

The Therapeutic Effects of Qur’anic-Based Spiritual Interventions on Psychological and Physiological Outcomes: A Narrative Review

Nadiya Nurul Afifah, Fadhila Auliya Putri

Abstract

Spiritual interventions are increasingly recognized as valuable complementary approaches to support psychological and physiological well-being. The Qur’an, as a source of spiritual comfort and guidance in Islam, has been used in various clinical contexts to promote relaxation, alleviate anxiety, and enhance recovery. Evidence from recent biomedical and psychosocial studies has begun to explore the measurable effects of Qur’anic recitation and related practices on health outcomes. This literature review aims to summarize current evidence on the therapeutic effects of Qur’anic-based spiritual interventions on clinical outcomes, including stress, anxiety, pain, comfort, depression, physical and mental health, gene expression, and physiological parameters across different patient populations. A structured search was performed in the PubMed database using the keywords “Qur’an,” “spiritual intervention,” “clinical outcomes,” and “response.” Twenty relevant studies were identified and reviewed. Eligible articles included clinical or experimental research investigating Qur’an recitation, listening, or related spiritual practices in patients or healthy individuals. Extracted data were summarized narratively according to population, intervention type, outcomes measured, and key findings. Most studies reported significant reductions in stress, anxiety, and pain, alongside improved comfort, mood, and overall mental well-being following Qur’anic recitation or listening. Physiological benefits such as reduced heart rate, stabilized blood pressure, and improved oxygen saturation were observed in surgical, hemodialysis, and intensive care settings. A few studies demonstrated molecular and gene expression changes linked to stress response and immune regulation. Variations in study design and intervention duration limited direct comparability. Qur’anic-based spiritual interventions show promising therapeutic potential as low-cost, non-pharmacological strategies to improve psychological resilience and physiological balance across diverse medical contexts. Further well-designed clinical and mechanistic studies are warranted to establish standardized protocols and elucidate underlying biological pathways.

Keywords: Qur’an, Spiritual Therapy, Anxiety, Stress, Pain, Depression, Palliative Care, Gene Expression, Clinical Outcomes.

Nadiya Nurul Afifah¹

¹Department of Pharmacy, Faculty of Health Sciences Universitas Esa Unggul, Indonesia
e-mail: nadiya.nurul@esaunggul.ac.id¹

Fadhila Auliya Putri²

²Department of Pharmacy, Faculty of Health Sciences Universitas Esa Unggul, Indonesia
e-mail: FadhilaAul@gmail.com²

2nd International Conference on Islamic Community Studies (ICICS)

Theme: History of Malay Civilisation and Islamic Human Capacity and Halal Hub in the Globalization Era

<https://proceeding.pancabudi.ac.id/index.php/ICIE/index>

Introduction

Spiritual care has increasingly been recognized as an integral component of holistic medicine, particularly in cultures where faith plays a central role in coping and healing. Within Islamic practice, the recitation and listening of the Qur'an are regarded not only as acts of worship but also as sources of comfort and psychological tranquility. Advances in psychoneuroimmunology have demonstrated that spiritual practices can modulate stress-related hormones, autonomic tone, and immune function, thereby influencing overall health outcomes [1, 2].

Several studies conducted in hospital and community settings have shown that Qur'anic recitation can reduce anxiety, enhance mood, and alleviate pain among patients undergoing medical procedures or living with chronic disease [3, 4]. In palliative and perioperative contexts, spiritual interventions have been associated with improved emotional acceptance, decreased analgesic needs, and better quality of life [5]. Despite such promising findings, the scientific evidence remains scattered across different populations and methodologies.

This review aims to summarize available literature examining Qur'anic-based spiritual interventions and their effects on psychological (stress, anxiety, depression, comfort) and physiological (pain, hemodynamic, biochemical, gene expression) outcomes. The purpose is to consolidate existing data and highlight opportunities for integrating faith-based therapy into clinical practice.

