

Review Article

Spirituality, Religiosity and Substance use: Evidence and Proposed Mechanisms

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Abstract

Many studies have been pointing to the role of cultural, ethnical, and intrapersonal factors on substance use and abuse. From these several cultural factors, religious/spiritual beliefs appear to be important factors associated with substance use patterns. In the present article, we aim to review the relationship between spirituality, religiosity and substance use; to present the proposed mechanisms and to understand the role of spiritual interventions on substance use treatment. We found strong evidence that higher religious involvement, such as organizational religiosity (religious attendance), non-organizational religiosity (private religious practices), and some religious affiliations (Protestants) were associated with less use of alcohol, tobacco and illicit drugs. However, the possible mechanisms for this relation and the role of religiosity/spirituality for substance use treatment should be better explored.

INTRODUCTION

Drugs use is a worldwide public health problem. According to World Health Organization's World Mental Health Survey Initiative, which evaluated 17 countries worldwide, lifetime use of drugs ranges from: 46% to 97% for alcohol; 16.8% to 73.6% for tobacco; 0.3% to 42.4% for cannabis and 0% to 16.2% for cocaine [1].

The substance use/abuse is responsible for several problems in the society, such as road crashes, conduct problems, attentional problems, suicide, homicide, a range of injuries, poisoning, and the spread of infectious disease [2,3].

However, studies have shown that the use of substances is not related solely to drug policy, since countries with stringent drug policies did not have lower levels of use than countries with liberal ones [1].

Therefore, researchers have been investigating which predisposing factors could be related to substance use. In general, age, gender, education, income, parental drug problems/monitoring, mood disorders and personality disorders are the most common risk factors for any type of drug usage [1,4-6].

Within this context, many studies have been pointing to the role of cultural, ethnical, and intrapersonal factors on this use [7]. From several cultural factors, religious and spiritual beliefs appear to be important factors associated with use patterns [8].

In the present article, we aim to review the relationship

between spirituality, religiosity and substance use; to present the proposed mechanisms and to understand the role of spiritual interventions on substance use treatment.

Studies on spirituality, religiosity and substance use/abuse

Several studies are showing the protective role of religiosity/spirituality in substance use/abuse. Higher religious involvement, such as organizational religiosity (religious attendance), non-organizational religiosity (private religious practices), and some religious affiliations (Protestants) are associated with less use of alcohol, tobacco and illicit drugs [8-10].

Recently, a meta-analysis evaluated 22 studies from 1995 to 2007 and found that religiosity was consistently associated with less youth substance use, including alcohol, cigarette, marijuana and other illicit drugs [8].

Similar results were found by Chitwood et al. [11] which reviewed 105 articles about the relationship between religiosity/spirituality and alcohol and drug use that were published between 1997 and 2006. Most articles in this field focused primarily on organizational religiosity (52.4% of the articles), religious affiliation (24.8%), subjective religiosity (22.9%), religious belief (21.0%), spirituality (9.5%) and religious coping (1.9%). They found higher levels of religiosity and spirituality, regardless of how they have been measured, were found to be associated with decreased risk of substance use.

Our research group [6] has recently assessed the role of religious involvement and religious beliefs in the prevalence and frequency of smoking and alcohol consumption in 383 people from a Brazilian shanty-town. Four regression models were created to explain the relationships among religious involvement, tobacco and alcohol use, controlling for demographic, social and psycho-behavioral factors. High religious attendance was associated with less alcohol use, alcohol abuse, tobacco use, and combined alcohol/tobacco use, as well as less days consuming alcohol beverages per week, controlling for confounding factors. Additionally, high non-organizational religious behavior was associated with less tobacco and combined alcohol/tobacco use.

These findings are in accordance with a large body of research in the medical literature. Notwithstanding, the mechanisms for this relationship are not yet totally elucidated.

Proposed mechanisms for this relationship

There is no single and definitive explanation for this relationship. Several authors have been studying these mechanisms in the last decades.

Some authors believe that social support may play an important role, but this alone is probably not the only reason. Michalak et al. [9] examined the role of social status in mediating the relationship between religiosity and substance use. Authors found social support had little effect on the magnitude of the religiosity coefficients in the logistic regression models.

