

Murottal Qur'an on Anxiety and Sleep Quality of Patients Undergoing Dialysis: *Scoping Review*

Dimas Utomo Hanggoro Putro^{1*}, Arifin Setiawan², Arif Apriyanto Wibowo³,
Muhammad Bayu Sucipto³, Rian Andito Fesanrey³, Veri Sugandi⁴

¹Akademi Keperawatan Pelni, Indonesia

²Rumah Sakit Sari Asih Sangiang, Indonesia

³Fakultas Ilmu Keperawatan, Universitas Muhammadiyah Jakarta, Indonesia

⁴Rumah Sakit Umum Daerah Koja, Jakarta, Indonesia

*email: dimasuhp@akper-pelni.ac.id

Article history

Posted, Des 14th, 2023

Reviewed, Apr 05th, 2024

Received, May 26th, 2024

Copyright © 2024 Authors



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

ABSTRACT

Chronic kidney disease is a non-communicable disease problem that causes global problems. Patients with chronic kidney disease require dialysis therapy, including hemodialysis. Chronic kidney disease patients undergoing hemodialysis may experience anxiety, depression, and decreased sleep quality. This study aims to determine the effects of Murottal Qur'an therapy on anxiety and sleep quality in patients with chronic kidney disease undergoing hemodialysis. The method used is scoping review with the Google Scholar database and Springer Link. The keywords used are "Chronic Kidney Disease Patients" AND "Murottal Qur'an Therapy" OR "Holy Qur'an Therapy" AND "anxiety and sleep quality while undergoing hemodialysis. Inclusion criteria include full text articles from 2019-2023 in Indonesian or English published from national and international journals. The types of articles are Randomized Controlled Trial (RCT), Quasi Experimental, and Case Study. Twelve articles meet the inclusion criteria. Qur'an murottal therapy with Surah Ar-Rahman and Al-Fatihah can reduce anxiety and improve sleep quality because there are chemical elements in the body. The conclusion is that there is an effect of murottal Qur'an on reducing anxiety and improving sleep quality in chronic kidney disease patients undergoing hemodialysis

Keywords: Anxiety; Chronic Kidney Disease; Hemodialysis; Murottal Qur'an; Sleep Quality

ABSTRAK

Gagal ginjal kronik merupakan permasalahan penyakit tidak menular yang menimbulkan permasalahan global. Pasien gagal ginjal kronik memerlukan terapi dialisis salah satunya dengan hemodialisis. Pasien gagal ginjal kronis yang menjalani hemodialisis dapat mengalami kecemasan dan penurunan kualitas tidur. Tujuan penelitian ini untuk mengetahui pengaruh terapi murottal Al-Qur'an terhadap kecemasan dan kualitas tidur pasien gagal ginjal kronik yang menjalani hemodialisis. Metode yang digunakan adalah scoping review dengan database Google Scholar dan Springer Link. Kata kunci yang digunakan adalah "Chronic Kidney Disease Patients" AND "Murottal Qur'an Therapy" OR "Holy Qur'an Therapy" AND "anxiety and sleep quality while undergoing hemodialysis". Kriteria inklusi meliputi artikel teks lengkap dari 2019-2023 dalam bahasa Indonesia atau bahasa Inggris yang diterbitkan dari jurnal nasional maupun internasional. Tipe artikel yaitu Randomized Controlled Trial (RCT), Quasy Experimental, dan Case Study. Dua belas artikel memenuhi kriteria inklusi. Terapi murottal Al-Qur'an dengan surah Ar-Rahman dan Al-Fatihah dapat menurunkan kecemasan dan meningkatkan kualitas tidur karena ada unsur kimiawi dalam tubuh. Kesimpulannya adalah terdapat pengaruh murottal Al-Qur'an terhadap penurunan kecemasan dan peningkatan kualitas tidur pada pasien gagal ginjal kronik yang menjalani hemodialisis.

Kata Kunci: Gagal Ginjal Kronik; Hemodialisis; Kecemasan; Kualitas Tidur; Murottal Al-Qur'an

INTRODUCTION

Chronic kidney disease is a non-communicable disease that causes global health problems (Kampmann et al., 2023).

Chronic kidney disease is defined as an abnormality in the structure or function of the kidneys, which occurs for more than 3 months. Chronic kidney disease is diagnosed by a persistent increase in urinary albumin excretion (albuminuria), a low glomerular filtration rate, or other manifestations of kidney damage (Elsayed et al., 2023).

Data from the National Health and Nutrition Examination Survey (NHANES) shows the prevalence of chronic kidney disease in adults in the United States in 2015-2018 was 14.4% (National Kidney Foundation, 2022). Data from the Indonesian Renal Registry (IRR) in 2018 stated that the prevalence of chronic kidney disease in Indonesia had

increased from 108,723 people in 2017 to 198,575 people in 2018 (Perkumpulan Nefrologi Indonesia, 2018).

