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HEALTH ANXIETY AMONG GENERAL MEDICAL OUT PATIENTS OF PUBLIC AND PRIVATE SECTOR HOSPITALS IN FAISALABAD

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ABSTRACT

The present study investigated health anxiety among patients of general outpatient departments of public and private sector hospitals in Faisalabad. In order to meet that research objective, Health Anxiety Questionnaire (HAQ), developed by Lucock and Morely (1996), was translated in Urdu language in order to extend its application for the population whose first language is Urdu. Reliability and validity analysis determined the application of Urdu version of HAQ for examining health anxiety. In the second phase, prevalence and gender difference was determined on the sample of one hundred and seventy six (n =176) patients selected from general outpatient departments. Ages of them ranged from 21 to 60 with mean age (M = 44.93; SD = 8.44). Data were collected via demographic information sheet and Health Anxiety Questionnaire (HAQ). Statistical analysis revealed majority of patients experiencing moderate level of health anxiety, while women reported more health anxiety pertaining to their current physical health status as compared to men in terms of health worry and preoccupation, fear of illness and death, re-assurance seeking behavior and interference with life. Present findings imply the integration of psychological assessment and treatment procedures while dealing patients suffering from physical complaints.

Keywords: Health Anxiety, General Out Patients, Physical Complaints

INTRODUCTION

Health anxiety is characterized by excessive apprehensions and worries pertaining to own health believing one is likely to have chronic illness or disease. People suffering from health anxiety misinterpret their bodily complaints and are obsessed with fear of serious disease (Abramowitz et al., 2007). Health anxiety is common health issue being reported by the patients admitted in primary health units due to various contributing factors (Gedik et al., 2023). Health anxiety, if associated with dysfunctional beliefs and health checking behaviour, emerges as maladaptive health anxiety resulting in societal costs and personal devastation for sufferers (Asmundson & Fergus, 2019). Further associated repercussions of health anxiety includes psychological distress, functional damage and overuse of medical sources as well (Lee et al., 2015). Symptoms of health anxiety among youngsters are allied with distress, impairment, overutilization of health care, comorbidity with emotional problems (Rask et al., 2024). In post COVID-19 scenario, health anxiety emerged as a common problem anticipating threat to have a disease (Tyrer, 2020).

Construct of health anxiety shares its feature with illness anxiety disorder and somatic symptoms disorders as mentioned in Diagnostic and Statistical Manual for Mental Health Disorders-IV (Bailer et al., 2016). Persistent worries pertaining to health may be treated as health anxiety or hypochondriasis (Taylor & Asmundson, 2004, as cited in Melli et al., 2018). Statistical figures of 6% to 13% indicating the occurrence of health anxiety in general population with increasing trends in older population (Creed & Barsky, 2004). A cross-sectional study from Pakistan also found 11.9%

medical students having hypochondriacal concerns (Zahid et al., 2016). Another study also pointed out significant increase in the prevalence of hypochondria among students (Mehmood & Yasin, 2023). Health related anxiety could be the part of mental health disorders or existing illness constituting intense distress (Fava et al., 2006). Health anxiety has been recognized as a mental health disorder owing to numerous negative effects on individual's personal, societal and occupational functioning besides resulting in somatic morbidity (Berge et al., 2016). In fact, healthy anxiety reflects person's thoughts and behaviours towards health status and how he or she perceives health related threats. It could serve as adaptive signal for one's survival but its excessive presence is likely to be harmful (Tene et al., 2020, as cited in Jungmann & Witthöft, 2020). People suffering from health anxiety used to read books to get knowledge regarding physical diseases but now they can get information from internet to get assurance whether they are physically healthy or not (Brown et al., 2019; Singh & Brown, 2014).

Uncontrollable thoughts are likely to predict health anxiety symptoms above other kinds of disorders like depression, general anxiety, etc (Meili et al., 2018). Excessive thinking about physical complaints makes people apprehensive and upset further that impede their daily life functioning. Previous researches also discussed the contributing role of medical and mental illness in health anxiety (Aziz et al., 2023). Considering this, the present study has been designed to examine the health anxiety among patients having various body complaints. For that purpose, a questionnaire was required in Urdu language so that participants could understand the items to be answered. Further work was related to the main objectives of the study as mentioned below:

1. To standardize the Urdu version of Health Anxiety Questionnaire (HAQ)
2. To estimate the prevalence of health anxiety among general medical outpatients suffering from physical health problems
3. To examine the gender difference in health anxiety among general medical outpatients

Method

Sample

First, fifty participants including (n =25) male and (n =25) female patients were selected from general outpatient department of public and private sector hospitals of Faisalabad city to estimate the reliability of translated version. Total one hundred and fifty patients were included in the study to compute confirmatory factor analysis on Health Anxiety Questionnaire (HAQ). For determining the prevalence and gender difference on the variable of Health Anxiety, required sample size (n =176) was obtained via G* Power software (t-test for difference between two independent means). Considering it, total (n =88) male and (n =88) female patients were selected from general outpatient departments of public and private sector hospital via convenient sampling method. Their ages ranged from 21 to 60 years with mean age (M = 44.93; SD = 8.44). All selected participants reported to have various physical complaints such as: headache, pervasive cough, body pain, high/low blood pressure and weakness for which they were frequently visiting general physicians. However, they had not been diagnosed with any chronic disease.

