



Cognitive Behavior Therapy (CBT) to Reduce Death Anxiety (Thanatophobia) in HIV/AIDS Patients

Defia Roza¹; Nova Yanti^{2*}; Yossi Suryarinilsih³; Alfitri⁴; Heppi Sasmita⁵

^{1,2,3,5} Poltekkes Ministry of Health Padang, West Sumatra, Indonesia

⁴ Dr. M. Djamil Hospital, Padang, West Sumatra, Indonesia

ARTICLE INFO

Article history:

Received 20 July 2022
Accepted 31 October 2022
Published 10 December 2022

Keyword:

CBT
HIV
Thanatophobia

ABSTRACT

HIV/AIDS patients have complex problems, both physical, psychological, social, and spiritual. The most common psychological problem is thanatophobia. Psychological problems that are not resolved will reduce the patient's immune system that it can accelerate the emergence of opportunistic infections. The purpose of this study was to determine the effectiveness of Cognitive Behavior Therapy on death anxiety. The design of this research is *Mixed Method*. The research was conducted at the Taratak Jiwa Hati Foundation, Padang City with a sample of 15 people who were taken by purposive sampling technique. Data collection techniques with deep interviews and the implementation of CBT in groups of five sessions for five weeks. Univariate data analysis is a frequency distribution. The bivariate analysis uses paired sample t-test. The results obtained are the average level of death anxiety of HIV patients before administering CBT is 9.6 and after giving CBT is 6.4 and n value. The mean difference between before and after CBT was 3.2 with a standard deviation of 3.55. The results of the statistical test showed that there was a significant difference between the level of death anxiety in HIV patients before and after CBT ($p = 0.004$). It is hoped that nurses will provide counseling to HIV AIDS patients to take CBT when there is a problem. It is suggested to the next researcher to conduct other research on how to overcome the mental problems of HIV patients

This open access article is under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Kata kunci:

CBT
HIV
Thanatophobia

*) corresponding author

Nova Yanti

Poltekkes Ministry of Health Padang
West Sumatra, Indonesia

Email: opha-piky@yahoo.co.id

DOI: 10.30604/jika.v7i4.1320

Copyright @author(s)

ABSTRAK

Pasien HIV/AIDS mempunyai masalah yang kompleks ,baik secara fisik, psikologis , sosial dan Spiritual. Masalah psikologis yang paling sering ditemukan adalah thanatophobia. Masalah psikologis yang tidak teratasi akan menurunkan kekebalan tubuh pasien ,sehingga dapat mempercepat munculnya infeksi oportunistik. Tujuan dari penelitian ini untuk mengetahui efektifitas Cognitive Behavior Therapy terhadap kecemasan kematian . Desain penelitian ini adalah *Mixed Method*. Penelitian dilaksanakan di Yayasan Taratak Jiwa Hati Kota Padang dengan sampel sebanyak 15 orang yang diambil dengan teknik purposive sampling. Tehnik Pengumpulan data dengan deep interview, pelaksanaan CBT secara berkelompok sebanyak lima sesi selama 5 minggu. Analisa data univariat adalah distribusi frekuensi, Analisa bivariat menggunakan paired sample t Test. Hasil penelitian yang didapatkan adalah rata rata tingkat kecemasan kematian pasien HIV sebelum pemberian CBT adalah 9,6 dan sesudah pemberian CBT adalah 6,4 dan nilai mean perbedaan antara sebelum dan sesudah tindakan CBT adalah 3,2 dengan standar deviasi 3,55. Hasil Uji statistic didapatkan ada perbedaan yang signifikan antara tingkatan kecemasan kematian pasien HIV sebelum dan sesudah tindakan CBT ($p = 0,004$).Diharapkan kepada perawat untuk memberikan penyuluhan kepada Pasien HIV AIDS untuk melakukan tindakan CBT setiap ada masalah . Disarankan kepada peneliti selanjutnya untuk melakukan penelitian lain tentang cara mengatasi masalah kejiwaan pasien HIV

