Spiritual Care within Dietetic Practice: A Systematic Literature Review

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Spiritual care within dietetic practice: A systematic literature review

Abstract

Registered dietitians assess, diagnose and treat nutritional problems. Although integral to healthcare, their role in spiritual care is unknown.

We conducted a systematic review of spiritual needs and spiritual care in nutrition and dietetic practice.

Subject headings and keywords were used to search Medline, CINAHL, PsycINFO, AMED for studies exploring spiritual care and nutrition or dietetic practice.

From 1433 records, 13 studies were included. Medium quality evidence showed unmet spiritual needs among dietetic patients suffering from cancer, COPD, heart failure and diabetes. Unmet needs occurred in patients from a variety of ethnicities, religions and none. However, dietitians were only involved in spiritual care regarding nutrition and hydration at the end of life.

Integrating spiritual screening and sign-posting within dietetic practice is prudent, but clinical trials are needed to evaluate its effectiveness.

Keywords

Religious, Spiritual, Nutrition, Dietetic Practice, Spiritual Care

Background

Dietitians (UK) are qualified and regulated healthcare professionals that assess, diagnose and treat dietary and nutritional problems at an individual and wider public-health level. They work in a variety of settings as well as the National Health Service (NHS). They often work as integral members of multi-disciplinary teams to treat complex clinical conditions (BDA, 2020). It is perhaps in this clinical setting that the need for spiritual care in dietetic practice has become apparent. Before defining spiritual care, it is recognised spirituality is an universal dimension amongst humans, it is a multidimensional concept that has been defined as "…the aspect of humanity that refers to the way individuals seek and express meaning and purpose and the way they experience their connectedness to the moment, to self, to others, to nature, and to the significant or sacred" (Pulchalski et al., 2009).

This definition considers secular and religious elements of spirituality, making it an inclusive definition applicable to patients regardless of specific religious affiliation or none.

The European white paper from the European Association of Palliative Care (Best et al., 2020) describes spiritual care as recognizing the importance of the spiritual dimension of care for patients and involves needs assessment and provision of support. It also is considered a type of care that addresses and seeks to meet existential and spiritual needs and challenges in connection with illness and crisis (Hvidt et al., 2020; Selman et al., 2018). Spiritual care is an essential component of quality care for patients (Gijsberts et al., 2019), yet observational evidence suggests that only around 6%-28% of patients receive spiritual care from their healthcare teams (Astrow et al., 2007; Balboni et al., 2007; Balboni et al., 2013; Phelps et al., 2012). A lack of delivery of spiritual care by healthcare teams is associated with poor quality of life, dissatisfaction with care, less hospice utilization, more aggressive treatment, and increased costs, particularly among ethnic minority groups and patients with high levels of religious coping (Balboni et al., 2007; Balboni et al., 2010; Balboni et al., 2011; Pearce et al., 2012).

While the need for spiritual care may traditionally be more apparent in 'religious' countries, recent research has shown its relevance is not diminished in secular countries. For example, in Denmark, one of the most secular cultures in the world, professional perspectives, identified through group concept mapping, showed spiritual care should be an integral aspect of healthcare, although it is challenging to handle. Spiritual care was considered to as paying attention to patients' values and beliefs, requiring adequate skills and is being realised in a relationship between healthcare professional and patient founded on trust and confidence (Hvidt et al., 2020)

A focus group study conducted across nine countries (South Africa, Kenya, South Korea,

United States of America (USA), Canada, United Kingdom (UK), Belgium, Finland and Poland) showed that patients and caregivers experience a range of existential ('why them?', 'why me?', meaning making), psychological (guilt, feeling overwhelmed, questioning ability to cope), religious (anger

towards God, seeking answers from God) and social concerns (relationship patients have with themselves, others, nature and God) (Selman et al., 2018). The participants also emphasised that all healthcare members within an interdisciplinary team need to be able to address spiritual issues, and have an understanding of what these issues can be and the impact they have. Participants also suggested that healthcare professions need to understand the qualities of human connectedness, and how to communicate sensitively about spirituality.

Dietitians are well trained in sensitive listening, to be empathetic and compassionate (BDA, 2013); to communicate well, build good relationships and partnerships (EFAD, 2016). Such characteristics are recognised to be of great importance by patients who want to receive spiritual care (Selman et al., 2018). However dietitians are perhaps less able to identify the need for 'meaning-making' and faith support among their clients, despite this being something they may want. Addressing spirituality and providing spiritual care is often left to the chaplain, however international guidance calls for all healthcare professionals within clinical settings to be trained to address spiritual distress so that interprofessional spiritual care can be fully integrated and patients' spiritual distress attended to by all members of a multi-disciplinary team (Puchalski et al., 2020).

Dietitians work in a clinical setting but a dietetic consultation is often an overlooked place where exploration of religious and spiritual issues could occur. For example, a secure divine attachment has been shown to be associated with improvements in eating disorders (Richards et al., 2013), and faith has been shown to be a valuable resource for those managing weight and improving diet. (Lancaster et al., 2014; Patel et al., 2017a; 2017b). Qualitative studies have consistently reported that patients prefer their spiritual care to be provided by a clinician they are likely to have the most contact with and are familiar with. It is also important that the clinician has had time to build a rapport which is often not possible in the short time frames of many clinical consultations (e.g., general practitioner, consultant etc). Time constraints are a consistently reported barrier to delivering spiritual care

(Balboni et al., 2007; Selman et al., 2018). Dietitians in their usual assessment process will explore day-to-day lives and habits collaboratively, such assessments often enable patients to begin to consider their emotional needs (Hancock et al., 2012) and subsequently their spiritual needs (Morris et al., 2016). Qualitative evidence exploring patient's expectations of dietetic consultations and what they consider important highlight that patients do expect dietitians to consider their nutritional needs holistically, develop a caring relationship with them, which in turn leads to more individualised care, and greater patient agency (Sladdin et al., 2018). This is why it is important for dietitians, as healthcare professionals, to be adequately trained in identifying spiritual concerns and referring on as appropriate.