Literature Review

Research Methodology

A structured search was conducted using the PubMed database. The following keywords and Boolean operators were applied: ("Qur'an" OR "Quranic recitation") AND ("spiritual intervention" OR "religious therapy") AND ("clinical outcomes" OR "response"). All English-language articles involving human subjects were screened. Twenty publications met inclusion criteria: quantitative, qualitative, or mixed-method studies that investigated Qur'anic recitation or related practices as an intervention and reported at least one measurable outcome such as anxiety, stress, pain, comfort, depression, physiological indicators, or molecular responses. Data were extracted on study design, sample, intervention characteristics, and results. Because of heterogeneity, findings were synthesized narratively rather than statistically pooled.

Results

A total of 23 studies were reviewed to explore the therapeutic effects of Qur'anic recitation and related spiritual interventions on clinical and psychosocial outcomes. The findings were organized into major thematic domains, including psychological effects, physiological responses, and molecular or genetic outcomes. Across most studies, Qur'anic-based interventions demonstrated beneficial influences on emotional well-being, physiological stability, and overall quality of life, as detailed in the following subsections (Table 1).

3.1 Psychological Outcomes

The majority of reviewed studies reported that Qur'anic recitation or listening significantly decreased stress and anxiety levels. For example, a systematic article, [3] found that listening to Holy Qur'an recitation generally reduces anxiety across diverse settings, as shown in most of the 28 reviewed trials, though one study found a non-significant difference. In addition, related to the anxiety of patients, such as hemodialysis patients, a randomized controlled trial found that Holy Qur'an recitation has a significant effect on lowering depressive symptoms in hemodialysis patients [6]. Observed similar effects among pregnant women during labor, where Qur'anic audio reduced both pain perception and anxiety compared with standard care. A recent study showed that listening to the recitation of the Surah Al-Inshirah

during labor had positive effects on the women's pain, anxiety, and comfort levels [7]. The Holy Quran also affects the mental status of the patients, as resulted in the study about the Qur'anic recitation effect on preoperative anxiety among Muslim patients awaiting neurosurgery [8]. Another study from Saudi Arabia stated that among 70 colorectal cancer patients in Saudi Arabia, high religious involvement was common—over 70% regularly prayed, read the Qur'an, and fasted—and was significantly associated with fewer depressive symptoms ($B = -0.58$, $p = 0.026$) and less suicidal ideation ($B = -0.07$, $p = 0.025$) [9].

Collectively, these findings suggest that auditory Qur'anic stimulation may activate parasympathetic relaxation pathways and positive cognitive reframing. This method can be recommended in medical settings as a way to provide Qur'anic recitation to help ease patients' anxiety and discomfort.

3.2 Physiological Outcomes

Clinical investigations also demonstrated measurable physiological responses. A study found that listening to Qur'anic recitation combined with endurance-resistance training significantly improved physical condition and quality of life and reduced anxiety in hemodialysis patients [10]. Significant differences also were found across tasks, with only the LF/HF ratio differing between groups and showing a moderate positive correlation with the number of Qur'an pages memorized. This study reveals that Quran memorizing is correlated to the heart function [11]. In patients undergoing laparoscopic cholecystectomy in the day surgery unit, they prove that the Qur'an audio therapy during post-anesthesia recovery significantly reduced anxiety, opioid use, and length of stay in the PACU [12]. In 57 women with early breast cancer, a Qur'an-based spiritual intervention emphasizing prayer, meditation, and gratitude suggesting improved mental well-being and potential benefits for cancer management [13]. Pain outcomes were consistent: in post-CABG patients, the study resulted in Qur'anic recitation significantly reducing pain scores ($p < 0.001$) and shortening both ICU and hospital stays ($p < 0.05$) compared to the control group [14].

