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Exploring the Role of Self-Efficacy in Antiretroviral Therapy Adherence Among HIV Patients in Regional General Hospital

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A B S T R A C T

This study investigates the role of self-efficacy in antiretroviral therapy (ART) adherence among HIV patients at RSUD Blambangan Banyuwangi using a qualitative case study approach. Data were collected from 36 purposively sampled HIV patients through in-depth interviews, direct observation, and document analysis. Thematic analysis was conducted through data reduction, coding, categorization, and conclusion drawing, with validity ensured via triangulation, member checks, and prolonged engagement. Findings reveal that higher self-efficacy enhances ART adherence by fostering consistent medication routines, resilience, and proactive communication with healthcare providers. Emotional stability, family and peer support, and medical staff guidance were identified as key factors influencing self-efficacy. The study highlights the need to integrate psychological support and self-efficacy enhancement programs into HIV care services to improve treatment adherence.

INTRODUCTION

Human Immunodeficiency Virus (HIV) is a major global public health problem (*World Health Organization*, 2023). Thirty-nine million people worldwide are living with HIV, 1.3 million people are newly infected with HIV, women and girls account for 46% of all new infections in 2022 (UNAIDS, 2023). In Indonesia, the estimated number of people living with HIV (PLHIV) in 2024 is 503,261 people, while the number of people living with HIV who know their status is 351,378 people. Of these, 217,482 people (62%) received antiretroviral (ARV) treatment, 99,463 (46%) received viral load tests, and 91,662 (42%) received viral suppression (Ministry of Health of the Republic of Indonesia, 2023).

Banyuwangi is one of the districts in East Java Province with a high rate of new HIV case finding. The HIV case finding rate in Banyuwangi in 2023 was 544 cases with a cumulative total since 1999 of 6,402 cases. Of these findings, 67.15% were on antiretroviral (ARV) treatment. And 32.85% still do not want to undergo ARV treatment for various reasons (Banyuwangi Regency Health Office, 2024). The results of the preliminary study to Blambangan Hospital, Banyuwangi Regency found that Blambangan Hospital is the first VCT service and is also one of the HIV care, support and treatment services (PDP) of 35 PDP services in Banyuwangi Regency, and is also the first referral for HIV treatment and referral for *viral load* testing services so that it can be said that Blambangan Hospital is a comprehensive service in the discovery and treatment of HIV cases.

One of the forms of case management before someone is declared ODHIV is by conducting a confirmed laboratory examination. Based on the Minister of Health Regulation No. 23 Year 2022, there are several treatments for HIV cases, one of which is communication, information and education on adherence to taking medication. Adherence to ARV medication is very important because ODHIV will take ARV medication for the rest of their lives. Compliance and commitment to treatment are needed (Setiarto et al., 2021). ODHIV patients who are not compliant will cause ARV therapy failure. ARV therapy failure will be indicated by virological failure which appears earlier and more accurate than immunological and clinical failure. This can be seen from the results of a high *viral load* examination, followed by a low number of CD4 lymphocytes and in a state of clinical failure characterized by the re-emergence of opportunistic infections. Compliant behavior of taking medication according to the dose, never forgetting, on time, and never dropping out can reduce the number of viruses in the body of ODHIV patients. With these conditions, ODHIV patients can get a good quality of life and prevent morbidity and mortality (Paramadika et al., 2023).

Behavior according to Green (1980) is influenced by three factors, namely predisposing factors, enabling factors and reinforcing factors. In the *precede-proceed* theory which are predisposing factors, enabling factors and reinforcing factors are in phase 4-5, namely educational and ecological diagnosis. This *precede-proceed* model allows a comprehensive structure for assessing health levels and quality of life needs, designing, implementing, and evaluating health

promotion programs (Notoatmodjo, 2012). There is an intervening variable between these three factors and compliance, namely self-efficacy. Bandura (1997b) considers self-efficacy to be the most important personal factor in behavior change. Self-efficacy affects a person's efforts to change risky behavior and their persistence to keep fighting (Wilandika, 2022). Self-efficacy is one of the concepts that focuses on the patient's belief in the success of treatment, including adherent behavior to treatment. This is in line with research (Jadgal et al., 2022) that increasing self-efficacy and social support can help them become better more independent in complying with treatment.