There is growing review evidence suggesting these spiritual care needs should be met as clear and consistent links have been found between religious/spiritual struggles and poor health and well-being (Abu-Raiya et al., 2015). Spiritual struggles have been defined as follows:

"Spiritual struggles occur when some aspect of spiritual belief or experience becomes the focus of negative thoughts or emotions, concern or conflict. It can take many forms including divine struggle (conflicts about a perceived relationship with a deity) demonic struggle (concerns of evil spirits harming the individual) interpersonal struggles (negative experiences involving religious people, places or issues) and Intrapersonal struggles such as moral struggles (struggling with moral issues and potential transgressions) doubt-related struggles (troubled by doubts around their beliefs) and finally struggles around ultimate meaning (perceived lack of meaning in one's life)." (Exline et al., 2014)

A proposed mechanism by which spiritual struggles lead to poor health is through a psychoneuroimmunological pathway (interaction between psychological processes and the nervous and immune systems). Spiritual struggles may lead to stress and low mood which affects both mental and physical health. Whereas positive religious coping, which encompasses religiously framed cognitive, emotional, or behavioural responses to stress, is associated with a reduction in

stress and therefore with better physical and mental wellbeing (Ano & Vasconcelles, 2005). Positive religious coping may help achieve meaning in life, closeness to the divine, hope, peace, connection to others, self-development, and personal restraint (Pargament et al., 1997).When individuals use religion to cope, they often seek social support from their religious communities too. A nationwide study showed that people adopt more positive religious coping methods when there is spiritual support provided by their religious community (Krause et al., 2001).

At this point, it is important to note the role of stress and low mood in many health conditions that dietitians treat on a daily basis. A common maladaptive response to these negative emotions is to overeat (Adam & Epel, 2007), indeed evidence from a cohort of undergraduate students in the USA suggests a positive association between binge eating and compensatory behaviours with anger or disappointment toward God (from Attachment to God Scale-9) and fear of God's disapproval (Exline et al., 2016). Stress and depression is also associated with poor appetite and malnutrition (Zhang et al., 2019), it can negatively affect gut health (Windgassen et al., 2017) increase cardiovascular disease risk factors (Barth et al., 2004) and lead to a deterioration in glycaemic control (Riazi et al., 2004).

Therefore, in extension to the biopsychosocial model of health that dietitians currently use, evidence suggests that dietetic practice may benefit from being more intentional about addressing spiritual and religious needs. This systematic review investigates whether there is direct evidence of spiritual or religious needs among the patients that dietitians see, if and how dietetic practice is addressing these needs.

Aim

To conduct a systematic literature review, following PRISMA guidelines (Moher et al., 2009), to investigate whether there are spiritual needs in nutrition and dietetic practice and what spiritual care is provided?

Methods

Eligibility criteria

Qualitative and quantitative studies of any design were included, where religiously spiritual needs or concerns were addressed as part of nutrition and dietetic practice (Table 1).

Table 1. Eligibility criteria for study selection

	Inclusion criteria	Exclusion criteria
Population	Dietitians and Nutritionists or identified users of dietetic services	All other health care professional practice not inclusive of dietitians
Intervention	Spiritual care defined as an intervention to identify and /or meet spiritual or religious needs; address a religious or spiritual crisis; or facilitate religious coping.	Spiritual care that does not consider a religious or spiritual crisis; or facilitate religious coping.
Comparison	Studies with or without any comparison or control conditions	No comparisons or control conditions
Outcomes	Studies with or without outcome measures	No outcomes
Study type	Qualitative and quantitative studies of any design, primary research and evidence synthesis and policy documents	Narrative reviews, commentaries, perspectives or textbooks

Information sources

Medline, CINAHL, PSYCH-info and AMED databases were searched, for studies meeting eligibility criteria, through the EBSCO host from inception to 21st May 2019.

Search Strategy

Search strategies included Medical Subject Heading (MeSH) terms for Medline and corresponding subject headings for each of the other databases; these together with keywords combined with 'OR' to capture literature where food, nutrition and dietetic practice were the major concept of the article. To capture articles researching the eligible intervention MeSH terms and corresponding subject headings relating to religious, spiritual or faith-based care, keywords with wildcards capturing spiritual, religious, pastoral, chaplaincy care or support were combined with OR and

searched in the abstract of articles. To capture both these categories they were combined with AND. No other limiters were applied, but only articles in the English language were eligible for inclusion. Full search strategy is available on request.

Study selection

Eligibility criteria was defined to include only those studies where a dietitian or nutrition professional was directly involved and there was reference made to the delivery of religious or spiritual needs (Table 1). It was defined to exclude studies where dietetic practice or nutritional interventions are culturally tailored but without a religious element, as this is already standard dietetic practice (BDA, 2013). Exclusion criteria was also designed to exclude interventions delivered in a religious setting by lay people or volunteers as these are already recommended by the World Health Organisation (WHO, 2009).

DL screened title and abstract against eligibility criteria and identified articles for which full text was obtained. Full text of articles were again assessed against the eligibility criteria and either accepted for inclusion in the review of rejected with reason given (Figure 1).

There was no restriction on study design, observational, qualitative, intervention studies were included as well as systematic reviews and clinical guidelines.

Risk of bias in individual studies

Risk of bias of selected studies was assessed by noting the strengths and limitations of the methods for each study in line with robust reporting guidelines from the EQUATOR-Network (Enhancing the QUAlity and Transparency Of health Research) (Altman et al., 2008).

Risk of bias across studies

Given the above risk of individual studies an overall statement was made about the quality of the evidence supporting each finding from the systematic review.

Analysis

Given the limited amount of quantitative evidence found, evidence from the studies was synthesised narratively and conclusions were drawn from this.

Results

Study selection

A total of 13 studies met the inclusion criteria after screening full text of 91 articles identified as potentially relevant from screening the tile and abstract of 1433 articles identified from the database search (Figure 1).

