

## Patterns of Hypochondriasis in Population Visiting Tertiary Care Settings in Karachi

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### ABSTRACT

**Objective:** To assess the patterns seen in population visiting tertiary care facilities of Karachi

**Method:** This cross-sectional study was conducted in 2013 in two tertiary care hospitals of Karachi. A total of n=398 participants were enrolled in the study through the convenience sampling technique. Hypochondriasis was assessed using Illness Attitude Scale (IAS) by Kellner. Data was analyzed using SPSS version 20. Difference in mean scores among different groups was taken out through Independent sample t test and ANOVA, associations were taken out using chi-square test. P value less than 0.05 was taken as significant.

**Results:** Out of the total participants, 53.8% were suffering from hypochondriasis. When categorized by gender males were 45.8% and females 62.9% (p value 0.001). When categorized by marital status, it was found that 58.6% of married participants were hypochondriac whereas only 37.1% singles were hypochondriac (P value 0.001). Age group between 25-35 years had the maximum number of hypochondriacs (30%).

**Conclusion:** The pattern of distribution of hypochondriasis was found out to be similar with those of other studies. Females are predominantly more hypochondriac as compared to males

**Key words:** Frequency, Hypochondriasis, Somatoform Disorder, general population

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### INTRODUCTION

Hypochondriasis is a somatoform disorder classified by DSM IV criteria as when “patients come to believe, or at least to very strongly suspect, that they are sick with a serious, perhaps life-threatening disease<sup>1</sup>.” In Hypochondriasis symptom production and motivation is done unconsciously<sup>1</sup>. When diagnosed, hypochondriasis can be a chronic debilitating disorder<sup>1</sup>. According to the book titled DSM IV by *Spitzer* Hypochondriasis involves ‘doctor shopping’ which like the name suggests, is when the patient tends to arrange visits with other physicians, because the previous physician was unable to come to a diagnosis that satisfied the patient. These patients also tend to be alienated by family members, because of their

constant demand for attention and care, despite the occasional appearance of bodily symptoms<sup>2</sup>.

Somatoform disorders are not restricted to hypochondriasis; they include other disorders like somatization, conversion, pain and body dysmorphic disorder<sup>3</sup>.

A number of studies have assessed the prevalence of Hypochondriasis and somatoform disorders<sup>4-7</sup>. Studies performed in Denmark found prevalence of somatoform disorders to be 20.1%<sup>4</sup> while it was 31.6% in Italy<sup>5</sup>. When looking at hypochondriasis specifically it was found that the prevalence Hypochondriasis was 0.05% in Germany<sup>6</sup>, while 3.4% in California<sup>7</sup>. Co-existence of Hypochondriasis and other psychiatric disorders was found to be high with anxiety being 59%, panic 45% and depression 45%<sup>8</sup>.

Although in Pakistan researches have been conducted on issues like somatoform disorders<sup>9</sup>, anxiety and depression<sup>10</sup>, yet no study has been conducted that specifically targets Hypochondriasis<sup>9</sup>. Hence the purpose of this study is to focus on Hypochondriasis as a disorder of keen interest to assess its pattern among tertiary care hospitals and assess demographic factors influencing it.

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## MATERIALS & METHODS

A cross sectional study was performed in 2013 in the outpatient departments of one government and one private tertiary care hospital of Karachi. Patients and their attendants attending different outpatient departments were enrolled using Non-Probability convenience sampling technique. A sample size of 245 was calculated through WHO Sample size calculator on prevalence of 20% in studies conducted elsewhere<sup>4</sup>.

After adding 20% wastage the total sample size was inflated to 300. All those patients/attendants found in the OPD who were greater than 18 years of age were inducted in the study whereas those attending psychiatry OPD and possessing chronic debilitating diseases were excluded. Also excluded were people who refused to consent or presented with language barriers.

