PRAYER AS A COMPLEMENTARY THERAPY

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Abstract
The definition of complementary and alternative medicine is broad and evolving. We question whether it should encompass ‘prayer’ when prayer can be directed at improving health, the mechanism is unexplained and the practice based on personal beliefs. A review of studies on prayer for the alleviation of ill-health by the Cochrane collaboration suggested results remain equivocal. A local randomised blinded study of intercessory prayer in patients with cancer showed a significant improvement in assessments of spiritual and emotional wellbeing, despite small effects. Most studies of prayer use as a complementary and alternative medicine are from the United States where religious affiliation is reportedly high. Classifying prayer within complementary and alternative medicine domains varies by culture but is usually combined with mind/body therapies (ie, meditation), distorting patterns of use. Importantly, complementary and alternative medicine use is not commonly raised with patients’ physicians despite such discussions having been shown to enhance communication. Physicians who describe themselves as ‘spiritual’, as opposed to ‘religious’, appear more likely to accept complementary and alternative medicine. Including prayer as a complementary and alternative medicine raises difficulties in definition and measurement, but its widespread societal use suggests it should be acknowledged. Physicians should ask their patients about complementary and alternative medicine use as it may actually improve the acceptance and adoption of conventional treatment.

Defining ‘CAM’ and ‘prayer’
There is much debate over accurately defining complementary and alternative medicine (CAM) and as more therapies and practices appear (or re-emerge) in popular culture, and as more gain scientific merit and become conventional treatments, definitions continue to evolve. Ayers and Kronenfeld state that “the definition of CAM is fluid”,1 while Tippens and colleagues suggest “CAM is a moving target – a point on a continuum of broad acceptance that will eventually be overtaken by increased utilisation or study by conventional health care practitioners”.2 At the very core, complementary medicine is used in addition to conventional therapies, while alternative medicine is practised instead of the conventional. So, can something as primitive and elusive as ‘prayer’ be considered a CAM?

To answer this question we must first of all define prayer itself. However, this can also be a complex exercise. Maier-Lorentz3 states:

“The word ‘prayer’ is derived from the Latin precari, which means ‘to entreat’. Prayer may be defined as an intimate conversation with a higher being for the purpose of imploring or petitioning for something or someone.”3

Prayer can be practised as an individual or as a group. It can be practised inside or outside of the presence of a spiritual healer or place of worship. You or your group can pray for yourself or pray for others, even people you don’t know (intercession). You can pray near someone or at a distance (remote). You can pray with or without the knowledge of the recipient; and that is not to say who you are praying to and whether you consistently believe in a transcendent being. Some have even researched prayer as a retroactive phenomenon to see if its practice can impact wellbeing in the past tense, given that time may not be linear in the experience of the divine.4 Importantly, for the definition of a CAM, prayer is not always related to appeals for better health,5 rather we can pray for different things and we can pray in different ways. Appeals for the wellbeing of ourselves or others would classically be defined as a form of petitionary prayer (appeal for a specific need),1,5 rather than ritual (recitation of prepared prayers) or colloquial prayer, which is “a conversational style of prayer that incorporates petitionary elements, but is less concrete and specific eg, asking for personal guidance...”.5 However, meditative prayer may also be focused on one’s health or wellbeing. Although such types of prayer are described as being aimed at developing a personal and intimate relationship with the divine,5 in modern times, the core components of meditative prayer have been ‘packaged’ into efficacious, structured psycho-social interventions. Although not specifically a ‘prayer’ to some, others will engage in such programs using their meditative (or mindful) training to become closer to the transcendent such as during mindfulness-based stress reduction or its cousin, mindfulness-based cognitive therapy, part of the ‘third wave’ of therapies that emphasise the existential.6 A recent meta-analysis of mindfulness-based stress reduction for cancer” identified good support for the improved mental health of patients using such methods. We have also found mindfulness-based cognitive therapy to significantly improve depression and anxiety in the cancer affected; effects maintained at a three month follow-up.6 Prayer, like meditation, can invoke a relaxation response, where measurable impact on the human body can be gauged, such as the heart rate slowing, brain waves...
altering and respiration rates lowering. Masters and Spielman point out that because some types of prayer may have a known biomedical explanation for their impact, they cannot strictly be considered CAM. In addition to the relaxation response, psychological mechanisms that may impact a person’s health through prayer may include increased social support, hope or decreased distress. These mechanisms may explain the positive impact of prayering for oneself or praying for another in their presence or with their knowledge. Conversely, how a person’s health is positively impacted by distant (remote) intercessory prayer (for others) is unknown in the conventional biomedical sense, thus it can certainly fall under the umbrella of CAM.