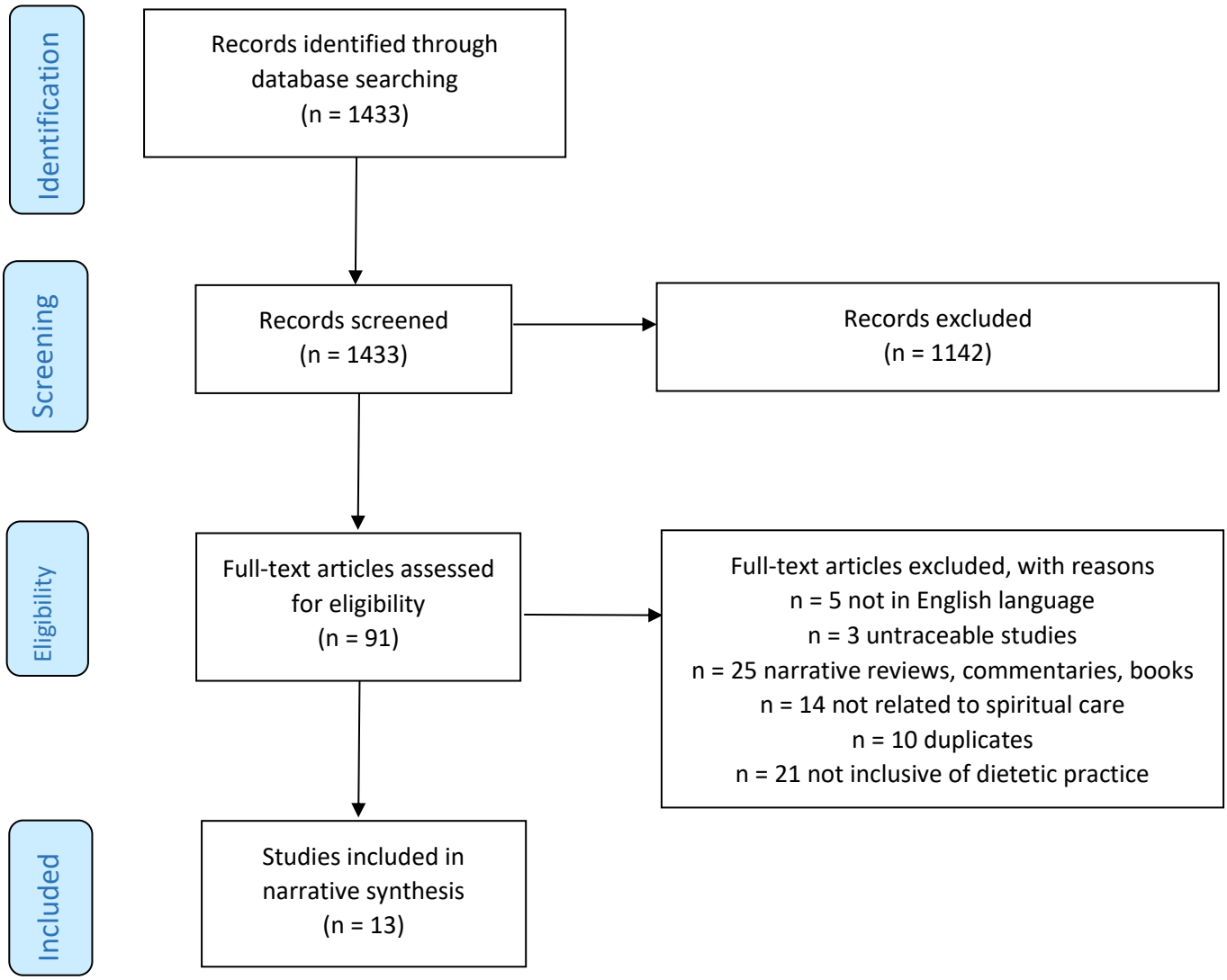

Figure 1. Systematic review flow diagram: the PRISMA flow diagram for the systematic review detailing the database searches, the number of abstracts screened and the full texts retrieved.

Study characteristics and risk of bias

Of the 13 included studies, 5 were clinical guidelines for dietitians relating to providing or withdrawing/withholding nutrition and hydration at the end of life. Three of these were position statements from the American Academy of Nutrition and Dietetics that developed over time (O'Sullivan Maillet et al., 1995; 2002; 2013); the first was in consideration of permanently unconscious patients and the latter two broadened to consider this ethical dilemma across the lifespan. The first was based on law, judicial cases, ethical theories and consideration of various religious viewpoints; by 2013 the guidelines included judicial case from over 30 years, as well as clinical studies on physiological change to feeding and withdrawing at the end of life. None of these guidelines contained any empirical evidence evaluating the role of dietitians in contributing to end of life feeding decisions.

The other two clinical guidelines contained literature review on clinical outcomes regarding feeding at this stage of life, however one was not a systematic review so there was a high risk of study selection bias and there was no evidence of critical appraisal of included studies. This guideline was by American Society for Parenteral and Enteral Nutrition (ASPEN) specifically regarding feeding gastrostomy placement (Schwartz et al., 2014). The other guidelines was from the European Society of Parenteral and Enteral Nutrition (ESPEN), this was based on a systematic review followed by consensus reached through a multidisciplinary Delphi exercise, however it is considered to have a medium risk of bias as the literature review was conducted 6 years prior to publication of this specific guideline (Druml et al., 2016).

There were 2 other studies relating to end of life care, one was a robustly conducted qualitative focus group study of healthcare professionals in Canada (Sohi et al., 2015) and the other was a cross-sectional study of multidisciplinary involvement in palliative care units in Japan (Maeyama et al., 2003). Response rates in the study in Japan were good reducing the risk of response bias; however, it was not clear from reporting which disciplines were in attendance at any one time.

The remaining 6 studies were conducted primarily on patients, one was a large longitudinal study investigated the association of distress and unmet needs in cancer patients with use of psychosocial services, adjusted analysis reduced the risk of bias in this study (Hamilton & Kroska, 2018). The other 5 were qualitative studies conducted with varying degrees of rigour. They explored nutritional problems in those in the UK with Chronic Obstructive Pulmonary Disease (COPD) (Dickenson, 2009); explored barriers and facilitators to adherence to nutrition recommendations, this was a particularly rigourous study amongst the Chuukese in Chuuk and Hawaii, with perspectives from faith leaders, health care providers, individual with diabetes and their carers (Aitaoto et al., 2014). Also studies exploring dietary sodium and fluid restriction Chinese patients with heart failure (Rong et al., 2016); exploring Arab-American knowledge, perceptions, and practices relevant to diabetes and their preferences for a lifestyle intervention. (Bertran et al., 2016) and exploration of the healthcare experiences Somali and Bangladeshi Muslim women, living in Canada and observing Ramadan (Pathy et al., 2011). See Table 2 for more details on study characteristics and risk of bias.