The purpose of the study was explained to each participant. Participants were ensured that anonymity would be maintained throughout the study. After explaining the purpose of study, a verbal consent was taken for interviewing on a pretested questionnaire assessing their perceptions regarding their health, illness and death. The questionnaire comprised of questions taken from a validated illness attitude scale<sup>11</sup>. The scale consists of 29 questions, which are further divided into 9 different sub scales, each having 3 questions per scale. It is scored out of 108 points, with each sub scale having a high score of 12 points. The nine different sub scales are labeled as follows: Worry about illness, Concerns about pain, Health habit, Hypochondriacal beliefs, Thanatophobia, Disease phobia, Bodily preoccupations, Treatment experience, and Effects of symptoms. The cut off value for Hypochondriasis was taken to be 45<sup>11</sup>.

Data was entered on Microsoft excel and after correction was transferred to Statistical Package of Social Sciences (SPSS) version 20 for analysis. Descriptive statistics according to the type of variable was taken out. Scores for IAS were counted. Difference in the mean scores of the Individual items of the scale on the basis of gender and marital status was taken out by independent sample t test and that of age groups was taken out through the application of ANOVA. Chi square was applied for finding association between gender and marital status and variables related to Hypochondriasis. P value less than 0.05 was taken as significant.

## RESULTS

A total of n=398 patients participated in the study. 39.2% (n=156) were from a private hospital and 60.6% (n=241) were from a government hospital. Data was

collected from patients in the Outpatient Department. Sample consisted of 53.3% (n=212) males whereas females made up 46.7% (n=186) of sample. When distribution of hypochondriasis was assessed in the sampled population it was found that 21.9% (n=81) were younger than 25 years, 28.1% (n=112) between 26-35 years, 23.1% (n=92) between 36-45 years, 14.8% (n=59) between 46-55years, and 12.1% (n=48) over the age of 56 years. Marital status was also taken into account 77.6% (n=309) patients were married, while 22.4% (n=89) were single. Out of the married individuals 11.3% (n=45) had only one child, 28.6% (n=114) had two or three children, 24.9% (n=99) had four to five children, whereas 8.5% (n=34) had six children or more.

Figure 1: Age groups and presence of Hypochondriasis

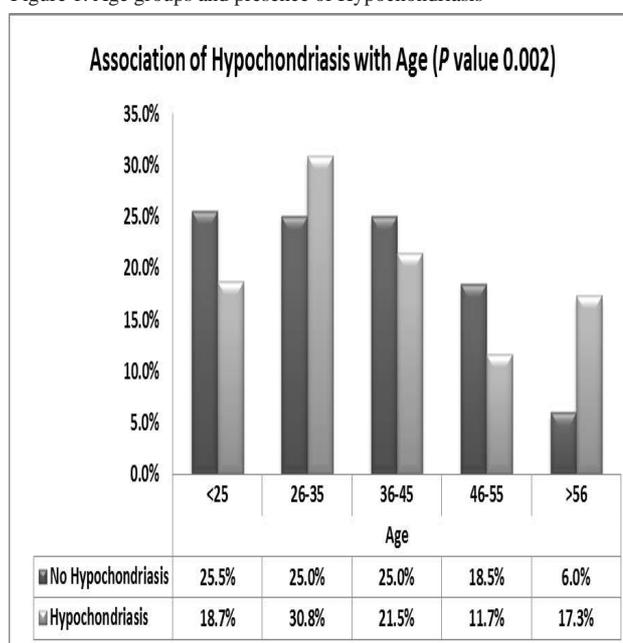


Table 2: Marital status and Somatoform disorders

	Single (n=89) Mean (SD)	Married (n=309) Mean (SD)	P Value
Worry about illness	4.9 (3.2)	5.9 (2.8)	0.007
Concern about pain	4.8 (3.0)	4.6 (2.9)	0.648
Health habits	5.5 (3.1)	5.9 (3.4)	0.305
Hypochondriacal beliefs	3.3 (2.9)	4.4 (3.4)	0.005
Thanatophobia	3.7 (4.0)	3.9(3.8)	0.673
Disease phobia	2.7 (2.9)	3.7 (3.2)	0.009
Bodily preoccupations	4.1 (3.1)	4.6 (3.1)	0.251
Treatment experience	4.4 (3.6)	5.9 (3.7)	0.001
Effect of symptoms	4.8 (3.7)	5.9 (4.0)	0.015