The results of previous studies, namely age, gender (Ochieng et al., 2021), education (Ekperi et al., 2020), occupation (Yunita et al., 2023) and income (Karanja, 2023) affect ARV therapy adherence. Enabling factors, namely health services (Sasono, 2021), disease severity (Kioko & Pertet, 2017), and length of illness (Chesney, 2000) and reinforcing factors, namely social support (Hilmi et al., 2018), affect ARV therapy adherence.

Good treatment adherence is expected to be in line with the quality of life of ODHIV because according to research from Rachmawati, et al. (2021) patients who have high adherence have a good quality of life. Similarly, according to research (Ahmed et al., 2021) overall, PLHIV in Pakistan who are adherent to ART have shown a good quality of life assessment. According to Busi et al. (2021), showed that PLHIV who had low adherence levels related to perceived treatment aspects of their health had a negative impact on their quality of life. In addition, another study conducted by Kioko et al, (2017) in communities in Kenya stated that marital status ($p = 0.019$) and the burden of side effects ($p \leq 0.001$) made a significant contribution to the prediction of ARV adherence. According to Rachmawati et al, (2020), patient characteristics, patient factors and family factors, affect subjective well-being and quality of life.

While many studies have been conducted on factors influencing patient adherence to antiretroviral therapy (ART), most of them tend to focus on clinical and socio-economic aspects such as education level, social support, and healthcare accessibility. However, there is limited in-depth research on the role of self-efficacy in influencing ART adherence, especially in the context of regional public hospitals serving diverse populations with unique challenges. In addition, much of the existing literature focuses on developed countries or major medical centers, leaving a knowledge gap on how self-efficacy influences ART adherence in regions with limited resources and different demographic characteristics.

This study brings novelty by exploring the role of self-efficacy in ART adherence in a district general hospital (RSUD), reflecting distinctive local challenges and contexts. This study not only fills a gap in the existing literature by providing data from an underrepresented region, but also highlights a psychological dimension of HIV patients that has often been overlooked in previous studies. By positioning self-efficacy as a key variable, this study offers a new perspective on how self-efficacy-enhancing interventions can be

designed to improve ART adherence, which may ultimately contribute to better health outcomes for HIV patients in public hospitals.

This study aims to identify and analyze the role of self-efficacy in influencing the level of adherence of HIV patients to antiretroviral therapy at the Regional General Hospital. Specific objectives include: (1) evaluating the association between self-efficacy levels and ART adherence, (2) identifying factors that influence self-efficacy among HIV patients, and (3) providing evidence-based recommendations for interventions that can improve patient self-efficacy, with the hope of improving ART adherence in a regional public hospital setting

LITERATURE REVIEW

HIV/AIDS

HIV is a virus that attacks and weakens the human immune system, disrupting its ability to fight infections and diseases so that the body is easily infected with various diseases. This HIV virus attacks or infects white blood cells / CD4 (*Cluster Differentiation 4*). The attack of CD4 cells will cause a decrease in the human immune system. If CD4 cells are attacked by the HIV virus, the human body's immunity will be chaotic and very vulnerable to infection with other viruses (Ministry of Health of the Republic of Indonesia, 2016). With the disruption of the body's immunity, a set of other disease symptoms will appear. A group of symptoms of other diseases characterized by a decrease in immunity is called AIDS (*Acquired immune deficiency Syndrome*). AIDS is a group of disease symptoms due to decreased immunity caused by HIV. A person infected with HIV does not immediately suffer from AIDS. There is about 5-10 years before suffering from AIDS (Ministry of Health RI, 2016).

