

## THE RELATIONSHIP BETWEEN KNOWLEDGE AND FAMILY SUPPORT AND COMPLIANCE WITH MEDICATION IN MENTAL DISORDER PATIENTS

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### ABSTRACT

**Background.** Mental disorders are a form of deviant behavior patterns that occur in individuals and result in discomfort, stress pressure, body dysfunction, decreased quality of life, and their role in society. Treatment and care must be carried out continuously to prevent recurrence so that the patient can live their life. The purpose of this study was to identify the relationship between knowledge and family support with medication adherence in people with mental disorders at the Sanur health center.

**Research Method.** This study used a cross-sectional approach. Using Kendall's Tau bivariate test. The sampling technique used was total sampling with a sample of 33 respondents. The variables are knowledge, family support, and the use of the MMAS instrument.

**Findings.** The results of the analysis showed a relationship between knowledge and adherence to taking medication, which had a significance value of  $0.044 < 0.05$  and had a correlation coefficient value of 0.334. There is a relationship between family support and medication adherence, which has a significance value of 0.016 and has a correlation coefficient value of 0.407. While the closeness of the relationship shows that the variables of family support and knowledge have a correlation coefficient of 0.407, the knowledge variable has a correlation coefficient value of 0.334. Which means that the two variables have a strong, close relationship.

**Conclusion.** There is a relationship between knowledge and family support with adherence to taking medication in people with mental disorders at the Sanur health center, Nunukan Regency, North Kalimantan.

**Keywords:** Knowledge, Family Support, Medication Adherence, Mental Disorder Patients.

### BACKGROUND

Mental disorders are a significant health problem worldwide, including in Indonesia. Mental disorders are a form of deviant behavioral patterns that occur in individuals and result in discomfort, distress, bodily dysfunction, and a decline in quality of life and role in society [1]. Treatment and care must be carried out continuously to prevent relapse so that sufferers can live productive lives [2] 70% of people with mental disorders who stop taking medication for a period of one year will relapse. Some factors that trigger relapse in people with mental disorders include a lack of family knowledge and support [3].

Most people consider mental disorders to be a very feared disease, a disease that is difficult to cure, and a disgrace to the family, so they often receive inhumane treatment [4]. Lack of knowledge about people with mental disorders can lead families to act impulsively without considering the consequences, negatively impacting the person with the disorder. This can worsen the condition of the person with the disorder [5].

Family knowledge and support regarding mental health are key elements in creating a supportive environment for people with mental disorders. Family knowledge about medication follow-up times, how to obtain the correct dosage, and following nurses' and doctors' recommendations are factors that can encourage families to visit the Community Health Center (Puskesmas) for follow-up. Adequate knowledge about mental disorders can increase family support, maintain the mental health of family members, and thus minimize family mental health problems. The support provided can take the form of motivation during treatment and home care. This support can take the form of emotional support by providing the individual with a sense of comfort, love, and care during depression [6]. Informational support includes providing advice and encouragement in monitoring the patient's medication intake. Instrumental support includes direct assistance, such as free time, facilities, or materials, such as providing the facilities needed by the patient at home, taking them to the community health center for routine check-ups, and so on. Esteem support includes helping individuals understand the occurrence of depression, its sources, and coping strategies they can use to deal with stressors. This support serves to increase self-esteem and feelings of being valued when people with mental disorders experience stress [7].

## **RESEARCH METHOD**

This study is a quantitative study using a cross-sectional approach to determine the relationship between knowledge and family support with medication adherence in patients with mental disorders at the Sanur Community Health Center, Nunukan Regency, North Kalimantan. This study used 33 respondents who were given questions through the MMAS questionnaire and a questionnaire on knowledge and family support in medication adherence. 33 respondents with the same nursing problem, namely, patients with mental disorders. This case study was conducted in May 2023. Data collection used the results of filling out the knowledge and family support questionnaire and medication adherence with the MMAS instrument. This study was conducted after submitting a research permit application at the Bhakti Mulia Pare Health College campus. Furthermore, after submitting the permit application, the researcher waited for the issuance of the research letter, then the

researcher carried out the research permit process at the Sanur Community Health Center UPTD. After the research permit letter from the Sanur Community Health Center UPTD was issued, the researcher began the data collection process by visiting the respondents' homes. A total of 33 respondents were given informed consent for approval to become respondents in this study. Next, the researcher gave respondents a questionnaire and asked them to fill in the answers on the questionnaire. Before respondents filled in their answers, the researcher provided clear information and procedures for filling out the questionnaire to avoid confusion. Elderly respondents who had difficulty filling out the questionnaire could be assisted by family members. Two weeks later, the researcher conducted the coding and data processing process. After data processing, the researcher analyzed the research results, which were then compiled into a research manuscript. Data Analysis Using the Kendall's Tau Test. Research Permit Letter Number 017/bk/STIKes.BM/Kep/III.2023.