Table 2. Characteristics of included studies, with the results on spiritual care and quality of study (strengths and limitations)

Reference	Study Type	Population	Intervention/ Exposure	Comparator	Outcomes and Results	Strengths & Limitations /Risk of Bias
O'Sullivan Maillet et al., 1995	Position Paper of The American Dietetic Association	Permanently Unconscious Patients	Feeding	Not feeding	Ethical considerations. Summary of recommendations: "Health care team members, including the dietitian, must set patient-centred treatment goals that are handled individually and that respect the unique values and personal decision of the patient. The patient's expressed desire is the primary guide for determining the extent of nutrition and hydration once the patient is diagnosed as being in a PVS [Permanently vegetative state]. Within the extent of the law, the family should share decision making when the patient's preference is not stated and the family is in agreement about medical care. The health care team will need to discuss with the family as needed the issues of ethics, values, religious guidelines, and pastoral advice. If the patient's choice is feeding, the dietitian will ensure that the composition of the feeding promotes nutritional health. If the patient's choice is cessation of feeding, the dietitian should explain what is known about the duration of time between cessation of feeding and death. Sensitivity to the family's needs and responsiveness to their questions are imperative in both scenarios. Within institutions, the ethics committee should help establish and implement defined written guidelines for care of the permanently unconscious. The dietitian should be required to be a member of or consultant to such a committee and should serve an integral role in development of institutional policy. The dietitian must provide education about nutrition and hydration issues, serve as a patient advocate, and participate in the legal and ethical issues regarding feeding. The dietetics community is involved in the legislative arena at the state and local level to promote the use of advanced directives and to affect legislative and societal changes that result in appropriate care for patients in a PVS."	Strengths: Based on law, historical legal cases, ethical theories and consideration of various religious viewpoints Limitations: No statistics on dietitians' role in these areas Risk of bias: High
O'Sullivan Maillet et al., 2002	Position Paper of the Academy of Nutrition and Dietetics	Persons through the lifespan for which providing nutrition and hydration present ethical issues	Providing nutrition and hydration	withdrawing, or withholding nutrition and hydration	Ethical considerations. As details above and in summary: is the position of the American Dietetic Association that the development of clinical and ethical criteria for the nutrition and hydration of persons through the life span should be established by members of the health care team. Registered dietitians should work collaboratively to make nutrition, hydration, and feeding recommendations in individual cases.	Strengths: Based on law, historical legal cases over 25 years, clinical evidence and ethical theories and consideration of various religious viewpoints

						Limitations: No statistics on dietitians' role in these areas Risk of bias: High
O'Sullivan Maillet et al., 2013	Position Paper of the Academy of Nutrition and Dietetics	Terminally ill, end-of-life, permanently unconscious	Providing nutrition and hydration	withdrawing, or withholding nutrition and hydration	Ethical Considerations Summary of recommendations: "Registered dietitians (RDs) should work collaboratively as part of the interprofessional team to make recommendations on providing, withdrawing, or withholding nutrition and hydration in individual cases and serve as active members of institutional ethics committees. RDs have an active role in determining the nutrition and hydration requirements for individuals throughout the life span. When individuals choose to forgo any type of nutrition and hydration (natural or artificial), or when individuals lack decision-making capacity and others must decide whether or not to provide artificial nutrition and hydration, RDs have a professional role in the ethical deliberation around those decisions. Across the life span, there are multiple instances when nutrition and hydration issues create ethical dilemmas. There is strong clinical, ethical, and legal support both for and against the administration of food and water when issues arise regarding what is or is not wanted by the individual and what is or is not warranted by empirical clinical evidence. When a conflict arises, the decision requires ethical deliberation. RDs' understanding of nutrition and hydration within the context of nutritional requirements and cultural, social, psychological, and spiritual needs provide an essential basis for ethical deliberation. RDs, as health care team members, have the responsibility to promote use of advanced directives. RDs promote the rights of the individual and help the health care team implement appropriate therapy."	Strengths: Based previous guidelines, law, judicial decisions over 30 years, clinical evidence of physiological change and ethical theories Limitations: No statistics on dietitians' role in these areas Risk of bias: High
Schwartz et al., 2014	Literature review within special report by American Society for Parenteral and Enteral Nutrition (ASPEN)	Patients With Advanced Dementia or Near End of Life	Feeding Gastrostomy Placement	Feeding Gastrostomy placement not performed	Recommendations for Ethical Practice. Recommendation 5 states: "The autonomy of the patient or surrogate decision maker should be respected. Emphasis should be placed on functional status and quality of life. An essential aspect of the process involves cultural, religious, social, and emotional sensitivity to the patient's value system. A time-limited trial of nasogastric feedings may be considered if a decision to proceed in the future with a G-tube is made."	Strengths: Literature review conducted on the clinical outcomes associated with gastrostomy placement and previous guidelines considered. Limitations: Not a systematic literature review, so cannot judge search strategy or inclusion criteria. No evidence of critical appraisal of included studies.

