



RESILIENCE OF HUMAN IMMUNODEFICIENCY VIRUS PATIENTS: A CONCEPT ANALYSIS

Eka Diana Permatasari¹, Untung Sujianto², Suhartini Ismail^{3*}

¹Nursing Science and Profession Study Program, Faculty of Health, Universitas Bhamada Slawi, Indonesia

²Medical Surgical Nursing Division, Department of Nursing, Faculty of Medical, Universitas Diponegoro, Indonesia

³Emergency & Critical Care Nursing Division, Department of Nursing, Faculty of Medical, Universitas Diponegoro, Indonesia

ABSTRACT

*Corresponding Author:

Suhartini Ismail

Emergency & Critical Care Nursing Division, Department of Nursing, Faculty of Medical, Universitas Diponegoro, Indonesia

suhartini.ismail@fk.undip.ac.id

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The terminology of HIV resilience used in the definition is still ambiguous. These inconsistencies make it difficult to understand the findings related to resilience in HIV research. Concept analysis of the resilience of HIV patients is still limited in terms of its development to clarify its meaning. This concept analysis aims to identify the concepts of the resilience of HIV patients by identifying the attributes that determine the concept, antecedents, and consequences. This study uses the Walker and Avant method with eight steps of analysis. The results of the analysis reveal the resilience attributes of HIV patients, including the characteristics of individual resilience, self-competence, and social competence. The antecedents of the resilience of HIV patients are personal capacity as a source of individual resilience, interpersonal resilience resources, and spiritual strength. The consequences of the concept of HIV resilience include positive outcomes for people living with HIV in HIV care and psychological well-being. The concept of resilience in HIV patients is defined as a concept that depends on many factors that contribute positively to people living with HIV, and this concept can be used for a literature review for the development of further research related to HIV resilience.

Keywords:

Concept analysis, HIV, Resilience

BACKGROUND

Human Immunodeficiency Virus (HIV) is an infectious disease with adverse effects on patients. Generally, the negative effect of HIV is 34.31% in the form of physical problems, and 40% are psychological ones (Brewer et al., 2020). The negative effects

of HIV contribute to patients' difficulty living with HIV throughout their lives. Psychological problems, family problems, and social problems are among the problems. The psychological problems in HIV patients are closely related to psychological stress. Previous studies showed that 7.8% of People Living With HIV/AIDS (PLWHA) suffered from psychological

stews. The most common problems for people living with HIV/AIDS are depression and anxiety. The psychological problem could affect the life quality of PLWHA and their family (Basha et al., 2019). The difficulty of the family problem can be found in the family, such as prejudice from the family members. Family plays a significant role in supporting PLWHA, as less support contributes to a more significant negative effect. The difficulty of the social problem is described as patients' experience in coping with a negative stigma and the lack of information about the infection, treatment, and care perspectives. The lack of information affects PLWHA's life quality (de Jesus et al., 2017).

The negative impact of HIV will cause problems for HIV patients in dealing with HIV conditions. This problem will have a worse impact on the condition of HIV patients. One of the harmful impacts is caused by stigma and discrimination from the environment, so PLWHA are afraid to have relationships with other people and withdraw from various social activities. If this problem continues, it will impact the lack of support for people living with HIV facing daily challenges. Furthermore, the negative social interactions brought on by stigma may impede patients from receiving consistent treatment and, as a result, from receiving poor HIV treatment. In addition to poor HIV treatment, it would also result in poor psychosocial adaptation and provide an opportunity for the virus to keep replicating so that it could lower immunity (Basha et al., 2019). The prolonged condition would negatively affect the treatment of PLWHA.

However, based on the previous study, it was explained that patients with HIV could rise from the difficulties through positive adaptation. This process is resilience (Brewer et al., 2020). The percentage of resilience condition of patients with HIV showed that 10% - 20% of patients had a high level of resilience (Brown et al., 2020; Kalomo et al., 2020; Wen et al., 2020). The resilience level of populations consisting of patients with HIV was mostly at a moderate level (>49.05%) (de Araújo et al., 2017; Kalomo et al., 2020; McGowan et al., 2018). The patients' resilience positively contributed to their quality of life improvement by prompting positive psychology to cope with physical and psychological problems (Sadler et al., 2017; Wen et al., 2020).

