

THE RELATIONSHIP BETWEEN SELF-REPORTED HEALTH STATUS AND SPIRITUALITY AMONG ADULT PATIENTS ATTENDING GENERAL OUTPATIENT CLINIC OF TERTIARY HOSPITAL IN IBADAN

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ABSTRACT

Background: Spirituality is an important aspect of health that is not always addressed in modern day medical practice. This is related to lack of clarity about the nature of the concept, however its role in researches and health service provision is being revisited because of the evergreen importance.

Objective: To determine the relationship between spirituality and self-reported health status of adult patients attending general outpatient clinic of University College Hospital, Ibadan, Nigeria.

Methods: A cross-sectional descriptive study wherein interviewer administered questionnaire was applied on randomly selected 422 eligible and consenting adult patients attending general outpatient clinic of University College Hospital between 1st November, 2010 and 31st January, 2011. Their Spirituality and Health status were assessed using spirituality scale and self reported health questionnaire respectively.

Result: Of all the respondents, 270(64.0%) were females while 152(36.0%) were males with a ratio of 1.8:1, and mean age of 42.8 ± 15.9 . The overall mean spirituality score was 125.7 ± 12.1 , the maximum obtainable score was 138. A total of 63(15.0%) respondents rated their health as excellent, 114 (27.0%) rated theirs as very good while 150 (35.5%) respondents considered theirs as good. Respondents who rated their health as good had significantly higher mean scores when compared with those who rated theirs as poor or fair (mean difference = 3.347, 95% C I = 0.552 to -6.142 p=0.019)

Conclusion: The study revealed that perceived spiritual wellbeing is positively related to the patient's sense of general wellbeing. Therefore, there is need to give attention to patient's spiritual wellbeing during medical encounter in the hospital.

Key words: Spirituality, Self-reported health, Spirituality score

INTRODUCTION

Self-reported health (SRH) is among the most frequently assessed health perceptions in epidemiological research because a person's appraisal of his or her general health is a powerful predictor of future morbidity and mortality.¹ Fayers and Springers in 2002 reported that self-reported health status (SRHS) is a useful global measure of health status. They ascribed its advantages to its simplicity and easy administration.² Self-reported morbidity is also widely used as a part of social statistics.^{1,2} According to WHO, health does not just mean an absence of infirmity but refers to the social, emotional, spiritual and cultural well-being of the whole body.³ Therefore, a healthy person is not only that who is sound physically, mentally

and emotionally but also well spiritually.³ Spirituality is a concept that is globally acknowledged but means different things to different people and could be explained based on different cultures.^{4,5} Spirituality was formerly described in the context of religiosity but recent advancement in research had come to see the difference in the two concepts.^{4,5} There is no consensus in the definition of spirituality. Several definitions have been proposed: spirituality is defined as a personal search for meaning and purpose in life, which may or may not be related to religion.⁴ It entails connection to self-chosen belief and or religious beliefs, values, and practices that give meaning or reasoning to one's life or existence, thereby inspiring and motivating

individuals to achieving optimal being. This connection brings faith, hope, peace, and empowerment and the results are joy, forgiveness of oneself and others, awareness and acceptance of hardship and mortality, a heightened sense of physical and emotional well-being, and the ability to transcend beyond the infirmities of existence.⁴ According to American Association of Family Physicians, spirituality is defined as the way you find meaning, hope, comfort and inner peace in your life.⁵

The health benefits of spirituality have been widely studied. Consistently, the finding is that spirituality prevents illness and enhance coping during illness.⁶⁻⁸ Patrick and John in 2008 in Nigeria reported that harnessing spirituality with pharmacotherapy would significantly enhance drug compliance and better recovery of patients from illness.⁹ Similarly, in a local study, also in Nigeria in 2008 by Oluwole, a positive relationship was demonstrated between spirituality, marital satisfaction, self disclosure and sexual self efficacy.¹⁰ The study demonstrated that spirituality is a paramount indicator of marital satisfaction, well being and marital stability.¹⁰

However, while there are several studies indicating that spirituality may protect against distinct diseases,⁶⁻⁸ study on spirituality is at the primitive stage and little is known about the relationship between spirituality and health in our environment. Hence, the need for this study to determine the spirituality of adult patients attending General Outpatient Clinic of University College Hospital, Ibadan and find out if their spirituality affects their self-rated health. It is hoped that the outcome of this study will further guide the physician on how to properly place patient's spirituality during their encounter in the hospital.

