



Spirituality and coping in young adults with diabetes: a cross-sectional study

N Parsian,* T Dunning

Background

Spirituality is an increasingly important aspect of healthcare, and health professionals are beginning to recognise that addressing patients' spiritual needs is an essential part of patient-centred care. According to Hampton and Wienert, there is a link between spirituality and optimal health, and that spirituality helps people to cope with chronic health conditions¹ and to accept the reality of living with an incurable condition and cope with the consequences.² People often seek meaning, hope, comfort and inner peace when they are confronted with stressful and unbalanced situations, including long-term illness such as diabetes. Developing a sense of coherence and self-efficacy helps people with diabetes to overcome the stressful situations associated with living with diabetes and achieve better diabetes control.^{3,4} Spirituality and a sense of meaning in suffering bring people with chronic health conditions to the process of transformation, help them know their strengths through finding

Abstract

Aim: Spirituality is an important aspect of wellbeing in people with diabetes. The current study aimed to explore how young adults with diabetes define spirituality, and the relationship between spirituality and coping in young adults with diabetes.

Methods: An exploratory study was conducted in 100 young adults with diabetes aged 18–30 years. Participants completed the Coping Questionnaire for Young Adults with Diabetes and the Spirituality Questionnaire.

Results: Young adults with diabetes defined spirituality as a sense of finding inner self and meaning in life, which is enriched by connections with other people and the universal whole. There was no significant difference in spirituality between religious and non-religious young adults with diabetes. People with a shorter duration of diabetes had higher scores on spiritual needs and engaged in more spiritual practices. Coping was correlated with spirituality ($p < 0.002$) and self-awareness ($p < 0.000$). Lower levels of glycosylated haemoglobin were associated with overall spirituality ($p < 0.04$) and self-awareness ($p < 0.01$).

Conclusions: Young adults with diabetes defined spirituality as a sense of being in touch with the inner self, meaning in life, and connecting with people, nature and a higher being. Spirituality is important to young adults with diabetes and helps them cope with stressful situations.

Key words

Spirituality; inner self; transformation; coping

inner self and achieve wellbeing. Thus, spirituality is an integral component of holistic care.^{5,6}

However, there are barriers to addressing spirituality in clinical settings, and little is known about the most effective way to integrate spirituality into care – partly due to a lack of consensus about what spirituality is, its relationship to religion and its contribution to health outcomes.

Importantly, spirituality may or may not encompass religion.^{7–9}

Therefore, spirituality in the current study refers to the inner self that empowers people to manage difficult situations, and helps them to find meaning in life situations and to connect with other people and the universal whole. It encompasses reflecting on life events, coping with obstacles and ultimately achieving acceptance and inner peace. Figure 1 depicts the conceptual framework used to guide the study.

'Coping' in the current study refers to the behaviours that young adults with diabetes used to manage critical and stressful situations to achieve stability.^{10,11}

Aims

The aims of the study were to explore:

Authors

N Parsian, RN, MSN, PhD
Trisha Dunning AM, RN, MED, PhD,
FRCNA, Sigma Theta Tau, Inaugural
Chair in Nursing, Deakin University,
Melbourne, Victoria, Australia

*Correspondence to:

N Parsian, Deakin University,
Melbourne, Victoria, Australia
e-mail: npars@deakin.edu.au

Received: 17 November 2008

Accepted in revised form:
17 August 2009

Conceptual framework for the study

The conceptual framework used for the study concerned spirituality as a process of finding meaning in suffering and being able to transcend the suffering through connections with the inner self, other people and the universe, which ultimately helps people cope with the situation, in this case diabetes, and achieve a sense of inner peace and wellbeing.



- How young adults with diabetes define spirituality
- The relationships among demographic variables and spirituality in young adults with diabetes
- The relationship between spirituality and coping in young adults with diabetes.

Methods

Sampling population

Young adults with diabetes aged 18–30 who had diabetes for at least one year were recruited from the outpatient clinic of an inner-city teaching hospital and from the Reality Check website (www.reality-check.org.au), a website for young adults with diabetes. On the advice of a statistician and undertaking sample-size calculation, a sample size of 100 was recommended as the minimum number of subjects required to achieve statistically significant results.

Data collection procedures

Data were collected using two validated questionnaires: the Spirituality Questionnaire (SQ) and the Coping Questionnaire for Young Adults with Diabetes (CQYAD).

