

Celso Iglesias-García<sup>1,2</sup>  
Rita Prieto<sup>3</sup>

# Quality of life in depressed women over 40 years old

<sup>1</sup>Hospital Valle del Nalón  
Langreo. Asturias  
<sup>2</sup>Fundación Benito J. Feijoo

<sup>3</sup>Departamento Médico EuCan  
Pfizer S.L.U.  
Madrid. España

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**Objectives:** This study aims to determine quality of life and satisfaction in depressed Spanish women over 40 years old in the outpatient psychiatry setting. Secondly, the association between several characteristics of depressed patients and quality of life was assessed.

**Material and Methods:** Cross-sectional, descriptive study, carried out in the Spanish psychiatry setting in 2008. A total of 365 Spanish psychiatrists participated. 1069 patients older than 18 years old signed the informed consent. Depressive symptoms were assessed using the 17 Item Hamilton for Depression Rating Scale (HAM-D<sub>17</sub>). The Quality of Life Enjoyment and Satisfaction Questionnaire (Q-LES-Q) scale assessed the patient's satisfaction and life enjoyment.

**Results:** Were included a total of 942 patients with the following characteristics: mean age of 52.46 years, medical comorbidity in 62.9%, and a history of psychiatric disorders in 79.6%. HAM-D<sub>17</sub> mean score of 21.39. According to the Q-LES-Q questionnaire, Global satisfaction mean score was of 35.2%, the highest mean scores were achieved in the treatment satisfaction and the lowest mean scores in free time activities. The quality of life was influenced by the intensity of depressive symptoms and physical comorbidity.

**Conclusion:** The study results show an impairment of quality of life in depressed women attending outpatient psychiatric centers. This decrease in the quality of life is associated with depressive symptoms and medical comorbidity.

**Key words:** Epidemiology, Quality of life, Depressive disorders and gender

*Actas Esp Psiquiatr* 2012;40(4):221-7

## Calidad de vida en mujeres deprimidas mayores de 40 años

**Introducción.** El objetivo de este estudio fue evaluar la calidad de vida relacionada con la salud en una muestra amplia de mujeres deprimidas, mayores de 40 años, que recibían atención psiquiátrica ambulatoria en España. Secundariamente se estudió la influencia de las características clínicas y sociodemográficas en la calidad de vida de las pacientes.

**Material y métodos.** Estudio descriptivo, transversal, realizado en el año 2008. Participaron 365 psiquiatras de centros de atención psiquiátrica ambulatoria de todo el territorio español. Se incluyeron 1.069 mujeres mayores de 40 años diagnosticadas de depresión según el juicio del investigador utilizando criterios DSM-IV. La intensidad de la sintomatología depresiva se evaluó mediante la escala de Hamilton de la depresión de 17 ítems (HAM-D<sub>17</sub>). Para evaluar la satisfacción y el disfrute del paciente con su vida cotidiana se administró la escala Q-LES-Q.

**Resultados.** Se incluyeron en el análisis 942 pacientes cuyas características más relevantes fueron: edad media de 52,46 años; comorbilidad médica en el 62,9% y antecedentes de trastornos psiquiátricos en el 79,6%. La puntuación media en la escala de Hamilton Depresión (HAM-D<sub>17</sub>) fue de 21,39 puntos. En la el cuestionario Q-LES-Q: el grado de satisfacción global fue de 35,2%; la puntuación más alta se obtuvo en el área de satisfacción con la medicación y la más baja en actividades de tiempo libre. La intensidad de los síntomas depresivos y la presencia de comorbilidad física influyeron en la calidad de vida.

**Conclusión.** La calidad de vida en mujeres mayores de 40 años tratadas ambulatoriamente por un trastorno depresivo mayor se encuentra reducida. Esta disminución se ve influida principalmente por: la intensidad de los síntomas depresivos y la presencia de enfermedad física.

**Palabras clave:** Epidemiología, Calidad de vida, Trastornos depresivos y género

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Correspondence:  
Celso Iglesias-García  
Centro de Salud mental de Langreo.  
C/ Jove y Canella 1. Langreo. Asturias (Spain)  
Phone: 985673931  
FAX: 985697100  
E-mail: icelso@yahoo.es.