MATERIALS AND METHODS

Study Population/Setting

This study was carried out at the General Outpatient Clinic of Family Medicine Department of University College Hospital (U.C.H), Ibadan. U.C.H is situated at the Queen Elizabeth road, Ibadan. Ibadan is the capital city of Oyo State and Oyo state is one of the 36 states of Nigeria. Ibadan is located in the South Western part of Nigeria and it is the largest city in South of the Sahara with an estimated population of 2.55 million. Most of its residents belong to the Yoruba ethnic group.

The University College Hospital (U.C.H), Ibadan is the premier teaching hospital in Nigeria, established in 1957. It is under Ibadan North-East local government. It renders health care to residents in Ibadan and its

environs. It also serves as a referral center for other cities and towns in Nigeria. The General Outpatient serves as the primary and secondary health care facility within the tertiary hospital and receives most patient coming to U.C.H, Ibadan with or without prior referral from other hospitals. Patients of all ages and both gender with various diseases condition are managed at first contact while those that require specialist care are referred to the appropriate specialists. An average of 1500 new clients are seen monthly in this clinic.

This was a descriptive cross-sectional study consisting of consenting adult patients aged 18 years and above who were not acutely ill and presented during the study period. In a month 1200 adults clients were seen and there are 20 working days in a month for three months study period, there were 60 interview days and to interview 422 clients $422/60 = 7.03$. Therefore 7 clients were recruited on a daily basis.

Recruitment was by simple random sampling technique using computer generated random numbers. The numbers were generated daily by using the rand-between function in the Microsoft excel 2007 software.¹¹ The numbers were matched with the tally numbers given to the patients and those that met the inclusion criteria and consented to the study were selected. Any of those who declined were skipped and the next number out of the remaining list was picked until the calculated sample size of 422 was met.

These respondents were seen by the researcher in a consulting room and their privacy was ensured. However, before the departure of each respondent, the questionnaire was checked for completeness and correctness.

Data collection was by means of an interviewer-administered questionnaire. Each questionnaire had three sections viz:

Biodata and social classification: These include the following; age, sex, occupation, educational background and ethnicity. The respondents were also allocated into social classes according to their occupation. The classification ranged from I - the highly skilled/professionals, II-intermediate, III-skilled manual and non-manual, IV-partly skilled and V which is the unskilled.¹²

Respondents spirituality: This was assessed using spirituality scale questionnaire which is a validated holistic assessment instrument with cronbach alpha coefficient of 0.94, Pearson coefficient of 0.84 and internal consistency of 0.59- 0.97. The scale contains 23- items and it is scored based on Likert scales of 1-6, ranging

from strongly disagree to strongly agree. The highest possible score that can be obtained on the 23-item Spirituality scale is 138 and the lowest is 23. It was theorized that score of 23 to 60 indicated very low levels of spirituality, 61–91 indicated low spirituality, 92– 117 moderate spirituality, and 118-138 suggested high levels of spirituality.¹³

Self-evaluated health status: This was assessed using self-reported health questionnaire¹⁴ simply by asking the respondents to rate their overall health on a Likert scale from 1 to 5, with 1 being poor, 2 being fair, 3 being good, 4 being very good and 5 being excellent.

Data Analysis

The administered questionnaires were sorted out and coded serially on a daily basis and analyzed using statistical package for social science version 17. Frequency tables were generated for relevant variables after cleaning the data. Continuous variables were summarized using mean and standard deviation while categorical variables were summarized with proportions. The mean spirituality score was obtained and the association between the score and other variables were determined using student t-test and Analysis of variance (F -test) where applicable. The mean spiritual score was compared across categories of self-reported health. Multiple linear regressions were used to model significant variables on spirituality scores. Regression coefficients and their 95% confidence interval (CI) were reported. Data were presented in tables and a p-value of 0.05 or less was considered statistically significant.

