

# CORRELATION OF COPING STRATEGY WITH THE QUALITY OF LIFE OF HIV/AIDS PATIENTS IN ADAM MALIK CENTRAL GENERAL HOSPITAL IN MEDAN, INDONESIA

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## Abstract

There were 519.158 people suffered from HIV/AIDS in Indonesia at the end of Juni 2022, in which North Sumatera ranked the fifth with 13.150 people. HIV/AIDS cause physical, psychological, and social effects on patients; therefore, they need good coping strategy to face their illness and to increase the quality of life. The objective of the research was to analyze the correlation of coping strategy with the quality of life of HIV/AIDS patients in the Special Service Center of H. Adam Malik Central General Hospital, Medan. The research used analytic method with cross sectional design. The population was all HIV/AIDS patients who got ARV therapy in the Special Service Center of H. Adam Malik Central General Hospital, and 55 of them were used as the samples. The result of the research showed that the respondents' quality of life was in the range of 46.73 to 52.09. The highest score was quality of life in psychological domain (52.09), and the lowest score was the quality of life in physical domain (46.73). Instrument action coping strategy had significant correlation with quality of life in psychological domain at p-value = 0.04, negotiation had significant correlation with quality of life in physical domain at p-value = 0.00, escapism had significant correlation with quality of life in psychological domain (p=0.01) and environmental domain (p=0.01), and minimization coping strategy had significant correlation with quality of life of HIV/AIDS patients in psychological domain (p=0.03) and in social domain (p=0.01). It is recommended that HIV/AIDS patients use negotiation and minimization coping strategies in their problems in order to increase their quality of life.

**Keywords:** HIV/AIDS, Coping Strategy, Quality of Life.

## 1. INTRODUCTION

### 1.1 Background

The data from Ministry of Health of the Republic of Indonesia in 2023 revealed that the number of new positive HIV/AIDS cases in Indonesia increased significantly in the last five years. this condition arouses great concern since this trend indicates an iceberg phenomenon in which the detected number of cases constituted one tenth of the real cases.

Some risk factors which cause this high coverage of HIV/AIDS cases are the use of hypodermic needles repeatedly in drug users, the use of unsterile health equipment, keeping on changing sex partners homosexually, bisexually, or heterosexually, a mother to her baby, blood transfusion, and so on. The increase in the number of drug users will eventually cause the increase in HIV/AIDS case; however, the highest risk factor is heterosexual intercourse which reached to 44,305 people of the 75,799 AIDS cases in the period of 2018-2022 (Ditjen PP & PL Kemenkes RI, 2014).

HIV/AIDS causes physical, psychological, and social impacts on its patients. Physical effects are indicated by the emergence of the AIDS symptoms which come from infection of HIV with the enlargement of lymph gland, diarrhea, thrush, and opportunistic infection like digestive tract, pneumonia, tuberculosis, toxoplasmosis, etc. However, there are only a few AIDS patients who die because of direct effect of HIV infection. Usually, the death occurs because of cumulative effects of various

opportunistic infections or malignant tumour. Psychological effects occur when someone is informed that the result of his HIV test is positive so that there will be self-confrontation in the fact that he is faced by a terminal situation. This reality will cause the feelings of shock, denial, no confidence, depression, lonesomeness, desperation, sadness, anger, and fear. Social effect constitutes a stigma felt by people throughout the world toward HIV/AIDS sufferers which causes isolation, rejection, discrimination, and avoidance on those who are suspected of being infected by HIV; in consequence, they will be quarantined.

Rachmawati S. (2015) in her research, points out that the quality of life of ODHA that participate in ARV therapy, in the physical domain, is good because they are fully aware of the importance of keeping their physical health by taking antiretroviral medicines punctually so that there will be no more opportunistic illness. Meanwhile, the quality of life of ODHA emotionally, socially, and spiritually is low as it is indicated by the result of the research that ODHA do not develop their social and spiritual relationship and lack of good social support from their family members and neighbours which indicates that there are still stigma and discrimination on them.

Stigma and discrimination on HIV patients not only cause them to have difficulty in getting employment but also cause them to lose their job and their homes, and receive inhuman treatment.

Physical, psychological, and social effect on HIV patients is the problem which has to be faced by them so that they need effective coping strategy in order to be able to maintain their quality of life. Ineffective coping strategy in HIV patients will cause non-adaptive response like rejection, anger, and depression. Non-adaptive psychological response in HIV patients can impede its curing attempts.

