

# The Role of Religion and Spirituality in Alcohol Use Treatment and Recovery: An Integrative Review

Mohannad A. Aldiqs<sup>1</sup>, Ayman M. Hamdan-Mansour<sup>2</sup>

<sup>1</sup>Lecturer, Mental Health Nursing, Faculty of Nursing, Al-Ahliyya Amman University, Amman- Jordan 19328,

<sup>2</sup>Professor, Mental Health Nursing, School of Nursing, The University of Jordan Queen Rania Street, Amman 11942 Jordan

## Abstract

Despite the belief that religion and spirituality considered the most important cultural factors that give meaning to human behaviors and values, religion and spirituality have been equally ignored in the empirical alcohol studies. The purpose of this integrative review paper is to identify the role of religion and spirituality in alcohol use treatment and recovery. An integrative review has been utilized to address the issue. There is a presentation of findings from research examining religion and spirituality and their relationship to alcoholism. Treatment requires awareness of underlying causes to establish effective treatment approaches. Determining these underlying causes requires adequate knowledge of underlying personal beliefs and values that adheres to religions and spirituality. Health professionals across disciplines have an important role in implementing multidisciplinary interventions. Results, controversies, and concerns raised by the reported results are addressed. Implications for future research are delineated.

**Keywords:** Alcoholism; Belief System; Religion; Spirituality.

## Introduction

The past few decades witnessed a growing public interest in alcoholism and related method of treatment. Alcohol is a widely used substance throughout all ages, cultural, and ethnic groups<sup>[1]</sup>. It affects individuals, families, and societies' financial, psychological, and social functions<sup>[2]</sup>. This evokes attention towards understanding the socio-cultural factors that contribute to alcohol use and its related treatment approaches. Amongst, is religion and spirituality that forms a significant component of any given culture.

Despite the belief that religion and spirituality considered the most important cultural factors that give meaning to human behaviors and values<sup>[3]</sup>, religion and spirituality have been equally ignored in the empirical alcohol studies<sup>[4]</sup>. The researchers mostly include all questions related to religion and spirituality combined as one factor<sup>[5]</sup>. The use of alcohol and other drugs is clearly proscribed in some cultural and religious groups and commended in others. Larson and Larson<sup>[5]</sup> maintained in their review that researchers tend to assess religious affiliation as a measure to religion. This kind of neglect

of religion and spirituality was also observed in medical studies. Mueller and his colleagues<sup>[6]</sup> related that to the researchers' tendencies to use the biomedical model in which physical evidence is paramount. Addressing religion and spirituality as one factor is a questionable issue giving that in many cultures, religion and spirituality are not indicating the same meaning although some common components may exist. The connection between religion, spirituality, and alcohol use required further investigation as alcohol treatment programs depend largely on psychosocial modalities that use the individuals cultural, religious, and spiritual background as major components. Furthermore, mental and medical practitioners are aware of the legal aspects of substance use and treatment; however, recognizing religion and spirituality as core components allows adopting effective approaches to treatment. The *purpose* of this integrative review is to identify the role of religion and spirituality in alcohol use treatment and recovery. The discussion will include a review of studies and treatment approaches that support the efficiency of using the spiritual and religious dimensions in alcohol recovery. Besides, the interrelationship among alcoholism, religion, and

spirituality is also discussed. The paper will emphasize the role of religion and spirituality as an essential and commended approach to deal with the alcohol problem at the individual and society level.

## Method

### Data Source

The article search was conducted by the first author. EB identified articles by scanning and reviewing all existing literature reviews of Religion, Spirituality, and Alcoholism. Reference lists of these articles were further reviewed for relevant studies. Then literature searches were conducted between January 2010 to Jun 2020 using the online databases: Medline/Pubmed, PsycINFO, Google Scholar, British Nursing Index, Pro-Quest, Elsevier, EBSCOhost, and Cumulative Index to Nursing and Allied Health Literature (CINAHL) Plus using the following search keywords: Alcoholism; Belief System; Religion and Spirituality. Only peer-reviewed papers published in Arabic and English were considered; no geographical limits were used.