AIDS is caused by the *Human Immunodeficiency Virus* which is more commonly abbreviated to HIV. This virus weakens the human immune system and works by damaging white blood cells so that there is a decrease in the function of a person's immune system so that the body is easily infected with various diseases. There is a gap of about 5-10 years from the time the virus enters until it causes symptoms, so a person infected with this virus does not immediately suffer from AIDS (Ministry of Health of the Republic of Indonesia, 2016).

HIV infection will attack the immune system in the human body. When the HIV virus attacks the immune system, it will have an impact on the condition of *immunodeficiency* or weakening of the immune system, this happens because the HIV virus will disrupt the balance and function of CD4 cells in the body. The HIV virus will then attack dendrite cells and macrophages in the body, enter through the bloodstream and mucosal tissue then the infection process will occur in the lymphoid glands and at that time the virus will be in a latent condition for a long time until it becomes active again and the symptoms of AIDS appear (Yuliyanasari, 2016.

In the Ministry of Health (2012) in the guidelines for the implementation of prevention of HIV and Syphilis transmission from mother to child for health workers, it is stated how HIV is transmitted as follows:

A. Genital Fluids
   The sperm and vaginal fluids of people with HIV have high enough viral load to allow transmission, especially if accompanied by other STIs. Therefore, all risky sexual intercourse can transmit HIV, whether genital, oral or anal.
B. Blood or Tissue Contamination
   HIV transmission can occur through blood contamination such as transfusion of blood and its products (plasma, platelets) and organ transplants contaminated with the HIV virus or through the use of non-sterile medical equipment, such as unsafe injections, e.g. shared syringes among people who inject drugs.
C. Perinatal
   Transmission from mother to fetus or baby transmission to the fetus occurs during pregnancy through the infected placenta; while to the baby through blood or genital fluids during delivery and through breast milk during lactation.

Self-Efficacy

Self-efficacy according to Bandura in (Wilandika, 2022) is a feeling of self-control facilitating health behavior change. Self-efficacy involves a feeling of control over one's environment and behavior. Self-efficacy beliefs are perceptions that determine whether health behavior change will begin, how long the effort will take, and how long it will last in the face of obstacles and failure. Self-efficacy influences a person's challenge in choosing goals. Someone with high self-efficacy will choose more difficult goals (bandura and locke, 2003 in (A Wilandika, 2022).

Self-efficacy is a concept developed by Bandura based on social cognitive theory. In his theory, Bandura reveals that human action is the result of a reciprocal interaction between the individual, the environment, and behavior, known as the "*triadic reciprocal causatio*" principle. Self-efficacy theory is a key component in social cognitive theory which generally says that individual behavior is influenced by the interaction between the individual, the environment, and cognitive factors such as outcome expectations and self-efficacy. Bandura defines self-efficacy as an individual's assessment of his or her ability to carry out certain patterns of behavior.

According to Wilandika (2022) self-efficacy can be understood or developed through a number of information, including:

1. Enactive mastery experience is one's interpretation of past success. Individuals who engage in a task or activity interpret the results of their actions, use the interpreted results to develop confidence in their ability to perform the next task, and act with established confidence. Typically, interpreting outcomes as success increases self-efficacy.
2. The experience of the success of others (vicarious experience) is the process of observing or learning from the experiences of others. Self-efficacy will increase if influenced by relevant patterns. Important role models who can help build confidence will influence a person's life.

3. Self-efficacy can be achieved or weakened through social persuasion. The impact of social persuasion is somewhat limited, but under the right conditions, persuasion can increase or decrease one's effectiveness.
4. Physiological and emotional states can affect a person's self-efficacy. Emotional states such as anxiety, stress, arousal, and mood also provide information about self-efficacy

Bandura in (A Wilandika, 2022) states that there are three dimensions of self-efficacy, namely magnitude, generality, and strength. The picture and explanation are as follows:

Figure 1. Dimensions of Self-Efficacy

1. The magnitude dimension relates to the difficulty of the task. If the tasks given to a person are organized by difficulty level, self-efficacy will be different and divided into simple, medium or high tasks. a person will only perform actions that they feel capable of doing, except for tasks that are considered beyond their ability.
2. The generality dimension involves a set of personal beliefs in which a person feels confident about their abilities. Individuals can assess their confidence in performing activities and think about avoiding failure in different areas or only in certain areas.
3. The strength dimension, this dimension relates to the level of strength or ability of a person to their beliefs. Someone who has strong beliefs and persistent efforts is able to achieve the expected goals despite difficulties and obstacles.

