

The Impact of Spiritual Health Care on Patients' Clinical Outcome

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ABSTRACT

Method

A scoping literature review was conducted to determine the definition of spirituality and the impact of spiritual health care on HIV/AIDS Patients' response to treatment. We conducted an internet search using the following questions on google scholar and PUBMED: Definition of spirituality; what is spiritual health care ?; Impact of spiritual Health care on HIV/AIDS Patients response to treatment .We retrieved about 45 articles and eliminated 9 of them which didn't meet our inclusion criteria. Thus 34 articles were reviewed.

Results.

Our findings revealed that spirituality and spiritual care positively impacted the clinical outcomes of patients (When God was portrayed as Loving and caring) and negatively impacted on patients' clinical outcome (When God was portrayed as judgmental, punishing the sick with the condition). However a Majority of findings showed positive impact of spirituality on patients' response to treatment. Our findings further revealed that meditation and intercessory prayer when used as spiritual intervention serving as alternative or complementary medicine in patients irrespective of their medical condition improved their clinical outcomes. Frequently reported positive outcomes were identified in the following conditions; Cardiovascular diseases, cancer, depression, anxiety, depression, HIV/AIDS, respiratory, Female infertility and many other conditions.

Conclusion

Spirituality and spiritual Health care which improve on patients' spirituality positively impacts HIV/AIDS patients' response to treatment. Thus spiritual interventions could be beneficial in promoting adherence and positive health outcomes in HIV/AIDS patients on antiretroviral therapy.

KEYWORDS: HIV+/AIDS, mental illness, spirituality and health, Spiritual Care

INTRODUCTION

Background

Spiritual health care refers to actions of helping a client/clients to discover their unique meaning of life in times of sickness, to strengthen their relationship with self, others and God and to bring an appreciation of a health personel's interventions in the immediate environment of care [1].

Statement of the Problem

Historically, the notion of approaching clients as biopsychosocial and spiritual beings has been identified within the health profession. In a study twenty-six nursing theories were evaluated by [2] to determine whether nurse theorists acknowledge the spiritual dimension in their conceptual frameworks of care. The study revealed that 12 out of the 26 theories acknowledged the impact of spiritual health care on the quality of patient care offered within the dynamics of provision of holistic health care. Historically, there is evidence that, health professionals incorporated 'attention to the soul' which implies that, an aspect of their clinical practice involved caring for the spiritual dimension [3]. The relevance of meeting the spiritual needs of clients is

emphasized in national and international governing bodies' publications which endorse that the spiritual needs of clients should be provided as an important aspect in holistic care provision [4]. Dissatisfaction to care is one argument offered for refocusing on the holistic aspects client care as opposed to a purely bio-medical, scientific and bureaucratic approach to health care provision. The bio-medical model of care gives no attention to the spiritual dimension of care creating a gap in holistic care provision which may negatively Impact client's clinical outcome to care provision. Thus our main aim is to investigate the impact of spiritual health care on Patients' Clinical outcome.

Objectives

A. General Objective

To determine the Impact of spirituality/Spiritual health care HIV/AIDS Patients response to Treatment.

B. Specific Objectives

1. To determine the association between spirituality and health

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2. To determine the impact of prayer on spiritual outcomes.
3. To determine the impact of spirituality to HIV/AIDS
4. To determine the Psychological / Mental Health association with spirituality
5. To determine the impact of spiritual Health care to HIV/AIDS patients' outcomes

Research Questions

1. What is the association between spirituality and health?
2. What is the impact of prayer on spiritual outcomes?
3. What is the impact of spirituality on HIV/AIDS outcomes?

Findings

1. Association between spirituality and health.

During periods of illness individuals experience stress as a result of mental, physiological, and sometimes anatomical changes initiated by the disease/illness. Eventually clients who previously had no religiosity/spirituality begin to search for the cause and meaning behind the reason why they are ill or therapy. Should the medical system fail to treat or cure the disease /illness, the client begin to seek for help from non medical sources (alternative/complementary therapy). A study carried out by Benson in 1974 revealed that those who meditate 10 - 20 minutes, twice per day experience decrease in their; metabolism, heart rate, respiratory rate, and slower brain waves. This spiritual exercise was found to be an effective therapy for chronic pain, anxiety, depression, hostility, insomnia, premenstrual syndrome, and infertility and was a useful adjunct to treatment for patients with cancer or HIV. Personal beliefs of the clients were found to influence disease prevention, recovery, coping, and illness experience. Clients exhibited less psychological distress whenever they connected with God with expectation of being healed of getting relief from stress. A greater majority of them reported strength and comfort from their spiritual beliefs [5,6].

