

# Fields: journal of Huddersfield student research



Available open access at: https://www.fieldsjournal.org.uk/

# Is there a role for integrating spirituality into substance use disorder treatment?

# Mukai Kardija Dabo, Melanie Rogers, Jane Anderson

University of Huddersfield, Queensgate, Huddersfield, West Yorkshire, HD1 3DH

### ARTICLE INFO

Article history: Received 03 November 2024 Received in revised form 03 May 25 Accepted 25 June 25

Keywords:
Spirituality,
substance abuse
addiction,
drug and alcohol abuse
treatment,
substance misuse,
substance use disorder
treatment,
drug and alcohol addiction,
substance use disorder,
holistic care.

### ABSTRACT

# **Background**

As a single cause for substance use disorder [SUD] is yet to be identified, no one treatment plan is likely to be successful. The problems arising from SUD are complex, with biological, social, psychological and spiritual crises being contributory factors. Holistic care, which addresses all these factors, is paramount to improve clinical outcomes for service users. However, the dimension of spirituality is frequently omitted from patients' holistic care.

### Aim

To explore the evidence for integrating spirituality into substance use disorder treatment.

## Methods

This literature review utilised a systematic approach to critically appraise and analyse whether there is a role for integrating spirituality into SUD treatment. Seven electronic databases were searched, eight articles were identified.

### **Findings**

There is evidence to support integrating spirituality into the management of service users with SUD with spirituality contributing to both a reduction in, and abstinence from, alcohol and drug use. Many service users find spirituality meaningful and welcome the idea of spirituality being included in their SUD treatment. Spirituality is perceived differently by people and can depend on factors like gender, race, faith and cultural backgrounds. A holistic patient-centred approach is paramount, but clinicians' lack of knowledge of spirituality is a barrier to incorporating spirituality into SUD treatment.

### Introduction

Despite considerable advances in both pharmacological and psychological treatment modalities, there is still a need to improve substance use disorder [SUD] treatment (Balboni et al., 2015; Mendola & Gibson, 2016).

According to the definition of SUD in the 11th International Classification of Diseases, SUD is compounded by dependency use of drugs and alcohol. Both dependencies can lead to a chronic and compulsive relapsing brain disease (World Health Organisation [WHO], 2019). SUD is a serious public health problem that continues to have an enormous negative impact on the lives of individuals, their family, communities and health With an exacerbation systems. rate of approximately 50%, SUD is a chronic health disorder like diabetes, hypertension, and chronic obstructive pulmonary disease (National Institute on Drug Abuse, 2018).

In 2016, approximately 0.5% of healthy life years were estimated to be lost due to premature death and disability caused by SUD (United Nations Office on Drugs and Crime [UNODC], 2017). In England, statistics show a drastic increase of 13,319 SUD adults in treatment between April 2021 and March 2022 (National Statistics, 2023), which may relate to lockdown restrictions caused by the Covid-19 pandemic. Furthermore, globally 5.1% of adults aged 15 and over had an alcohol use disorder in 2016 and 0.6 % had a drug use disorder in 2015 (WHO, 2018). These statistics emphasise SUD as a significant contributor to the global disease burden

(Degenhardt et al., 2018) and hence attention should be turned to both supporting patients with SUD and to improving clinical approaches to SUD treatment (Galanter et al., 2021).

As there is no one cause for SUD, a single successful treatment modality is currently unknown. Holistic care should be paramount in all treatment plans, due to the causative factors of SUD being complex and can be attributed to biological, psychological, social and spiritual factors (Rezende-Pinto & Moreira-Almeida, 2023). Holistic care incorporates a biopsychosocial model, which aids in the understanding of factors that have played a part in the development of SUD in an individual (Engel, 1977). This model has been widely embraced as a guide for clinical approaches (Fava & Sonino, 2017).

Conversely, this model has also been criticised as it does not incorporate other holistic approaches in addition to the biopsychosocial model (Ghaemi, 2018; Wade & Halligan, 2017). WHO [1999] highlighted the significance of spirituality as a quality-of-life dimension and has amended its constitution, inserting spiritual well-being into the concept of health (Carey & Mathisen, 2018). In line with this, Sulmasy (2002) argued for the expansion of the biopsychosocial model to include a spiritual dimension due to the inability of clinicians to understand the whole patient without this. Despite spirituality being included in WHO's constitution, for the most part it is excluded from the care of individuals (Rogers & Wattis, 2020), especially those with mental health problems (Rogers et al., 2023).

Conversely, Sloan et al. (1999) urge caution in promoting religion and spirituality as adjunctive medical treatments in healthcare due to the weak and inconsistent findings of the benefits. This was also supported by other critics who have also challenged both the rigour of the science and the overall propriety of spirituality and religion as a subject for health research and practice (Mills, 2002; Sloan and Bagiella, 2002; Sloan et al., 2000). However, religion and spirituality are not synonymous with spirituality encompassing a wider diverse and more inclusive definition.

A variety of definitions of spirituality have been proposed across several disciplines, including nursing and medicine. Cook (2004) analysed 265 published books and articles and found that the concept of spirituality had 13 conceptual components. Among these, transcendence and relatedness were the most referenced conceptual components of spirituality. Cook revealed different synonyms for this concept such as intrinsic meaning, interconnectedness, life purpose, values and beliefs (Cook, 2004). This demonstrates the subjectiveness of spirituality which can be compounded by many assumptions.

However, in line with the concepts revealed, Clarke (2013) defined spirituality as a phenomenon that is intrinsic to individuals, brings hope and meaning to their lives and is simply part of being human. Fowler (2017) and Lavorato Neto et al. (2018) dispute Clarke's (2013) definition and assert that spirituality includes an interconnection of something both beyond ourselves and within ourselves, i.e. something transcendent and something existential. Fowler (2017) and Lavorato

Neto et al. (2018) also report that some people interpret and experience their spirituality in different ways, either through the practice of a religion (Yesilcina et al., 2018), or individually outside an organised religious system (Lavorato Neto et al., 2018). In addition, Barber (2019) stressed that even those individuals who do not consider themselves religious can also experience spirituality. With continued variations definitions, spirituality continues to lack consensus on how it is defined, measured and integrated into practice (Bliss, 2007). There is additionally a lack of evidence in implementing spirituality in SUD treatment.

### Aims and objectives

Despite limited evidence regarding spirituality being incorporated in SUD treatment, there has been a growing interest. In the first part of the twentieth century there was evident success in addiction recovery through Alcoholics Anonymous [AA] (Tiebout, 1961), who asserted that success of AA was related to its spiritually-based approach. Saad et al. (2017) emphasised in their study that spirituality is an integral part of an individual's belief and value and needs to be considered.

This literature review explored the evidence for spirituality being integrated into SUD service users' care, as part of holistic practice. The aims and objectives of this study can be found in Table A.

