



The Influence Of Stimulus And Coping Mechanism To Hiv/Aids Patient Adaptation Based On Callista Roy Theory In Regional Public Hospital Kota Probolinggo

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Abstrak

Pasien HIV / AIDS mengalami berbagai masalah yang ditinjau dari model adaptasi seperti masalah fisik, psikologis, sosial dan ketergantungan. Proses adaptasi dapat dipengaruhi oleh stimulus dan mekanisme elektronik, salah satu stimulus yang menilai klien HIV / AIDS adalah stigma negatif dari masyarakat, lingkungan sekitar dan penolakan keluarga. Tujuan penelitian adalah untuk menganalisis pengaruh mekanisme stimulus and coping terhadap adaptasi pasien HIV / AIDS berdasarkan teori Callista Roy di rumah sakit umum daerah Kota Probolinggo. Desain penelitian ini adalah korelasi dengan pendekatan cross-sectional I. Populasi adalah 68 responden; ukuran sampel 58 responden diambil dengan teknik purposive sampling. Instrumen penelitian ini menggunakan kuesioner; Data dianalisis menggunakan analisis jalur. Hasil penelitian menunjukkan bahwa 1) Stimulus fokus mempengaruhi copingcognate ($p = 0,000$). Stimulus kontekstual mempengaruhi regulator coping ($p = 0,047$) dan copingcognate ($p = 0,000$). Stimulus residual mempengaruhi pemindaian ($p = 0,004$). 2) Regulator coping dipengaruhi tentang adaptasi fisiologis ($p = 0,006$), adaptasi fungsi peran ($p = 0,040$), adaptasi interdependen ($p = 0,004$). Copingcognate dipengaruhi adaptasi fisiologis ($p = 0,006$), adaptasi konsep diri ($p = 0,000$), adaptasi fungsi peran ($p = 0,000$), adaptasi interdependen ($p = 0,008$). Sebagai hasil dari fokus, kontekstual dan residual stimulus, sehingga membentuk copingcognatemechanism dan menghasilkan empat komponen adaptasi (fisiologis, konsep diri, fungsi peran, saling tergantung) kepada pasien HIV / AIDS. Perlu ada peningkatan mekanisme copingcognate untuk membentuk empat komponen adaptasi yang baik, dengan memberikan konseling dan bimbingan kepada keluarga dan pasien HIV / AIDS.

Kata Kunci: Stimulus, Mekanisme Coping, Adaptasi, HIV / AID

Abstract

HIV/AIDS patients experienced various problems that reviewed of adaptation models such as physical, psychological, social and dependency problems. The adaptation process can be influenced by stimulus and coopmechanism, one of stimulus which appeared to HIV/AIDS client is negative stigma from the community, the surrounding environment and family rejection. The research objective is to analyze the effect of stimulus and coping mechanism to HIV / AIDS patient adaptation based on Callista Roy theory in regional public hospital Kota Probolinggo. The design of this study is correlation with the cross-sectional approach I. The populations are 68 respondents; the sample size of 58 respondents was taken by purposive sampling technique. This research instrument used a questionnaire; Data was analyzed using path analysis. The results showed that 1) Focal stimulus influences

copingscognate (p = 0,000). Contextual stimulus affect coping regulator (p = 0,047) and copingscognate (p = 0,000). Residual stimulus affect copingcognate (p = 0,004). 2) Coping regulator affected about physiological adaptation (p = 0,006), role function adaptation (p = 0,040), interdependent adaptation (p = 0,004). Copingscognate affected physiological adaptation (p = 0,006), self-concept adaptation (p = 0,000), role function adaptation (p = 0,000), interdependent adaptation (p = 0,008). As a result of focal, contextual and residual stimulus, so that it forms copingcognatemechanism and produce four components of adaptation (physiological, self-concept, role function, interdependent) to HIV/AIDS patient. There needs to be an increase in copingcognate mechanisms to form four components of good adaptation, by giving counseling and mentoring to families and HIV/AIDS patient.

