Spirituality, Religiousness and Mental Health: Scientific Evidence

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Abstract This chapter reviews the main and most robust scientific evidence on the relationship between Religiousness/Spirituality (R/S) and mental health. We discuss the proposed mechanisms involved in this relationship, such as purpose and meaning in life, optimism, gratitude, social support, self-esteem, cognitive framework (involving, for example, a sense of coherence), healthier lifestyle, etc. In general, individuals who have higher levels of religious and spiritual involvement have lower rates of depression, suicidal behaviour, and alcohol and drug use and abuse. Although less consistent, there are studies indicating R/S as useful for coping with anxiety and psychotic symptoms.

Keywords Mental health · Religion · Spirituality · Anxiety · Schizophrenia · Psychosis · Depression · Suicide · Alcohol use and abuse · Substance use and abuse

1 Introduction

Demographic studies showed that in 2010 about 84% of the world's population reported affiliation with some religious group (Pew Research Center 2012). Despite this finding, until recently, the impact of religious and spiritual dimensions on people's mental health had not received adequate attention for more than 150 years (Koenig 2009). By the end of the nineteenth century, negative ideas about religion

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became prevalent in the psychiatry and psychology communities, lasting throughout most of the twentieth century (Moreira-Almeida et al. 2006). Examples of those are Jean Charcot and Sigmund Freud, who associated religion with hysteria and neurosis. This vision began to greatly separate religion from mental health care in the decades that followed (Koenig 2009). Hence, most patients still do not have their spiritual needs identified, and most clinicians do not include Religiousness/Spirituality (R/S) in clinical practice (Moreira-Almeida et al. 2014).

Only in the last four decades has rigorous scientific researches been regularly carried out and published in leading medical and psychological journals, generating a broad and strong body of evidence showing an association between religious involvement and mental health (Moreira-Almeida et al. 2006). Two systematic reviews of academic literature have identified more than 3000 empirical studies on R/S and health (Koenig et al. 2001, 2012). In general, individuals who have higher R/S have lower rates of depression, suicidal behaviour, and substance use/abuse than those with lower or no R/S. In addition, they usually experience better quality of life, optimism, well-being, better self-rated general health, and faster remission of depressive symptoms (Koenig 2009; Moreira-Almeida et al. 2006; Bonelli and Koenig 2013).

On the other hand, despite these positive aspects of R/S, and although less frequently, there is also evidence showing an association of R/S with negative mental health outcomes. These negative outcomes associated with R/S are often related to negative religious coping (Weber and Pargament 2014).

This chapter first discusses the main proposed mechanisms for the R/S and mental health association and then reviews the main findings of recent high-quality research on R/S and mental health, mainly in the areas of anxiety, psychotic disorders, depression, suicide, and substance use/abuse. In each section, we start with an overview of the available evidence and then describe some the best or most representative studies on the subject.

2 Mechanisms

Although the R/S and health relationship has been well established based on thousands of studies, the mechanisms of this association have remained one of the most challenging issues for research and theory (Moreira-Almeida 2013).

The potential mechanisms most usually raised to explain (at least partially) the effects of R/S on health are: encouraging healthy behaviours (influencing eating habits, substance use, sexual behaviour, child rearing, etc); social support from the religious community; belief system (providing meaning to life and suffering); coping mechanisms; personality characteristics; and neuroendocrine and neuroimmunology pathways (cortisol, C-reactive protein, fibrinogen and cytokines).

For example, regarding depression, religious and spiritual involvement may prevent the onset of depression by fostering healthy coping behaviours to deal with precipitating psychosocial stressors. If depression sets in, R/S may provide meaning

and social support, facilitating faster adaptation to the underlying stressors and thereby accelerating the resolution of depression. However, if a person has strong religious beliefs but does not live up to religious values, this can create internal conflicts that can generate stress and disharmony, or lead to social exclusion from his/her religious group or family. Such internal/social conflicts may lead to guilt, hopelessness, social isolation and depression (Koenig et al. 2012).