Current literature reveals a renewed emphasis on spiritual care with a growing awareness on issues related to its contribution to patient care quality and holistic patient care attainment [7]. Many studies have revealed an association between terminal illnesses and spirituality; however, given that humans are spiritual beings, they all have spiritual needs. Spiritual care according to [8], is related to maintenance of hope in clients while helping them to find purpose and meaning in unresolved pain. Religious rituals and practices are also considered to be part of spiritual care intervention.

Although spiritual care seems not to fit well with the understanding of science and what constitutes scientific truth. [9] Argue that spiritual gains that result in full or partial transformation of an individual can be precipitated through spiritual care, serving to promote hope and faith in care givers and clients alike. A study conducted by [10], titled 'An exploration of how spiritual care is applied in clinical nursing practice', defines spiritual care as; care that is humane, placing a high premium on the life of humans as a whole, with emphasis on giving equal attention to the spiritual dimension needs as equally significant as that of mind and body; characterized by availability of care religiously orientated interventions such as prayer or reading religious texts in relation to God's intervention and his healing powers [15].

Psychological and biological changes have been found to be associated with different types of meditation that are actually or potentially associated with improved health. The use of meditation to enhance spirituality has been found to produce a clinically significant reduction in ambulatory as well as resting blood pressure, to improve heart rate, to result in cardio respiratory synchronization, to change levels of serotonin and melatonin, to suppress corticostriatal glutamatergic neurotransmission, to boost the immune response to decrease the levels of reactive oxygen species as measured by ultra-weak photon emission, to promote positive mood states and reduce stress, to enhance self-esteem and reduce pain and anxiety and to have a favorable influence on overall and spiritual quality of life in late-stage disease [16, 17, 18, 19, 20, 21] have all been found to be associated with meditation. Findings in other studies have surprisingly proven that, spiritual meditation is more effective than relaxation and secular in terms of; tolerance to pain, decrease in anxiety, improvement in positive mood, spiritual health, and spiritual experiences [22].

Mental health / Psychological associations with spirituality

Result on studies on spirituality/spiritual health reveal that; religious adherence during stressful hours can bring about comfort, sound orientation and support one to find an ultimate purpose and meaning in life. Furthermore, effective methods of coping linked to better mental health can be shaped by spiritual orientations [16, 17]. According [18], religious attitudes promote to a greater extent satisfaction in life. Worship-attendance frequency was found to be a predictor of Increased satisfaction with care. Worship-attendance frequency was found to be inversely proportional to Increased Alcohol use. Spirituality and spiritual well-being improves health outcomes with evidence of lower levels and lesser episodes of depression, anxiety, cognitive avoidance, and higher quality of life [19].

2. Clinical Outcomes

2.1. Improved outcomes associated with prayer

A study on the impact of spirituality on fertility conducted by [7], sample and eventually recruited 219 participants, aged 26-46 years, who were treated with in vitro fertilization method of embryo transfer, in Seoul, South Korea revealed a strong association between spiritual intervention, health and fertility. By use simple random sampling method, Participants were separated into two arms (distant prayer – Intervention, and the control arm (No prayer). Prayer groups in Canada, Australia and the USA carried out the intervention (prayers). Participants and their health providers were not informed about the prayer intervention. Furthermore the investigators, and even the statisticians, were ignorant of the group allocations throughout the data collection process. Thus, this study was randomized, triple-blind, controlled and prospective study design. Results revealed that, women who had been prayed for had almost twice as high pregnancy rate as those who had not been prayed for (50 vs. 26%; $P < 0.005$). Furthermore, the intervention showed a higher implantation rate than the control (16.3 vs. 8%; $P < 0.001$) [8]. Finally, results revealed that, the positive clinical outcomes associated with prayer were independent of clinical or laboratory providers and clinical variables. This study thus showed that following fertilization, implantation and fetal development in pregnancy are improved by distant intercessory prayer.