Decreased kidney function means that urine cannot be produced and excreted, toxins in the body accumulate, fluid balance is disturbed, shortness of breath, and anemia (Purba, 2021). Renal replacement therapy is a step to reduce the risk of damage to chronic kidney disease (Sinurat et al., 2022). Kidney replacement therapy includes hemodialysis therapy, peritoneal dialysis and kidney transplantation (Halimah et al., 2022). Chronic kidney disease patients often choose hemodialysis because of the low cost of this therapy compared to other kidney replacement therapies (Ezdha et al., 2023). Data from the 2018 IRR stated that

99% of chronic kidney disease patients chose hemodialysis therapy (Perkumpulan Nefrologi Indonesia, 2018).

Hemodialysis is one of the dialysis therapies when the GFR is less than 15 ml/minute/1.73 m². Hemodialysis will remove excess salt, water and dregs from the body (Priandini, Handayani and Rosyidah, 2023). Patients who experience chronic kidney disease will depend on hemodialysis for life on a regular basis and will no longer be able to carry out their usual activities (Darsini and Cahyono, 2023).

Chronic kidney disease patients undergoing hemodialysis will cause anxiety (Twistiandayani and Prabowo, 2021). Anxiety in patients arises due to fluid restrictions, physical limitations, and dependence on hemodialysis therapy (Dahlan, Budi and Widiyanto, 2023). The level of anxiety greatly affects the quality of sleep in patients undergoing hemodialysis because they cannot think calmly about their future (Damanik, 2020).

Hemodialysis undertaken by chronic kidney disease patients also has an impact on poor sleep quality (Diawati, Dewi and Inayati, 2023). Poor sleep quality is caused by the kidneys not being able to filter properly, so that toxins remain in the blood and leave the body through urine (Muchammad and Waliyanti, 2023).

Patients who experience anxiety, if it cannot be handled properly, will cause stress and depression for themselves (Taha, Firmawati and Harismayanti, 2023). Poor sleep quality in chronic kidney disease patients undergoing hemodialysis will affect the patient's physiological, psychological, social and spiritual well-being, as well as the patient becoming irritable, decreasing alertness and concentration. This will worsen the disease condition (Nurhayati *et al.*, 2021).

An effective and efficient strategy for reducing anxiety levels and improving sleep quality is relaxation techniques (Kurniasih, Kurnia and Istiqomah, 2021). One therapy to overcome anxiety and improve sleep quality is murottal Qur'an therapy (Khamid and Rachimah, 2022; Taha, Firmawati and Harismayanti, 2023). There is a need for nursing intervention to keep noise levels to a minimum to disguise noisy sounds through Qur'an murottal therapy (Diawati, Dewi and Inayati, 2023).

Murottal Qur'an therapy has the benefit of reducing depression, sadness, anxiety, gaining calm and improving sleep quality (Dahlan, Budi and Widiyanto, 2023; Diawati, Dewi and Inayati, 2023). Someone who listens to murottal Qur'an experiences a decrease in the hormones epinephrine, dopamine and cortisol. This

decrease occurs because the sound of the murottal Qur'an stimulates the brain, thereby stimulating the hypothalamus to produce neuropeptides. This is what makes murottal Qur'an have a calming effect on the body (Yudha, Ludiana Ludiana and Sari, 2021).

The aim of this study was to determine the effect of murottal Qur'an on reducing anxiety and improving sleep quality in chronic kidney disease patients undergoing hemodialysis.

METHOD

This research uses a *scoping review technique* with a methodological framework as suggested by Arksey and O'Malley for writing *scoping reviews*.

The five steps taken for the review are: 1) identification of research questions, 2)

identification of relevant articles, 3) selection of relevant articles, 4) selection of literature related to the article and data mining, and 5) compiling, summarizing and reporting the results.

Researchers applied the Population, Concept, Context (PCC) format to organize and determine the focus of the review. In this study, P = chronic kidney disease patients, C = murottal Qur'an therapy, and C = anxiety and sleep quality while undergoing hemodialysis. The question asked in this article is "How can murottal Qur'an therapy reduce anxiety and improve sleep quality in chronic kidney disease patients undergoing hemodialysis?"