Regarding suicide, the mechanisms might involve religious coping during stressful periods, providing meaning to life and suffering, social networks via the presence of a religious community, or specific living standards and values (Wu et al. 2015). All major religions in the world prohibit suicide, which makes this prohibition serve as a deterrent (Kleiman and Liu 2014). But the exact mechanisms are not clear. For example, a recent large longitudinal study showed that religious attendance was a strong protective factor against suicide deaths. However, although religious attendance had also been related to higher social support, lower depression and alcohol use (important suicide risk factors and possible pathways for R/S influence on it), the impact of R/S on suicide deaths was independent of these factors (VanderWeele et al. 2016).

Regarding substance use/abuse, there is evidence that self-help groups based on the 12-step programme, such as Alcoholics Anonymous (AA), that has a strong spiritual component, contribute to the process of recovery from alcohol dependence by increasing R/S and, mainly, by developing a new social network (Kelly et al. 2012). In addition, some studies found that "spiritual awakening" during the 12-step programme is a predictor of better recovery among patients with substance dependence (Kelly et al. 2011; Zemore 2007).

Some authors have proposed models based on these possible mechanisms. George et al. (2002) pointed to four potential psychosocial mechanisms: health practices, social support, psychosocial resources such as self-esteem and self-efficacy, and belief structures such as a sense of coherence. They conclude, after analysing the scientific evidence, that these four factors, although relevant, seem to be insufficient for fully explaining the mechanisms by which R/S impacts health outcomes.

Levin (2003) classified the potential salutogenic mechanisms of R/S into five types: biological, psychosocial, bioenergy-based, nonlocal, and supernatural. The biological pathway is about some religio-ethnic groups which preserve some genetic patterns that predispose their members to a disease or to a healthier life. The psychosocial pathway involves cognitive, emotional and behavioural after-effects of religious involvement, for example, social support, positive emotions, personality styles and positive thoughts. The bioenergy-based pathway is proposed in order to explain the therapeutic results of spiritual intentionality. The nonlocal pathway is derived from Larry Dossey's theory, which says that there is some part of our mind or consciousness that is connected to all else (to all other moments and places and persons). Finally, the supernatural pathway would be interventions by God or a divine Being that is able to transcend the laws of nature.

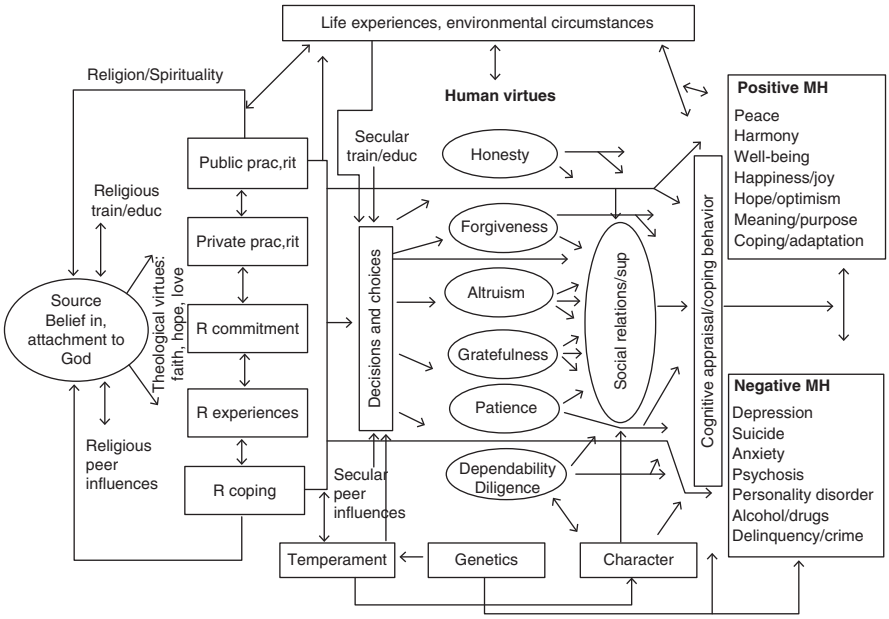

Fig. 1 Model to explain effects of R/S practices and beliefs on mental health. (Reproduced from Koenig et al. 2012)

Finally, Koenig et al. (2012) proposed a comprehensive model for the impact of several R/S dimensions on mental health through several interconnected bio-psycho-social pathways (Fig. 1).