Table A. Research question, aim and objectives

Question	Is there a role for integrating					
	spirituality into substance disorder					
	treatment?					
Aim	To explore the evidence for					
	integrating spirituality into					
	substance use disorder treatment and					
	consider barriers to implementation.					
Objectives	• To undertake a structured literature					
	review on spirituality and substance					
	use.					
	• To critically analyse barriers and					
	facilitators for integrating spirituality					
	into substance use disorder					
	treatment.					
	• To evaluate service user					
	perceptions, related to the integration					
	of spirituality into their care.					
	• To make recommendations for					
	future practice.					

#### Methods

This literature review was carried out using a systematic approach, the results critically appraised and the results analysed (Aveyard, 2019).

In order to develop a research question that was balanced and focused, the research question was generated using mind map (Aveyard, 2019), brainstorming with colleagues and utilising the technique that followed acronym PICO framework (Richardson et al., 1995). This made the original format difficult to use in developing and refining questions for this literature review.

Following Hewitt-Taylor (2017) who asserted that the purpose of using a framework was to help develop a clear and focused question and not to create complications, PICO principles were used as guide to formulate key concepts for the research question. Therefore, adapted PICo acronym from PICO framework explained: Population, Intervention, Context (Coughlan & Cronin, 2021).

Mnemonic **P**- included adults with SUD, **I**-Spirituality, **Co**- substance use disorder (alcohol AND/OR drug) treatment. This led to the research question: Is there a role for integrating spirituality into drug and alcohol use disorder treatment?.

The keywords for undertaking a computerised literature search for this review were identified from the literature review question, through carefully examining the refined terms established from the PICo acronym (Eriksen & Frandsen, 2018). These keywords are demonstrated in Table B.

Table B. Keywords

Spirituality	Addiction	Holistic care
Substance	Drug and	Substance use
abuse	alcohol abuse	disorder
	treatment	treatment
Substance use	Substance	Drug and
disorder	misuse	alcohol
		addiction

Seven electronic databases were searched for literature using the identified keywords and inclusion and exclusion criteria. Databases used include Medical Literature Analysis and Retrieval Online [MEDLINE], Cumulative Index to Nursing and Allied Health Literature [CINAHL], APA PsycINFO, Scopus, PubMed, TRIP Plus and Europe PMC.

Nevertheless, databases have different peculiarities that could either limit or maximise search results. Therefore, different search strategies incorporating asterisks, quotation marks, Boolean and Medical subject headings [Mesh] operators were used. This ensured only relevant literature was retrieved (Aveyard, 2019). Advanced search mode was also

used, which allowed keywords to be combined, thereby limiting, expanding and clarifying the search (Coughlan & Cronin, 2021). Attention to selection bias remained paramount, so no key studies were excluded until after full appraisal (Coughlan & Cronin, 2021). The selected studies were narrowed down through screening for eligibility based on the key elements of the literature review question and aims, in consideration of the inclusion and exclusion criteria.

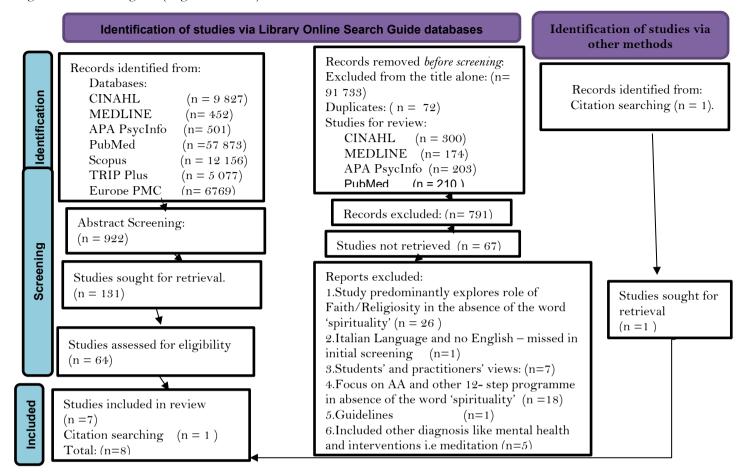
The inclusion criteria included peer reviewed studies, relevant to the research question, published in English language, and published 2013–2023. The parameters in relation to the date of publication was initially for studies published in the last five years; however, limited studies were retrieved. Consequently, a decision was made to increase the search parameter to ten years. Spirituality and synonyms of this were also included when related to SUD.

The exclusion criteria were studies that only mentioned religion and faith in the absence of the word 'spirituality', studies that only mentioned AA and other mutual aid programmes without mentioning the word 'spirituality', studies not published in English and studies with participants aged under 18. Although many studies integrate spirituality and religion, excluding papers that focused on religion and synonyms alone ensured a focus on the research aim.

### Results

A total number of 92,655 studies were retrieved from all seven databases. These studies were further narrowed down via removal of duplicates, abstract screening and full article screening to ensure they met the inclusion criteria (Diagram A).

Diagram A. PRISMA guide (Page et al., 2021):



The data summary chart (Table C) helped to identify recurring themes in the literature (Mays et al., 2005).

Table C. Data summary chart

Table C. Data summary chart						
Citation: Author, date, title	Country	Peer revie wed	Method of research	Sample type, size and age	Findings	
Bliss, D. L., & Ekmark, S. S. (2013). Gender differences in spirituality in persons in alcohol and drug dependence treatment. <i>Alcoholism Treatment Quarterly</i> , 31(1), 25–37. https://doi.org/10.1080/07347324.2013.746625	United States of America [USA]	yes	Cross-sectional study Survey	Convenience sampling  Age 18+  N= 180 participants	There were no statistically significant gender differences in four of the five assessed spirituality dimensions. Women were found to have high levels of expression of cognitive orientation towards	
McInerney, K., & Cross, A. (2021). A phenomenological study: Exploring the meaning of spirituality in long-term recovery in Alcoholics Anonymous. <i>Alcoholism Treatment Quarterly</i> , 39(3), 282–300. https://doi.org/10.1080/07347324.2021.1895016	United Kingdom [UK]	yes	Interpretative phenomenological analysis  Semi-structured interview	Age 18+ N=5 participants	spirituality.  Role of Spirituality in participants was elicited and two themes of Spirituality as an Existential phenomenon and Secular phenomenon was described by participants.	
Kelly, J. F., & Eddie, D. (2020). The role of spirituality and religiousness in aiding recovery from alcohol and other drug problems: An investigation in a national U.S. sample. <i>Psychology of Religion and Spirituality</i> , 12(1), 116–23. https://doi.org/10.1037/rel 0000295	USA	yes	Cross-sectional study Survey	Age 18+ $N=2002$ Random sampling	Participants reported spirituality had either helped resolve their AOD problem or did not. Substantial differences were identified in race, gender, and prior professional treatment like mutual aids were related to greater spirituality than religiosity.	
Bakken et al. (2014). Spirituality and desistance from substance use among reentering offenders. International Journal of Offender Therapy and Comparative Criminology, 58(11), 1321–39. https://doi.org/10.1177/0306624X13494076	USA	yes	Longitudinal study  Questionnaire	Age 18+ N= 920 participants	Three forms of substance use – marijuana, cocaine and alcohol – were concentrated on. Results showed increase in spirituality leads to increase in desistance after release in cocaine and alcohol; however, findings for spirituality and marijuana was inconclusive.	
Vitorino et al. (2023). Association between religiosity/spirituality and substance use among homeless individuals. <i>International Journal of Social Psychiatry</i> , 70(2) 207640231211495. https://doi.org/10.1177/00207640231211495	Brazil	yes	Cross-sectional Questionnaire	Age 18+ N= 482	Increase in spirituality led to decrease in illicit drug use. However, individuals who believed in both spirituality and religiosity exhibited different coping abilities. Positive thoughts and feelings were associated with decreased substance use, while negative thoughts and feelings were associated with increased substance use.	