Other possible explanations may involve the enhancement and cultivation of moral values by religion, since most religions encourage moral values in their doctrines. Cole et al. [12] found conformity, tradition, security, benevolence and universalism/equality were associated with lower substance-use in school children. In addition, Dollinger et al. [13] found alcohol consumption was negatively correlated with humanistic (universalism and benevolence) values among college students.

There are also differences in alcohol use/abuse between religious traditions. For instance, Roman Catholics utilize alcohol in their sacraments and afro-religions (i.e. Umbanda) utilize it in their rituals, whereas some Protestant Evangelicals forbid its use [14].

Another important, but yet poorly understood factor is the role of religious beliefs on attitudes toward health, substance use and alcohol policies [15,16]. If a religious person has a more supportive opinion toward alcohol policies, such as not drinking and driving, not only will he/she support such policies, but this may also impact other people's attitudes toward these issues [17].

We have recently conducted a Brazilian nationwide study [17] aiming to investigate the influence of religiousness on attitudes toward alcohol policies (such as approval of public health interventions, drinking and driving). We found religiousness was associated with more negative attitudes toward alcohol, such as limiting hours of sale ($p < 0.01$), not having alcohol available in corner shops ($p < 0.01$), prohibiting alcohol advertisements on TV ($p < 0.01$), raising the legal drinking age ($p < 0.01$), and raising taxes on alcohol ($p < 0.05$). In summary, we concluded that individuals with high levels of religiousness are more supportive

of restrictive alcohol policies, such as approval of public health interventions and not drinking and driving.

Despite the possible "protective effects" of religiosity regarding substance use, this is a complex, dynamic and multidimensional relationship [6]. More studies will be needed to understand the exact mechanisms by which religious/spiritual beliefs could influence the usage of substances.

Substance use treatment, spirituality and religiosity

As noted previously in this article, there are numerous studies dealing with the relation between spirituality/religiousness and substance use and abuse [8,11]. However, one of the great challenges is how we could use this information to treat our patients [18]. Is it possible to use R/S as a tool for treatment?

Within this context, some studies started to evaluate the role of therapeutic strategies that incorporate a spiritual or religious dimension as a central component of the intervention [19]. Therefore, several authors have started to investigate whether these interventions could have favorable outcomes in controlled and randomized environments.

In the field of substance use/abuse, addiction treatment groups such as Alcoholics/Narcotics Anonymous has developed in and out of faith-based settings and emphasizes personal searching, prayer, meditation, and conscious contact with God (higher power as one understands it to be) [20], considering spirituality as an important step in recovery. The results of such groups are promising [21].

Timko et al. [22] compared patients who received standard referral with patients who received intensive referral to 12-step self-help groups. They found patients who received intensive referral were more likely to attend and be involved with 12-step groups during both the first and second six-month follow-up periods, and improved more on alcohol and drug use outcomes over the year.

With similar results, Kelly et al. [23] examined the relationships among lifetime religiosity, during-treatment with the Alcoholics Anonymous/Narcotics Anonymous groups, and the outcomes among 195 adolescents. They found greater lifetime formal religious practices at intake were associated with increased step work and AA/NA-related helping during treatment, which in turn were linked to improved substance outcomes, global functioning, and reduced narcissistic entitlement.

Recently, Worthington et al. [24] investigated the efficacy of spiritually modified psychotherapies in a recent systematic review with 46 studies. The most common problems treated in the studies reviewed in that report were depression, anxiety, trauma, hopelessness, lack of forgiveness, marital problems, and substance abuse. Authors concluded that spiritually modified psychotherapies showed no negative effects, and were as efficacious as conventional psychotherapies for most outcomes measured, and showed superior efficacy in reducing depressive symptoms and in improving of spiritual well being. These results were maintained even after the end of the interventions studied.

On the other hand, Miller et al. [25] evaluated the role of spiritual direction as an adjunct in addiction treatment. They

found that the intervention group had less improvement on depression and anxiety than control group and no better substance use outcomes. However, although up to 12 intervention sessions were offered, only 3–5 were completed on average, with only 59 percent of patients receiving three or more sessions. In addition, there was no spiritual or religious growth in this population, pointing to a problem in the intervention provided.

More studies are needed to investigate the role of religiosity/spirituality as a tool for substance use treatment.

CONCLUSION

In conclusion, there is a strong body of evidence that spiritual and religious beliefs could impact the use and abuse of substances. However, the possible mechanisms for this relation and the role of religiosity/spirituality for substance use treatment should be better explored.

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