Medical subject headings (MeSH) descriptors or appropriate permutations were used to index the content of the databases. The Boolean operators “AND” and “OR” were used as connectors to combine the various search terms and help narrow down the search. Using “AND” ensures that articles with both search terms are retrieved whereas using “OR” ensures the retrieval of articles with either of the search terms. With the aid of these Boolean operators, the search terms were combined as follows: Alcoholism AND Religion OR Spirituality OR Belief System; Alcoholism AND Belief System OR Religion OR Spirituality; and Alcoholism AND Belief System OR Religion OR Spirituality (Table 1).

**Table 1. Boolean table showing keywords used for research.**

<b>List of search terms:</b>
Alcoholism AND Spirituality OR Religion
Alcoholism AND Spirituality OR Belief System

**Inclusion and Exclusion Criteria:** The inclusion criteria included articles published in the English language, research studies specifically related to Religion, Spirituality, Alcoholism, and relevant publications regardless of the study design. The inclusion criteria also included articles published from the year 2010 to 2020 to ensure that only current evidence is explored. The

exclusion criteria included studies that were not relevant to Religion, Spirituality, Alcoholism, studies published in languages other than English and Arabic, and studies with publications older than 2010.

**Religion and Spirituality:** The word religion is taken from the Latin word *religare* which means “to bind together” [7]. Religion reflects a set of beliefs and practices that are agreed upon by specific groups of people. The degree to which an individual devote or the quality of being religious refers to religiosity or religious involvement[7]. Spirituality is taken from the word *spiritualitas* which means “breath”[7]. Spirituality can be defined as “a broad concept that encompasses values, meaning and purposes; one turn inward to the human traits of honesty, love wisdom, caring, imagination, compassion, existence of quality of a higher authority, guiding spirit or transcendence that is mystical; a lowing, dynamic balance that allows and creates healing of body-mind spirit; and may or may not involve organized religion” [8] p24. Three characteristics of spirituality as posited by Margaret Burkhardt [9] are unfolding mystery, harmonious inter connectedness, and inner strength. Some researchers use the term spiritual wellbeing to refer to spirituality. But these two terms are different. Spiritual wellbeing refers to “the affirmation of life in relationship with God, self, community, and environment that nurtures and celebrates wholeness”[10]. Spiritual well-being is first emerged by David O. Moberg in 1971 where he defined it as “wellness or health of the totality of the inner resources of people, the ultimate concerns around which all other values are focused, the central philosophy of life that guide the conduct, the meaning-giving center of human life which influences all individual and social behavior”[11]. p2). Carson[12] maintained that spiritual wellbeing is not a state but rather an indication of the presence of spiritual health in the person. The features of spirituality include connectedness with others and divine, transcendence (the human is more than simple materials), and values as love and justice[13]. Despite of the growing interest in different professional disciplines to study the impact of spirituality on various aspects of individuals’ health, researchers were not able to present a measurable definition of spirituality; Therefore, researchers used to measure religiosity to address spirituality[14]. However, religion and spirituality do not refer to the same things. Canda [15], who has developed a concept of spirituality for social work, maintained that religion involves modeling of the individual’s spiritual practices and beliefs into a

social institution. Religion is at the level of individual and has boundaries of specific beliefs, practices, and forms of governance and rituals<sup>[16]</sup>.

**The Interrelationship between religion and alcoholism:** Most clinical studies and population surveys noted that religiosity and alcohol use are inversely related (e.g.,<sup>[17]; [18]</sup>). Chang-Lin and his colleagues<sup>[19]</sup> found that religiously exhibited lower use and initiation of alcohol. In a recent study, the investigators found that religiously-involved students are less likely to abuse alcohol than their nonreligious colleagues<sup>[20]</sup>. Even in maintaining abstinence, religious individuals show more significant results in terms of longer abstinence periods<sup>[21]</sup>.

A systematic review showed that there is an inverse relationship between attitudes toward alcohol drinking and religiosity<sup>[22]</sup>. Religion was negatively associated with using alcohol among adolescents sample<sup>[23]</sup>. These studies show some significant and supportive results toward the effective use of religious beliefs and practices in alcohol sober and abstinence. We need to have these studies replicated in various cultural and religious groups. Despite of the valid results of an existing inverse relationship between alcohol use and religiosity, it very difficult to develop a causal relationship<sup>[6]</sup>.

