Spirituality and quality of life in diabetic patients

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Abstract

The spirituality implications in health have been scientifically evaluated and documented in hundreds of articles. Diabetes is a disease that has increasing incidence. Our goal was to understand the implication of spirituality on diabetic patients, correlating it with their life quality. This research was developed at Diabetes Education Center in the Pouso Alegre, Minas Gerais. The sample consisted of 20 patients presenting Diabetes. A questionnaire consisting of three questions was applied, data were recorded and transcribed. In the universe of 20 people interviewed, they consisted mostly of women, married, unemployed, and with incomplete primary education. The study demonstrated that, for the group included, the meaning of spirituality is related to religious aspects, as they showed attachment to them in order to be able to carry their lives with Diabetes and imporve, therefore, their quality of life.

Key words: Spirituality. Quality of life. Diabetes mellitus.

Resumo

Espiritualidade e qualidade de vida em pacientes com diabetes

As implicações da espiritualidade na saúde vêm sendo cientificamente avaliadas e documentadas em centenas de artigos. O diabetes é uma doença que vem apresentando incidência com proporções cada vez maiores. Nosso objetivo foi conhecer o significado de espiritualidade para pacientes diabéticos, correlacionando-o com sua qualidade de vida. Esta pesquisa desenvolveu-se no Centro de Educação em Diabetes da Prefeitura Municipal de Pouso Alegre (MG). A amostra foi constituída por 20 pacientes portadores de diabetes. O discurso do sujeito coletivo constituiu o método escolhido para a construção dos significados. Foi aplicado um questionário composto de três perguntas, gravadas e transcritas na íntegra. O perfil dos entrevistados, na maioria, era de mulheres, casadas, com ensino fundamental incompleto e desempregadas. O estudo demonstrou que para elas o significado de espiritualidade está ligado a aspectos religiosos, aos quais se apegam para conseguir conviver com o diabetes e melhorar, assim, sua qualidade de vida.

Palavras-chave: Espiritualidade. Qualidade de vida. Diabetes mellitus.

Resumen

Espiritualidad y calidad de vida en pacientes con diabetes

Las implicaciones de la espiritualidad en la salud han sido científicamente evaluadas y documentados en cientos de artículos. La Diabetes es una enfermedad que presenta incidencia con proporciones cada vez más grandes. Nuestro objetivo era comprender el significado de la espiritualidad para los pacientes diabéticos, en correlación con su calidad de vida. Esta investigación se desarrolló en el Centro de Educación sobre la Diabetes de la Alcaldía Municipal de Pouso Alegre, Minas Gerais. La muestra consistió en 20 pacientes con diabetes. El discurso del sujeto colectivo fue el método elegido para la construcción de los significados. Se aplicó cuestionario que constaba de tres preguntas, grabadas y transcritas integralmente. El perfil de los encuestados, en su mayoría eran mujeres, casadas, desempleadas y con estudios primarios incompletos. El estudio demostró que el significado de la espiritualidad para ellas está vinculado a aspectos religiosos, que se aferran a ser capaces de vivir con diabetes y así mejorar su calidad de vida.

Palabras-clave: Espiritualidad. Calidad de vida. Diabetes mellitus.

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Bioethics is the bridge between science and the humanities, traditionally understood as an application of ethics that deals with the proper use of new technologies in the field of medical sciences and proper solution of moral dilemmas presented by it. Thus, the matters involving personal religious issues of patients need to be inserted in the understanding of clinical practice one, considering that the respect for the values that who cares is fundamental to the ethical link between health professional and patient ².

Although concept with various interpretations, spirituality can be understood as the belief that accepts and tries to develop the spiritual part of humans as opposed to its material part ³ is a dynamic, personal and experiential ⁴ process, which seeks to confer meaning and significance to life, may coexist or not the practice of a religious creed ⁵ religiosity, however, is based on the acceptance of a particular set of values. Some authors suggest that religion is institutional, dogmatic and restrictive, while spirituality is personal, subjective and emphasizes life ⁵.

Despite the scientific controversy about the effects of spirituality on health is a reflection of Roberts: It should be clear that if these benefits come from an intervention or God's answer to the calls of prayer and spirituality, it will always be beyond what science can not prove or ⁶.

