The association between religion/spirituality and mental health in cancer

Salsman and colleagues published an impressive series of meta-analyses into the association between religion and spirituality (R/S) and various outcome variables. We will focus on the meta-analysis that described the association between R/S and mental health (1). The authors found an impressive number of 148 studies. However, we were somewhat disappointed that they did not go one step further than earlier reviews and meta-analyses on the relationship between R/S and mental health by leaving out all studies that used spiritual well-being (SWB) as a R/S predictor, and by focusing on longitudinal studies.

1. No less than 46 of the studies included in their meta-analysis used spiritual well-being (SWB) to demonstrate that R/S is related to mental health. It is known that the use of SWB creates spuriously high correlations; a problem of which several authors have warned (2;3). Salsman et al. acknowledged this problem and also calculated an effect size without including studies that used an SWB scale. We appreciate this, but why include these meaningless studies in the first place only to reject them later?

2. One may also question what the relationship between spiritual distress and general distress means. The most probable explanation is that spiritual distress implies general distress, instead of spiritual distress causing or contributing to negative wellbeing, which is what investigators and laymen are interested in. We counted 13 studies that included spiritual distress as a predictor. One may question whether the conclusion of the authors that “R/S was the most robust predictor of the mental health outcomes” still holds, if these studies were also excluded.

3. In the Discussion, the authors indicate that “investigators used psychometrically poor measures of R/S specifically designed for their study, making clear categorization of measures and, thus, comparisons of correlations challenging” (p. 3777). However, the authors did not perform a sub-analysis including only studies that used appropriate scales for R/S.

4. Nearly all included studies were cross-sectional, which implies that causal relationships cannot be demonstrated. Eleven of the 148 studies are labelled “longitudinal” in the Online Data Supplement. However, three of them are longitudinal but not prospective with respect to the R/S well-being association (4), or not longitudinal at all (5;6). Of the remaining eight studies, four used a spiritual well-being scale for the predictor, leaving four studies to rely on. One could maintain that a critical attitude is inappropriate for an underdeveloped area. However, several meta-analyses on the relationship between R/S and mental health have been performed before (7-10), and all ended with the limitation that their findings did not yield an insight into the causal relationship, leading to the advice that more longitudinal prospective studies are needed. The authors of the present meta-analysis acknowledged the problem, but could have gone one step forwards by only selecting prospective studies, or at least by performing a sub-analysis on longitudinal
This would have helped to break free from the recurrent complaint that no conclusion can be made about causal relationships.

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References