

# Effectiveness of Group Cognitive Behavior Therapy to Improve Quality of Life in People Living with HIV/AIDS (PLWHA)

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**Abstract**— The purpose of this study was to see the effectiveness of group cognitive behavior therapy to improve the quality of life in PLWHA. This study used a quasi-experimental one group pre-test post-test design. The sampling technique used purposive sampling. Participants in this study were five people living with HIV / AIDS (PLWHA). The G-CBT module used in this study consisted of cognitive restructuring and coping skills. The G-CBT was held as many as five meetings in two weeks. Quantitative data were taken from the WHOQOL-HIV Bref scale. The quantitative data were analyzed using nonparametric Wilcoxon. The results showed an increase in quality of life in PLWHA after being given G-CBT ( $p = 0.039$ ;  $p < 0.05$ ;  $Z = -2.622$ ). Based on the research results, group cognitive behavior therapy is effective in increasing the quality of life of PLWHA.

**Keywords**— Group Cognitive Behavior Therapy, People Living with HIV/AIDS, Quality of Life.

## I. INTRODUCTION

Based on data from UNAIDS in 2018, there are approximately 37.9 million people infected with HIV and it continues to increase every year. Indonesia is one of the countries in the Asia Pacific where the population is also infected with HIV. According to data from the Indonesian Ministry of Health<sup>1</sup>, in 2018 the estimated number of people with HIV in Indonesia was 641,675 people. Human Immunodeficiency Virus (HIV) is a virus that infects immune cells and destroys its function, while Acquired Immunodeficiency Syndrome (AIDS) is an advanced stage of HIV infection and usually individuals also suffer from one or more opportunistic infections related to HIV<sup>2</sup>. AIDS is a chronic disease that not only affects physical conditions, but also social relationships, mental health and finances<sup>3</sup>.

Apart from physical problems, people living with HIV / AIDS (PLWHA) also face social challenges such as getting negative stigma and discrimination from society because transmission is considered to violate cultural beliefs in Indonesia. The phenomenon of PLWHA being expelled, feeling isolated, feeling useless, and having no life expectancy was something researchers encountered when conducting initial research interviews. The inability of PLWHA to be productive for themselves and in their social life indicates that they have low quality of life<sup>3</sup>. Quality of life (QOL) is defined as an individual's perception of his position in life, in the cultural context and value system in which the individual lives and his relationship to his final goals, expectations, standards and concerns<sup>2</sup>. When the perception of QOL in PLWHA is

high, it is related to adherence to taking ARVs, being happy and satisfied with their life, on the other hand, patients who have low QOL are indicated to have a proportion of anxiety and depression symptoms, irrational thoughts, avoidance which can also worsen their condition to AIDS<sup>5</sup>. There are several factors that influence QOL such as negative stigma, consumption of ARVs, coping style, depression and education<sup>6</sup>. PLWHA who give negative stigma (irrational thoughts) on themselves and have the perception that they are sick people also describe a low QOL<sup>7</sup>.

There are several interventions that can be used to improve QOL PLWHA. One of these interventions is cognitive behavior therapy (CBT). Through CBT, individuals are guided to identify distorted thought patterns and ineffective behavior, then modified through purposeful conversations and pre-arranged tasks<sup>8</sup>. CBT is considered effective for increasing QOL in patients cardiovascular; QOL in a group of students who experience premenstrual syndrome. However, if you look at the results of the Riyahi study<sup>8</sup>, CBT does not have a significant effect overall QOL on patients with hepatitis B, but only in one domain, emotional domain.

In this study, CBT was applied through group therapy or called group cognitive behaviour therapy (G-CBT). GCBT is considered to provide more benefits than individuals, for example through togetherness and receiving support and empathy from other group members and of course facilitating them in learning the process of coping<sup>9</sup>.

## II. OBJECTIVE AND METHOD

The purpose of this study was to see the effectiveness of group cognitive behavior therapy to improve the quality of life in PLWHA. The research design used was a quasi-experimental one group pre-test post-test. The sampling method used purposive sampling with the criteria of PLWHA, aged 20-40 years, taking ARVs. All participants in this study were aged 22-37 years and had at least high school education. All five participants were put together in groups. The group was facilitated by a psychologist who had experiences in G-CBT. The module G-CBT is based on references to group cognitive behavior therapy Bieling's. In this intervention, the activities consisted of psychoeducation on CBT, cognitive restructuring, coping skill, diaphragmatic breathing and coping planning. Therapy sessions were held five times. Then the quantitative data were taken using WHOQOL-HIV Bref, amounting to 31 items with a scale form Likert. The data pre-

test post-test obtained from this scale were then analyzed using nonparametric Wilcoxon statistics.

### III. RESULTS AND DISCUSSION

This study has a hypothesis that group cognitive behavior therapy is effective in increasing the quality of life in PLWHA. Based on the results of the Wilcoxon analysis pretest-posttest, a score of  $Z = -2.622$  and a significance value of 0.039 which means  $p < 0.05$  can be concluded that there is a significant difference between the results pre-test and post-test of research participants after being given group cognitive behavior therapy, so that the hypothesis is accepted.

The irrational thinking of PLWHA makes them feel helpless, hopeless, consider themselves insignificant and so on which has an impact on their quality of life. Through group cognitive behavior therapy, PLWHA are helped to change their irrational thoughts regarding their status as PLWHA. The results of this study are in line with research conducted by Yousefy<sup>10</sup> that CBT is effective in increasing QOL in patients with cardiac vascular. The study also taught participants to change irrational thoughts with logical or rational thoughts.

Group cognitive behavior therapy focuses on modifying or changing ODHA's irrational thoughts regarding their HIV status which also affect feelings and behavior. In this study, research participants were also taught to use coping strategies. Teaching coping to participants is one thing that can be done to improve psychological functioning and the ability to handle stress in PLWHA<sup>12</sup>. This is important because one of the QOL factors is coping style, for example avoidance coping described as a feeling of helplessness of an PLWHA.

Furthermore, one of the factors that contributed to the success of this study was because CBT therapy was carried out using group therapy. During the therapy process, participants helped each other by giving motivation and challenging other participants' irrational thoughts. The existence of this process is indeed one of the advantages of using group cognitive behavior therapy so that it is more effective and efficient than the individual<sup>11</sup>. This is also reinforced that the effect size of the group cognitive behavior therapy in increasing the quality of life of PLWHA in this study is quite large, namely by 81%.

Looking at the huge effect size on this study, of course it this study had a weakness due to the limited number of

research samples, which is only five people. In addition, this study also did not have a control group so that no comparison group was not given treatment. However, group cognitive behavior therapy can be used as an alternative to increase the quality of life in PLWHA.

### IV. CONCLUSION

Based on the research results, it can be concluded that group cognitive behavior therapy is effective in increasing the quality of life of PLWHA. This can be seen through the results of Wilcoxon's analysis with a score of  $Z = -2.622$  and  $p = 0.039$  so that  $p < 0.039$ , it can be concluded that there is a significant difference between the pretest and posttest participants after group cognitive behavior therapy was given.

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