The CQYAD, with the overall Cronbach's alpha at 0.75, measured coping behaviours in young adults with diabetes in four sections: self-efficacy (alpha = 0.68), diabetes-related coping behaviours (alpha = 0.65), social-focused behaviours (alpha = 0.71), and avoidance behaviours (alpha = 0.57).¹²

The SQ, with the overall Cronbach's alpha at 0.94, consisted of five sections: self-awareness (alpha = 0.91), importance of personal spiritual beliefs (alpha = 0.91), spiritual practices (alpha = 0.80), spiritual needs (alpha = 0.89), and open-ended questions asking respondents about their concept of spirituality and its impact on wellbeing.¹²

The scores of each item in both

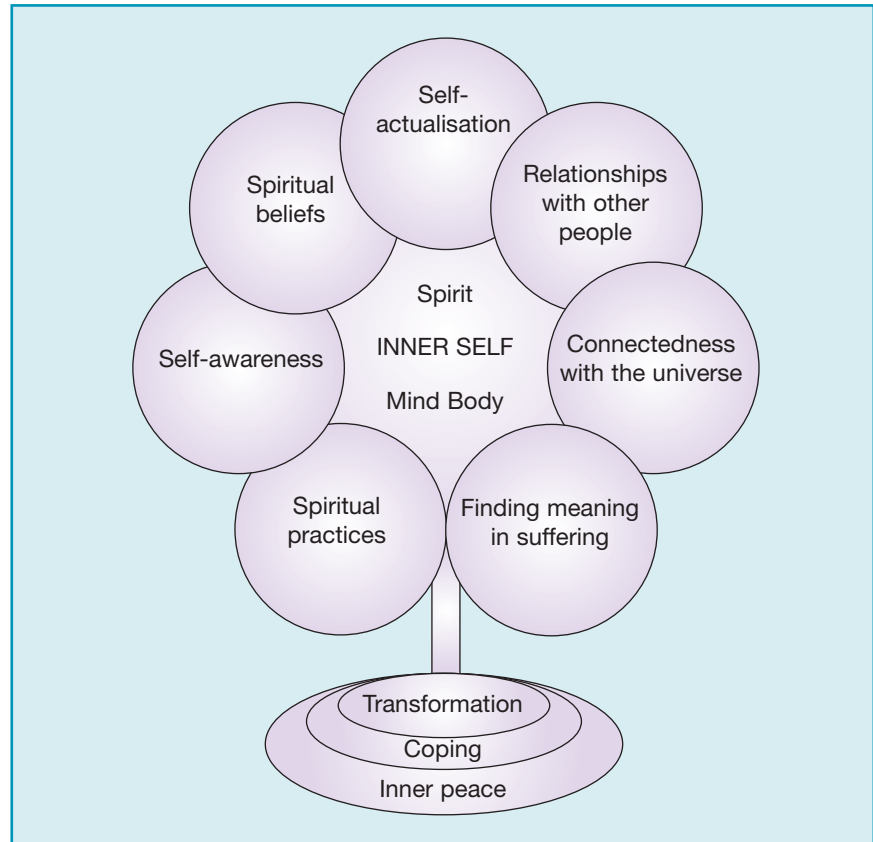


Figure 1. Conceptual framework used to guide the study, focusing on finding inner self in relation to the other components – self-awareness, self-actualisation, connections with the whole universe, finding meaning in life, spiritual beliefs and practices – which help people cope with difficulties and achieve a sense of peace

SQ and CQYAD ranged from 1–4: strongly disagree to strongly agree.¹²

The demographic data collected were age, gender, educational level, ethnicity, religion, and diabetes-related data including type and duration of diabetes, diabetes complications and glycosylated haemoglobin (HbA_{1c}).

The researcher approached young adults in the diabetes outpatient clinic while they waited for their appointments, explained the study, and distributed the questionnaires with a pre-addressed, reply-paid envelope and a letter explaining the study. Completing and returning the questionnaires implied consent to participate.

Permission to recruit young

adults with diabetes through the Reality Check website was obtained from the website manager, who posted it on the website and in the Reality Check monthly online newsletter, which is readily accessible to young adults with diabetes. Those interested in participating in the study either returned the completed questionnaire to the researcher's e-mail address, or printed and mailed a hard copy to the researcher at the university. The number of people regularly accessing the Reality Check website is unknown.

Data analysis procedures

Data were analysed using SPSS version 14. Frequencies and descriptive statistics were employed to describe



demographic characteristics. Data obtained from the questionnaires were ordinal; therefore, non-parametric correlation statistical tests were used to investigate the relationships among the variables of interest.¹³ Rank correlation tests including Spearman's rho and Kendall's tau were used to examine the relationship between spirituality and coping, and among spirituality, coping, age and HbA_{1c}. Mann-Whitney U was used to investigate the relationship between spirituality and gender, and the Kruskal-Wallis H test was employed to investigate the relationship among spirituality, coping, education, religion, ethnicity and the duration of diabetes.