Quality of life (QOL) refers to the concept seen as subjective, because besides differ from individual to individual is subject to change throughout life. Nahas shows that factors that determine the QOL of people are many and their combination results in a phenomena and situations that, abstractly, can be called quality of life network. Associated factors such as health, longevity, job satisfaction, salary, leisure, family relationships, mood, pleasure and even spirituality generally, are: *In a broader sense quality of life can be a measure of human dignity, because it involved service fundamental human needs* ⁷.

From the point of view of health, Dreher⁸ shows that QOL can be divided into six dimensions: physical, emotional, social, professional, intellectual and spiritual. Minayo ⁹, in turn, meant that QoL is an eminently human notion that maintains relationship with the satisfaction of the individual with his family, loving, social, environmental and existential life encompassing the skills, experiences and values of individuals and collectivities, at a particular time,

place and situation.

The morbidity associated with longstanding diabetes, both types results in certain complications such as microangiopathy, retinopathy, nephropathy and neuropathy. If no adequate metabolic control, long-term complications can occur, with consequences such as amputation, blindness, retinopathy, nephropathy, among other consequences that would compromise the quality of life of these people. Therefore, the basis for these chronic long-term complications is the subject of much research. Diabetic suffering with the clinical manifestations of disease, such as polyuria, polydipsia, polyphagia, weight loss and asthenia ¹⁰.

This chronic non-communicable disease requires adjustments to lifestyle and incorporating therapeutic practices involving changes in dietary patterns, glycemic control, physical activity, maintaining blood pressure and continuous monitoring by a multidisciplinary team of ¹⁰ health Living with Diabetes mellitus (DM) implies adjust to the complex dynamics of family relationships, feelings, lifestyle and habit changes, fitness routines, implementation of care and glycemic control procedures, aiming to DM a healthy living and prevention acute and chronic complications ¹¹ the way people perceive their condition influences the overall control of their state of health and disease ^{12,13}.

The development of QoL studies, the importance and involvement of spiritual issues were present. Therefore, it is understood that the field of quality of life can come to become a mediator between the field of health and religious / spiritual issues, which may facilitate the development of health interventions that have the foundation in the spiritual dimension ¹⁴. Under this perspective, this paper aims to know the meaning of spirituality for diabetic patients, and that spirituality can influence a better adherence to treatment, thus providing a better quality of life.

Methods

This study adopted a qualitative descriptive approach was developed in the Municipality of the city of Landing Alegre (MG) Center for Diabetes Education (Cemed) in the period from 2.1.2013 to

30.9.2013, having sampled 20 patients with diabetes. The criteria for participation in the study were being treated for at least one month older than 18 years at the date of completion of the questionnaires and confirmed diagnosis by analyzing the records.

Because it is qualitative study, in which the main objective is the comprehensive approach to the needs, motivations and behaviors of participants, the sample size was defined conventionally, that is, without a necessary quantitative relationship between the percentage of patients chosen and the number of patients enrolled in the institution. Thus, sampling was intentional, seeking to list on the basis of the researcher's knowledge about the population and its elements the widest diversity of respondents.

To collect data on a semi-structured survey questionnaire consisting of three questions, recorded and transcribed was applied. The method chosen for the analysis of the material was the discourse of the collective subject (DSC), based on the construction of meanings, seeking to allow the approach to the phenomenon under study. For data analysis we used the DSC, written in the first person singular, composed of key expressions that have the same core ideas (IC) and anchor (AC).

The autonomy of the study participants was respected by the free decision to participate in the study after providing guidelines that supported his decision. Respected-whether cultural, social, moral and ethical values, habits and customs of the participants. Procedures to ensure the confidentiality, anonymity of information, privacy and protection of the image of the respondents were provided, by ensuring that the information obtained was not used to the detriment of any kind to the members of the study. The study followed the precepts established by Resolution 196/96 of the National Health Council, applies to the period in which the application of the study was approved by the Ethics Committee of the University Vale do Sapucai.

Results and discussion

The results were presented in three parts. In the first, are evidenced the personal and social characteristics of respondents (tables 1 and 2).

