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Enhancing Family Readiness to Prevent Relapse in Individuals with Severe Mental Disorders in Indonesia

Incremento de la preparación familiar para prevenir las recaídas en personas con trastornos mentales graves en Indonesia

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SUMMARY

Objective: *Effective relapse prevention for individuals with severe mental disorders requires understanding the role of psychosocial factors in readiness-relapse. This study evaluates the impact of family support, motivation, coping mechanisms, and experience on readiness-relapse.* **Methods:** *A correlational study was conducted with 150 respondents from three primary healthcare centers in Kebumen Regency, Central Java, Indonesia. Participants were selected using proportional random sampling and completed validated questionnaires. Data were analyzed for validity, reliability, normality, and hypothesis testing using T-tests and F-tests.* **Results:** *Motivation was identified as a significant predictor of readiness-relapse ($p = 0.0001$), demonstrating its crucial role in preventing relapse. In contrast, family support, coping mechanisms, and experience did not significantly influence readiness-relapse ($p > 0.05$). Validity and reliability tests confirmed the instruments' effectiveness, and normality and homogeneity tests indicated appropriate data distribution for analysis.* **Conclusion:** *The findings highlight that motivation is a key factor in readiness for relapse, suggesting that interventions should focus on enhancing motivation. The lack of significant effects from family support, coping, and experience indicates a need for further research to explore their complex roles in relapse prevention.*

Keywords: *Readiness-relapse, motivation, family support, coping mechanisms, severe mental disorders.*

RESUMEN

Objetivo: *La prevención eficaz de las recaídas en personas con trastornos mentales graves requiere comprender el papel de los factores psicosociales en*

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la preparación para la recaída. Este estudio tiene como objetivo evaluar el impacto del apoyo familiar, la motivación, los mecanismos de afrontamiento y la experiencia en la preparación para la recaída. **Métodos:** *Se realizó un estudio correlacional con 150 encuestados de tres centros de atención primaria de salud en Kebumen Regency, Java Central, Indonesia. Los participantes fueron seleccionados mediante un muestreo aleatorio proporcional y completaron cuestionarios validados. Los datos se analizaron para determinar su validez, confiabilidad, normalidad y prueba de hipótesis mediante pruebas T y pruebas F.* **Resultados:** *La motivación se identificó como un predictor significativo de la preparación para la recaída ($p = 0,0001$), lo que demuestra su papel crucial en la prevención de la recaída. Por el contrario, el apoyo familiar, los mecanismos de afrontamiento y la experiencia no influyeron significativamente en la preparación para la recaída ($p > 0,05$). Las pruebas de validez y confiabilidad confirmaron la efectividad de los instrumentos, y las pruebas de normalidad y homogeneidad indicaron una distribución de datos adecuada para el análisis.* **Conclusión:** *Los hallazgos destacan que la motivación es un factor clave en la preparación para la recaída, lo que sugiere que las intervenciones deben centrarse en mejorar la motivación. La falta de efectos significativos del apoyo familiar, el afrontamiento y la experiencia indica la necesidad de realizar más investigaciones para explorar sus complejos roles en la prevención de recaídas.*

Palabras clave: *Preparación para la recaída, motivación, apoyo familiar, mecanismos de afrontamiento, trastornos mentales graves.*

INTRODUCTION

Mental health has emerged as a critical global issue, with alarming trends indicating a serious threat to global health. According to the Institute for Health Metrics and Evaluation (IHME), six of the top twenty causes of disability are mental health disorders (1). The World Health Organization (WHO) further highlights the profound impact of mental health conditions, reporting that every 40 seconds, a person dies by suicide globally due to mental health issues (2). These conditions not only affect individual health but also have significant social repercussions for families (3). This evidence underscores the urgent need for comprehensive mental health interventions.

This increasing awareness of the importance of mental health is mirrored in global policy changes, including the WHO's adoption of the principle that "there is no health without mental health" (4). Mental health is now an essential focus within the United Nations' Sustainable Development Goals (SDGs), particularly Goal 3, which emphasizes the inclusion of mental health care in universal health coverage. The increasing prevalence of mental health disorders worldwide, coupled with their associated health and economic burdens, makes this focus imperative (5).

Globally, approximately 792 million people, or one in ten individuals, suffer from mental health disorders (6). The most prevalent conditions include anxiety (3.8 % or 284 million people), depression (3.44 % or 264 million people), bipolar disorder (0.6 % or 46 million people), and schizophrenia (0.3 % or 20 million people) (7). The WHO (2020) estimates that 450 million people worldwide are affected by mental disorders, with notable rates of depression, bipolar disorder, schizophrenia, dementia, and suicide. These statistics emphasize the necessity for national mental health policies aligned with SDG Goal 3.