2.1 Summary

Aspects such as greater purpose, optimism, generosity, gratefulness, social support, self-esteem, self-efficacy, cognitive framework (e.g., sense of coherence and meaning), healthier habits (e.g., related to smoking, drinking, sexual life), body sanctification, locus of control, positive and negative affects, stress moderation, treatment adherence, and coping seem to be major explanations for the relationship between R/S and mental health.

Indeed, evidence has shown that these proposed pathways are often related to R/S. However, when tested for mediation, these factors usually explain only partially or not at all the R/S and health relationship (VanderWeele et al. 2016; George et al. 2002; Corrêa et al. 2011). In summary, evidence about these possible mediators is still inconsistent, and they are probably not the whole story. There is no one mechanism that alone is able to fully explain how R/S affects health. This is one of the most challenging and promising research topics on R/S and health.

3 Anxiety

Anxiety is an unpleasant feeling of fear and apprehension, characterized by tension or discomfort derived from the anticipation of danger, from something unknown or strange. It is a natural and adaptive resource of the body in anticipation of a potentially threatening event. When it is intense, frequent, and/or generates great suffering, it can cause serious problems to mental and to general health. Generalized anxiety disorder, panic disorder and phobias are the most prevalent anxiety disorders (Araújo and Lotufo Neto 2013. Anxiety disorders are one of the most prevalent mental disorders, with an estimated global prevalence of 11.6% (Baxter et al. 2013).

3.1 Relationship Between R/S and Anxiety

Koenig et al. (2012) reviewed almost 300 studies (94% cross-sectional) investigating the relationship between R/S and anxiety. Almost half of them (147/ 49%) reported an inverse correlation. Thirty-three (11%) studies found greater anxiety related to higher R/S levels. Of the 19 longitudinal studies, 9 (47%) reported that R/S predicted lower anxiety levels over time; one study (5%) found an increase in anxiety (among women undergoing abortion for foetal anomaly), and seven reported no association between anxiety and R/S.

3.2 Interventions Based on R/S for Anxiety

A recent meta-analysis (Gonçalves et al. 2015a) aimed to evaluate the impact of R/S-based interventions on health, describing the study protocols and their quality, and found that R/S-based interventions showed significant effects on anxiety ($p < 0.0001$). A clinical trial with 62 Muslim patients with Generalized Anxiety Disorder found that patients who received religious-based intervention reported, after 3 months of treatment, significant reduction of the symptoms compared to the control group (Azhar et al. 1994). Another study tested the efficacy of Spiritually Integrated Treatment-SIT (a program involving Jewish spiritual strategies for coping with stress and worries) delivered via the internet to 125 Jews with subclinical anxiety. They found reductions in stress, worry, depression, and intolerance of uncertainty compared to the control group (who only had progressive muscle relaxation) and waitlisted control (Rosmarin et al. 2010).

Some kinds of complementary and integrative therapies (based on spiritual practices such as mindfulness and meditation) seem to decrease anxiety symptoms (Thrane 2013; Sankhe et al. 2017; Kiran et al. 2017). In a randomized controlled trial with 72 Brazilian internal medicine inpatients, those who received Spiritist Passes (SP) – a kind of laying on of hands – presented higher reductions in anxiety,

depression, and muscle tension and had lower heart rates than those who did not receive SP (Carneiro et al. 2017).

3.3 Summary

In spite of scientific evidence showing that R/S seems to be a protective factor for anxiety disorders, findings are still not conclusive. The most robust evidence is about R/S-based interventions to reduce anxiety symptoms (Gonçalves et al. 2015b). More studies are needed to explore this relationship.

4 Psychotic Disorder/Schizophrenia

Psychotic disorders are characterized by symptoms such as delusions and/or hallucinations, indicating impaired contact with reality. Psychotic disorders are usually very disabling and the prototypical example is schizophrenia.

The relationship between R/S and psychosis has been discussed for a long time; many studies (old and recent) show that religious delusions are common in psychotic patients (voices with demonic forces, messages from God or the devil) (Rose et al. 2017).

A critical question is whether this relationship is a causal one (R/S generating psychosis), or if people suffering from psychotic symptoms seek religious experiences to cope with these symptoms, or whether the contents of these religious delusions simply reflect patients' cultural backgrounds (cultural pathoplasty).