This open access article is under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



INTRODUCTION

HIV/AIDS is a global problem with a population of 37.5 million in 2019, and there are 1.5 million new cases in 2020 (UNAIDS, 2021) with the highest age range between 2010-2019 being 25-49 years of age which is a productive age. HIV cases in Indonesia reached its peak in 2019 at 50,282 cases, where in the same year there were 78% of new HIV infections in the Asia Pacific region. There were 7,036 AIDS cases in 2019 in Indonesia, with the most cases being men, namely 68.60% (Ministry of Health RI, 2020)

AIDS is the 9th leading cause of death in low-income countries. From 1987 to June 2019 there were 32 million deaths in the world due to AIDS and 680,000 people in 2020. Meanwhile in Indonesia AIDS deaths from 2005 - 2019 have decreased, this is due to the increasing number of AIDS treatment efforts where in 2020 there are 73% of all patients in the world taking ARVs (Health, 2021)

AIDS causes progressive destruction of the immune system, so that along with the worsening of the immune system, symptoms due to opportunistic infections such as weight loss, prolonged fever, enlarged lymph glands, diarrhea, tuberculosis, fungal infections, herpes, and others will also be seen (Nursalam). & Kurniawati, 2009). This condition is chronic and increases the morbidity and mortality of PLWHA. This physical condition can cause feelings of anger, confusion, disbelief, despair, feeling haunted, and experiencing feelings of fear of death (Itsna, 2011).

Anxiety about death (Thanatophobia) is a feeling scared or negative attitude towards death which is a normal process but can be problematic because it confiscates time, sad, and disturbing in one's life, this is related to aspects of culture, spirituality, religious beliefs, as well as external support (Pandya & Kathuria, 2021)

Death anxiety in PLWHA, apart from being caused by disease conditions, is also caused by patient knowledge about the number of deaths due to HIV/AIDS. (Widianti, 2018) states that most people living with HIV experience high levels of death anxiety, with the most worrying thing about the process of death (43%) and anxiety about life after death and the family left behind by only 2% each. This anxiety is influenced by age and gender factors (Argenis Guita Dea Nurhaesi et al., 2021) and there is a relationship between family support and the level of death anxiety (Rahman et al., 2019)

Death anxiety affects several aspects of an individual's life, such as coping with illness, environmental stress, and quality of life. So teamwork is needed to deal with individuals who experience thanatophobia (Balasubramanian et al., 2018) Patients with thanatophobia need to be assessed thanatophobically and appropriate coping mechanisms should be developed including the use of religious rituals.

Cognitive Behavior Therapy (CBT) is a psychotherapy that has been proven to be effective in overcoming anxiety in patients with chronic fatigue syndrome, overcoming insomnia, effectively reducing anxiety, and deprereducinganxiety with Chronic Obstructive Pulmonary

Diseases. (COPD), reducing death anxiety in covid 19 Effectively incresersilience and acceptanresilienceth in individuals experiencing death anxiety (Menzies & Whittle, 2022) Furthermore (Menzies et al., 2021) developed an online CBT program to overcome death anxiety and showed significant results.

Death anxiety is a psychological problem that cannot be ignored, requiring treatment to help individuals live a quality and stress-free life. *Cognitive Behavior Therapy* is a method that aims to reduce death anxiety by identifying anxiety problems and guiding patients to find solutions for themselves.

METHODS

The design of this research is *Mixed Method*. Qualitative phenomenological methods to get an idea of what to worry about and the response to death anxiety in HIV/AIDS patients and quantitative methods Quasi-experimental to see the level of death anxiety and the effect of CBT on death anxiety. The research was carried out at the Taratak Jiwa Hati Foundation, Padang City from August 2020 to December 2021 with a population of all HIV/AIDS patients registered at the Taratak Jiwa Hati Foundation were 123 people. and a sample of 15 people taken by purposive sampling technique. The sampling process begins with a death anxiety screening, then patients who experience anxiety are asked their willingness to participate in the study by signing an informed consent. Then the qualitative data collection was carried out by using in-depth interviews about things that we're worried about the patient's response to death anxiety that was experienced. and followed by five sessions of group CBT for 5 weeks led by a licensed therapist.