According to Bandura (1997), there are several factors that can affect self-efficacy in individuals, among others:

1. Culture
   Culture influences self-efficacy through the influence of values, beliefs, and self-regulatory processes in assessing self-efficacy and as a result of beliefs in self-efficacy.

2. Gender
   Gender differences also have an impact on self-efficacy. This is reflected in Bandura's view that women tend to have high self-efficacy in managing their roles. Women who have dual roles, both as homemakers and professionals, tend to have higher self-efficacy than men who only work.
3. Nature of the task at hand
   The level of task complexity faced by an individual will affect the individual's assessment of their own abilities. The more complex the task, the more likely individuals will have a lower self-assessment of their abilities. Conversely, if individuals are faced with an easy and simple task, they tend to have a higher self-assessment of their abilities.
4. External intensive
   Another factor that can affect individual efficacy is the incentives they receive. Bandura suggests that one of the factors that can increase self-efficacy is "competent contingent incentive," which is an incentive given by others that reflects the success of the individual.
5. Status or role of the individual in the environment
   Individuals who have a higher social status tend to have a greater degree of control, so their self-efficacy is also higher. On the other hand, individuals who have lower social status may have a more limited level of control, so their self-efficacy tends to be lower.
6. Information about self-efficacy
   Individuals who have high self-efficacy will tend to respond positively to positive information received about themselves. Conversely, individuals with low self-efficacy will be more likely to respond negatively to negative information received about themselves.

METHODOLOGY

This study used a qualitative approach with a case study design to explore the role of self-efficacy in adherence to antiretroviral therapy (ARV) at RSUD Blambangan Banyuwangi. The study subjects consisted of 36 HIV patients who were on ARV therapy for at least six months, aged 18 years and over, and willing to become informants by providing written consent. The main informants were patients selected using purposive sampling technique, while additional informants included health workers, such as doctors, nurses, or HIV counselors who have experience in patient assistance. Data were collected through in-depth semi-structured guided interviews, participatory observation during patient-health worker interactions, and documentation in the form of patient medical records related to adherence to therapy schedules and laboratory results. The focus of the research is directed at understanding how self-efficacy affects patient adherence to ARVs and the supporting or inhibiting factors in the context of service delivery at RSUD Blambangan Banyuwangi.

Data analysis was conducted using a thematic analysis approach. This process involved verbatim transcription of interview and observation data, identification of key themes through open coding, grouping of themes with axial coding, and integration of categories to build a comprehensive narrative.

Data validity was ensured through source triangulation by comparing information from patients, health workers, and documents; method triangulation that included interviews, observations, and documentation; and member checking to verify interview results with informants. In addition, an audit trail was developed to ensure transparency of the research process, including field notes, interview transcripts, and analysis results. This research is expected to provide in-depth insight into the role of self-efficacy in supporting the success of ARV therapy at RSUD Blambangan Banyuwangi and become a reference for developing strategies to improve therapy adherence based on strengthening the self-efficacy of HIV patients.

RESEARCH RESULT

The results showed that self-efficacy plays a central role in encouraging HIV patients at RSUD Blambangan Banyuwangi to adhere to antiretroviral (ARV) therapy. Patients with high levels of self-efficacy tend to have strong beliefs that they can manage their treatment well despite facing various challenges. They have the ability to manage time, cope with side effects, and be consistent with the treatment schedule. Self-efficacy has been shown to be a key psychological factor that influences HIV patients' long-term adherence to antiretroviral (ARV) therapy. Patients with high levels of self-efficacy have a greater ability to cope with various therapeutic challenges, including drug side effects, social stigma, and daily life dynamics that can disrupt treatment schedules. They believe in their ability to maintain their commitment to therapy, despite facing psychological and social pressures. This belief helps them stay focused on the long-term goals of improving health and preventing serious complications. Research findings at RSUD Blambangan Banyuwangi show that patients who have a deep understanding of the importance of therapy and believe in the effectiveness of ARVs are better able to organize their time and resources to ensure treatment schedules are met without disruption.

