A Comparative Study of Hypochondriacal Concerns in Hospital Personnel and Students

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Abstract: Background and Aim: Hypochondria is a psychological disorder characterized by excessive anxiety about having an illness. Despite the importance of this disorder, few studies have been carried out on this subject in Iran. Therefore, the present research is a comparative study of hypochondriacal concerns in community and clinical populations. Materials and Methods: This research was carried out on 200 hospital personnel and students. All the participants completed the Illness Attitudes Scale (IAS). Analysis of covariance was used for data analysis. Findings: The results of analysis of covariance showed that there is a significant difference between the two groups in hypochondriacal concerns (P < 0.05). Discussion and Conclusion: The research showed a higher level of hypochondria in hospital personnel than students.

Key words: Hypochondria, hospital personnel, students.

INTRODUCTION

Hypochondriasis, or hypochondria, is a disorder that is characterized by fear of a serious disease based on inaccurate perception or somatoform symptoms. The duration of these symptoms and preoccupation is 6 months or longer despite meticulous medical evaluations and repeated reassurance. Hypochondriasis creates much distress and desperation in personal, social, and professional life of the person (American Psychiatric Association, 1994).

One of the evident and persistent features this disorder is preoccupation of the hypochondriac (Looper & Kirmayer, 2001). This preoccupation is so severe that the hypochondriacs usually complain about various physical symptoms. Indeed these symptoms often have no physical basis, or even if the patient has a physical ailment, the experienced symptoms are much greater than that which can be explained by the disease (Abramowitz et al., 2007). Moreover, these patients are not merely preoccupied with their symptoms, but also with the meaning of their symptoms (Noyes et al., 2006). Another feature of these patients is hypochondriacal behaviors and resistance against the usual medical reassurance (Abramowitz et al., 2007). Hypochondriacal behaviors include medical examination and searching for reassurance of not being afflicted with the disorder and both these behaviors are the result of fear of disease and belief in illness (Salkovskis et al., 2003). Other behaviors of this sort are: physical checkups, laboratory examinations, and other diagnostic measure as well as hospitalization, unnecessary surgery, and repeated questioning of family members, friends, and doctors to ensure lack of a serious illness (Creed & Barski, 2004).

However, hypochondriasis is not the only disorder characterized by health anxiety symptoms. People afflicted with panic attacks, obsessive-compulsive disorder, and major depressive disorder also experience these concerns (Ghorbanalipour et al., 2011). Hypochondriacal concerns are prevalent in a large portion of the general public. Rief et al. (2001) carried out a research on the somatoform symptoms and health concerns in a sample of 2050 persons in Germany. Participants were asked whether during the prior two years they had experienced the 53 symptoms identified by the researchers. They were instructed only to answer “yes” if the symptoms had a significant influence on their subjective well-being and if doctors did not find a sufficient explanation for the complaints. Most reported symptoms were pain (backache 30%; joint pain 25%; pain in the limbs 20%; headache 19%; chest pain 5%), gastrointestinal symptoms (abdominal pain 11%, bloating 13%, and intolerance of several foods 12%) and cardiovascular symptoms (palpitation 11%). The majority of these symptoms were prevalent in 46-year-old and older individuals (Rief et al., 2001). Furthermore, various studies have reported the prevalence of hypochondriasis in certain populations. For instance, Ellingsen and Wilhelmson (2002) carried out a study in medical and law students and found that medical students have less disease anxiety than law students. They also found that health anxiety symptoms in medical students usually emerged at the first two years of college and that they were mostly temporary. Kellner et al. (1986) also studied hypochondriacal anxieties in medical and law students and found that the prevalence of hypochondriacal fears, beliefs, and attitudes did not differ significantly between the two groups.

Due to the critical role of medical staff in promoting health in society and since these individuals often deal with health-related issues and death, the present research tries to examine hypochondriacal concerns in community and clinical populations in order to provide a deeper insight into this disorder, its driving factors, and its prevalence.

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Methodology:
The present research is a cross-sectional descriptive study. The population consists of the medical personnel of hospitals in Khoy County and the students of Khoy Branch of IAU during the period 2010-2011. Using Morgan’s table and random sampling, 100 persons (61 female and 39 male) were selected from the medical population and 100 persons (56 female and 44 male) were selected from the student population. Only those subjects with no special physical or neurological disorder and who were not under medical or psychotherapy entered the study. It must be noted that all the subjects voluntarily participated in the study. To motivate the respondents and increase the accuracy of the responses, the subjects were told that they can be informed about the results if interested. Analysis of covariance was used for data analysis.