The data collection instrument used a questionnaire to obtain data on the characteristics of the respondents, screening for death anxiety with the Death Anxiety Scale (DAS) questionnaire. Then in-depth interviews to obtain data on factors that cause death anxiety and death anxiety responses. The results of the deep interview were analyzed to get the theme. Univariate data analysis was analyzed by frequency distribution. Bivariate analysis used paired sample t-test to answer the hypothesis whether there was a difference in the level of death anxiety in HIV patients before and after CBT. This research has passed the ethical clearance test by the ethics committee at the Faculty of Medicine, Andalas University, Padang on July 2021.

RESULT AND DISCUSSION

The average age of the respondents was 31.13 years, median 30 with a standard deviation of 6.43. The lowest age is 21 and the highest is 46 years, it is believed that 95% of the average age of HIV sufferers is 27.57 - 34.70 years.

Table 1
Characteristics of respondents based on average age

Characteristics	mean	SD	median	Min-Mak	95% CI
Age	31.13	6.43	30	21 -46	27.57 - 34.70

HIV patients were dominated by men (93.3%) with education levels mostly high school (60%), undergraduate (40%), and most occupations were private employees (20%), followed by housewives, and unemployed respectively (13%). Most (86.7%) HIV patients were married and the rest were unmarried and 6.7% were widows/widowers respectively. Most (60%) had HIV for more than 5 years, in line with the length of time taking HIV also showed 60% had been more than 5 years with the most side effects of ARVs being dizziness (60%), nausea (40%), anemia (20%), and only 6.7%

experienced no side effects. Furthermore, the most frequent opportunistic infections experienced were pulmonary TB (33%), syphilis (13%), diarrhea (6.7%), and herpes (6.7%) almost half of HIV patients (46%) did not even have HIV. opportunistic infection. The biggest risk factor for transmission is homosexuality (MSM), which is 80%, with the quality of family relations being mostly good (80%), but almost all (93.3%) families do not know that the person in question has HIV.

Table 2
Distribution of respondents based on characteristics (gender, occupation, education, marital status, duration of HIV, duration of RRV consumption, side effects of ARVs, opportunistic infections, risk factors for transmission, quality of relationship with family, HIV status known to family

Characteristics	n	%
Gender		
Man	14	93.3
Woman	1	6.7
Work		
Private sector employee	3	20
Self-employed	1	6.7
Housewife	2	13
Not yet working	2	13
Education		
Senior High School	9	60
Bachelor	6	40
Marital status		
Single	10	6.7
Marry	13	86.7
Widower widow	1	6.7
Long time suffering from HIV		
More than 5 years	9	60
Less than 5 years	6	40
ARV consumption		
More than 5 years	9	60
Less than 5 years	6	40
ARV side effects		
Dizzy	9	60
Nauseous	6	40
Anemia	3	20
No side effects	1	6.7
Past opportunistic infections		
Pulmonary TB	5	33
Diarrhea	1	6.7
Herpes	1	6.7
Syphilis	2	13
Not experiencing	6	46
Risk factors for HIV transmission		
Homosexual (SLS)	12	80
Heterosexual	3	20
Quality of relationship with family		
Well	12	80
Not good	3	20
Family knew HIV status		
Family knows	1	6.7
Family doesn't know	14	93.3

Death Anxiety Levels Before and After Cognitive Behavior Therapy (CBT)

The mean level of death anxiety level of HIV patients before CBT administration was 9.6, with a standard deviation of 2.53 and the lowest value was 6 and the highest was 15. It

is believed that 95% of the mortality anxiety level of HIV patients before CBT is between 8.2 – 11.