Another clinically relevant and widely debated topic refers to the differentiation between non-pathological religious experiences that resemble psychotic symptoms (e.g., hearing voices, trance and possession experiences, etc.) and psychotic disorders with religious contents. There is consistent evidence that "psychotic" or "anomalous" experiences are frequent in the general population and that most of them (90%) are not related to psychotic disorders. While about one-third of psychoses have religious content, most religious experiences are not psychotic (Koenig 2007; Menezes and Moreira-Almeida 2010).

In order to aid clinical reasoning, Moreira-Almeida and Cardeña (2011) proposed several criteria suggestive of non-pathological "psychotic" or "anomalous" experience: absence of suffering, functional or occupational impairment, compatibility with the patient's cultural background or with some religious tradition, acceptance of experience by others, absence of psychiatric comorbidities, control over the experience and personal growth over time. In summary, the emphasis should not be placed on anomalous experiences resembling positive psychotic symptoms (such as hallucinations) but on other psychotic symptoms such as disorganized behaviour, cognitive disorders and social withdrawal.

4.1 Relationship Between R/S and Psychotic Disorders

Koenig et al. (2012) identified 43 studies on the relationship between psychotic disorders and R/S. About 33% of these studies (14) showed an inverse relationship between psychotic symptoms and R/S, and 23% (10) found a positive relationship.

A study about the influence of R/S on substance misuse in patients with schizophrenia or schizo-affective disorder among 115 Dutch outpatients found that religious involvement may have played a protective role in preventing substance misuse in 14% of the total sample, especially for patients who had stopped substance misuse. Another study with 150 patients from Geneva's four psychiatric outpatient facilities, with diagnosis of schizophrenia or schizo-affective disorder pointed out that 43% of psychotic patients had already attempted suicide. Twenty-five per cent of them said that they recognized the protective role of religion with regard to suicide behaviour mostly through ethical condemnation and religious coping (Huguelet et al. 2007).

Almost 70% of 103 stabilized schizophrenic patients from Switzerland considered spirituality as very important or even essential in their everyday life. Of these patients, 57% had an opinion that their illnesses are directly influenced by their spiritual beliefs −31% positively and 36% negatively (Borras et al. 2007).

4.2 Summary

Religious delusions are common in psychotic disorders and psychotic patients very often turn to R/S as a coping strategy. Some non-pathological spiritual experiences may resemble psychotic disorders, and a careful and sensible clinical evaluation is needed, especially for a differential diagnosis (Huguelet et al. 2009).

Based on the evidence available, the importance of studying R/S in psychotic patients is clear (because of the importance of R/S for them, because of the protective factor that R/S have in their lives, and because of the content of their delusions), and it is necessary to learn more about R/S experiences in the general population that are not "psychotic" experiences (maybe spiritual experiences). There is still much about the relationship between religion and psychosis that remains unknown, pointing to the need for more studies to better inform clinical practice (Huguelet et al. 2016). Collecting spiritual history, considering interventions from spiritual groups for patients who have this inclination and/or supporting non-psychotic religious involvement are among the next promising steps (Clark et al. 2012; Huguelet et al. 2016).

5 Depression

Depression is a common mental disorder. Globally, more than 300 million people of all ages suffer from depression. Depression is one of the leading causes of disability worldwide and is a major contributor to the overall global burden of disease (GBD 2015 Disease Injury Incidence and Prevalence Collaborators 2016).

5.1 Relationship Between R/S and Depression

Koenig et al. (2001) identified 96 observational studies published up to the year 2000, of which 61 (64%) reported an inverse correlation between R/S and depressive symptoms. From 339 articles published between 2000 and 2010, 170 (63%) showed lower rates of depression and fewer depressive symptoms among those with higher R/S. Among the 45 longitudinal studies, 25 (47%) found that higher R/S involvement predicted lower rates of depression over time (Koenig et al. 2012).

A meta-analysis of 147 studies with a total of 98,975 individuals showed a significantly inverse relationship between religiosity and depression. Such outcomes were not moderated by gender, age, or ethnicity, but the association was stronger in those studies involving people who were experiencing recent stressful life situations. On the other hand, results were moderated by the type of religiosity measure used in the study; extrinsic religiosity and negative religious coping (e.g., blaming God for difficulties) were associated with higher levels of depressive symptoms (Smith et al. 2003).