Foster et al. (2016). Compounding risk: An examination of associations between spirituality/religiosity, drinking motives, and alcohol- related ambivalence among heavy drinking young adults. Addictive Behaviors, 63, 1–11. https://doi.org/10.1016/j.addb eh.2016.06.026	USA	yes	Cross-sectional Questionnaire	Age 18+  Purposive sampling  N= 241 participants	Results showed that individuals at highest risk of problematic drinking are those who more strongly endorse drinking motives, are low in spirituality/religiosity (S/R) and high in ambivalence
Giordano et al. (2015). Exploring the relationship between religious coping and spirituality among three types of collegiate substance abuse. Journal of Counselling and Development, 93(1), 70–9. https://doi.org/10.1002/j.1556-6676.2015.00182.x	USA	yes	Survey	Age 18+  Convenience sampling  N = 310 participants	Four dimensions of spirituality were measured against, and marijuana use was either increased or decreased depending on the level of purpose/meaning, innerness dimension.  Explained: when high spirituality meant reduced marijuana use and vice versa. Drinking was associated with spirituality dimension of unifying interconnectedness, transcendence, when high, alcohol use was low and vice versa. However, no results were found for R/S coping psychostimulants use for participants did not view this as a problem with reasons of use being aligned with study enhancements.
DiReda, J., & Gonsalvez, J. (2016) The role of spirituality in treating substance use disorders. <i>Journal of psychology Clinical Psychiatry</i> , 6(4): 00365. DOI: 10.15406/jpcpy.2016.06.00365	USA	yes	Cross-sectional survey	Availability sampling  Age 18+  N=31 participants	There was clear desire for spirituality to be integrated into patient's care and was evident by a figure of ninety percent who believed in the value of spirituality and were able to describe the meaning it holds for them. Eighty-one per cent were able to articulate the role spirituality had in their treatment journey. Ninety-four per cent reported desire, and welcome spirituality in their care; however, two residents did not. Nineteen per cent were reluctant to talk about spirituality in a group.

# **Findings**

Studies included in the literature review included an international perspective, with six out of eight studies being from the United States of America, one from Brazil, and one from the United Kingdom. All eight studies were peer reviewed. Six studies were quantitative and two qualitative. The quantitative studies had varying sampling sizes ranging from Kelly and Eddie's (2020) study with the largest sample size N=2,002 and Bliss and Ekmark's (2013) study having the lowest sample size N=180.

The qualitative studies allow in-depth, individual insight to be achieved (Moon et al., 2013). An example of this included the study by McInerney and Cross (2021), where only five participants were included for the interpretative phenomenological analysis. This format allowed dialogue between researcher and participants which was affirmed by Guba and Lincoln (1995) highlighting dialogue's contribution to the construction of findings. Correspondingly, the findings in McInerney and Cross's (2021) study enhanced insight into lived experiences and participants' view of the role of spirituality in their alcohol use disorder treatment and recovery.

Most of the studies were cross-sectional studies. Only Bakken et al.'s (2014) study was a longitudinal study of 920 diverse offenders returning to the community after a period of incarceration. This study examined alcohol, marijuana and cocaine to gauge the effect that spirituality plays in the desistance process.

Table D. Themes raised from the eight selected studies.

studies.					
Article	Mean	Religi	Gen	Race	Multiple
	ingful	osity	der		interpret
	ness	and			ation of
		Spiritu			spirituali
		ality			ty
Vitorino	*	*			*
et al.					
(2023)					
Foster et	*	*			*
al. (2016)					
Giordano	*	*			*
et al.					
(2015)					
Bakken	*	*	*		*
et al.					
(2014).					
DiReda &	*	*			*
Gonsalve					
z (2016)					
Kelly &	*	*	*	*	*
Eddie					
(2020)					
Bliss &	*	*	*		*
Ekmark					
(2013)					
McInern	*	*			*
ey &					
Cross					
(2021)					

# Meaningfulness

In all the eight studies reviewed, SUD participants were not provided with a definition of spirituality and therefore were free to interpret spirituality however they chose and determine how it contributed to their SUD treatment. This highlighted the intrinsic phenomena of spirituality

on an individual, making it more meaningful when self-defined. Moreover, to reach an in-depth understanding of the extent to which the role of spirituality towards SUD is meaningful, DiReda and Gonsalvez (2016) conducted a cross-sectional survey which examined the role and influence that spirituality holds on men and women diagnosed with SUD. Participants were on a 30-day residential treatment programme. The importance spirituality holds for those in treatment was highlighted by 94% of participants in this study emphasising a clear desire for spirituality to be integrated into their treatment. They were able to describe both the meaning of, and the role of, spirituality in their SUD treatment, reinforcing its meaningfulness in treatment, by stating that spirituality helped them understand that SUD recovery was possible (DiReda and Gonsalvez, 2016).

This positive meaningful role of spirituality in SUD treatment correlated with findings from McInerney & Cross's (2021) interpretative phenomenological study. This study comprised of five participants who had acquired 15 years of abstinence and were in long-term recovery from alcohol misuse disorder [AUD]. Participants' individual concepts of spirituality, the role it played during their AUD treatment and in their ongoing recovery, was explored through in-depth study. The analysis highlighted two meaningful themes involving participants' conceptualisation of spirituality as a secular, and existential, phenomenon. In accordance with the participants, they suggested spirituality as a secular phenomenon as a way of describing no overlap with religion. All five participants explained that interpretation as an existential phenomenon

was the way in which spirituality helped them connect to self, the world and others. One participant stated that 'spirituality is the essence of... who l am, who l try to be, and also... the connection l have with myself and the outside world' (McInerney & Cross, 2021)

Furthermore, all participants described spirituality in a way that included trusting in something other than self. The themes that emerged during analysis demonstrated that spirituality played a primary role in participants' treatment and continued to play an important part of their recovery from AUD. Spirituality gave the participants meaning (McInerney & Cross, 2021).