**Spirituality and Alcoholism:** The issues of measuring spirituality become one of the main concerns for the workers in the sociocultural and psychosocial disciplines. Therefore, drug and alcohol abuse is considered a symptom of wounded spirituality<sup>[24]</sup>. This view is not what Royce<sup>[25]</sup> went for when he called addiction, to alcohol and any other drug, as a spiritual disease. Royce<sup>[25]</sup> maintained that addiction is simply not functioning with ease regarding the drug. He relied mainly on his understanding of the word disease. He pointed out that “disease” is a “lack of ease”; therefore, alcohol works as a disease by impairing the ability of the body to think and feel right about God. The alcoholics and addict resort to drugs and alcohol in an attempt to void and overcome that spiritual emptiness, spirituality is protective factors and function as mechanisms against relapse<sup>[26]</sup>. Hence, the AA’s has a strong belief that addiction, including alcoholism, is a spiritual disease. Researchers<sup>[27]</sup> presented an interesting idea that relates alcoholism and addiction to spirituality by maintaining that spirituality is the functions of the right hemisphere in which it is the part of the brain that most of the addiction drugs make their effects. Therefore, when the defect

in spirituality happiness, such as a feeling of spiritual emptiness, the addicts use alcohol and other drugs for the pharmacological benefits of the drugs in the right hemisphere, where the spiritual process takes place.

**Religion, Spirituality and Health:** The last few decades witnessed an increased interest in the role of an individual’s belief system and spirituality in maintaining and promoting individuals’ health. Health practices, in general, and medicine specifically has been historically liked to religion, and religious people were always the resort for individuals’ health problems. By time medicine, followed by other health care professions split themselves from religion. In the present time, health professionals are encouraged to consider the spiritual assessment and spiritual care in their process of care of individuals and families<sup>[1]</sup>. This reflects the importance to deal with the individual as a whole not only from a disease model perspective. Mueller and his colleagues<sup>[6]</sup> in their review found that patient care was well enhanced by employing and enforcing the patient’s spirituality. They indicated that spirituality enhanced patient coping, and quality of life and patients valued their spiritual wellness equal to their physical well-being.

The association between high spirituality and religiosity with physical and psychosocial well-being has been strongly recommended in the literature. Higher levels of spirituality and religion have been found to be negatively associated with rates of alcohol and drug use, suicide, and depression<sup>[28]</sup>. Spirituality found to associate with an individual’s health through reduced loneliness<sup>[29]</sup>. Further, religious practices are inversely related to the severity of symptoms and hospital use and enhance life satisfaction among psychiatric inpatients<sup>[30]</sup>. This indicated why many people turned to alternative medicine is because it corresponds with their beliefs, values, and philosophical orientation, and because of dissatisfaction with conventional medicine<sup>[31]</sup>. However, religion has been reported with some negative consequences on the individual’s health behaviors and practices such as obesity<sup>[32]</sup>, obsessive behaviors<sup>[33]</sup>, and adherence to medical regimens<sup>[34]</sup>. While some of these beliefs may not be accepted by the health care providers and other allied professionals, ethicists suggest that these beliefs must be respected<sup>[35]</sup>.

Therefore, spiritual assessment and exploring religious beliefs have to be part of the patient’s holistic management and a core part of the first visit<sup>[36]</sup>. That includes fears, wishes, values, hopes, and the way they

perceived disease and illness<sup>[37]: [38]</sup>. The person should not be seen as an object, rather as a biological, spiritual, physical, and social human being. These considerations should not be limited to patients who attend hospitals and clinics suffering from psychotic-related illness, as found by Hilton and his colleagues<sup>[39]</sup>, but also for all patients. One way to accomplish that is by learning the significance of spiritual assessment outcomes in the process of caring and decisions related to the selection of treatment approaches.