The results of this study also highlight the importance of social support from family, friends and peer groups in building patients' self-efficacy. Patients who receive emotional and practical support from loved ones tend to feel more confident to face the challenges of therapy. Family who provide moral encouragement, such as reminders to take medication or accompanying patients on hospital visits, are important factors that support the success of therapy. In addition, the existence of peer support groups at RSUD Blambangan Banyuwangi provides a platform for patients to share experiences, get inspiration, and feel accepted. These groups play an important role in reducing the sense of social isolation often experienced by HIV patients, especially those who experience discrimination or stigma from their environment.

There are several factors that increase patient self-efficacy, including emotional support from family, healthcare professionals, and the peer community. Patients who feel psychologically supported show greater confidence in facing social stigma and therapeutic challenges. In addition, education provided by HIV counselors at RSUD Blambangan is an important

element in increasing patient understanding and confidence in ARV therapy. Health workers at RSUD Blambangan have a strategic role in supporting patient self-efficacy through continuous education, counseling, and mentoring. HIV counselors, nurses, and doctors provide clear information about the benefits of ARV therapy, the mechanism of action of drugs, and how to manage side effects. This education not only increases patients' understanding but also strengthens their belief that therapy can have a significant positive impact on quality of life. Health workers also provide direct motivation through empathic interpersonal interactions, so that patients feel supported holistically. The sustainability of this intervention is an important element in creating an environment that is conducive for patients to adhere to therapy.

In contrast, patients with low self-efficacy often face significant barriers in adhering to ARV therapy. The main barriers include drug side effects, lack of social support, and fear of stigma. Some patients reported that side effects such as nausea and dizziness caused them to hesitate to continue treatment. Social stigma was one of the main factors hindering adherence. Patients who feel socially isolated often lose the confidence to follow treatment consistently. Stigma also causes some patients to be reluctant to disclose their status to family or friends, which in turn reduces the potential support they can receive. Health workers at RSUD Blambangan act as key catalysts in improving patients' self-efficacy. They provide ongoing education on the importance of adherence to ARV therapy, the positive impact of long-term therapy, and strategies to cope with drug side effects. HIV counselors at RSUD also actively motivate patients to remain optimistic and confident.

Patients with high self-efficacy develop various strategies to manage therapy. They use reminders, such as alarms on their phones, to take their medication on schedule. They also share their experiences with other patients who have successfully undergone therapy, which provides inspiration and emotional support. Knowledge of the mechanism of action of ARVs and their impact on the immune system proved to be an important factor that increased self-efficacy. Patients who understand how ARVs work are more likely to adhere to the treatment schedule as they realize the importance of consistency in achieving optimal results. Family support has a significant positive impact on patient adherence. Patients who get moral encouragement from their families tend to have higher levels of self-efficacy and show better adherence to the treatment schedule. Peer support groups at RSUD Blambangan help patients to share experiences, provide motivation, and reduce loneliness. In this group, patients get practical and emotional information from those who have had similar experiences, thus increasing their confidence.

The economic condition of patients was also an important finding. Patients with financial constraints often feel pressured to access routine therapy. However, subsidy policies and government programs help reduce these barriers, thereby improving adherence. A supportive social environment provides a sense of security for patients to undergo ARV therapy. Conversely, an unsupportive or judgmental environment can demotivate patients and worsen their self-efficacy. Patients who consistently undergo ARV therapy

report improved quality of life, including health stability, ability to perform daily activities, and increased life expectancy. This also serves as additional motivation for other patients to improve their adherence

Although self-efficacy can be a key driver, social stigma remains a significant barrier that reduces patients' motivation to undergo therapy consistently. Many patients report that they often feel discriminated against or judged by their social environment. Fear of stigma leads some patients to choose to hide their HIV status, which in turn limits their access to social support that could improve adherence. Stigma also impacts patients' self-efficacy, as they feel less confident to take the necessary steps to maintain their health. Therefore, community-based interventions that emphasize reducing social stigma need to be prioritized to create a more inclusive and supportive environment for HIV patients.