Ethical considerations

Ethics approval to conduct the study was obtained from Deakin University Human Research Ethics Committee (HREC), the HREC of the sampling hospital and the manager of the website. The participants were assured that their personal details would not be able to be identified in any report, paper or presentation arising from the study.

Results

Eighty-five completed questionnaires were returned from the diabetes clinic (response rate = 57%) and 15 were returned by e-mail from the Reality Check website, giving an overall sample of 100. Respondents were aged 18–30 years, mean 22.7 ± 4 SD. A range of ethnic groups, religions, education level, diabetes duration, diabetes complications and HbA_{1c} were represented.

Definition of spirituality

'Self-awareness' was the most important section of spirituality to young adults with diabetes (mean 31.7 ± 5.8 SD out of 40). Three items of 'I am a compassionate

person', 'I have a number of good qualities' and 'I have a meaningful life' were the highest scoring items in this section.

'Trying to live in harmony with nature' was the highest scoring item (2.91 ± 0.67 SD out of 4) among the six items examined in the 'spiritual practices' section. 'Relationships are important in my life' and 'I need to have strong connections with people' (mean scores 3.46 and 3.10, respectively) were scored by the participants as the most important items in the 'spiritual needs' section.

The open-ended questions about description of spirituality and its impact on wellbeing were answered by 90 of the 100 participants, and the following seven themes emerged:

- Being in touch with the inner self
- Having a sense of purpose and meaning in life
- Connecting with other people, nature and a higher being
- Having a belief system
- Positive attitude
- Having a sense of inner peace and balance
- Connecting spirituality with religion.

Importantly, young adults with diabetes who participated in the study defined spirituality as a sense of connecting with the inner self, other people, nature and, in some people, with a higher being.

Spirituality, coping and demographic variables

Examining the relationships among demographic variables and spirituality revealed that males had higher self-efficacy scores and social-focused coping behaviours than females ($p < 0.003$ and $p < 0.004$, respectively). Females adopted more spiritual practices than males ($p < 0.01$). Spirituality had a significant relationship with education in that young adults with higher education were more spiritual ($p < 0.03$). Participants with a shorter duration of diabetes obtained higher overall spirituality scores ($p < 0.03$).

There was no significant difference in spirituality or coping between respondents who had an organised religion ($n = 54$) and those who indicated having no organised religion ($n = 45$) (Figure 2). There was a significant relationship between spirituality and

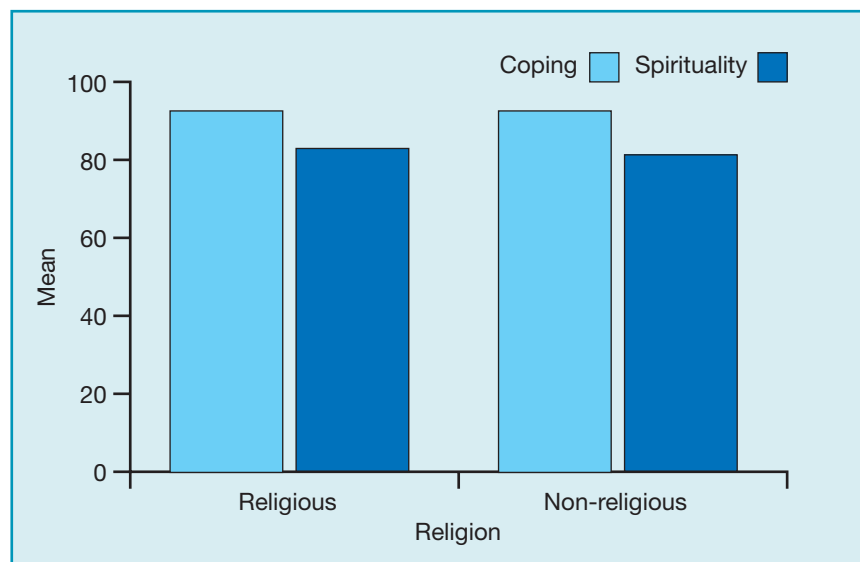


Figure 2. Differences of spirituality and coping in religious and non-religious young adults with diabetes



HbA_{1c}: the higher the spirituality, the lower the HbA_{1c} ($p < 0.04$) (Figure 3). Likewise, there was a significant relationship between lower HbA_{1c} and self-awareness ($p < 0.01$).