The average death anxiety level of HIV patients after CBT administration was 6.4 (95% CI: 4.18-8.62), with a standard deviation of 4.014. the lowest value is 2 and the highest is 15. It is believed that 95% of HIV patients ' mortality anxiety level after CBT is in the range of 4.18-8.62.

Table 3
Overview of Death Anxiety Levels Before and After Intervention

Death Anxiety	mean	SD	Min -Max	95% CI
Before Intervention	9.6	2,530	6 - 15	8.2 - 11
After Intervention	6.4	4.014	2 - 15	4.18 - 8.62

In-depth interviews get an overview of the things that are worried about in death in the form of feeling sad, useless, afraid of community stigma, fear of troubling others, fear of dying quickly, fear of seeing HIV friends who die, fear of dying overseas. If you die, you are afraid of dying in AIDS, the body is not taken care of, you are afraid of the grave, and you are afraid that God will not accept the practice because of AIDS.

Responses of HIV patients who experience death anxiety include suicidal thoughts, withdrawal to depression, irritability, frequent crying, lazy activities, and addiction to same-sex sexual relations.

Differences in Anxiety Levels of HIV Patients Before and After Cognitive Behavior Therapy

The mean level of death anxiety of HIV patients before CBT was 9.6 with a standard deviation of 2.539. After the CBT action was carried out, the average death anxiety score was obtained at 6.4 with a standard deviation of 4.014. There is a significant difference between the level of death anxiety of HIV patients before and after CBT ($p = 0.004$)

Table 4
Differences in Anxiety Levels of HIV Patients Before and After Cognitive Behavior Therapy

Variable	N	mean	SD	SE	P Value
Death Anxiety Score					
- Before	15	9.6	2.54	0.65	0.004
- After		6.4	4.01	1.04	

DISCUSSION

The results of this study showed that the average level of death anxiety in HIV patients before CBT intervention was at a severe level. This is in line with research conducted (Irawati et al., 2011) which revealed that the death anxiety of HIV patients was classified as severe and moderate. Likewise, the results of research (Pardede et al., 2018) revealed that 48.4% of HIV patients experienced moderate levels of anxiety and 45.2% experienced severe levels of anxiety. This severe level of death anxiety must be addressed immediately because according to (Menziez et al., 2019) death anxiety is closely related to various psychological disorders so it requires innovative and sustainable treatment.

HIV patients revealed that when they were newly diagnosed with HIV, various worries arose such as whether their partner would accept it, whether they could still work to earn a living as usual, whether their family would accept their presence the same as before they were sick and they also often feel that their end is getting closer, and bad societal stigma. Many of the patients experience excessive fear of death, (Pardede et al., 2018) who mention the anxiety that appears at the beginning of the diagnosis is future health conditions, remaining age, family and environmental responses, death anxiety and stigmatization and discrimination. In-depth interviews with HIV patients get an overview of the things that are worried about death in the form of feeling sad, useless, afraid of community stigma, fear of troubling others, fear of dying quickly, fear of seeing HIV friends who die, fear of dying overseas. If you die, you are afraid of dying in AIDS, the body is not taken care of, you are afraid of the grave, and you are afraid that God will not accept the practice because of AIDS. A study cohort by (Kalfas et al., 2022) said that patients with Chronic Fatigue Syndrome (CFS) experience severe anxiety, fatigue, and poor adjustment to work and social environments.

depth interviews also revealed that patients feel excessive fear of death because until now there is no cure for HIV. Death anxiety can be in the form of feeling very

horrified to see the corpse (93.3%), 86.7% said they are afraid to think about life after death, 80% said they are afraid of facing a disease that requires surgery, afraid of having an opportunistic infection in the form of cancer. , 73.3% said they were afraid to think about life after death. 66.7% said it is acute if someone talks about earthquakes, tsunamis, and other natural disasters, (Menziez & Veale, 2022) mentioning that death anxiety can cause a phobia of certain things which can even lead to various mental disorders.