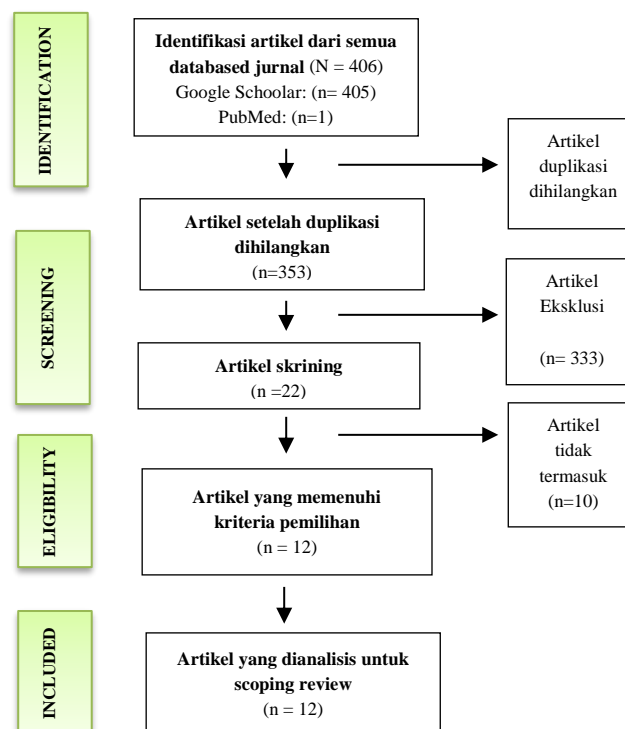


Figure 1. Article screening process

The literature search process was carried out through the Google Scholar and Springer Link databases in May-June 2023 , and used Boolean operators. "OR AND". The following keywords were used in the search: " *chronic kidney disease patients* " AND " *murottal Qur'an therapy* " OR " *holy Qur'an therapy* " AND " *anxiety and sleep quality while undergoing hemodialysis* ".

Article inclusion criteria include full text articles from 2019-2023 in Indonesian or English published from national or international journals. Article types are

Randomized Controlled Trial (RCT), Quasi Experimental , and Case Study . The exclusion criteria are the type of literature study articles and articles from *repositories*

RESULTS AND DISCUSSION

The results of the article screening obtained 12 articles (figure 1). Duplicate articles were then identified from two databases using the Mendeley application to simplify the search process. Researchers then filtered articles by reading the titles and abstracts based on the inclusion criteria. Finally 12 articles were selected for analysis (table 1) and divided into 2 themes as follows:

Table 1. Article search results

No.	Author and Year	Research design, sample, instruments, and analysis	Intervention	Results
Theme 1: The influence of Murottal Qur’an therapy on anxiety in chronic kidney disease patients undergoing hemodialysis				
1.	(Taha, Firmawati and Harismayanti, 2023)	Research design : Quasi Experimental with design Pretest-Posttest with Two Group Design Sample: 30 respondents Instruments: not described in the article Analysis: Paired t Test	Dhikr therapy and murottal Qur'an with surah Ar-Rahman and played once for each patient undergoing therapy	Anxiety scores before and after being given murottal Qur’an therapy with Surah Ar-Rahman and Dhikr therapy with each value p-value = 0.000
2.	(Dahlan, Budi and Widiyanto, 2023) .	Research design : Case study Sample: 1 respondent	Murottal Qur'an with Surah Ar-Rahman for 15 -20 minutes. Then the	Murotal Qur’an therapy with Surah Ar-Rahman for 15 -20 minutes, the patient

No.	Author and Year	Research design, sample, instruments, and analysis	Intervention	Results
		Instrument: State Trait Anxiety Inventory (STAI) Analysis: -	patient rests for 10 minutes .	experienced a reduction in anxiety score of 59, including moderate anxiety level.
3.	(Hapsari, Endah and Kusuma Putri, 2022)	Research design : Quasi Experimental with a one group pretest-posttest design Sample: 34 respondents Instrument: Zung Self Anxiety Rating Scale (ZSAS) Analysis: Paired t Test	Murottal Qur'an therapy with Surah Ar-Rahman which is carried out for 7 days with a duration of 15 minutes	There is a significant influence between murottal Qur'an therapy and Surah Ar-Rahman on the anxiety level of chronic kidney disease patients undergoing hemodialysis with p-value = 0.000.
4.	(Twistiandayani and Prabowo, 2021)	Research design : Quasi Experimental with a pretest and posttest control group design Sample: 40 respondents Instrument: DASS-42 questionnaire Analysis: Mann Whitney Test	Treatment group: Murottal Qur'an therapy with Surah Ar-Rahman and Al-Fatihah with a duration of 30 minutes during hemodialysis twice a week for 4 weeks. Control group: not given any intervention	Murottal Qur'an therapy surah Ar-Rahman and surah Al-Fatihah have a significant effect on anxiety with p-value = 0.005
5.	(Suhita, Arini and Kardjati, 2019)	Research design : Quasi Experimental with a pretest-posttest control group design . Sample: 58 respondents Instruments: Not described in the article Analysis: Paired t Test	Murottal Qur'an therapy with surah Ar-Rahman is carried out for 30 days. The duration of murottal Qur'an therapy is not explained in this article. The intervention given to the control group is also not described in this article	The statistical test results obtained by murottal Qur'an therapy with Surah Ar-Rahman can be obtained reduced anxiety in the treatment group 9.01 with an anxiety significance value = 0.000, while the reduction in anxiety in the control group was 22.41 with an anxiety significance value = 0.000

