



ARTICLE RESEARCH

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The Effect of Family Support on the Relapse of Drug Abusers

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ABSTRACT

Drug abuse remains a persistent global health challenge, with relapse continuing to be a major obstacle in sustaining recovery after rehabilitation. This study examined the association between knowledge, motivation, and family support factors, including emotional, social, and moral support, with relapse among residents at the Community-Based Rehabilitation Institute of the Mitra Husada Foundation in Makassar. A cross-sectional design was applied, involving all 82 rehabilitation residents through total sampling. Data were collected using structured questionnaires and analyzed with Chi-Square and logistic regression tests. The results demonstrated significant associations between relapse and knowledge ($p < 0.013$), motivation ($p < 0.0001$), emotional support ($p < 0.004$), social support ($p = 0.002$), and moral support ($p < 0.0001$). Logistic regression analysis identified motivation as the most influential factor (Wald = 8.026, $p < 0.005$). The study concludes that strengthening intrinsic motivation and consistent family involvement are essential strategies in relapse prevention. Integrating family-based aftercare programs into rehabilitation services is recommended to ensure sustainable recovery.

Keywords: Family Support, Resident Behavior, Relapse Resident.

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INTRODUCTION

Drug abuse, or NAPZA (Narcotics, Psychotropics, and Other Addictive Substances), represents a multifaceted public health challenge that requires integrated and sustainable prevention strategies. In Indonesian legislation, specifically Law No. 35 of 2009, NAPZA is defined as substances capable of causing dependence and addiction, encompassing narcotics, psychotropics, and other hazardous addictive materials (1). The World Health Organization (WHO), on the other hand, categorizes these substances based on their pharmacological properties, such as depressants, stimulants, and hallucinogens. In the Indonesian context, the prevalence of drug abuse has shown a worrying upward trend across various socio-economic strata, affecting both lower and higher income populations. Evidence from multiple national surveys and prior studies suggests that the drivers of drug abuse are complex and interconnected (2). These include insufficient knowledge, risk-taking attitudes, peer influence, personality-related vulnerabilities such as weak self-control, gender disparities, socio-economic inequalities, and the role of the family environment.

According to the United Nations Office on Drugs and Crime (UNODC), the increase in drug abuse cases globally is strongly influenced by the rapid development of globalization. As a result, drug trafficking is no longer conducted individually but is now managed through well-organized international networks, as drugs have become a highly profitable business sector. The establishment of these international networks is driven by high demand and the continuous availability of drug supplies. The UNODC World Drug Report 2023 notes that at least 271 million people worldwide aged 15 to 64 have used drugs, highlighting the global scale of the problem. In Southeast Asia, the situation is particularly concerning (3). According to the UNODC Southeast Asia Opium Survey 2023, the Mekong Subregion including Myanmar, Laos, and Thailand remains one of the world's largest producers of synthetic drugs, especially methamphetamine. The report shows that more than 30 million methamphetamine tablets were seized in Southeast Asia in 2022 alone, indicating a significant surge in production and distribution in the region. This growing regional supply chain has a direct impact on drug availability and use in Indonesia (4).

The United Nations Office on Drugs and Crime (UNODC) reports that globalization has transformed drug trafficking from small-scale activity into complex transnational networks, reflecting the high profitability of the illicit drug trade. Sustained demand and supply drive these networks, with the World Drug Report 2023 estimating 271 million users worldwide aged 15–64 (5). Southeast Asia faces particular challenges, as the Mekong Subregion Myanmar, Laos, and Thailand remains a major hub for methamphetamine production. In 2022, authorities seized over 30 million tablets in the region. This expanding supply chain significantly increases drug availability in Indonesia, complicating national prevention and rehabilitation efforts (6).

One of the approaches used to overcome the widespread impact of drug abuse is a rehabilitation program, which is intended to ensure that drug abusers receive healing or recovery. Based on the results of the effectiveness of drug rehabilitation services, it appears that abusers who are declared cured or

have completed the rehabilitation program experience symptoms of relapse. Based on the results of research conducted by Nulira Ahmad et al, the drug relapse rate is estimated at 90% (3).