Furthermore, from in-depth interviews, information was also obtained that the effect of death anxiety that also appears in HIV patients is the response of HIV patients who experience death anxiety in the form of wanting to commit suicide, withdrawing to depression, irritability, often crying, lazy to do activities, and addiction to sexual relations with others. type. (Pardede et al., 2018) revealed that the effects of death anxiety in HIV patients can be in the form of mental disorders, lack of concentration, depression, feelings of guilt, closure, disorganized thoughts, perceptual disturbances, phobias, illusions and hallucinations, anxiety, anger, and suicidal ideation. self.

According to (Balasubramanian et al., 2018) that the factors that contribute to preventing thanatophobia are high self-esteem, high religious beliefs, good health, sense of satisfaction in life, intimacy with family and friends, high fighting spirit. Furthermore (Menziez & Whittle, 2022) states that a person's fortitude can reduce death anxiety, where this fortitude is the basis of Cognitive Behavior Therapy and is a potential guide to the success of CBT. thanatophobia in respondents, in addition to being influenced by factors such as health conditions such as opportunistic infections that can cause death, also because most of the HIV patients who became respondents were homosexuals who had less religious beliefs.

All HIV patients in in-depth interviews said they were afraid that after death, their bodies would not be considered human, so people did not want to carry out their bodies, even many HIV patients had to be caretakers of other HIV patients' bodies because no one was willing to do it. HIV

patients are also afraid of dying in conditions of severe opportunistic infections. There is a separate but connected construction between the fear of death and the fear of the death process. The effect of death anxiety varies greatly, including religiosity, gender, psychological state, and age (Sinoff, 2017)

The average level of death anxiety after being given CBT was at mild level. The results of this study are in line with the results of research (Damayanti & Putri, 2021) which shows that there is a decrease in anxiety in victims of bullying behavior after Cognitive Behavior Therapy (CBT) group therapy ($p = 0.031$). It is hoped that CBT can be applied as a method in reducing anxiety that can be given to victims of bullying. Case study (Ramadan, 2020) in a 30-year-old woman with a diagnosis of *Illness Anxiety Disorder* who has experienced anxiety since she was diagnosed with Mammary Fibroadenoma (FAM) and always thought it would become vicious and be the cause of his premature death. After 4 sessions of CBT, death anxiety and reduced pain levels. Cognitive Behavior Therapy is also effective in reducing insomnia in pregnant women. The decrease in insomnia was faster in pregnant women who took CBT (31 days) compared to those who did not follow CBT (48 days) with p -value = 001

Problems that arise in HIV patients are explained by cognitive theory developed by Beck (2011). This theory states that thoughts will affect mood and behavior. If individuals can adaptively develop thinking, then the emotions felt are more positive and the behavior generated is more functional. A thought that is wrong, irrational, and maladaptive is called a cognitive distortion. Beck suggests that cognitive distortions can be in the form of over-generalization, magnification, minimization, dichotomous thinking, and so on. The dynamics of the problems experienced by patients can be described through Beck's cognitive theory approach that the subject experiences cognitive distortion Magnification, namely a form of excessive cognitive distortion of the significance of a situation or an event. The patient assumes that his HIV will cause him to die. This cognitive element requires a cognitive restructuring approach as well as behavioral therapy using relaxation. Before performing CBT interventions, patients must realize in advance that they already have erroneous beliefs (cognitive distortion) so that it will be easier to change emotions and behavior in a more positive direction.