No.	Author and Year	Research design, sample, instruments, and analysis	Intervention	Results
6.	(Alivian, Purnawan and Setiyono, 2019)	Study design: Quasi Experimental by pretest-posttest Design with Two Groups. Sample: 30 respondents Instrument: Visual Analog Scale Anxiety (VAS-A) 0-100 Analysis: P aired t T test and Independent t Test	Prayer therapy and murottal Qur'an therapy, but the surah used as Qur'an murottal therapy is not explained in the article. The time and duration of prayer therapy and Qur'an murottal are not explained in this article.	There is a significant difference between anxiety scores before and after listening to murottal Qur'an therapy and prayer with each p value < 0.001
7.	(Yudha, Ludiana and Sari, 2021)	Research design : case study Sample: 1 respondent Instrument: Observation sheet, standard operating procedures (SOP) for Qur'an murottal therapy and Hamilton Anxiety Rating Scale (HARS). Analysis: -	Murottal Qur'an therapy was carried out for 3 days but the surah used as murottal Qur'an therapy was not explained in the article. The duration of Qur'an murottal therapy is not explained in this article.	Murottal Qur'an therapy can reduce anxiety levels in subjects with kidney disease undergoing hemodialysis
8.	(Agusmita and Effendy, 2019)	Research design : case study Sample: 1 respondent Instruments: Demographic questionnaire and Hamilton Rating Scale for Anxiety (HRS A) Analysis: -	Murottal Qur'an therapy is carried out for three days, one day is carried out for 25 minutes. However, the surah used as murottal Qur'an therapy is not explained in the article. The therapy is carried out when the patient is undergoing hemodialysis in the hemodialysis room at Medan North Sumatra Hospital. Respondents	There is an influence of providing murottal Qur'an therapy on the anxiety level of hemodialysis patients at North Sumatra Hospital, Medan

No.	Author and Year	Research design, sample, instruments, and analysis	Intervention	Results
			listened to murrotal Qur'an using MP3 players and headphones .	
Theme 2: Effect of Murottal Qur'an Therapy on sleep quality in chronic kidney disease patients undergoing hemodialysis				
1.	(Siregar et al. , 2023)	Research design : Quasi Experimental with a one group pretest-posttest design Sample: 35 respondents Instrument: Pittsburgh Sleep Quality Index (PSQI) Analysis: Paired t Test	The intervention was carried out 1 time during 1 SEFT cycle and 30 minutes of listening to the murottal Quran Surah Ar Rahman using animated videos and headsets for the patient after SEFT was carried out.	The combination of Spiritual emotional freedom technique (SEFT) and listening to the murrotal Quran with Surah Ar-Rahman can improve the sleep quality of patients with hemodynamic disorders in the hemodialysis room
2.	(Diawati, Dewi and Inayati, 2023)	Research design : Case study Sample: 2 respondents Instruments: demographic questionnaire sheet, observation sheet of sleep quality measurement results using the Pittsburgh Sleep Quality Index (PSQI) and SOP for providing Qur'an murottals Analysis : -	Murottal Qur'an therapy with Surah Ar-Rahman is carried out for 7 days with a duration of ± 20 minutes. The application of this therapy will continue at the respondent's home when the respondent is not undergoing treatment at the hospital.	The sleep quality of the two respondents after applying murottal Qur'an therapy with Surah Ar-Rahman on day 7 improved to good with a PSQI score of 2.
3.	(Muchammad and Waliyanti, 2023)	Research design : Case study Sample: 1 respondent Instrument: Pittsburgh Sleep Quality Index (PSQI) Analysis : -	Aromatherapy and murottal Qur'an therapy with Surah Ar-Rahman once a day for 7 days with a duration of 30 minutes	The sleep quality of elderly people with chronic kidney disease has increased, as indicated by a PSQI score of 7 (Mild Sleep Difficulty). Providing lavender aromatherapy intervention and murottal Qur'an

No.	Author and Year	Research design, sample, instruments, and analysis	Intervention	Results
4.	(Nurani, Rochmawati and Nurchayati, 2019)	Study design: Quasi Experimental with a pretest-posttest control group design Sample: 38 respondents Instrument: Pittsburgh Sleep Quality Index (PSQI) Analysis : Paired t T test and Independent t Test	Murottal Qur'an therapy uses Mishary Al Afasy Mushaf's version of Surah Ar-Rahman which is listened to every day before going to bed at night for 13 minutes 34 seconds for 1 week at the home of the respondent undergoing hemodialysis	Surah Ar-Rahman can improve the level of sleep quality in elderly patients with chronic kidney disease Murottal Qur'an therapy with Surah Ar-Rahman can be done improve sleep quality with p-value = 0.000

