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# LIFE QUALITY RELATED TO SPIRITUAL HEALTH AND FACTORS AFFECTING IT IN PATIENTS AFFLICTED BY DIGESTIVE SYSTEM METASTATIC CANCER

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**ABSTRACT**

**Introduction.** Spiritual health is of the basic elements in chronic patients. This concept can be considered as an important approach in promoting physical & spiritual health & life quality **Goal**. The present study has been planned aiming to study life quality related to metastatic phase gastrointestinal (digestive) cancer referring to Mazandaran Medical Science University Educational Center in Iran. **Material and Methods**. This research has been done by descriptive-analytical method with 250 patients through available sampling method. The data has been collected via spiritual health & life quality questionnaire. The data analysis has been performed by calculating $X^2$, T Test, variance analysis and Pearson correlation coefficient. **Results.** The mean & standard deviation of the patients were 12.56 ±94/47. The highest relationship between age & spirituality was related to ages over 60. There was a meaningful statistical relationship between spirituality & life quality scale ($p<0.001$), between spirituality & respiratory disorder ($p<0.047$), anorexia ($p<0.004$), exhaustion ($p<0.006$), financial problems ($p<0.006$). **Conclusion:** regarding the results**,** we can perceive the necessity behind improving spiritual health aspect as an influencing factor on the patients' life quality. Through enhancing spiritual beliefs, it is possible to help the patients' spiritual quality get promoted.

**Key words. Life quality, spiritual health, gastrointestinal cancer.**

## 1. INTRODUCTION

Cancer is a widespread disease in Iran and the world (1). Cancer is a chronic disease which has been increasing since 70s (2). In Iran, more than 70000 cases of new cancer is estimated annually (3, 4). Gastrointestinal cancer has been reported as the most common one in northwest Iran (5). Esophagus cancer shows the highest case (31.6%) among age group 65-74( 6). Colorectal cancer is the third prevalent one in the USA and the cause behind 10% death of new cancers in men & 11% in women (7). In Iran, Colorectal cancer is around 7/9%-6% out of 1000 annually (8). In recent years, not only the importance of cancer hasn't been degraded but also in some reports, it has got superior to esophagus cancer in terms of relative position. In northern Iran, the majority of stomach cancer has started since 40s. This malady has been observed in poor social and economic classes of the society (9). Some researchers demonstrated that spirituality is highly related with the person's health, so that spirituality has been considered as of the significant resources to adapt with life stressful events (10). In their studies on the cancer stricken patients' spiritual health, researchers have found the direct relationship between the patients' age and their spiritual health (11). The elderly get better results from their treatment compared with others as a result of the belief that they suffer from a special physical disease (12). Some studies suggest that lacking spiritual health, the person cannot achieve the highest life quality level (13). There is a mutual relationship between the disease and life quality. Physical disorders have a direct effect on all life dimensions (14). In recent years, studying cancer stricken individuals' life quality has gained a special importance . Cancer influences the patients' life quality with various degrees all cases (9). The research on health spiritual aspect and life quality relationship in metastatic cancerous patients isn't completely vivid and considering this point that this subject has been studied limitedly, conducting such research seems critical. To assess life quality helps us to analyze the effect of interventions on the patients' life quality. Thus the present study aims to investigate

life quality associated with spiritual health and its influencing factors in metastatic gastrointestinal patients.

## 2. MATERIAL AND METHODS

This cross-sectional research is descriptive-analytical. The study community has been selected out of metastatic phase gastrointestinal cancer afflicted patients in 2012-2013 referring to educational center medical science university of Mazandaran in northern Iran. Sampling has been by census that 250 individuals were included. The study input criterion involved: definite diagnosis of metastatic gastrointestinal cancer based on the pathological result and the exclusion criterion of lack of tendency to cooperate. Before doing the study, the patients' consensus was gained for taking part in the research. To gather data, 3 tools have been used: a) Demographic data collection form; b) Life quality questionnaire EORC QLQ (European Organization for Research and Treatment of Cancer - 30).