## INTRODUCTION

Depressive disorders exhibit gender differences in their distribution and clinical presentation. It is known that the prevalence of depression is twice as high in adult women as in adult men,<sup>1-3</sup> and women may have different clinical features, with an earlier onset of the first depressive episode and more psychomotor retardation, somatoform symptoms, atypical symptoms and comorbid anxiety.<sup>4-7</sup> Gender differences have been found in the response to drug therapy<sup>8</sup> and prognosis since women experience greater functional impairment than men, although these findings are less conclusive.<sup>5</sup> Some factors that could explain these disparities are different adverse experiences in childhood, anxiety disorders and depression in childhood and adolescence, sociocultural roles, psychological attributes related to vulnerability to adverse events and coping skills, and the effects of sexual steroids<sup>9, 10</sup>. Depression is not homogeneously distributed in women. The morbidity rates of major depressive disorder vary with age<sup>11</sup> and different reproductive stages may modify response to psychotropic agents.<sup>12-14</sup>

The concept of health-related quality of life refers to the perception that a person or group has of physical or mental health over time. Depression causes deterioration in health-related quality of life<sup>15, 16</sup> that is similar<sup>17</sup> or greater<sup>16</sup> than that produced by other chronic conditions. Studies of chronic physical diseases<sup>18, 19</sup> and mental illnesses like schizophrenia<sup>20, 21</sup> show that their impact on health-related quality of life is different in women and men. Among patients with depressive disorders, women have a poorer quality of life than male controls and complain more about stressful life events,<sup>22</sup> probably due to the greater impact of depression on areas specifically associated with the feminine role (mother, wife, leisure).<sup>23</sup>

Existing data support the hypothesis that women have special characteristics at different stages in life that make them especially vulnerable to depressive disorders. However, until now, studies of depression have focused primarily on young adult populations.<sup>24</sup>

The aim of this study was to determine the health-related quality of life of a sample of Spanish women over 40 years old diagnosed of depression and treated in psychiatric outpatient clinics. Secondary objectives were to determine the influence of sociodemographic and clinical characteristics on the quality of life of patients.

## METHODS

This cross-sectional, descriptive study enrolled a sample of women over 40 years old, diagnosed with major depressive disorder according to the clinical judgment of investigators using DSM-IV criteria and treated as outpatients by a psychiatrist.

## Population

Three hundred sixty-five randomly selected psychiatrists who worked in the public or private outpatient setting participated in the study. Every psychiatrist enrolled the first 3 consecutive patients seen in the office after the date of initiation of the study who met the inclusion criteria: diagnosis of major depressive disorder and stable symptoms in the previous 3 months. The study was conducted during the second quarter of 2008. A total of 1069 women were interviewed. The ethical principles contained in the Declaration of Helsinki and subsequent amendments, Good Clinical Practice (GCP) guidelines and other international standards were followed. We obtained informed consent from patients prior to enrolling them in the study and implemented measures to ensure the confidentiality of the data. The study protocol was approved by the Clinical Research Ethics Committee.

## Outcome measures

Every investigator participating in the study received general instructions on how to conduct the investigation. The data were collected in a single visit from the medical history and information provided by patients. The data collected were

- Sociodemographic data: age, marital status, employment status, educational level
- Clinical data: comorbid somatic diseases and treatments received for these processes at the time of enrollment in the study
- History of mental illness and psychiatric treatment received at the time of enrollment in the study
- Intensity of depressive symptoms, assessed by administering the 17-item Hamilton Scale for Depression (Ham-D 17) and health-related quality of life measured with the "Quality of Life Enjoyment and Satisfaction Questionnaire" (Q-LES-Q)

The Q-LES-Q is a self-administered scale designed to measure the patient's satisfaction and enjoyment of daily life.<sup>25</sup> The original version has 93 items, 91 of which explore the satisfaction and pleasure experienced in 8 areas: physical health/activities (13 items), mood (14 items), work (13 items), domestic activities (10 items), school activities (10 items), leisure time (6 items), social relations (11 items), and general activities (14 items). The two remaining items measure satisfaction with the medication and overall satisfaction. The patient uses a 5-value Likert scale ranging from 1 (never) to 5 (very often or always) to answer each question. The general activities subscale is sometimes used as a short form of the questionnaire. High scores on the Q-LES-Q indicate greater satisfaction. The score for each area (raw score)

is obtained as the sum of the scores on each item in the area. The score can be transformed and expressed as a percentage of the maximum possible score a subject can get.

## Statistical analysis

A descriptive analysis was made of all variables and the absolute and relative frequencies were given for qualitative variables. Quantitative variables were studied using the mean, standard deviation and confidence intervals of variables with a normal distribution, or the median, minimum, maximum and interquartile range of variables without a normal distribution.

For quantitative variables, statistically significant differences between independent variables were sought using the Student t-test if parametric assumptions were met, or the Mann-Whitney U test if not. For qualitative variables, the Chi-square test and likelihood ratio test were used.