Keyword: Stimulus, Coping Mechanism, Adaptation, HIV/AIDS

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INTRODUCTION

AIDS (*Acquired Immune Deficiency Syndrome*) is a group of symptoms of immune system damage. AIDS is not a congenital disease but obtained from the results of transmission. This disease is caused by HIV (*Human Immunodeficiency Virus*). HIV/AIDS is an international problem because in a relatively short time there has been increasing of patients and has affected many countries. Until now there has not been found a vaccine or drug that is relatively effective for AIDS, causing anxiety in the world. (1)

HIV/AIDS patients have problems related to stimulate and coping mechanisms that can affect the adaptation process. One stimulus that appears on HIV/AIDS patients is a negative stigma from society, surrounding environment and family rejection. Stigma against ODHA (People with HIV/AIDS) appears related to someone not knowing about the of HIV / AIDS transmission mechanism. Misunderstanding or lack of public knowledge about HIV/AIDS often has an impact on people's fear of ODHA, so there is a rejection of ODHA. Stimulus it can affect coping mechanism towards the negative, because of HIV/AIDS patients feel their life is no useful anymore, feeling failed in living

their life and even isolating themselves from the environment. With the psychological disorders HIV/AIDS patients can lead to a decline in immune system and changes negative coping mechanisms. HIV/AIDS patients will experience variety carrying problems which in terms of the adaptation model, namely physical problems such as *asthma*, TBC, *pneumonia*, *vomiting*, *dysphagia*, diarrhea, loss weight 10 % every three months, fever and others. Psychic problems such as feeling helplessness or despair, stress, anger, denial, anxiety and irritability. Social problems such as feeling insecure and useless in society, feeling isolated or rejected. Dependency problems such as feeling need help from others (2).

HIV all this time it has been heavily discussed, it is not just focused on HIV/AIDS-only, but more importantly how we as smart communities can fight stigma and discrimination against ODHA. HIV/AIDS patients very easy to feel guilty and accept rejection from the surroundings, this is caused to the assumption that their behavior, especially sexual behavior that can harm others. HIV/AIDS patients will experience various stressors or stimulate that can affect coping mechanisms, stimulus or input those which contain focal stimulus, stimulus contextual and

residual stimulus HIV/AIDS patient requires appropriate coping mechanisms which efforts directed at managing stressors (3).

Full Individual and healthy, will be able to function to fulfill biopsychosocial needs using positive or negative coping. To be able to adapt each individual will respond to physiological needs, positive self-concept, able to maintain self-integrity, is always in a healthy range of pain to maintain the adaptation process. big impact of adaptive coping mechanisms for quality of life on HIV/AIDS patient, required exchange information detailed and comprehensive between HIV/AIDS patient. Roy Adaptation model explained the existence of defense and increased ability of the process of adaptation of patients to stimulate towards more effective coping (2). Aligood & Toney (2014) said that nursing is a form of professional service that focuses on individual processes and life patterns that emphasize individual, group and social health promotion. Roy defines the aim of nursing as to improve adaptation responses that relate to four adaptation response models. Internal, external and stimulus changes depend on individual coping. A person's adaptation is determined by focal stimulus, contextual stimulus and residual stimulus (4).

Based on the results of a preliminary study conducted by researchers on the October 2017 in Kota Probolinggo, obtained the people with HIV / AIDS who received treatment as many as 176 people (5). From the interview results, there are many patients who experience stressors from internal or external which can affect the adaptation process HIV/AIDS patient. This is the based of the researcher to analyze the influence of stimulate and coping mechanisms on adaptation HIV/AIDS patient based on approach *Callista Roy theory*. Path analysis in this study is expected to serve as a basis for nurses in developing assessment models and nursing interventions that focus on aspects of adaptation of HIV / AIDS clients by paying attention to stimuli, coping mechanisms and adaptation models.