The research conducted by Hardiansyah (2013) indicates that quality of life of HIV patients in physical domain is good (38.1%) and in psychological domain is also good (23.8%). The quality of life in independence domain is good (28.6%), in social interaction domain it is good (38.1%), in environmental domain it is good (38.1%), and in spiritual domain it is good (47.6%).

Coping strategy which is usually used in persons is cautiousness, action instrument, negotiation, escapism, minimization, self-blame, and seeking meaning. A correct coping strategy should be used in HIV patients by the help of their family members, companion, or health care providers so that it will yield positive psychological response from the patients about their acceptance on what is occurring to them such as their willingness to get help, to appreciate their own self, to do their daily activities, and to maintain their quality of life.

## **1.2 Formulation of the Problem**

Was there any correlation of coping strategy with quality of life of HIV/AIDS patients in the Special Service Center of H. Adam Malik Central General Hospital, Medan?

## **1.3 Objective of the Research**

### **1.3.1 General Objective**

To find out the correlation of coping strategy with quality of life of HIV/AIDS patients in the Special Service Center of H. Adam Malik Central General Hospital, in Medan, Indonesia.

### 1.3.2 Specific Objectives

- a) To find out coping strategy used by HIV/AIDS patients.
- b) To find out the quality of life of HIV/AIDS patients.
- c) To analyze effective coping strategy in maintaining the quality of life of HIV/AIDS patients.

## 1.4 Significance of the Research

### 1.4.1 Health Service

Health service could be used as the basis for determining the policy on health promotion in increasing the use of coping strategy so that the quality of life of HIV/AIDS patients could be better.

### 1.4.2 Health Care Providers

Insight and capacity in developing and using coping strategy were increased to improve the quality of life of HIV/AIDS patients, in the community and particularly in the Health Service Unit.

### 1.4.3 Patients, Families, and Community

Knowledge and capacity of patients, family members, and community were increased to determine coping strategy which could improve the quality of life of HIV/AIDS patients.

### 1.4.4 Knowledge

Knowledge could be the existing theories concerning the use of coping strategy for improving the quality of life of HIV/AIDS patients.

## 2. RESEARCH METHODOLOGY

### 2.1 Types of the Research

The research used an analytic method with cross sectional design which was aimed to find out the correlation of coping strategy with the quality of life of HIV/AIDS patients. It could be seen in the following chart:



explanation:

X = HIV/AIDS patients

X1 = Coping strategy of HIV/AIDS patients

X2 = the quality of life of HIV/AIDS patients

## **2.2 Variables and Operational Definition**

### **2.2.1 Variables**

Independent variable in the research was the coping strategy of HIV/AIDS patients and dependent variable was the quality of life of HIV/AIDS patients.

### **2.2.2 Operational Definition**

1. Coping strategy is specific attempt, either behavioral or psychological, used by people to control, tolerate, reduce, or minimize any impacts.
2. quality of life is a person's perception on his position in life in cultural context and value system where he lives and his relationship with purpose, standard, expectation, and wish.
3. HIV/AIDS patients are clients who visit the Special Service Center of H. Adam Malik Central General Hospital in Medan, Indonesia and who are diagnosed as suffering from HIV/AIDS and obtain Anti Retroviral Virus (ARV) therapy.

### **2.3 Location and Time of the Research**

The research was conducted in the Special Service Center of H. Adam Malik Central General Hospital in Medan, Indonesia, in 2022.

### **2.4 Population and Samples**

The criteria of the samples were as follows:

1. Adults
2. Diagnosed as suffering from HIV/AIDS and had obtained Anti Retroviral Virus (ARV) therapy.

The samples of the research were taken by using purposive sampling technique.

### **2.5 Technique and Gathering of Data**

The variable of coping strategy was measured by using Likert scale in which each point of statement was given the score of 1-4. In the statement of favorable, if the respondents answered always (Al), was given the score 4, often (Of) was given the score 3, sometimes (St) was given the score 2, and never (Nv) was given the score 1. For the statement unfavorable, the scores were given in reverse. Score and assessment were given in each coping strategy.

The score of > 50% in the type of coping strategy identified that the respondents had used a certain coping strategy. The measurement of quality of life was adopted from WHOQoL in which it was divided into 4 (four) domains: physical domain, psychological domain, social domain, and environmental domain. Each question was given the score 1-5. The number of scores obtained from any domain would be transformed by using table of information into the scale 0-100.

