Prayer or spiritual healing as adjuncts to conventional care: a cross sectional analysis of prevalence and characteristics of use among women

Angela Rao,1 David Sibbritt,2 Jane L Phillips,3 Louise D Hickman1

ABSTRACT

Objectives: To determine the prevalence and characteristics of users of prayer or spiritual healing among women.

Design and setting: This cross sectional study was conducted as a part of the Australian Longitudinal Study on Women’s Health (ALSWH), a 20-year study that examines various factors affecting women’s health and well-being.

Participants: The sample used in the current study were women from the 1946–1951 cohort (n=9965) (59–64 years) who were surveyed in 2010.

Outcome measures: Use of prayer or spiritual healing; demographic factors and measures of health status. χ2 Tests, analyses of variance (to determine associations) and a stepwise backward logistic regression model (for the most significant predictors) using a likelihood ratio test were used to determine the outcome measures.

Results: It is estimated that 26% of Australian women from the 1946–1951 cohort (aged 59–64 years) use prayer or spiritual healing on a regular basis. Women were significantly more likely to use prayer or spiritual healing if they were non-smokers, non-drinkers or low-risk drinkers, had symptoms of severe tiredness (OR 1.25; 95% CI 1.12 to 1.40), depression, (OR 1.30; 95% CI 1.11 to 1.53), anxiety (OR 1.33; 95% CI 1.15 to 1.53), diagnosed cancer (OR 1.84; 95% CI 1.28 to 2.65) or other major illnesses (OR 1.43; 95% CI 1.18 to 1.75) and used other complementary therapies.

Conclusions: A significant proportion of adult women are using prayer or spiritual healing. Given that prayer or spiritual healing was significantly associated with health symptoms, chronic illnesses and positive health seeking behaviours, respect for prayer or spiritual healing practices is required within health care settings. Future research is recommended around specific populations using prayer or spiritual healing, reasons for their use and potential benefits on health related outcomes and general well-being.

INTRODUCTION

Prayer and spiritual healing are a significant part of the medical system of many non-western countries.1-3 Spiritual healing is used widely in the UK, with nine separate healing organisations registering approximately 13,000 healers, and in the USA using the modality of Therapeutic Touch,4 while the Australian setting comprises of multiple smaller organisations.5-6 Dossey7 defined prayer as the conscious willing intent of one or more persons for the well-being of self (personal prayer) or others (intercessory prayer) that may be initiated as a conscious activity or from the unconscious mind. Benor8 in page 4 of ‘Spiritual Healing’, defined spiritual healing concisely as the “systematic, purposeful intervention by one or more persons aimed to help another person by focused intention (including hand contact or hand passes) to improve their condition.”

Use of prayer or spiritual healing in the US setting indicates that 64.1% of community dwelling older adults report using prayer or spiritual healing on a daily basis.9 Nationally representative samples in the USA are ambiguous regarding use of prayer or spiritual healing. Barnes et al10 indicated that 43% of adults over 18 years of age report...
using prayer for health, and 24.4% reported using prayer for the health of others; while an earlier survey found that 7% of the population use either prayer or spiritual healing. In the Australian setting, use of prayer or spiritual healing was reported to be used among 24.4% of a nationally representative sample of women using self-prescribed complementary and alternative medicine (CAM).

Two previous systematic reviews determining the efficacy of prayer or spiritual healing therapies were inconclusive or equivocal given the early stages of research in this area. While the Cochrane review concluded that no changes to current intercessory prayer practices were required given the low risk of the intervention, another review recommended that spiritual competence and relevant training were required before allied health staff prayed with clients, however, silent prayer may be beneficial if performed without obtaining the patient’s consent.

The largest systematic review by Benor, involving cells, plants, animal and human populations, found spiritual healing to be effective as an adjunctive treatment to conventional care. Three further systematic reviews were inconclusive and determined that further methodologically strong studies were needed that include the assessment of potentially confounding factors such as expectation and belief.