Effective implementation of CBT to rationalize cognitive and change maladaptive behavior consists of several stages namely: (a). Pre-therapy, therapist, and subject determine what targets to be achieved and the expectations of the subject. The subject's target and expectation are not to be disturbed by negative thoughts that hinder the subject's activities to increase economic income. (b). Relaxation, the subject is taught techniques to reduce tension with breathing relaxation. This session aims to teach the subject to be more relaxed and calmer when faced with a worrying situation. Breathing relaxation teaches the subject to feel his breath in the diaphragm so that it can help the subject to be in a relaxed state. Breathing relaxation has the advantage that the subject can apply it directly when faced with an anxious situation. (c). Cognitive restructuring discusses logical errors, negative thoughts, and beliefs that arise automatically. Subjects are taught to identify and distinguish thoughts (Perihan et al., 2020)

Furthermore, patients are asked to find alternative thoughts to fight cognitive distortions with logical and realistic thoughts. Cognitive restructuring aims to correct negative thoughts that make the patient's behavior

maladaptive. In this session, the patient succeeded in identifying some negative thoughts that cause anxiety. These negative thoughts are then replaced by the patient with positive thoughts about their condition. Changes were found in the anxiety scores that were evaluated each session (showing a decrease) and the presence of changes in behavior after CBT. Patients can carry out CBT therapy well to reduce anxiety. The success of the intervention was supported by internal motivation and cooperative attitude during the intervention process. The results showed that CBT is effective for individuals with anxiety problems due to having a physical illness, this is following several previous studies on CBT in similar cases. Anxiety occurs because of attentional bias and memory processing associated with threats about health and maintenance of severe anxiety. This bias can be changed through CBT. Beck points out that it is very important to straighten out the negative thinking that exists. Replacing wrong thought patterns or perceptions with positive and realistic thinking makes the patient more adaptive in dealing with anxiety. In addition, the breathing relaxation that is given is very helpful for the subject in providing calm in the face of physiological responses when anxious. (Pandya & Kathuria, 2021)

The problem of death anxiety in HIV patients is very complex, so it is necessary to intervene in various ways. In addition to using CBT, the patient's faith must also be increased. Apurva-kumar Pandya and Tripti Kathuria (2021) revealed that death anxiety can be overcome by improving the patient's spiritual and coping mechanisms. The quality of life of HIV/AIDS patients can also be improved with Spiritual Emotional Freedom Technique (SEFT) therapy because spirituality and health are closely related, the hopes and prayers offered by and for patients greatly affect healing and will ultimately improve the quality of life. Another spiritual intervention that is also effective for dealing with anxiety is remembrance therapy, a combination of remembrance with progressive muscle relaxation (PMR) has been proven to be effective in reducing the symptoms of Post Traumatic Syndrome Disorder for earthquake victims (Sasmita et al., 2021)

Various interventions that can be done to overcome psychological problems in HIV patients as described above, CBT is very well done to overcome anxiety, especially thanatophobia, because CBT can be done by patients easily, and patients can fight negative thoughts and behaviors into thoughts and behaviors positive, so that any problems that arise can be resolved properly and quickly.

CONCLUSION AND SUGGESTION

The average death anxiety level of HIV patients before CBT was 9.6, the average death anxiety level of HIV patients after CBT was 6.4, The mean difference between before and after CBT was 3.2 with a standard deviation of 3, 55. The results of the statistical test obtained p value = 0.0 04, so it can be concluded that there is a significant difference between the level of death anxiety of HIV patients before and after CBT. Nurses are expected to provide counseling to HIV/AIDS patients to take CBT every time there is a problem It is suggested to the next researcher to conduct other research on how to overcome the mental problems of HIV patients.

ACKNOWLEDGEMENT

We would like to express our gratitude to all those who have helped participate in this research, especially to the Health Polytechnic Ministry of Padang Padang, which has funded this research, through the DIPA fund of Health Polytechnic

Conflict of Interest statement

The author declares that there is no potential conflict of interest concerning the authorship and publication of this article.

