

# Spirituality and Quality of Life and Its Effect on Depression in Older Adults in Mexico

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The quality of life (QOL) appears as an object of study of psychology, as a central component of human well-being. The quality of life in the elderly is especially relevant because as the years go the older persons can have lost health, the social role, the cognitive functioning, the power financial and their family. The purpose of the study is to evaluate the impact of psychological variables associated with quality of life in Mexican elderly. A sample of 75 elderly people between 60 and 87 years (mean = 65, SD = 9.41), 45 women and 30 men, assigned to a health clinic. QOL was measured with the WHOQOL, and an ex post facto design, three groups were formed by the level obtained with depressive symptoms GDS: (G1) absent ( $n_1 = 42$ ), (G2) mild ( $n_2 = 19$ ) and (G3) moderate-severe ( $n_3 = 14$ ). An acceptable correlation between QOL and spirituality ( $r = .523, p < .0001$ ). A negative association between QOL and depression ( $r = -.482, p < .0001$ ). The QOL showed differences between groups with different levels of depressive symptoms ( $F_{(2,72)} = 15.212, p < .0001$ ). The QOL exhibited differences between diseased subjects (QOL = 61.19) and non-diseased (QOL = 66.61) ( $t = 2.025, p < .046$ ). There were differences in the level of spirituality (Sp) among elderly patients (Sp = 64.77) and non-elderly patients (Sp = 75.0) ( $t = 2.37, df = 97, p < .02$ ). The QOL in the elderly can be improved with psychological interventions to help reduce depression, where spirituality can be a resource and coping strategy to strengthen other areas of aging.

**Keywords:** Spirituality; Quality-of-Life; Depression; Older Adults Mexicans

## Introduction

Mexico is in a period of change in the trend of the population, which is projected in the next years much of the population will be elderly.

Several sources (CONAPO, 2001, 2006; Partida, 2006; United Nations, 2007; World Bank, 2009) have given explanation to this phenomenon, attributing it mainly to advances in the medical field, thanks to this the mortality rate has decreased and life expectancy has increased from 34 years old in 1930 to over 75 years old in 2005 (INEGI, 2009), allowing one hand a death to a later age and on the other a lower infant mortality.

Thus the combination of life expectancy increasing and a fall in the fertility rate, causes a significant increase in the average age, a rising proportion of older adults, and therefore a need for greater attention to these individuals.

But if the life expectancy has increased it does not necessarily indicate that conditions have improved, also that living more years, means more health risks and does not necessarily represent a complete satisfaction (González-Celis, 2010).

Thus the quality of life (QOL) appears as an object of study of psychology, as a central component of human well-being that is closely related to other aspects of functioning, such as health (Johansson, Grant, Plomin, Pederson, Ahem, Berg et al., 2001; Litwin & Shiovitz-Ezra, 2006), the coping, the problem solving, the self-efficacy (Bandura, 1977, 1999; González-Celis, 2009a, 2012b), the development of social skills (Acuña-Gurrola & González-Celis, 2011) and the depressive symptoms (Gon-

zález-Celis, 2009b).

Evaluate the quality of life in the elderly is especially relevant because according to the years go in the life of an individual, is undergoing a series of transformations that result in gains and losses, including health, the social role, cognitive functioning, the family and the economic status, loneliness, and anxiety, among others (Nieto, Abbot, & Torres, 1998; Pinquart & Sörensen, 2001; Rivera-Ledesma, Montero, González-Celis, & Sanchez-Sosa, 2007; Rowe & Kahn, 1997; Sanchez-Sosa & González-Celis, 2002, 2006).

One of the dimensions of quality of life is social support, and in the elderly appears as a measure of the well-being (Burnett, Regev, Pickens, Prati, Aung, Moore, & Bitondo, 2006; Jackson, 2006).

One of the most common problems found in the elderly, is the presence of depressive symptoms.

One strategy to coping with the loss in the elderly is spirituality (González-Celis, 2012a; González-Celis & Araujo, 2010; González-Celis & Lázaro, 2007; González-Celis & Padilla, 2006).

It is from this kind of approach that studies on quality of life (QOL) come to know and give better service to the needs of the elderly.

So the purpose of the study is to evaluate the impact of psychological variables associated with the QOL in older adults Mexicans.

## Objectives

The principal objective is to examine if the social support

and spirituality are measures of the quality of life in the elderly and its effect on depression.

Other objective is to test the association between the social support, depression and spirituality.

As well as to evaluate the differences in QOL, social support, depression, and other additional measures, gender and condition of health.

And to test the differences in the domains of QOL in older people with different groups depressive symptoms.