## **FINDINGS**

The research results are presented in several sections: a description of the study location, general data covering age, gender, occupation, education, and income, and specific data on family support, knowledge, and medication adherence.

### **Research Location Overview**

The UPTD of Sanur Health Center is located in Tetaban, Sebuku, Nunukan Regency, North Kalimantan, Indonesia. Sanur Health Center is one of the health centers in Nunukan Regency that provides health check-ups, referrals, health certificates, etc. Sanur Health Center provides various health check-up programs, health certificate issuance, outpatient care, stitch removal, dressing changes, wound stitching, tooth extraction, blood pressure checks, pregnancy tests, examinations for pregnant women, child examinations, blood type tests, uric acid, cholesterol, and others. Sanur Health Center also provides referrals for BPJS patients to hospitals for further treatment.

The research findings that the age of respondents in this study is categorized into 5 groups, the largest being adults with 16 respondents (48.5%), then the early elderly age group with 6 respondents (18.2%). The early adult and late adult age groups have 5 respondents or as many as (15.2%), while the young adult age group has the smallest number, namely 1 respondent only (3%). Gender in this study is divided into 2 categories: female and male.

In terms of gender, women have the largest number, namely 22 respondents or (66.7%), then the male gender is 11 respondents or (33.3%). In the occupations that are categorized into 4 groups, the largest are the housewife group (IRT), as many as 21

respondents or (63.6%), the private sector, as many as 8 respondents or (24.2%), farmers as many as 3 respondents or (9.1%), self-employed as many as 1 respondent or (3%). There are no laborers, civil servants/military/police.

**Table 1. Participant characteristics**

| No | Respondent General Data | Classification   | Frequency (n) | Percentage (%) |
|----|-------------------------|--|---------------|----------------|
| 1  | Age                     | Early adulthood, 18 – 24 years   | 5             | 15.2           |
|    |                         | Young adults 25 – 30 years old   | 1             | 3              |
|    |                         | Adults 30 – 40 years old   | 16            | 48.5           |
|    |                         | Late adulthood 41 – 50 years   | 5             | 15.2           |
|    |                         | Early elderly 50 – 60 years old  | 6             | 18.2           |
|    |                         | Seniors 61 – 75 years old  | 0             | 0              |
|    |                         | Amount   | 33            | 100            |
| 2  | Gender                  | Woman  | 22            | 66.7           |
|    |                         | Man  | 11            | 33.3           |
|    |                         | Amount   | 33            | 100            |
| 3  | Work                    | Housewife  | 21            | 63.6           |
|    |                         | Laborer  | 0             | 0              |
|    |                         | Farmer   | 3             | 9.1            |
|    |                         | Self-employed  | 1             | 3              |
|    |                         | Private  | 8             | 24.2           |
|    |                         | Civil Servants/TNI/POLRI   | 0             | 0              |
|    |                         | Amount   | 33            | 100            |
| 4  | Education               | Higher Education (D1 – S3)   | 1             | 3              |
|    |                         | Medium Education (did not graduate from high school, or graduated from high school)  | 3             | 9.1            |
|    |                         | Low Education (no schooling, completed elementary school, did not complete junior high school, completed junior high school) | 29            | 87.9           |
|    |                         | Amount   | 100           | 100            |
| 5  | Income                  | Salary 3.95 -> 4 million   | 0             | 0              |
|    |                         | Salary 2.2 - < 4 million   | 10            | 30.0           |
|    |                         | Salary 2.1 - < 2 million   | 23            | 69.7           |
|    |                         | Amount   | 33            | 100            |

Education in this study was divided into three categories: higher education, middle education, and lower education. Lower education had the most respondents, at 29 (87.9%),

while middle education had 3 (9.1%), and higher education had the fewest respondents, at just 1 (3%).

Income in this study is divided into 2 categories, which are described as follows: the income category with a salary of 2.2-<3.9 million has 10 respondents (30.3%), while the income category with a salary of <2.2 million has the most respondents, namely 23 respondents (69.7%).

### **Analysis of Family Support, Knowledge, and Medication Compliance**

Analysis of the research results was carried out based on Kendall's Tau bivariate analysis to determine the relationship between variables and results.

**Table 2. Analysis of Family Support, Knowledge, and Medication Compliance**

| Variables      | N  | Sig.  | Correlation Coefficient (r) |
|----------------|----|-------|-----------------------------|
| Family Support | 33 | 0.016 | 0.407                       |
| Knowledge      | 33 | 0.044 | 0.334                       |

The results of the bivariate analysis showed that family support had a significance value of 0.016, and knowledge had a significance value of 0.044. This means that both variables, namely family support and knowledge, have a relationship with medication adherence in patients with mental disorders. Meanwhile, the closeness of the relationship shows that the family support and knowledge variables have a correlation coefficient of 0.407, and the knowledge variable has a correlation coefficient of 0.334. This means that there is a strong closeness between the two variables.