**Role of Religion and Spirituality in Alcohol Recovery:** The worker and professionals who deal with addiction problems are no more ignoring the role of the spiritual dimension in recovery from alcoholism and addiction. Literature has provided a significant association between alcohol recovery and spiritual awakening (e.g.,<sup>[40]</sup>). Among the dominant treatment initiatives of alcoholism is Alcoholics Anonymous (AA)<sup>[41]</sup>. In the AA, the individual develops “humanity, inner strength, a sense of meaning and purpose, acceptance, tolerance, and harmony in one’s life”<sup>([42], p 209)</sup>. These entire elements considered to be important components in the individual’s spirituality. Therefore, the basic of AA is spiritual growth by practicing certain spiritual principles and traditions<sup>[43]</sup>. The AA does not provide the definite cure of alcoholism; rather, relieving the alcoholic through practicing the twelve steps and twelve traditions that guide the spiritual growth. Alcoholics Anonymous is not the only alcohol recovery program that is spiritually-related. There are Al-Anon and Alateen, Rational Recovery, SMART Recovery, secular organization for sobriety, men for sobriety, and women for sobriety. All these groups have common agreement on rejecting the disease model of alcoholism, recognize the diversity in treatment, and spirituality is a key element in the recovery<sup>[42]</sup>.

Drinking outcome after treatment is not related to the extent to which the individual attends the AA<sup>[44-46]</sup>; however, the involvement in AA has been significantly related correlated with drinking outcomes. While studies supported the effect of the spiritual dimension and using meditation on the health outcomes among alcohol and drug addicts (e.g.,<sup>[47]</sup>) the controlled studies revealed a non-significant effect of using meditation on alcohol consumption<sup>[48]</sup>. One of the major supportive results that related the use of spirituality in alcohol recovery is reported by the project MATCH, where individuals who have AA involvement and spiritual/religious involvement groups have better outcomes on the abstinence measures

compared with others in the cognitive/behavioral skills group and motivational enhancement group. Although spiritual/religious involvement may be an important protective factor against alcohol/drug abuse, and Individuals currently suffering from these problems are found to have a low level of religious involvement and spirituality<sup>[49-50]</sup>, the spiritual-focused intervention is still a debated issue and not well-proven due to the limited empirical evidence<sup>[16]</sup>.

**Implication and research issues:** The reviewed studies on alcoholism and its relationship to religion and spirituality acknowledge the role of religious/spiritual affiliation as a protective factor against alcohol use and abuse. Although some studies revealed a positive relationship between the religious/spiritual involvement and recovery from alcohol; however, the limited empirical evidence limits the ability to establish a predictive relationship. Nevertheless, the roles of religion and spiritual beliefs have been strongly addressed as one major components for alcohol recovery and sobriety. This is dependent upon personal rather than selected model of treatment. Therefore, mental and addiction health practitioners need to assess and investigate sources of internal power and strengths of individuals with alcohol use problems. legal aspects of alcohol use although considered significant factors, the medical and mental health practitioners need to develop their intervention using the power of personal belief and accommodate their plans to cultural factors. This reflects the importance of including the spiritual dimension as an essential part of the process of caring.

The evidence of religious and spiritual practices in protecting against addiction logically implies that these practices can be used effectively in the process of recovery. This require psychiatric and addiction practitioners to gain more understanding of the spirituality and religious affiliation of individuals with alcohol use problems and disorders. Further, the health care providers are urged to include the outcomes of spiritual assessment planning and interventional processes. The researchers need to investigate more the relationship between alcohol recovery and spiritual/religious involvement and include the spiritual variables in the treatment studies. Recognizing that the main barrier to research is lack of interest of researchers in studying religious and spiritual concepts, there is a need to integrate these concepts while addressing alcohol use recovery and treatment research and interventions. The mental health professionals probably lack the appropriate knowledge to use tools

and method of measuring religiously and spiritual beliefs inferring the need to have the researchers and mental health and addictions specialists to communicate and cooperate to improve the excellence of the produced studies in the field of alcoholism.

There is a need to deal with the individual as a whole system and applying the holistic approach of care including the biological, social, psychological, physical, and spiritual processes. Religion has been linked to medicine and health, why not to regain this relationship, and present it in a scientific way. It's time to build the holistic model of health care that recognizes individuals' spirituality and religious affiliation.