Bakken et al. in their longitudinal cross-sectional study (2014) constructed a self-rating scale to elicit participants' own description of spirituality and religiosity which was meaningful to the participant. This aimed to consider if spirituality and religiosity were viewed as synonymous or differing concepts. The findings suggested spirituality and religion are distinct and that participants placed a high importance on spirituality in terms of preventing SUD (Bakken et al. 2014).

Conversely, not everyone with SUD found spirituality meaningful in their treatment and this was demonstrated by two respondents in DiReda and Gonsalvez's study (2016), who reported not finding spirituality meaningful and declined to have spirituality integrated into their care.

## Spirituality and religiosity

Despite Bakken et al.'s (2014) findings, spirituality

and religiosity (S/R) are often used interchangeably in research and clinical practice, but the two are arguably separate. However, sometimes there are overlapping aspects, leading the researchers in six out of the eight included studies to incorporate individual tools to measure religiosity and spirituality separately. The other two studies only focused on spirituality (DiRida & Gonsalvez, 2016; McInerney & Cross, 2021). Religion can be defined as organised beliefs and practices while spirituality empathises the more individual value and relationship to what gives hope, meaning and purpose (Rogers et al., 2021).

Notably, participants involved in McInerney and Cross's (2021) study were involved in an Alcoholics Anonymous support group, which is spiritually oriented to support alcohol use disorder. Kelly and Eddie's study (2020) reported that spirituality, rather than religion, appeared to play a role in aiding recovery, particularly among those with prior involvement in Alcoholics Anonymous groups, which are spiritually oriented.

Participants in all included studies found that spirituality played more of a role in reducing or stopping substance use, while less to no effect was found in religiosity. In line with this, Kelly and Eddie (2020) conducted a nationally representative cross-sectional survey of 2,002 adults in the United States, looking at spirituality and its association with SUD recovery. The survey reviewed spirituality and religiosity interchangeably and included three items equally assessing participants for S/R and their roles in SUD recovery. Participants reported being moderately spiritual and religious but overall, religion had not helped

them overcome their SUD problem; however, spirituality had.

Bakken et al.'s study (2014) of three forms of substance use – alcohol, marijuana and cocaine – gauged the role that S/R plays in the desistance process. The findings indicated no impact on alcohol desistance from religious affiliation. However, their study indicated the high importance of spirituality in alcohol and cocaine desistance. The relationship between marijuana and spirituality results was mixed, demonstrating marijuana desistance in older participants, with less change in use for African American and female participants.

Vitorino et al.'s study (2013) demonstrated that S/R was associated with a lower likelihood of substance use. However, S/R was found to be aligned with coping strategies that were mood dependant. They suggested that if S/R was used when an individual was in a positive mood, the results showed a lower likelihood of alcohol and illicit drug use; but when in a low mood, this was associated with increased use of both.

S/R was also investigated by Kelly & Eddie (2020), Giordano et al. (2015) and Vitorino et al. (2013) who found both to be a protective factor against heavy drinking. However, Foster et al. (2016) found that S/R was not a protective factor for alcohol use. Results showed that individuals at the highest risk for problematic drinking were those with strongly endorsed drinking motives, low interest in S/R and who were ambivalent about recovery.

# Multiple perceptions of spirituality

Multiple perceptions of spirituality were identified

in all eight studies. These included the differences between participants' perceptions of spirituality and researchers' use of spirituality assessment tools that incorporated differing dimensions of spirituality to those of the participants, which yielded mixed findings.

McInerney and Cross's (2021) participants conceptualised their own perceptions of spirituality which enabled researchers to elicit the role spirituality played in their SUD treatment and recovery. This individualised interpretation of spirituality from participants led to multiple perceptions of spirituality being reported. These multiple perceptions were reported in five out of the eight studies (Bakken et al., 2014; DiRida & Gonsalvez, 2016; Foster et al., 2016; Kelly & Eddie, 2020; Vitorino et al., 2013).

There was a lack of consistency in the instruments used to measure S/R in the studies reviewed which contributed to mixed results. This lack of consistency led to multiple perceptions of spirituality. An example of this is Giordano et al.'s study (2015) that used questions borrowed from the Spirituality Assessment Scale tool, utilised by Howden (1992), to measure the impact of spirituality in relation to hazardous drinking, marijuana use and psychostimulant use across four spirituality dimensions. The spirituality dimensions assessed included: purpose/meaning; innerness; unifying interconnectedness; and transcendence in relation to substance use behaviour. Results demonstrated mixed findings. Unifying interconnectedness significantly predicted behaviours. Whereas hazardous drinking

purpose/meaning and innerness significantly differed between marijuana using groups (Giordano et al., 2015).

Comparably, similar substances were measured in Bakken et al.'s (2014). However, the researchers did not use a validated assessment tool. Researchers elicited participants' own description of S/R by utilising an individually tailored spirituality self-rating scale developed from a previous survey participants had completed. This approach added multiple perceptions of spirituality. The findings indicated the significance of spirituality towards the prevention of alcohol and cocaine use: the relationship between spirituality and marijuana results were mixed and statistically weaker than the positive correlation with alcohol and cocaine.

Overall, findings from Giordano et al. (2015) and Bakken et al.'s (2014) studies showed multiple perceptions of spirituality, which in turn contributed to mixed findings on the role of spirituality in managing SUD. However, these findings support the multifaceted nature of spirituality.

### Gender

There is some data to support the finding that women and men perceive spirituality differently. In Kelly and Eddie's study (2020), men and women differ in how they view their S/R. Substantial differences were observed, with women describing a more significant role that S/R played in their SUD treatment and recovery, than did men.

Bliss and Elmark conducted a cross-sectional

survey (2013), exploring gender differences in five dimensions of spirituality. On a scale of intensity, the results from this survey demonstrated that men had lower levels of expression of cognitive orientation towards spirituality compared to women. The other four spirituality dimensions, religiousness, paranormal beliefs, experiential/phenomenological and existential well-being, did not show any gender differences.

Overall, when looking closely at both Bliss & Elmark (2013) and Kelly & Eddie's (2020) studies, it becomes clear that women and men differ in their spirituality conceptions, articulation and experience of the spirituality element that envelopes their beliefs.

### Race

Despite the theme of race only being highlighted in one out of the eight studies, it is a significant theme in enhancing engagement in the support provided and in fostering long-term recovery for diverse service users. The levels of how S/R were viewed in someone's treatment and recovery from SUD differed in race (Kelly & Eddie, 2020). This study revealed African Americans to be much more spiritual and religious, with Black participants reporting that spirituality and religiousness had made all the difference in aiding their recovery in SUD. In comparison with other racial ethnicities, African Americans reported substantially more S/R than American Caucasians.