Rehabilitation services are essential in addressing drug abuse, yet sustaining recovery remains challenging as relapse rates in Indonesia reach nearly 90% (7). Many programs emphasize detoxification but lack comprehensive aftercare such as counseling, psychosocial support, and skill building. Environmental pressures, peer influence, and weak family support further trigger relapse. Marlatt and Gordon's Relapse Prevention Model (1985) highlights high-risk conditions like stress and negative emotions. Effective relapse prevention requires integrated medical, psychological, social, and community-based interventions to ensure long-term recovery (8).

Family support is a vital element in rehabilitation and relapse prevention for individuals recovering from substance abuse. Research shows that emotional, social, and moral support significantly enhance recovery and resilience after treatment (9). Emotional support provides empathy and care to reduce stress and isolation, social support offers practical help such as access to healthcare, employment, and reintegration programs, while moral support guides individuals toward positive choices and spiritual values. Together, these dimensions foster psychological strength, reduce relapse risk, and encourage healthier lifestyles. Strengthening family- and community-based systems is therefore essential to help recovering individuals achieve independence and contribute positively to society. National data further highlight the urgency of the 2021 National Survey on Drug Abuse reported prevalence rising from 1.80% in 2019 to 1.95% in 2021, reflecting significant population-level growth (10).

Relapse in drug abuse commonly occurs during the early stages of recovery and gradually decreases over time. The Relapse Prevention Model by Marlatt and Gordon (1985) explains that high risk conditions such as stress, negative emotions, and permissive social environments often trigger recurrence (11). Cognitive Behavioral Therapy (CBT) is widely applied to identify triggers, manage cravings, and strengthen coping skills, while mindfulness, family support, and peer assistance further enhance emotional stability (12). Research indicates that relapse is strongly associated with emotional states, family dynamics, and peer influence, underscoring the importance of integrated psychological and social interventions to achieve sustainable recovery.

Previous studies on relapse among former drug abusers indicate that relapse is influenced by a combination of psychological, social, and demographic factors. Psychological determinants include emotional instability, strong cravings, and low self efficacy, which significantly increase vulnerability to relapse (13). Social determinants, such as family dysfunction, lack of perceived social support, and peer influence, also play a critical role in sustaining recovery. In addition, demographic and behavioral factors including age at first drug use, frequency and dosage of consumption, delays in entering treatment, marital status, and employment status have been shown to affect relapse risk (14). Recent research further highlights that structured relapse prevention programs, incorporating psychological therapy, skill building, and social support, are effective in reducing addiction severity and lowering relapse rates.

Previous research has generally discussed family support as a single, broad construct without exploring its specific dimensions in depth. This study addresses that research gap by analyzing the specific dimensions of family support, which include knowledge, motivation, emotional support, social support, and moral support, for rehabilitation clients at the Community Component Rehabilitation Institute, Mitra Husada Foundation, South Sulawesi. The novelty of this study lies in its comprehensive examination of family support components to better understand how each dimension uniquely contributes to the recovery process and relapse prevention among drug rehabilitation clients.

METHOD

This study applied a quantitative cross-sectional design to investigate factors associated with relapse among drug rehabilitation residents. The study population included all 82 individuals undergoing rehabilitation at the Mitra Husada Foundation. A total sampling technique was used to ensure complete population coverage. The inclusion criteria consisted of: (1) residents currently in the rehabilitation phase, (2) individuals who had successfully completed detoxification, (3) those with the ability to communicate effectively, and (4) willingness to participate by signing informed consent. Meanwhile, the exclusion criteria were unstable psychological or physical conditions and incomplete responses to the questionnaire. Data collection was conducted using structured questionnaires that measured demographic characteristics, knowledge, motivation, and family support dimensions, including emotional, social, and moral support.