In the Australian setting, characteristics of users of prayer or spiritual healing have yet to be explored. Previous research has indicated that, in the USA, prayer for health reasons or prayer for self was more likely to be used among adults of low socioeconomic status, women and African-Americans. Use of prayer has been positively correlated with five or more chronic conditions, poorer self-rated health, age and residence within the south-western areas of the USA. Adults under 65 years of age with public health insurance and living in urban areas, who were hospitalised in the past 12 months, and former smokers, were also more likely to use prayer for health reasons. This differs from the general characteristics of CAM users who are more likely to have above-average incomes, be well educated and employed, and have private health insurance; however, CAM users generally are also more likely to be female.

Factors related to use of spiritual healing have yet to be explored worldwide.

The aims of the study are to: estimate the prevalence of use of prayer or spiritual healing in Australian women; and identify the demographic, health status and health service utilisation factors associated with the use of prayer or spiritual healing among Australian women.

METHODS

Study participants
The Australian Longitudinal Study on Women Health (ALSWH) is a population-based study conducted over a 20-year period, and is designed to explore the physical health, emotional well-being, biological, psychosocial, lifestyle and health service utilisation factors affecting the health of women. Eligibility criteria included women who were registered on the Australian Medicare database, assumed to be the most accurate representation of Australian women given registration of close to all women on a government health agency database including citizens and permanent residents, such as migrant and refugee women. Random sampling was used to recruit women into three ‘young’ (1973–1978), ‘mid’ (1946–1951) and ‘older’ (1921–1926) cohorts, which were nationally representative samples for the respective age groups, however, there was some response bias with over-representation of women with a tertiary qualification and under-representation of women from some ethnic minority population groups.

The baseline survey in 1996 included 14 099 respondents in the mid cohort, however, only the most recent survey (conducted in 2010) was used in this analysis.

Data collected

Prevalence (primary outcome measure)
Women were asked about their frequency of use of prayer or spiritual healing within the previous 12 months.

Demographic characteristics
Urban, rural or remote comparisons for areas of residence were made by means of current geographical postcode. Other demographic data collected included age (in years), level of education, marital status, ability to manage on available income, smoking status, alcohol use and health insurance for hospital cover or ancillary services.

Health status
Women were asked questions about the frequency of experiencing health symptoms in the past 12 months or diagnosed conditions within the past 3 years. Symptoms included difficulty breathing, chest pain, stiff or painful joints, back pain, depression, anxiety, intense anxiety such as panic attacks, constipation, difficulty sleeping, palpitations, dizziness, loss of balance or difficulty concentrating. Diagnosed conditions referred to diabetes, impaired glucose tolerance, rheumatoid arthritis, osteoarthritis, other arthritis, hypertension, heart disease, asthma, bronchitis or emphysema, osteoporosis, breast cancer, skin cancer, other cancer or other major illnesses.

Statistical analysis
The STATA program was used to complete all analyses. To determine associations between categorical, demographic and health status factors and use of prayer or spiritual healing, \( \chi^2 \) tests were used. A one way analysis of variance (ANOVA) was employed to determine differences in mean scores between continuous demographic and health status factors and the use of prayer or spiritual healing. To determine the most parsimonious model, demographic and health status factors that were
significant at the p<0.25 level were entered into a logistic regression model followed by the use of a stepwise backward elimination process using a likelihood ratio test.\textsuperscript{23} \textsuperscript{24} Statistical significance was set at p<0.005 due to the large sample size.

A signed consent form attached to the returned questionnaire and invitation to participate was used as informed consent.\textsuperscript{25}

RESULTS
A total of 12,064 participants were eligible for the 2010 survey. There was a total of 1,651 ineligible participants due to death (n=472), frailty (n=67) or withdrawal from the study (n=1,112).\textsuperscript{26} The response rate was 83% (n=10,011) from the 1946–1951 cohort in 2010.\textsuperscript{26} The majority of non-respondents were contactable, but did not complete the survey (n=1,148); or were not contactable (n=905) and excluded from the analysis (n=2,053).\textsuperscript{26}

Participants from the 1946–1951 cohort were predominately rural or remote residence (61.2%), married or in a de facto relationship (76.9%), had a school level of education (58.5%) and were able to manage well on available income (62.9%).