MATERIALS AND METHODS

This research design used a correlation research design with a cross-sectional approach. This study was chosen to measure the dependent and independent variables once, not measured at the same time, and explain the results of the effects of a research variable. The population in this study is in accordance with the number of respondents who received ARV therapy in general hospital Kota as many as 68 respondents. The samples in this study were 58 respondents according to the inclusion criteria set by the researcher, namely: 1) Clients who are willing to become respondents and sign informed consent; 2) Clients who have been diagnosed for ≤ 1 year; 3) old clients aged (21-45 years).

The research data was obtained by using a data collection tool in the form of a questionnaire based on existing theories. Questionnaires consist of stimulus (focal, contextual and residual), coping mechanisms (regulator and cognator) and adaptation (physiological, self-concept, role and interdependent functions), consisting of 59 statement items. Validity and reliability testing for the questionnaire was tested to 15 respondents. The stimulus instrument, coping mechanism and adaptation have been tested for validity with values $r_{count} > \text{value } r_{table}$ (0,514) then declared valid, for reliability testing shows value *cronbach's alpha* above 0,70.

Data taken in this study is by giving questionnaires to respondents accompanied by researchers and nurses who served in the hospital. Data analysis method in this study uses path analysis model.

RESULTS AND DISCUSSION

Based on the results of research conducted on HIV/AIDS clients in Regional General Hospital Kota Probolinggo as follow:

The picture above is an estimate of the path analysis model on HIV / AIDS clients which

Picture 1. Result of Path Analysis Model Estimates

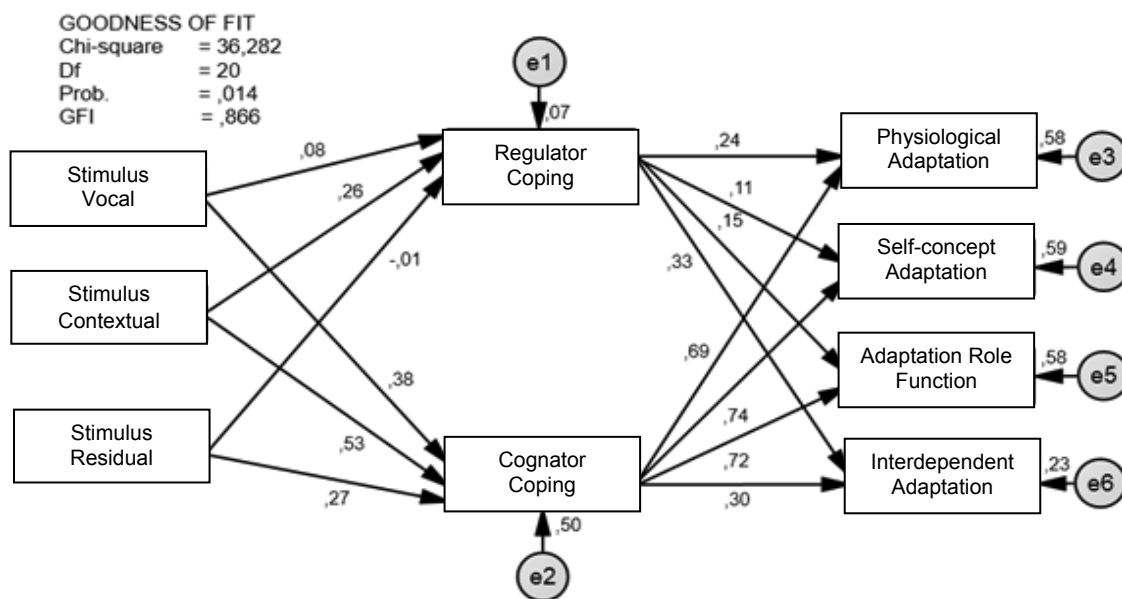


Table 1. The results of testing the hypothesis of the influence of stimulus (vocal, contextual and residual) to coping mechanisms (regulators and cognators)