A 1-year longitudinal study with 4791 US adolescents found that involvement in religious activities protected against the onset of depressive episodes (Van Voorhees et al. 2008). Adjusting for demographic characteristics and depressive mood at baseline, praying once a week and attending religious youth groups at least once a month correlated with fewer onsets of depressive episodes compared to those who never prayed (OR = 0.52; 95% CI 0.29–0.94) and who never attended (OR = 0.37; 95% CI 0.15–0.88).

A 10-year follow-up study of 114 US children found that those who reported at 10 years old that R/S was highly important to them had about a quarter of a risk of experiencing depression between 10 and 20 years later than those who did not consider R/S important. In the high-risk subgroup (having a depressed parent), those who reported high importance of R/S had a tenth of the risk of having depression between 10 and 20 years later compared with those who did not report R/S importance (Miller et al. 2012).

A 2-year study investigated 1992 depressed and 5740 non-depressed older US adults. Non-depressed baseline individuals who regularly attended religious services were more likely to remain non-depressed in the follow-up, while those depressed at baseline were less likely to remain depressed at follow-up when they

were more often engaged in private prayer compared to the ones who did not often engage (Ronneberg et al. 2016).

5.2 Interventions Based on R/S for Depression

A systematic review of randomized clinical trials evaluating R/S interventions showed that these interventions have decreased depressive symptoms (Gonçalves et al. 2015a). Other reviews also found that the inclusion of R/S elements in standard psychotherapies may be useful for patients with different types of psychological problems, including depression (Hook et al. 2010; Worthington et al. 2011). Another meta-analysis of randomized clinical trials found that faith-adapted cognitive-behavioural therapy (F-CBT) produced larger decreases in depression scores than control conditions (e.g., waiting list or treatment as usual) and even more than standard CBT (Anderson et al. 2015).

5.3 Summary

The good quality evidence currently available indicates that R/S involvement (especially intrinsic religiosity, attendance at religious services and positive religious coping) is usually associated with lower levels of depression, with a higher protective effect size among those individuals at higher risk, such as those in stressful situations. In addition, the use of religious resources may contribute to the recovery process of depressed patients. Evidence also suggests that religious interventions may also help reduce depressive symptoms.

6 Suicide

Suicide is a major cause of morbidity and mortality in the world. It is responsible for more than 800,000 deaths per year and ranks among the top three causes of death of people 15–44 years old (Wu et al. 2015). Causes of suicide include psychological factors, such as depression, anger and impulsivity; social factors such as family disorders, lack of social support and loneliness; behavioural factors such as alcohol and drug use and dependence; biological causes, including side effects of medications; medical conditions such as chronic and disabling diseases; genetic causes; and developmental causes, such as domestic violence and sexual, physical or emotional abuse (Koenig et al. 2012).

6.1 Relationship Between R/S and Suicide

A systematic review of 141 studies examined the relationship between R/S and suicidal ideation, suicide attempts and complete suicide. Of these studies, 106 (75%) found less suicidal ideation and behaviour among those who were more religious (Koenig et al. 2012). A meta-analysis of nine studies from 2000 to 2015 analysed 2369 completed suicides and 5252 controls (living or dead from natural causes). It found a global protective effect of R/S over complete suicides (OR = 0.38; 95% CI 0,21–0.71), with a stronger effect in Western cultures (Wu et al. 2015).

A 16-year follow-up study of a US nationally representative sample (n = 20,014) found that those who regularly attended religious services died three times less by suicide compared with those who did not attend (Kleiman and Liu 2014). In a Canadian nationally representative sample of 36,984 individuals, religious frequency was associated with fewer suicide attempts, even after adjusting for social support (OR = 0.38; 95% CI 0.17–0.89) (Rasic et al. 2009).

In a Brazilian case-control study (110 subjects who attempted suicide and 114 controls with no history of suicide attempts), religiousness was related to about a 50% decrease in the risk of suicide attempts, after controlling for other relevant risk factors (Caribé et al. 2012).

In a 14-year longitudinal study of 89,708 US women, after adjusting for demographic variables, lifestyle factors, medical history and depressive symptoms, weekly attendance at religious services was associated with seven times lower suicide rates compared to those who had never attended (VanderWeele et al. 2016).