Instruments:
The Illness Attitudes Scale (IAS) was designed by Kellner (1986). It includes 29 items rated on a 5-point Likert scale (from 0 to 4) and assesses fears, beliefs, and attitudes associated with hypochondriasis. The original form of the scale included 9 subscales. However, this form was modified in a research on the factor structure of IAS and 5 major subscales were identified (Kellner et al., 1987): (1) worry about illness, (2) treatment experience, (3) hypochondriacal beliefs and effects of symptoms, (4) health habits, and (5) thanatophobia. These subscales have 7, 3, 10, 4, and 3 items respectively. Consistency tests showed that all the subscales have sufficient internal consistency (above 0.70). It was also revealed that there is a correlation between factors 1, 2, and 4 and hypochondriasis scale in MMPI, between factors 1 and 3 and somatization scale in SCL-90R, and between factor 3 and physical symptoms in GHQ (Atrifard et al., 2007).

Results:
The descriptive statistics of the subjects are presented in Table 1.

Table 1: Frequency distribution of the subjects in terms of gender and group.

<table>
<thead>
<tr>
<th>Group</th>
<th>Gender</th>
<th>Total</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Personnel</td>
<td>Female</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>40</td>
<td>40</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>60</td>
<td>60</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Students</td>
<td>Female</td>
<td>57</td>
<td>57</td>
<td>43</td>
<td>43</td>
<td>43</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>43</td>
<td>43</td>
<td>43</td>
<td>57</td>
<td>57</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>117</td>
<td>58.5</td>
<td>6</td>
<td>42.5</td>
<td>200</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows that 58.5 percent of the subjects were female and 42.5 percent were male. The mean and standard deviation of IAS scores of the two groups are presented in Table 2.

Table 2: Mean and standard deviation of IAS scores before controlling for confounding variables.

<table>
<thead>
<tr>
<th>Index</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Medical Personnel</td>
<td>49.12</td>
<td>8.65</td>
</tr>
<tr>
<td>Students</td>
<td>41.14</td>
<td>7.36</td>
</tr>
</tbody>
</table>

Levene’s test confirmed equality of variances in the population (P = 0.22). This means that the variance or dispersion of IAS scores in the groups is equal. The results of analysis of covariance of IAS scores of the two groups are presented in Table 3. In this analysis, the effects of pretest, age, and education were controlled and the groups were compared with respect to the remaining scores.

Table 3: The results of analysis of covariance of the two groups in IAS scores after controlling for confounding variables.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>P</th>
<th>η²</th>
<th>Statistical Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>1</td>
<td>326.51</td>
<td>0.001</td>
<td>0.71</td>
<td>0.91</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1</td>
<td>1242.67</td>
<td>0.01</td>
<td>0.34</td>
<td>0.65</td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>1368.53</td>
<td>0.0001</td>
<td>0.82</td>
<td>1.000</td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 3, the difference between the IAS scores of the groups is significant after controlling for confounding variables (P < 0.0001). The difference between the groups is 82%, that is, 82% of the variance of scores is related to group membership. The statistical power equals 1, suggesting that the accuracy of this analysis in discovering significant differences is 100%.
Discussion and Conclusion:

The purpose of the present research was to compare hypochondriacal concerns in clinical and community populations. It was revealed that there is a significant difference between health anxieties. The results of the research are consistent with the findings of Hunter et al. (1964) and Woods et al. (1996). These studies reported a prevalence of hypochondriasis in medical students up to 70 and 80 percent. The results are also consistent with the findings of Moss-Morris and Petrie (2001) who showed that 70% of medical students had hypochondriacal concerns. In this study, it was revealed that half of the students were worried about palpitation and tremor, and despite doctors’ reassurance about lack of illness these anxieties still persisted. Furthermore, the results of the present research are in line with the study of Talaie et al. (2002) who showed that medical students have more hypochondriacal concerns than other students. On the other hand, these results are inconsistent with the findings of Ellingsen and Wilhelmsen (2002) and Singh et al. (2004). These two studies found health anxiety to be greater in law and English students than in medical students.

The prevalence of health anxiety in the medical personnel of Khoy hospitals can be explained by internal stimuli such as physiological changes and external stimuli such as experiencing disease and death in patients. In an interesting longitudinal study by Kendler et al. (1995) on twin women (mean age of 30 years), data related to stressful events were collected in a one-year period and these events were considered as the predictors of the onset of hypochondriasis. Family-related stressors included severe illnesses or death in family members and relatives. Illness and death of other people were also among the stressful events of the studied sample. In contrast, being a victim of robbery or assault was less common. This research showed that these events are significantly associated with the onset of hypochondriasis within a month after the event. Therefore, since the personnel of the medical sector have a critical responsibility and have the highest encounter with disease and death in people, the prevalence of health anxiety in these individuals is not surprising.

It must be noted that the present research has some limitations. The first limitation is that it is not longitudinal and therefore the long-term effects of health anxiety on the medical personnel of Khoy County are not accounted for. The second limitation is the use of a self-report scale that limits the generalizability of the results. Therefore, it is recommended that future studies find a solution to these limitations.

REFERENCES