3.3 Molecular and Gene-Expression Findings

In 57 women with early breast cancer, a Qur'an-based spiritual intervention involving prayer, meditation, and zikr significantly reduced dopamine receptor gene expression (DRD1–5) compared with pre-test and control values, suggesting improved mental health and potential inhibitory effects on cancer cell proliferation [13]. In vitro studies also show a linear result that the Holy Qur'an recitation significantly inhibited PC-3 cancer cell proliferation and migration, enhanced cisplatin's anticancer effects, and downregulated the anti-apoptotic gene BCL2L12 expression [15]. Exposure to murattal Al-Fatihah, alone or combined with cisplatin, decreased HeLa cell viability (to 80.14% and 64.32%, respectively), induced apoptosis, and caused cell-cycle arrest—showing that Qur'anic audio has cytotoxic and synergistic effects that may support cancer therapy [16].

3.5 Discussion

This literature synthesis indicates that Qur'anic-based spiritual interventions yield consistent benefits for mental well-being and physiological stabilization across a range of clinical contexts [17]. Mechanistically, the rhythmic and melodic features of recitation may synchronize breathing and heart rate, enhancing vagal tone and reducing sympathetic arousal [11]. Simultaneously, cognitive engagement with sacred meaning provides emotional reassurance and spiritual coping, which can attenuate pain perception through central gating mechanisms. The results showed that engaging with the Qur'an—through listening, reciting, or memorizing—positively influenced depression, anxiety, physiological functions, quality of life, sleep quality, and intelligence [18]. Qur'an also proven to have a strong healing effect; the study

found that 92.6% of participants believed the Qur'an is a healer, and 81.8% felt Qur'anic therapy supports their health, confirming its effectiveness for spiritual and psychological issues and highlighting patients' strong willingness and satisfaction to receive such treatment[19].

The biological evidence, though preliminary, supports the possibility that Qur'anic recitation influences gene pathways associated with stress regulation, paralleling findings from other mindfulness and meditation research [10, 11, 13, 15, 16]. Clinically, these effects have practical implications for nursing, palliative, and perioperative care, particularly in Muslim-majority settings where religious comfort aligns with patient values [14]. Importantly, Qur'anic recitation is fully accessible, safe, inexpensive, and easily implemented alongside standard medical therapy [20]. These statements, clinically proven by several studies, include the experimental studies that show both relaxation and prayer therapies effectively enhance hope and reduce anxiety in patients with coronary artery disease, offering simple, short-term, and practical options for healthcare providers.

Table 1. Summary of Reviewed Studies on the Therapeutic Effects of Qur'anic Intervention

No	Author	Country	Year	Number of subject/articles	Population	Intervention	Outcomes	Key Findings	Reference
1	Al-Jubouri, M. B. A. et al.	Iraq	2021	159 sub	Adult patients with cancer before chemotherapy administration	Listening to Quran Recitation; Listening to Music; Control Group	Anxiety (measured by Arabic State Anxiety Inventory)	Listening to Quran or music reduced chemotherapy-induced anxiety. There was no significant difference between the two interventions.	(Al-Jubouri dkk., 2021)
2	Sadeghimoghaddam, S. et al.	Iran	2019	75 sub	Patients with Coronary Artery Disease (CAD)	Benson's Relaxation and Prayer Therapy	Anxiety (Beck Anxiety Inventory) and Hope (Snyder's	Both relaxation and prayer therapy interventions are effective in promoting hope and	(Sadeghimoghaddam dkk., 2019)