## **DISCUSSIONS**

### **Identification of Respondent Characteristics Based on General Data**

The results of the research data analysis stated that the age of respondents in this study was categorized into 5 groups, the largest being adults with 16 respondents (48.5%), then the early elderly age group with 6 respondents (18.2%), and the early elderly age group with 6 respondents (18.2%). In the early and late adult age groups, there were 5 respondents or 15.2%, while in young adults, the smallest number was 1 respondent (3%). Age is an important domain that influences a person's level of knowledge in life. The older a person is, the more experience they will have. The older they are, the more mature a person's level of maturity and strength will be in thinking and working. Age is a major factor in medication adherence. As research has shown [8] that early adulthood, especially in men, tends to be

non-compliant with medication due to the many activities undertaken during their productive years. The elderly also have low compliance due to decreased memory capacity and degenerative diseases. According to researchers, a person's level of education influences their attitude and knowledge in receiving information and their way of thinking about actions in managing their health. For example, research conducted by Iswanti stated that high or low levels of education do not affect medication adherence in managing therapy regimens. This is because patients with mental disorders, regardless of educational background, experience cognitive impairments in processing information when learning adherence behavior [9].

The results of the research analysis show that gender in this study is divided into 2 categories: female and male. The female gender has the largest number, namely 22 respondents or (66.7%), then the male gender is 11 respondents or (33.3%). The characteristics of male respondents are more than those of female respondents, possibly because men have an active, exploratory, aggressive, expressive, dominant, public-oriented personality, have a leadership spirit, and always want to achieve something more than women to show their existence. So from the results of the study, researchers concluded that men have an active personality, are closed when there is a problem, are aggressive, and have a leadership spirit, in contrast to women who have an open nature and want to show their own existence. This is not in accordance with research that has been studied that gender has no significant relationship, but rather a single factor or the influence of status and subjective experiences that exist in society. Therefore, from the research results, researchers concluded that men have active, withdrawn, aggressive, and leadership-oriented personality traits, in contrast to women who are open and want to assert themselves. Therefore, most people who experience mental disorders are men because they have a withdrawn or silent nature about their problems, which results in their mental disorders due to their own problems.

The results of the analysis of occupations were categorized into 4 groups, the largest of which were housewives (IRT) with 21 respondents (63.6%), the private sector with 8 respondents (24.2%), farmers with 3 respondents (9.1%), and self-employed with 1 respondent (3%). There were no laborers, civil servants/military/police. The demographic variable that influenced compliance was occupation. Patients felt better and were more likely to stop treatment due to the disappearance of symptoms. This discontinuation of treatment can cause relapse because patients do not take medication regularly. Occupation can be defined as an activity or activity carried out routinely to earn income. Occupation is defined as an activity carried out to earn income. According to the results of research conducted, studies have shown that unemployed and self-employed patients have more time to maintain

a healthy lifestyle and are more compliant with their medications. This is because they have fewer responsibilities, allowing them time to pick up their medications and remember to take them [10].

The results of the educational analysis in this study are divided into three categories: higher education, middle education, and lower education. Low education had the most respondents, 29 respondents (87.9%), while middle education had 3 respondents (9.1%), and high education had the fewest respondents, only 1 respondent (3%). Education level influences the incidence of type 2 diabetes mellitus. Education is closely related to knowledge. The higher a person's education, the greater their knowledge. Consequently, health awareness increases. Education level influences a person's way of thinking and how they act when facing something [11]. According to researchers, a person's level of education influences their attitude and knowledge in receiving information and their way of thinking about actions in managing their health [12]. Regarding education level, patients with low levels of education tend to be less concerned about their quality of life, which also impacts their treatment. Conversely, patients with higher levels of education tend to be more critical about their health. According to research, highly educated patients tend to be more concerned about the quality of their mental health and therapy.

The results of the income analysis in this study were divided into two categories, as described below: 10 respondents (30.3%) were in the income category with a salary of 2.2- <3.9 million, while those with a salary of <2.2 million had the largest number of respondents, namely 23 respondents (69.7%). This proves that family economic status does not influence the success of treatment for people with mental disorders (ODGJ). The results of this study are in contrast to research conducted by Darmawan, which stated that a person's actions are influenced by income. This is also inconsistent with the results of previous research, which stated that families with a high economic status will have an adequate level of family support. Due to low income, it is not possible for families to carry out independent treatment, given the relatively high costs. The alternative taken by families is to seek treatment at health facilities (Puskesmas) for free. This free government treatment program will provide maximum results if accompanied by family support and good cooperation across sectors[13].