This study suggests the need to strengthen self-efficacy-based interventions. More personalized education and intensive counseling can be strategic steps to improve adherence. In addition, strengthening peer support groups and integrating anti-stigma programs in the community are important steps. The results of this study provide practical and theoretical implications in the management of ARV therapy. Increasing self-efficacy not only supports the success of therapy but also strengthens patients' mental resilience in facing challenges. Health workers need to continue developing a holistic approach, including education, emotional support, and strengthening social networks to improve the success of ARV therapy at RSUD Blambangan Banyuwangi.

DISCUSSION

Self-efficacy, as outlined by Bandura (1997), is an individual's belief in their ability to carry out actions necessary to achieve certain outcomes. In the context of HIV treatment, self-efficacy plays a major role in ensuring patients adhere to antiretroviral (ARV) therapy. The study by Davis et al. (2020) showed that patients with high self-efficacy are more likely to consistently undergo therapy, even in the midst of various challenges, such as drug side effects and social stigma. This finding was also seen at RSUD Blambangan Banyuwangi, where patients with higher self-efficacy showed better adherence compared to patients with low self-efficacy.

Self-efficacy not only serves as a motivator but also as a reinforcer of the patient's self-regulation ability. According to O'Cleirigh et al. (2017), patients with high self-efficacy tend to be better able to manage medication time, deal with side effects, and maintain a healthy lifestyle. The findings at RSUD Blambangan Banyuwangi show that patients who have confidence in their ability to manage therapy also show a higher level of discipline in complying with ARV protocols. This confirms that self-efficacy supports the development of active coping strategies that are essential in therapy management.

Social support is one of the main factors that drive self-efficacy. Research conducted by Kim et al. (2021) shows that family and peer groups can be a source of emotional support and motivation for HIV patients. At RSUD Blambangan, patients who received encouragement from family and friends

reported higher confidence in facing ARV therapy. This support helps reduce psychological pressure, increase self-confidence, and provide a sense of optimism in facing treatment. The social environment has an important role in the formation and strengthening of self-efficacy. The study by Mugavero et al. (2020) shows that supportive interpersonal relationships can strengthen the confidence of HIV patients to continue to adhere to therapy. At RSUD Blambangan, the support patients receive from health workers, family, and peer support groups contributes significantly to their motivation to continue undergoing treatment. Patients who feel emotionally and socially supported tend to have a more positive perception of their ability to manage therapy.

Although high self-efficacy can support adherence, some barriers remain, especially social stigma. According to Turan et al. (2019), HIV-related stigma can decrease patients' motivation to seek treatment, which negatively impacts their adherence. At RSUD Blambangan, patients who feel isolated or judged by their community tend to have low levels of self-efficacy. This confirms the need for community-based interventions to reduce the social stigma experienced by HIV patients. Education and counseling are important elements in improving patient self-efficacy. A study by Fisher et al. (2020) found that patients who were given clear information about the mechanism of action of ARVs, the positive impact of therapy, and how to manage side effects were more likely to comply with treatment. At RSUD Blambangan, education conducted by HIV counselors provides patients with a deeper understanding, which in turn increases their confidence in undergoing therapy. Peer support groups at RSUD Blambangan play an important role in building patient self-efficacy. Patients who join these groups gain first-hand experience from people with similar backgrounds, which provides motivation and inspiration. This finding is in line with research by Simoni et al. (2022), which showed that peer support groups can increase patient confidence through sharing experiences and emotional reinforcement.