REFERENCES

- Argenis Guita Dea Nurhaesi, G., Diah Larasati, A., Titis Asrining Tyas, N., Nursing Science Program STIKES St. Elisabeth Semarang, M., Study Program, DS, & St. Elisabeth Semarang, Stik. (2021). Description of Anxiety Levels of People With Hiv/Aids (PLHA) in Arjuna's Peer Support Group (Kdsa) in Semarang City. *Indonesian Journal of Nurses*, 5(3), 850–857.
- Balasubramanian, C., Subramanian, M., Balasubramanian, S., Argawal, A., Raveendran, S., & Kaliaperumal, C. (2018). thanatophobia: Physician perspective of Dealing with Patient with Fear of Death. *Journal of Natural Science, Biology and Medicine*, 9 (January), 103–104. <https://doi.org/10.4103/jnsbm.JNSBM>
- Ballesio, A., Bacaro, V., Vacca, M., Chirico, A., Lucidi, F., Riemann, D., Baglioni, C., & Lombardo, C. (2021). Does cognitive behavior therapy for insomnia reduce repetitive negative thinking and sleep-related worry beliefs? A systematic review and meta-analysis. *Sleep Medicine Reviews*, 55, 101378. <https://doi.org/10.1016/j.smrv.2020.101378>
- Cookson, MD, & Stirk, PMR (2019). *濟無 No Title No Title No Title*. 4, 178–186.
- Damaiyanti, S., & Putri, M. (2021). Group Cognitive Behavior Therapy on Reducing Anxiety Levels in Victims of Violent Behavior (Bullying) in Elementary Schools. *Journal of Health*, 12, 358–361.
- Health, W. (2021). Global progress report on HIV, viral hepatitis and sexually transmitted infections, 2021. In *World Health Organization* (Vol. 53, Issue 9). <https://www.who.int/publications/i/item/9789240027077>
- Irawati, D., Faculty, S., Gadjah, PU, Yogyakarta, M., & Kumolohadi, R. (2011). Religious Cognitive Behavior Therapy To Reduce Anxiety Towards Death of Hiv/Aids Patients. Religious Cognitive Behavior Therapy To Reduce the Anxiety Towards Death of Hiv/Aids People. *Journal of Interventional Psychology*, 3(2), 169–186.
- Kalfas, M., Smakowski, A., Hirsch, C., Simiao, F., & Chalder, T. (2022). Generalized Worry in Patients With Chronic Fatigue Syndrome Following Cognitive Behavioral Therapy: A Prospective Cohort Study in Secondary Care. *Behavior Therapy*. <https://doi.org/10.1016/j.beth.2022.01.004>
- Indonesian Ministry of Health. (2020). HIV AIDS Infodata. *Ministry of Health of the Republic of Indonesia*, 1–8. <https://pusdatin.kemkes.go.id/resources/download/pusdatin/infodatin/infodatin-2020-HIV.pdf>
- Manber, R., Bei, B., Simpson, N., Asarnow, L., Rangel, E., Sit, A., & Lyell, D. (2019). Cognitive behavioral therapy for prenatal insomnia: A randomized controlled trial. *Obstetrics and Gynecology*, 133 (5), 911–919. <https://doi.org/10.1097/AOG.0000000000003216>
- Menzies, RE, & Menzies, RG (2020). Death anxiety in the time of COVID-19: Theoretical explanations and clinical implications. *Cognitive Behavior Therapist*, 13, 1–11. <https://doi.org/10.1017/S1754470X20000215>
- Menzies, RE, Sharpe, L., & Dar-Nimrod, I. (2019). The relationship between death anxiety and severity of mental illnesses. *British Journal of Clinical Psychology*, 58 (4), 452–467. <https://doi.org/10.1111/bjc.12229>
- Menzies, RE, Sharpe, L., Helgadóttir, FD, & Dar-Nimrod, I. (2021). Overcome Death Anxiety: The Development of an Online Cognitive Behavior Therapy Program for Fears of Death. *Behavior Change*, 38 (4), 235–249. <https://doi.org/10.1017/bec.2021.14>