#### **Analysis Results of Knowledge and Medication Compliance**

The analysis results showed that knowledge had a significance value of  $0.044 < 0.05$  and a correlation coefficient of 0.334. This means that the significance value of 0.044 is smaller than the significance level of 0.05, so it can be concluded that there is a relationship between knowledge and medication adherence. Knowledge is the result of

knowing; the core occurs after a person senses a particular object. Compliance, also known as adherence, is the degree to which a patient follows the clinical recommendations of the treating physician. Compliance is very important in healthy living behavior. Medication adherence is taking medications prescribed by a doctor at the right time and dose. Treatment will only be effective if the patient adheres to the rules for using the medication [14].

Knowledge about mental disorders is crucial for all family members, but not all family members know and understand it. Patients currently need family support and encouragement for their recovery. Increasing family knowledge will accelerate the patient's recovery, but lacking knowledge will delay recovery. However, research shows that family knowledge is still lacking and needs to be improved. Therefore, patients desperately need this support for their recovery [15].

Compliance occurs when the doctor's prescribed medication instructions and administration are followed correctly and on time. If this therapy is continued, it is important for the mental patient to understand the importance of taking medication for recovery and to be able to continue therapy correctly and without supervision from family or close relatives. Therefore, the role of family and close relatives is needed to always monitor and accompany the mental patient in taking medication regularly according to the dosage and time recommended by the doctor until the mental patient is ultimately compliant and regular in taking their medication. Knowledge or cognition is a very important domain in shaping a person's actions to do something [16].

According to researchers, behavior is based on knowledge or education. A person's behavior is based on their knowledge. If someone has good knowledge, it will influence them to behave well and show positive behavior, while people with less knowledge will influence them to behave more negatively. Likewise, for families who have less knowledge about mental disorders, the family will consider mental disorders as diseases that are used for witchcraft, and do not need medical treatment, and are shameful diseases that bring shame to the family. Knowledge based on proper understanding will foster new, expected behaviors, especially independence in carrying out mental disorder treatment, especially related to medication adherence. According to researchers, patient medication adherence is inseparable from the importance of patients having good knowledge, so that patients who comply with the prevalence of relapse.

### **Analysis of Family Support and Medication Compliance**

The analysis results showed that family support had a significance value of 0.016

and a correlation coefficient of 0.407. The significance value of 0.016 is smaller than the significance level of 0.05, so it can be concluded that there is a relationship between family support and medication adherence. Families are expected to be more understanding, knowledgeable, and compassionate, which ultimately can play an active role as the main support for patients who also improve their ability to adjust and are no longer vulnerable to the influence of psychological stressors. Nearly half of the respondents had insufficient knowledge, so it is feared that it will be difficult for families to cope with, care for, and care for one of their family members with a mental disorder. Within family support, a good parent-child relationship can improve medication adherence in children with mental disorders, where a positive parental response and acceptance of the child's condition provide a high experience of compliance for patients with mental disorders [17].

The presence of family in supporting patients in undergoing treatment programs. Patients with mental disorders who receive family support have the opportunity to develop optimally towards better outcomes, so that clients with mental disorders will have a positive attitude, both towards themselves and their environment, because the family is the first social environment they know [8]. Information and knowledge about mental disorders are crucial for all family members, but not all family members know and understand this because they perceive the sufferer as a burden. This can cause some families to feel uncomfortable with the presence of the individual experiencing mental disorders. Family information is crucial, especially for patients with mental disorders who require long-term medication, as the family is the primary source of support for the patient when health problems arise [18]. Families also have the capacity to assist vulnerable relatives in various ways, such as offering assistance and support in collecting prescriptions. One fundamental element of a family is the role of medical services. Medical service capacity is the family's ability to truly focus on the care of relatives experiencing medical conditions. Families truly need to offer positive support as allies in medication adherence by participating in observing prescription collection between healthy and vulnerable relatives[19].

According to researchers, compliance occurs when the doctor's prescription and administration instructions are followed correctly and on time. If this therapy is continued, it is important that the schizophrenia patient's family understands the importance of taking medication for the patient's recovery and can continue the therapy correctly and without supervision from family or close relatives. Therefore, the role of family and close relatives is needed as the primary support system, providing direct care for each patient's illness,

especially when the patient is at home. The family is the primary support system that provides direct care for each patient's illness, especially when the patient is at home. Family-focused care not only recovers the patient's condition, but also aims to develop and improve the family's knowledge and skills in addressing health problems within the family.

## **CONCLUSION**

The results of the research analysis that has been carried out found that there is a relationship between knowledge and compliance in taking medication in patients with mental disorders.

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