Theme 1: The influence of Murottal Qur'an on reducing anxiety

Anxiety is an unpleasant feeling of tension and an apprehensive feeling that something bad will happen (Cholis, Rumpiati and Sureni, 2020). Anxiety in patients undergoing hemodialysis will usually be seen when undergoing hemodialysis for ≤6 months , patients usually feel very anxious about what they are doing, respondents are often angry, sad, shaking, weak, nervous, often repeat questions, worried that they will not work as usual, There was a look of despair on the patient's face, as well as confusion and anxiety thinking about how

long he would undergo hemodialysis therapy (Sinay and Lilipory, 2019).

Anxiety will increase the hormone norepinephrine in the blood, which will stimulate the parasympathetic nerves, then cause changes in biochemistry. The action of the hormone epinephrine is vasoconstriction in the arteries and stimulates the heart rate and heart contractions, so that blood pressure will increase, blood sugar levels will increase. increasing, rate metabolism increase And need oxygen increases. Hormone epinephrine generated in amount big moment somebody currently angry,

indication Which will seen are difficulty sleeping and anxiety (Astuti, Lestari and Simbolon, 2021). Unresolved anxiety can result in negative thoughts about one's life, decreased quality of life, depression and psychological disorders (Puspanegara, 2019).

Murottal Qur'an can be used as therapy to reduce anxiety (Alivian, Purnawan and Setiyono, 2019). The reduction in anxiety levels in hemodialysis patients is due to the Qur'an surah Ar-Rahman murottal therapy intervention which provides calm so that it can reduce anxiety and can be used as an alternative therapy because it does not cause side effects and is affordable (Hapsari, Endah and Kusuma Putri, 2022).

Positive responses emerged from providing murottal Qur'an therapy (Yudha, Ludiana Ludiana and Sari, 2021). Positive responses were seen in respondents who experienced chronic kidney disease who underwent hemodialysis, such as looking calm while closing their eyes and enjoying the sound of surah Ar - Rahman. This shows that the respondent is in a pleasant condition and has good hearing and anxiety that was previously very severe can be reduced (Suhita, Arini and Kardjati, 2019).

Murottal Qur'an has beautiful chants that make the body relax, reduce stress hormones, can divert attention from fear,

anxiety and tension, get closer to God, and can improve the body's chemical system so that it lowers blood pressure, slows down breathing, heart rate, pulse and brain wave activation (Taha, Firmawati and Harismayanti, 2023). Murottal Qur'an is also able to break the cycle of negative thinking for someone who experiences anxiety (Agusmita and Effendy, 2019). Another benefit of listening to murottal Al-Quran is that it can increase a person's immunity (Dahlan, Budi and Widiyanto, 2023).

Surah Al-Fatihah is believed to be a cure for various diseases as another name it bears is Asy-Syifa which means healer. Apart from that, Al-Fatihah can overcome all anxiety, protect from all evil in facing difficulties (Twistiandayani and Prabowo, 2021). Surah Ar-Rahman has many verses that are read repeatedly so that they can divert attention and function as a decrease in the patient's brain waves. In this condition, the brain will produce the hormones serotonin and endorphins which make a person feel comfortable, calm and happy (Hapsari, Endah and Kusuma Putri, 2022).

This anxiety can be reduced when the patient is not nervous, does not feel tense and restless, the patient feels comfortable, the patient does not ask any more questions about the hemodialysis process and the

patient does not feel cold sweat (Suhita, Arini and Kardjati, 2019) . Reducing anxiety with stimulation can increase the natural release of endorphins and balance brain waves so that listeners get a positive response in the form of relaxation or calm and comfort and have an effect on reducing perceived anxiety (Yudha, Ludiana Ludiana and Sari, 2021).

Theme 2: The influence of Murottal Qur'an on improving sleep quality

Sleep quality is someone who feels satisfied with their sleep, so they don't feel tired, restless, headaches and drowsiness (Damanik, 2020). Good sleep quality is characterized by the ease with which a person can start sleeping at bedtime, maintain sleep, initiate sleep again after waking up at night and the easy transition from sleeping to waking up in the morning (Pius and Herlina, 2019).

Poor sleep quality in chronic kidney disease patients undergoing hemodialysis is caused by worries about the economy, quality of life, and reduced life expectancy (Dewi and Hendrati, 2022) . Poor quality in chronic kidney disease patients undergoing hemodialysis will have a negative impact on their health status and quality of life (Saraswati, Lestari and Putri, 2022).