For questions relating to individual health symptoms, missing data varied between 0.8% to 3.4%.\textsuperscript{26} Data were missing for 0.9% of participants for questions relating to diagnosed conditions within the past 3 years, while 0.3–1.3% of answers were missing for questions related to the use of complementary therapies.\textsuperscript{26}

A total of 9,965 (99.5%) women answered the question regarding the use of prayer or spiritual healing. Among these women, prayer or spiritual healing was used often by 14% (n=1,385), used sometimes by 12% (n=1,211), used rarely by 6% (n=599) and never used by 68% (n=6,770).

Table 1 shows the symptoms of chronic illness associated with the use of prayer or spiritual healing. Compared to women who never or rarely experienced these symptoms, women who used prayer or spiritual healing were

| Health symptoms            | Use of prayer or spiritual healing |        |        |        |        |        |        |
|----------------------------|----------------------------------|--------|--------|--------|--------|--------|--------|
|                            | Never (n=6,670), (%)             | Rarely (n=599), (%) | Sometimes (n=1,211), (%) | Often (n=1,385), (%) | p Value |
| Breathing difficulty       | 85 (%)                           | 84 (%)     | 83 (%)     | 83 (%)     | 0.163   |
| Chest pain                 | 15 (%)                           | 16 (%)     | 17 (%)     | 17 (%)     |
| Stiff or painful joints    | 92 (%)                           | 90 (%)     | 90 (%)     | 89 (%)     | 0.002   |
| Back pain                  | 64 (%)                           | 69 (%)     | 65 (%)     | 65 (%)     | 0.045   |
| Depression                 | 82 (%)                           | 76 (%)     | 75 (%)     | 75 (%)     | <0.001  |
| Anxiety                    | 18 (%)                           | 24 (%)     | 25 (%)     | 25 (%)     |
| Intense anxiety            | 93 (%)                           | 92 (%)     | 92 (%)     | 92 (%)     | 0.300   |
| Palpitations               | 83 (%)                           | 78 (%)     | 79 (%)     | 79 (%)     | <0.001  |
| Dizziness/loss of balance  | 83 (%)                           | 82 (%)     | 81 (%)     | 80 (%)     | 0.035   |
| Difficulty concentrating   | 17 (%)                           | 22 (%)     | 21 (%)     | 21 (%)     |
| Difficulty sleeping        | 76 (%)                           | 73 (%)     | 70 (%)     | 69 (%)     | <0.001  |
|                           | No                               | 64 (%)     | 63 (%)     | 64 (%)     | 0.206   |
|                           | Yes                              | 36 (%)     | 37 (%)     | 36 (%)     |
significantly more likely to have sometimes or often experienced: chest pain (p=0.002); back pain (p=0.005); poor memory (p<0.001); depression (p<0.001); anxiety (p<0.001); palpitations (p<0.001); and/or difficulty concentrating (p<0.001).

The association between diagnosed conditions and the use of prayer or spiritual healing is presented in Table 2. In contrast to women who had not been diagnosed with any of these conditions, women who used prayer or spiritual healing were significantly more likely to have been diagnosed with: impaired glucose tolerance (p=0.005); asthma (p<0.0001); other cancer diagnosis (other than breast or skin cancer) (p<0.001); and/or another major illness (p<0.001).

Table 3 demonstrates the association between the use of complementary therapies and use of prayer or spiritual healing in women. Women who used vitamins or minerals sometimes or often were significantly more likely to use prayer or spiritual healing compared to women who never or rarely used vitamins or minerals (p<0.001). Compared to women who never or rarely used yoga or meditation, women who used yoga or meditation sometimes or often were significantly more likely to use prayer or spiritual healing (p<0.001). Use