Other studies conducted to determine the association between spirituality/spiritual care conducted on animals suggest a positive association between spiritual intervention and wound healing. An example is the study conducted by [9] to investigate the effect of religion/spirituality on wound healing in a nonhuman primate species using intercessory prayer as intervention. The study population was bush babies and the sample size was 22 bush babies (*Otolemur garnettii*) with wounds resulting developed from self-injurious behavior. These bush babies were randomized into prayer and control groups that were similar at baseline. The intervention, Prayer was conducted for 4 weeks and both groups of bush babies were served L-tryptophan additionally. It was found that, bush babies in the intervention arm had a greater reduction in wound size and a greater improvement in hematological parameters than the control animals [10]. This result is important in this review because the study was conducted in a nonhuman species; therefore, the likelihood of the effect of a placebo was taken off.

2.2. Retrospective benefits with prayer

A study conducted in Israel by [23] showed a rare finding. The study sample size was; 3,393 in patients who had been diagnosed hematologic infection between the year 1990 and 1996. A positive blood culture in the presence of sepsis was the operational definition of bloodstream. Using simple random sampling Participants were separated into prayer as intervention arm ($n = 1,691$) and control ($n = 1,702$) with no prayer in July, 2000. A list of participants' first name in the intervention arm was handed to a person (details not specified) who prayed briefly (details again not specified) for total recovery and wellbeing of the entire group. The spiritual intervention was conducted a period of about 4-10 years or longer after the index admission. The study was aimed at determining the retrospective healing effect of prayer.

The participants in the intervention and control groups shared common important socio-demographic and clinical characteristics. Findings revealed that; the length of stay in the hospital and the duration of fever were both significantly shorter in the prayer group than in the control group ($P = 0.01$ and 0.04 , respectively), whereas there was no significant difference in the mortality rate, between the intervention and the control arms (28.1 vs. 30.2%) respectively [34].

The following points about this study are worth noting;

- A. The two groups differed by a little margin when the two medians were compared. The outliers on skewed the sample on which the significance of the findings depended on. The intervention group had a slightly higher improvements in outcomes which was statically non significant when compared with the control.
- B. Attempt to control for unusual biases, such as day of admission and discharge was not made. Patients were admitted toward the week end may have been investigated and treated more slowly compared to those who were due for discharge on weekends that may have been held back in the hospital until the start of the subsequent week.
- C. Could the findings may have changed to a little extent had the author strictly followed the ethical principles guiding good clinical research practices in carrying out the intervention for the control group at the conclusion

of the study? Given that the data were retrospective there was possibility to conduct the same study several times with new sample each time. The question is whether the results, would have remained unchanged? Other issues with these inclusive were raised in the journal correspondence, published in the document [26]

- D. Possibly there would have been an overlap in the first names given, considering the number of participants per group [25]. The possibility existed for participants in both arms to have experience to the extent of overlap, the benefits of the prayers.

Both religious and non-religious patients use prayer as a popular part of spiritual practice. Prayer is often used as an everyday life coping strategy and at times for extreme stressful situations such as in response to the terrorist atrocities on 11 September 2001 [27] and 7 July 2005 [28]. A review of prayer based studies; suggested prayer has mental health benefits related to positive emotions that benefit health [29]. Prayer can give comfort and help to provide relief to patients. Issues have been raised on whether prayers made by nurses to patients would be ethical. Nevertheless hospital chaplains are available to intervene if patients desire prayer from a trained professional.

The art of healing the body through one's mind and spirit is a new sphere of health related research. A study conducted by [30], unveils a self-healing programme for cancer patients, in which psychological and spiritual based exercises help patients and loved ones cope with the disease. *The Healing Journey*, is a process which patients desiring this intervention undergo. Cunningham highlighted the benefits of the healing Process (therapy) and called on the need for research in this area. Spiritual literature literature and other forms of spiritual support such as yoga groups, Buddhism, Sufi or scriptural study groups are incorporated into the program and Patients are encouraged to explore various spiritual support exercises or tools.