### 3. RESULT OF THE RESEARCH

#### 3.1 Coping Strategy

**Table 3.1: Description of Respondents' Coping Strategy**

No	Coping Strategy	F	%
1	Cautiousness		
	Yes	55	100
	No	-	-
	Instrument action		
2	Yes	49	89,10
	No	6	10,90
3	Negotiation		
	Yes	51	92,70
	No	4	7,30
	Escapism		
4	Yes	27	49,10
	No	28	50,90
5	Minimization		
	Yes	40	72,70
	No	15	27,30
	Self-blame		
6	Yes	35	63,60
	No	20	36,40
7	Seeking meaning		
	Yes	0	0
	No	55	100

It could be seen that all respondents used cautiousness coping strategy (100%), the majority of the respondents used negotiation coping strategy (92.70%), the majority of the respondents used instrument action coping strategy (89.10%), the majority of the respondents used minimization coping strategy (72.70%), and the majority of the respondents used self-blame coping strategy (63.60%). Meanwhile, of the 55 respondents, no one of them used seeking meaning coping strategy.

#### 3.2 quality of life

There were 4 (four) domains which were measured in the quality of life according to WHO: physical domain, psychological domain, social domain, and environmental domain. The scores of quality of life were transformed into the scale of 0-100.

**Table 3.2: Description of Respondents' quality of life**

No	Quality of Life	Mean	Deviation Standard
1	Physical	46,73	10,61
2	Psychological	52,09	12,22
3	Social Relation	48,73	19,13
4	environmental	51,00	9,92

The above table showed that quality of life of HIV/AIDS patients who obtained ARV in the Special Service Center of H. Adam Malik Central General Hospital was from 46.73 to 52.09. Psychological domain had the highest score (52.09) and physical domain had the lowest score (46.73). This indicated that psychological domain had higher score than that of the other domains although it was still considered as moderate category.

### 3.3 Correlation of Coping Strategy with quality of life

**Table 3.3: Correlation of Coping Strategy with the quality of life HIV/AIDS Patients in the Special Service Center of H. Adam Malik Central General Hospital**

No		Physical		Psychological		Social Relation		Environmental	
		Mean	P Value	Mean	P Value	Mean	P Value	Mean	P Value
1	Instrument actions								
	Yes	45,82	0,68	50,94	0,04	47,94	0,38	50,35	0,16
No	54,17	61,50		55,17		56,33			
2	Negotiation								
	Yes	47,41	0,00	52,61	0,26	48,75	0,98	51,31	0,40
No	38,00	45,50		48,50		47,00			
3	Evasion								
	Yes	44,44	0,11	47,58	0,01	48,33	0,88	47,33	0,01
No	48,93	56,54		49,11		54,54			
4	Minimization								
	Yes	47,45	0,495	54,23	0,03	47,00	0,27	52,90	0,02
No	44,80	46,40		53,33		45,93			
5	Self-blame								
	Yes	45,54	0,277	51,60	0,69	50,31	0,42	49,71	0,21
No	48,80	52,95		45,95		53,25			

Statistic test with independent t-test was used to find out the correlation of coping strategy with respondents' quality of life. From the table above it was found that of the seven coping strategies (cautiousness, instrument action, negotiation, escapism, minimization, self-blame, and seeking meaning), only four of them (instrument action, negotiation, escapism, and minimization) had the correlation with quality of life, while statistic test could not be done with cautiousness and self-blame coping mechanism because all respondents used cautiousness coping strategy. On the other hand, no respondent used seeking meaning coping strategy. However, not all coping strategies had significant correlation with the four domains of quality of life.

Instrument action coping strategy had significant correlation with quality of life from the psychological domain ( $p=0.04$ ), negotiation had significant correlation with quality of life from the physical domain ( $p=0.00$ ), evasion had significant correlation with quality of life from the psychological and environmental domains ( $p=0.006$ ), minimization had significant correlation with quality of life from the psychological domain ( $p=0.03$ ) and environmental domain ( $p=0.02$ ).