That were translated into Persian and its validity and reliability have been verified in domestic studies (15, 16). The questionnaire QLQC-30 includes 30 options the first part of which is related to function (physical, emotional, role, cognitive and social) and the second part is about the disease symptoms and signs (exhaustion, nausea, vomiting, pain, asthma, sleep disorder, loss of appetite, constipation and diarrhea , the disease economic impacts). In this questionnaire, 4 option scale (never, slightly, very, very much) has been applied to measure the answer. Except for the scale related to the global health condition and life quality having 7 options, all areas scoring is done between 0-100 (17). In the areas associated with functional and global health condition and life quality, the higher scoring indicates the individual's better condition in this area. But about the disease symptoms and signs, higher scoring suggests more symptoms and signs of the disease in the person (17-19).

Twenty (20) item spiritual health tool of Ellison and Paloutzian (1982) has been employed, 10 questions of which measure religious health & 10 ones measure the other existential health. The spiritual health score is the sum of these two subgroups ranging 20- 120. The answers to the questions have been classified as 6-item Likert scale (totally disagree, agree, relatively disagree, relatively agree, agree, totally agree). Score 6 was assigned to totally agree and 1 to totally disagree. In the negative questions, scoring was done reversely and the spiritual health has been classified as low (20- 40), average (41-99) and high (100-120). The spiritual health questionnaire's validity

Has been determined via content validity after being translated into Persian and the questionnaire's reliability has been set by $\alpha$-Cronbach reliability coefficient as 0.82 (11). The data collected using SPSS 16 software has been analyzed. For data analysis, descriptive and inferential statistical methods, Pearson correlative coefficient, chi-squares, independent, and variance analysis have been applied.

## 3. RESULTS

The findings show that most of the patients (58.4%) were men over 60 years old (70%), urban (57.2%), illiterate (38.4%) and workers (32%). The disease affliction time was 6 months (48.8%). Esophagus cancer was the highest (48%). 60% were in the third phase of the disease. 60% had no relative suffering from cancer. 86.4% were undertaking chemotherapy. The mean life quality was this way, in physical aspects 50.16%, global health status 57.63%, emotional 54.63%, cognitive 81.86% and social 56.30%. The mean and the standard deviation of global spiritual health of the sample were 94/47±12/56 and the highest spiritual health was related to men with the mean and the standard deviation as 94/93 ± 12.06. The highest relationship between spiritual health with age was found for ages 60 and more with the mean and the standard deviation as 95/06± 12.44. Most of them (61.2%) had spiritual health of average to high. Most of them were men (61%) having average to high spiritual health. Regarding life quality, the mean score in functional scale was 56.53, in global health condition 59.63 and in the symptoms 39.08. (Score 100 indicates the best health condition and 0 the worst health condition). About spirituality and the symptoms and signs between spiritual health, nausea and vomiting ($P<0.008$), spiritual health and respiratory disorder ($P<0.047$), spiritual health and loss of appetite ($P<0.004$), spiritual health and financial problems ($P<0.006$), spiritual health and exhaustion ($P<0.006$), there was a meaningful relationship. However, there was no statistical meaningful relationship between spiritual health and life quality of the patients, gender, age and the other demographic factors (Tables 1 and 2).