One thing that must be adhered to by patients undergoing hemodialysis is good

sleep quality (Sinay and Lilipory, 2019). Treatment that can be done to improve sleep quality is murottal Qur'an therapy (Siregar *et al.* , 2023).

Murottal Qur'an therapy is a complementary therapy with healing because it contains elements of meditation, suggestion and relaxation (Muchammad and Waliyanti, 2023). When a person listens to murottal Qur'an , the earlobe captures sound in the form of waves through the air to the cochlea so that it vibrates the tympanic membrane and is transmitted to the middle ear through the auditory ossicles. This process is a mechanical stimulus that releases neurotransmitters into the synapse which gives rise to an action potential in the auditory nerve which then goes to the auditory cortex which is transmitted to the limbic system and leads to the hypothalamus. Stimulation of the sense of hearing through sound waves originating from the murottal of the Koran can reduce cortisol and ACTH levels which causes relaxation and helps improve sleep quality (Diawati, Dewi and Inayati, 2023).

One of the Quran surahs used in murottal therapy is Surah Ar-Rahman which consists of 78 verses. One of the verses of Surah Ar-Rahman is the repetition of the verse, namely: "*Fa bi ayi alairobbikuma*

tukadzidziban " which means " *Which favors of God do you deny?* ". The repetition of this verse is to emphasize a very strong belief , so that it can have a calming effect and ultimately lead to a positive emotional response which can improve sleep quality. (Muchammad and Waliyanti, 2023). Murottal Qur'an therapy which is carried out regularly before bedtime can improve a person's sleep quality and provide calm which can make a person feel comfortable and calm so that the quality of sleep which was initially poor becomes good (Nurani, Rochmawati and Nurchayati, 2019).

CONCLUSION

The results of twelve articles that have carried out a *scoping review* can be concluded that Qur'an murottal therapy has an influence on reducing anxiety and improving sleep quality in chronic kidney disease patients undergoing hemodialysis.

ACKNOWLEDGMENT

DUHP would like to thank the Akademi Keperawatan Pelni for their support to make this research success. Author would like to thank all parties who have provided support throughout the process of preparing this *scoping review* until the end.

REFERENCES

- Agusmita, A., & Effendy, E. (2019). An anxiety case report with murottal alqur'an approach in woman who got hemodialysis in universitas sumatera utara hospital, medan. *Open Access Macedonian Journal of Medical Sciences*, 7(16), 2695–2697. <https://doi.org/10.3889/oamjms.2019.420>
- Alivian, G. N., Purnawan, I., & Setiyono, D. (2019). Efektifitas mendengarkan murottal dan doa terhadap penurunan kecemasan pada pasien hemodialisis di rsud wates. *Jurnal Keperawatan Sriwijaya*, 6(2), 13–17. https://jks-fk.ejournal.unsri.ac.id/index.php/jk_sr_iwijaya/article/view/80
- Astuti, V. P., Lestari, T. B., & Simbolon, A. R. (2021). Hubungan antara tingkat kecemasan, jenis kelamin dengan kualitas tidur pasien gagal ginjal kronik yang menjalani hemodialisis. *Carolus Journal of Nursing*, 3(2), 112–121. <https://doi.org/10.37480/cjon.v3i2.69>
- Cholis, E. N., Rumpiati, R., & Sureni, I. (2020). Hubungan komunikasi terapeutik perawat dengan tingkat kecemasan pasien hemodialisa di rsud dr harjono ponorogo. *Jurnal Keperawatan Terpadu*, 2(1), 54–63. <https://doi.org/10.32807/jkt.v2i1.55>
- Dahlan, M. A., Budi, A. W. S., & Widiyanto, P. (2023). Providing muratal qur'an therapy to reduce anxiety levels in patients with chronic kidney disease (ckd). *Journal Nursing Army*, 4(1), 64–68. <http://journal.akperkesdam6tpr.ac.id/index.php/JOJS/article/view/61>