### Discussion

All eight included studies have shown that increased levels of spirituality improve SUD

and. in participants outcomes concurrence, acknowledge the integral role that spirituality plays in their SUD treatment and ongoing recovery, while religious beliefs show mixed findings related to SUD treatment (Bakken et al., 2014; Bliss & Ekmark, 2013; DiReda & Gonsalvez, 2016; Foster et al., 2016; Giordano et al., 2015; Kelly & Eddie, 2020; McInerney & Cross, 2021; Vitorino et al., 2023). The findings from these studies indicate that spirituality is an intrinsic phenomenon to individuals, making it more meaningful to their treatment and ongoing recovery. This meaningfulness has been found to have a positive impact on SUD, demonstrating higher levels of spirituality, showing better treatment outcomes for participants in both abstinence and severity reduction in substance use.

This was further emphasised in DiReda and Gonsalvez's study (2016), in which spirituality was demonstrated to be the motivator for engagement in SUD treatment, and many SUD patients desired and welcomed a focus on spirituality in their SUD treatment. However, as observed in the same study, 2% of patients reported an unwillingness to engage in spirituality and did not welcome spirituality into their treatment (DiReda & Gonsalvez, 2016). This reinforces the need for SUD clinicians to always endorse a holistic approach to care, which is individually tailored in accordance with self-reported importance of spirituality (Rezende-Pinto & Moreira-Almeida, 2023).

Studies examining gender and race, however, offer a more complicated picture (Zemore et al., 2021). For instance, Bliss and Ekmark (2013) concluded that women were able to communicate their

spirituality differently to men. Similar findings were noted in the study by Kelly and Eddie (2020), whereby men and women differed in their spirituality and religiosity identification. Substantial differences were observed, with women reporting that S/R played a more important role in aiding their recovery in SUD, than did men. These findings from both Bliss and Ekmark's (2013) and Kelly and Eddie's (2020) studies demonstrate significant implications for SUD treatment for women and men. Bearing this in mind, Tuchman (2010) found that women faced greater barriers when trying to access SUD treatment than men. This further suggests the need for SUD clinicians to support women's SUD treatment to include interventions that would enable them to translate these attitudes and beliefs relating to spirituality into specific behaviours and practices that help in their SUD treatment goal (Rezende-Pinto & Moreira-Almeida, 2023).

Similarly, despite men being found to have lower expressions of spiritual beliefs and attitudes, SUD clinicians would be advised to support men to identify these attitudes. Considering gender differences will alters clinicians' approaches in how they support both men and women, for, as with women, men should be encouraged to learn how to translate their spiritual beliefs into specific behaviours that assist them in their SUD treatment, reducing relapse and aiding recovery (Rezende-Pinto & Moreira-Almeida, 2023).

Although only reported in one study, race plays an important role in how S/R was viewed in an individual's treatment and recovery from SUD

(Kelly & Eddie, 2020). This study revealed that African Americans were much more spiritual and religious, reporting that S/R had made all the difference in their SUD treatment. In comparison with other racial ethnicities, African Americans reported substantially more S/R than American Caucasians. The significance of S/R in the lives of African Americans was also seen and emphasised by Roland and Kaskutas (2002) who advocate for African American clients' participation in AA support groups which are spiritually oriented, despite the considerable debate over appropriateness of AA for ethnic minority clients. However, these findings demonstrate the need for SUD services to be flexible with their treatment offers and incorporate S/R as an additional SUD treatment element. To attract and engage clients in SUD treatment, African Americans might benefit from increased spirituality and religiosity treatment input, while Caucasian Americans might benefit from increased secular approaches.

S/R have been used interchangeably in six quantitative studies included in this review, leading them to be conceptualised as S/R. This conceptualisation was supported by Yesilcinar et al. (2018), who emphasised how spirituality and religion are interchangeable due to some religious similarities between them. However, Koenig (2008) queried this, affirming the need to distinguish spirituality from religiosity. This is because religion focuses on practices, rituals and answers to questions of conscience whereas spirituality focuses on finding meaning, connection and value.

In support of Koenig (2008), researchers in all eight studies assessed participants' level of S/R

separately with the use of different tools. In response to this, most participants were able to separate S/R, reporting that for them spirituality has more of a role in reducing or stopping substance use.

S/R has found to be aligned with coping strategies in Vitorino et al.'s study (2023). This indicated that, when an individual's mood was settled, the results showed low to nil effectiveness on SUD whereas, in the presence of low mood, the likelihood of a positive correlation with SUD was higher. Similar findings were seen in Giordano et al.'s study (2015), whereby positive religious coping was associated with reduced marijuana and alcohol use, while negative religious coping was associated with increased use of both substances. In line with these findings, Marques et al. (2022) identified the role of S/R in coping with different stressful factors, alleviating depressive and anxiety symptoms that, in turn, are indirect risk factors for SUD. This reinforces the influence of S/R beliefs among individuals suffering from SUD, illustrating a coping aspect that should be addressed by clinicians dealing with this population.

Relatedly, another barrier for the integration of spirituality, as seen in all the eight studies, includes the presence of multiple perceptions of spirituality (Bakken et al., 2014; Bliss & Ekmark, 2013; DiReda & Gonsalvez, 2016; Foster et al., 2016; Giordano et al., 2015; Kelly & Eddie, 2020; McInerney & Cross, 2021; Vitorino et al., 2023). It is evident that at times there is no guidance to what constitutes 'spirituality', leaving clinicians unclear on how to integrate it into care (Berry, 2005). To address differing ideologies around integrating spirituality

into SUD practice, Carrington (2013) emphasised that spiritually oriented approaches should be generated, evaluated and implemented by SUD clinicians and for clinicians to consider how spirituality can support services users with SUD in unique ways.

Fowler (2017) emphasised that spiritual dimensions can be unique for each individual and the lack of standardised definition and inconsistency in the instruments used to measure spirituality causes multiple perceptions of spirituality, which can be a barrier to spirituality interventions, as seen in three of the studies (Bakken et al., 2014; and Bliss & Ekmark, 2013; Giordano et al., 2015). These studies that non-standardised showed the impact spirituality dimensions can have on research findings. For instance, spirituality and marijuana use was measured in Bakken et al.'s study (2014), with no overall effect noted. This outcome contradicts Miller's contribution (2003)demonstrating that spirituality overall is successful in treating SUD. However, DiReda and Gonsalvez's study (2016) asserts the challenge to the measurement of spirituality, being that it is an abstract and uniquely personal phenomenon. These qualities, in accordance with Moberg (2002), give spirituality experiences a transcendent aspect, which makes it difficult to operationalise the dimensions clearly and to universally interpret them. Therefore, there is a need for precise guidelines for measuring spirituality (Connors et al., 2017). Additionally, one might argue the aforementioned lack of consistent measurements will impact the study results. However, this lack of consistency shows how spirituality is individually interpreted, and the need to discover the

individual's attitude to spirituality to determine the appropriate treatment.