## 4. DISCUSSION

In this research, the mean score of the patients' life quality in the aspects of physical function scale was 50.16, global health status 57.63, emotional 54.63, cognitive function 81.86 and in social function scale 56.30. In the study by Kobashi et al., (2008), the scoring of physical function was 77, role playing 68, emotional 67, cognitive 74, social 72, global health condition 58(16). In another research, the score of the patients in physical function was 79, role playing 69, social function 72, global health status 62 , emotional function 70 and cognitive function 80 (20). As seen, in all cases except for cognitive function, the dimensions of the patients' life quality in the European countries are better than that of the Iranians. This issue is probably as the result of supporting patients more by the considered organizations and countries while in Iran, due to the financial problems and overwhelming costs of the patients' treatment and lack of being supported by public and grassroots organizations has negative effect on the patients' life quality. This study derived results demonstrated that the majority of the patients over 60 enjoyed average to high spiritual health. These findings are consistent with those of the studies by Rowe et al., (2004) and also Kaczoroowski et al., (1989). They showed that the tendency to spirituality rises as age increases because it is the route through which the person faces the fact behind death and adapts with it (21, 22). Though, in the current study, there is no significant difference between age and spiritual health, the majority of the patients enjoyed average to high spiritual health so that this study findings have been almost compatible with the mentioned research. While in the research by Fernsler et al., (1999), no relationship has been found between spiritual health and the age of the colorectal cancer patients (23). In this study, it has been revealed that there is no meaningful relationship between spiritual health and age. High field et al., (1992) demonstrated that there is no significant relationship between lung cancer and age (24). Although in the research by Kaczoroowski et al., (1989) the spiritual health in women suffering from cancer is slightly higher than that in man, there has been no meaningful difference (21). No meaningful statistical relationship has been

found between spiritual health and life quality in functional scale and global health scale. But a meaningful relationship has been discovered between spiritual health and life quality in the symptoms and disease scale. The research by Morgan et al., (2006) on breast cancer patients under treatment showed that there is a significant relationship between spiritual health and the life quality physical and functional dimensions (25). Another study on the kidney patients has confirmed the relationship between spiritual health and life quality (26). Another study on chronic patients has revealed the positive relationship between spiritual health and life quality and the patients' compatibility (27). In another research on the cancer stricken patients, an average relationship has been found between life quality and spiritual health (28). Maybe it is due to the difference in the results related to the cultural differences, the kind of the treatment, treatment phase, and accuracy of performing the studies, the samples number and various tools. However, there is a meaningful relationship between the spiritual health and life quality in most of the Disease symptoms and signs aspects (nausea, vomiting, loss of sleep, pain, financial problems, loss of appetite, exhaustion). Based on the findings obtained, there is a significant statistical relationship between spiritual health, anxiety and exhaustion. That is the patients with high spiritual health have got less anxious (29). The high levels of stress creates physical, psychological disorders, anxiety, sleep disorder, exhaustion, pain, decreased social function and lower problem solving capability (30). These findings are compatible with those of this study. The present study findings indicate that no statistical meaningful relationship exists between spiritual health and demographic variables (education, marital status, the children's number, employment). In this area the conducted studies' results differ. The studies' results denote that there is no statistical meaningful relationship between the demographic variables and spirituality (31, 32). Another research indicated that there is relationship between some of the demographic variables and spiritual health (33). Though, the study by Nelson et al., (2002) didn't show any meaningful relationship between the demographic variables and spiritual health (34). Although the result of the studies about spiritual health and the demographic variable is opposite

Apart from the probabilities like the effect of cultural and spiritual factors, the number of samples and the sampling manner and many other influencing factors affect this issue. It seems that in this area, additional clarification seems necessary.

## 5. CONCLUSION

Considering that the study patients enjoyed average to high spiritual health and life quality, the positive relationship between spirituality and life quality and also the positive role of spirituality in predicting the afflicted patients' life quality, enhancing spirituality and spiritual attitude in the patients and also encouraging and explaining to do the relevant actions can increase life quality. The cultural, educational and therapeutic officials are recommended to offer spiritual teachings in order to boost the spirit and to promote life quality of the patients. Performing qualitative research to understand how spirituality influences life quality is advised. To find appropriate strategies based on the culture to promote the study patients' life quality and spiritual health can be a great solution for spiritual health and life quality relationship.

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CONFLICT OF INTERESTS: NONE DECLARED.

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