Indeed, many have presented empirical evidence for the impact of intercessory prayer. Cochrane reviews on intercessory prayer published in 2000, 2004 and 2009, assessing up to 10 randomised control trials suggest, however, that results remain equivocal or ambiguous.

In cancer research, we found a positive impact of intercessory prayer on the spiritual wellbeing of newly diagnosed patients in Australia. Nine hundred and ninety-nine patients were randomised to receive either remote Christian intercessory prayer or no prayer, with the intervention being unknown to the patients, thus eliminating expectation bias. This trial was unique as it was in oncology, was interested in the impact of prayer on ‘spirituality’ and did not pre-define how intercession should be achieved, rather using a well established prayer chain. As hypothesised, results showed that the prayer (intervention) group evidenced a small, statistically significant improvement over time in spiritual wellbeing compared to the control group (p = .03, partial 2 = .01). Of the other quality of life measures, only emotional wellbeing was significantly improved for the prayer group (p = .04, partial 2 = .01) more so than controls. Although effects were small and therefore only clinically meaningful for few of the intervention patients (10.2% showed positive reliable change in spiritual wellbeing), this study did show that the impact of intercession was indeed measurable. It did not seek to explain the mechanism of action. However, there is no clear data available on how well utilised intercessory prayer is for ill health. This is likely to be because it is a particularly difficult CAM to gauge, given it is practised by groups and individuals alike for ‘unknown others’ for varying periods of time. On the other hand, there is research on the use of other prayer as a CAM.

Prayer in CAM research

Despite the complexities in definition, prayer has been included in much CAM research, most prominently through study of the US National Institute of Health Survey (NHIS). Prayer has likely been included in US CAM research due to the importance of religion and faith in America. In spirituality research in oncology, only around 7% of US samples report having ‘no religion’, compared to a much larger 30% in Australia, which is similar to research in Germany at about 30%. However, the proportions and predictors of prayer use from the 2002 NHIS vary according to which study you follow. In an attempt to compare the rate of cancer survivor CAM and prayer for health use with other groups (the US general and other chronic disease populations), Mao and colleagues utilised the 2002 NHIS data. They identified 1904 as having a previous cancer diagnosis. Controlling for sociodemographics, they found 40% of cancer survivors reported using CAM in the previous 12 months, significantly more than the general population but similar to other chronic disease groups. Importantly, when prayer was analysed, 62% of cancer survivors reported praying for their health, 39% had others pray for their health and 15% participated in prayer groups, showing a significant difference (up to 48% increase) compared to other groups, despite recent or distant (>10 year) cancer diagnoses. Within the cancer group, females and those with breast, uterine, or multiple cancer diagnoses, used prayer more than others. Those within the first year of a cancer diagnosis were also more likely to use prayer compared to those years to five years post-diagnosis.

Ross and colleagues also utilised the 2002 NHIS data to research CAM use in 2262 individuals with a history of cancer. Although this study deemed a larger number of individuals as cancer affected from the same survey data (as compared to Mao et al.), results were similar, indicating that 68.5% prayed for their own health (although they did state that this proportion rose to 88% if they assessed use ‘in the previous year’). Sociodemographic factors found to influence the use of prayer included being female, older, non-Hispanic black, married and those living in the west of the US. Those with shorter survival times and those with either breast or colorectal cancer diagnoses were more likely to use prayer for their health compared to other types.