						Risk of bias: Medium
Druml et al., 2016	International multidisciplinary working group based on the main aspects of the Guideline on "Ethical and Legal Aspects of Artificial Nutrition" published 2013 by the German Society for Nutritional Medicine (DGEM) after conducting a review of specific current literature. The text was extended and introduced a broader view in particular on the impact of culture and religion. Final approval by members European Society of Parenteral and Enteral Nutrition (ESPEN) working groups and committees via a Delphi process	Adult patients where feeding presents an ethical dilemma	Providing nutrition and hydration	withdrawing, or withholding nutrition and hydration	Ethical Considerations. Patient autonomy is key as well as careful communication with patients and families. Due to increasingly multicultural societies and the need for awareness of different values and beliefs is elaborated as: Statement 35 is in respect to religious and spiritual needs: "There should be awareness and obligatory education for medical personnel [including the nutritionists] to enable them to treat patients appropriately to their spiritual needs. Respect for religious, ethnic and cultural background of patients and their families has to be granted." The guidelines details specific considerations across different religions.	Strengths: Based on literature review in previous guidance. Consensus reached by a Multidisciplinary Delphi exercise. Limitations: literature conducted in 2010, 6 years before publication of this guidance. Risk of bias: Medium
Sohi et al., 2015	Research Action design, two rounds of focus groups with four inter-professional groups from various clinical settings of a health centre in Quebec, Canada	37 participants representing nine professions: nurse, dietitian, occupational therapist, orderly, pastoral worker, physician, physiotherapist, respiratory therapist and social worker	Involvement in collaboration to facilitate patient participation in decisions regarding life-prolonging care	N/A	Themes to increase collaboration: (1) recognizing the involvement of different key players in the communications surrounding this decision-making process, (2) using certain strategies to facilitate patient participation, such as building trust, verifying patient comprehension, taking time to listen, and inquiring about patient goals of care, quality of life, life goals and (3) increasing communication between professionals regarding the establishment of common goals of care, the sharing and validation of pertinent patient information, and the inclusion of the patient. Development of two new communication tools: Documenting Patient Wishes, aimed at encouraging all health professionals to explore patients' wishes and effectively documenting relevant information obtained, and Patient's Goals of Care, inciting	Strengths: Good multidisciplinary representation. Temporal triangulation. Limitations: Results may not be transferable to larger health care centres or in more culturally diverse communities. Risk of bias: Low

					professionals to explore and document the patient's goals of care before discussing related specific medical interventions.	
Maeyama et al., 2003	Cross-sectional Study in 38 Institutions in Japan	Multidisciplinary team (MDT) in Palliative Care Units	Attendance at MDT meetings	No attendance at MDT meetings	Percentage of MDT meetings and MDT in attendance 70% of institutions held regular care meetings with more than three types of health-care providers. Weekly or more frequent attendance at MDT meetings by: 37% of dietitians, 39% of medical social workers, 27% of pharmacists, 13% of physical therapists 35% of religious workers 11% of counsellors.	Strengths: Response rates 86% for institutions 100% for nurses, 97% for physicians, 95% for dietitians, 82% for medical social workers, 79% for pharmacists. Limitations: Unclear which healthcare professionals were in attendance at each of the meetings so cannot conclude extent to which dietitians worked with religious workers. Risk of bias: Medium
Hamilton & Kroska, 2018	Longitudinal study conducted at cancer centre in Mid-Western USA	1213 adult cancer patients early-on in cancer care Age: 62 (13.8) Female: 54% Married 62% Caucasian: 82% African-American: 10.7%, Hispanic: 1.8% Asian: 1.5% Mean distress score: 3.3 (2.9) Moderate level of distress (>4): 43.2% No of unmet needs 3.3 (2.7)	High levels of Distress Unmet Needs	Low levels of distress Few unmet needs	Association between distress, unmet needs and psychosocial service (social work, psychology, nutrition, chaplain) use in the 12 months that followed. No of services used: 1.1 (1.0) Percentage use of Dietitians: 29.8% Visits: 2.7 (2.8) Social workers: 26.5% Visits: 1.9 (2.0) Psychology: 5.9% Visits: 2.5 (1.8). Chaplaincy 5.4% Visits: 1.52 (0.80) -Significant positive association between distress and dietetic service -Positive association between distress and chaplaincy service use (not statistically significant) -Two or more needs in a specific domain i.e. nutritional, spiritual predicted use of that service significantly for dietitians but not a significantly predictor for chaplaincy use. Only 1% of those needing referral to chaplain had an appointment and 6% of those who did not meet referral criteria to chaplain had a self-selected appointment. 63% of those needing referral to dietitian had an appointment and 37% of those who did not meet referral criteria to a dietitian had a self-selected appointment.	Strengths: Large sample, Adjusted analysis Limitations: Largely homogenous Caucasian, heterosexual, and middle-income sample. Not clear what baseline use of these services was? Reasons why those needing referral did not get appointment is unclear Risk of bias: High

Dickenson, 2009	Qualitative semi-structured interview study in UK	12 individuals with Chronic Obstructive Pulmonary Disease (COPD), 6 had received dietary advice and intervention from a dietitian, 6 had not.	Exploration of dietary habits, eating difficulties and their perceived consequences in COPD	N/A	Five categories were identified: Physical, Nutritional, Social, Emotional/Psychological and Spiritual needs Despite questions directed at nutrition, other areas of need dominated the conversations. Spiritual issues included questions such as 'why me?', expressions of regret, resignation, acceptance, fears of the future particularly around dying or dying alone because of breathlessness.	Strengths: Clearly written methods Limitations: no details on how rigour was applied e.g. was there any peer review of analysis or member checking? Risk of bias: High
Aitaoto et al., 2015	Grounded Theory and Community-Based Participatory Research	Faith leaders and health care providers individual with diabetes and carers	Exploration of barriers and facilitators to adherence to nutrition recommendations amongst the Chuukese in Chuuk and Hawaii	N/A	Spiritual and faith related barriers: Lack of culturally appropriate options for dietary modification. Lack of motivation. Emotional issues whereby unhealthy foods are palatable and make them emotionally satisfied. Congregant dining (6 meals per week eaten at church) and not wanting to eat differently. Needs: Participants expressed the need for interventions holistic. I.e. nutrition education that addresses the needs of the mind (eg, culturally and contextually appropriate nutrition education and skills training, for example addressing congregant eating, ease of preparation, access and cost; body (eg, ability to care for the physical body, cultivate strong relationship with family members and stewardship of resources), and spirit (eg, faith, encouragement, motivation, and accountability). Participants prioritized the critical need to address the following emotions and attitudes related to a diabetes diagnosis and living with diabetes everyday and for the rest of their lives: denial, shame, anger, fear, hopelessness, passiveness, and sadness.	Strengths: Diverse sample of participants provided triangulation. Large sample of 102 individuals plus 17 faith leaders and 12 health professionals Peer review/group coding was conducted Limitations: Unclear whether member checking was conducted. Risk of bias: Low
Rong et al., 2016	Qualitative study using semi-structured in interviews and framework analysis using Leininger's Sunrise Model for transcultural nursing	15 Chinese heart Failure patients in East Shanghai Hospital; >60 years old	Exploration of dietary sodium and fluid restriction	N/A	7 cultural themes that affect compliance with dietary and fluid restrictions in heart failure. These are attitudes concerning health and illness, lifestyle, kinship and social factors, religion, financial concerns, education, and use of the folk care system and the traditional Chinese medicine system. More specifically religiously spiritual aspects were: A blasé attitude to dietary restriction based on Taoist and Buddhist philosophies of a fatalistic attitude to life and health and also the importance of food and tea drinking in terms of routine and respectfulness to others who prepare them traditional salty food.	Strengths: Peer review of codes and themes Limitations: the Sunrise model may include a bias regarding the effect of culture on dietary and fluid restriction behaviour Risk of bias: Medium