Factors associated with the quality of life of patients were identified by multiple linear regression analysis of each subscale, considering as dependent variables the respective Q-LES-Q subscale score and as explanatory variables: age, employment status (active/ not active), marital status, presence of medical comorbidity (yes/no), history of psychiatric illness (yes/no) and Ham-D<sub>17</sub> total score. Estimates were made with a confidence level of 95%. We used SPSS V17.0 for statistical analysis.

## RESULTS

We interviewed a total of 1069 women, 942 of whom were eligible (127 were excluded from the analysis for not meeting inclusion criteria). The patients' baseline demographic characteristics are summarized in Table 1. The patients' psychiatric and medical characteristics are shown in Table 2 and their psychopharmacological treatment at the time of enrollment, in Table 3. The mean age of the sample was 52 years and the most frequent characteristics were: married, employed or housewife, and elementary school education.

The health status of most of the patients included medical comorbidity (mainly musculoskeletal disorders) and drug treatment for physical problems (especially painkillers and anti-inflammatory drugs). Most of the patients had a history of psychiatric illness, especially mood disorders, and almost all of them were taking antidepressants. The mean score on the Hamilton Rating Scale for Depression was 21.39 points, 95% CI = [21.02-21.75].

The scores on the Q-LES-Q are shown in Figure 1. The highest score was obtained in the area of satisfaction with medication and the lowest score in leisure activities. Due

Table 1		Sociodemographic characteristics of sample
Patient Characteristics	Number of Patients (N=942)	
Age	52.46 (SD=8.86)	
Marital status		
Married	613 (65.1%)	
Single, widowed, separated	329 (34.9%)	
Employment status		
Wage earner	228 (25.4%)	
Self-employed	65 (7.3%)	
Homemaker	283 (31.6%)	
Unemployed	30 (3.3%)	
Retired	172 (19.2%)	
Temporary disability	95 (10.6%)	
TD for mental illness	9 (1%)	
Other	60 (6.3%)	
Level of education		
Elementary school	418 (46%)	
High school	223 (24.5%)	
University studies	148 (16.3%)	
Trade school	76 (8.4%)	
No education	44 (4.8%)	

to the age characteristics of the women in the sample, the school activities subscale was not analyzed.

The linear regression analyses performed to identify the patient characteristics that influence quality of life (global scale and subscales) yielded the following results: the "physical health/activities" subscale was negatively influenced by the Ham-D<sub>17</sub> total score ( $\beta = -1.214$ ,  $P < 0.0001$ ) and the presence of medical illness ( $\beta = -2.906$ ,  $p < 0.001$ ). On the "general activities" subscale, the only factor associated with quality of life (negatively) was the Ham-D<sub>17</sub> total score ( $\beta = -1.381$ ,  $P < 0.0001$ ).

## DISCUSSION

This study had certain limitations. First, the sample cannot be considered representative of the population studied, although the breadth of the study indicates that it can be considered useful for the stated purposes. The scale used to assess the quality of life has the general weaknesses derived from its subjectivity, which make it vulnerable to pessimistic assessments, particularly in individuals with affective disorders.<sup>26</sup> On the other hand, there were specific limitations

Table 2		Clinical characteristics of patients	
		Number of Patients (%)	
Medical comorbidity	Yes	589	(62.9%)
	No	347	(37.1%)
<b>Current medical conditions</b>		<b>N= 589</b>	
CNS disease		56	(9.5%)
Musculoskeletal disease		332	(56.5%)
Sensory organ disease		75	(12.8%)
Dermatological disease		47	(7.9%)
Respiratory disease		46	(7.8%)
Cardiovascular disease		172	(29.3%)
Digestive disease		122	(20.7%)
Genitourinary disease		72	(12.2%)
Other		126	(21.4%)
Current medical treatment	Yes	586	(62.8%)
	No	374	(37.2%)
<b>Therapeutic agents</b>			
Painkillers		325	(55.5%)
Anti-inflammatories		275	(46.9%)
Anticoagulants		21	(3.6%)
Antihypertensives		181	(30.9%)
Lipid-lowering agents		100	(17.1%)
Antidiabetic agents		48	(8.2%)
Anovulators		19	(3.2%)
Other		186	(31.7%)

related to the sample characteristics because the classroom activities subscale was not applicable to this population. Similarly, the subscale of work activity was not applicable to two-thirds of the sample that did not work. The variable that addresses physical symptoms also has limited validity because it is based exclusively on information provided by patients. The possibility of bias resulting from different treatment of variables must also be considered, because the intensity of depressive symptoms was treated as a continuous variable (HAM-D<sub>17</sub> score), although physical illness is considered a dichotomous variable (presence/absence of any physical process).