Resilience could be translated as resistance. According to American Psychological Association, resilience is adapting well in the face of adversity or significant sources of stress, such as family problems or serious health problems. However, some researchers define the resilience of HIV patients as a positive

adapting process, a framework of wealth, a strength-based approach, method, skill, and personal identity to cope with a stressful situation. There is a specific mechanism discrepancy in the resilience profile in patients with HIV, whether it is a form of positive adaptation and response to the stigma to get the result of HIV treatment (Adegoke & Steyn, 2017; Brewer et al., 2020; de Araújo et al., 2017; Kaunda-Khangamwa et al., 2020a).

Most research defines the resilience of patients with HIV as a form of adaptation. Other studies also describe it as mental health symptoms (either positive or negative), endurance, coping, and a revival. Some of the terminologies used in the definition are ambiguous. Most of the definition of resilience involves the fact that the response to adversity is the main component. However, factors associated with adversity affecting the definition's resistance improvement have not been investigated. The inconsistency contributes to the difficulty in understanding the finding of resistance or resilience in HIV-related research. In addition to comparing the findings connected to resilience in any research, many definitions presented contain ambiguous terminology and/or incorporate confusing qualification components (Peless et al., 2021).

In terms of development to clarify the meaning, the concept analysis of HIV patients' resilience is restricted. There are, however, some studies and reviews on the resilience of HIV patients. A clear concept analysis of the resilience of HIV patients is required to comprehend the phenomena due to the variety of terminology and definitions utilized. The study aims to identify the resilience of HIV patients by identifying the factors that influence concept, antecedent, and consequence. The complete study would help further positive psychology studies in HIV patients in the future.

METHOD

Concept analysis is a formal and strict process to transparently explore the abstract concept, define it from a similar concept, and use it in the theoretical formulation. This research used The Walker and Avant method of concept analysis (2011), including eight steps of analysis: 1) choosing a concept; 2) determining the purpose of analysis; 3) identifying all uses of the concept; 4) defining attributes; 5) identifying a model case; 6) constructing an additional case; 7) identifying antecedents and consequences; and 8) defining empirical reference (Efendi et al., 2019).

A literature search was conducted using four elec-

tronic databases: ScienceDirect, SpringerLink, EBSCO, and PubMed. The inclusion criteria in selecting this article included articles on the topic of HIV resilience, there was no limitation on the year of publication, and an International publication article with a rating of Q1-Q4. The exclusion criteria for selecting this article included the topic of general resilience and types of intervention research articles. The scope of the search was confined to nursing literature. Between 2000 and 2021, the research articles were taken and reviewed, and the internationally published Q1-Q4 level publications. The terms "resilience in HIV" and "HIV patient's resiliency" were used. A preliminary literature search yielded 90 publications. 37 publications were evaluated and analyzed after the title relevancy, abstract, method, and research finding were identified. The 37 articles were then examined and identified to determine the attribute, antecedent, and consequence. The attributes, antecedents, and consequences were categorized in each theme to produce a concept analysis of attributes, antecedents, and consequences of patient resilience.

RESULT

Resilience of HIV Patients

An interesting concept to analyze is the resilience of patients with HIV. This concept correlated to the patients' positive adaptation to cope with difficulties and adversities during life with HIV. The process resulted in positive impacts through the formation of self-defense. The concept selection was also the base for future research related to resilience as a positive psychological process in patients with HIV in coping with adversities. Patients' resilience positively affected the treatment process and the activities of living with HIV.

The resilience of patients with HIV is a concept applied to research and practice of HIV patients' psychological health. Understanding the concept involves an integrative literature review about the concept of resilience of patients with HIV by using The Walker and Avant Method. The concept analysis of the resilience of patients with HIV determines the resilience attribute of patients with HIV based on the literature on the previous research. The explanation of antecedent and consequence is set to cases focussing on the population of HIV/AIDS, which experienced adversity and potent to resilience. The finding on the resilience of patients with HIV resilience contributes to the concept of resilience in HIV for future research.