					In one case motivation to restrict salt was to reduce oedema so could adopt correct position for meditation.	
Bertran et al., 2016	Qualitative focus group study	Sixty-nine self-identified Arab or Arab Americans ≥30 years of age and without diabetes. 62% of the sample was female 2016	Exploration of Arab-American knowledge, perceptions, and practices relevant to diabetes and their preferences for a lifestyle intervention.	N/A	Intervention preferences included gender-specific exercise, group-delivered education featuring religious ideology, inclusion of the family, and utilization of community facilities. The role of Islam is inseparable from the fabric of the Arab culture with daily prayers, dietary considerations, periods of fasting. One participant noted that a lifestyle intervention program should reflect the history, diversity, and religiosity of the Arab community: "Bring wise old Arabic sayings from the Chaldean culture in the Iraqi history to the Greek and Arabic culture that was in Lebanon and all cultures. You can find subjects or stories about nutrition and medicine dealing with nutrition. All these, if we include, it will feel that this is a book automatically; a special book that includes ethnic matters."	Strengths: Interviews conducted in Arabic and translated by a bilingual translator to minimise meaning getting lost through language barriers. Limitations: Peer review of coding not apparent. Risk of bias: Medium
Pathy et al., 2011	Qualitative interviews and focus groups	22 health care professionals were interviewed: six family physicians, four internists, one obstetrician, one respirologist, five dieticians, two registered nurses, two pharmacists and a pharmacy technician.	Religious practices related to fasting during Ramadan, the impact of fasting on health and the role health professionals during Ramadan	N/A	Four major themes: (1) the spiritual significance of Ramadan to Muslims; (2) the health implications of fasting during Ramadan; (3) health-related observances during Ramadan; and (4) the relationship between patient and health professionals during Ramadan. All women discussed they wanted their healthcare providers to be respectful and understanding towards their faith. Women discussed they wanted their healthcare professionals to provide health advice that supports their decision to fast rather than advising them to not engage with their religious practices during Ramadan.	Strengths: Focus groups with Somalian and Bangladeshi women had co-facilitators from the respective culture and language (Bangladeshi and Somalian) who actively translated and engaged with participants if language or cultural interpretation were required. Peer review and descriptive and interpretive validity were conducted to enhance rigor of analysis. Limitations: Study design and data collection materials were not designed with input from the cultural and religious background of the population studied. Interpretations were not confirmed for accuracy. Risk of bias: Medium

Evidence Synthesis

Of the 13 included studies, four studies contained details of patients with spiritual needs that were accessing dietetic services (Aitaoto et al., 2015; Bertran et al., 2016; Dickenson, 2009; Hamilton & Kroska, 2018), and six studies discussed how spiritual care does or should occur in practice (Maeyama et al., 2003; O'Sullivan Maillet et al., 2002; 2013; Rong et al., 2016; Schwartz et al., 2014; Sohi et al., 2015). Three studies discussed both spiritual needs in dietetic clinics and how spiritual care is addressed (Druml et al., 2016; Pathy et al., 2011; O'Sullivan Maillet et al., 1995).

Spiritual care in nutrition or dietetic practice at the end of life

Clinical guidelines from the USA and Europe consistently recommend the dietitian's role in ethical deliberations with regard to nutrition and hydration at the end of life, both at the bedside and serving on ethical committees. A dietitian's responsibility is to provide expertise in nutritional requirements at the end of life in line with a patient's unique wishes, promoting advance directives. Where there is conflict the family should share decision making, decisions should be within the law and in consideration of an individual's cultural, social, psychological, religious and spiritual needs is essential to ethical discussion with family and the multidisciplinary team. Effective and consistent communication of patient goals within the team is paramount to appropriate care (Table 2).

The above statement is based on clinical guidelines, early development of these carried a high risk of bias which reduced to a medium risk in more recent guidelines which incorporated literature reviews, focus group and Delphi studies (Table 2).

Evidence of actual involvement of dietitians in discussing the religious and spiritual needs of individuals at the end of life is limited. One cross-sectional study showed that 37% of dietitians and 35% of religious workers attended multi-disciplinary meetings in palliative care units in Japan, however it was unclear whether they were both in attendance, working together at any one meeting (Maeyama et al., 2003).

Spiritual needs in prolonged conditions, for those seeing a dietitian or nutrition healthcare professional

A large survey (n=1213) explored the impact of distress on utilisation of psychosocial services in cancer patients. During the second appointment with the oncologist a needs assessment of the patient was conducted to determine which psychosocial service patients should be referred to (e.g. for nutritional needs patients were referred to the dietitian, for spiritual concerns they were referred to the chaplain). The findings showed that nutritional and spiritual needs were evident in cancer patients in the USA, with 30% of patients seeing a dietitian and 5% of patients seeing a chaplain. Higher levels of distress significantly predicted more dietetic service use and non-significantly predicted more chaplaincy service use. Two or more nutritional needs significantly predicted dietitian use and two or more spiritual needs non-significantly predicted chaplaincy use. 63% of those needing referral to dietitian had an appointment and 37% of those who did not meet referral criteria to a dietitian had a self-selected appointment; whereas only 1% of those needing referral to chaplain had an appointment and 6% of those who did not meet referral criteria to chaplain had a self-selected appointment (Hamilton & Kroska, 2018, Table 2). Whilst the authors do not discuss why chaplaincy services received such low up-take, they listed barriers around personnel availability and capacity to receive referrals, which could explain why dietitian and social workers were more utilised. Also patient specific barriers around managing competing treatment demands and travelling to different locations to access services could also explain lack of uptake of referrals.