In Indonesia, mental health issues remain a serious concern, particularly with severe mental disorders. Data from the Indonesian Basic Health Research in 2018 indicate an increase in the prevalence of severe mental disorders from 0.15 % to 0.18 %. In Kebumen Regency, which ranks fourth in severe mental disorders within Central Java, there is a high rate of relapse among individuals with severe mental disorders. Efforts to address mental health issues have traditionally focused on medication, but a more holistic approach is necessary. Psychoeducation, which integrates therapeutic and educational interventions, is crucial in preventing relapse and supporting recovery. Psychoeducational programs, including video-based interventions, can provide essential support for families and communities, enhancing their ability to manage and reduce relapses in individuals with severe mental disorders (8).

This study aims to develop a psychoeducational model designed to enhance family preparedness and prevent relapse among individuals with severe mental disorders in Kebumen Regency,

Indonesia. By equipping families with the tools and understanding necessary to support their loved ones, this model seeks to address the complex mental health challenges facing Indonesian communities.

METHODS

Study Design and Setting

This study employed a correlational design to investigate the relationships among family readiness, motivation, coping mechanisms, and social support in preventing relapse among individuals with severe mental disorders. The research was conducted at three Primary Healthcare Centers (Puskesmas) in Kebumen Regency, Central Java, Indonesia, with data collected between March and May 2024.

The study population consisted of families with members diagnosed with severe mental disorders, receiving care at the Community Health Center (Puskesmas). A sample of 150 respondents was selected using proportional random sampling. The inclusion criteria for participants were: core family members living in the same household as the individual with a severe mental disorder; residing in the Puskesmas areas of Kebumen Regency and participating in the Desa Siaga Sehat Jiwa (DSSJ) program; that is Mental Health Alert Village community-based mental health program that aims to increase community awareness and knowledge about mental health. This program also aims to increase community preparedness for mental health risks and dangers. The participant aged 17 to 55 years; able to communicate in the Indonesian language; possessing at least a junior high school (SMP) education level; and willing to participate in the study. Families were excluded if they were unavailable during data collection or if core family members did not reside in the same household as the individual with a mental disorder.

Data were collected using a structured questionnaire, which included demographic information and standardized instruments to assess key variables. Family readiness and motivation were assessed using the Caregiving Inventory (CGI) (9), translated into Bahasa Indonesia and back-translated to ensure semantic equivalence. The CGI consists of 21 items that evaluate activities and motivations related to caregiving for ill family members. Coping mechanisms were measured with a modified version of the Ways of Coping Scale (10), a standardized instrument translated into Bahasa Indonesia by Suwaryanti (2014). Social support was evaluated using a questionnaire based on Sarafino and House's theoretical framework, encompassing four dimensions: emotional support, esteem support, instrumental support, and informational support.

Data Analysis

Data analysis followed a systematic approach. Normality tests were conducted to determine whether the data distribution met the assumptions for parametric analysis. Homogeneity testing ensured that variances across groups were similar. Descriptive statistics were applied for univariate analysis to summarize demographic characteristics and study variables. Hypothesis testing was carried out using linear regression analysis to explore the relationships among family readiness, motivation, coping mechanisms, and social support in relation to relapse prevention. T-tests and F-tests were used to assess the significance of these relationships. Parametric statistical methods were applied, as the data met the assumptions for normality and homogeneity.

RESULTS

Instrument Validity and Reliability

The validity and reliability of the instruments measuring key variables—readiness-relapse, family support, experience, motivation, and coping—were rigorously tested. The validity tests indicated that all variables were statistically significant with p-values of <0.001, confirming that the instruments accurately measured their respective constructs. Reliability was assessed using Cronbach's alpha, with values ranging from 0.746 to 0.811, indicating strong internal consistency. Specifically, readiness-relapse had a Cronbach's alpha of 0.775, family support 0.752, experience 0.753, motivation 0.811, and coping 0.746. These values exceed the generally accepted threshold of 0.70, confirming the reliability of the instruments.

Data Normality Test

The Kolmogorov-Smirnov test was used to evaluate the data's normality. The results showed that all variables—readiness-relapse, family support, experience, motivation, and coping—had significance values greater than 0.05, indicating that the data were normally distributed and suitable for parametric analyses.

Homogeneity Test

The homogeneity of variances was assessed to ensure that sample variances were not significantly different across groups. Table 1 presents the homogeneity test results for family support, motivation, coping, and experience. All variables had significant values greater than 0.05, indicating that the variances were homogeneous and suitable for further analysis.

