A new method to promote the quality of life based on spiritual wellbeing in health care workers: A predictive model

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Abstract

**Background:** Promotion in quality of life is an important goal of health care systems. Spiritual health can be improved by harmonizing various aspects of life and improvement of mental health and adjustment. This study was designed to provide a new method to enhance the quality of life based on spiritual health in health care as a predictive model.

**Methods:** This was a correlation predictive study that carried out on 84 health personnel in all health centers in Bojnurd. Data was collected through interview and questionnaire based on quality of life (SF 36) and spiritual wellbeing (SWBS). Data were analyzed by Chi-square, Fisher exact test, Pearson correlation, multiple regression analysis (stepwise method) and logistic regression, in software 22 SPSS. P<0.05 was considered as the level of significance.
Results: The mean age of the participants’ were 33.48 ± 8.12 and also 69.7% were females. Mean score for the spiritual health, and quality of life was 79.7 ±11.5 and 71.2± 15.9 respectively. There was not significant different between men and women. There was a positive significant correlation between quality of life and spiritual health (p=0.02, r=0.377). By using stepwise regression analysis, the variables of gender and spiritual health could predict quality of life.

Conclusion: Health cares’ gender and also their spiritual health score can predict their quality of life.

Keywords: Quality of life, Spiritual Health, Health care, Predictive model.
Introduction:
World Health Organization (WHO) has defined Quality of Life as a person's perception of their position in life, in culture and social values and goals, expectations, standards and individual interests [1]. The assessment of Quality of Life, for more than 20 years, is done in cancer research; But gradually extended to other clinical areas. This issue, used in treatment decisions, choosing appropriate interventions and evaluate the effectiveness of interventions [2]. Quality of Life in medicine is classified in the form of general quality of life that means the sense of well-being, and health-related quality of life that related to the impact of the disease on the health and well-being and life satisfaction [3].

Spiritual health is an important aspect of human health; since this regard, the World Health Organization states that health needs should include spiritual health as well as physical, mental and social. Spiritual wellbeing provides integrated relationship between internal forces and detected by stability characteristics in the lives as peace, balance and harmony. Feeling of close relationship with self, God, society and the environment. In general, Spiritual health determines a person's integrity [4, 14]. Some studies indicate that without spiritual health, other aspects of biological, psychological and social functioning, cannot be functioning properly or achieve to maximum capacity, so the highest level of quality of life, cannot be achieved. Moreover, does not notice to the issue of health in a positive position, rather the process of achieving high levels of well-being is of any size [5, 14].

Health groups because of their nature are always associated with stress factors than others, and present, Different wards, due to differences in stressful situations, would have a different effect on the state of mental health care workers. However, the American Nursing Association expressed in clinical practice standards that spiritual dimension is at the center of the health check [2, 6 and 7].

Since the improving the Quality of Life of medical practice staff is an important factor of stability and effectiveness of the health care system [12], and the lack of study that able to provide a way to improve the quality of life of health workers is based on spiritual health, Researchers involved in this study to explain this.

Methods and Materials:
This study was a correlation predictive study that conducted in all of health centers of Bojnurd city. The population of this study, regard to Confidence of interval=95% and the power of the study= 80%, and the evaluation of Pearson Correlation Coefficient, was determined 61 participants.

The health workers that agreed to participate were given a three-page self-administered questionnaire that encompass Socio-demographic information (include: Age, Sex, Marital status, occupational health history and Educational level), The World Health Organization Quality of Life questionnaire of 26 questions (WHOQOL-BREF) and Spiritual Well-being Scale. Questions on Quality of Life covered 4 main topics subscales on physical health, mental health, social relationships, and environmental health and in finally Quality of life and its general health. Reliability and Validity of this questionnaire approved in the same study [9,17]. Alpha coefficients for reliability and internal consistency of the questions were found to be 0.84. The
metod of answering this questionnaire was likert. Based on questionnaire protocol, in the first, the questions were related to each domain, separated, and so to every question was awarded in accordance with the Protocol score between zero and 100. Scores for each domain were gathered together and their means that expressed as a percentage, revealed the level of health in that aspect. For calculating total scores of questionnaire, The mean values obtained from the numerical scheme is 0-100, expressed as total score of Quality of Life. Also, the Quality of Life classified to 3 sub-groups: High Quality of Life (scores 75 and above), Moderate Quality of Life (scores between 74 to 50) and Low Quality of Life (scores below 50). According to Montazeri and collegues [9], and Assarroudi and et al [17], the total of physical function, the limitation of physical roling, physical pain and general health, considered as Quality of Life in physical aspect and total of other subgroups of questionnaire (such as: limitation of emotional rolling, mental health and social functioning) considered as mental aspect.