### 3.4 Discussion

Quality of life of HIV/AIDS patients who obtained ARV was in the range from 46.73 to 52.09. The highest score of quality of life was psychological domain and the lowest score was physical domain. In general, however, of all domains which had been analyzed, respondents' quality of life was not good.

quality of life from the physical domain in HIV/AIDS patients was lower than that of the other domains because this disease attacked immunization system so that body would be susceptible to various diseases and physical condition would be weak (Lewis, et.al, 2000). Hutapea, in his research (1995), points out that a HIV/AIDS patient undergoes isolation so that he becomes stressed and will weaken his immunization system which



has been weakened by HIV virus and which eventually cause his physical condition to become weaken.

The highest score of quality of life was psychological domain because there was the relationship with the use of coping strategy in the respondents. Based on the result of the research, it was found that all respondents (100%) used considering problem alternative, 92.7% of the respondents used negotiation, and 72.7% of the respondents used minimization. These three strategies indicated that in solving their problems, the respondents involved other people in asking their opinion, sharing their experience, evaluating strategies which had previously been done, searching for support from relatives who were directly and indirectly involved in their problems, and considering that there was no big problem. This condition could decrease their psychological stressor.

Usually, coping strategy depends on personality and the level of stress. In this research, all respondents (100%) used considering problem alternative coping strategy which indicated that in their vulnerable physical and psychological condition, the respondents still had good capacity in thinking and considering the existing problems, were careful in coping with the problems, evaluated their previous strategies, and were full of consideration in acting. This was because there was support from their family members, environment, and community. However, in this research, the correlation of cautiousness coping strategy with the quality of life of HIV/AIDS patients in the Special Service Center of H. Adam Malik Central General Hospital, could not be analyzed because all of them used cautiousness coping strategy.

In this research, all respondents used cautiousness coping strategy because they were in the third process of mournfulness/loss, compromise/bargaining phase. It could be seen from the data in table 5.2 which showed that 92.70% of the respondents had done negotiation. According to Ross (1969) in Suseno & Tutu April A. (2015), compromise/bargaining phase in the process of mournfulness/loss would enable persons to do negotiation and cautiousness.

Eighty nine point ten percent of the respondents used instrument action coping strategy. Respondents who used this strategy were those who immediately decided to cope with the problems by searching for information themselves actively in order to cope with the problems and improve their personality. Instrument action had significant correlation with quality of life in psychological domain ( $p=0.04$ ). Meanwhile, there was no significant correlation with quality of life in physical, social, and environmental domains. The respondents who did not use this coping strategy had better psychological quality of life at the score of 61.50 than those who used it (50.94). This was in accordance with quality of life from psychological point of view, seen from how far one could enjoy his life, how about his perception on the meaning of his life, how about his capacity to concentrate, and how about his acceptance to his self-appearance and self-satisfaction. This indicated that those who used this coping strategy felt that their life was futile; they could not enjoy their life, could not accept their self-appearance, and did not satisfy with their own self. This was because the respondents who used this coping strategy did not want to share their problems with other people. They only attempt to cope with their problems without sharing them with other people so that they underwent serious psychological pressure.

As what has been pointed out by David Spiegel (2014) that man is a social being so that sharing his problem with other people can become the source of support and help so that it can decrease psychological tension and burden. Diener & Schwartz (1999) in Nofitri (2009) also point out that when the need for close relationship with other people is fulfilled through friendship which mutually supports and through marriage, one will have better quality of life physically and emotionally.

There were more respondents who used negotiation coping strategy (92.70%) than those who did not use it. The result of statistic test showed that there was significant correlation of coping strategy with quality of life in physical domain ( $p=0.00$ ). This was in accordance with the theory of Lazarus and Folkman in Sarafino (2016) which state that persons who use this strategy can decrease their stressor by themselves which will influence their physical condition to become better; besides that, the respondents get ARV therapy so that opportunistic infection which infects physical condition can be curbed. This statement is in accordance with the result of this research. It was supported by the research done by Rachmawati, S (2019) which stated that ODHA who got ARV therapy would have better physical condition, and they could be prevented from opportunistic infection.

Escapism is a coping strategy which is used by escaping from any problem with daydreaming and illusion as if a person were in another pleasant situation, eating, sleeping, smoking, and using drugs while expecting that his bad condition would pass by. Of the 55 respondents, 28 of them (50.90%) did not use this coping strategy in coping with their problems. This condition was much better because it only copes with the problems temporarily and not in the long run. Statistically, escapism strategy had significant correlation with life style in psychological and social domains at  $p=0.01$  respectively which indicated that the respondents who did not use this strategy would have better psychological and social quality of life. If a person always avoids and escapes from a problem, he actually does the wrong thing because basically his action does not settle the problem, but it is only a temporary piece of mind. This type of strategy could only be used for mild stressor.