Instruments

Personal Information Sheet, covering demographic characteristics and physical complaints participants were suffering from, was used to have required information. Then, another instrument Health Anxiety Questionnaires (HAQ), developed by Lucock and Morely (1996) was used to examine health anxiety. It consisted of 21 items which have been divided into four subscales naming a) Health Worry and Preoccupation, b) Fear of Illness and Death, c) Re-assurance Seeking Behavior, and d) Interference with Life. All these items are scored on 4-point likert scale (Not at all or rarely = 0, Sometimes =1, Often =2, Most of the time = 3). Internal consistency of Original/English version is .92, whilst test-retest reliability is .87. Authors also have reported good discriminate validity of this measure that based on cognitive-behavioral model explaining health anxiety.

Procedure

Following steps have been taken to complete the present study

A. Translation of the Health Anxiety Questionnaire (HAQ)

For translation and validation purpose, three copies of Health Anxiety Questionnaire (HAQ) copies were given to three different subject experts who translated the measure into Urdu. Afterwards, translated versions were given to other three different experts who translated back them in English. Having received 3 different sets of both English and Urdu versions, closeness of the concepts and appropriateness of the item writing were checked by comparing original English version with translated English version. In last, with the help of seventh expert, most appropriate items from three different Urdu versions were selected for the final draft of HAQ.

B. Determining Reliability of Health Anxiety Questionnaire (HAQ)

Final Urdu draft of Health Anxiety Questionnaire (HAQ) was administered on fifty participants (n =50) taken from general outpatient departments of public and private sector hospitals to check the application of translated version. Reliability of Urdu version was determined through Cronbach's alpha.

RESULTS

Table 1: Summary of Internal Consistency among Items of Urdu Version of HAQ

Measure	k	α	M	SD
Health Worry and Preoccupation	8	.75	1.42	.15
Fear of Illness and Death	7	.79	1.33	.09
Re-assurance Seeking Behavior	3	.59	1.36	.18
Interference with Life	3	.79	1.16	.10
Health Anxiety	21	.83	1.34	.16

Summary of Cronbach's alpha (**Table: 1**) indicated good internal consistency among items of the full questionnaire (**α** = .83). On the other hand, alpha value ranged from .59 to .79 on all four subscales of HAQ. Items allocated to the subscales were also found to be internally consistent with each other proving the HAQ Urdu version as reliable measure for examining health anxiety.

Determining Validity of Health Anxiety Questionnaire (HAQ)

Before computing the Bartlett 'test and KMO, further one hundred participants were selected from the general OPD of the same hospitals. In that way, further analysis was done on total one hundred and fifty participants (n =150) to determine HAQ Urdu version as valid measure.

Results:

Table: 2 Summary of Bartlett's and KMO pertaining to Urdu Version of HAQ

Scale	KMO	X^2	Df	P
Health Anxiety Questionnaire (HAQ)	.76	1043.07	210	.000

Bartlett 'test and KMO determined the suitability of applying confirmatory factor analysis on translated version of HAQ that is evident by the value of KMO (.76) with (X^2 =1043.07, df = 210, p =.000). In last, confirmatory factor analysis was done for validation purpose.

Table 3: Summary of Confirmatory Factor Analysis

Item No	Factor 1	Factor 2	Factor 3	Factor 4
HWP4	.710			
HWP7	.696			
HWP18	.682			
HWP9	.660			
HWP1	.627			
HWP6	.616			
HWP11	.603			
HWP8	.580			
FID16		.770		
FID17		.730		
FID15		.628		
FID14		.594		
FID10		.535		
FID2		.492		
FID3		.450		
RSB5			.757	
RSB13			.612	
RSB12			.589	
IWL20				.835
IWL19				.779
IWL21				.769
Eigen Value	5.486	2.277	1.399	1.764
% Variance	26.122	10.842	6.660	8.400

Factor 1: Health Worry and Preoccupation **Factor 2**: Fear of Illness and Death
Factor 3: Re-assurance and Seeking Behaviour **Factor 4**: Interference with Life

Validity analysis was done with confirmatory factor analysis (**Table:3**). Factor loading on all items (allocated to four subscales) of Urdu Version of HAQ ranged from .450 to .835 which seemed satisfactory. Eigen values, greater than 1 on four subscales respectively, retained the items, while observations noted on all four factors of Urdu version HAQ and its theoretical constructs found to be statistically correlated.