| Table 2 | The association between diagnosed chronic illnesses and use of prayer or spiritual healing by women aged 59–64 years in 2010 |
|---------|---------------------------------------------------------------------------------------------------------------|
| Condition                  | Use of prayer or spiritual healing                                                                 |
|                              | Never (n=6770), (%) | Rarely (n=599), (%) | Sometimes (n=1211), (%) | Often (n=1385), (%) | p Value |
| Diabetes                    | No 92 | 95  | 92 | 92 | 0.074  |
|                             | Yes 8 | 5   | 8  | 8  |         |
| Impaired glucose tolerance  | No 97 | 98  | 96 | 96 | 0.005  |
|                             | Yes 3 | 2   | 2  | 4  |         |
| Osteoarthritis              | No 82 | 80  | 81 | 79 | 0.113  |
|                             | Yes 18 | 20  | 19 | 21 |         |
| Rheumatoid arthritis        | No 95 | 95  | 96 | 95 | 0.710  |
|                             | Yes 5 | 5   | 4  | 5  |         |
| Other arthritis             | No 87 | 88  | 86 | 86 | 0.552  |
|                             | Yes 13 | 12  | 14 | 14 |         |
| Heart disease               | No 96 | 96  | 95 | 95 | 0.219  |
|                             | Yes 4 | 4   | 5  | 5  |         |
| Hypertension                | No 70 | 68  | 69 | 69 | 0.779  |
|                             | Yes 30 | 32  | 31 | 31 |         |
| Asthma                      | No 90 | 89  | 85 | 88 | <0.001 |
|                             | Yes 10 | 11  | 15 | 12 |         |
| Bronchitis/emphysema        | No 94 | 93  | 93 | 92 | 0.051  |
|                             | Yes 6 | 7   | 7  | 8  |         |
| Osteoporosis                | No 93 | 93  | 93 | 92 | 0.217  |
|                             | Yes 7 | 7   | 7  | 8  |         |
| Breast cancer               | No 98 | 98  | 97 | 98 | 0.647  |
|                             | Yes 2 | 2   | 3  | 2  |         |
| Skin cancer                 | No 86 | 85  | 86 | 86 | 0.853  |
|                             | Yes 14 | 15 | 14 | 14 |         |
| Other cancer                | No 99 | 99  | 98 | 97 | <0.001 |
|                             | Yes 1 | 1   | 2  | 3  |         |
| Other major illnesses       | No 95 | 96  | 92 | 91 | <0.001 |
|                             | Yes 5 | 4   | 8  | 9  |         |
of prayer or spiritual healing was significantly more likely in women who sometimes or often used herbal medicines compared to women who never or rarely used herbal medicines (p<0.001). Women who used aromatherapy oils sometimes or often were significantly more likely to use prayer or spiritual healing compared to women who never or rarely used aromatherapy oils (p<0.001). Women who used Chinese medicines sometimes or often were significantly more likely to use prayer or spiritual healing compared to women who never or rarely used Chinese medicines (p<0.001). In comparison with women who never or rarely used other alternative medicines, women who used other alternative medicines sometimes or often were significantly more likely to use prayer or spiritual healing (p<0.001).

The statistically significant predictors of the use of prayer or spiritual healing are shown in Table 4. Women with a trade qualification, certificate or diploma were 1.28 (95% CI 1.13 to 1.46) more likely to use prayer or spiritual healing than women with no formal education, or women who completed school only. Compared to women who had never smoked, ex-smokers were 0.78 (95% CI 0.69 to 0.87) times less likely to use prayer or spiritual healing while current smokers were 0.64 (95% CI 0.52 to 0.78) times less likely to use prayer or spiritual healing than women who had never smoked.

Women classified as risky drinkers or high-risk drinkers were 0.63 (95% CI 0.50 to 0.79) times less likely to use prayer or spiritual healing than women classified as non-drinkers or low-risk drinkers. Women who reported suffering from severe tiredness sometimes or often were 1.25 (95% CI 1.12 to 1.40) times more likely to use prayer or spiritual healing than women who reported never or rarely suffering from severe tiredness. Compared to women who never or rarely suffered from self-reported depression, women who suffered from self-reported depression sometimes or often were 1.30 (95% CI 1.11 to 1.53) times more likely to use prayer or spiritual healing. Compared to women who never or rarely reported anxiety, women who reported anxiety sometimes or often were 1.33 (95% CI 1.15 to 1.53) times more likely to use prayer or spiritual healing.

Women who had a diagnosed cancer other than breast, cervical or skin cancer were 1.84 (95% CI 1.28 to 2.65) times more likely to use prayer or spiritual healing than women who did not have a cancer diagnosis other than breast, cervical or skin cancer. Women who had been diagnosed with another major illness or disability were 1.43 times (95% CI 1.18 to 1.75) more likely to use prayer or spiritual healing than women who did not have a diagnosed major illness or disability.