Identification of the Resilience of HIV Patients

The resilience of patients with HIV is stated in some literature as "adapting process," "result of adaptation," and "revival" from adversity. Those terms are similar to the chosen concept. According to Oxford Learner's Dictionaries (2021), resilience is the ability of people or things to recover quickly after something unpleasant, such as shock, injury, etc. Specifically, the resilience of patients with HIV is defined as the ability of PLWHA to get back to the psychological and social norms after the adversities caused by the HIV-positive diagnosis (Kumboyo et al., 2018), the resource to cope with adversities (Fletcher et al., 2020), or the revival from a bad event such as HIV diagnosis (Emlet et al., 2017). Therefore, in this case, the definition of resilience is a revival from the adversities caused by HIV and a resource to help patients with HIV cope with adversities.

Attributes of the Resilience of HIV Patients

Based on the related literature, it was found that the attributes of the resilience of patients with HIV are: 1) individual resilience characteristics; 2) self-competence; and 3) social competence.

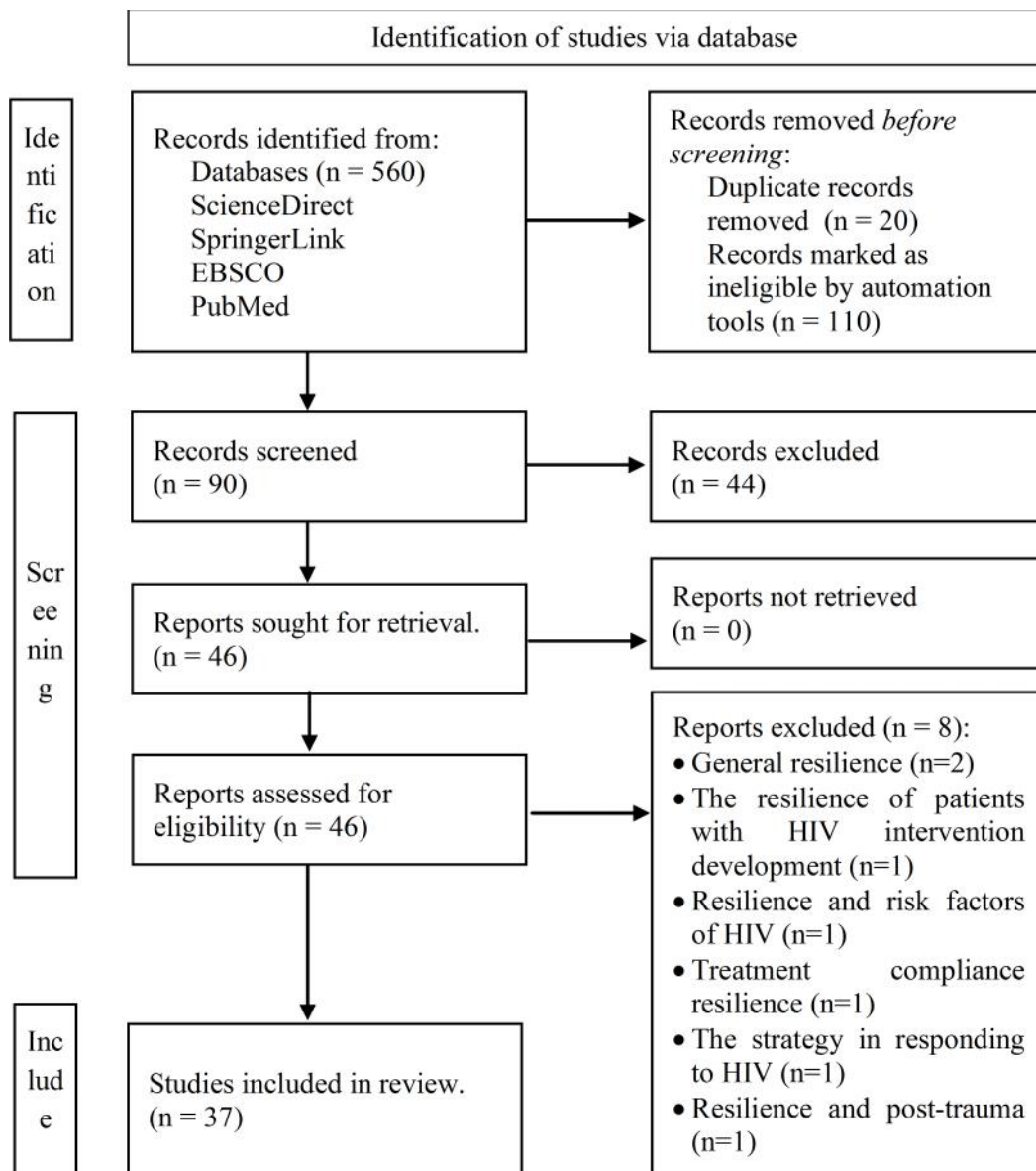
Individual Resilience Characteristic

According to Merriam-Webster.com Dictionary, character is defined as a distinguishing trait, quality, or property. Further, Mathieson and Wall argue that individual characteristics involve some aspects, including gender, age, education level, and experience, which enable differentiation between individuals. Individual characteristics such as friendly, optimistic, intelligent, and humorist personalities will help the individual cope with the adverse situation (Brennan, 2017). Meanwhile, based on the literature analysis, the attribute of the resilience of patients with HIV is related to the individual resilience characteristics