Table 1. Personal and socioeconomic characteristics of interviewees

Gender Female Male	12 (60%) 8 (40%)
Marital Status Single Maried Divorced Widower	0 15 (75%) 2 (10%) 3 (15%)
Education Did not attend to school Elementary completed Incomplete Elementary Education High school Incomplete Secondary Education College degree Postgraduate	0 5 (25%) 8 (40%) 5 (25%) 0 2 (10%)
Employment situation Student Employee Unemployed	0 8 (40%) 12 (60%)

Table 2 Standard deviations and avarage ages of patients surveyed

	Standard deviation	Average	N
Male	6,63325	64,00	08
Female	10,8519	62,18182	12
Total	8,777213	62,75	20

In the catchment area studied, the epidemiological profile of individuals with diabetes was characterized by a predominance of females (60%), for the planet, according Miranzi ¹⁵, the female population is larger than the male. This explains in part the higher proportion of women affected by and diagnosed more often seek health services.

The subjects' ages ranged between 42 and 79 years (with an average of around 64 years), relevant interval with previous studies, in which there are some studies showing that diabetes is more prevalent in people over 35 years The 16 schooling, 40% had not completed primary education and 60% were unemployed. According to the Report of Primary Care / 2001, adherence to treatment tends to be lower in individuals with low education and low

income, which increases the responsibility of family health teams in developing educational activities, with emphasis on disease control to promote health 16 of the total respondents, 75% were married. The World Health Organization (WHO) states that the marital status of individuals influences on family dynamics and self-care. For seniors, family composition can be a decisive factor for the lack of stimulus to self-care and institutionalization ¹⁷.

In the second part, the themes explored are shown - with their respective central ideas (Tables 1, 2 and 3) - and finally the last part shows the central ideas accompanied with their respective CSDs. The first question asked was: "What is the meaning of spirituality?". The CSDs based on the central ideas presented in this question were:

- 1st central idea: have peace— "Spirituality is for people to have a peace and a quiet ...";
- 2nd central idea: *be a good person—"Spirituality is a good person, a humorous person ..."*;
- 3rd central idea: religious aspects— "Spirituality for me is religion, a religious person. It is a spirit of kindness, patience (...) is the religious spirit, is the spirit of the people. Be a Christian, one who has God in his heart. I consider all religions, I respect, I try to learn from others ... ";
- 4th central idea: be humble— "Are you having a spirituality of forgiveness, to accept things. (...) It is humility, being humble ... ";
- 5th central idea: faith and belief—"Overall I think it's what the person has belief, the way he acted. (...) Is the emotional part. It is something that one has to believe, have to have faith, no matter the religion ";
- 6th central idea: knowledge of the inner self—"I
 would say it is the knowledge of my inner self";
- 7th central idea: do not know– "Do not know";
- 8th central idea: to transmit peace— "The spirit has to convey something of peace, (...) a joyful thing ...".

Although, at first glance, the category "do not know" to denote the absence of a "central idea" instead shows the answers of respondents who said

they did not have a formed and / or does not know the meaning of spirituality opinion. Anyway, according to Table 1, most respondents said that spirituality is linked to religious faith and belief aspects.

Table 1 Central ideas, subjects and frequencies of theme 1

Central ideas	Subjects	Frequency
To have peace	1	1
To be a good person	2	1
Religious aspects	3,4,7,11,12,13, 14,15,16,18	10
To be humble	5	1
Faith and belief	6,10,17	3
Knowledge of the inner self	8	1
Does not know	9,19	2
To transmit peace	20	1

In a study of long follow-up, ¹⁸ Strawbridge evaluated during 28 years, 6928 patients between 16 and 94 years, finding that regular practitioners of religious activities had lower mortality rates. These findings were more robust in women; adjusted for history of chronic disease or health risk factors analysis no significant reduction of the impact. During follow-up, patients with frequent religious practices stopped smoking, adopted regular physical activity, increased social support and improved their health.

Jaffe and colleagues ¹⁹ also evaluated patients adherent to religious practices or dwelling areas considered affiliated with religious practices in Israel. 141,683 individuals aged 45-89 years were analyzed, living in 882 separate areas; 29,709 deaths were reported at a median follow up of 9.5 years. Just as in the previous example, men and women living in close proximity or affiliated with religious practice areas had lower mortality rates.