The Level of Spirituality of the Respondents

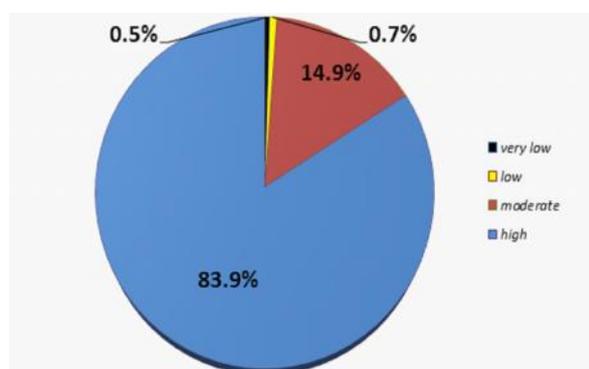


Fig. 1: Proportion of respondents in each level of spirituality

Ethical Considerations

Ethical clearance for the study was obtained from the joint ethical review board of the institution/hospital (University of Ibadan/UCH). Written and informed consent was obtained from all the participants. The procedure was conducted according to the guidelines defined by the Helsinki's declaration on human research.¹⁵

RESULTS

There were 270 (64.0%) females and 152 (36.0%) males in the studied population, with a female to male ratio of 1.8: 1. The age range of the respondents was 19 to 85 years with a mean age of 42.8 ± 15.9 years.

Table 1: Socio-demographic characteristics of respondents

| Variable | (N= 422) n | % |
|------------------------------|---------------|------|
| Age (years) | | |
| < 30 | 104 | 24.6 |
| 30-39 | 103 | 24.4 |
| 40-49 | 74 | 17.5 |
| 50-59 | 63 | 15.0 |
| ≥ 60 | 78 | 18.5 |
| Sex | | |
| Female | 270 | 64.0 |
| Male | 152 | 36.0 |
| Education | | |
| None | 138 | 32.7 |
| Primary | 100 | 23.7 |
| Secondary | 119 | 28.2 |
| Tertiary | 65 | 15.4 |
| Social class | | |
| I | 81 | 19.2 |
| II | 121 | 29.0 |
| III | 46 | 11.0 |
| IV | 27 | 6.0 |
| V | 147 | 34.8 |
| Marital status | | |
| Single | 94 | 22.3 |
| Currently Married | 287 | 68.0 |
| Divorced | 4 | 0.9 |
| Separated | 7 | 1.7 |
| Widowed | 30 | 7.1 |
| Ethnicity | | |
| Yoruba | 353 | 83.7 |
| Ibo | 35 | 8.3 |
| Hausa | 17 | 4.0 |
| Others | 17 | 4.0 |
| Religion | | |
| Christianity | 254 | 60.2 |
| Islam | 168 | 39.8 |
| Monthly Income(Naira) | | |
| ≥N5,700 | 226 | 53.6 |
| <N5,700 | 196 | 46.4 |

However, a higher proportion (51.0%) of the respondents was aged 40 years and above.

Majority 287(68%) of the respondents were married. Of this, 210(73.2%) was of monogamous family setting and the remaining 77(26.8%) belonged to polygamous family setting. The least proportion 4 (0.9%) of the respondents were divorced. Majority 353(83.7%) of the respondents were of Yoruba descendant. The remaining respondents belonged to Igbo 35(8.3%), Hausa 17(4.0%) and other minority ethnic groups 17(4.0%).

Two hundred and eighty four(67.3%) respondents had formal education while 138 (32.7%) had no formal education. However, of the 284(67.3%) with formal education, the highest proportion 119(41.9%) had secondary school education.

The social classification of the respondents revealed that the highest proportion 147(34.8%), belonged to social class V while the least proportion 27 (6.0%) was in social class IV.¹²

The respondents' monthly income ranged from N1,000 to N480,000 (\$6.58 to \$3157.89) with median income of N14,000 (\$92.11). During the period of this study, a dollar was equivalent to N152.00. However, using the World bank poverty line of \$1.25 a day (\$37.5 in a month=N5,700) being used as poverty line for developing countries, majority 226(53.6%) of the respondents were above poverty level.¹⁶ 150 (35.5%) described their health as good while 83(19.7%) rated theirs as fair.

Spirituality and Social Demographics of the Respondents

The mean spirituality score was marginally higher in the respondents aged 40years and above when compared with their counterparts who were less than 40 years of age (127.1 ± 11.6 versus 124.1 ± 12.8 respectively). And was statistically significant ($p=0.014$). The female respondents had a higher mean spirituality score when compared to their male counterparts (126.5 ± 10.2 versus 124.0 ± 15.2). The difference was statistically significant ($p=0.043$). For the educational status of the respondents, there was an initial increasing trend in the mean spirituality score