of an HIV patient in the form of confidence, optimism, personal belief, self-consciousness, positive attitude in doing things, positive internal cognitive, self-acceptance for being HIV positive, the appreciation to education and work, high self-efficacy and self-esteem, the stability of personal identity and emotional, also positive personality.

Self-Competence

"Competence" refers to an attitude or personal attribute supporting the working area. According to Chung and Lo, individual competence is a skill, knowledge, and ability that an individual should possess in completing a job or achieving a goal (Wong, 2020).

Figure 1. The Strategy of Literature Research and Selection with Prisma Flow



The literature analysis found that the attribute of the resilience of patients with HIV related to self-competence, such as skill and ability related to coping strategy, problem-solving ability, HIV revealing ability, re-adapting ability, emotional control, framing positive goals, ignoring/coping with stigma, giving the best effort amidst the adversities, positive reaction toward adversities.

Social Competence

Social competence is identified by networking with people around HIV patients to cope with adversity. Social competence involves social skills, social communication, and interpersonal communication (Adegoke & Steyn, 2017). People with HIV have a high capacity to adapt, recover, and achieve resilience in coping with adversity (de Araújo et al., 2017).

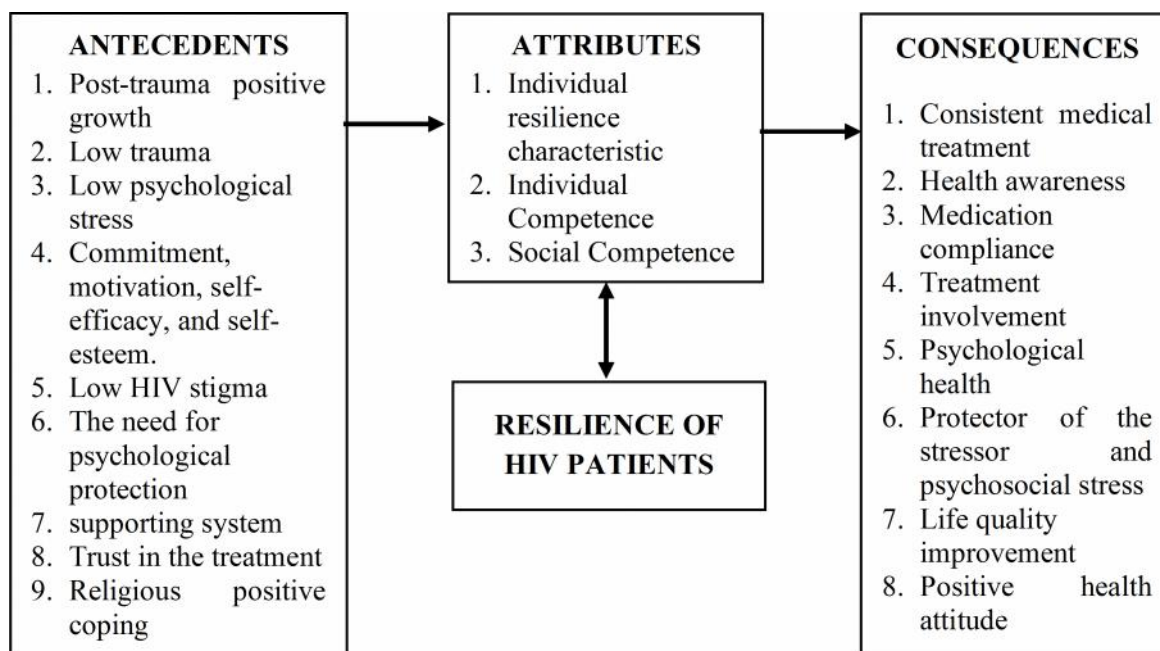
The resilience of patients with HIV related to social competence is found. The results of the articles review about social competence include the ability to build positive relationships with friends, and family, support people, the community, pro-social activist, the willingness to help others have active socialization, and the ability to involve in any activities.