The data were processed through standard research procedures, including editing, coding, entry, tabulation, and cleaning, to ensure accuracy and reliability. Statistical analysis was performed in three stages: univariate analysis to describe respondent characteristics, bivariate analysis using the Chi-Square test to examine the relationship between independent and dependent variables, and multivariate analysis with multiple logistic regression to identify the most influential factors. The level of significance was set at $p < 0.05$. Furthermore, this research was conducted in accordance with strict ethical standards and obtained official approval from the Health Research Ethics Committee, Faculty of Health, Universitas Pejuang Republik Indonesia, with Ethical Clearance Number: 0138/Etik/FKES-UPRI/I/2023.

RESULTS

Respondent Characteristics

Based on Table 1, the largest proportion of respondents was in the 21–30 years age group, with 40 individuals (48.8%), while the smallest proportion was in the <20 years and >40 years categories, each totaling 8 individuals (9.8%). Regarding educational background, the majority of respondents had completed senior high school, accounting for 64 individuals (78.0%), whereas the lowest proportion was in the elementary school category, with only 2 individuals (2.4%). In terms of occupation, the highest proportion of respondents was unemployed, totaling 31 individuals (37.8%), while the lowest was in the civil servant category, with only 1 individual (1.2%) of job group respondents are in the ASN (State Civil Apparatus) category, 1 respondent, 1.2%.

Table 1. Frequency Distribution of Characteristics of Drug Abusers in Residents of Drug Abuse Community Component Rehabilitation Institutions

Characteristics	Description	n (82)	%
Age	< 20 years	8	9.8
	21–30 years old	40	48.8
	31–40 years old	26	31.7
	> 40 years	8	9.8
Education	Elementary school	2	2.4
	Junior High School	13	15.9
	Senior High School	64	78.0
	College	3	3.7
Occupation	Student	5	6.1
	Civil Servant	1	1.2
	Self-employed	15	18.3
	Private sector employee	30	36.6

Analysis of the Relationship Between Research Variables

Table 2. Relationship between Knowledge, Attitude, Motivation, Emotional Support, Social Support, Moral Support, and Resident Relapse

Variable	Resident Recurrence				Total		<i>P - Value</i>
	Relapsed		No Relapse		n=82	%	
	n	%	n	%			
Knowledge							
Adequate	14	31,1	31	68,9	45	100	0,013
Inadequate	31	83,8	6	16,2	37	100	
Motivation							
Adequate	10	25,0	30	75,0	40	100	0,000
Inadequate	35	83,3	7	16,7	42	100	
Emotional Support							
Low	15	38,5	24	61,5	39	100	0,004
Adequate	30	69,8	13	30,2	43	100	
Social Support							
Low	16	38,1	26	61,9	42	100	0,002
Adequate	29	72,5	11	27,5	40	100	
Moral Support							
Low	18	40,0	27	60,0	45	100	0,000
Adequate	27	73,0	10	27,0	37	100	

Based on Table 2, the findings indicate significant associations between several independent variables and relapse among residents. For the knowledge variable, of the 45 respondents with adequate knowledge, 14 individuals (31.1%) relapsed while 31 (68.9%) did not. In contrast, among 37 respondents with inadequate knowledge, 31 (83.8%) experienced relapse and only 6 (16.2%) remained

abstinent. The Chi-Square test showed a p-value of 0.013, confirming statistical significance. Regarding motivation, among 40 respondents with adequate motivation, 10 (25.0%) relapsed and 30 (75.0%) did not. Conversely, of 42 respondents with low motivation, 35 (83.3%) experienced relapse while only 7 (16.7%) did not. The Chi-Square test yielded a p-value of 0.000, indicating a strong association.