2.3. Absence of health benefits with prayer

An investigation conducted, by [20] aimed at determining the cardiovascular outcomes related to prayer revealed a positive association. Participants in a coronary artery care unit were recruited at discharge and separated randomly into intervention and control arms respectively. At discharge, 799 Participants coronary were randomly allocated into intervention (prayer) and control groups. The intervention (Prayer) was carried out by five research assistants per participant for at least once weekly for 26 weeks.

Participants who were ≥ 70 years suffering from: previous myocardial infarction, cerebro-vascular disease, diabetes mellitus or peripheral vascular disease was classified under high-risk group. Participants who suffered from ; cardiac arrest, cardiovascular related re-hospitalization, coronary revascularization, emergency department visit for cardiovascular disease and dead were considered primary end point of the study.

Findings at the end of 26 weeks into the study revealed an occurrence of a primary endpoint in 25.6% of participants in the intervention (prayer) group and in 29.3% of participants in the control arm. The difference in occurrence of primary end point was not statistically significant for both groups. The outcomes at the end of the study witnessed a non statistical significant difference in outcomes when data were analyzed separately for both high- and low-risk participants

[21]. Thus, this study showed that; intercessory prayer did not influence the 26-week outcome after discharge from a coronary care unit.

Negative results have been reported from similar randomized controlled trials. For instance, [22] reported absence of benefits with off-site prayer in participants (n = 748) subjected to percutaneous coronary interventions [31]. Another study conducted by [32], revealed that, neither remote prayer nor prayers offered by nurses with no previous training or experience in the art of distance healing nor professional healers resulted in benefits to participants (n = 156) with AIDS -defining opportunistic infections.

2.4. Worse outcomes associated with prayer

A triple-blind, randomized controlled study carried out by [33] which examined whether remote intercessory prayer as spiritual intervention affects recovery after coronary artery bypass graft surgery and whether better outcomes were associated with the certainty of being prayed for. The sample was made up of 1,802 participants who were recruited in six hospitals in the USA. The participants were randomized into three groups. After 604 Participants were informed that they may or may not be prayed for, prayers were made for them. No prayer was made for 597 participants after they were informed similarly that they may or may not be prayed for, and 601 received prayer after being informed that they would definitely be prayed for.

The intervention (Prayer) was initiated one day before the surgery and sustained for 14 days. Three mainstream religious study sites ministered prayer daily for participants assigned to receive prayer. An assessment of outcomes was made by nurses who were blinded to the group assignments. The presence of any complication within 30 days of surgery was considered to be the primary outcome. Any major event, including death was considered Secondary outcomes. The aim of this study was to determine the effect of intercessory prayer and not to validate God's presence [34].

Both groups were blinded to whether they were receiving the intervention not. The occurrence of Complications was evident in 52% of participants who received intercessory prayer and for those in the control 51% reported this event. A significantly larger proportion of the population who were conscious of receiving the intervention (59%), contrary to expectation reported complications. Major events and 30 days mortality were similar amongst the three groups [35].

Findings therefore showed that after coronary artery bypass graft surgery, remote intercessory prayer did not improve clinical outcomes. Contrary to expected outcome, Knowledge of being prayed for was associated with a slightly but significantly higher rate of postsurgical complications. The occurrence of slightly significant higher rate of complications after surgery was found to be associated with knowledge of being prayed for.

2.5. Negative outcomes

The answer of professionals of the 20th century to the question on the efficacy of spirituality/religion in promoting effective coping in times of illness was a complete "No". Spirituality/Religion is perceived by some to be of non effect in patients physical or mentally health and have been blamed to be the cause of neurosis [36, 37]. Studies carried out by [38, 39], revealed that, hospitalized patients who are hospitalized usually interrogate themselves with the question, "why me?". When prayers for relief and healing receive no positive respond, they ask "Is God punishing me

for my sins"? Usually Patients get "stuck" during spiritual struggles and are unable to resolve them on their own without any assistance. They therefore refrain from religious/spiritual activity to lean on that which can otherwise bring them comfort and hope.