Males and females were not significantly different in their overall coping scores. There was a significant inverse relationship between HbA_{1c} and coping ($p = 0.001$). The higher the self-efficacy scores, the lower the HbA_{1c} ($p = 0.002$).

Spirituality and coping

Coping was significantly correlated with overall spirituality ($p < 0.002$). Self-awareness had a positive significant impact on coping ($p = 0.000$). Table 1 shows the association among aspects of spirituality and aspects of coping.

Discussion

This article highlights the importance of addressing spirituality in diabetes management. Respondents in the current study conceptualised spirituality as a multidimensional aspect of people's lives, with the key aspects of 'sense of self or finding inner self', 'finding meaning in life', and 'connectedness with other people, nature and the whole universe'. 'Finding the inner self' was a dominant theme in defining spirituality.

Spirituality was associated with gender: females were more likely to engage in spiritual practices, but males were more self-aware than females. This finding suggests that males and females might take different paths on their spiritual journeys, which could partly be explained by their different biological and psychological characteristics. Healthcare professionals who care for people with diabetes need to consider that young men and women may take different spiritual paths and have different spiritual growth trajectories.

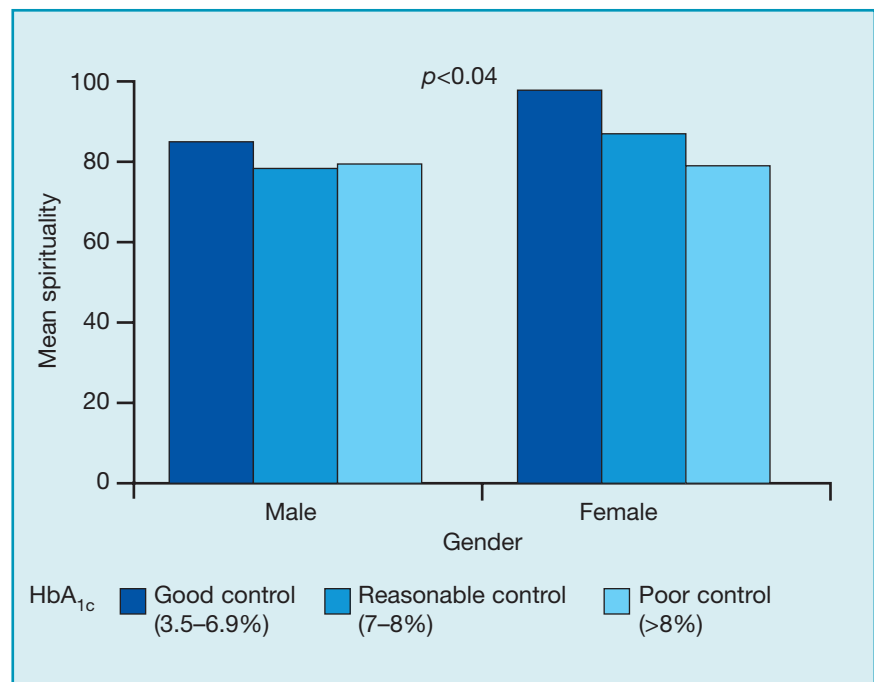


Figure 3. Relationship between spirituality and HbA_{1c} in male and female young adults with diabetes

The findings also indicated that people with a shorter duration of diabetes had higher spirituality scores. One suggestion might be that young adults with diabetes need spirituality to become empowered and cope with diabetes in the first years after diagnosis. People with type 1 diabetes are usually more ill when diabetes is first diagnosed, and might need more spiritual resources at that time in order to accept their diabetes and improve their coping.

Significant association was found among diabetes control (HbA_{1c}), coping and spirituality; while spirituality and coping were not different between religious and non-religious participants. Qualitative research conducted by Samuel-Hodge *et al.*¹⁴ with 70 African-American women with type 2 diabetes in 10 focus groups, showed the influence of spirituality in self-management of people with type 2 diabetes. Quantitative/qualitative research in women with cardiovascular disease and arthritis also indi-

cated spirituality as an empowering source and a coping mechanism.¹⁵ The relationship between spirituality and coping was an important key finding of the current study.

The findings of the current study and those of other researchers^{14,16,17} suggest that healthcare professionals need to consider the role of spirituality in diabetes self-management and to address spirituality in diabetes care plans and consultations. Further qualitative and quantitative research is needed to explore how spirituality can help young people with diabetes transcend their situation and to determine how spirituality can be incorporated into diabetes care. The current study is continuing to explore the concept of spirituality more extensively in young adults with diabetes, the relationship between spirituality and coping, and the role of health professionals in a qualitative study.

