

ISSN 2354-8428
e-ISSN 2598-8727

JURNAL KEPERAWATAN

KOMPREHENSIF

COMPREHENSIVE NURSING JOURNAL

Published by :

**Sekolah Tinggi Ilmu Keperawatan
PPNI Jawa Barat**

Vol. 10 No. 2, April 2024



JURNAL KEPERAWATAN KOMPREHENSIF	VOL. 10	NO. 2	Bandung April 2024	ISSN 2354-8428	e-ISSN 2598-8727
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Research Article

Effectiveness of Psychotherapy on Quality of Life People with HIV/AIDS

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Received : 19/03/2024

Revised : 25/04/2024

Accepted : 28/04/2024

Online : 30/04/2024

Published : 30/04/2024

Abstract

Aims: patients with HIV/AIDS have unique challenges regarding their quality of life, with factors such as physical symptoms, use of antiretroviral therapy, social support, and psychiatric conditions being important determinants.

Method: This study is a systematic literature study. Literature search through online databases ProQuest, Scopus, Google Scholar, PubMed. The keywords used were: plwh, hiv aids, hiv positive, hiv patient, psychotherapy, cbt, mindfulness, counselling, quality of life, qol, depression, stress, with Boolean logic AND and OR. Journal of the last 10 years (2013-2023), using English, is a journal article, open access, involving adult respondents, full text, HIV/AIDS, adult, clinical trial, RCT. Exclusion criteria: Encyclopedia article, book chapter, conference, correspondent, editorial, news, practice guideline, protocol, systematic review, literature review and meta-analysis qualitative study. Screening and selection of articles are displayed in the PRISMA diagram. Selected articles were subjected to critical appraisal of RCT studies.

Results: 7 articles met the criteria and were discussed in this study. 5 articles used CBT intervention and 2 used ITP intervention. Both CBT and ITP proved to have significant results in improving the quality of life of PLWHA.

Conclusions: Psychotherapy, especially CBT and ITP, has a significant impact on the quality of life of people living with HIV. Integration of care, especially for alcohol use disorders, and utilization of telemedicine technologies, such as tele-IPT, also provide feasible solutions to improve accessibility of care, especially in rural areas.

Keywords:

AIDS, HIV, Psychotherapy, Quality of Life

INTRODUCTION

Psychotherapy refers to various types of treatment that aim to help a person identify and change the emotions, thoughts, and behaviors that make them feel worried or disturbed (1,2). In helping patients with HIV/AIDS, a thorough assessment of mental health, substance use, peer relationships, family support, romantic relationships, employment, and health is essential to creating an appropriate and effective

treatment plan. The importance of building a trusting relationship with patients, by showing high empathy, helps to evaluate various aspects of their lives. This helps us better understand how patients function in various areas of their lives. With this understanding, we can create better care plans to meet their needs (3,4).

Based on data from various literature, it shows that factors such as physical symptoms, use of antiretroviral therapy,

psychological well-being, social support, coping strategies, spiritual well-being, and the presence of psychiatric conditions are significant indicators for the quality of life in HIV sufferers. Therefore, the impact of HIV infection on various aspects of quality of life, including physical and mental health, social support, and roles in daily life, has become a major concern for individuals affected by HIV infection. Psychotherapy is one intervention that can be implemented in HIV patients (5,6).

Quality of life (QoL) is a concept that aims to capture the well-being, of both populations and individuals, regarding the positive and negative elements in their overall existence at a certain point in time. For example, general aspects of QoL include personal health (physical, mental, and spiritual), relationships, educational status, work environment, social status, wealth, sense of security and safety, freedom, autonomy in decision making, social belonging and their physical environment (7). WHO defines quality of life as “an individual's subjective view of their position in life, situated within the framework of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns” (8,9). This concept involves a variety of aspects, including physical health, psychological conditions, level of independence, social interactions, personal beliefs, and their

relationships with significant elements of the surrounding environment. spirituality in the lives of individuals or populations at any given time. In particular, patients with HIV/AIDS have unique challenges regarding their quality of life, with factors such as physical symptoms, use of antiretroviral therapy, social support, and psychiatric conditions being important determinants (10,11).

This study aims to conduct a systematic literature review on the effectiveness of psychotherapy on the quality of life of HIV sufferers through a literature review of reports on the results of previous studies.