### Conclusion

There has been growing interest in studying the relationship between alcoholism and spiritual/religious involvement. Studies have acknowledged the role of an individual's spirituality and religious beliefs in physical and psychosocial well-being and alcohol recovery. This paper presented a discussion of the relationship between spirituality and religiosity and alcoholism. The paper presented a discussion that shows the significant role of spiritual/religious involvement as a protective factor against alcohol use problems and disorder as a supportive element in the process of recovery. Controversial findings related to the nature of this relationship also presented. Further, the paper delineated how individuals' spirituality and religiosity may differ and how can they be linked. Implications and research concerns with suggestions presented and discussed for implementation in the research, education, and clinical settings.

**Conflict of Interest:** the authors declare no conflict of interest related to publication of this article.

**Financial Disclosure:** There is no financial disclosure.

**Ethical Clearance:** the study has been approved by the ethics and research committee at the university of Jordan.

### References

1. American Psychiatric Association. Diagnostic and statistical manual of mental disorders (DSM-5). American Psychiatric Pub; 2013 May 22.
2. Sacks JJ, Gonzales KR, Bouchery EE, Tomedi LE, Brewer RD. 2010 National and State Costs of Excessive Alcohol Consumption external icon. *Am J Prev Med* 2015; 49(5): e73–e79.
3. Hamdan-Mansour AM, Al-Sagarat AY, Shehadeh JH, Al Thawabieh SS. Determinants of substance use among high school students in Jordan. *Current Drug Research Reviews*. 2020 May 25.
4. Al Abaiat D, Hamdan-Mansour A, Hanouneh S, Ghannam B. Psychosocial predictors of relapse among alcohol dependents in Jordan. *Current Drug Abuse Reviews*. 2016; 9, 1, 19-25.
5. Gove PB. *New International Dictionary*. Springfield, MA: Merriam-Webster Inc. 1986.
6. Hamdan-Mansour AH, Shehadeh JH, Mansour LA. Using cognitive behavioral intervention to prevent substance use among university students: comparative study. *Mental Health and Social Inclusion*. 2020 Jul 1. doi.org/10.1108/MHSI-04-2020-0021
7. Hamdan-Mansour AM, Malkawi AO, Sato T, Hamaideh SH, Hanouneh SI. Men's perceptions of and participation in family planning in Aqaba and Ma'an governorates, Jordan. *EMHJ-Eastern Mediterranean Health Journal*. 2016;22(2):124-32.
8. Hamdan-Mansour A, Nawafeh D, Hanouneh S, Al Omari H. Psychosocial aspects of patients diagnosed with Diabetes mellitus type-II in Jordan. *International Journal of Diabetes in the Developing Countries*. 2015; 36:65-9.
9. Xiao H, Yoon JY, Bowers B. Quality of life of nursing home residents in China: a mediation analysis. *Nursing & health sciences*. 2017 Jun;19(2):149-56.
10. Moberg DO. The development of social indicators for quality of life research. *Sociological Analysis*. 1979 Mar 1;40(1):11-26.
11. Hamdan-Mansour AM, Mahmoud KF, Al Shibi AN, Arabiat DH. Impulsivity and sensation-seeking personality traits as predictors of substance use among university students. *Journal of Psychosocial Nursing and Mental Health Services*. 2017 Sep 12;56(1):57-63.
12. Hamdan-Mansour AM, Dardas LA, Nawafleh H, Abu-Asba MH. Psychosocial predictors of anger among university students. *Children and Youth Services Review*. 2012 Feb 1;34(2):474-9.
13. Ghaderi A, Tabatabaei SM, Nedjat S, Javadi M, Larijani B. Explanatory definition of the concept of