Model Case and Contrary Case of the Resilience of HIV Patients

Model Case

Mrs. R, 27 years old, was a patient with HIV diagnosed in 2012. Mrs. R was diagnosed with HIV as her husband transmitted the virus. At first, Mrs. R was shocked, gave up, was in denial, and lost her life expectancy. The adversities felt by Mrs. R in living with HIV were the side effect of the treatment, the

Figure 2. Concept Analysis of the Resilience of HIV Patients: Attributes, Antecedents, Consequences



stigma of HIV, and stress in life. However, Mrs. R's condition now is way better. Mrs. R revived after joining an HIV group and was active in Peer Group activities. Mrs. R had some adversities related to the side effect of the treatment. However, she was able to handle and even made a drug-taking strategy. Besides, Mrs. R was also supported by the surrounding people and family, especially the children, by accepting Mrs. R's condition.

On the other hand, Mrs. R also possessed motivation and a solid belief to show that she was healthy. Now, Mrs. R can reveal her status to others without fearing discrimination. It positively affects Mrs. R in the form of normal physical condition, the ability to actively do activities, socialize, and have long life expectancy.

Contrary Case

Mrs. G was an HIV patient diagnosed in 2021 while carrying a baby. Mrs. G's response at that time was denial, confusion, beat, and sadness. Mrs. G denied any treatment and counseling related to her treatment because she was still in the HIV examination process. She demanded to keep her condition secret from everyone except her husband and biological mother. On the other hand, at present, Mrs. G only told her husband's condition. She did not tell her mother. Because she fears the stigma from the surrounding people, she tries to hide her condition. Mrs. G always asks about her pregnancy related to her condition. She is worried about her present condition and still trying to accept her condition.

The attributes in the case model describe the complexity of HIV patients' resilience. Mrs. R owns confidence, a positive attitude, and acceptance toward HIV. Those characteristics contribute to Mrs. R's ability to reveal her HIV condition to other people without the fear of discrimination, solve her problem, and put strategies to cope with her problem. Mrs. R also possesses social competence by keeping her social activities regular. The first case showed that patients faced some adversities with HIV. However, amidst the problems, Mrs. R could pass everything well and survive as she could adapt and get support from herself and others. The resilience of Mrs. R positively affects her physical and psychological condition.

Meanwhile, in the second case, it is shown that Mrs. G cannot build resilience yet. She is still trying to accept her HIV condition. In addition, she is afraid of HIV stigma and the development of the disease.

Antecedents and Consequences of the Resilience of HIV Patients

Antecedent of Resilience

In the case of patients with HIV, there are some antecedents of resilience. The antecedents to building the resilience of patients with HIV such as personal capacity as the resource of individual resilience, interpersonal resilience, and spiritual endurance. Personal capacity can be in the form of a positive post-traumatic condition, low trauma (depression and anxiety), low psychological stress, commitment, motivation, self-efficacy and self-esteem, self-acceptance

to live with HIV, physical and psychological struggle, and the ability to adapt. Interpersonal resilience resources such as low HIV stigma, the need for psychological protection, the supporting system (family, friends, healthcare), also interpersonal, informational, social, emotional support, adaptive coping, and individual belief in the therapy process. Spiritual power could be in the form of spiritual belief and values as supporting and coping agents, active spiritual involvement, positive religious coping, and a religious supporting system.

Consequences of Resilience

The consequences of resilience in the case of patients with HIV, based on the literature analysis, are positive for HIV treatment and the mental and physical welfare of patients with HIV. The result of positive HIV patients, such as consistent medical treatment, and health awareness, is identified by positive health behavior, treatment compliance, and treatment involvement. The formation of mental and physical welfare in patients with HIV, such as psychology, protection from psychosocial stress, and life quality improvement.