Conclusion

The current study concerns spiritu-



Coping	Spirituality					
	Correlation coefficient and significance	Self-awareness	Spiritual beliefs	Spiritual practices	Spiritual needs	Overall spirituality
Self-efficiency	tau <i>p</i> -value	0.48 0.000	0.20 0.007	0.16 0.03	0.02 0.748	0.23 0.001
Diabetes-related coping behaviours	tau <i>p</i> -value	0.29 0.000	0.12 0.097	0.19 0.010	-0.00 0.974	0.10 0.151
Social-focused behaviours	tau <i>p</i> -value	0.17 0.018	0.22 0.003	0.10 0.152	0.18 0.013	0.22 0.002
Avoidance behaviours	tau <i>p</i> -value	-0.18 0.014	0.02 0.819	-0.09 0.205	-0.06 0.388	-0.03 0.629
Overall coping	tau <i>p</i> -value	0.40 0.000	0.21 0.006	-0.08 0.254	0.11 0.124	0.22 0.002

The bold *p*-values show the significant relationships among aspects of coping and spirituality. Self-awareness was significantly associated with all aspects of coping.

Table 1. The relationship between spirituality and coping using Kendall's tau test

ality as a sense of finding inner self and meaning in life, which is enriched by connections with other people and the universal whole. Spirituality helps young adults with diabetes to cope with stressful situations and enables them to manage their diabetes. More emphasis on the spiritual aspects of care in overall healthcare settings is needed, especially in the healthcare of young people who are at the stage of developing their self-concept.

Conflict of interest statement:

None

References

- Hampton JS, Wienert C. An exploration of spirituality in rural women with chronic illness. *Holis Nurs Pract* 2006; **20**: 27–33.
- Tse S, Lloyd C, Petchkovsky L, *et al.* (2005). Exploration of Australian and New Zealand indigenous people's spirituality and mental health. *Aust Occup Ther J* 2005; **52**: 181–187.
- Maharaj S, Daneman D, Olmsted M, *et al.* Metabolic control in adolescent girls. *Diabetes Care* 2004; **27**: 709–715.
- Laing SP, Jones ME, Swerdlow EJ, *et al.* Psychosocial and socioeconomic risk factors for premature death in young people with type 1 diabetes. *Diabetes Care* 2005; **28**: 1618–1623.
- McSherry W, Cash, K. The language of spirituality: an emerging taxonomy. *Int J Nurs Stud* 2004; **41**: 151–161.
- Pesut B. Spirituality and spiritual care in nursing fundamentals textbooks. *J Nurs Educ* 2008; **47**: 167–173.
- Carr T. Mapping the processes and qualities of spiritual nursing care. *Qual Health Res* 2008; **18**: 686–700.
- Burkhart L, Hogan N. An experiential theory of spiritual care in nursing practice. *Qual Health Res* 2008; **18**: 928–938.
- Greenstreet W. Synchronicity and dissonance: nursing, spirituality and contemporary discourse. *Spirituality Health Int* 2007; **8**: 92–100.
- Speck, P, Higginson I, Addington-Hall J. Spiritual needs in health care. *BMJ* 2004; **329**: 123–124.
- Tanyi RA. Spirituality and family nursing: spiritual assessment and interventions for families. *J Adv Nurs* 2006; **53**: 287–294.
- Parsian, N, Dunning T. Developing and validating a questionnaire to measure spirituality: a psychometric process. *J Global Health Sci* 2009; **1**: 2–11.
- Bryman A, Cramer D. *Quantitative Data Analysis with SPSS12 and 13: a Guide for Social Scientists*. East Sussex: Routledge, 2005.
- Samuel-Hodge CD, Headen SW, Skelly AH, *et al.* Influences of day-to-day self-management of type 2 diabetes among African-American women. *Diabetes Care* 2000; **23**: 928–933.
- Harvey IS. Assessing self-management and spirituality practices among older women. *Am J Health Behav* 2008; **32**: 157–168.
- Polzer RL. African Americans and diabetes: spiritual role of the health care provider in self-management. *Res Nurs Health Research in Nursing and Health* 2007; **30**: 164–174.
- Newlin K, Melkus GD, Tappen R, *et al.* Relationships of religion and spirituality to glycaemic control in black women with type 2 diabetes. *Nurs Res* 2008; **57**: 331–339.