- spiritual health: a qualitative study in Iran. *Journal of medical ethics and history of medicine*. 2018;11.
14. Mmaryan N, Rassouli M, Mehrabi M. Spirituality concept by health professionals in Iran: A qualitative study. *Evidence-Based Complementary and Alternative Medicine*. 2016 Jan 1;2016.
  15. Kendler KS, Gardner CO, Prescott CA. Religion, psychopathology, and substance use and abuse: A multimeasure, genetic-epidemiologic study. *The American journal of psychiatry*. 1997 Mar.
  16. Alsyouf WS, Hamdan-Mansour AM, Hamaideh SH, Alnadi KM. Nurses' and patients' perceptions of the quality of psychiatric nursing care in Jordan. *Research and theory for nursing practice*. 2018 Jun 1;32(2):226-38.
  17. Hamdan-Mansour AM, Al-Sagarat AY, AL-Sarayreh F, Nawafleh H, Arabiat DH. Prevalence and correlates of substance use among psychiatric inpatients. *Perspectives in Psychiatric Care*. 2018 Apr;54(2):149-55.
  18. Ghannam B, Hamdan-Mansour A, Al Abaiat D. Psychosocial predictors of burden among caregivers of patients with serious mental illness in Jordan. *Perspectives in Psychiatric Care*. 2017;53(4):299-306.
  19. Lin HC, Hu YH, Barry AE, Russell A. Assessing the associations between religiosity and alcohol use stages in a representative US sample. *Substance Use & Misuse*. 2020 May 2:1-7.
  20. Tomkins MM, Neighbors C, Park CL. Expressing discrepancies between religious affiliations and drinking reduces drinking intentions. *Psychology of Religion and Spirituality*. 2020 Feb;12(1):124.
  21. Almadi T, Cathers I, Hamdan Mansour AM, Chow CM. The association between work stress and inflammatory biomarkers in Jordanian male workers. *Psychophysiology*. 2012 Feb;49(2):172-7.
  22. Luecha T, Peremans L, Dilles T, Poontawee P, Van Rompaey B. The prevalence of and factors related to alcohol consumption among young people in Thailand: a systematic review of observational studies. *Drugs: Education, Prevention and Policy*. 2020 Feb 22:1-22.
  23. Stauner N, Exline JJ, Kusina JR, Pargament KI. Religious and spiritual struggles, religiousness, and alcohol problems among undergraduates. *Journal of Prevention & Intervention in the Community*. 2019 Jul 3;47(3):243-58.
  24. Nikfarjam M, Solati K, Heidari-Soureshjani S, Nourmohammadi M, Kazemi SY, Jafari A, Omidi M. The effect of group religious intervention on spiritual health and symptom reduction in patients with depression. *Journal of Shahrekord University of Medical Sciences*. 2019 Feb 9.
  25. Shehadeh J, Hamdan-Mansour AM, Halasa SN, Hani MH, Nabolsi MM, Thultheen I, Nassar OS. Academic stress and self-efficacy as predictors of academic satisfaction among nursing students. *The Open Nursing Journal*. 2020 Jun 18;14(1).
  26. Shafie AA, Jailani MR, Elias NF, Miskam NA, Mahyuddin MK. The effectiveness of a guided repentance module: a qualitative analysis of psycho spiritual and drug-related locus of control. *International Journal of Academic Research in Business and Social Sciences*. 2019 Jun;9(6).
  27. Hamdan-Mansour AM, Mahmoud KF, Al Shibi AN, Arabiat DH. Impulsivity and sensation-seeking personality traits as predictors of substance use among university students. *Journal of Psychosocial Nursing and Mental Health Services*. 2017 Sep 12;56(1):57-63.
  28. de Rezende-Pinto A, Schumann CS, Moreira-Almeida A. Spirituality, religiousness and mental health: Scientific evidence. In *Spirituality, Religiousness and Health 2019* (pp. 69-86). Springer, Cham.
  29. Gallegos ML, Segrin C. Exploring the mediating role of loneliness in the relationship between spirituality and health: Implications for the Latino health paradox. *Psychology of Religion and Spirituality*. 2019 Aug;11(3):308.
  30. Hamdan-Mansour AM, Constantino RE, Farrell M, Doswell W, Gallagher ME, Safadi R, Shishani KR, Banimustafa R. Evaluating the mental health of Jordanian women in relationships with intimate partner abuse. *Issues in Mental Health Nursing*. 2011 Sep 23;32(10):614-23.
  31. Hamdan-Mansour AM, Al-Gamal E, Puskar K, Yacoub M, Marini A. Mental health nursing in Jordan: An investigation into experience, work stress and organizational support. *International Journal of Mental Health Nursing*. 2011 Apr;20(2):86-94.
  32. Banimustafa RA, Mansour AM, Arabiat DH. Empowerment and psychological wellbeing of women in the southern region of Jordan: in the