							Hope Scale)	reducing anxiety in patients with CAD.	
3	Moulaei, K. et al. (Review)	Iran	2023	15 art	Different populations (Studies mainly from Asia)	Holy Quran Recitation and Listening	Anxiety, Stress, and Depression	Quran recitation and listening is a useful nonpharmacological treatment to reduce anxiety, stress, and depression.	(Moulaei dkk., 2023)
4	Che Wan Mohd Rozali, W. N. A. et al. (Review)	Malaysia	2022	20 art	Muslim Population	Listening to, Reciting, or Memorizing the Quran	Physical and Mental Health (Depression, anxiety, physiologic parameters, QoL)	The interventions had a favorable effect on depression, anxiety, and physiologic parameters.	(Che Wan Mohd Rozali dkk., 2022)
5	Simonovich, S. D. et al	USA	2022	9 studies (Mixed-Method Scoping Review)	Perinatal Muslim Women	Muslim Faith Practices (prayer, reciting Quran, Dua, listening to audio recordings)	Perinatal Anxiety and Depression	Incorporation of faith practices effectively reduces perinatal depression and anxiety among Muslim women.	(Simonovich dkk., 2022)
6	Hosseini, L. et al.	Iran	2016	57 Sub	Females with early	Spiritual Intervene	Dopamine Gene	Showed significant	(Hosseini dkk., 2016)

					breast cancer involvement	ntion based on Islamic principals (prayer, zikr, meditation, patience, reliance)	Receptor (DRD1-5) expressions, Mental Health, Hope, Quality of Life	reduction in dopamine gene receptor (DRD1-5) expressions. Spiritual intervention can improve mental health, increase hope and quality of life, and potentially reduce cell proliferation.	
7	Frih, B. et al.	Tunisia	2017	53 Sub	Elderly male patients undergoing haemodialysis	Intervention Group: Listening to Holy Qur'an recitation + Endurance-Resistance Training	Dialysis adequacy (Kt/V), Functional capacity (TUG, 6MWT), Psychological outcomes (SF-36 for Quality of Life, HADS for Anxiety and Depression)	The combination intervention induced an improvement in physical condition and quality of life and a large reduction in anxiety.	(Frih dkk., 2017)

8	Agusmita, A. et al.	Indonesia	2019	1 Sub	Woman with chronic renal failure undergoing hemodialysis	Murotall Alqur'an Approach (Murottal Al-Qur'an Therapy)	Anxiety (measured by the Hamilton Rating Scale for Anxiety or HRS-A). Initial State: Severe anxiety	There is an effect of giving Murottal Al-Qur'an therapy to the anxiety level of hemodialysis patients. The Murottal Alqur'an approach is effective in managing anxiety in a hemodialysis patient.	(Agusmita & Effendy, 2019)
9	Aburuz, M. E. et al.	Jordan	2023	132 Sub	Patients post-Coronary Artery Bypass Graft (CABG)	Listening to the Holy Quran recited for 10 minutes twice daily	Pain intensity and Length of Stay (LoS) in the ICU and hospital	Listening to the Quran was significantly effective in improving pain intensity ($p < 0.001$) and shortening their hospital/ICU stay ($p < 0.05$ for both).	(Eid Aburuz dkk., 2023)
10	Salari, N. et al.	Iran, Malaysia	2025	Randomized samples (Sub)	Muslim patients who were candidates for brain	Reciting the Quran (Sound of the Quran/ Qurani	Anxiety (Spielberger questionnaire), Vital	The sound of the Quran leads to a decrease in the level of	(Salari dkk., 2025)

					and nerve surgery (Neurosurgery Candidates)	c voice)	signs (Blood pressure, Heart rate, Respiration)	anxiety (Overt anxiety effect size: 53.5%). It is a positive and effective factor for reducing pre-neurosurgery anxiety.	
11	Mine Yilmaz Kocak et al.	Turkey	2021	126 Sub	Pregnant Muslim women during labor	Listening to the recitation of the Surah Al-Inshirah	Labor pain, anxiety and comfort levels	Listening to the Surah Al-Inshirah had positive effects on the women's pain, anxiety and comfort levels. Recommended integration of spiritual elements into midwifery care.	(Kocak dkk., 2022)
12	Ali Ali Gobaili Saged et al.	Malaysia	2018	121 Sub	Patients with psychological and spiritual diseases	Qurani c therapy (listening to verses) + remedy program	Effectiveness and responsiveness to treatment, Psychological and Spiritu	92.6% support that the Quran has a significant healing influence. The sound of the Holy Quran is	(Saged dkk., 2020)