2.6. No association

Galton documented the results of a retrospective study on the effects of spirituality/religion on the health of clergies in 1872. His findings reported no benefits of spirituality/religion to health. He also referenced findings in an earlier study which concluded that longevity was not still possible despite the many prayers offered for the good health of British monarchs. Furthermore, other studies revealed that spirituality was unrelated to disruption of activities by pain, pain distress, and pain severity [40]

3. The Effect of Spirituality/Religion on HIV-Related Outcomes

Mechanisms through which spirituality/religion affects HIV/AIDS outcomes have been examined through Multiple quantitative studies. Results of these studies point to the double role of spirituality/religion serving as a stressor and method of adaptation for HIV/AIDS Patients. A study conducted by, [35] reported that religion/spirituality affected the view of HIV as a negative or a positive turning point in their life. People Living With HIV/AIDSs who witnessed increased spirituality, saw themselves chosen by God (a Higher Power) to go through the suffering imposed by this deadly disease and perceived their health condition as the most positive turning point in their lives. Contrarily, HIV/AIDSs infection was perceived to be the most negative turning point in the lives of those who experienced a decline in spirituality. A subsequent study by the same researchers further revealed that, a negative view of God predicted faster while a positive view of God predicted slower progression of HIV disease.

Studies have also examined the relationship between mental health outcomes in HIV/AIDSs with spirituality/Religion, owing to the high rates of behavioral problems/depression among PLWH. An example of such study is that conducted by Chaudoir and colleagues (2012). They investigated on the relationship between HIV coping, spiritual peace and stigma beliefs (extent to which Religious/spiritual beliefs promote a sense of comfort, meaning of life, and inner peace). PLWH usually go through social devaluation requiring ways to wave off anxiety and distress resulting from social factors such as discrimination and prejudice, thus a focus on stigma-related coping is relevant. Spiritual peace in this study was considered a general adaptation strategy which might mitigate the negative consequences of stress on patients' psychosocial well-being. Inner peace and personal use of coping strategies by patients predicted lower while HIV stigma predicted greater likelihood of significant depressive symptoms in study conducted with a sample of 465 PLWH. In this same study, findings on interaction effect revealed that: at high stigma levels, individuals presenting with high spiritual peace were less likely than those presenting with low spiritual peace to have significant symptoms of depression. The results of this study suggests that the potential of spiritual peace in reducing depression is high – spiritual based interventions in PLWH

In a study on the role of spirituality/religion in mental health among People living with HIV/AIDS in Tanzania, a framework for coping with stress was used. Structural equation model (SEM) was used for testing and hypothesizing mediating effects of avoidant coping, active coping and social support. Study findings demonstrated that, social support and coping mediated the relationships of spirituality and religiosity to psychological distress; religiosity and spirituality (active coping vs avoidant, respectively) revealed slight difference in their mediating mechanism.

Studies on the impact of spirituality on HIV/AIDS patients' outcomes have also examined socio-demographic variables —, gender, age, race and sexual orientation — which influence the relationship between spirituality/religion and health outcomes in HIV/AIDS Patients. Amongst the demographic factors, patient's age and aging is increasingly attracting more studies given that HIV/AIDS patients tend to live longer than before. A conceptual framework to study barriers have been developed by [42]. This tool is used to study barriers to and components of successful aging with HIV, and spirituality is 1 of the 4 key component in this tool. Spirituality, specifically is hypothesized to exacerbate or buffer the effects of decreased stigma (age- and HIV-related), social support, and mental illness in older PLWH. Although similar levels of spirituality/religiousness were reported by older and younger adults with and without HIV in 1 study, spirituality/religiousness among HIV-infected individuals was associated with larger social networks, better mood, higher self-reported health, and fewer medical problems. Thus, spirituality/religion may facilitate successful aging with HIV.