## Method

### Participants

A sample of 75 elderly, aged between 60 and 87 years old (mean = 65, SD = 9.41), 45 were women and 30 men, assigned to a health clinic in a lower-class urban area of Mexico State. The average educational level was of basic education. Regarding marital status, 63% were married or with partners, 34% widowed and 3% singles.

They completed three instruments plus a sheet socio demographic data also they gave voluntarily, their informed consent.

Under an ex post facto design, formed three groups of subjects by the level of depressive symptoms according to the score obtained by the Geriatric Depression Scale: (G1) absent ( $n_1 = 42$ ), (G2) mild ( $n_2 = 19$ ) and (G3) moderate-severe ( $n_3 = 14$ ).

### Measures

It was applied a battery composed of three measuring instruments psychological and sheet socio demographic data.

Sociodemographic questionnaire. As an interview through 20 both open and closed questions, general data were obtained from subjects who participated in the study (name, age, gender, marital status and condition about health).

Quality of Life (WHOQOL-100), prepared by the World Health Organization (WHO-Group, 1996, 1997, 1998a, 1998b), in its extended version (Power, Bullinger, & Harper, 1999), translated and adapted to Spanish-Mexican by González-Celis (2002). It features 100 items, with which measures the quality of life in general. It includes six domains of quality of life: physical health, independence, psychological health, social relationships, environment and spirituality. Contains 24 specific facets with four questions each (96 items) and a general facet of four items designed for to measure "Quality of Life Global" and "Overall Health". It was got a total score from 0 to 100, with higher scores indicating better quality of life. Also the score of the QOL has six specific scores one for each domain. To answer the questionnaire asked the participants that their responses they referred to two weeks earlier.

Subjective Well-being Scale PCG (Philadelphia Geriatric Center) for the elderly, written and reviewed by Lawton in 1975 which measures the overall subjective well-being older adults (Andrews & Robinson, 1991) (Spanish version by González-Celis, 2002). The scale is composed of three factors: agitation, attitude to their own aging and loneliness. The scale values range from 0 (lowest level of well-being) to 22 (highest), which refers to the values of satisfaction, peace or achievement. The answer choices are dichotomous and nominal -yes/no-, and two open questions in the factor 3, items 1 and 5.

Geriatric Depression Scale, GDS, (Yesavage, Brink, Rose, Lum, Huang, Adey, & Leiver, 1983). The short version with 15

items of the Geriatric Depression Scale (GDS), adapted to Mexican older population by González-Celis & Sánchez-Sosa (2003). The total qualification is obtained by adding scores of 0 (zero), which equals to lack of depression, to a maximum of 15 points. Scores of five points or more indicate a presence of depressive symptoms.

### Procedure

It requested authorization to a health clinic located in the state of Mexico, for the implementation of quality of life assessments to seniors.

It contacted people to invite them to participate in the study, reporting the assessment of the QOL, in order to know how it was in their physical, psychological and emotional. Those interested in participating were given by the interviewers and were programmed according to appointment availability.

Later, in a cubicle of the health clinic, there was a single session lasting approximately one hour, where it conducted the reading and signing the informed consent, followed by filling the data sheet and socio demographic implementation of the three questionnaires as an interview, in the same order for all.

## Results

An acceptable correlation between QOL and social support ( $r = .599, p < .0001$ ), and quality of life and spirituality ( $r = .523, p < .0001$ ).

The results also revealed a moderate but significant negative association between QOL and depression ( $r = -.482, p < .0001$ ).

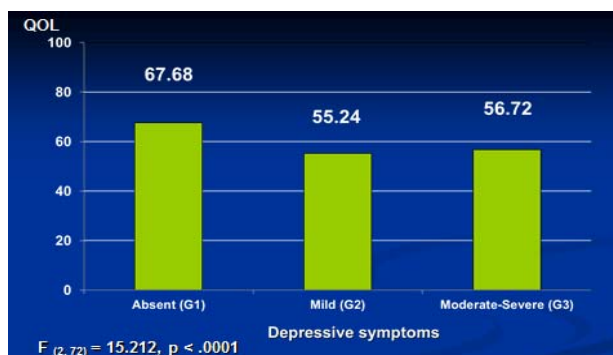
Also found moderate, significant and negative correlation between depression and social support ( $r = -.397, p < .0001$ ), but not with depression and spirituality.

The QOL showed differences between groups with different levels of depressive symptoms ( $F_{(2,72)} = 15.212, p < .0001$ ) (Figure 1).

The quality of life exhibited difference between diseased subjects (QOL = 61.19) and non-diseased (QOL = 66.61) ( $t = 2.025, p < .046$ ).

The quality of life showed gender differences significant ( $t = 2.005, df = 74, p < .049$ ) (QOL of women = 60.80, QOL of men = 65.42).