- Damanik, V. A. (2020). Hubungan tingkat kecemasan dengan kualitas tidur padapada pasien yang menjalani hemodialisis. *Jurnal Keperawatan Priority*, 3(1), 47–57. <https://doi.org/10.34012/jukep.v3i1.795>
- Darsini, & Cahyono, E. A. (2023). Kualitas hidup pasien hemodialisis selama pandemi covid-19; studi klinis di ruang hemodialisa, rumah sakit gatoel kota Mojokerto. *Jurnal Keperawatan*, XVI(1), 26–46. <https://e-journal.lppmdianhusada.ac.id/index.php/jk/article/view/232>
- Dewi, L. N., & Hendrati, L. Y. (2022). Hubungan kualitas tidur dengan depresi pada pasien gagal ginjal kronis yang menjalani hemodialisis. *Preventif: Jurnal Kesehatan Masyarakat*, 13(2), 313–325. <https://doi.org/10.22487/preventif.v13i2.373>
- Diawati, N., Dewi, N. R., & Inayati, A. (2023). Penerapan terapi spiritual (murottal al-qur'an) terhadap kualitas tidur pasien gagal ginjal kronik dengan hemodialisa di rsud jendral ahmad yani metro. *Jurnal Cendikia Muda*, 3(4), 486–494. <https://jurnal.akperdharmawacana.ac.id/index.php/JWC/article/view/496>
- Elsayed, N. A., Aleppo, G., Aroda, V. R., Bannuru, R. R., Brown, F. M., Bruemmer, D., Collins, B. S., Das, S. R., Hilliard, M. E., Isaacs, D., Johnson, E. L., Kahan, S., Khunti, K., Kosiborod, M., Leon, J., Lyons, S. K., Perry, M. Lou, Prahalad, P., Pratley, R. E., ... Gabbay, R. A. (2023). 11. Cardiovascular Disease and Risk Management: Standards of Care in Diabetes—2023. *Diabetes Care*, 46(January), S158–S190. <https://doi.org/10.2337/dc23-S010>
- Ezdha, A. U. A., Hamid, A., Fitri, D. E., Anggreini, S. N., & Julianti, E. E. (2023). Pengaruh edukasi kesehatan dengan booklet diet hemodialisa (booket lisa) terhadap tingkat pengetahuan dan sikap pasien hemodialisa di rsud dr . rm . pratomo bagansiapiapi. *Jurnal Kesehatan Holistic*, 7(01), 43–51. <https://doi.org/10.33377/jkh.v7i1.152>
- Halimah, N., Zakariyati, Alhidayat, N. S., & Handayani, D. E. (2022). Karakteristik pasien gagal ginjal kronik dengan continuous ambulatory peritonal dialysis di rs tk ii pelamonia. *Garuda Pelamonia Jurnal Keperawatan*, 4(1), 14–28. <https://doi.org/10.4425/garuda.v4i1.192>
- Hapsari, T., Endah, D. R., & Kusuma Putri, T. A. R. (2022). The effect of murottal alquran therapy on anxiety level of ckd patients undergoing hemodialysis. *Keperawatan Komprehensif*, 8(4), 433–576. <https://doi.org/10.33755/jkk.v5i2>
- Kampmann, J. D., Heaf, J. G., Mogensen, C. B., Mickley, H., Wolff, D. L., & Brandt, F. (2023). Prevalence and incidence of chronic kidney disease stage 3–5 – results from KidDiCo. *BMC Nephrology*, 24(1), 1–9. <https://doi.org/10.1186/s12882-023-03056-x>
- Khamid, A., & Rachimah, R. F. (2022). Pengaruh pemberian terapi murottal al-qur'an untuk meningkatkan kualitas tidur pada lansia. *Jurnal Kesehatan Tambusai*, 3(4), 653–658. <https://doi.org/10.31004/jkt.v3i4.9577>