For emotional support, 15 respondents (38.5%) with low support relapsed and 24 (61.5%) did not. Meanwhile, among 43 respondents with adequate emotional support, 30 (69.8%) relapsed and 13 (30.2%) did not. The Chi-Square test produced a p-value of 0.004, showing significance. The social support variable also showed a significant relationship. Of 42 respondents with low support, 16 (38.1%) relapsed and 26 (61.9%) did not. Conversely, among 40 respondents with adequate social support, 29 (72.5%) relapsed and 11 (27.5%) did not, with a p-value of 0.002. Finally, for moral support, 18 respondents (40.0%) with low support experienced relapse while 27 (60.0%) did not. Among 37 respondents with adequate support, 27 (73.0%) relapsed and 10 (27.0%) did not. The Chi-Square analysis yielded a p-value of 0.000, confirming a significant association between moral support and relapse.

Multivariate Analysis

Table 3. Multiple Regression Analysis

Variable	B	Forest	Say.	Exp (B)
Knowledge	-2,801	5,341	0,021	0,061
Motivation	-3,010	8,026	0,005	0,049
Emotional Support	-2,950	5,079	0,024	0,052
Social Support	-1,004	1,028	0,997	0,996
Moral Support	-3.107	6.170	0,013	0,045

Table 3 shows that of the five variables tested simultaneously, there are four variables that are statistically significant. Based on the results of the analysis using multiple regression tests, the variable that has the most influence on the relapse of drug abusers is the resident's motivation with the Wald score. 8,026 ($p = 0.005$).

DISCUSSION

Knowledge

Knowledge is an essential factor in the recovery process and in preventing relapse among individuals with a history of drug dependence (15). A comprehensive understanding of drug effects, addiction mechanisms, and long-term health consequences provides a strong foundation for sustaining abstinence. Individuals who recognize how drugs alter the nervous system, disrupt brain chemistry, and affect both physical and mental health are generally more conscious of relapse risks. This awareness not only strengthens their motivation to remain abstinent but also improves their ability to make informed decisions when faced with high-risk situations. The Health Belief Model (HBM) further supports this perspective, emphasizing that health-related behavior is shaped by perceptions of susceptibility,

severity, benefits, and barriers. Adequate knowledge of drugs and addiction positively influences these perceptions, thereby motivating individuals to engage actively in relapse-prevention strategies (16).

The results of this study revealed a significant association between knowledge and relapse, which is consistent with findings from previous research. (17) demonstrated that knowledge levels had a strong correlation with the likelihood of relapse among drug users, while (18) Similarly, researchers reported that individuals with greater awareness of addiction risks were less likely to relapse. In line with these findings, highlighted that knowledge of coping strategies significantly reduced relapse rates in rehabilitation settings, showed that clients who received structured health education during rehabilitation experienced fewer recurrences compared to those who did not. More recently (19) emphasized that sufficient knowledge, when combined with family support, functioned as a protective factor against relapse in former drug abusers. Taken together, these findings confirm that knowledge plays a pivotal role in reducing relapse rates. However, its effectiveness is not independent, as it is also mediated by other determinants such as individual motivation, family and social support, and access to aftercare services.

Motivation

Research on the association between resident motivation and drug abuse relapse consistently demonstrates significant outcomes. The present study confirmed that a resident's level of motivation to recover and maintain abstinence is closely related to their ability to prevent relapse after rehabilitation. Individuals with stronger motivation were found to have lower relapse rates. Motivation in this context reflects an internal willingness to change, commitment to the recovery process, and persistence in maintaining a drug-free lifestyle. Such motivation enables individuals to cope more effectively with challenges, resist temptations, and continuously apply relapse-prevention strategies acquired during treatment (20).

The Self-Determination Theory (SDT) developed by Ryan and Deci offers a relevant theoretical explanation for these findings. SDT differentiates between intrinsic and extrinsic motivation, emphasizing autonomy, competence, and relatedness as essential factors for sustaining motivation. Within addiction recovery, intrinsic motivation emerging from personal determination to change tends to be more effective than extrinsic motivation driven by external influences. Higher motivation also supports smoother progression through the stages of behavioral change, facilitating more consistent achievement of long-term abstinence.