	Lane (Path)	Koef. Path	t-count	p value	Explanation
Stimulus Vocal	→ Regulator coping	0,080	0,615	0,538	No Significant
Stimulus contextual	→ Regulator coping	0,261	1,990	0,047	Significant
Stimulus Residual	→ Regulator coping	-0,008	-0,060	0,952	No Significant
Stimulus Vocal	→ Cognator coping	0,380	3,990	0,000	Significant
Stimulus contextual	→ Cognator coping	0,534	5,556	0,000	Significant
Stimulus Residual	→ Cognator coping	0,273	2,888	0,004	Significant

consists of stimulus variables, coping mechanisms and adaptation. The stimulus variable analyzed consists of sub variables of focal stimulus, contextual stimulus and residual stimulus. The coping mechanism variables analyzed consisted of the sub-variables of the regulator coping mechanism and cognator coping mechanism. The adaptation variables analyzed consist of sub-variables of physiological adaptation, self-concept adaptation, adaptation of role functions and interdependent adaptation.

Path analysis conducted in this model estimation includes stimulus variables (focal, contextual and residual) towards coping mechanisms (regulator and cognator), and coping mechanism (regulator and cognator) variables towards adaptation (physiological, self-concept, role and interdependent functions).

Based on picture 1 showed the estimation results of the path analysis model have met the *goodness of fit* that good. value Chi-square as big as 36,282 , Df as big as 20, probability model or *p* value as big as 0,014 and GFI as big as 0,866.

The stimulus path analysis of coping mechanisms that showed significant contributions, among others, focal stimuli affect coping cognition (*p* = 0,000). Stimulus contextual influence on regulator coping (*p* = 0,047) and cognition coping (*p* = 0,000). Stimulus residual influences coping cognition (*p* = 0,004).

Focal stimulus is a direct stimulus that can affect an individual to behave towards an adaptive coping mechanism. Contextual stimulus is a stimulus that can support the occurrence of illness, while a residual stimulus is a person's

history and arises relevant according to the situation in which faced. his study which has a significant contribution is contextual stimulus to regulator coping, the contextual stimulus in this study is the perception of health, perception of treatment and perception of health workers. While coping regulator is the occurrence of nursing problems. Health workers have an active role in improving the coping mechanism of HIV / AIDS patient. Doctors and nurses must provide support to clients both bio-psycho-socially and spiritually, so that clients feel confident, feel cared for by health workers. Focal, contextual and residual stimulus has a significant contribution to cognition coping, this is due to mutual trust between clients and health workers. Health workers are always counseling to help solve problems faced by clients, so as to reduce the stressors experienced by clients and improve the coping mechanism of clients.

According to research Sandu, Yuly dan Eva (2016) shows there is a relationship between stimulus and coping mechanism to ODHA. HIV/AIDS patient have problems related to coping mechanisms caused by stimulus, these stimulus obtained from the many people who think negatively on HIV/AIDS client, so many HIV/AIDS patient who isolate themselves and their environment, many sufferers who consider themselves no longer useful. With the psychological disorders HIV/AIDS patient, it will cause a decline in the immune systems (6).

According to Nursalam's research (2016) said that HIV/AIDS patient sangat mudah feeling guilty and accepting rejection from the family and community, this is due to the assumption that their behavior, especially sexual behavior can harm others. HIV/AIDS patient will experience various stressors or stimulus that can affect the coping mechanism, the stimulus or input that enters are focal, contextual and residual stimulus so that ODHA required appropriate coping mechanisms for efforts directed at managing stressors (4).

Based on observations in primary and secondary data obtained, these are still some HIV / AIDS clients who feel shunned by their family, friends and society because of their current illness, they feel excluded, and do not get support from family, friends or the community . Whereas clients who suffer from HIV / AIDS are in desperate need of moral and spiritual support from family, friends and the community, so that they can help clients towards adaptive coping mechanisms. In addition, clients also often experience stressors and even depression due to their illness, client lacks confidence in the ability to overcome the problem.