Use of vitamins or minerals among women sometimes or often was correlated with a 1.61 (95% CI 1.42 to 1.82) times greater likelihood of using prayer or spiritual healing than use of vitamins or minerals never or rarely. Use of yoga or meditation sometimes or often was associated with a 2.00 (95% CI 1.75 to 2.28) times greater likelihood of using prayer or spiritual healing among women than use of yoga or meditation never or rarely. Women who used herbal medicines sometimes or often were 1.19 (95% CI 1.05 to 1.34) times more likely to use prayer or spiritual healing than women who used herbal medicines never or rarely. Compared to women who used aromatherapy oils never or rarely, women who used aromatherapy oils sometimes or often were 1.59 (95% CI 1.39 to 1.83) times more likely to use prayer or spiritual healing.

Table 3  The association between use of complementary therapies and use of prayer or spiritual healing by women aged 59–64 years in 2010

| Use of complementary therapies | Use of prayer or spiritual healing | Never (n=6770), (%) | Rarely (n=599), (%) | Sometimes (n=1211), (%) | Often (n=1385), (%) | p Value |
|-------------------------------|-----------------------------------|---------------------|---------------------|------------------------|---------------------|---------|
| Vitamins/minerals | | | | | | |
| Never/rarely | 36 | 24 | 22 | 19 | <0.001 |
| Sometimes/often | 64 | 76 | 78 | 81 | |
| Yoga/meditation | | | | | | |
| Never/rarely | 88 | 75 | 69 | 68 | <0.001 |
| Sometimes/often | 12 | 25 | 31 | 32 | |
| Herbal medicine | | | | | | |
| Never/rarely | 78 | 63 | 65 | 60 | <0.001 |
| Sometimes/often | 22 | 37 | 35 | 40 | |
| Aromatherapy | | | | | | |
| Never/rarely | 90 | 77 | 74 | 75 | <0.001 |
| Sometimes/often | 10 | 23 | 26 | 25 | |
| Chinese medicine | | | | | | |
| Never/rarely | 98 | 92 | 94 | 94 | <0.001 |
| Sometimes/often | 2 | 8 | 6 | 6 | |
| Other alternative therapies | | | | | | |
| Never/rarely | 96 | 89 | 82 | 80 | <0.001 |
| Sometimes/often | 4 | 11 | 18 | 20 | |
spiritual healing. Use of another alternative therapy sometimes or often was associated with a 2.47 (95% CI 2.07 to 2.95) times greater likelihood of using prayer or spiritual healing compared to women who did not use an alternative therapy other than those aforementioned.

Women who did consult a counsellor, psychologist or social worker were 1.39 (95% CI 1.15 to 1.67) times more likely to use prayer or spiritual healing than women who did not consult a counsellor, psychologist or social worker. For every one point increase on the life orientation test (ie, a more positive outlook on life) there is a corresponding 7% increase in the likelihood that women will use prayer or spiritual healing 1.07 (95% CI 1.06 to 1.09).

**DISCUSSION**

This research has highlighted a number of important issues regarding prayer or spiritual healing and, in particular, its use for chronic illness, and is the first ever study examining the use of prayer or spiritual healing using a nationally representative sample of women.

**Table 4  Multiple logistic regression model for predicting use of prayer or spiritual healing compared for women aged 59–64 years in 2010**