These findings are consistent with prior studies. That motivation, together with environmental conditions, significantly impacts recovery and relapse prevention (21). Laksana (22) reported that strengthened motivation contributes to behavioral change and early intervention against recurrence. Similarly, Wang L (23) found that residents with higher intrinsic motivation demonstrated greater adherence to treatment and lower relapse in community-based programs. Further showed that

motivational enhancement confirmed that high motivation, particularly when reinforced with psychosocial support, reduces relapse risk among young adults in residential rehabilitation.

Emotional Support

The findings of this study demonstrate a significant relationship between family social support and relapse among individuals with a history of drug abuse. These results emphasize the crucial role of the family in sustaining recovery and preventing recurrence. Family social support includes emotional concern, attention, and assistance from family members for individuals undergoing rehabilitation. As an interconnected emotional unit, the family system influences recovery, where changes in one member inevitably affect the whole. In the context of addiction, active family involvement creates a supportive environment that reduces relapse risk (24).

Forms of family support include empathy and reassurance, practical assistance such as financial or logistical help to access rehabilitation, and informational support through advice and education about drugs and recovery strategies (25). These results align with the Stress and Coping Theory of Lazarus and Folkman, which highlights social support as a buffer against stress, a common trigger for relapse. A supportive family environment strengthens coping mechanisms, reduces reliance on drugs as an escape, and fosters long-term abstinence. Previous studies support these findings. Chen A et al (26) showed that family involvement during and after rehabilitation is essential to minimize relapse risk. Park et al. (2020) in Addictive Behaviors found that greater perceived family support significantly reduced relapse episodes. Research has shown that family engagement plays a significant role in preventing relapse and improving treatment adherence. Furthermore, family-based interventions have been consistently proven to reduce relapse rates and enhance recovery outcomes across diverse cultural settings.

Social Support

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Moral Support

Family moral support refers to psychological and emotional encouragement provided by family members to individuals struggling with drug addiction. Drawing on Bowlby's Attachment Theory, strong emotional bonds within the family serve as a foundation for an individual's sense of security, confidence, and resilience when facing challenges during the recovery process (27). This perspective emphasizes that when attachment needs are adequately fulfilled, individuals are more likely to develop positive behavioral changes and sustain long-term abstinence. Research conducted at the Mitra Husada Foundation rehabilitation center revealed a significant relationship between family moral support and relapse among residents. These findings highlight the central role of the family in both recovery and relapse prevention. Moral support can take the form of empathy, encouragement, emotional reinforcement, and affirmation of positive behavior, all of which strengthen intrinsic motivation and improve residents' ability to manage psychological stressors and social pressures that frequently trigger relapse.

Consistent moral support throughout rehabilitation creates a recovery oriented environment that reduces relapse risks. Nevertheless, its effectiveness depends on the quality and continuity of the support. Families with greater awareness of addiction and effective communication strategies are better positioned to provide constructive and sustainable moral support. Therefore, relapse-prevention interventions should not only target the individual but also integrate family-based approaches to maximize emotional and moral resources during rehabilitation. These results are consistent with previous studies. Previous research has highlighted the important role of family emotional support in developing effective intervention programs for individuals with drug dependence (28). Evidence also shows that family cohesion and moral support significantly reduce relapse rates among methamphetamine users. Further studies demonstrate that family support contributes to better treatment adherence and resilience, while sustained moral support strengthens coping capacity and enhances overall recovery outcomes (29).

CONCLUSIONS AND RECOMMENDATIONS

Residents with strong motivation are generally more engaged in rehabilitation activities and demonstrate greater capacity to resist the urge to return to drug use. Strengthening and sustaining resident motivation is therefore a crucial strategy in minimizing the risk of relapse. Rehabilitation centers should design and implement programs that actively involve families in supporting residents

throughout the recovery process. Furthermore, the development of structured aftercare programs that consistently engage families even after residents complete formal rehabilitation is essential to ensure long-term recovery and reduce the likelihood of relapse.

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