Comparison of the perception of health-related quality of life between older men and women
Comparación de la percepción de calidad de vida relacionada con la salud en hombres y mujeres adultos mayores

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ABSTRACT:
Introduction: The quality of life related to health is understood as the functional and emotional effect that a disease produces in a person, including treatment and how this process is perceived by the person, which may be influenced by gender.
Objective: To determine the perception of quality of life related to health among men and older women in the Comarca Lagunera of Coahuila.
Method: Quantitative and descriptive cross-sectional study. The sample was 100 old adults selected at convenience in the Nursing School, U.T. from the Autonomous University of Coahuila and a public hospital in the town. Data were analyzed in the SPSS v22 program for Mac, descriptive statistics and the Mann-Whitney U test were used.
Results: The analysis between gender and health-related quality of life perception did not observe a significant difference (U=922.00, p=.178); However, when analyzing the quality of life by dimensions, there is a significant difference in three components that are physical mobility (U=812.00, p<.05), pain (U=816.00, p<.05) and energy (U=807.50, p<.05).
Conclusions: In the present investigation, it can be observed that older men and women perceive the quality of life related to health in a very similar way, however, a difference was found in some components that from the point of view of the authors, they are closely linked to the social role played by a woman or an older adult man.

Key words: Quality of life; Perception; Aging; Health.
Objetivo: Determinar la percepción de la calidad de vida relacionada con la salud entre hombre y mujeres adultos mayores en la Comarca Lagunera de Coahuila.

Método: Estudio cuantitativo y descriptivo de corte transversal. La muestra estuvo conformada por 100 adultos mayores seleccionados a conveniencia en la escuela de Lic. en Enfermería, U.T. de la Universidad Autónoma de Coahuila y un hospital público de la localidad. Los datos se analizaron en el programa SPSS v22 para Mac, se utilizó estadística descriptiva y la prueba U de Mann-Whitney.

Resultados: El análisis entre el género y la percepción de calidad de vida relacionada con la salud no observó diferencia significativa (U= 922.00, p>.178); sin embargo, al analizar la calidad de vida por dimensiones, existe diferencia significativa en tres componentes que son movilidad física (U= 812.00, p>.05), dolor (U= 816.00, p>.05) y energía (U= 807.50, p>.05).

Conclusiones: En la presente investigación se puede observar que los hombres y mujeres adultos mayores perciben la calidad de vida relacionada a la salud de una forma muy parecida, sin embargo, se encontró diferencia en algunos componentes que desde el punto de vista de los autores están muy ligados al rol social que cumple una mujer o un hombre adulto mayor.

Palabras clave: Calidad de vida; Percepción; Envejecimiento; Salud

INTRODUCTION

In Mexico, the total population is 119 million people, of which 12.4 million are adults over 60 years old, which represents 10.4% of the total population. It is estimated that the population structure will increase to 14.8% by 2030 and to 21.5% by 2050, which means an enormous challenge for the health system\(^1\)\(^2\). In the state of Coahuila, an increase is estimated in the group aged 65 years or over in relation to its total population, increasing from 7.6% in 2020 to 10.2% in 2030, and the number of people in this group will also increase from 237,152 to 349,351 people in these years, respectively\(^3\).

The increase in the adult population is a challenge for public policies in two main aspects: on one side, there is a need for the creation of employment opportunities for those who continue in the labor market with age-appropriate protections and, there is the increase in the pension system on the other. Similarly, this demographic transition that Mexico and the world face, supposes a high demand for health services and infrastructure to care for older people\(^3\).

WHO defines quality of life as an individual’s perception of their position in life, in the context of culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected by the different dimensions with which the individual is related in their context. Therefore, it is a totally individual perception, such as their psychological state, level of mobility, social relationships as well as their relationship with the environment\(^4\).

Quality of life has been investigated according to different approaches over time, with special emphasis to the socioeconomic aspect and the meaning given by people to this construct. However, recent studies have included other factors affecting the perception of quality of life, such as health, psychological and social conditions, making the definition of quality of life more comprehensive on the one hand, but more complex and difficult to fulfil all the criteria, on the other hand\(^5\). Some authors raise the idea that there are indicators to assess health-related quality of life, such as mortality, morbidity, disability, discomfort and dissatisfaction\(^6\), accessibility and availability of health services and the individual's perception of health as an essential value in life, among many other factors\(^7\).

Health-related quality of life is understood as the functional and psychological effect
that a disease produces in a person, including the treatment and how a person perceives this process. Therefore, it is a subjective construct influenced by the current health status and the ability to perform those activities important to the individual\(^8\)\(^9\). Health behavior and illness behavior are experienced and accepted differently based on gender, as they depend a lot on the roles established, recognized or determined by a context, which involves acceptance of the impositions established by the environment as characteristic for each person\(^9\).