Studies using data on the cancer affected, outside the NHIS, have also found prayer to be one of the most utilised CAMs in the US. In a small survey of CAM use among 105 women with breast cancer, Lengacher and colleagues assessed the use of 33 different CAMs. A total of 49% of these predominantly Caucasian women used prayer or spiritual healing to help deal with stress, highlighting that reasons for CAM use (such as ‘stress’) probably impact rates, and racial/ethnic differences were important factors in prayer assessment. Yates and colleagues surveyed 752 newly diagnosed US patients (94% Caucasian) about their CAM use, two weeks after completing conventional cancer treatments. A large proportion (91%) reported using at least one form of complementary therapy during treatment, most commonly prayer, relaxation and exercise. Bauer-Wu and colleagues longitudinally assessed complementary medicine use among 173 women with advanced breast cancer, all receiving conventional cancer treatments. Results indicated that across three time points over six months, that 90% of women used at least one CAM and 68% used two or more, with the frequency remaining stable over time. Around 75% engaged in spiritual practices, including prayer on a regular basis.

Similar to US findings, in a rare study of Indigenous Africans, Ezeome and Anarado interviewed 160 cancer patients about their use of CAM at a Nigerian teaching
defined. and found 98% use when ‘CAM user’ was loosely among breast cancer patients (from various countries) considered 10 recently published studies of CAM use instance, a Norwegian study by Kristofferson et al population-based surveys such as the NHIS). For differences in religiosity and thus prayer rates. Second, difficult to generalise to other countries given probable First, as most data comes from the US, findings are apparent from the handful of studies reported above. in cancer affected individuals, a few things are clearly differences in the proportions of prayer use reported Although there appear to be more similarities than in cancer affected individuals, a few things are clearly apparent from the handful of studies reported above. In research, CAM classifications appear to vary (especially if studies are using samples not obtained through population-based surveys such as the NHIS). For instance, a Norwegian study by Kristofferson et al considered 10 recently published studies of CAM use among breast cancer patients (from various countries) and found 98% use when ‘CAM user’ was loosely defined. However, this proportion was reduced to only 20% when a CAM user was defined as ‘a user of a CAM practitioner’. Third, prayer rates will vary depending on certain factors such as race/ethnicity, gender, age and diagnosis/treatment related variables. To further highlight the lack of stable, cross-cultural definitions of CAM, the US authority of the National Centre for Complementary and Alternative Medicine which developed the NHIS, reports on 27 different CAM that are grouped into five broad domains, including Group 2 termed ‘Mind-Body Medicine’ that incorporates prayer alongside mediation, relaxation, yoga, massage etc, based on their ‘similarities’. Conversely, in the UK, the House of Lords Select Committee on Science and Technology recommend less categories (three) where prayer is also combined with other ‘Complementary Therapies’ including meditation, massage and spiritual healing. Therefore, in research, CAM classifications are often based on these country specific systems of measurement, although things do get worse; some researchers classify some CAM as belonging to more than one category, so they make their own judgement call on classifications, or they over inflate the proportion of CAM use in their reports. Still others don’t use these national systems at all - they create their own. Based on these and other shortcomings, some researchers are now turning to assessing patterns of CAM use rather than relying on commonly reported CAM categorisations. Based on all data collected through the 2002 NHIS, Ayers and Kronenfeld conducted a factor analysis to see if the five specified domains of CAM reflected actual patterns of use. Data was based on 30,923 adults who completed the survey, reflecting CAM use in the previous 12 months. Among other important findings, results indicated that prayer should be treated as a separate domain, excluded from the usual ‘Mind-Body Medicine’ group, highlighting how previous domains of CAM have been inconsistent with its use. These authors suggest an alternative framework for future CAM research, including a category termed ‘prayer’ that includes measurement of prayer for self and others, prayer in groups and healing rituals. This idea is clearly supported by others. In one example, Conboy and colleagues state that grouping heterogeneous therapies into CAM domains can hide important differences. They found that in a nationally representative survey of 2055 Americans, that caucasians used more CAM than non-caucasians, and CAM users tended to be better educated, but under both circumstances, there was an exception in the case of the CAM ‘prayer’.