METHODS

This study uses a systematic literature review method. w. Inclusion criteria: Journals from the last 10 years (2013-2023), in English, journal articles, open access, involving adult respondents, full text, HIV/AIDS, adults, clinical trials, RCTs. Exclusion criteria: Encyclopedia articles, book chapters, conferences, correspondence, editorials, news, practice guidelines, protocols, systematic reviews, literature reviews and meta-analysis qualitative studies. Article selection and screening is shown in the PRISMA diagram (diagram 1). Selected articles underwent critical appraisal of RCT research (12,13).

Table 1. PICO Framework

Problem	People with HIV/AIDS
Intervention	Psychotherapy
Comparison	Aerobic and resistance exercise
Outcome	Quality of life

Table 2. Keyword

Problem/ patient	Intervention	Comparison	Outcome
PLWH	Psychotherapy		Quality of Life
HIV AIDS	CBT		Depression
HIV Positive	Mindfulness		Stress
HIV Patient	Counselling		QOL

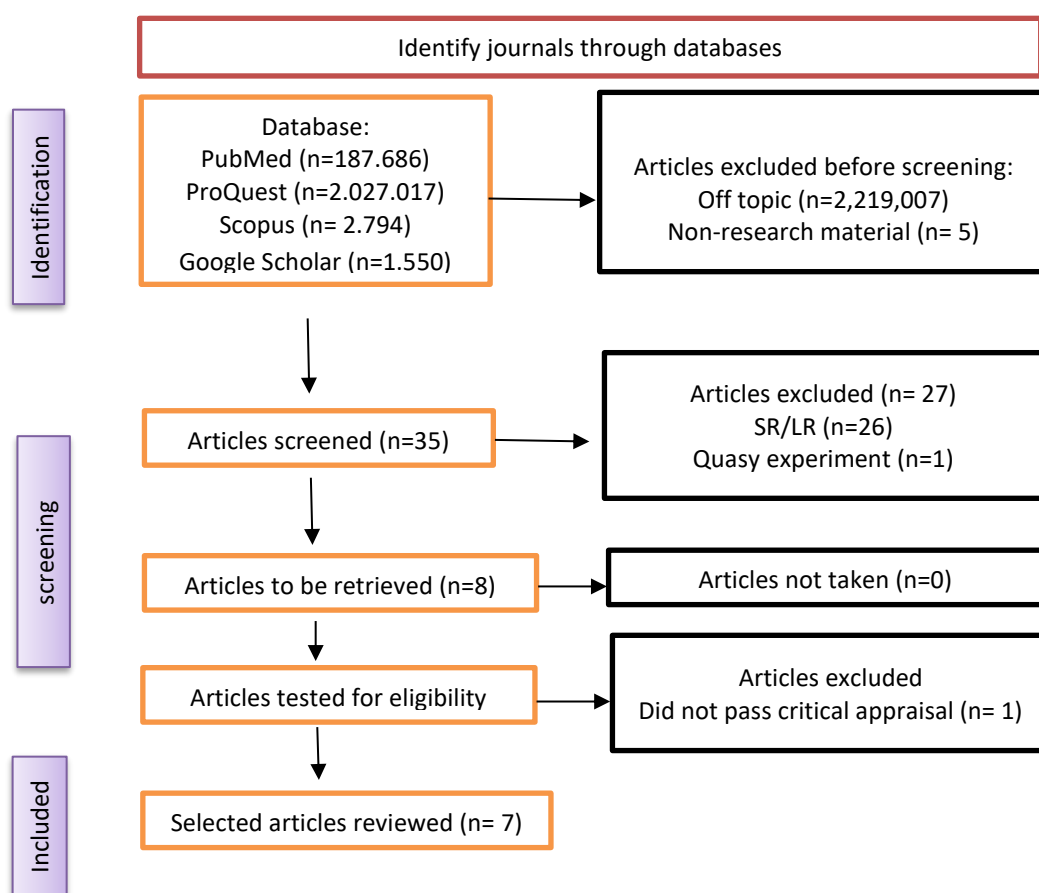


Diagram 1. PRISMA 2020 flow diagram for systematic review (14)

RESULTS

Five articles were selected in this study and passed critical appraisal using the JBI Critical Appraisal Tool for Randomized Controlled Trials (2) (Table 3).