Empirical Resilience of HIV Patients

Empirical reference could be a valid and reliable measuring instrument to investigate the resilience level of patients with HIV. The scales of the resilience of patients with HIV used in many research are the Brief Resilience Scale (BRS), Connor-Davidson Resilience Scale (CD-RISC), PLHIV Resilience Scale, Resilience Assessment Scale (RAS), R-PLA, Resilience Scale for Adults (RSA), Perceived Past Health-Related Resilience Outcomes, dan Resilience Scale-14 (RS-14), dan Child Youth Resilience Measurement (CYRM-28).

BRS is developed to assess someone's ability to revive or recover from stress, representing the real meaning of resilience and the only scale to assess resilience (Sánchez et al., 2021). CD-RISC assesses five factors: self-competence, high standard, persistence; assessment of belief on intuition, the tolerance to the negative effect and tolerance to adversity; assessing spiritual effects (de Araújo et al., 2017). PLHIV resilience scale assesses many kinds of resiliences to measure the resilience among PLWHA, facilitates the tracking of self-changing from time to time, and also gives information about intervention, policy, and advocacy (Gottert et al., 2019). RAS consists of 32 items with the dimensions of resilience, such as positive acceptance toward change, spirituality, resignation, self-competence, and the integrity

to cope with adversity (de Brito & Seidl, 2019). R-LPA assesses resilience specifically in the HIV population (J et al., 2019). RSA provides an individual and spiritual characteristic research model to confirm the relevance of the resource in the community (Morote et al., 2017). Perceived Past Health-Related Resilience Outcomes is a subscale from the Situated Subjective Resilience Questionnaire for Adults (SSRQA), which assesses the resilience result to cope with stress caused by previous health conditions (Garrido-Hernansaiz et al., 2017). RS-14 is specially developed to measure resilience in adults and the elderly (McGowan et al., 2018). CYRM-28 is suitable for identifying factors and processes related to resilience in subpopulations of adolescents with HIV (Kaunda-Khangamwa et al., 2020b).

DISCUSSION

The phenomenon shows that patients with HIV can revive and survive adversities. The process represents a positive adaptation of patients with HIV, which contributes to patients' resilience (Brewer et al., 2020). The resilience of patients with HIV is a positive condition identified by some resilience attributes such as individual resilience characteristics, self-competence, and social competence.

Individual resilience characteristics describe conditions or characteristics of patients with HIV when they own the self-resilience. Individual resilience characteristics may be in the form of confidence, optimism, personal belief, self-consciousness, positive attitude in doing things, positive internal cognition, self-acceptance for being HIV positive, the appreciation of education and work, high self-efficacy and self-esteem, the stability of personal identity and emotional, also positive personality. Based on the findings, an HIV-positive individual with high resilience shows individual belief characteristics, including belief in destiny and admitting personal power as the consequences of managing adversity. The other characteristics are life acceptance, responsibility, and high self-esteem. The capacity for self-reflection represents these characteristics. HIV individual resilience characteristics are highlighted by belief and other characteristics that enable the individual and social competence to manage adversity (Dulin et al., 2021). Besides, there is a positive correlation between resilience, self-efficacy, and self-esteem. Individuals with high self-efficacy can do anything to adapt and get up stronger after adversity. It is the same with someone who believes in himself and has high self-esteem to recover from adversity (Dale et al., 2021).

Self-competence includes skill and ability in coping strategy, problem-solving ability, HIV revealing ability, re-adapting ability, emotional control, framing positive goals, ignoring/coping with stigma, giving the best effort amidst adversities, and positive reaction toward adversities. One of the self-competence characteristics of the resilience of patients with HIV is strong emotional control, such as dealing with anxiety and depression. The previous research explained that anxiety and depression are related to low emotional control ability (Berko et al., 2021). On the other hand, in the case of the resilience of patients with HIV, the anxiety and depression levels could be positively controlled through emotional regulation as the personal capacity of patients with HIV.