- context utilization of reproductive health care services. *The Arab Journal of Psychiatry*. 2011 Nov;44(2313):1-8.
33. Hamdan-Mansour AM, Arabiat DH, Sato T, Obaid B, Imoto A. Marital abuse and psychological well-being among women in the southern region of Jordan. *Journal of Transcultural Nursing*. 2011 Jul;22(3):265-73.
  34. Movahedizadeh M, Sheikhi MR, Shahsavari S, Chen H. The association between religious belief and drug adherence mediated by religious coping in patients with mental disorders. *Social Health and Behavior*. 2019 Jul 1;2(3):77.
  35. Griffin SJ. The ethical accommodation of patients' religious beliefs in healthcare: a care respect framework prompted by examples from modern Paganism (Doctoral dissertation, Keele University).
  36. Abdulla A, Hossain M, Barla C. Toward comprehensive medicine: listening to spiritual and religious needs of patients. *Gerontology and Geriatric Medicine*. 2019 Apr; 5:2333721419843703.
  37. Al Ja'afreh S, Hamdan- Mansour A, Alabeiat D. Predictors of attitudes toward substance use among university students in Jordan. *Psychology and Education*. 2020; July 57(5): 331-335.
  38. McSherry W, Ross L, Balthip K, Ross N, Young S. Spiritual assessment in healthcare: an overview of comprehensive, sensitive approaches to spiritual assessment for use within the interdisciplinary healthcare team. In *Spirituality in Healthcare: Perspectives for Innovative Practice 2019* (pp. 39-54). Springer, Cham.
  39. Ghaznavi F, Zuberi T. Religious beliefs and practices in acute mental health patients. *Nursing Standard* (through 2013). 2002 Jun 5;16(38):33.
  40. Hamdan-Mansour AM, Abdel Razeq NM, AbdulHaq B, Arabiat D, Khalil AA. Displaced Syrian children's reported physical and mental wellbeing. *Child and Adolescent Mental Health*. 2017 Nov;22(4):186-93.
  41. Vandivier AM. The Growth of Spiritual Awareness through AA Participation: A phenomenological study. *Alcoholism Treatment Quarterly*. 2020 Jan 2;38(1):32-49.
  42. Carroll S. Spirituality and purpose in life in alcoholism recovery. *Journal of studies on alcohol*. 1993 May;54(3):297-301.
  43. Marmash LR, Hamdan-Mansour AM, Elian RN RM, Hiarat SY. Differences in perception between nurses and patients in Jordanian nurses' effectiveness in practicing communication skills. *Jordan Medical Journal*. 2012 Apr;171(785):1-21.
  44. Mahadeen A, Othman A, Hamdan-Mansour A, Sato T, Imoto A. Knowledge and practices towards reproductive health among rural women in the southern region of Jordan. *East Mediterr Health J*. 2012;18(6):567-72.
  45. Aldiqs MA, Mansour A. Relationship of neurocognitive function with psychological well-being and activities of daily living among patients diagnosed with schizophrenia in Jordan. *Journal of Nursing and Health Sciences*. 2018 Jun;4(2):34.
  46. Almadi T, Cathers I, Mansour AM, Chow CM. An Arabic version of the Perceived Stress Scale: Translation and validation study. *International journal of nursing studies*. 2012 Jan 1;49(1):84-9.
  47. M Hamdan Mansour A, H Shehadeh J, Puskar K, El-Hneiti M, M Haourani E. Investigating physical, psychological and social well-being of older persons in Jordan. *Current Aging Science*. 2017 Aug 1;10(3):217-23.
  48. Murphy TJ, Pagano RR, Marlatt GA. Lifestyle modification with heavy alcohol drinkers: Effects of aerobic exercise and meditation. *Addictive behaviors*. 1986 Jan 1;11(2):175-86.
  49. Atallah MA, Hamdan-Mansour AM, Al-Sayed MM, Aboshaiqah AE. Patients' satisfaction with the quality of nursing care provided: The Saudi experience. *International Journal of Nursing Practice*. 2013 Dec;19(6):584-90.
  50. Breslow RA, Dong C, White A. Prevalence of alcohol-interactive prescription medication use among current drinkers: United States, 1999 to 2010. *Alcoholism: Clinical and Experimental Research*. 2015 Feb;39(2):371-9.