In the relationship between spirituality/religion and HIV/AIDS related outcomes, a key factor is sexual orientation. In one study the association between religious practices and biopsychosocial outcomes (eg, mood, social support) in homosexual was compared with that of heterosexual PLWH using SEM. Documented findings revealed that religiosity was positively associated with social support among homosexual living with HIV/AIDS. On the other hand religiosity did not culminate into any of the outcomes in heterosexual living with HIV/AIDS. On a similarly note, the associations between spirituality/religion and psycho-social outcomes amongst people living with HIV/AIDS have been shown to differ by race and age. Higher spirituality and in turn, higher levels of social support has been documented in older African Americans and,; however, psychosocial outcomes among Caucasian do not seem to be mediated by religiosity. Furthermore, because of women's reproductive and family roles, HIV/AIDS affects women in unique ways. Recent meta-analytic review have investigated on the effect of stress and coping amongst HIV-infected women. Patients' Coping by social isolation and avoidance resulted into more serious mental health problems amongst study participants. Report also revealed that spirituality and positive reappraisal led to better psychological adjustment compared to reliance on social support. According to findings women practicing spiritual reframing of stress were found to be more likely to have higher perceived control and stress-related growth as compared to those who depended on social support. The result of this study is consistent with some qualitative findings.

Religion/spirituality has also been reported amongst other factors like adherence to treatment within the context of treatment of HIV/AIDS. Research has found the return of defaulters back to HIV care to be associated with religion/spirituality among U.S. inner-city clinic patients (Tran BX, 2012). Studies also reveal that, the use of alternative and complementary medicine adjuvant to HIV/AIDS treatment is associated with fewer adherences to HIV/AIDS treatment in Asia (China) and, faith healing to be "Third therapeutic system" in the management of HIV/AIDS in sub-Saharan Africa.

3.1. Positive Outcome In HIV/AIDS

Studies have revealed that populations with high level of religious involvement present with lower mortality rates compared to those who do not attend at all. In a 12-step program to restore chronic alcoholic psychopaths an Anonymous unveils as one of their first step thus: "[we] came to believe that a power greater than we could restore us to sanity" [10, 11]. Further findings show that meditation provides a good therapy for chronic conditions such as headaches, anxiety, depression, premenstrual syndrome, AIDS, and cancer. Two step procedures are elicited by Benson's relaxation response:

- A. The patient undergoing therapy Repeats a word or a muscular exercise.
- B. Engages self to passively ignore any unpleasant thoughts and returning to the repetition.

According to a study carried out by Pargament In 2008, factors such as heart disease, dyslipidemia, hypertension, cancer and mortality have an inverse relationship with religious behaviors. Every leading religion/spiritual fraternity possesses a certain level of involvement in health related intervention or influence in every health domain is at individual or organizational level such as, frequency of church attendance. Growing literature documents a better adaptation in adolescent religious/spiritual patients suffering from conditions such as arthritis, diabetes, renal disease, cancer, cardiovascular disease, pulmonary disease, HIV/AIDS, cystic fibrosis, sickle cell anemia, amyotrophic lateral sclerosis, chronic pain, and terminal illnesses. A review on the effect of religious behavior on neuro-immunologic, cardiovascular, and musculoskeletal changes out carried out by McCullough, in 1995. Report revealed ; lower death rates from cancer, better function of the immune system, drop in cholesterol levels, Improvement in cardiac outcomes, more freedom from cigarette addiction, reduction in blood pressure level, improved sleep and more exercise are associated with religiosity/spirituality and are documented in his book titled "Handbook of religion and health" [12,13].

Conclusion

According to our findings; mixed results of positive and negative associations between spirituality and clinical outcomes are evident. However our study reports a more positive association between spiritual health care/spirituality with patient's clinical outcome. The negative outcomes may have been as a result of instances which patients perceived their ailment to be a curse from God (Negative view of God). Generally our results show that spirituality /spiritual health care will improve on patients' clinical outcome. A prospective cohort with an interventional design using spiritually inclined health professionals to

administer spiritual care will provide a clearer evidence of the impact of spiritual health care/spirituality on patients clinical outcome. Proper training of research participants will reduce physician's related concerns loner waiting time caused by spiritual intervention and poor spiritual assessment skills. There is need for many more studies to be carried out on this topic so as to provide more insight and improve on the holistic care provision. The result will be improvement of the overall quality of health care rendered by health professionals to patients.

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