- Kurniasih, E., Kurnia, A., & Istiqomah, L. F. (2021). Pengaruh terapi spiritual (islam) terhadap penurunan tingkat kecemasan pada pasien hemodialisa program studi keperawatan STIKes Bakti Tunas Husada Tasikmalaya , Indonesia. *Jurnal Keperawatan Galuh*, 3(1), 15–20. <https://doi.org/10.25157/jkg.v3i1.6584>
- Muchammad, R. A. A., & Waliyanti, E. (2023). Pemberian aromatherapy lavender dan murottal ar-rahman untuk mengatasi gangguan pola tidur pada pasien lansia gagal ginjal kronik. *Journal Nursing Army*, 4(1), 57–63. <http://journal.akperkesdam6tpr.ac.id/index.php/JOJS/article/view/63>
- National Kidney Foundation. (2022). Volume 1: Chronic kidney disease. *American Journal of Kidney Diseases*, 79(4), S1–S177. <https://doi.org/10.1053/j.ajkd.2022.01.003>
- Nurani, R. D., Rochmawati, E., & Nurchayati. (2019). Efektifitas terapi murottal al-qur'an terhadap kualitas tidur pada pasien hemodialisa. *Journal Health of Studies*, 3(2), 78–85. <https://doi.org/10.31101/jhes.525>
- Nurhayati, I., Hamzah, A., Erlina, Li., & Rumahorobo, H. (2021). Gambaran kualitas tidur pada pasien gagal ginjal kronik yang menjalani terapi hemodialisa: Literature Review. *SJurnal Keperawatan Indonesia Florence Ningtingale*, 1(1), 38–51. <https://pesquisa.bvsalud.org/portal/resource/en/mdl-20203177951%0Ahttp://dx.doi.org/10.1038/s41562-020-0887-9%0Ahttp://dx.doi.org/10.1038/s41562-020-0884-z%0Ahttps://doi.org/10.1080/13669877.2020.1758193%0Ahttp://serisc.org/journals/index.php/IJAST/article>
- Perkumpulan Nefrologi Indonesia. (2018). *11 th report of indonesian renal registry 2018*.
- Pius, E. S., & Herlina, S. (2019). Faktor-faktor yang berhubungan dengan kualitas tidur pada pasien gagal ginjal kronik yang menjalani hemodialisis di rumah sakit tarakan jakarta. *Jurnal Keperawatan Widya Gantari Indonesia*, 3(1). <https://doi.org/10.52020/jkwgi.v3i1.1081>
- Priandini, R. P., Handayani, L., & Rosyidah. (2023). Faktor - faktor yang berhubungan dengan kualitas hidup (quality of life) pasien gagal ginjal kronik yang menjalani hemodialisa. *Jurnal Pendidikan Tambusai*, 7(1), 3332–3338. <https://mail.jptam.org/index.php/jptam/article/view/5724>
- Purba, S. K. R. (2021). Gambaran kadar asam urat pada penderita gagal ginjal kronik di rumah sakit bina kasih pekanbaru. *The Indonesian Journal of Medical Laboratory*, 2(1), 6–11. <http://ijml.jurnalsenior.com/index.php/ijml/article/view/13>
- Puspanegara, A. (2019). Pengaruh usia terhadap hubungan mekanisme coping dengan kecemasan ketika menjalani terapi hemodialisa bagi para penderita gagal ginjal kronik di kabupaten kuningan jawa barat. *Jurnal Ilmu Kesehatan Bhakti Husada: Health Sciences Journal*, 10(2), 135–142. <https://doi.org/10.34305/jikbh.v10i2.102>

- Saraswati, N. L. G. I., Lestari, N. K. Y., & Putri, K. A. (2022). Hubungan tingkat stres dengan kualitas tidur pada pasien gagal ginjal kronik yang menjalani hemodialisis. *Malahayati Nursing Journal*, 4(5), 1242–1249. <https://doi.org/10.33024/mnj.v4i5.6598>
- Sinay, J. M., & Lilipory, M. (2019). Kecemasan dan kualitas tidur berhubungan dengan lama menjalani hemodialisa pada pasien gagal ginjal kronik. *Moluccas Health Journal*, 1(1), 10–18. <https://doi.org/10.54639/mhj.v1i1.45>
- Sinurat, L. R. E., Barus, D., Simamora, M., & Syapitri, H. (2022). Self management berhubungan dengan kualitas hidup pada pasien gagal ginjal kronis di unit hemodialisa. *Jurnal Penelitian Perawat Profesional*, 4(1), 173–184. <https://doi.org/10.37287/jppp.v4i1.804>
- Siregar, M. A., Kaban, A. R., Harahap, Y. A., & Saftriani, A. M. (2023). Pengaruh Spiritual Emotional Freedom Technique (Seft) dan Murottal Surah Ar Rahman Terhadap Kualitas Tidur Pasien Hemodialisa. *JKEP*, 8(2), 237–251. <https://doi.org/10.32668/jkep.v8i2.1425>
- Suhita, B. M., Arini, D. Y., & Kardjati, S. (2019). The effectiveness of murottal al- qur ' an therapy by surah ar-rahman toward anxiety of chronic kidney disease (ckd) which is being hemodialysis. *STRADA Jurnal Ilmiah Kesehatan*, 8(2), 129–135. <https://doi.org/10.30994/sjik.v8i2.213>
- Taha, R., Firmawati, & Harismayanti. (2023). Efektivitas terapi spiritual murottal al-qur'an dan terapi dzikir terhadap penurunan tingkat kecemasan pasien hemodialisa di rsud toto kabila. *Jurnal Ilmu Kesehatan Dan Gizi*, 1(2), 149–160. <https://doi.org/10.55606/jikg.v1i2.978>
- Twistiandayani, R., & Prabowo, A. R. (2021). Terapi Mendengarkan murottal al-qur'an surah al-fatihah dan surah ar-rahman terhadap stres, kecemasan, dan depresi pada pasien ckd v yang menjalani hemodialisis. *Journals of Ners Community*, 12(1), 95–104. <https://doi.org/10.55129/jnerscommunity.v12i1.1327>
- Yudha, T. A., Ludiana Ludiana, & Sari, S. A. (2021). Penerapan terapi murottal al-qur'an terhadap tingkat kecemasan pasien gagal ginjal yang menjalani hemodialisa di kota metro. *Jurnal Cendikia Muda*, 1(2), 194–203. <https://jurnal.akperdharmawacana.ac.id/index.php/JWC/article/view/200>