6.2 Summary

R/S beliefs and practices have consistently been shown as important protective factors against suicidal attempts and deaths. However, there is a lack of controlled studies and clinical trials evaluating whether interventions based on R/S may contribute to reducing suicidal behaviour and controlling risk factors.

7 Substance Use and Abuse

Harmful alcohol use is related to more than 200 diseases, including liver cirrhosis and cancers. In 2012, about 3.3 million deaths or 5.9% of all deaths worldwide were attributed to alcohol. In that same year, 5.1% of the global burden of diseases were attributed to alcohol consumption (Global Status Report on Alcohol and Health 2014). It is estimated that in 2009, 149–271 million people used illicit drugs worldwide. Several adverse health outcomes, such as mental disorders, road accidents,

suicide and violence are related to cannabis, opioid, cocaine and amphetamines use (Degenhardt and Hall 2012).

7.1 Relationship Between R/S and Substance Use and Abuse

There is strong and consistent evidence that alcohol use and abuse is less frequent among those who have higher levels of religious involvement. A review of 278 quantitative studies examining the relationship between R/S and alcohol found that 240 (or 86%) reported less alcohol use/abuse among the more religious, the same proportion in prospective studies (86% of 49 studies) (Koenig et al. 2012).

Results are similar regarding illicit drug use/abuse. From 185 studies, 155 (84%) reported an inverse relationship between R/S and drug use/abuse. Of the 35 prospective cohort studies, 33 (94%) found baseline R/S predicting less future drug use/abuse. Over 70% of these studies were done with young individuals (adolescents, university students and young adults) (Koenig et al. 2012). These findings are important because there is evidence that experimental drug use in childhood and puberty is related to a higher risk of further development of dependence than when the use starts in adulthood (Nappo et al. 2010).

This protective effect of R/S has been reported by several national surveys in different countries. In a US national survey, the proportion of people who drink alcohol among those who attended church less than twice a month or did not attend was twice that of those who attended a church two to four times a month. The likelihood of alcohol use in the last year for those who said religion was not important in their lives was 50% higher than among those who reported that religion was important in their lives. Importantly, this association does not appear to have been mediated by social support and mental health status (Edlund et al. 2010).

Data from 11,169 women in the three waves of the National Alcohol Survey in the USA (2000, 2005 and 2010) were used for analyses of religiosity regarding lifetime alcohol use and harmful consumption of alcohol and drugs in the last 12 months. High religiosity was associated with lifetime alcohol abstinence and was found to be protective against harmful alcohol consumption and drug use (Drabble et al. 2016).

One of the largest surveys in Central America examined the relationship between religion and substance abuse in a randomized sample of 17,215 high school students between the ages of 12 and 20 in Panama, Costa Rica and Guatemala. Beliefs of adolescents in God were related to a lower likelihood of drunkenness (OR = 0.96, $p < 0.001$) (Kliewer and Murrelle 2007).

In a Brazilian national sample of 5040 people, those whose main leisure activity was to go to parties, bars and clubs were 73.3% more likely to have used drugs than those involved in cultural, sports or religious activities (Bastos et al. 2008). In a nationally representative sample of 12,595 Brazilian university students, about 40% regularly attended religious services. Compared with those who had regular attendance, students who did not regularly attend religious services were more likely to

use alcohol (OR = 2.52; 95% CI 2.08–3.06), tobacco (OR = 2.83; 95% CI 2.09–3.83), marijuana (OR = 2.09; 95% CI 1.39–3.14) and other drugs (OR = 1.42; 95% CI 1.12–1.79) (Gomes et al. 2013).

7.2 Interventions Based on R/S for Substance Use and Abuse

Despite observational evidence clearly showing R/S as a protective factor for alcohol and drug use/abuse, studies are still needed to investigate the impact of R/S interventions on the process of recovery from alcohol and other substance disorders.

In Brazil, a qualitative study conducted in 21 religious institutions in São Paulo evaluated 85 individuals who had been abstinent for at least 6 months and who had used non-medical religious resources to treat substance dependence. Frequent prayer, described as a form of direct contact with God, was one of the main strategies for preventing relapse and controlling cravings for the drug (Sanchez and Nappo 2008).