The assessment of hypochondriasis was done on the Illness Attitude Scale proposed by Kellner. The cut off value for hypochondriasis was taken to be 45<sup>11</sup>. A total

of 46.2% (n=184) individuals scored less than 45 and were grouped as Not having hypochondriasis, whilst 53.8% (n=214) scored above 45 and were said to have hypochondriasis.

Table 1: Gender and Somatoform disorders

	Male (n=212) Mean (SD)	Females (n=186) Mean (SD)	P Value
Worry about illness	5.5 (3.0)	5.8 (2.9)	0.238
Concern about pain	4.5 (3.0)	4.8 (2.9)	0.245
Health habits	4.9 (3.5)	6.8 (2.8)	0.001
Hypochondriacal beliefs	3.9 (3.1)	4.4 (3.5)	0.157
Thanatophobia	3.3 (3.5)	4.6 (4.1)	0.001
Disease phobia	3.0 (3.2)	4.0 (3.0)	0.002
Bodily preoccupations	4.3 (3.3)	4.7 (2.9)	0.214
Treatment experience	4.8 (3.9)	6.5 (3.3)	0.000
Effect of symptoms	5.4 (4.4)	6 (3.4)	0.163

As stated earlier, the number of males was n=212, it was found that 54.2% (n=115) scored below the cut off value and were grouped as not having hypochondriasis, whereas 45.8% (n=97) were said to have hypochondriasis. While n=186 females were included in the study and 37.1% (n=69) did not have hypochondriasis and 62.9% (n=117) were grouped as having hypochondriasis. *P* value = .001.

When looking at marital status, a total of n=89 patients were single and n=308 were married, in the single category 62.9% (n=56) were grouped as not having hypochondriasis, while 37.1% (n=33) were grouped as hypochondriacs. In the married category 41.4% (n=128) did not have hypochondriasis while 58.6% (n=181) did have hypochondriasis. *P* value = .000.

In married individuals with one child n=45, 51.1% (n=23) fell in the category of not having hypochondriasis, while 48.9% (n=22) were found to be hypochondriacs. N=114 had two or three children and 32.5% (n=37) did not have hypochondriasis, whereas 67.5% (n=77) did have hypochondriasis. N=99 had four to five children in which 48.5% (n=48) and 51.5% (n=51) did not and did have hypochondriasis respectively. Lastly n=34 had six children or more out of which 50.0% (n=16) did not have hypochondriasis, and 50.0% (n=18) had hypochondriasis. (*P* value=.007).

In the age category, n=81 were younger than 25 years, out of which 54.0% (n=47) did not have hypochondriasis, whilst 46.0% (n=40) did have hypochondriasis. N=112 patients were between 26-35 years old, and 41.1% (n=46) did not have hypochondriasis, whereas 58.9% (n=66) did. There were n=92 patients between the ages of 36-45 years,

50.0% (n=46) divided equally into either not having or having hypochondriasis. N=59 patients were between 46-55 years 57.6% (n=34) did not have hypochondriasis and 42.2% (n=25) had hypochondriasis. Finally, n=48 patients over the age of 56 years out of which only 22.9% (n=11) had no hypochondriasis compared to 77.1% (n=37) were found to be hypochondriacs ((*P* value= .002).

## DISCUSSION

This study was designed to assess the distribution of hypochondriasis, a somatoform disorder; it was found that 53.8% of the population being sampled reached the cut off value. As compared to other countries the figures vary as 6% in Germany<sup>10</sup>, 1.6% in Italy<sup>9</sup> reaching the IAS cut-off. These results changed drastically in those patients that also had a diagnosed psychiatric problem 16.25-20.2% in Denmark<sup>10</sup>, and 14.1% in Germany<sup>5</sup>. The population sampled in our study included both public and private medical hospitals in Karachi; however this study may not reflect the response of patients in other parts of the country.