Figure 1 | Q-LES-Q scores

The age criterion used for sample selection meant that the average age of the population was 12 years older than the study population without age constraints<sup>6</sup>. In addition, age-related characteristics appear, such as a greater proportion of married women and a smaller proportion of actively employed women.

Previous studies have shown an association between depression and physical comorbidity<sup>16, 27, 28</sup>, with a prevalence of comorbidity that varied, depending on the characteristics of the population, from 31% in primary care patients diagnosed of major depression or dysthymia<sup>29</sup> to 55% in patients admitted with a diagnosis of major depressive disorder.<sup>30</sup> Our sample had even higher rates of comorbidity, mainly due to chronic osteomuscular, cardiovascular or digestive conditions.

Our data show the known association between depression and reduced health-related quality of life that, in this case, could be reinforced by the particular characteristics of the sample (high mean age and medical comorbidity). With increased age, the coexistence of chronic physical illness and depression causes a downward spiral of both physical and mental health<sup>31, 32</sup> that negatively influences perceived health<sup>33</sup> and functionality.<sup>16</sup>

Traditionally, the factor that has been most consistently associated with the diminished quality of life of depressed patients has been the severity of the depression.<sup>24, 34</sup> In recent years, the influence of other factors on the quality of life and prognosis of depressed patients has been shown.<sup>35</sup> Specifically, in the case of women, the number of children, economic status or presence of physical illness are factors that modulate the influence of depressive symptoms on quality of life.<sup>36</sup>

Our data showed that, of the variables included in the regression model, only the presence of a physical condition and severity of depression significantly influenced quality of

Table 3		Psychiatric illness and treatment with psychotropic drugs of patients	Number of Patients (%)
Personal psychiatric history	Yes		745 (79.7%)
	No		190 (20.3%)
Mood disorder			655 (87.9%)
Anxiety disorder			330 (44.3%)
Somatoform disorder			33 (4.4%)
Schizophrenia and other psychotic disorders			4 (0.5%)
Eating disorder			28 (3.8%)
Substance-related disorder			29 (3.9%)
Adaptation disorder			115 (15.4%)
Personality disorder			72 (9.7%)
Other			19 (2.6%)
Current psychiatric treatment	Yes		920 (97.8%)
	No		21 (2.2%)
Current therapeutic agents			
Antidepressants			899 (97.7%)
Benzodiazepines			770 (83.7%)
Neuroleptics			82 (8.9%)
Mood stabilizers			147 (16%)
Other			17 (1.8%)

life. Physical illness has an influence on the physical symptoms subscale of the Q-LES-Q but does not affect overall quality of life, whereas the intensity of depressive symptoms significantly influences both. The intensity of depressive symptoms is thus shown to be the most robust factor in its influence on the perceived quality of life. It has been seen that in depression, as the patient's age increases, external conditionants (environment) become less important, whereas internal factors (mental and physical discomfort) become the factors that most impair quality of life.<sup>32</sup> Among the internal factors, physical symptoms are less influential because they are more easily integrated as characteristic age-related events.<sup>37</sup>

The negative synergy that depression and physical symptoms exercise on health-related quality of life clearly has clinical importance, especially when it is known that the presence of multiple comorbid medical conditions does not diminish the effectiveness of multidisciplinary treatment programs for depression,<sup>38</sup> that a treatment for depression of sufficient intensity produces a decrease in the intensity of the symptoms of both depression

and the comorbid medical pathology,<sup>39</sup> and that the perceived quality of life improved significantly when depression is treated adequately,<sup>40-43</sup> even in cases in which the improvement of depression is not accompanied by improvement of the physical process.<sup>41</sup> Given their frequency, musculoskeletal conditions have received special attention. Their association with depression has been observed to produce more general deterioration, decreased quality of life and a less favorable response of patients to multimodal therapeutic programs. Consequently, most authors consider it essential to treat depression in cases of physical and mental comorbidity.<sup>44-46</sup>

In conclusion, female patients over 40 treated for depressive disorder in the outpatient setting have a high prevalence of comorbid physical disease and a diminished quality of life, particularly in the areas of leisure, overall satisfaction, physical health/activities and subjective feelings. The presence of physical illness negatively affects the score on the physical health subscale of the Q-LES-Q, while the severity of depressive symptoms negatively affects the physical health subscales and overall quality of life.

#### ACKNOWLEDGMENTS

The authors thank Luz Samaniego, of TFS, for her assistance with the statistical analysis of the data. Ms. Samaniego was assigned as statistical coordinator for this study by Pfizer, Madrid, Spain.

#### STATEMENT OF INTERESTS

This study was initiated and funded by Wyeth Farma S.A. (Pfizer Group). Rita Prieto is a full-time employee of Pfizer, S.L.U.

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