							al disease s	an effective treatment for those who suffer from spiritual and psycholo gical issues.	
1 3 .	Mahmoud Shaheen Al Ahwal et al.	Sau di Ara bia	20 16	70 Sub	Colorec tal cancer (CRC) patients	Religio us beliefs and practice s (Measu red using a 13-item Muslim religios ity scale)	Correl ation with demog raphic, social, psycho logical (depres sive sympto ms, depres sive disorde r), and physic al health charact eristics	Result and conclusio n correlatio n with health are not available in the provided snippet.	(Shaheen Al Ahwal dkk., 2016)
1 4 .	Batoul Jabbari et al.	Iran	20 17	168 SUB	Iranian pregnan t women	Broadc ast of the Holy Quran with translat ion; Broadc ast of the Holy Quran without translat ion; Control	Stress, Anxiet y (percei ved stress, state anxiety , trait anxiety ,) and Depres sion	Scores in both interventi on groups were significan tly lower than the control group. The Holy Quran with and without translatio n, both are effective	(Jabbari dkk., 2020)

								for reducing stress, anxiety and depression during pregnancy.	
15	Hassan Babamohamadi et al.	Iran	2015	60 Sub	Hemodialysis patients	Listening to the recitation of the Qur'an in traditional cantillation voice	Anxiety (Spielberger's State-Trait Anxiety Inventory - STAI)	Recitation of the Qur'an was effective in reducing anxiety (STAI score decreased significantly) in the intervention group, compared to the control group which experienced no change.	(Babamohamadi dkk., 2015)
16	Akhu-Zaheya, L. M. et al.	Jordan	2012	123 Sub	Muslim Jordanian oncology patients	Survey of Complementary and Alternative Medicine (CAM) use	Frequency of CAM therapies use	The mean number of CAM therapies used was 6.6 (SD=4.3). The study assesses the use of CAM, of which Quranic therapy is often a part.	(Akhu-Zaheya & Alkhasawneh, 2012a)
17	Ghazali, A. R. et al.	Malaysia	2024	32 Sub	Tahfiz students (Quran	Measuring	Heart Rate	Quran memorisation	(Ghazali dkk., 2024)

					memorizers) and non-Tahfiz students	HRV during three tasks: Recalling familiar verses, memorizing new verses, and recalling newly memorized verses	Variability (HRV) parameters (SDNN, LF, HF, LF/HF Ratio)	increased HRV. A moderate positive correlation was found between the number of pages memorized and the LF/HF ratio ($r=0.61$, $P<0.05$).	
18	Mutiah, R. et al.	Indonesia	2019		HeLa Cells (Cervical cancer cell line)	Exposure of Murattal Surah Al-Fatihah Audio (AM); Cisplatin (10 $\mu\text{g/mL}$); and combination (AM + Cis)	Cytotoxic activity (cell viability) and cell cycle modulation (apoptosis)	The combination of Murattal Al-Quran + Cisplatin provides a synergistic impact, causing the highest decrease in HeLa cell viability (64.32%). Recommended as a supportive therapy.	(Mutiah dkk., 2019)
19	Owens, J. et al.	Global (Review)	2023	44 Sub	Muslims (Patients seeking guidance for	Qur'an Interventions (Salah/praying, recitation,	Anxiety, Depression, Stress, Quality of Life,	Interventions using the Qur'an are used to reduce anxiety, depression	(Owens dkk., 2023)