The Spiritual Well Being Health Questionnaire encompasses 20 items that the half of them assesses Religious well-being and the other 10 assesses Existential well-being. This questionnaire provides a subscale for Religious and Existential well-being as well as an overall measure of the perception of an individual’s spiritual quality of life. The Existential Well-Being Subscale gives a self-assessment of an individual’s sense of life purpose and overall life satisfaction. The Religious Well-Being subscale proves a self-assessment of an individual’s relationship with God. Answers each of the questions based on Likert scale a six-part "strongly disagree" to "strongly agree" were classified. In terms of positive action, Answer “Strongly Disagree”= 1, and "strongly agree"= 6, and conversely. The Spiritual Well Being Health’s minimum score was 20 and maximum was 120. Scores of Religious and Existential well-being in minimum and maximum was 10- 60 [2, 17]. Validity of this questionnaire reported in the Alahbakhshian and et al with Cronbach's alpha coefficients= 0.82.

In the report of findings related to spiritual health outcomes and quality of life scores, the range of them was between zeros to 100. In analytic measurements of this study used of Chi-square test, Fisher's exact test, Pearson correlation coefficient and Multiple Regression (in stepwise method) in SPSS software (Version 22). A P value of < 0.05 was considered to be statistically significant.

Results:
In all 84 eligible participants completed the questionnaire, the mean age of respondents was 15.48 (S.D. =8012) years old, 69.7% were female and the most of them (84.8%) were married, and the majority of respondents (87.8%) had academic level education.

The mean score of spiritual health in participants was 79.7±11.5, and the mean of Quality of Life score was 71.2±15.9. In spiritual health, Comparison assessment between its items in terms of gender, showed that any significant differences in men than women (p= 0.45). Also, the comparison of Quality of Life means between men than women, Despite the higher scores among women, did not show a significant difference (p=0.09).

Comparing spiritual health among the population study, in terms of marital status, revealed higher scores of spiritual health among single people. Also, this correlation was true in comparison of mean quality of life score.
Among the participants in this study, the highest level of spiritual health was seen in lower grade of academic educational level; albeit, in comparison of three educational groups (diploma and lower, lower grade of academic educational level and higher grade of academic educational level), in terms of spiritual health mean, wasn’t seen any significant differences (p=0.47). There was no significant difference among the three groups of study of quality of life; although, Mean quality of life was greater with higher education (p=0.62).

Among the components of quality of life and spiritual well-being, was A significant relationship in a positive direction (p=0.02 and r=0.377), so that participants with high levels of spiritual well-being had a higher quality of life. Also, there was significant relationship in a positive direction (p=0.02 and r= 0.334) between spiritual health and occupational health history.

The results of Pearson correlation test revealed that there was correlation in negative direction (r=0.322) among the components of well-being with age and job history; Men with age and higher experience, had less spiritual health. This correlation among women was significant and in positive direction (p=0.015 and r=0.358). The results of the Pearson correlation test between age and job history, in men, were significant and in negative direction; So that in older men with more job history, quality of life was lower. This fact is shown in table 1.

In evaluation of the relationship between age, sex, marital status, educational level and spiritual well-being health in population study, Using regression step by step, it was found that statistical significant relation between sex and spiritual health, and another variables excluded from model; hence, Two variables spiritual health and gender in predicting quality of life are predictable with the linear model (r=0.493), that shown in table 2.