Mutual-help organizations, based on 12-steps, such as AA, have a spiritual orientation. The fundamental element of this approach is the premise that there is a "Higher Power" and the use of prayer and meditation is encouraged. Six of the 12-steps refer to God (Galanter 2007). The main recovery mechanism is identified as a "spiritual awakening" brought about through the completion of the 12-steps (Kelly et al. 2011).

Regarding research evidence of the 12-steps programme's effectiveness, a Cochrane review evaluated eight trials involving 3417 people and found that AA may help patients to accept and maintain treatment (Ferri et al. 2006). A review showed that people who received professional treatment and participated in spirituality-based support programmes (such as AA) were more likely to remain sober than those who received only professional treatment (Koenig 2009). Another AA effectiveness study pointed out that among those attending AA (Kaskutas 2009), abstinence rates were twice as high as those of non-attendees.

7.3 Summary

There is strong evidence that R/S is an important preventive factor against alcohol and substance use/abuse. However, more studies are still needed to evaluate the impact of R/S-based interventions on the recovery process of these disorders. It seems R/S-based programmes, such as the 12-steps used in AA, can contribute in a complementary way to professional treatment.

8 The Dark Side of R/S

Although R/S is usually associated with better health outcomes, this is not always the case. Several studies have shown that negative religious coping (for example, passive deferral to God, reappraisals of God's powers, feeling abandoned or punished by God, etc.) that reflects a controversial relationship with God and spiritual struggles (feeling angry toward God, feeling unforgiven by God, or behaviours contrary to what their religion says) are associated with worse outcomes in mental health and well-being (Stauner et al. 2016; Exline and Rose 2013; Pargament 1997). A prospective study with more than 800 US undergraduate students found that spiritual struggle partially mediated the relationship between trauma and PTSD symptoms. Therefore, spiritual struggle may be an important factor to consider in the cognitive and emotional responses of trauma victims as a potential mechanism in the development and maintenance of PTSD symptoms (Wortmann et al. 2011).

Data from a nationwide online survey of US adults investigating links between spiritual struggles and depressed affect, anxiety, phobic anxiety and somatization suggest that there is a direct correlation between spiritual struggles and these distempers (Ellison et al. 2013).

Patients with obsessive compulsive disorder may have religious content obsessions or compulsive behaviour (praying repeatedly, going to confession or other religious rituals) to relieve their anxiety. This kind of OCD is more common among religious people than people who do not have religious involvement (Steketee et al. 1991; Greenberg and Witztum 1994).

Another "dark side" of religiousness is when mental health care is replaced by religion, when they are seen as mutually exclusive and not complementary. Some religious groups can advise their members not to look for specific mental health services (because only God can cure, or because psychiatric drugs are not from God, etc.) (Baltazar 2003; Alves et al. 2010).

8.1 Summary

Some symptoms of mental disorders can be influenced by religious beliefs; negative religious coping and religious struggles seem to increase the intensity of the symptoms. Some religious groups and practices discourage the pursuit of mental health services because of fanaticism and/or oppressive traditionalism.

9 Conclusion

In the last four decades, very consistent evidence has emerged showing an association between R/S and mental health. This can be understood as established knowledge. In general, individuals who have high R/S involvement have lower rates of depression, suicidal behaviour, and substance and alcohol use and abuse.

Despite some inconsistent results, studies reveal that R/S seems to be more protective than harmful in helping people cope with anxious symptoms. The relationship between R/S and psychotic disorders remains unclear. But there is consistent evidence that religious coping is frequent among psychotic patients and that it is needed to differentiate non-pathological religious and spiritual experiences from psychotic symptoms.

Among the areas that deserve more study are understanding the mechanisms of the R/S-mental health connection and how to translate the available knowledge to clinical practice. The evidence about possible mechanisms of the R/S and mental health relationship is still controversial and inconsistent. The main proposed pathways have been: greater purpose and meaning in life, optimism, generosity and gratitude, social support, self-esteem, cognitive framework (sense of coherence, meaning, resilience), healthier lifestyle habits, corporal sanctification, positive affect, coping with stress and adherence to treatment.

There is some evidence that R/S interventions or spirituality-adapted treatments can be effective in the treatment of mental health issues and mental disorders. However, more studies are needed to assess which are the "effective components" of these interventions, which patient profiles would benefit from it and how to ethically deliver them.

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