Communication of CAM use with physicians

One important finding in CAM research is the lack of communication of CAM use between patient and physician. For instance, MacLennan and colleagues found that in a state-wide population-based survey of CAM use in South Australia, consistent with two previous surveys, that 53% did not report CAM use to their GP. Furthermore, 49% incorrectly believed that CAMs were independently assessed by a government agency before being sold or provided. The authors stated that: “...lay beliefs are that most CAMs are safe. This is in contrast to increasing reports of adverse effects from CAMs and other problems seen predominantly overseas, such as contamination, adulteration, substitution, variable dosage, dubious quality control and inappropriate labelling.” These issues obviously surround ingestion of nutritional supplements or herbal medicine, etc, and how this impacts conventional medicines (for instance, cancer treatments), rather than the use of prayer for one’s health, unless of course prayer is used as an ‘alternative’ rather than ‘complementary’ therapy, which could also pose a serious problem. In one study, while interviewing 29 men with prostate cancer who declined conventional cancer treatment, White and Verhoef identified 10 men where spirituality impacted this important choice. Cancer diagnoses appeared to deepen spiritual practices for these men, including improving their personal relationships, strength of spiritual community and gratitude toward life, affecting their decision making; these findings highlight that spirituality may be a prominent theme that should be discussed at diagnosis. But is communication about (complementary) prayer use (especially the importance of prayer for the patient) of benefit to the conventional patient-physician relationship? Roberts et al assessed communication of complementary medicine use between patients and their oncology physicians in the US. They asked 106 breast and 82 prostate cancer patients how many CAMs they used out a list of 45 therapies. Physicians were asked about their support of CAM. Findings suggested that 84% of patients used at least one CAM, the most prominent being exercise (47%), followed by vitamins, prayer/spiritual practices (43%) and nutritional supplements. Oncologists
were generally supportive of CAM with more than half supporting 15 out of 45 therapies; exercise was the most supported (89%), followed by support groups, massage, meditation, relaxation, biofeedback and prayer (65%). The authors concluded that discussions of CAM between patients and physicians were rare, but importantly, when they did occur, they seemed to enhance relationships.

Yates and colleagues also found that just over half (57%) of their 752 newly treated patients discussed some use of CAM with their oncologist, or to a lesser degree, their primary care physician.17 However, the types of CAM discussed (such as diet, massage and herbal medicine) were not the most frequently used forms (prayer, relaxation, and exercise). Similarly, in their study of 160 Indigenous African patients with cancer, Ezeome and Anarado found that the majority of patients did not mention CAM use to their doctors (56%), mainly because they were simply not asked.19

One interesting study by Curlin and colleagues compared the religious and spiritual characteristics of physicians and CAM practitioners.20 Naturopaths and acupuncturists were less likely to report having a religious affiliation, but described themselves as very spiritual in contrast to other conventional physicians. Among general internists and rheumatologists, increased spirituality (rather than religiosity) was associated with more personal use of CAM and willingness to integrate CAM into a treatment program. The authors concluded that the future of successful integrative medicine will depend, in part, on the religiosity or spirituality of practitioners.

Conclusion

Research into the prevalence of CAM use is clearly suffering from the lack of a universal definition. Some researchers have moved toward examining patterns of CAM use in an attempt to solve this issue, suggesting prayer should be classified as a separate domain. However, including prayer use in CAM research still raises many difficulties due to the enormous scope of the definition of ‘prayer’ itself, including measurement challenges of certain types (such as remote intercession). Despite the inherent problems ahead for CAM researchers, the use of prayer for health seems to have stood the test of time, even as other CAM use has increased. If we are to truly adopt the bio/psychosocial/spiritual model of health, then it appears that physicians should accept society’s move toward the integrative and start asking their patients about CAM use. In an antithetical way, this may actually improve adoption and compliance with conventional treatment.

References