## Implications for practice

All studies included in this literature review indicate a strongly positive relationship between spirituality and SUD, with spirituality aiding both a reduction and abstinence in alcohol and drug use (Bakken et al., 2014; Bliss & Ekmark, 2013; DiReda & Gonsalvez, 2016; Foster et al., 2016; Giordano et al., 2015; Kelly & Eddie, 2020; McInerney & Cross, 2021; Vitorino et al., 2023). Service users' need for spirituality to be incorporated into their SUD been identified from most treatment has participants in the eight studies. Therefore, understanding the concept of spirituality in the treatment of SUD should enable clinicians to offer SUD interventions that incorporate spirituality and in turn enhance service user engagement into their own treatment

(Rezende-Pinto & Moreira-Almeida, 2023).

Consideration of what specific measures for spirituality and religiosity rather than conflating these would help with the concern of both multiple perceptions of spirituality and the conceptualisation of S/R (Worley, 2020). Reaching a consensus on the definition of spirituality would help with the formulation of spirituality assessment guidelines, which would clarify how the multi-dimensional concepts are differentiated and contribute to SUD treatment (Worley, 2020). Without development of such tools, it will continue to be difficult for SUD clinicians to accurately describe the complexities associated with spirituality and SUD. Moreover, the need for clinicians to use

validated instruments reinforces the need for organisational support in delivering spirituality intervention to SUD patients who welcome this intervention in their treatment (Attard et al., 2019).

The barrier for clinicians to integrate spirituality stems from the lack of spirituality training by SUD clinicians. This results in reluctance to discuss the relevance of spirituality with SUD patients, despite patients' generally welcoming spirituality into their treatment (Menegatti-Chequini et al., 2019). Connors et al. (2017) concur, elaborating that clinicians are unfamiliar with ways to broach spirituality conversations with patients, leading to fear of imposing one's beliefs on patients, due to limited education on the subject. In line with this, Ali et al. (2018) conducted a literature review exploring the inclusion of spirituality in nursing education from 1993 to 2017. Her findings showed that nursing students lacked support and training in spirituality. There were gaps in practice and knowledge around spirituality. This further demonstrates how clinicians, like nurses, are left unprepared to address the spirituality domain of SUD treatment and highlights the need for Nursing Schools to enhance their content on spirituality, to support nurses to feel comfortable and competent in engaging in discussions around spirituality with SUD patients.

### Strengths and limitations

This literature review was conducted using a systematic approach, to critically appraise and analyse the results (Aveyard, 2019). Eight peer reviewed studies were utilised to answer the research question (Aveyard, 2023). The studies

examined the role of spirituality in SUD treatment and recovery, analysing how spirituality dimensions interact with SUD. The qualitative studies allowed in-depth, individual insight to be achieved (Moon et al., 2013). However, one might assume, participants who took part in McInerney and Cross's study (2021) might have been influenced in their responses by their positive experiences of the AA fellowship recovery journey, given their lengthy, 15-year involvement in the AA. Nevertheless, similar findings were emphasised in DiReda and Gonsalvez's study (2016), where spirituality was highlighted to be the motivator for engagement in SUD treatment with 94% of participants welcoming a focus on spirituality in their SUD treatment. The importance spirituality holds for those in treatment to arrest their substance use, enhance their recovery and rebuild their lives was highlighted. The findings intend to enhance insight and knowledge into the role of spirituality in SUD treatment.

Most of the included studies used cross-sectional designs, which are unable to measure change (Sedgwick, 2015), inhibiting understanding of the actual salutary role spirituality plays on SUD treatment in the long term. Two out of the eight studies were qualitative, limiting a more in-depth insight of the role spirituality plays in SUD treatment from patients' perspectives (Cohen et al., 2018). Moreover, all studies lacked a definition of spirituality and it was left for participants to define, leading to a lack of clarity of what constitutes spirituality (Bliss, 2007). This process might have caused participants to become confused with spirituality dimension differences, which could have influenced study results.

### **Further research**

Despite the theme of race only being highlighted in one out of the eight studies (Kelly & Eddie, 2020), it is a significant theme which warrants further research.

Moreover, further research is required on the relationship between spirituality and marijuana use due to the results from the two research studies being unable to be generalised, in consequence of yielding both statistically weaker results and mixed findings. The two studies utilised different spirituality measuring instruments (Bakken et al., 2014; Giordano et al., 2015). It is recommended that researchers conduct a similar study utilising the same spirituality instrument to gauge spirituality impact on marijuana. Additionally exploring whether there are different biopsychosocial factors contributing to these mixed findings between spirituality and marijuana. This would more precisely inform the nature of the correlation between spirituality and marijuana, if any, providing a clearer framework for both training clinicians and supporting patients.

Additionally, longitudinal studies need to be conducted using a range of variables to determine the role of spirituality in SUD treatment. The data collected from this can further support the findings from this literature review.

### **Conclusion**

This literature review demonstrates the significance and value of integrating spirituality into the treatment of substance use disorder. The findings not only showed the importance

spirituality holds for those in treatment, to stop or reduce their drug and alcohol use, but also how it plays an integral part in rebuilding lives. Despite most participants welcoming the integration of spirituality into their treatment and finding this meaningful, it is important to note that some participants did not welcome this.

There is a need for individualised patient-centred care to be offered, respecting individual views and wishes. Spirituality should be considered and offered rather than imposed in healthcare. It is clear that it is an important part of holistic practice; however, it is frequently omitted due to confusion regarding the concept and conflation with religion.

Clinicians should be mindful of the barriers and facilitators for incorporating spirituality, including a need for a clear definition of spirituality, an understanding of its importance for patients and a willingness to consider this aspect of care. It would be helpful for education on spirituality to be offered to clinicians to give them the confidence to integrate spirituality into practice in addition to specific tools to assess spirituality in SUD.

# References

Ali, G., Snowden, M., Wattis, J., & Rogers, M. (2018). Spirituality in nursing education: Knowledge and practice gaps. *International Journal of Multidisciplinary Comparative Studies*, 5(1–3), 27–49.

Attard, D. J., Ross, D. L., & Weeks, K. (2019).

Developing a spiritual care competency framework for pre-registration nurses and midwives. *Nurse Education Practice*, 40,102604.

https://doi.org/10.1016/j.nepr.2019.07.010

Aveyard, H. (2019). Doing a literature review in health and social care: A practical guide. (4th ed.). Open University Press.

Aveyard, H. (2023). Doing a literature review in health and social care: A practical guide. (5th Ed.). Open University Press.

Bakken, N. W., DeCamp, W., & Visher, C. A. (2014). Spirituality and desistance from substance use among reentering offenders. *International Journal of Offender Therapy and Comparative Criminology*, 58(11), 1321–39. https://doi.org/10.1177/0306624X13494076

Balboni, M. J., Bandini J., Mitchell C., et al. (2015). Religion, spirituality, and the hidden curriculum: medical student and faculty reflections. *Journal for Pain Symptom Manage*, 50(4), 507–15.

Barber, C. (2019). Working within a spiritual framework. *British Journal of Nursing*, 28, 229. https://doi: 10.12968/bjon

Berry, D. (2005). Methodological pitfalls in the study of religiosity and spirituality. Western Journal of Nursing Research, 27(5), 628–47. https://doi.org/10.1177/0193945905275519

Bliss, D. L. (2007). Empirical research on spirituality and alcoholism: A review of the literature, *Journal of Social Work Practice in the Addictions*, 7(4), 5–25.

