed	14	25,9
Other	31	57,4
Ages		
Less than 35 Years	30	55,6
More than 35 Years	24	44,4
Education		
Not graduated from elementary school	3	5,6
Graduated from elementary school	8	14,8
Junior high school graduate	23	42,6
High school graduate	20	37

Tribe		
Aceh	6	11,1
Batak	21	38,9
Java	12	22,2
Karo	7	12,9
Malay	2	3,7
Minangkabau	6	11,1
Income		
Below 1,400,000	28	51,9
Above 1,400,000	26	48,1

The table illustrates the pretest quality of life among drug abuse patients at the National Narcotics Agency of North Sumatra Province in 2023, based on WHO categories across various aspects. In terms of Physical Health, 57.4% of respondents had a good quality of life, 25.9% were moderate, and 16.7% were very satisfactory. The posttest indicates that 100% of respondents achieved the category of very satisfactory in Physical Health, demonstrating a significant improvement after the rehabilitation program. The average pretest score (65.91) was lower than the posttest score (90.78), indicating an enhancement in the quality of life after the intervention. The Wilcoxon signed-rank test ($Z = -6.219$) indicates that the pretest ranks lower than the posttest with very high significance (0.001), supporting the conclusion that the intervention significantly positively impacted the aspect of physical health.

Table 2. Pretest and Posttest Results of Physical Health Aspects

Pretest	Total Respondents	Percentages
Physical Health Aspects		
Medium	14	25,9
Good	31	57,4
Posttest	Total Respondents	Percentages
Physical Health Aspects		
Highly Satisfactory	54	100

Table 3. Wilcoxon Test on Physical Health Aspects

Physical Health Aspects	Mean	Z	Rank		Ties	Sig
			Negative Ranks	Positive Ranks		
Pretest	65,91	-6,219	1	50	3	0,001

The majority of respondents (61.1%) had a moderate psychological quality of life, with a small percentage in the categories of less (7.4%) and poor (1.9%). After the rehabilitation program, 98.1% reached the category of very satisfactory, indicating significant improvement. The paired sample t-test indicates a highly significant difference between the pretest (mean 55.22) and posttest (mean 91.89) in the psychological aspect, with a negative t-value (-17.922) and very low significance (0.001). The 95% confidence interval for the difference is -40.770 to -

32.563, confirming that the intervention has a positive and significant impact on the psychological aspect, despite the weak relationship between the pretest and posttest.

Table 4. Pretest and Posttest Results of Psychological Aspects

Pretest	Total Respondents	Percentages
Psychological aspects		
Poor	1	1,9
Less	4	7,4
Medium	33	61,1
Good	11	20,4
Posttest	Total Respondents	Percentages
Psychological aspects		
Good	1	1,9
Very Satisfactory	53	98,1

Table 5. Paired T Test on Psychological Aspects

Psychological aspects	Mean	Correlation	Confidence Interval 95%		t	Sig
			Lower	Upper		
Pretest	55,22	0,054	-40,770	-32,563	-17,922	0,001
Posttest	91,89					

The aspect of social support shows a striking difference, with the majority of respondents (50%) in the moderate category, and most others in the good category (27.8%). Although 92.6% reached the category of very satisfactory after the rehabilitation program, 7.4% still fell into the good category, indicating room for improvement. The paired sample t-test indicates a highly significant difference between the pretest (mean 52.89) and posttest (mean 89.06) in the aspect of social support, with a negative t-value (-11.404) and very low significance (0.001). The 95% confidence interval for the difference is -42.527 to -29.806. Although the relationship between the pretest and posttest is weak (correlation -0.304), the test results provide strong evidence that the intervention brings significant improvement in the aspect of social support, with strong statistical support.