In old age, health-related quality of life is a result of the way of life that people assumed, followed and were influenced in the social, economic and institutional context experienced by an older person in terms of health. In this sense, women have a nearly unequivocal degree of vulnerability in terms of health, unlike men\(^9\). Factors investigated, such as biological factors (genetics, physiology and inherited factors) influence the perception of both sexes in a different way. In general, men show a better health-related quality of life, while women are affected by psychosocial issues, and the role played by them as well as socioeconomic factors determine their perception of quality of life as regular or bad\(^10\).

The perception of quality of life in older adults is determined according to different dimensions, which are not considered as important in other age groups, aspects such as retirement, absence of the family structure linked to characteristic aging factors, change in the social, family and work roles, and functional disability. Among all these, health is one of the factors that most impacts quality of life\(^11\). In old age, health becomes one of the most evident concerns, especially because of the functional decline, which is accentuated by the presence of chronic degenerative diseases. As nursing professionals, it is important to improve the quality of life in real terms, but it is also necessary to modify the perception of it. Therefore, the objective of this study was to determine the perception of health-related quality of life between older man and women from the Lagunera area in Coahuila, Mexico.

**METHODOLOGY**

A descriptive cross-sectional study was carried out with older adults from the Comarca Lagunera in Coahuila, using a non-probabilistic or convenience sampling technique\(^12\)\(^13\). The surveys were carried out with the grandparents of the students of the School of Bachelor in Nursing, Torreón Unit, Autonomous University of Coahuila and persons recruited through an external consultation service of the Institute of Security and Social Service for State Workers (ISSSTE). Participants met the following inclusion criteria: people aged 60 years and over, with a score equal to or higher than 13 points in the Mini-Mental State Examination and who completed the instrument in full.

For data collection, a sociodemographic questionnaire was used with general data such as age, sex, marital status, years of education, who currently lives with them, on whom they economically depend, attendance at religious events, and number of medications taken.

Health-related quality of life was measured using the Nottingham Health Profile questionnaire (NHP), which contains 38 items and evaluates six dimensions: energy, pain, physical mobility, emotional reactions, sleep and social isolation. The scores for each dimension were transformed into a scale ranging from zero (no health problem at
all) to 100 (presence of all health problem within a dimension). To calculate the score, the total number of positive responses was divided by the total number of items within a dimension and the result was multiplied by 100\(^{(14-16)}\).

The research was designed and carried out in compliance with the provisions of the Declaration of Helsinki and the General Health Law on the ethical principles for conducting research with human beings\(^{(17)}\). An informed consent form was elaborated with details on the reasons for the study, and people signed the agreement in the presence of two witnesses, ensuring the dignity and respect, as well as the anonymity of the participant. Data capture and data analysis were performed using the SPSS Statistics software version 22 for Mac. The Cronbach’s Alpha was used to validate the reliability of the instrument\(^{(18)}\), descriptive statistics by means of measures of central tendency and frequencies was also adopted. Finally, the nonparametric Mann-Whitney U test was used for independent samples to investigate if there are differences between men and women in the perception of health-related quality of life.

RESULTS

The sample of this study consisted of 100 older adults, of which 67 were women and 33 were men, aged between 60 and 83 years, with an average age of 67.6 and a standard deviation (SD) of 5.5. The following results were found regarding marital status: 52% were married, 30% widowed and 18% belonged to other categories, such as single and separated. Among the older adults in the sample, 94% were literate and the average years of schooling was 7.84 years (SD=5.3). In relation to the occupation, 18% were professionally active, 39% were retired and 43% were involved in unpaid housework.

In the sample of this study, 36% of women and 70% of men live in a nuclear family, while 64% of women and 30% of men live in an extended family. Among the participants, 77% take medication and 23% do not take any medication and, of those who take medication, 87% (67) do it by themselves, the average number of medicines taken is three a day.

A total Cronbach’s alpha of 0.932 was observed when performing the Reliability Analysis of the Nottingham Health Profile instrument, and the reliability analysis results by dimension is shown in Table 1.

**Table 1:** Reliability analysis results of the Nottingham Health Profile instrument by dimension.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical mobility</td>
<td>0.765</td>
</tr>
<tr>
<td>Pain</td>
<td>0.836</td>
</tr>
<tr>
<td>Sleep</td>
<td>0.683</td>
</tr>
<tr>
<td>Social isolation</td>
<td>0.655</td>
</tr>
<tr>
<td>Emotional reactions</td>
<td>0.822</td>
</tr>
<tr>
<td>Energy</td>
<td>0.605</td>
</tr>
</tbody>
</table>

The results of the analysis between gender of the perception of health-related quality of life showed no significant difference \((U=922.00, p=0.178)\). However, when the analysis was performed by dimension, a significant difference was found in three components, namely physical mobility, pain and energy, as shown in Table 2.
**Table 2:** Perception of health-related quality of life (NHP) by dimension in men and women.