Table 3. Summary of critical appraisal

Validitas Internal		1	2	3	4	5	6	7
Selection and allocation bias								
1.	Is randomization correctly used to divide respondents into treatment groups?	Y	C	Y	Y	Y	Y	Y
2.	Was there a hidden allocation to the treatment group?	C	Y	TJ	Y	Y	TJ	TJ
3.	Were the treatment groups equivalent at the start of the study?	C	Y	Y	Y	Y	Y	Y
Bias in providing intervention								
4.	Did the respondent not know they were in the Intervention group?	Y	C	C	C	C	UC	Y
5.	Does the researcher not know which respondents are in the treatment group or the intervention group?	C	C	C	Y	Y	UC	UC
6.	Were the Intervention and control groups treated the same apart from the Intervention provided?	Y	C	C	C	C	Y	Y
Outcome measurement bias								
7.	Was the outcome assessor unaware of the treatment action?	UC	Y	Y	Y	UC	UC	UC
8.	Are outcomes measured in the same way for treatment groups?	Y	Y	Y	Y	Y	Y	Y
9.	Are outcomes measured in a reliable way?	UC	Y	Y	UC	Y	Y	Y
Respondent retention bias								
10.	Is the follow-up complete? If not, have any differences between groups in follow-up been described and analyzed?	Y	Y	UC	Y	C	UC	Y
Validity of Statistical Results								
11.	Are respondents analyzed into randomized groups?	Y	Y	Y	Y	Y	Y	Y
12.	Is the statistical analysis used appropriate?	Y	Y	Y	Y	Y	Y	Y
13.	Was the RCT design appropriate and deviations from RCT standards taken into account (randomization and parallel groups) in the conduct and analysis of the trial?	Y	Y	Y	Y	Y	Y	Y
		61 %	70 %	61 %	78 %	70 %	61 %	77 %

Information : Y: Yes; C: Clear; UC: Unclear

Table 3 shows that research articles meet the requirements as Randomized Control Trial (RCT) research according to the JBI critical appraisal tool, with the majority getting a percentage $\geq 70\%$ (n=4).

Table 4. Study characteristics and findings

No	Title	Author	Journal	Intervention	Sample	Gender	Findings
1	Brief cognitive behavior therapy for stigmatization, depression, quality of life, social support and adherence to treatment among patients with HIV/AIDS: a randomized control trial	(15)	BMC Psychiatry	Brief-Cognitive Behavior Therapy (B-CBT)	126 participant Intervention = 63 Kontrol = 63	52/74	Cognitive behavioral therapy has been proven to be successful in reducing levels of depression and stigma, as well as increasing social support, quality of life, and adherence to treatment in individuals living with HIV/AIDS. Thus, cognitive behavioral therapy approaches are effective in treating patients with these conditions.
2	Effectiveness of a psychological intervention delivered by general nurses for alcohol use disorders in people living with HIV in Zimbabwe: a cluster randomized controlled trial	(16)	Journal of the International AIDS Society	Motivational Interviewing blended with brief Cognitive Behavioural Therapy (MI-CBT) dan Enhanced Usual Care (EUC)	234 participant Intervention (MI-CBT) = 108 Kontrol (EUC) = 126	184/50	Both groups, both MI-CBT and EUC, experienced significant improvements in quality of life at the three and six month periods. However, there was no statistically significant difference between the two groups.
3	Interpersonal psychotherapy delivered by nonspecialists for depression and posttraumatic stress disorder	(17)	PLOS Medicine	Interpersonal Psychotherapy (IPT)	256 participant Intervention (IPT) = 123	0/256	Participants who received Interpersonal Therapy (IPT) experienced significant reductions in rates of major depressive disorder (MDD), post-traumatic stress disorder

No	Title	Author	Journal	Intervention	Sample	Gender	Findings
	among Kenyan HIV-positive women affected by gender-based violence: Randomized controlled trial				Kontrol = 133		(PTSD), and combined MDD-PTSD compared to the control group. Additional findings showed that compared with the control group, IPT participants experienced greater reductions in rates of disability, intimate partner violence, and decreased absence from work, although these differences were not significant.
4	Treating Depression and Adherence (CBT-AD) in Patients with HIV in Care: A Three-arm Randomized Controlled Trial	(18)	The lancet. HIV	Cognitive Behavior Therapy for adherence and depression (CBT-AD), Information and supportive psychotherapy with adherence counseling (ISP-AD), dan enhanced treatment as usual with adherence counseling (ETAU)	240 partisipan CBT-AD = 94 ISP-AD = 97 ETAU = 49	165/75	The main findings of this study showed that CBT-AD proved its effectiveness in improving MEMs-based adherence compared with ETAU. However, there is no difference when compared with ISP-AD. Additionally, there was an advantage in terms of reducing depression rates using CBT compared with ETAU, and these improvements generally persisted over the follow-up period.
5	Tele-Interpersonal Psychotherapy	(19)	Physiology & behavior	Tele-Interpersonal	132 partisipan	83/71(self identify	Tele-ITP has a clinically significant impact on reducing depressive