Patients in the UK suffering from COPD interviewed about nutritional problems redirected conversations to focus primarily on other areas of need. Spiritual issues included questions such as "why me?" Participants expressed feelings of regret, resignation, acceptance and fears of the future particularly around dying or dying alone because of breathlessness (Dickenson, 2009, Table 2).

Chuukese patients with diabetes living in Chuuk and Hawaii expressed the need for holistic interventions that was not only culturally and socially appropriate e.g. addressing meals eaten

almost daily as a church community but also spiritual using aspects of faith to motivate and encourage care for your body and wise use of resources. Participants identified specific emotional needs associated with having diabetes that they would like addressed spiritually, these included: denial, shame, anger, fear, hopelessness, passiveness, and sadness (Aitaoto et al., 2015, Table 2).

Chinese patients with heart failure discussed how nutrition advice often conflicted with their cultural and spiritual philosophies of life. For example, they understood that dietary restriction of sodium and fluid was a necessary treatment for heart failure, but their spiritual values, embracing embraced Taoist and Buddhist philosophy to live life in the moment; rather than thinking about the future, was more important. This meant they chose to eat traditional salty foods and drink tea with family and friends, being respectful of their hosts and enjoying the moment, rather than stick to dietary restrictions. Patients required healthcare professionals to understand their wider cultural and spiritual needs when providing healthcare advice. Specifically for dietitians, given how important food is within Chinese culture, dietitians need consider how to provide dietary advice without compromising these spiritual values. In the study patients discussed their motivation to restrict salt came from the reduction in oedema which helped with getting the right posture for meditation (Rong et al., 2016, Table 2). Dietitians could also work with this motivation to help change dietary behaviour. Arab-Americans at risk of diabetes expressed preference for lifestyle interventions that embraced their Islamic ideology as well as taking place in community settings. Not only was reference made to dietary laws and fasting but also to daily prayer (Bertran et al., 2016, Table 2).

The evidence suggests there are unmet spiritual needs among patients receiving dietetic care for a variety of long-term conditions including; cancer, COPD, heart failure and diabetes. These unmet needs are seen in patients from a variety of ethnicities, religions and none.

The above statement is based on one cross sectional study with a high risk of bias and qualitative studies with a medium risk of bias on average.

Understanding spiritual needs during Ramadan and what this means for nutrition and dietetic practice

Somali and Bangladeshi women living in Canada reported the spiritual significance of Ramadan beyond that a religious observance (Pathy et al., 2011). Health professionals expressed health concerns around the practice of fasting (e.g. dehydration in pregnancy, hypoglycaemia in diabetes). There was general consensus that Muslim women considered there were health benefits to fasting, many considered that these benefits outweighed any negative health effects (e.g., overeating during non-fasting periods, caffeine withdrawal headaches and not taking medication for other health conditions). There was a sense that the fasting during difficulties reaped greater reward and God would provide the strength when health was poor, although there was also the expression that fasting did not take precedence over maintaining one's health, especially in emergencies, it was perceived that "Allah doesn't get angry". This illustrated there were variations in practices and beliefs among the Muslim women themselves.

Some patients would not be open to advice against fasting but would be interested in learning how to best maintain their health while fasting. Informal peer counselling or talking to their spiritual advisor about weighing the pros and cons may be helpful. As may formal published guidelines on optimising health during Ramadan endorsed by Muslim leaders from the various local ethnic communities (Pathy et al., 2011, Table 2).

These results came from one qualitative study considered of medium quality, but nonetheless highlight spiritual needs could be better considered in tailoring dietetic advice to individuals, around the period of Ramadan.

Discussion

Summary of Results

This systematic review aimed to investigate (1) whether there is direct evidence of spiritual or religious needs among the patients that dietitians see, (2) if and how dietetic practice is addressing these needs. The findings from this review with reference to the first aim identified that patients receiving dietetic care for a variety of long-term conditions including; cancer, COPD, heart failure and diabetes, all had unmet spiritual needs that were reflective of spiritual struggles, regardless of their ethnicity or religious (or none) affiliation. Some patients also wanted to draw on their faith to motivate dietary change, but only where dietary change did not compromise the practicing of their religion or spirituality. Spiritual struggles may therefore present in dietetic consultations, where these conditions are managed, dietitians should therefore be able to identify these and refer on as appropriate. Dietitians should provide patient centred care that supports religiously motivated behaviour change and tailor dietary advise so that it aligns with a patients' belief system. With reference to the second aim, dietitians were involved only in addressing these needs through multidisciplinary team working where ethical dilemmas arise regarding nutrition and hydration at the end of life.

Consistency with other literature

The unmet spiritual needs, and desire for cultural, religious and spiritual aspects of life to be considered during healthcare consultations are not limited to patients accessing nutrition and dietetic services. Unmet spiritual needs are described by patients across a range of clinical settings. For example; a narrative review identified that despite spiritual needs and spiritual issues being apparent among patients within intensive care units, patients rarely receive appropriate spiritual care (Ho et al., 2018).

Similar to the findings of studies within our review (Aiotato et al., 2015; Bertran et al., 2016; Pathy et al., 2011; Rong et al., 2016), a systematic review exploring spiritual care provision by physicians also showed that spiritual care is not just addressing spiritual struggles, rather it can also be considering the role religious/spiritual beliefs have in how patients perceive and navigate their response to an

illness (Best et al., 2015). Patients desire holistic care from their physicians, but the level of spiritual care desired varies; some prefer spiritual care from clergy or chaplain, and others consider their physician to be an appropriate spiritual advisor (Best et al., 2015).