Table 6. Pretest and Posttest Results of Social Support Aspects

Pretest	Total Respondents	Percentages
Social Support Aspects		
Poor	4	7,4
Less	5	9,3
Medium	27	50
Good	15	27,8
Posttest	Total Respondents	Percentages

Social Support		
Good	4	7,4
Very Satisfactory	50	92,6

Table 7. Paired T Test on Social Support Aspects

Social Support Aspects	Mean	Correlation	Confidence Interval 95%		T	Sig
			Lower	Upper		
Pretest	52,89					
Posttest	89,06	-0,304	-42,527	-29,806	-11,404	0,001

The environmental aspect shows variation, with the majority of respondents (50%) in the moderate category, while 29.6% are less, and 16.7% are good. Only a small portion (3.7%) falls into the poor category. Posttest results indicate significant improvement, with the majority (98.1%) reaching the very satisfactory category. The paired sample t-test shows a highly significant difference between the pretest (mean 47.09) and posttest (mean 93.44) in the environmental aspect, with a negative t-value (-25.082) and very low significance (0.001). The 95% confidence interval for the difference is -50.059 to -42.645. Although the relationship between the pretest and posttest is weak (correlation 0.163), the test results provide strong evidence that the intervention brings significant improvement in the environmental aspect, with strong statistical support.

Table 8. Pretest and Posttest Results of Environmental Aspects

Pretest	Total Respondents	Percentages
Environmental Aspects		
Poor	2	3,7
Less	16	29,6
Medium	27	50
Posttest	Total Respondents	Percentages
Environmental Aspects		
Good	1	1,9
Very Satisfactory	53	98,1

Table 9. Uji Paired T Test on Environmental Aspects

Environmental Aspects	Mean	Correlation	Confidence Interval 95%		T	Sig
			Lower	Upper		
Pretest	47,09					
Posttest	93,44	0,163	-50,059	-42,645	-25,082	0,001

The research on the outpatient rehabilitation program demonstrates a significant positive impact on the quality of life of drug abuse patients. The program successfully enhances the physical, psychological, social, and environmental aspects of the patients. There is a notable improvement in physical health, with an increased emphasis on physical well-being as a key factor in recovering from drug abuse. Recommendations are provided to enhance outpatient rehabilitation services, emphasizing additional support and motivation for clients. The research findings align with previous studies on the quality of life of former drug addicts, highlighting positive changes in both physical and psychological aspects as indicators of rehabilitation success. Holistically, this research provides an in-depth insight into the impact of rehabilitation on quality of life, reinforcing the need to focus on physical and psychological improvements for better recovery outcomes for former drug addicts.

This study contributes insights into the effectiveness of rehabilitation programs in improving the quality of life of former drug addicts. Highlighting a holistic approach, the results indicate that rehabilitation is not solely focused on ceasing drug use but also aims to improve various aspects of clients' lives for overall well-being. Other findings from a third study on the relationship between social support and self-efficacy in rehabilitated drug users suggest that, despite no significant correlation, rehabilitation programs still have a positive impact on their quality of life. This underscores the complexity of influences in the rehabilitation process, emphasizing the importance of a holistic approach covering psychological, physical, and social aspects. The fourth study examining the quality of life of former drug addicts in the rehabilitation clinic of BNN Kota Kendari provides relevant insights, particularly regarding positive changes in various aspects of quality of life.

This research highlights significant challenges faced by former drug addicts, both physically and psychologically, socially, and spiritually. The outpatient rehabilitation program successfully achieves positive changes in various aspects of the quality of life of former addicts, including physical well-being, positive feelings, improved social well-being, and spiritual growth. The Wilcoxon test results confirm that rehabilitation has a positive impact on improving the quality of life of former addicts. Overall, this research emphasizes the importance of outpatient rehabilitation programs in supporting positive changes in various dimensions of the lives of former drug addicts. These findings lay the groundwork for continual improvement of rehabilitation programs, ensuring optimal recovery in physical, psychological, social, and spiritual aspects. Research on the role of family as a source of social support also emphasizes the crucial role of family support in the rehabilitation process and its impact on positive changes in clients' quality of life.