No	Title	Author	Journal	Intervention	Sample	Gender	Findings
	Acutely Reduces Depressive Symptoms in Depressed HIV-Infected Rural Persons: A Randomized Clinical Trial			Psychotherapy (tele-IPT)	Tele-IPT = 70 Standard care (SC) = 62	gay/bisexual)	symptoms and interpersonal problems in individuals with HIV/AIDS (PLWHA) in rural areas. Tele-IPT was also well received, with 4 of 5 tele-IPT patients participating fully in all nine teletherapy sessions. Assessment of the effectiveness of tele-IPT should wait for the results of analysis of long-term intervention. If it is proven that tele-IPT can reduce symptoms of depression both acutely and long-term in PLWHA in rural areas, then this treatment method can be implemented by health practitioners in rural areas who care for large numbers of PLWHA in rural settings.
6	Effective Treatment of Depressive Disorders in Medical Clinics for Adolescents and Young Adults Living with HIV: A Controlled Trial	(20)	Journal of Acquired Immune Deficiency Syndromes	Combined CBT and MMA (COMB)	42 partisipan COMB = 22 TAU = 20	29/13	The study found that participants who received COMB therapy for 24 weeks had fewer depressive symptoms ($P < 0.01$) and higher remission rates ($P < 0.001$) compared with the TAU group. COMB participants also received more psychotherapy (95% vs. 45%, $P < 0.001$) and attended more sessions (12.6 vs. 5, $P < 0.001$) than TAU participants. Viral load was reduced in

No	Title	Author	Journal	Intervention	Sample	Gender	Findings
							both groups and correlated ($P < 0.05$) with reduced depressive symptoms.
7	Effectiveness of Cognitive Behavioral Therapy for Quality of Life among Women with HIV	(21)	Iranian Journal of Health Psychology	Cognitive behavioral group therapy (CBGT)	60 participant CBGT = 30 Kontrol = 30	0/60	After 10 weeks of training, there was a significant improvement in quality of life scores in the Intervention group. Through analysis of covariance, it was found that the Intervention group had a significantly higher quality of life score than the control group after Intervention, with a P value < 0.05 . The conclusion of this study is that Cognitive Behavioral Group Therapy (CBGT) can help in psychological rehabilitation and improve the quality of life in women living with HIV (WLWH) who experience low quality of life.

Based on table 4, it can be seen that the majority of selected research articles used CBT intervention ($n=5$), 2 studies used IPT. The findings of the 7 studies show that psychotherapy provides significant benefits for HIV patients with various conditions related to their quality of life.

DISCUSSION

Psychotherapy, especially Cognitive Behavior Therapy (CBT), has emerged as an effective approach in improving the quality of life of HIV/AIDS patients. Studies show

that B-CBT can reduce depression and stigma, significantly improve treatment adherence, social support, and quality of life. The integration of CBT with medication adherence counseling has also proven beneficial in increasing adherence and reducing depression.

Cognitive Behaviour Teraphy (CBT)

Brief cognitive behavioral therapy (B-CBT) has been studied for its potential to help HIV/AIDS patients who are taking antiretroviral medication (ART) deal with sadness, stigma, treatment non-adherence,

poor quality of life, and a lack of social support. A randomized trial design was used to carry out the investigation in a Pakistani hospital. Compared to a control group, B-CBT dramatically improved HIV/AIDS patients' quality of life, social support, medication adherence, and reduction of stigma and depression. The results of this study support the idea that cognitive behavioral therapy can help those living with HIV/AIDS.

A similar study tested the effectiveness of cognitive behavioral therapy (CBT) for depression integrated with medication adherence counseling in adults living with HIV and experiencing depression. Studies compared CBT-AD with Life-Steps integrated with information and supportive therapy (ISP-AD) as well as with enhanced care as usual (ETAU). Results showed that CBT-AD provided greater improvements in medication adherence and depression compared with ETAU, and maintained higher adherence and lower depression during follow-up. There were no significant differences between CBT-AD and ISP-AD. This study suggests that integrating evidence-based treatments for depression with medication adherence counseling is beneficial for individuals living with HIV/AIDS and depression (22).

The importance of a holistic and integrated approach in caring for HIV/AIDS patients is evident from studies that have attempted to integrate treatment for alcohol use disorders with HIV care. Motivational Interviewing mixed with Cognitive Behavioral Therapy (MI-CBT) has been proven to reduce problematic alcohol consumption in HIV/AIDS patients.

This study notes the limitations of randomized clinical trials regarding alcohol use disorder (AUD) in individuals living with HIV in Africa. Although alcohol consumption plays a role in poor virological control in PLWH undergoing antiretroviral therapy, research in this area is limited. This study involved 16 clinic clusters in Zimbabwe that were randomized into Intervention and Control groups.