- Menzies, RE, & Veale, D. (2022). *Free Yourself From Death Anxiety; A CBT Self Help Guide For a Fear of Death and Dying*. Jessica Kingsley Publishers. https://books.google.co.id/books?hl=id&lr=&id=7TVTEAAAQB-AJ&oi=fnd&pg=PP1&dq=cbt+and+thanatophobia&ots=MyRH_cedlx&sig=MnX_GKyuEHKGToklaSUXDcLG-onec=&redir=falc=fsec=&redir_fsec=
- Menzies, RE, & Whittle, LF (2022). Stoicism and death acceptance: integrating Stoic philosophy in cognitive behavior therapy for death anxiety. *Discover Psychology*, 2 (1). <https://doi.org/10.1007/s44202-022-00023-9>
- Pandya, AK, & Kathuria, T. (2021). Death anxiety, religiosity and culture: Implications for therapeutic process and future research. *Religions*, 12 (1), 1–13. <https://doi.org/10.3390/rel12010061>
- Pardede, JA, Simanjuntak, GV, Febrian, J., Putra, A., Studi, P., University, N., & Mutiara, S. (2018). *Reducing the anxiety level of HIV/aids patients through five-finger hypnosis therapy*. 85–90.
- Perihan, C., Burke, M., Bowman-Perrott, L., Bicer, A., Gallup, J., Thompson, J., & Sallese, M. (2020). Effects of Cognitive Behavioral Therapy for Reducing Anxiety in Children with High Functioning ASD: A Systematic Review and Meta-Analysis. *Journal of Autism and Developmental Disorders*, 50 (6), 1958–1972. <https://doi.org/10.1007/s10803-019-03949-7>
- Rahman, A., Kirana, W., Anggraini, R., Panglima, J., & Pontianak, K. (2019). *Anxiety Facing Death of HIV/AIDS Patients in RSUD dr. Abdul Aziz*. 18–32.
- Ramadhan, D. (2020). Cognitive Behavioral Therapy To Reduce Anxiety in Fibroadenoma Mammarum Patient. *Journal of Psychiatry Psychology and Behavioral Research*, 1, 6–9. <http://doi.wiley.com/10.1002/9781118625392.wbecp>
- Roza, D., Alfitri, & Wira, A. (2021). *Spiritual Needs of HIV Patients* (Guepedia, Ed.). Guepedia.
- Sasmita, H., Yanti, N., Hendri, K., Tasman, T., Astuti, VW, & Fadriyanti, Y. (2021). Progressive Muscle Relaxation and Dhikr on Reducing Post Traumatic Stress Disorder in Earthquake Victims. *Journal of Aisyah: Journal of Health Sciences*, 6 (2), 385–392. <https://doi.org/10.30604/jika.v6i2.494>
- Sinoff, G. (2017). Thanatophobia (death anxiety) in the elderly: The problem of the child's inability to assess their own parent's death anxiety state. *Frontiers in Medicine*, 4 (FEB), 6–10. <https://doi.org/10.3389/fmed.2017.00011>
- UNAIDS. (2021). Global HIV Statistics, 2021. In *UNAIDS* (Vol. 34, Issue 1). <https://doi.org/10.36721/PJPS.2021.34.1.SUP.275-281.1>

- Wahidah, FR, & Adam, P. (2019). Cognitive Behavior Therapy to Change Negative Thoughts and Anxiety in Adolescents. *Indigenous: Scientific Journal of Psychology* , 3 (2), 57–69. <https://doi.org/10.23917/indigenous.v3i2.6826>
- WHO (World Health Organization). (2020). Global HIV epidemic. In *Weekly releases (1997–2007)* (Vol. 2, Issue 26). <https://doi.org/10.2807/esw.02.26.01196-en>
- Widianti, E. (2018). Level of Anxiety on Death in PLWHA. *Sudirman Journal of Nursing* , 12 (3), 199. <https://doi.org/10.20884/1.jks.2017.12.3.758>
- Zhang, X., Yin, C., Tian, W., Lu, D., & Yang, X. (2020). Effects of cognitive behavioral therapy on anxiety and depression in patients with chronic obstructive pulmonary disease: A meta-analysis and systematic review. *Clinical Respiratory Journal* , 14(10), 891–900. <https://doi.org/10.1111/crj.13226>