Table 1. Homogeneity Test Results for ANOVA Data (n = 150)

Variable	Mean Square	F	Sig.
Family Support	157.236	1.429	0.143
Motivation	38.012	240.812	0.100
Coping	255.418	1.132	0.334
Experience	178.180	1.492	0.117

Table 2. Distribution of Respondent Characteristics (n = 150)

Characteristic	Mean	Median	SD	Min	Max
Age (years)	40.76	39.00	9.50	26	65
Gender (Male/Female)	83/67				
Education Level	1.45	1.00	0.50	1	2
Readiness-Relapse	1.79	1.00	1.04	1	4
Family Support	36.17	37.00	3.43	30	40
Motivation	46.22	47.00	10.72	27	86
Coping	18.47	20.00	1.99	14	22
Experience	80.10	79.00	15.12	42	129

Univariate Analysis

A univariate analysis was conducted to describe the characteristics of the study participants and key variables. The respondent characteristics included age, gender, and education level (Table 2).

Variable Categories

The variables were categorized into low, medium, and high based on a three-level classification using standard deviations. Table 3 shows the respondent distribution by variable categories.

Hypothesis Testing

The T-test results revealed the partial effects of family support, motivation, coping, and experience on readiness-relapse. Family support ($p = 0.979$) and experience ($p = 0.947$) showed no significant impact on readiness-relapse, indicating that these factors did not independently influence

Table 3. Respondent Distribution by Variable Categories (n = 150)

Variable	Category	Frequency	Percentage (%)
Age (years)	Low	11	7.34
	Medium	107	71.30
	High	32	21.30
Gender	Male	83	55.30
	Female	67	44.70
Family Support	Low	36	24.00
	Medium	90	60.00
	High	24	16.00
Motivation	Low	22	14.70
	Medium	110	73.30
	High	18	12.00
Coping	Low	22	14.70
	Medium	110	73.30
	High	18	12.00
Experience	Low	140	93.30
	Medium	10	6.70
	High	0	0.00

the dependent variable. Similarly, coping ($p = 0.681$) was not a significant predictor of readiness-relapse. However, motivation ($p = 0.0001$) had a significant partial effect, suggesting that higher motivation levels are strongly associated with improved readiness-relapse outcomes. The F-test further confirmed the overall significance of the regression model ($p < 0.001$), demonstrating that the combined influence of family support, motivation, coping, and experience significantly predicted readiness-relapse. This suggests that while individual factors like motivation play a critical role, the interaction of these variables contributes meaningfully to readiness-relapse in family members of individuals with severe mental disorders.

DISCUSSION

To the best of our knowledge, this is the first study to specifically evaluate the impact of family support, motivation, coping mechanisms, and experience on readiness-relapse among individuals with severe mental disorders in the Kebumen Regency, Central Java, Indonesia. The findings reveal that motivation is a significant predictor of readiness-relapse, whereas family support, coping, and experience do not have a significant impact. These results suggest that targeted interventions to enhance motivation may be crucial for improving readiness-relapse outcomes, while the roles of family support, coping mechanisms, and experience warrant further investigation.

The Role of Motivation in Readiness-Relapse

Motivation was found to be the most significant predictor of readiness-relapse among the variables studied. This finding aligns with extensive literature that emphasizes the central role of motivation in behavioral change. Motivation, particularly intrinsic motivation, has been shown to be a powerful determinant of sustained behavior change (11). Individuals motivated by internal factors such as personal growth and health are more likely to engage in and maintain beneficial behaviors (12). This study's findings support the notion that higher levels of motivation enhance individuals' ability to manage relapse challenges, consistent with theories that position motivation as central to progressing through stages of change (13,14). Additionally, the significant role of motivation underscores the importance of motivational interviewing (MI) as an effective intervention technique for improving readiness for change and reducing relapse rates (15). The results advocate for using and developing motivational strategies in relapse prevention programs.

The Unexpected Role of Family Support

Contrary to expectations, family support did not significantly predict readiness-relapse. This finding challenges the established view that family support is crucial for effective relapse prevention (16,17). Several explanations exist for this study's lack of a significant relationship between family support and readiness-relapse. One possibility is that the quality and nature of family support may vary widely among individuals, and not all forms of support are beneficial. For instance, overprotective or controlling family behaviors, although well-intentioned, can lead to increased stress and reduced self-efficacy in the individual, potentially

exacerbating relapse risk (18). Additionally, the study's measurement of family support may not have captured the nuances of different support types or the subjective experience of receiving support. Previous research suggests that perceived support is more impactful than objective measures (16,17). This highlights the need for a more individualized approach to supporting interventions, where the individual's specific needs and preferences are considered.