Second time, in the same interview, he was asked: "How spirituality gives meaning to your life?". The central ideas of the key expressions of this question and the frequencies of responses are transcribed in Table 2.

Table 2. Central ideas, subjects and frequencies of theme 2

Central ideas	Subjects	Frequency
Good feelings	1,2,3,5,7,11,13,20	8
Religious aspects	4,9,10,12,14, 15,16,17,18,19	10
Having a goal to persuit	6,8	2

The analysis developed from the collective subject discourse based on the central ideas presented in this question were:

First central idea: good feelings— "My life now it's good, thank God. Is good because I have peace, quiet, do not have to be thinking is having problems ... joy, patience, fellowship with other people. When you are doing well in life, you're well too. Helps a lot. For us avoid frustration comes and talks to someone from the church, right? It is very good ";

Second central idea: religious aspects — "We have to believe in something, have to have strength. It is the belief (...) that gives us strength to continue, right? For we live, we face certain diseases, to take us forward. Help on the day we have peace, hope, faith. I'm very devoted, I am Catholic, I am very devoted to God and Our Lady. I pray every day to protect myself, my children and my husband. The Holy Spirit that God has left here in this world to be our comforter (...) then he gives me encouragement in my life. Without religion, without God, we are nothing."

Third central idea: have a goal—"In everything because then you have a goal then you think more in his fellow than yourself ... You have to have a goal, you know, something you can play for your life according to what you think ".

Computing the answers of Table 2 shows that 10 respondents using the central idea of religious aspects, saying that spirituality makes people believe in something, to have faith, hope and peace; while eight said that spirituality transmit good feelings and two used the central idea of having a goal to follow. Some researchers found that religiosity tends to increase during negative life events, including illness ²⁰ This occurs because the connection

with religion can be a source of relief or discomfort, depending on how the person she reports ²¹.

Moreira-Almeida and Koenig ²² found that the majority of well-conducted studies argues that higher levels of involvement with religion are positively associated with indicators of psychological well-being (life satisfaction, happiness, positive affect, and higher morale) and with less depression, suicidal behavior and abuse of drugs and alcohol. Generally, the positive impact of religious involvement on mental health is more exuberant among people under stressful life circumstances (the elderly, those with a disability and those with a disease).

Finally, it was asked "How spirituality has helped you cope with the diabetes?". The central ideas of the key expressions of this question, and the frequency responses are transcribed in Table 3.

Table 3. Central ideas, subjects and frequencies of theme 3

Central ideas	Subjects	Frequency
Tranquility	1	1
Coping with the disease	2,3,7,9	4
Helping a lot	4	1
Willingness to live	6	1
Does not affect	8	1
Belief and faith	5,10,13,16,17	5
Controlling nervousness, insecurity and disease	11,12,15	3
Acceptance of the disease	14,18,19,20	4

The CSDs based on the central ideas presented in this question were:

- 1st central idea: quiet—"So we demand increasingly have peace, peace, avoid nervous because we have to hold the nervous, right? To be healthy";
- 2nd central idea: coping with the disease—"Spirituality helps address of course. I am very at-

tached to God (...) facing the death of my husband and that much of problem I have. Have to fight in order to win ";

- 3rd central idea: helped much— "It has helped a lot";
- 4th central idea: the will to live—"Diabetes needs you have will to live, you're engaging in always improving";
- 5th central idea: no effect—"Spirituality does not affect me";
- 6th central idea: belief and faith—"It is my belief in God, my faith that leads I can live with the disease. We have to really believe in God very much in hand and let Him deliver Him in hand. He knows. I pray too for Our Lady of Fatima that leaves my diabetes did not rise much and have a lot of faith, you know, that one day I will not have it anymore. I never lose my faith, because I did not have these things, I did not have diabetes. Whenever I'm sometimes with some affliction I cling to the Divine Eternal Father, is to have faith because if we were aggressive, nervous, person did not face ";
- 7th central idea: controlling nervousness, insecurity and disease—"I think it helps me behave, do not get nervous, it helps me control right, does not leave much of trains. I am unsure on that part. Some people have so much faith that speaks, has it, has it. I confess that I am insecure. What is stress, depression? It is a distrust of the future, right? ";
- 8th central idea: acceptance of illness—"It helps because you spend trying to understand things from the religion you begin to understand things ... I thought I'm not the only one, I'm not the first. I think I have to have it there because if I get sad I almost get sick (...) not be stressed, not be unhappy. I have both a health problem and I'm doing well thanks to God. "

On that last question, the highest frequency of responses occurred within the central idea of having belief and faith (five responses). Following, we had four responses within the idea of spirituality helping to tackle the disease; four, using the central idea of spirituality helping to accept the disease; and three in the central idea to help control nervousness, insecurity and disease.