| Factor                                      | OR   | 95% CI          | p Value |
|---------------------------------------------|------|-----------------|---------|
| Education                                   |      |                 |         |
| None, year 10, year 12                      | 1.00 |                 |         |
| Trade/certificate/diploma                   | 1.28 | 1.13 to 1.46    | 0.001   |
| University/higher degree                    | 0.99 | 0.86 to 1.13    | 0.835   |
| Smoking status                              |      |                 |         |
| Non-smoker                                  | 1.00 |                 |         |
| Ex-smoker                                   | 0.78 | 0.69 to 0.87    | 0.001   |
| Current smoker                              | 0.64 | 0.52 to 0.78    | 0.001   |
| Alcohol use                                 |      |                 |         |
| Non-drinker/low risk                        | 1.00 |                 |         |
| Risky/high risk                             | 0.63 | 0.50 to 0.79    | 0.001   |
| Severe tiredness                            |      |                 |         |
| Never/rarely                                | 1.00 |                 |         |
| Sometimes/often                             | 1.25 | 1.12 to 1.40    | 0.001   |
| Depression                                  |      |                 |         |
| Never/rarely                                | 1.00 |                 |         |
| Sometimes/often                             | 1.30 | 1.11 to 1.53    | 0.001   |
| Anxiety                                     |      |                 |         |
| Never/rarely                                | 1.00 |                 |         |
| Sometimes/often                             | 1.33 | 1.15 to 1.53    | 0.001   |
| Other cancer                                |      |                 |         |
| No                                          | 1.00 |                 |         |
| Yes                                         | 1.84 | 1.28 to 2.65    | 0.001   |
| Other major illness or disability           |      |                 |         |
| No                                          | 1.00 |                 |         |
| Yes                                         | 1.43 | 1.18 to 1.75    | 0.001   |
| Vitamins/minerals                           |      |                 |         |
| Never/rarely                                | 1.00 |                 |         |
| Sometimes/often                             | 1.61 | 1.42 to 1.82    | 0.001   |
| Yoga/meditation                             |      |                 |         |
| Never/rarely                                | 1.00 |                 |         |
| Sometimes/often                             | 2.00 | 1.75 to 2.28    | 0.001   |
| Herbal medicines                            |      |                 |         |
| Never/rarely                                | 1.00 |                 |         |
| Sometimes/often                             | 1.19 | 1.05 to 1.34    | 0.006   |
| Aromatherapy oils                           |      |                 |         |
| Never/rarely                                | 1.00 |                 |         |
| Sometimes/often                             | 1.59 | 1.39 to 1.83    | 0.000   |
| Other alternative therapy                   |      |                 |         |
| Never/rarely                                | 1.00 |                 |         |
| Sometimes/often                             | 2.47 | 2.07 to 2.95    | 0.001   |
| Consultation with a counsellor, psychologist or social worker | | | |
| Yes                                         | 1.00 |                 |         |
| No                                          | 0.72 | 0.60 to 0.87    | 0.001   |
| Life orientation test                       | 1.07 | 1.06 to 1.09    | 0.001   |
Current findings indicate that prayer or spiritual healing is regularly used by 26% of women aged 59–64 years. This is lower than findings from previous research conducted in the USA, where it was estimated that prayer for one’s own health was used among 43% of adults, 24.4% received intercessory prayer for their own health and participation in a prayer group to assist health was utilised by 9.6% of the population. Further, prayer for health was estimated to be used among 53% of women overall, and in 48–51% of adults aged between 50 and 69 years, which may reflect higher trends of prayer use among Americans residing in highly religious areas, such as the south-western states. Greater use of prayer or spiritual healing in the Australian setting compared to the UK, where spiritual healing was used in 0.7% of the population, likely due to the exclusion of prayer as a complementary therapy and the use of a smaller sample of CAM users (n=200).

Presence of symptoms of chronic illnesses was a significant predictor of use of prayer or spiritual healing, which is consistent with previous research on prayer use in the USA. That women may be using prayer or spiritual healing as a means of managing health-related symptoms of chronic illnesses such as depression, anxiety, severe tiredness, cancer or other major illnesses, is an important finding, given that up to half of outpatient visits to mainstream healthcare providers are related to physiological symptoms for which there are no known physiological or biological correlates. In these instances potential global effects of prayer or spiritual healing, such as reductions in psychopathology and general distress, may enhance self-management among women managing chronic illnesses. This may be an important contribution in the context of comorbid diagnoses of depression and anxiety among women with chronic illnesses, given the high prevalence of somatic symptom burden and amplified chronic illness symptoms.

Increased use of prayer or spiritual healing among women with severe tiredness is also relevant, given the increased distress due to lack of legitimisation of chronic fatigue syndrome from conventional healthcare providers among some patients and the increased association this has to comorbid diagnoses of anxiety or depression. In this instance, utilisation of complementary therapies such as prayer or spiritual healing may assist with coping and reduce reliance on conventional healthcare practitioners for symptom management. This is consistent with previous literature where use of personal prayer was significantly associated with enhanced health locus of control. Previous research has also indicated that religiosity and spirituality are predictors of enhanced social support, cooperation, cognitive function and reduced depressive symptoms. That use of prayer may facilitate enhanced cooperation is an important finding, given that belief about symptoms among patients with chronic fatigue syndrome may lead to avoidance behaviours and restriction of activity, which in turn results in physical deconditioning, increased symptom prevalence and disability.