Score of support social was statistic and significantly difference between groups with different levels of depressive symptoms ( $F_{(2,84)} = 6.710, p < .002$ ).



**Figure 1.**

Quality of life scores for each group with different levels of depressive symptoms.

**Table 1.**

Comparison of quality of life scores for each domain between the various groups with depressive symptoms.

Groups with depressive symptoms	Quality of life domains					
	Physical health	Psychological health	Independence	Social relations	Environment	Spirituality
Absent (G1)	68.29	68.80	68.96	64.89	64.16	70.31
Mild (G2)	49.37	51.47	51.34	54.08	54.87	64.44
Moderate-severe (G3)	47.40	51.13	50.89	53.39	55.30	67.56
Total	59.64	60.06	60.32	59.79	60.29	68.08
F	19.843	29.018	19.543	6.710	9.221	.764
p	<.0001	<.0001	<.0001	<.0002	<.0001	>.469

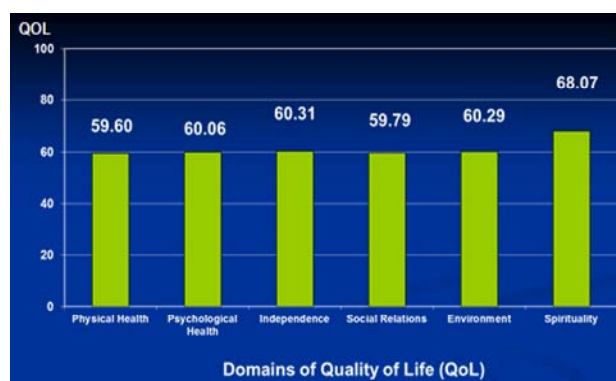
No differences in social support, spirituality and and the number of depressive symptoms between gender.

No differences in social support and depressive symptoms between elders who report being sick and healthy elderly.

There was difference in the level of spirituality (Sp), among elderly ill (Sp = 64.77) and healthy elderly (Sp = 75.0) ( $t = 2.37$ ,  $df = 97$ ,  $p < .02$ ).

Comparing levels of quality of life in each of the six domains of quality of life with the average obtained by standard WHOQOL-Group (1998a, 1998b) (Range = 62.25 - 71.75), was observed in the case of elderly sample Mexican, the quality of life scores were lower in all domains (Physical Health, Psychological Health, Independence, Social Relations and the Environment), except for the domain of Spirituality (68.07) (**Figure 2**).

Finally, when comparing the quality of life scores for each domain, between groups with different levels of depressive symptoms (**Table 1**). Note that there is enough statistical evidence to prove the difference in quality of life scores between groups with different levels of depressive symptoms, in the domains of Physical Health, Psychological Health, Independence, Social Relations, and Environment; found higher scores for quality of life in the elderly group without depressive symptoms, and lower scores for quality of life in groups of elders who had mild, moderate or severe depressive symptoms; not for the domain of spirituality, where the quality of life score was the same and slightly higher for all groups of elderly without depressive symptoms, or for those who showed symptoms of mild depression, moderate or severe.

**Figure 2.**

Comparison of quality of life scores for each domain, in a sample of 75 elders of the State of Mexico and the standard (62.25 - 71.75) of WHO.

## Discussion

In a report prepared by the WHO (Power, Bullinger, & Harper, 1999), the global standard established by 15 countries to consider a good QOL, is a score ranging from 70 to 75 in each of the domains, which, the results of the study are not very flattering. In analyzing the results, spirituality highlighted as an important element in the functioning of the QOL, agreeing with Viamonte (1993) on the inclusion of this aspect as one of five to maintain a balance in the well-being of the individual, possibly as a strategy coping used by older adults. Spirituality not only as belonging to any group or association of a religious, but as a belief in something that affects daily life and sense of transcendence (Montero & Sierra, 1996).

Although no significant association was found between scores on the domain of spirituality and attending a religious group, it was observed that the people who do attend a group scored higher in the domain of spirituality than those who do not, what may reflect that membership in a group helps to increase the level of spirituality, which would impact the quality of life of people.

Also it can be concluded that depression is a modulating variable of QOL in older adults. Elderly without depressive symptoms had higher levels of quality of life than those with mild, moderate or severe. However, the QOL was not differ for older people with different levels of depression, exclusively to the domain of spirituality, hence it is interesting to ask, if spirituality can be used as a protective factor when used as a resource for coping with the depressive symptoms.

Finally QOL in elderly probably be improved with psychological interventions (González-Celis, Chavez, & Tron, 2011, Gonzalez-Celis & Sanchez-Sosa, 2003) to help reduce the presence of depressive symptoms. Spirituality can be used as a resource and also as a coping strategy (González-Celis, 2012a; Rivera-Ledesma, 2003) to strengthen other areas of aging.

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