Psychiatric Symptoms and Personality Dimensions in Patients Younger Than 65 Years Admitted for Acute Coronary Syndrome

Síntomas psiquiátricos y dimensiones de personalidad en pacientes menores de 65 años ingresados por un síndrome coronario agudo

To the Editor,

Acute coronary syndrome (ACS) generates a considerable public health burden in Spain, with in-hospital and 6-month mortality rates of 4.1% and 3.8%, respectively.\(^1\) Data from prospective cohort studies indicate that the risk factors for ACS play a major role in the development of this condition.\(^2\) In addition to identifying these factors, it is important to determine which psychosocial processes have an impact on the psychological distress associated with coronary disease.\(^3\) The aim of this study was to analyze the differences in psychiatric symptoms and personality dimensions between men and women hospitalized for ACS.

This study included 102 ACS patients younger than 65 years admitted to the cardiology department of a tertiary referral hospital. Once their clinical condition had stabilized, all patients filled out the 24-item version of the Eysenck Personality Questionnaire (EPQ-24)\(^4\) and the 45-item Symptoms Assessment (SA45).\(^5\) The variables of interest for the study were age, sex, cardiovascular risk factors, psychiatric history in first-degree family members, education level (university/other) and marital status (married/other). The protocol was approved by the hospital ethics committee.

The EPQ24\(^4\) evaluates the individual’s personality. It contains 24 items that measure 4 personality dimensions: extraversion, neuroticism, psychoticism, and social desirability.

<table>
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<th>Table</th>
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<td>Sociodemographic and Psychopathologic Characteristics by Sex</td>
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<table>
<thead>
<tr>
<th></th>
<th>Women (n = 27)</th>
<th>Men (n = 75)</th>
<th>P</th>
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<tbody>
<tr>
<td>Age, y</td>
<td>53 ± 9</td>
<td>54 ± 8</td>
<td>.51</td>
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<tr>
<td>Diabetes mellitus</td>
<td>8 (29.6)</td>
<td>23 (30.7)</td>
<td>.92</td>
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<tr>
<td>Hyperlipidemia</td>
<td>17 (63)</td>
<td>41 (54.7)</td>
<td>.45</td>
</tr>
<tr>
<td>Current smoker</td>
<td>11 (40.7)</td>
<td>36 (48)</td>
<td>.51</td>
</tr>
<tr>
<td>Hypertension</td>
<td>16 (59.3)</td>
<td>40 (53.3)</td>
<td>.59</td>
</tr>
<tr>
<td>University education</td>
<td>6 (22.2)</td>
<td>17 (22.7)</td>
<td>.96</td>
</tr>
<tr>
<td>Married</td>
<td>18 (66.7)</td>
<td>55 (73.3)</td>
<td>.51</td>
</tr>
<tr>
<td>Psychiatric history in first-degree relatives</td>
<td>4 (14.8)</td>
<td>4 (5.3)</td>
<td>.11</td>
</tr>
</tbody>
</table>

### Psychiatric symptoms

- Hostility: 3.97 ± 3.70 vs. 3.83 ± 3.61, \(P = .88\)
- Somatization: 5.37 ± 3.27 vs. 3.80 ± 3.14, \(P = .03\)
- Depression: 6.11 ± 4.16 vs. 5.10 ± 4.57, \(P = .31\)
- Anxiety: 7.00 ± 3.43 vs. 6.43 ± 4.10, \(P = .52\)
- Interpersonal sensitivity: 4.41 ± 3.56 vs. 5.33 ± 4.03, \(P = .29\)
- Obsession-compulsion: 5.41 ± 4.20 vs. 6.01 ± 3.71, \(P = .49\)
- Phobic anxiety: 3.35 ± 2.63 vs. 3.24 ± 2.11, \(P = .48\)
- Paranoid ideation: 7.89 ± 5.20 vs. 8.10 ± 3.81, \(P = .84\)
- Psychoticism: 3.36 ± 2.63 vs. 2.76 ± 2.54, \(P = .18\)

### Personality dimensions

- Extraversion: 4.33 ± 1.35 vs. 3.36 ± 1.72, \(P = .009\)
- Neuroticism: 3.74 ± 1.81 vs. 3.80 ± 2.08, \(P = .89\)
- Psychoticism: 2.59 ± 1.67 vs. 2.17 ± 1.58, \(P = .25\)
- Social desirability: 4.59 ± 1.30 vs. 3.57 ± 1.59, \(P = .004\)

Continuous variables are expressed as the mean ± standard deviation and discrete variables as no. (%)
extraversion showed somatization patients a somatic viewpoint, sex corresponding fundamental psychoticism. The study psychiatric manifestation. The statistical analysis was performed using SPSS 17 (SPSS Inc.; Chicago, ILL, United States). Results showing a P value < .05 were considered statistically significant.

The mean age of the cohort was 54 ± 8 years, and 73.5% of the patients were men. The most common form of presentation of ACS was ST-segment elevation (58.5%). The sociodemographic characteristics, psychopathological data, and personality findings according to sex are shown in the Table. There were no significant differences in the sociodemographic variables between men and women. Analysis of the psychiatric symptoms showed that women had higher scores than men on 6 of the 9 psychopathological dimensions, but only the somatization score presented significant differences. In the personality evaluation, women scored significantly higher than men for extraversion and social desirability.

The originality of this study resides in 2 aspects: a) it is the first study performed in Spain that analyzes psychiatric symptoms and fundamental personality dimensions in patients younger than 65 years hospitalized for ACS, and b) the results show differences in psychiatric symptoms and in 2 personality dimensions according to sex.

Dealing with a life-threatening disease is one of the most stressful situations a person may have to face in life. Our study showed that women had higher scores on 6 of the 9 psychopathological dimensions, although somatization was the only psychiatric manifestation that differed significantly between the sexes. In the general population, women tend to score higher than men on the somatization item of the SA-45, although significant differences have not been described. From the psychopathological viewpoint, one could consider that, when various individuals are faced with the same stressful circumstances (ACS), women will report a larger number of physical complaints (with or without a somatic basis) than men. This may suggest differences in the strategies used for coping with ACS, and could be taken into consideration to avoid excessive diagnostic testing.

The concept of personality (ie, a person’s psychic characteristics) implies a certain persistence and stability throughout an individual’s life. Thus, it is difficult to explain the difference in 2 personality traits observed between men and women with ACS, particularly because no differences between the sexes have been found for any of the EPQ-24 dimensions in the general population.

The question that these results might pose is whether the high scores on extraversion (high sociability) and social desirability (tendency to project a favorable image of oneself) are specific to women with ACS, and therefore, could be considered predictive of risk.

The limitation of this study is that the sample was too small to obtain significant differences in the cardiovascular risk factors between the 2 populations.

Based on our data, we conclude that, in patients younger than 65 years with ACS, women have a greater degree of mental distress than men and show personality differences when faced with this same stressful situation. The long-term effect of these differences and their relationship with the clinical course of ACS merits further study.

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