In this context, faith becomes an important tool for coping with the diagnosis and treatment of diabetes. The faith or the search for divine help makes the person protrudes in demand for resources in the fight against the disease. Therefore, we feel that for them to reflect, pray or pray is a way to get closer to God and have the strength to withstand the vicissitudes imposed by the disease ²³.

Many patients consider important to the spiritual dimension in the health-disease process and would appreciate support in this regard, when necessary ²⁴. It appears, also, that patients realize that spirituality influences their health, this result evidenced, for example, on research indicating the positive influence of spirituality in lower prevalence of mental disorders, higher quality of life, longer survival and lower length of stay ². In this sense, must be considered the role of the health professional to facilitate this assistance, since it expresses, among others, the ethical principles of respect for autonomy and beneficence ²⁵.

Recognizing that many factors contribute to the construction of perception of quality of life in individuals, there is growing interest in the study of the phenomenon of religiosity as influential or not health and quality of life in people with both component states critical health as the general population considered healthy ²⁶.

Final considerations

The use of different aspects of spirituality and religiosity as support, therapy and determination of positive outcomes in many diseases has made symbolic challenge to medical science. When considering the ethical and method limitations is demonstrated how difficultoso is made to measure and quantify the impact of religious and spiritual experiences by traditional scientific methods.

The influences of spirituality have shown significant impact on physical health, defining itself as a potential factor preventing the development of disease in previously healthy population reduction and eventual death or impact of various diseases. The evidence has been directed more robust and consistent manner to prevent the scenario: independent studies, mostly of large numbers of volunteers and representative of the population, indicate that the regular practice of religious activities has reduced the risk of death so significant.

The use of proper scientific method and employing the principles of evidence-based critical appraisal of the literature and conducting studies medicine can certainly point the way to move the hypotheses of the proven promising. Surely, only these confirmations can consolidate enough to

change the perception and behavior of society today compared the correlation between spirituality and health paradigm.

The aforementioned results, it is recommended that the focus of spirituality in the care of people with diabetes should be strengthened, seeking the development of important aspects such as self-esteem, happiness, optimism, hope, faith, satisfaction - and strengthening social and family relationships to patient support.

Thus, it becomes important to approach health professionals with the theme, given that little has focused on the issue of spirituality in care plans. Many professionals do not feel comfortable dealing with the subject, perhaps because universities do not prepare their students for this theme ²⁷ This was observed in a recent survey in which more than 90% of teachers of a public medical school, study participants considered that Brazilian universities did not provide enough for the student information in this regard ²⁸.

Therefore, knowing the quality of life of individuals with diabetes means an odd moment of understanding and again points to the importance of planning and implementing actions of governmental responsibility, with grounding in scientific information, to be developed through public policies that involve both improving the quality of life of individuals regarding valuation of workers in family health teams.

It is believed that the discussion of the relationship between faith, spirituality, illness, healing, health and ethics must advance as they pursue scientific and biotechnological advances ²⁹. Discerning the best study designs and find the best evidence supporting the association between spirituality and health is, well, new, intriguing and profound paradigm for modern medicine ³⁰.

It is considered, above all, to make the bridge between healthcare and spirituality to the doctor and other health professionals should use, whenever possible, sources of referrals from the patient in order to act ethically in favor of both of respect for autonomy as the beneficence of this.

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Spirituality and quality of life in diabetic patients

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Participation of authors

Camila de Moura Leite Luengo was responsible for the study planning, data collection, statistical analysis and final writting of the article. Adriana Rodrigues dos Anjos Mendonça, was responsible for the orientation and final correction.