<table>
<thead>
<tr>
<th>NHP Dimension</th>
<th>Median in men</th>
<th>Median in women</th>
<th>Mann Whitney U test</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical mobility</td>
<td>12.50</td>
<td>37.50</td>
<td>812.00</td>
<td>0.029*</td>
</tr>
<tr>
<td>Pain</td>
<td>12.50</td>
<td>37.50</td>
<td>816.00</td>
<td>0.031*</td>
</tr>
<tr>
<td>Emotional reactions</td>
<td>22.22</td>
<td>11.11</td>
<td>1079.50</td>
<td>0.845</td>
</tr>
<tr>
<td>Energy</td>
<td>0</td>
<td>33.33</td>
<td>807.50</td>
<td>0.016*</td>
</tr>
<tr>
<td>Sleep</td>
<td>20.00</td>
<td>20.00</td>
<td>1030.00</td>
<td>0.569</td>
</tr>
<tr>
<td>Social isolation</td>
<td>0</td>
<td>0</td>
<td>942.50</td>
<td>0.182</td>
</tr>
<tr>
<td>Total</td>
<td>15.79</td>
<td>23.68</td>
<td>907.00</td>
<td>0.145</td>
</tr>
</tbody>
</table>

* Statistical significance p ≤ 0.05

**DISCUSSION**

The composition of the sample of this study by sex is similar to the demographic data observed in our country, as there was a higher proportion of women (67%) than men (33%). According to national data, the average life expectancy is 77.5 years for women and 72.1 years for men. Similarly, the proportion of older women is 60% compared to 40% for men\(^{(19)}\).

The predominant marital status in this study was the union as a couple (formal or informal marriage) with 52%, followed by widowhood with 30%, which corroborates nationally reported statistics. Unlike other population studies with older adults, it was observed an average years of schooling of 7.84 in this sample, which is higher than the national average of 4.6 years\(^{(19)}\).

The occupation of these older adults was similar to that reported in sociodemographic studies conducted in Mexico, in which it is observed that most of the older adults in this sample, 43%, were involved in housework and a smaller proportion of them was still professionally active 18%. This is in line with the gender because, as there was a greater number of women and low schooling, the main activity and role was to take care of home\(^{(20)}\).

One of the most important changes at the epidemiological level is the increase of chronic degenerative diseases in adults over 60 years, on whom it is observed that diseases such as hypertension, diabetes mellitus type 2 and cardiac complications are among the leading causes of morbidity in this population group. As a consequence, there is a higher proportion of older adults who take medications, as observed in 77% of this sample\(^{(20)}\).

In the studied sample, it is observed that 36% of women and 70% of men live in a nuclear family, which is similar to that reported at the national level, since it is observed that 38% of women and 50% of men live in a nuclear family\(^{(20)}\). Studies have shown that older adults living in an extended family have an important impact on the attention to their health, as the family may represent an important support network, but on the other hand, economic and functional adjustments in family dynamics are needed\(^{(21)}\).

Unlike other authors\(^{(14)}\), who indicate that gender is a determining factor for quality of life in older adults, this study did not show a significant difference in relation to gender.
when analyzing the perception of quality of life in its entirety. However, when the analysis was carried out by dimension, it was observed that physical mobility, pain and energy are perceived as being more affected in women than in men, which reveals that the male sex has a better perception of quality of life, as reported in other studies.[14] The difference in the perception of quality of life in older adults can be the result of gender inequalities present in other stages of life, which place women at a disadvantage in terms of social, economic and psychological circumstances.

CONCLUSIONS

Health-related quality of life is perceived in a specific way and is a product of the circumstances that each person lives and experiences. In this study, gender is a factor that contributes to a different perception of quality of life between men and women, since they appreciate and experience physical mobility, pain and energy in a different way.

A more in-depth research in which quality of life is analyzed in relation to gender inequalities in other stages of life and self-perception of health is recommended.

It is important that the nursing staff, as professionals who practice a humanistic science, see the person as a comprehensive being and value their perception of quality of life. This should be done taking into account the gender of the older adult with the aim of creating individualized care strategies in line with the real needs experienced and perceived by the older adult in the moment they request the attention of the nursing professional.

REFERENCES