					mental health)	reading, memorizing, listening)	and Coping	n, and stress and increase quality of life and coping. The evidence showed a paucity of studies from Western countries.	
2020.	Babamohamadi, H. et al.	Iran	2017	54 Sub	Hemodialysis patients	Listening to Holy Qur'an Recitation (Control Group received no intervention)	Depressive Symptoms (Beck Depression Inventory-II or BDI-II)	Holy Qur'an recitation has a significant effect on reducing depressive symptoms $F = 9.30, p = 0.004, \text{Cohen's } d = 0.85$. This intervention is easy to implement and cost-effective.	(Babamohamadi dkk., 2017)
2021.	Shoaa Kazemi, M. et al.	Iran	2024	379 Sub	Female students from four universities in Iran	Self-knowledge from Islamic Perspective (measured by questionnaire)	Mental Health (including substance abuse risk, depression, and anxiety)	There is a significant association between self-knowledge (from an Islamic perspective) and	(Shoaa kazemi dkk., 2024)

								mental health. Self-knowledge serves as a protective factor against poor mental health outcomes .	
22	Mehrafsar, A. & Mokhtari, M. J.	Iran	2018	In Vitro Research/Assay (PC-3 cells)	Human Prostate Adenocarcinoma Cell Line (PC-3 cells)	Exposure to Quran Recitation (compared to Cisplatin and Combination)	Cell Viability, Cell Migration, BCL2 L12 Gene Expression	Quran recitation showed a considerable inhibitory effect on the proliferation and migration of prostate cancer cells (PC-3). The combination of Quran Recitation + Cisplatin had a greater inhibitory effect than Cisplatin alone, via down-regulation of the BCL2L12 gene.	(Ali Mehrafsar, 2018)
23	Akhu-Zaheya, L. M. &	Jordan	2012	123 Sub	Muslim Jordanian	Survey of Comple	Frequency of CAM	The mean number of	(Akhu-Zaheya & Alkhasaw

	Alkhasawneh, E. M.				oncology patients (Patients with cancer)	mentary and Alternative Medicine (CAM) use	use; Stress reducing techniques (Quran, Praying, Ruqya)	therapies used was 6.6 (SD=4.3). The highest stress reducing CAM techniques included reading the Holy Qur'an, praying, and Ruqya	neh, 2012b)
--	--------------------	--	--	--	--	--	---	--	-------------

Conclusion

Qur’anic recitation and listening demonstrate promising therapeutic potential as complementary interventions to reduce stress, anxiety, and pain while enhancing psychological comfort and physiological stability. Integrating these spiritually meaningful practices within patient-centered care may improve outcomes, especially for individuals in palliative or high-stress clinical conditions. Further interdisciplinary research bridging spirituality, neuroscience, and clinical medicine is warranted to elucidate mechanisms and optimize application.

References

[1] Ellison CG, Levin JS. The Religion-Health Connection: Evidence, Theory, and Future Directions. *Health Education & Behavior* 1998; 25: 700–720.

[2] Koenig HG. Religion, Spirituality, and Health: The Research and Clinical Implications. *Int Sch Res Notices* 2012; 2012: 278730.

[3] Ghiasi A, Keramat A. The Effect of Listening to Holy Quran Recitation on Anxiety: A Systematic Review. *Iran J Nurs Midwifery Res* 2018; 23: 411–420.

[4] Rahmah TN, Ibrahim K, Pratiwi SH. The Effects of Listening to Quran Recitation on Patients Undergoing Hemodialysis: A Scoping Review. *Journal of Health and Nutrition Research* 2025; 4: 779–791.

[5] Moulaei K, Haghdoost A-A, Bahaadinbeigy K, et al. The effect of the holy Quran recitation and listening on anxiety, stress, and depression: A scoping review on outcomes. *Health Sci Rep* 2023; 6: e1751.

[6] Babamohamadi H, Sotodehasl N, Koenig HG, et al. The Effect of Holy Qur’an Recitation on Depressive Symptoms in Hemodialysis Patients: A Randomized Clinical Trial. *J Relig Health* 2017; 56: 345–354.