Minimization is a coping strategy in which a person minimizes a problem by considering that it is not serious and as if there was no problem at all. The result of the research showed that 72.70% of the respondents used this type of strategy in coping with the problem. It was found that there was significant correlation of minimization coping strategy with quality of life in psychological domain at  $p=0.03$  and in social domain at  $p=0.01$ . The quality of life of the respondents who used this coping strategy was better than that of the respondents who did not use it, either in psychological domain or in social domain.

Self-blame constitutes passive coping strategy in which a person will blame himself and never attempts to avoid the problem. The result of the research showed that 63.60% of the respondents used this coping strategy to cope with their problems. There was no correlation of self-blame coping strategy with the respondents' quality of life, either in physical, psychological, social, or environmental domains.

The majority of the respondents used this type of coping strategy probably because, in general, the problem was caused by negative behavior of the respondents themselves. In this research, none of the respondents used seeking meaning coping strategy. This was probably because they could not accept their problems they were facing since 65% of the respondents were patients who had just been diagnosed as



HIV/AIDS patients. Based on the theory of Kobler Ross (1969) in Suseno April A. (2015), it is said that every person who undergoes mournfulness will pass 5 phases: denial, anger, bargaining, depression, and acceptance phases. Denial phase is where respondents deny, reject, and do not accept the fact that they are in mournfulness/loss within 1-3 years, while the majority of the respondents were diagnosed as HIV/AIDS patients in 0-2 years. Every person who is in this phase cannot accept the fact that he is in this condition. In consequence, it is impossible for him to act rationally, to take the benefit of it, and to be close to God. A person can probably use this strategy when he is in the acceptance phase in which he has been able to accept his mournfulness/loss and to take the benefit from what he is undergoing.

Based on the result of the research, it was found that the respondents who used negotiation strategy had better quality of life in physical domain than those who used escapism and minimization coping strategy. This negotiation coping strategy constituted positive coping strategy which was focused on problems.

Even though instrument action coping strategy was positive, it was not good to be used for quality of life in psychological domain because the respondents tended to act without compromising and asking other people's opinions so that it was not impossible that the action led to the wrong track in coping with the problems.

The respondents who did not use escapism coping strategy had better quality of life in psychological domain and in environmental domain than the respondents who used this coping strategy. It was because escapism was a negative coping strategy, and therefore, every person should face his problem wisely.

On the other hand, the respondents who minimized their thinking about any problem would have better quality of life in psychological domain and environmental domain than the respondents who had excessive thinking about the problems. This is because people who minimize problems will have balanced emotion. Therefore, even though minimization coping strategy was negative, it was good to be used for maintaining quality of life in psychological domain of HIV/AIDS patients.

## **4. CONCLUSION AND SUGGESTIONS**

### **4.1 Conclusion**

All respondents (100%) used cautiousness coping strategy, 51 respondents (92.70%) used negotiation coping strategy, and 49 respondents (89.10%) used instrument action coping strategy, while there was no respondent used seeking meaning strategy.

In general, the respondents' quality of life was not good. It could be seen from their score which was in the range of 46.73 until 52.09. The highest score was quality of life in psychological domain (52.09) and the lowest score was quality of life in physiological domain (46.73).

Negotiation coping strategy was positive and good to be used to maintain quality of life in physical domain. Meanwhile, even though minimization coping strategy was negative, it was good to be used to maintain quality of life in psychological domain and in environmental domain of HIV/AIDS patients.

Instrument action coping strategy was positive, but it was not good to be used to maintain quality of life in psychological domain, while escapism coping strategy was negative and was not good to maintain quality of life in psychological domain and in environmental domain of HIV/AIDS patients.

## 4.2 Suggestions

### 4.2.1 Patient/Family/Community

It is recommended that negotiation and minimization coping strategies be used in order to increase quality of life in physical, psychological, and environmental domains of HIV/AIDS patients.

Health promotion should be determined for HIV/AIDS patients, especially about choosing coping strategy through health education regularly when patients get medication in health care facility.

### 4.2.1 Health Care Providers

Increasing knowledge should be provided for HIV/AIDS patients, especially in choosing coping strategy which can improve patients' quality of life.

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