Coping Mechanisms: Limited Impact on Readiness-Relapse

The study also found that coping mechanisms did not significantly predict readiness-relapse, which was unexpected given the extensive literature linking effective coping strategies to better psychological outcomes. Effective coping strategies, such as problem-focused coping and emotional regulation, are typically associated with reduced stress, better mental health, and lower relapse rates in various populations (19). One explanation could be the diversity of coping strategies and their varying effectiveness depending on context. For instance, problem-focused coping is effective when the individual has control over stressors, while emotion-focused coping is more useful when control is limited (20). The mismatch between coping strategies and participants' specific situations may account for the lack of significant impact. Furthermore, coping strategies often interact with other factors like motivation and social support, and their effectiveness can vary with the individual's stage of change (21,22). This dynamic interaction between coping and other factors could explain why coping did not emerge as a significant predictor in this study. The findings suggest that interventions aimed at relapse prevention should not only focus on enhancing coping skills but also consider the context in which these skills are used and how they interact with other factors, such as motivation and support.

Experience: A Non-Significant Predictor

Experience did not significantly predict readiness-relapse, which is surprising given the assumption that prior experience with similar challenges contributes to better outcomes. Experience might include previous behavior change attempts or relapse encounters. However, the concept of "learning from experience" may not apply uniformly, as negative experiences can lead to discouragement and reduced readiness (23). The measure of experience in this study might not have captured qualitative aspects such as the nature of experiences or the extent of reflective learning. Reflective practices, which allow individuals to learn from past experiences, may be crucial for influencing readiness-relapse (24). If the individuals in this study had not engaged in such reflective practices, their past experiences might not have significantly contributed to their readiness for relapse. These findings suggest that interventions should focus not only on individuals' experiences but also on how they process and learn from those experiences. Encouraging reflective practices and providing opportunities for individuals to extract meaningful insights from their past experiences could be crucial components of relapse prevention programs.

Integrative Discussion: The Interplay of Factors

While the individual factors of family support, motivation, coping, and experience were examined separately, it is important to consider how these factors might interact to influence readiness-relapse. The study's results suggest that motivation plays a pivotal role, potentially serving as the engine that drives the other factors. For instance, highly motivated individuals may be more likely to seek and effectively use family support, develop and apply coping strategies, and learn from past experiences. Conversely, those with low motivation may not fully benefit from support or coping strategies, regardless of availability or quality. The interaction between these factors highlights the complexity of readiness-relapse and suggests that a multifaceted approach is necessary for effective intervention. For example, enhancing motivation might amplify the effects of family support and coping strategies, leading to better overall outcomes. This integrative perspective is supported by the biopsychosocial model, which posits that biological, psychological, and social factors all contribute to health outcomes and should

be addressed in a comprehensive manner (25). The findings suggest that interventions should address not just individual factors but also their interactions within the broader system of an individual's life, consistent with systems theory (26).

While the study provides valuable insights into the factors influencing readiness-relapse, several limitations should be acknowledged. The cross-sectional design limits causal inferences about the relationships between the studied factors and readiness-relapse. Longitudinal studies are needed to establish causality and explore how these variables interact over time. Self-reported data may introduce response bias, and the study's measurement of family support, coping mechanisms, and experience may have overlooked important nuances. Future research should incorporate a broader range of variables, consider mixed methods approaches, and explore the qualitative aspects of the variables studied to gain a more comprehensive understanding of relapse prevention.

CONCLUSION

This study provides valuable insights into the predictors of readiness-relapse among individuals with severe mental disorders, revealing that motivation is a significant predictor. At the same time, family support, coping mechanisms, and experience do not significantly impact readiness-relapse. These findings answer the research aim by confirming that motivation plays a central role in influencing readiness for change, emphasizing its critical importance in relapse prevention interventions. In contrast, the lack of significant effects from family support and coping strategies challenges prevailing assumptions and suggests that these factors may not universally influence relapse outcomes as previously thought. The results indicate that targeted motivational strategies should be prioritized and highlight the need for a more nuanced approach to understanding and addressing the interplay between these factors. Future research should explore the qualitative dimensions of support, coping, and experience and employ longitudinal designs to establish causal relationships and refine relapse prevention strategies.

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Author Contributions

Conceptualization, IMA, MNR, AD, AW; methodology, IMA, NNR, AD, AW; investigation, IMA, MNR, AD, AW; data curation, IMA; writing—original draft preparation, IMA; writing—review and editing, IMA; supervision, MNR, AD, AW; funding acquisition, UNS. All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

Data Availability Statement

The data supporting this study's findings are available from the corresponding author upon reasonable request.

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