[7] Kocak MY, Göçen NN, Akin B. The Effect of Listening to the Recitation of the Surah Al-Inshirah on Labor Pain, Anxiety and Comfort in Muslim Women: A Randomized Controlled Study. *J Relig Health* 2022; 61: 2945–2959.

- [8] Salari N, Fayzi R, Abdipuor E, et al. The Effect of Reciting the Quran on the Anxiety of Neurosurgery Muslim Candidates. *Health Sci Rep*; 8. Epub ahead of print 8 April 2025. DOI: 10.1002/hsr2.70629.
- [9] Shaheen Al Ahwal M, Al Zaben F, Sehlo MG, et al. Religious beliefs, practices, and health in colorectal cancer patients in Saudi Arabia. *Psychooncology* 2016; 25: 292–299.
- [10] Frih B, Mkacher W, Bouzguenda A, et al. Effects of listening to Holy Qur'an recitation and physical training on dialysis efficacy, functional capacity, and psychosocial outcomes in elderly patients undergoing haemodialysis. *Libyan Journal of Medicine* 2017; 12: 1372032.
- [11] Ghazali AR, Abd Warif NM, A Yazit NA, et al. Quran memorisation and heart rate variability: How do they correlate? *World J Clin Cases* 2024; 12: 6275–6284.
- [12] Maarof SR, Ahmad CA, Atkins L, et al. The Effects of Listening to the Qur'an in the Postoperative Management of the Patients Undergoing Laparoscopic Cholecystectomy in the Day Surgery Unit. *Journal of PeriAnesthesia Nursing* 2023; 38: 58–62.
- [13] Hosseini L, Lotfi Kashani F, Akbari S, et al. The Islamic Perspective of Spiritual Intervention Effectiveness on Bio-Psychological Health Displayed by Gene Expression in Breast Cancer Patients. *Iran J Cancer Prev*; In Press. Epub ahead of print 27 April 2016. DOI: 10.17795/ijcp-6360.
- [14] Eid Aburuz M, Al-Dweik G, Ahmed FR. The Effect of Listening to Holy Quran Recital on Pain and Length of Stay Post-CABG: A Randomized Control Trial. *Crit Care Res Pract* 2023; 2023: 9430510.
- [15] Mehrafsar A, Mokhtari MJ. Effect of Exposure to Quran Recitation on Cell Viability, Cell Migration, and BCL2L12 Gene Expression of Human Prostate Adenocarcinoma Cell Line in Culture. 2018.
- [16] Mutiah R, Mustofa MR, Indrawijaya YYA, et al. Exposure of Murattal Al-Quran Audio Enhances Cisplatin Activity on Growth Inhibition and Cell Cycle Modulation on Hela Cells. *Indonesian Journal of Cancer Chemoprevention* 2019; 10: 71.
- [17] Saged AAG, Mohd Yusoff MYZ, Abdul Latif F, et al. Impact of Quran in Treatment of the Psychological Disorder and Spiritual Illness. *J Relig Health* 2020; 59: 1824–1837.
- [18] Che Wan Mohd Rozali WNA, Ishak I, Mat Ludin AF, et al. The Impact of Listening to, Reciting, or Memorizing the Quran on Physical and Mental Health of Muslims: Evidence From Systematic Review. *Int J Public Health*; 67. Epub ahead of print 31 August 2022. DOI: 10.3389/ijph.2022.1604998.
- [19] Sadeghimoghaddam S, Alavi M, Mehrabi T, et al. The Effect of Two Methods of Relaxation and Prayer Therapy on Anxiety and Hope in Patients with Coronary Artery Disease: A Quasi-Experimental Study. *Iran J Nurs Midwifery Res* 2019; 24: 102–107.
- [20] Shoa kazemi M, Yaghou bimamaghani N, Mahamid F. The association between self-knowledge from Islamic perspective and mental health among Iranian female students. *J Ethn Subst Abuse* 2024; 1–17.