Unmet existential, spiritual and religious needs have been related to higher pain and depression (Andersen et al., 2019), this is consistent with the findings from Hamilton & Kroska, (2018), in our review, which showed unmet spiritual needs were associated with increased distress and service utilisation. Unmet religious/spiritual needs are therefore seen in patients seeing a variety of healthcare professionals, despite the benefits of spiritual care being consistently reported.

With reference to the second aim of this review, the findings indicated that clinical guidelines around spiritual care within dietetic practice, were only found for end-of-life care. This is consistent with the focus on spiritual care by health professionals traditionally being at the end of life, as evidenced a systematic review highlighting that the greatest uptake of spiritual care training in nursing is by hospice nurses (Rachel et al., 2019). It should also be noted that despite guidelines and training, spiritual care is still not always provided where it should be, common reasons for this are time pressures and fear of where these discussions might lead (Keall et al., 2014).

Strengths and limitations of review

This is the first systematic review to our knowledge that has been conducted to help guide future understanding and recommendations for dietetic practice to include spiritual care. The studies included in this review provide insight for dietitians into patients' spiritual needs, and ways dietitians can adapt their practice to optimize spiritual care. While this systematic review was extensive in its search terms and included several key medical databases, it was not exhaustive. Broadening the search to articles where spiritual care in dietetic practice was not the main focus of the research may have yielded more results by identifying papers reporting on incidental findings, additionally searching grey literature may have revealed local policy documents not published in the databases

used. Nonetheless, this is the first systematic review to explore spiritual care specifically in dietetic practice and as such its evidence synthesis is unique.

There is a need for interventional studies and service level evaluation whereby the practice of dietitians to identify and address spiritual needs investigates the impact this has on health, well-being and person-centred care.

Implementation of findings

Current Dietetic Practice

Dietitians do not currently offer the same level of spiritual care as other healthcare professionals. For example, in nursing, clinical psychology, medicine and palliative care, good practice generally includes screening and referral to spiritual care provider/chaplain (Puchalski et al., 2009). It is recommended that spiritual distress or religious struggle is treated with the same intent and urgency as treatment for pain and any other medical or social problem (Puchalski & Ferrell, 2010). Therefore to prevent missed opportunities, for spiritual concerns to be addressed, dietitians need to be confident to identify spiritual concerns so that referrals can be made to faith leaders and chaplaincy.

How spiritual screening may be used in dietetic practice

The depth of assessment should be conducted according to a clinicians training and competency. Spiritual screening or triage is a quick determination of whether a person is experiencing a serious spiritual crisis requiring immediate referral to a chaplain, such screening may be conducted on hospital admission for example and may include questions like “How important is religion and spirituality in your coping?” and “How well are these resources working for you at this time?” (Fitchett & Risk, 2009). These are questions that can easily be incorporated into a dietetic consultation, either as part of their general assessment, or when issues arise naturally in the conversation. Spiritual history taking involves a broader set of questions as part of a holistic clinical assessment by a healthcare provider and aims to open up conversation to empower individuals to

draw on their inner spiritual resources as well as identify spiritual distress and refer to a spiritual care provider/chaplain where necessary. Dietitian's training in patient centred-care and behaviour change techniques are particularly well aligned to support patients in using and drawing on their spiritual resources. There are a variety of spiritual assessment tools which can be used for this purpose (McSherry et al., 2010); perhaps the most widely used is pneumonic is FICA (Borneman et al., 2010). F stands for Faith/Belief and relates to a question like "Do you consider yourself religious or spiritual? What gives your life meaning?", I for Importance; "What importance does your faith or belief have in your life?", C for community; " Are you part of a supportive religious or spiritual community?" and A for Address in Care or Action; "How would you like me to address this in your healthcare Or What action do you need to take on your spiritual journey?". The HOPE tool (Anandarajah & Hight, 2001) can also be used as a prompt for discussing a patient's source of H(ope), whether they are part of an O(rganised religion), what P(ersonal spiritual practices) they find helpful and whether their beliefs influence their healthcare of E(nd of life issues). Such tools should not be used as a tick box exercise but help to guide conversation.

Referral for spiritual counselling

A spiritual care provider/chaplain has specific training to undertake detailed spiritual assessment, complex spiritual diagnosis and treatment e.g. spiritual counselling. Mental health professionals and psychotherapists may also have competencies in spiritualty and religiously integrated counselling or psychotherapies (Pargament, 2007; Vieten & Scammell, 2015). This in-depth spiritual counselling would typically fall outside the role of a dietitian. Indeed, despite great strides into collaborative person-centred care an underlying power imbalance between a dietitian and patient likely remains, this means extra care needs taking to ensure there is neither coercion nor judgement on the part of the dietitian with respect to any spiritual/religious belief or practice. This would be an unethical exploitation of a patient's vulnerable position. However enquiring whether a patient has religious or spiritual beliefs that might be helpful or causing them concern at this time is neither threatening nor

coercive. It is this latter practice the authors recommend dietitians use to integrate spiritual care into dietetic practice. Dietitians follow protocols for the systematic, holistic assessment and treatment of nutritional problems. Incorporating spiritual aspects into these creates a quick and easy way to ensure spiritual care is delivered in dietetic practice. For example, in the United Kingdom (UK) the British dietetic Association (BDA) advocates Nutrition and Dietetic Process for practice (BDA, 2012), this could be used to include spiritual concerns (Lycett, 2020).

Conclusions and future research:

Dietitians are healthcare professionals who form part of the multi-disciplinary team considering ethical issues around feeding and hydration at the end of life, but spiritual concerns of their patients are evident in many long-term conditions during life, and these often remain unmet. As with other healthcare professionals, dietitians should be trained to identify spiritual need and refer on to chaplaincy services or faith leaders. They should also help patients tap into their spiritual resources and offer tailored dietary advice that aligns with a patient's beliefs. Future research should focus on interventional studies and service level evaluation whereby such spiritual care in dietetic practice is investigated and the impact this has on health and well-being is conclusively determined.

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