Bliss, D. L., & Ekmark, S. S. (2013). Gender differences in spirituality in persons in alcohol and drug dependence treatment. *Alcoholism Treatment Quarterly*, 31(1), 25–37.

https://doi.org/10.1080/07347324.2013.746625

Carey, L. B., & Mathisen, B. (Eds.). (2018). Spiritual care for allied health practice: A person-centred approach. Jessica Kingsley Publishers.

Carrington, A. (2013). An integrated spiritual practice framework for use within social work. *Journal of Religion and Spirituality in Social Work*, 32, 287–311.

Clarke, J. (2013). Spiritual care in everyday nursing practice: A new approach. Palgrave Macmillan.

Cohen, L., Manion, L. & Morrison, K. (2018). (8th Ed.) Research methods in education. Routledge Palmer.

Connors, J., Good, P., & Gollery, T. (2017). Using innovative teaching strategies to improve nursing student competence and confidence in providing spiritual care. *Nurse Educator*, 42(2), 62–4. DOI: 10.1097/NNE.00000000000000301.

Cook, C. C. H. (2004). Addiction and spirituality.

Addiction, 99(5), 539–51.

 $https://doi.org/10.1111/j.1360\hbox{--}0443.2004.00715.x$ 

Coughlan, M., & Cronin, P. (2021). Doing a literature review in nursing. (3rd Ed.). *Health and Social Care*. SAGE Publication Ltd.

Degenhardt, L., Charlson, F., Ferrari, A., Santomauro, D., Erskine, H., Mantilla-Herrara, A.,...Vos, T. (2018). The global burden of disease attributable to alcohol and drug use in 195 countries and territories, 1990–2016: A systematic analysis for the Global Burden of Disease Study 2016. *The Lancet Psychiatry*, 5(12), 987–1012. https://doi.org/10.1016/S2215-0366(18)30337-7

DiReda, J., & Gonsalvez, J. (2016). The role of spirituality in treating substance use disorders. *Journal of Psychology & Clinical Psychiatry*, 6(4),1–5. https://doi.org/10.15406/jpcpy.2016.06.00365

Engel, G. L. (1977). The need for a new medical model: A challenge for Biomedicine Science. *Biopsychosocial* Oriented Clinical Practice, 196(4286),129–36.

Eriksen, M. B., & Frandsen, T. B. (2018). The impact of patient, intervention, comparison, outcome (PICO) as a search strategy tool on literature search quality: A systematic review *Journal of the Medical Library*Association, 106(4), 420–31.

Fava, G. A., & Sonino, N. (2017). From the lesson of George Engel to current knowledge: The biopsychosocial model 40 years later. *Psychotherapy and Psychosomatics*, 86(5), 257–9. https://doi.org/10.1159/000478808

Ford, N., & Maher, D. (2013). Making sure that clinical trial results make a difference: Operational research and the hierarchy of evidence. *Tropical Medicine & International Health*, 18(4), 504–5.

Foster, D. W., Young, C. M., Bryan, J. L., & Quist, M. C. (2016). Compounding risk: An examination of associations between spirituality/religiosity, drinking motives, and alcohol-related ambivalence among heavy drinking young adults. *Addictive Behaviors*, 63, 1–11. https://doi.org/10.1016/j.addbeh.2016.06.026

Fowler, J. (2017). From staff nurse to nurse consultant: Spiritual care part 1: The importance of spiritual care. British Journal of Nursing, 26(8), 478. doi:10.12968/bjon.2017.26.8.478

Galanter, M., Hansen, H., & Poternza, M, N. (2021). The role of spirituality in addiction medicine: A position statement from the spirituality interest group of the international society of addiction medicine. Substance Abuse, 42(3), 269–71.

https://doi.org/10.1080/08897077.2021.1941514

Ghaemi, S. N. (2018). The rise and fall of the biopsychosocial model. *British Journal of Psychiatry*, 195(1), 3–4. https://doi.org/10.1192/bjp.bp.109.063859

Giordano, A. L., Prosek, E. A., Daly, C. M., Holm, J. M., Ramsey, Z. B., Abernathy, M. R., & Sender, K. M. (2015). Exploring the relationship between religious coping and spirituality among three types of collegiate substance abuse. *Journal of Counseling and Development*, 93(1), 70–9. https://doi.org/10.1002/j.1556-6676.2015.00182.x

Guba, E. G., & Lincoln, Y. S. (1995). Fourth generation evaluation. Sage.

Howden, J. (1992). Development and psychometric characteristics of the Spirituality

Assessment Scale. [Unpublished dissertation, Texas Woman's University].

Kelly, J. F., & Eddie, D. (2020). The role of spirituality and religiousness in aiding recovery from alcohol and other drug problems: An investigation in a national U.S. sample. *Psychology of Religion and Spirituality*, 12(1),116–23. https://doi.org/10.1037/rel0000295

Koenig, H. G. (2008). Concerns about measuring 'spirituality' in research. *The Journal of Nervous and Mental Disease*, 196, 349–55.

Lavorato Neto, G., Rodrigues, L., Silva, D., Turato, E.R., & Campos, C. J. G. (2018). Spirituality review on mental health and psychiatric nursing. *Revista Brasileira Enfermagem*, 71(5), 2323–33. https://doi:10.1590/0034-7167-2016-0429.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.

Marques, A., Ihle, A., Souza, A., Peralta, M., & de Matos, M, G. (2022). Religious-based interventions for depression: A systematic review and meta-analysis of experimental studies. *Journal of Affective Disorders*, 309, 289–96. https://doi.org/10.10.1016/j.jad.2022.04.126

Mays, N., Pope, C., & Popay, J. (2005). Systematically reviewing qualitative and quantitative evidence to inform management and policy-making in the health field, *Journal of Health Services Research and Policy*, 10(1), 6–20.

McInerney, K., & Cross, A. (2021). A phenomenological study: Exploring the meaning of spirituality in long-term recovery in alcoholics anonymous. *Alcoholism Treatment Quarterly*, 39(3), 282–300. https://doi.org/10.1080/07347324.2021.1895016

Mendola, A., & Gibson, R. L. (2016). Addiction, 12-step programs, and evidentiary standards for ethically and clinically sound treatment recommendations: What should clinicians do? *American Medical Association Journal of Ethics*, 18(6): 646–55.

Menegatti-Chequini, M.C., Maraldi, E. D. O., Peres, F. P., Leao, F. C., & Vallada, H. (2019). How psychiatrists think about religious and spiritual beliefs in clinical practice: Findings from a university hospital in Sao Paulo, Brazil. *Revista Brasileira de Psiquiatria*, 41, 58–65. https://doi.org/10.1590/1516-4446-2017-2447

Miller, W. (2003). Spirituality, treatment, and recovery. In M. Galanter (Ed.), *Recent developments in alcoholism*,16 p. 391–404). Kluwer Aca demic/Plenum Publishers.