Self-efficacy not only supports adherence to ARV therapy but also has a positive impact on patients' quality of life. Research by Williams et al. (2021) showed that patients with high self-efficacy tend to report improved physical and mental health. At RSUD Blambangan, patients who adhere to therapy consistently report improved health stability, ability to work, and better social relationships. Overcoming barriers that affect self-efficacy and adherence requires a holistic approach. Community-based interventions involving health workers, families and communities can be an effective solution. According to Okello et al. (2023), the integration of public education programs with anti-stigma policies can create a more inclusive environment for HIV patients. At RSUD Blambangan, this program could involve public awareness campaigns as well as training for health workers to provide better support to patients.

Despite the positive impact of self-efficacy, psychological challenges such as depression and anxiety remain major barriers. According to Reinius et al. (2018), HIV patients with high levels of anxiety tend to have low self-efficacy and poor levels of therapy adherence. At RSUD Blambangan, patients facing emotional distress often require additional interventions, such as psychological

counseling. These interventions help patients overcome fears or negative feelings that may affect their confidence to undergo therapy. Hospital-based education programs have a direct impact on increasing patient self-efficacy. A study by Lombe et al. (2019) revealed that patients who received intensive training related to understanding HIV and ARV therapy showed a significant increase in therapy adherence. At RSUD Blambangan, a group-based education program involving health workers, such as doctors and specialist nurses, provided patients with in-depth insights on how to face the challenges of therapy. Patients reported an increase in their confidence after receiving comprehensive and relevant information.

The results of this study have important practical and policy implications. Increasing self-efficacy should be a major focus in the management of ARV therapy. Patient-centered programs, such as intensive counseling, continuing education, and peer support groups, need to be expanded at RSUD Blambangan. In addition, government policies that support treatment subsidies and reduce social stigma must continue to be strengthened. With a holistic approach, HIV patients can achieve higher adherence to therapy, ultimately improving their quality of life and reducing the overall burden of disease.

CONCLUSIONS AND RECOMMENDATIONS

This study highlights the pivotal role of self-efficacy in enhancing adherence to antiretroviral therapy (ART) among HIV patients at RSUD Blambangan Banyuwangi. Patients with higher levels of self-efficacy were more likely to manage their therapy effectively, demonstrating greater commitment to medication schedules, coping with side effects, and integrating treatment into their daily routines. The findings reveal that self-efficacy is influenced by multiple factors, including psychological resilience, social support, and access to accurate health education. Moreover, barriers such as stigma, emotional distress, and economic challenges can undermine self-efficacy and, consequently, adherence. Addressing these factors is essential for improving treatment outcomes and fostering a holistic approach to HIV care.

To enhance ART adherence, RSUD Blambangan Banyuwangi should implement multifaceted interventions targeting the enhancement of self-efficacy. First, developing structured support groups led by trained counselors or peer mentors can provide a platform for sharing experiences and fostering mutual encouragement. Second, integrating mental health services into HIV care can address psychological barriers like anxiety and depression, which often undermine self-efficacy. Third, expanding educational programs tailored to patients' specific needs can help dispel misconceptions about ART and equip them with practical skills for managing treatment. Lastly, advocacy efforts to reduce stigma within the community are crucial for creating an environment conducive to sustained adherence. Collaborative efforts between healthcare providers, policymakers, and local communities will be instrumental in ensuring long-term success in HIV treatment and care.

ADVANCED RESEARCH

Future research on the role of self-efficacy in antiretroviral therapy (ART) adherence should delve deeper into longitudinal studies to explore the causal relationships between self-efficacy, adherence behaviors, and treatment outcomes over time. Advanced studies could also examine the intersectionality of socio-economic, cultural, and technological factors influencing self-efficacy among diverse HIV patient populations. For instance, leveraging digital health tools such as mobile applications and telemedicine platforms could provide insights into innovative ways to enhance self-efficacy through real-time monitoring and personalized feedback. Additionally, comparative studies across regions with varying healthcare infrastructure, such as urban and rural settings, would yield valuable data on contextual challenges and opportunities in fostering adherence. Incorporating neuropsychological assessments could further illuminate the cognitive and emotional mechanisms underpinning self-efficacy, offering a comprehensive foundation for developing tailored interventions.

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