HIV/AIDS client who did treatment in RSUD Dr. Moh. Saleh feels comfortable with the treatments who are currently taking, because treatment can extend life cycle. Health workers play an important role in helping to improve adaptive coping mechanisms, one of which is to provide assistance to newly diagnosed clients, with assistance to HIV / AIDS clients can reduce the stressors experienced by clients, thereby reducing the negative stimulus caused by clients. In addition, health workers need to conduct counseling for clients and families, with counseling clients and families can increase knowledge about the disease process experienced.

Analysis of the coping mechanism on adaptation pathways that showed significant influence, among others, coping regulators affect physiological adaptation ($p = 0,006$), role function adaptation ($p = 0,040$), interdependent adaptation ($p = 0,004$). Cognitor Coping affect physiological adaptation ($p = 0,006$), self-concept adaptation ($p = 0,000$), role function adaptation ($p = 0,000$), interdependent adaptation ($p = 0,008$).

According to Nursalam research (2014) said the regulator coping used by HIV / AIDS patients is through the HPA-Axis pathway (hypothalamus, pituitary and adrenal). Body effects produced when the body's response is

Table 2. The results of hypothesis testing influence the coping mechanism (regulator and cognator) on adaptation (physiological integrity, self-concept, role function and interdependent)

	lane (<i>Path</i>)	Koef. Path	t- count	p value	explanation
Regulator Coping	→ Physiological Adaptation	0,238	2,772	0,006	Significant
Cognatxor Coping	→ Physiological Adaptation	0,685	8,367	0,000	Significant
Regulator Coping	→ Self-concept adaptation	0,111	1,302	0,193	No significant
Cognator Coping	→ Self-concept adaptation	0,739	9,069	0,000	Significant
Regulator Coping	→ Adaptation Role Function	0,145	1,964	0,040	Significant
Cognator Coping	→ Adaptation Role Function	0,724	8,832	0,000	Significant
Regulator Coping	→ Interdependent Adaptation	0,331	2,849	0,004	Significant
Cognator Coping	→ Interdependent Adaptation	0,297	2,673	0,008	Significant

good, the physiological state of the body will be good. The physiological integrity produced is the client will experience a good physiological state and adapt to the illness well. Therefore, clients with a regulatory subsystem both on HIV / AIDS clients will improve physiological integrity and adapt well (7).

Regulator subsystem analysis has a significant contribution to interdependent adaptation. The resulting effect is a positive effect, so that when the regulator subsystem is good it will increase the effect of the interdependent, so that the better the coping, the better the interdependent effect. Erawatiningsih (2009) in her study said that there was a significant influence between the duration of illness and treatment disobedience. The result showed a negative relationship, meaning that the longer the complaint suffered by the patient, the more disobedient to come for treatment. Clients who have a lot of complaints need family support to improve compliance with the treatment process for client recovery. Sianturi (2014) said that client who has good family support will improve recovery and prevent recurrence. Therefore, clients who have good coping need good family support to improve their adaptation (8).

Cognition subsystem analysis of the physiological integrity of patients who influence HIV / AIDS who did treatment in Dr. Moh. Saleh Hospital Kota Probolinggo. Physiological integrity

can be influenced by subsystems controlled by most clients in this study is to have basic education. Pasek & Satyawan (2013) said that the higher the knowledge of the client, the client will be obedient in pursuing treatment. Obedient clients will facilitate clients towards recovery. This will reduce stress hormones which reduce cortisol and will increase T-helper to improve the immune system in the process of treating HIV / AIDS. Therefore, a significant influence can be caused by the average education factor of senior high school, where education will help improve the physiological adaptation function of HIV / AIDS clients (7).