Participants who meet the criteria receive 8-10 sessions of Motivational Interviewing mixed with Cognitive Behavioral Therapy (MI-CBT), or four sessions of Enhanced Usual Care (EUC) as a control, delivered by a nurse. The primary outcome was the change in AUDIT scores after six months. It was found that MI-CBT can reduce problematic alcohol consumption compared with EUC, indicating the potential for integration in primary care management of AUD and HIV in low-income countries. Further research is needed to evaluate the cost, implementation, and validation of alcohol use scales in limited resource settings, involving individuals with experience of HIV and AUD (23).

Another study using a combination of CBT and MMA (COMB) found that this intervention in young people living with HIV (YLWH), was more effective in achieving and maintaining remission of depression compared with usual care (TAU) in an HIV care clinic. Participants who received COMB therapy for 24 weeks had fewer depressive symptoms and higher remission rates compared with the TAU group. Meanwhile, research on women with HIV in Iran found that the Cognitive behavioral group therapy (CBGT) intervention had significantly higher quality of life scores than the control group after the intervention. This research concludes that CBGT can assist in psychological rehabilitation and improve the quality of life in women living with HIV (WLWH) who experience low quality of life.

Interpersonal Therapy (IPT)

A study highlights the role of Interpersonal Therapy (IPT), particularly in addressing the mental health impacts on women with HIV who experience gender-based violence (GBV). IPT delivered by nonspecialists in HIV clinics can reduce depression, PTSD, and produce improvements in mental functioning and experiences of GBV.

Many cases of depression and post-traumatic stress disorder (PTSD) among HIV-positive women are attributable to

gender-based violence (GBV). Despite widespread knowledge of the problem, mental health services remain underserved by HIV clinics. The vast majority of women living with HIV are located in Sub-Saharan Africa, a region with alarmingly high rates of gender-based violence. For HIV-positive women suffering from GBV, MDD, and PTSD, this study did a randomized trial in a Kisumu, Kenya, HIV clinic. They could either be on the waiting list for TAU or given interpersonal treatment (IPT) in addition to it. The clinic's nonspecialist staff received training to provide IPT. We evaluate the outcomes after three months. From May 2015 to July 2016, 256 people took part in the study. Compared to the control group, those who participated in the IPT+TAU group were less likely to have MDD (26%) and PTSD (35%). They were also less likely to have both illnesses at the same time (36%). For those who were in relationships, secondary evaluations showed less IPV and less impairment. Even after six months of follow-up, these advantages were still there. This study found that HIV women's mental health, functioning, and experiences of GBV were significantly improved when nonspecialists in HIV clinics provided IPT for MDD and PTSD, as opposed to those who did not receive IPT.

Another promising strategy for enhancing the quality of life for patients in far-flung places is the tele-IPT method, which has shown promise in lowering depressed symptoms and interpersonal issues in rural HIV patients. Those living with HIV in rural settings are 1.33 times more likely to suffer from depression than their urban counterparts. One hundred thirty-two rural HIV-positive individuals from twenty-eight states participated in a randomized clinical trial to see whether tele-interpersonal psychotherapy (tele-IPT) eased their depression symptoms. Each of them had a major depressive disorder (MDD) diagnosis, either current or in remission, or Dysthymic disorder, according to DSM-IV. Nine individual tele-IPT sessions (n=70) or usual care (n=62) were assigned at random to the

participants. Compared to the SC control group, patients who had tele-IPT reported less depressed symptoms and interpersonal issues, according to the analysis. Compared to the SC control group, 22% of tele-IPT patients were deemed "responders" in the ITT analysis, exhibiting a 50% reduction in depression symptoms. In a nutshell, people living with HIV in rural regions have demonstrated that tele-IPT is a viable option for alleviating depressed symptoms and interpersonal issues.

CONCLUSION

Quality of Life (QoL) for HIV/AIDS patients is an important aspect that includes physical, mental, social and spiritual dimensions. Factors such as physical symptoms, social support, and psychiatric conditions are the main determinants. Psychotherapy, especially Cognitive Behavioral Therapy (CBT) and Interpersonal Therapy (IPT), has been shown to be effective in improving patients' quality of life by reducing depression, increasing treatment adherence, and addressing mental health impacts, especially in women experiencing gender-based violence (GBV). Integration of care, particularly for alcohol use disorders, and utilization of telemedicine technologies, such as tele-IPT, also provide viable solutions for increasing accessibility of care, especially in rural areas.

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