Table 2: Spirituality scores of various socio-demographic groups

| Variable | Mean \pm SD | N=422 | Statistical value | p value |
|-----------------------|------------------|-------|-------------------|---------|
| Age (years) | | | | |
| < 40 | 124.1 \pm 12.8 | 207 | t=2.480 | 0.014* |
| \geq 40 | 127.1 \pm 11.6 | 215 | | |
| Sex | | | | |
| Male | 124.0 \pm 15.2 | 152 | t=2.032 | 0.043* |
| Female | 126.5 \pm 10.2 | 270 | | |
| Education | | | | |
| None | 125.9 \pm 15.1 | 65 | F=0.418 | 0.740 |
| Primary | 126.0 \pm 11.1 | 46 | | |
| Secondary | 126.4 \pm 9.9 | 122 | | |
| Tertiary | 124.9 \pm 12.9 | 189 | | |
| Marital status | | | | |
| Single | 124.6 \pm 10.6 | 94 | F=1.840 | 0.160 |
| Married | 125.4 \pm 13.3 | 287 | | |
| Others | 129.0 \pm 7.0 | 41 | | |
| Ethnicity | | | | |
| Hausa | 125.9 \pm 13.3 | 17 | F=0.104 | 0.957 |
| Ibo | 125.1 \pm 10.7 | 35 | | |
| Yoruba | 125.7 \pm 12.6 | 353 | | |
| Others | 124.2 \pm 7.9 | 17 | | |
| Religion | | | | |
| Christianity | 124.7 \pm 12.5 | 254 | t=1.838 | 0.067 |
| Islam | 126.9 \pm 11.8 | 168 | | |
| Monthly income | | | | |
| \geq N5,700 | 125.2 \pm 12.1 | 226 | t=0.819 | 0.413 |
| <N5,700 | 126.2 \pm 12.2 | 196 | | |

*=statistically significant at 5% level of significance

Table 3: Proportion of respondents in each category of self-reported health status (SRH)

| Category of SRH | Frequency | Proportion of the respondents (%) |
|-----------------|-----------|-----------------------------------|
| Excellent | 150 | 35.5 |
| Very good | 114 | 27.0 |
| Good | 83 | 19.7 |
| Fair | 63 | 15.0 |
| Poor | 12 | 2.8 |

as the educational status of the respondents increased from no formal education through primary to secondary educational level. However, there was a sharp decline in the spirituality score with further education with the respondents with tertiary educational status having the lowest mean spirituality score. However, this was not statistically significant ($p=0.740$). Furthermore, the mean spirituality score was found

Table 4: Comparison of spirituality across all categories of self-reported health status of the respondents

| Category of SRH | N=42 | Mean Spirituality score | P | F |
|-----------------|------|-------------------------|--------|-------|
| Excellent | 63 | 122.7±20.7 | 0.017* | 3.323 |
| Very good | 114 | 127.9±7.9 | | |
| Good | 150 | 126.7±11.2 | | |
| Fair | 83 | 123.4±9.9 | | |
| Poor | 12 | 124.1±8.9 | | |

* = statistically significant at 5%

to be marginally higher for married respondents compared to their counterparts who were single (125.4 ± 13.3 versus 124.6 ± 10.6). The difference was not statistically significant ($p = 0.160$). Although, the mean spirituality score of the respondents with lower income was slightly higher than that of the respondents with higher income (126.2 ± 12.2 versus 125.2 ± 12.1), this difference was also not statistically significant ($p = 0.413$). The other details are as described in table 2

Table 5: Multiple linear regression of spirituality score on significant variables

| Variable | Regression coefficient (β) | Standard error for β | 95% CI for β | p value |
|----------------------|------------------------------------|----------------------------|--------------------|---------|
| Age last birthday | 0.087 | 0.038 | 0.013 - 0.161 | 0.022 |
| Sex (Female) | 2.720 | 1.225 | 0.313 - 5.128 | 0.027 |
| Self-reported health | 3.347 | 1.422 | 0.552 - 6.142 | 0.019 |

Self Reported Health of the Respondents

The least proportion 12 (2.8%) described their health as poor, 83(19.7%) respondents rated their health as fair while 150 (35.5%) respondents described their health as good. One hundred and fourteen (27.0%) respondents described their health as very good and 63(15.0%) respondents perceived their health as excellent. The results are as shown in Table 3.

Spirituality and Self-Reported Health of the Respondents

The overall mean spirituality score was 125.7 ± 12.1 . The respondents who rated their health as very good and good had higher mean spirituality score (127.9 ± 7.9 and 126.7 ± 11.2 respectively). Respondents who rated their health as good had significantly higher mean scores when compared with those rating their health as poor or fair (mean difference = 3.347, 95%CI = 0.552 to- 6.142 $p=0.019$). The details are as shown in Table 4.