The study concludes that rehabilitation services have a positive impact on the quality of life of inmates with a history of drug abuse, with all four dimensions (psychological health, social relationships, physical health, and environment) significantly contributing to their well-being. This finding provides empirical support for the vital role of rehabilitation services in enhancing the quality of life of drug-abusing inmates. Another study evaluating the quality of life of outpatient rehabilitation patients at the BNN Clinic Kota Cimahi in 2021 indicates significant positive changes in the four key dimensions, reinforcing the view that rehabilitation not only reduces the negative impacts of drug abuse but also develops broader aspects of quality of life. Changes in psychological dimensions emphasize the importance of mental well-being in the rehabilitation process. Additionally, the research results highlight the role of rehabilitation in improving social relationships and support from the environment, providing broader support for individual recovery. In conclusion, this research affirms that rehabilitation has a significant positive impact on the quality of life of drug abusers, supporting the expansion and development of effective rehabilitation programs, especially in the context of outpatient rehabilitation. Another study analyzing the relationship between social support and quality of life in rehabilitated drug users provides strong evidence that the level of social support during rehabilitation is positively and significantly related to their quality of life. This finding underscores the crucial role of social support in helping individuals achieve a better quality of life during and after the drug rehabilitation process.

These findings reinforce the ongoing research by affirming that drug abuse rehabilitation involves physical, psychological, and particularly crucial social support aspects. Strong support from close individuals and the social environment is considered a key factor in improving their quality of life. This research contributes valuable insights into understanding the factors influencing the quality of life in the context of drug abuse rehabilitation, providing strong support for ongoing research findings. A study on the "Quality of Life of Former Drug Addicts who have Undergone Rehabilitation in the City of Surakarta" uses a qualitative descriptive approach and interviews six informants, including former drug addicts and rehabilitation center managers. The findings indicate significant improvements in the quality of life of former drug addicts after rehabilitation, covering physical, psychological, social, and environmental aspects. This aligns with research highlighting the potential of rehabilitation in enhancing the quality of life of drug abusers. However, the study also emphasizes that maintaining a better quality of life requires additional factors such as social support, family support, and individual commitment to recovery and a healthy lifestyle. This illustrates that rehabilitation is an essential initial step, but sustained efforts and support involving various life aspects are needed to ensure a better quality of life for former drug addicts.

This study provides a comprehensive view of rehabilitation and the contributing factors to the improvement of the quality of life of former drug addicts. These findings support the ongoing research, strengthening the concept that rehabilitation is a key element in recovery, and better quality of life can be achieved through social support, psychological changes, as well as attention to physical and environmental aspects. This holistic approach underscores the significant relevance of various factors in the individual recovery process in the context of drug abuse rehabilitation.

CONCLUSION AND RECOMMENDATION

The conclusion of this study indicates that the outpatient rehabilitation program at the National Narcotics Agency of North Sumatra Province has a significant positive impact, resulting in both physical and psychological improvements for drug abusers. Social support also plays a crucial role in enhancing their quality of life, while the rehabilitation program contributes to creating an environment supportive of recovery. Recommendations include strengthening the rehabilitation program, enhancing external collaborations, and implementing continuous monitoring and evaluation systems for the National Narcotics Agency of North Sumatra Province. For patients, active participation, building social support networks, and developing coping skills are recommended. Researchers are advised to conduct further studies and analyze relapse-triggering factors, with research findings disseminated to support improvements in narcotics rehabilitation policies and practices.

ADVANCED RESEARCH

Further research in the context of narcotics rehabilitation can be focused on several aspects that require a deeper understanding. Firstly, a comprehensive evaluation of the effectiveness of outpatient rehabilitation programs can be conducted by analyzing program elements to identify the most influential factors and measure their long-term impact on patient recovery, including the risk of relapse. Studying relapse-triggering factors becomes a crucial focus, enabling further analysis of the relationship between psychological, social, and environmental factors and the success of long-term recovery. The development of a holistic model for rehabilitation can be explored, integrating physical, psychological, social, and spiritual aspects in a comprehensive manner. Furthermore, research on the influence of environmental factors on rehabilitation can provide a deeper understanding of the role of economic, cultural, and geographical factors in the success of recovery. In-depth case studies of specific patient groups, such as age or specific types of narcotics, can provide insights into variations in response to rehabilitation programs. Finally, research related to the impact of the COVID-19 pandemic on rehabilitation programs and patterns of drug abuse can provide a better understanding of program adaptations during a global health crisis. Through this approach, it is expected that further research can significantly contribute to the improvement of narcotics rehabilitation programs and the enhancement of the quality of life for former drug abusers.

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