Social competence is identified by networking with people around HIV patients to cope with adversity. Social competence involves social skills, social communication, and interpersonal communication. Positive relationship with others shows that patients with HIV need emotional and material support as a form of survival condition to cope with adversity (Adegoke & Steyn, 2017). The characteristic of social competence is the antecedent of the resilience of patients with HIV. Personal capacity is a resource of resilience that comes from the individual as the stimulator of the resilience of patients with HIV. People with HIV have a high capacity to adapt, recover, and achieve resilience in coping with adversity (de Araújo et al., 2017). The personal capacity is in the form of the positive posttraumatic condition, low trauma (depression and anxiety), low psychological stress, commitment, motivation, self-efficacy and self-esteem, self-acceptance to live with HIV, physical and psychological struggle, and the ability to adapt. It is also related to self-esteem, an important coping characteristic to improve individual adaptive ability in coping with stress and trauma (Wen et al., 2020). Personal capacity also explains that the ability to develop after a traumatic condition positively is possible. The positive correlation between posttraumatic development with resilience shows that patients with HIV can observe their development after trauma and relate the developments by standing higher from the trauma and building resilience (Dale et al., 2021).

The resource of interpersonal resilience in the form of low HIV stigma, the need for psychological protection, the supporting system (family, friends, and healthcare), also interpersonal, informational, social, and emotional support, adaptive coping, and individual belief in the therapy are the antecedents of resilience in case of patients with HIV. The research shows that interpersonal support correlates to a higher health

condition. Resilience could be improved by improving social support. Social support is related to coping skill improvement as an attribute of the resilience of patients with HIV (Berko et al., 2021). Spiritual power, as another antecedent to the resilience of patients with HIV, describes the belief and values of spirituality as supporting and coping facilities, active involvement in spirituality, positive religious coping, and a religion-based support system. Spirituality is proven to help PLWHA cope with HIV (de Brito & Seidl, 2019). It is also mentioned that spirituality is a resource used to cope with facing an HIV diagnosis and holds an important role in dealing with the side effects among people with HIV/AIDS, especially heterosexuals. Spirituality is used as a supporting and coping facility by patients with HIV to cope with the side effect of HIV diagnosis (de Araújo et al., 2017).

The consequences of resilience describe the result gained from the formation of the resilience of patients with HIV. There is a positive correlation between resilience and the result of HIV treatment. Patients with HIV positively adapt or respond to HIV stigma to improve the HIV treatment progress (Brewer et al., 2020). Besides, resilience is independently related to life quality and psychological health. Resilience significantly and independently contributes to someone's physical and psychological welfare (Emlet et al., 2017; McGowan et al., 2018). The consequence of resilience, in this case, is related to the concept's attributes. It was found that one of the attributes of the resilience of patients with HIV is health-related consciousness which contributed to the virology suppression and compliance with ART (Dulin et al., 2021). It means that the resilience of patients with HIV contributes to the positive consequence of the disease development.

The measurement of the resilience scale used some scales. Previous research mentioned that a wide variation of HIV resilience measurements is available in HIV-related research literature. However, the inconsistency in the measurement of every research, the reliability, and consistency of the scale is very important. RSA, BRS, and CDRS have the strongest psychometric level. CDRS was used 23 times as the scale for assessing resilience. Meanwhile, RSA was used 3 times, and BRS was used once. RSA is the only instrument evaluating the factors of family resilience and social protection (Morote et al., 2017). These three scales contribute to 53% of the total scales used (Peless et al., 2021).

The concept analysis of the resilience of patients with HIV could be used in future research develop-

ment related to the building process of the resilience of patients with HIV. In this case, the antecedents and consequences of resilience could be developed in further research on whether the variables correlate.

CONCLUSION

The resilience of patients with HIV describes a positive psychological concept that depends on some contributing factors of individuals with HIV in coping with adversities. The resilience of patients with HIV is the revival condition from the adversities of living with HIV and a resource to help patients cope with the adversities. Resilience also shows positive characteristics in individuals due to positive adaptation to the negative effects of HIV. It also shows positive effects on the process and result of HIV treatment. The analysis concept of the resilience of HIV patients describes resilience attributes such as individual resilience characteristics, individual competence, and social competence. Previously explained the factors that affect the resilience of HIV patients, such as positive growth of trauma, HIV stigma, and positive coping, while the consequences of HIV patients' resilience, such as consistent medical care, health awareness, post-treatment adherence, and others.

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