Multiple Linear Regressions of Significant variables on Spirituality Scores

As shown in table 5, for every 1year increase in age, there was a statistically significant attendant increment in the spirituality score of the respondents by about 0.087 units (95% CI= 0.013 to 0.161, $p=0.022$). Females had a significantly higher spirituality score compared to males (mean difference = 2.72, 95% CI for mean difference = 0.313 - 5.128, $p=0.027$). Respondents who rated their health as good still had significantly higher mean scores when compared with those rating their health as poor or fair (mean difference = 3.347, 95%CI = 0.552 to -6.142 $p=0.019$).

DISCUSSION

The relationship between spirituality and health has been the subject of growing interest in the field of medical practice.¹⁷⁻²⁰ Clinical and scientific communities are continually trying to improve the quality of care offered to individuals seeking medical attention. This study has attempted to highlight the relationship between spirituality and self-reported health among the adult patients attending general outpatient clinic of the University College Hospital, Ibadan. The finding

of the majority (83.9%) of our respondents being highly spiritual may not be unrelated to the cultural practices in the country (Nigeria). However, this finding is in consonance with a previous report of a poll among the Nigerian living in America where 100% of the respondents were found to be spiritual²¹ and the conclusion of Jeri and Lynda who also reported that spirituality is inherent in every human being and that everybody is born as a spiritual being and this makes them to find meaning to their lives in health and diseases.²²

In this study, the finding of larger number of the respondents reporting their health status as good despite the fact that they had one form of health complaint or other may be a reflection of the ethnic background of majority of the respondents which is Yoruba. This is because people of Yoruba ethnic group are known to attach high significance to utterances. Therefore, the respondents may err on the side of claiming good physical health when in reality they are ill. This finding is in consonance with the report of a study done by Ojikutu among a community of people who lived in the slum in Lagos.¹³ He found that majority of his respondent rated their health status as good despite the obvious serious neighborhood deprivation and challenges.¹³ Similarly, the reporting of health optimism, or the reporting of good health despite objective physical evidence to the contrary, had also been previously documented in a study conducted by George.²³ George concluded that health optimism was one possible explanation for the interaction between spirituality and health appraisal. Higher spirituality score 126.2 ± 12.2 was found among the respondents with lower monthly income ($\leq \text{N}5,700$) compared with their counterparts 125.2 ± 12.1 with higher monthly income ($> \text{N}5,700$). This difference was however not statistically significant ($p=0.413$). This was similar to the finding of Albert who reported that people of low socio economic class tend to be more spiritual and that the prevalence of spiritual commitment tends to drop off among higher income categories, suggesting that as material conditions improve, the perceived need for spiritual resources as a coping mechanism declines.²⁴ The observation of this study could be due to the fact that the majority (60.4%) of the studied population was of low socioeconomic class therefore; there is tendency for a skewed result to a higher spiritual level.

In this study, higher spirituality score was found among the respondents who were married when compared with the respondents who were single (125.4 ± 13.3 versus 124.6 ± 10.6). However, this difference was not statistically significant ($p=0.160$). This trend was in agreement with the finding of Oluwole who had earlier

reported a higher spirituality level among married people compared with those who were not married.¹⁰ However, the finding of this study is dissimilar to the report of Albert who had previously noted that spiritual commitment was higher among those who were single compared with those who were married.^{24,18}

In this study, the higher spirituality score obtained in the respondents who rated their health to be good may also be due to the socio-cultural background and beliefs of the majority of the respondents (Yoruba) which make them to describe their health as good even when they have an obvious illness.¹³ However, this finding is similar to the outcome of the study done on the relationship between spirituality and self-reported health (SRH) by Daaleman *et al*¹. He opined that patients who had greater measure of spirituality were more likely to rate their health as good. Similarly, Koenig²⁵ in his study also concluded that patients who are spiritual were more likely to have more social support and better psychosocial and physical health outcomes when compared with patients who did not consider themselves spiritual or religious.^{25,19}

CONCLUSION

The study revealed that perceived spiritual well-being is positively related to the patients sense of general well-being

RECOMMENDATIONS

Based on the findings of this study wherein majority of the respondents were found to be spiritual, we recommend that appropriate guidelines and protocols should be designed and incorporate into routine medical practice in order to rejuvenate this important but often neglected aspect of medicine.

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