Cognitive subsystem analysis of self-concept integrity showed a significant contribution to HIV / AIDS clients. According to Sutarno & Utama (2013), said that the fact that clients of male types were motivated to be treated relatively better than female patients. Coping from male clients is better than women, so motivation in getting healing or treatment is higher for male clients. The client considers that with the treatment the client can be active and carry out daily activities again. According to Tintin, Nursalam, Eka, Candra and Misutarno (2016) the results of the study said the psychological responses that often occur to HIV / AIDS clients include anger, feeling guilty, feeling tired of what happened. Social stigma and discrimination are rooted in psychological responses, ranging

from rejection, anger to depression. Peer Group Support can help HIV / AIDS clients reduce psychological distress, anxiety and anger. In peer support groups individuals found themselves and can develop their social sense with their personal development and a place to receive and provide assistance with respect, mutual responsibility and mutual agreement through support, friendship, empathy, sharing, and giving social changing which it wants (9).

the cognator subsystem contributed significantly to the integrity of the role function. The role function in HIV / AIDS clients is in client alignment with the social environment in living their daily lives in accordance with their roles. The role function as an actor in society, the role function is closely related to the role as income earner in the family. Eryatningsih (2009) in her study said that there was a significant influence between family income on treatment disobedience in TB clients. Very low family income can determine patient disobedience for treatment. The role function in family life and the social environment must continue to improve the adaptation process accordingly (8).

According to Nurhayati (2012) the results of the study said the environment is a stimulus in providing stimulus in individuals. The external environment will affect a person's social response. Social response is from condition internal and external which influenced and resulted in the development and behavior of a person and group. HIV / AIDS is often associated with problems that are considered immoral and sinful, this misunderstanding will lead to social stigma and discrimination in the form of excessive prejudice, negative attitudes, and direct mistreatment from both the family and the surrounding environment in all of life (10).

According to Tintin, Nursalam, Eka, Candra and Misutarno's research (2016), peer support groups can increase social support for HIV / AIDS clients. In peer group support sessions,

information sharing is carried out that will be large the knowledge of HIV / AIDS patient, thereby increasing the client's confidence. Emotional assistance and support will further increase the feeling of being open and accepted by the environment, this can reduce feelings of negativity in patients (11).

The cognator subsystem does not provide an interdependent direct effect. In this study coping mechanism consists of direct efforts to overcome self-threats, controlling problems and adjusting to stress. The HIV / AIDS client cannot identify the threat of the problem, so the client cannot adapt interdependently. In addition the client also cannot control the problem and adjust to the stress experienced, so that the client is unable to adapt interdependently. According to Nursalam's research (2014) the level of adaptation of a person is influenced by individual development and the use of coping mechanisms. The maximum coping mechanism results in positive adaptation and is able to respond well to stimuli. HIV / AIDS client adaptation is influenced by various factors such as drug side effects, treatment experience, body response and coping mechanisms used by clients. It is necessary to provide counseling to families and clients who experience HIV / AIDS to increase knowledge in the HIV / AIDS client adaptation process. In addition, family assistance is also needed in improving the HIV / AIDS client adaptation process (7).

CONCLUSION AND RECOMENDATION

Stimulus that affected the coping mechanism of HIV / AIDS clients, among others: Focal stimulus influenced cognitive cognition. Contextual stimulus effected on regulator coping and cognitive cognition. Residual stimulus affects cognitive cognition. Coping mechanisms that influence the adaptation of HIV / AIDS clients include: the coping mechanism of the regulator influences physiological adaptation,

role function adaptation, and interdependent adaptation. Cognitive coping mechanism affected 4 components of the adaptation process (physiological, self-concept, role function, and interdependent. HIV/AIDS client adaptation is influenced by various factors such as drug side effects, treatment experience, body response and coping mechanisms used by clients. It is necessary to provide counseling to families and clients who experience HIV / AIDS to increase knowledge in the HIV / AIDS client adaptation process. In addition, family assistance is also needed in improving the HIV / AIDS client adaptation process.

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