As compared to the other western countries, the prevalence of hypochondriacs was found to be significantly high in the study. One theory behind this is the relationship of cultural background to somatization, in which any type of emotional distress manifest itself as a physical symptom. Due to the thinking of our society it is just reason to seek a consultation from a physician regarding a query about a physical symptom, rather than consulting a psychiatrist about an emotional problem<sup>12</sup>.

As seen in other studies, there was a positive relationship between gender, age, and marital status<sup>8,14</sup>. It was found that 45.8% males compared to 62.9% females were hypochondriacs. There was a striking difference between the prevalence of hypochondriasis amongst people of different marital status (58.6% of married individuals were found to be hypochondriacs). Similarly, there was also a positive relationship between increasing number of children and age and the prevalence of hypochondriasis. These results were found to be consistent with those of other studies conducted worldwide<sup>6,7,14</sup>.

Hypochondriasis is a difficult condition to diagnose<sup>1</sup>. Pakistan, being a developing country with cultural restraints has concentrated more on physical diseases' and to an extent neglected the attention that is needed for psychiatric disorders<sup>13</sup>. Flaws in the healthcare system and the non-serious attitude of physicians, who regard hypochondriasis as a condition that is not life threatening, maybe one reason behind this<sup>6</sup>. In Pakistan,

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diseases like tuberculosis, malaria, and non-communicable disease (hypertension, diabetes, malnutrition) make up the bulk of the burden of disease, and incidentally receives more attention and funds, even though WHO estimates the burden of psychiatric disease to be high<sup>15</sup>.

If diagnosed, the treatment of hypochondriasis requires time and patience<sup>16</sup>. Most therapies concentrate on patient education, reassurance, cognitive reconstruction, behavioral modification and problem solving<sup>16-18</sup>. Hypochondriasis, along with other somatoform disorders have been receiving needed attention around the world as an area of keen interest in the researching field<sup>3-5</sup>, however in Pakistan this topic, to an extent has been overlooked. This study was able to explore the idea of Hypochondriasis. However, our study only briefly touched the issue and was able to prove that this subject could be of further interest to new studies.

The major limitation of this study was that we took a convenience sample from two hospitals; this could have led to misrepresentation of the views patients in other hospitals and also the general population of the city. Hence, an emphasis was made to remove this error by taking a larger sample size.

We recommend that the issues of hypochondriasis, along with other somatoform disorders be addressed with seriousness by the physicians and the healthcare system.

## CONCLUSION

The distribution of hypochondriasis was found out to be high in this study. The study was able to explore the idea of hypochondriasis and how various factors relate to it. However, it is a topic that deserves further attention and further research in Pakistan.

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View Hypochondriasis Research Papers on Academia.edu for free. The aim of the study was to investigate the prevalence rates of obsessive-compulsive disorder (OCD) and hypochondriasis in schizophrenic patients treated with atypical antipsychotics (AAPs) and to investigate the different comorbidity more. The aim of the study was to investigate the prevalence rates of obsessive-compulsive disorder (OCD) and hypochondriasis in schizophrenic patients treated with atypical antipsychotics (AAPs) and to investigate the different comorbidity rates of OCD and hypochondriasis between clozapine-treated patients and patients treated with other AAPs. We therefore re Care guide for Hypochondriasis (Inpatient Care). Includes: possible causes, signs and symptoms, standard treatment options and means of care and support. You can have someone sign this form for you if you are not able to sign it. You have the right to understand your medical care in words you know. Before you sign the consent form, understand the risks and benefits of what will be done. Make sure all your questions are answered. Psychiatric assessment: Healthcare providers will ask if you have a history of psychological trauma, such as physical, sexual, or mental abuse. They will ask if you were given the care that you needed. Healthcare providers will ask you if you have been a victim of a crime or natural disaster, or if you have a serious in