Discussion:

The results of this study showed that the mean quality of life of health care workers was in the middle range (71.2±15.9) that the Sex had not significant correlation with its items. This finding is the same with the findings of Asarudi and colleagues [2] and Yazdi Moghaddam and et al [3]. But other findings of these studies [2,3] about The relationship between gender differences and the quality of life score, with our findings was contradicted. In this regard, Alahbakhshian and et al [10], didn’t reported any relationship between quality of life and sex. Because of this difference in our study with other studies can be results of the uneven distribution of population according to gender in our study due to the small sample size.

The results of our study showed that there was a significant correlation among the components of Quality of Life in men with their age. Also, this significant correlation was true in men job history. The findings of Asarudi and et al [2] study showed that there wasn’t significant correlation, except social aspect, between age and Quality of Life. This finding is consistent with the findings of Yazdi Moghaddam and et al [3]. Also the findings of Goshtasbi and et al [11], were contrast with our results. The difference between the results of our studies with the results of similar studies, due to differences between populations groups are studied, taking into account different age categories.

In present study, the mean score of spiritual well-being is in the upper range that showed high level of spiritual well-being among participants. This finding is consistent with the study results
of Safayi Rad and et al [14] hat in his study, The mean score of spiritual health was reported high. In comparison spiritual health between the sexes also were saw higher scores in men than women. These findings contradict the results of other similar studies [2,11,12,13]. Because of contradictory findings with results of other studies, revealed of the high Spiritual beliefs in life as an agent to deal with physical and psychological problems in men; albeit although the women did not.

In this study, among the components of well-being with age and job history, negative relationship was found. The interesting point is that the researchers of this study didn’t found any study that the relationship between health groups measured in this method. The result of study shown that the high spiritual health, According to gender, increased Quality of Life. This issue is similar with the findings of Asarudi and et al [2]. Also, Salsman and colleagues [16] in their study, were noted the positive relationship between spiritual health and quality of life. Our study findings indicate that a factor affecting the spiritual health of the participants involved in the study. Among the items contributing to reduced quality of life in health care workers, Due to the increasing age and duration of their job, is burnout that in this study can affect the spiritual health of health care workers, and it reduces their Quality of Life.

One of the limitations of this study includes low sample size. So, by increasing the sample size in other studies, the results will generalize to the larger population. It is recommended that in future studies by taking more samples, to determine the relationship between spiritual health and quality of life in health care workers with other factors affecting them, such as burnout.

**Conclusion:**

Gender of health care workers and scores of spiritual health can be predicting the Quality of Life. So, based to results of this study and the relationship between spiritual health and gender in predicting Quality of Life, will can be used of this model to prediction of Quality of Life in health care workers To enhance the productivity of human resources.

**Acknowledgment:**

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Tables:

Table 1: The correlation coefficient between Quality of Life, Spiritual Well-Being Health and age, job history, stratified by sex

<table>
<thead>
<tr>
<th></th>
<th>Age r*</th>
<th>p-value</th>
<th>Job history r</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>QOL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>-0.516</td>
<td>0.020</td>
<td>-0.610</td>
<td>0.027</td>
</tr>
<tr>
<td>Women</td>
<td>0.124</td>
<td>0.411</td>
<td>0.155</td>
<td>0.375</td>
</tr>
<tr>
<td>SWB</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>-0.322</td>
<td>0.166</td>
<td>-0.203</td>
<td>0.505</td>
</tr>
<tr>
<td>Women</td>
<td>0.358</td>
<td>0.015</td>
<td>0.454</td>
<td>0.006</td>
</tr>
</tbody>
</table>

*Correlation coefficient

Table 2: The results of multiple linear regressions model (Stepwise method) for predicting Quality of Life by Spiritual Well-Being Health, sex, age, job history, and educational level

<table>
<thead>
<tr>
<th></th>
<th>Un-standardized B</th>
<th>Standardized B</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual Well-Being</td>
<td>0.562</td>
<td>0.411</td>
<td>0.003</td>
</tr>
<tr>
<td>Sex</td>
<td>10.232</td>
<td>0.298</td>
<td>0.026</td>
</tr>
</tbody>
</table>

$R^2_{model}=0.243$

Excluded variables: age, job history (year), and educational level
References


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