Personal prayer has also been shown to significantly reduce psychological distress and depression 1 year post heart surgery and was used as a means of coping with postoperative symptoms among older adults. Further, personal prayer had a suppressive effect on distress and depression, thereby affecting patients with both high and low levels of health-related distress. This benefit is clinically relevant for women managing depression in the community and may assist healthcare providers to understand why women are more likely to be using prayer or spiritual healing as adjunct therapies. However, further research is required to understand the reasons for use among specific population groups with chronic illnesses.

Prayer or spiritual healing therapies may also affect psychological mediators that facilitate physiological benefits for women managing symptoms of chronic illnesses, including, but not limited to, cancer. For example, Sephton and Koopman found that women with metastatic breast cancer who highly valued spiritual expression had significantly increased immune function (increased white cell counts and lymphocytes). The identification of cancers other than breast or skin cancer as a significant predictor of the use of prayer or spiritual healing is consistent with the previous literature, where the cancer journey was significantly associated with increased spirituality. Intercessory prayer has been shown to improve spirituality among patients with various cancers. This result is of relevance given that ‘spiritual pain’ has been associated with adverse physical or emotional symptoms and decreased spiritual quality of life among patients with advanced cancer.

Management of the terminal phase of chronic illnesses such as cancer requires an understanding of the likelihood of these patients facing an ‘existential crisis’, by which prayer or spiritual healing modalities may assist with coping, and how one defines themselves, creates meaning and finds peace. Koenig found that use of spiritual coping was associated with situations deemed uncontrollable, which is relevant given that prayer has been found to be an important need in up to 50% of religious terminally ill patients.

Increased use of prayer or spiritual healing was significantly associated with non-smokers and non-drinkers. This may reflect users of prayer or spiritual healing as women who have positive health-seeking behaviours or lifestyle patterns. This is supported by current results indicating that women who use prayer or spiritual healing are also more likely to be users of other complementary therapies. Bell et al also found that people who pray for their health were significantly more likely to use any CAM. In addition, increased religiosity has been associated with use of preventative health practices (Bjorndal and Brown, 2004; Fox, Pitkin, Paul, Carson and Duan, 1998, in ref 20).
Limitations include ambiguity regarding how prayer or spiritual healing was understood by the participants, duration or types of prayer (intercessory or personal) or spiritual healing, or conditions in which prayer or spiritual healing were used, as these were not provided in the ALSWH data. Use of prayer or spiritual healing was provided as a single option in the ALSWH questionnaire, thereby limiting separate analysis of the use of prayer compared to the use of spiritual healing. This is an area for future research. Further, bias may be introduced by means of the self-report method for data collection, however, limitations are minor compared to valuable information obtained by analysing a large nationally representative sample of women. The study was based on information on women, thus limits generalisability of findings to the population as a whole. A similar study on men would be an area for future research.

CONCLUSION

Prayer or spiritual healing is used widely within the community. Healthcare providers need to be mindful of use of prayer or spiritual healing as non-pharmacological adjunct therapies, particularly among women with poorer health status, managing chronic health symptoms and/or diagnosed chronic illnesses. Given that prayer or spiritual healing modalities are safe, low-risk strategies, it is in the interest of policymakers and healthcare providers to consider the prayer or spiritual healing practices of women managing chronic illnesses, and to provide a conducive environment for spiritual self-expression within a contemporary healthcare framework. Recommendations for future research include assessment of the efficacy and impact of prayer or spiritual healing, and reasons for use.

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Contributors AR, DS, JLP and LDH contributed and conceptualised this manuscript. Statistical analysis was completed by AR and DS. Results were interpreted by AR, DS, JLP and LDH. LDH and DS guided the manuscript, and all authors were responsible for revisions.

Funding This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Ethics approval Human Research Ethics Committees of Newcastle, University of Queensland.

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement No additional data are available.

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