Mills, P. J. (2002). Spirituality, religiousness, and health: From research to clinical practice. *Annals of Behavioral Medicine*, 24, 1–2.

Moberg, D. O. (2002). Assessing and measuring spirituality: Confronting dilemmas of universal and

particular evaluative criteria. *Journal of Adult*Development, 9(1), 47–60.

https://doi.org/10.1023/A:1013877201375

Moon, M. D., Baker, K., Carman, M. J., Clark, P. R., Henderson, D., Manton, A., & Zavotsky, K. E. (2013). Evaluating qualitative research studies for use in the clinical setting. *Journal of Emergency Nursing*, 39(5), 508–10.

National Institute on Drug Abuse. (2018). Principles of drug addiction treatment: *A research-based guide*. (3rd Ed). Retrieved from https://www.drugabuse.gov/publications/principles-drug-addiction-treatmentresearch-based-guide-third-edition on 2023, December 30

National Statistics: Adult substance misuse treatment statistics 2021 to 2022: report. Substance misuse treatment for adults: Statistics 2021 to 2022. (2023). Office for Health Improvement and Disparities.

 $\frac{\text{Drug misuse in England and Wales - Office for National}}{\text{Statistics}}$ 

Page, M. J., McKenzie, J.E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., et al. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *British Medical Journal*, 372, 71. https://doi.org/10.1136/bmj.n71. http://www.prisma-statement.org/

Rezende-Pinto, A, D. R., & Moreira-Almeida, A. (2023). Guidelines for integrating spirituality into the prevention and treatment of alcohol and other substance use disorders. *Revista Brasileira De Psiquiatria*, 45(3), 274–9. https://doi.org/10.47626/1516-4446-2022-2984

Richardson, W. S., Wilson, M.C., Nishikawa, J., & Hayward, R.S. (1995). The well-built clinical question: A key to evidence-based decisions. *American College of* 

Physicians Journal Club, 123(3), 12-13.

Rogers, M., & Wattis, J. (2020). Understanding the role of spirituality in providing person-centred care. *Nursing Standards*, 35(9), 25–30. doi: 10.7748/ns.2020.e11342

Rogers, M., Wattis, J., Moser, R., Borthwick, R., Walters, P., & Rickford, R. (2021) Views of mental health practitioners on spirituality in clinical practice, with special reference to the concepts of spiritually competent practice, availability and vulnerability: A qualitative evaluation. *Journal for the Study of Spirituality*, 11(1) 7–23. DOI 10.10180/20440243.1857624

Rogers, M., Wattis, J., Stephenson, J., Wajid, K., Curran, S., & Walters, P. (2023). A questionnaire-based study of attitudes to spirituality in people using mental health services and their perceptions of the relevance of the concept of spiritually competent practice. *Journal of Spirituality and Mental Health*. Published Online. https://doi.org/10.1080/19349637.2023.2205036

Roland, E. J., & Kaskutas, L. (2002). Alcoholics Anonymous and church involvement as predictors of sobriety among three ethnic treatment populations. *Alcoholism Treatment Quarterly*, 20(1), 61–77.

Saad, M., De Medeiros, R., & Mosini, A. C. (2017). Are we ready for a true biopsychosocial-spiritual model? The many meanings of 'spiritual'. *Medicines*, 4(4), 79. https://doi.org/10.3390/medicines4040079

Sedgwick, P. (2015). Prospective cohort studies: Advantages and disadvantages. *British Medical Journal*, 347. Doi: 10.1136/bmj. f6726

Sloan, R. P., & Bagiella, E. (2002). Claims about religious involvement and health outcomes. *Annals of Behavioral Medicine*, 24, 14–21.

Sloan, R. P., Bagiella, E., & Powell, T. (1999). Religion, spirituality, and medicine. *Lancet*, *353*, 664–7.

Sloan, R. P., Bagiella, E., VandeCreek, L., Hover, M., Casalone, C., Jinpu Hirsch, T., Hasan, Y., Kreger, R., & Poulos, P. (2000). Should physicians prescribe religious activities? *New England Journal of Medicine*, 342, 1913–16.

Sulmasy, D. P. A. (2002). Biopsychosocial-spiritual model for the care of patients at the end of life. *Gerontologist*, 42, 24–33.

Tiebout, H. M. (1961). Alcoholics Anonymous – An experiment of nature. *Quarterly Journal of Studies on Alcohol*, 22(1), 52–68.

Tuchman, E. (2010). Women and addiction: The importance of gender issues in substance abuse research. Journal of Additive Disease, 29,127–38.

United Nations Office on Drugs and Crime (UNODC). (2017). World Drug Report 2017. World Drug Report (ISBN: 978-92-1-148291-1, Eisbn: 978-92-1-060623-3, United Nations publication, Sales No.E.17.XL.6). http://www.unodc.org/wdr2017/field/Booklet\_1\_EXS UM.pdf

Vitorino, L. M., Tostes, J. G., Ferreira, J. C. L., de Oliveira, Luiz Aurelio Gazzola, Possetti, J. G., Silva, M. T., Guimarães, M. V. C., Alckmin-Carvalho, F., & Lucchetti, G. (2023). Association between religiosity/spirituality and substance use among homeless individuals. *International Journal of Social Psychiatry*, 1–10.

https://doi.org/10.1177/00207640231211495

Wade, D. T., & Halligan, P. W. (2017). The biopsychosocial model of illness: A model whose time has come. *Clinical Rehabilitation*, 31(8), 995–1004. https://doi.org/10.1177/0269215517709890

World Health Organization (WHO). (1999). Fifty-

Second World Health Assembly. Available online: http://apps.who.int/gb/archive/pdf\_files/WHA52/ew 24.pdf(accessed) 11.2.24

World Health Organization, & World Health Organization Management of Substance Abuse Team. (2018). Global status report on alcohol and health 2018. World Health Organization.

World Health Organization (WHO). (2019). ICD-11 - Mortality and morbidity statistics. https://icd.who.int/browse11/l-m/en/10665/324775/WHO-PRP-18.1

Worley, J. (2020). Spirituality in recovery from substance use disorders. *Journal of Psychosocial Nursing and Mental Health Services*, 58(9),14–17, https://doi.org/10.3928/02793695-20200812-02

Yesilcinar, I., Acavut, G., Iyigun, E., & Tastan, S. (2018). Eight-step concept analysis: Spirituality in nursing. *International Journal for Human Caring*, 22(2), 34–42. https://doi.org/10.20467/1091-5710.22.2.34

Zemore, S. E., Gilbert, P. A., Pinedo, M., Tsutsumi, S., McGeough, B., & Dickerson, D. L. (2021). Racial/ethnic disparities in mutual help group participation for substance use problems. *Alcohol research: current reviews*, 41(1).