Table 4: Prevalence of Health Anxiety

Prevalence	Groups	
	Male	**Female**
Health Worry and Preoccupation	**f(%)**	**f(%)**
Mild	18 (20.4 %)	11(12.5%)
Moderate	61(69.3%)	53(60.2%)
Severe	9(10.2%)	24(27.2%)
Fear of Illness and Death		
Mild	19 (21.5%)	12(13.6%)
Moderate	57 (64.7 %)	55 (62.5%)
Severe	12(13.6%)	21 (23.8%)
Re-assurance and Seeking Behavior		
Mild	18(20.4%)	7(7.9%)
Moderate	62(70.4%)	55(62.5%)
Severe	8(9.09%)	26(29.5%)

Interference with Life		
Mild	15(17.04%)	4(4.5%)
Moderate	59(67.04%)	54(61.3%)
Severe	14(15.9%)	30(34.09%)
Total Health Anxiety		
Mild	19 (21.5%)	10 (11.3%)
Moderate	63(71.5%)	59(67.04%)
Severe	6(6.8%)	19(21.5%)

Analysis of prevalence (**Table 4**), as a whole, depicted majority of male (71.5%) and female (67.04%) participants suffering from moderate level of health anxiety. On the subscales of HAQ, more females reported severe form of health anxiety in terms of health worry and preoccupation (27.2%), fear of illness (23.8%), re-assurance and seeking behavior (29.5%) and interference with life (34.09%) in comparison to male counterparts. Conversely, more male participants reported moderate health anxiety in forms of health worry and preoccupation (69.3%), fear of illness and death (64.7 %), re-assurance and seeking behavior (70.4%) and interference with life (67.04%) as well. Mild level of health anxiety in all forms also observed among majority of male participants as compared to females.

C. Determining Gender Difference in Health Anxiety

Having determined the validity of HAQ via confirmatory factor analysis, gender difference among participants in respect to health anxiety was examined via independent samples t-test.

Table 5: Summary of Independent samples t-test showing gender difference in respect to health anxiety

Variables	Male (n =88)		Female (n =88)					
	M	SD	M	SD	Df	t	p	Cohen's d
Health Worry and Preoccupation	12.07	4.14	13.31	4.29		-2.01	.04	0.29
Fear of Illness and Death	8.63	4.14	10.15	4.77	174	-2.26	.02	0.34
Re-assurance Seeking Behavior	2.92	1.76	3.84	2.15		-3.09	.002	0.46
Interference with Life	2.73	2.15	4.10	2.57		-3.80	.000	0.57
Health Anxiety	26.37	7.84	31.42	9.84		-3.75	.000	0.56

Results (**Table: 5**), obtained through independent samples t- test, demonstrated significant gender difference in respect to health worry and preoccupation ($t = -2.01$, $df = 174$, $p = .04$, $d = .29$), fear of illness and death ($t = -2.26$, $df = 174$, $p = .02$, $d = .34$), re-assurance seeking behavior ($t = -3.09$, $df = 174$, $p = .002$, $d = .46$), interference with life ($t = -3.80$, $df = 174$, $p = .000$, $d = 0.57$) and health anxiety ($t = -3.75$, $df = 174$, $p = .000$, $d = .56$).

Discussions

For meeting the present objectives, first HAQ was translated and standardized by determining reliability and validity. Health Anxiety Questionnaire (HAQ-21) sounds suitable instrument to assess the problem of health anxiety in Pakistan as well. Full questionnaire along with subscales demonstrated good internal consistency in respect to all of its items (**Table: 1).** Studies from other societies also reported Cronbach's alpha value ($\alpha = 0.92$; $\alpha = 0.87$) for Koren and Arabic version of HAQ respectively (Hwang et al., 2018; Taha 2021). In the context of test construction and use, Cronbach's alpha is recommended as a significant test to determine the items related internal consistency (Cortina, 1993). Although, KMO value (0.76) is less than

0.8 but it is acceptable to determine sample adequacy (Shrestha, 2021). Confirmatory factor analysis revealed the present model of Urdu version of HAQ reasonably fit to be applied on the participants whose first language is Urdu. (**Table: 3**). In scientific literature, cut-off value 0.3 has been documented as recommended value while interpreting CFA output (Hair et al., 2010, as cited in Hassim et al., 2020). The current factor loading (.450 to .835) of Urdu version of HAQ, not ideal, but acceptable as this tool was applied in different culture for the first time.

Urdu version of HAQ seemed better to assess the health anxiety among patients having physical problems as evident by the prevalence and gender comparison made among them. Most of the participants experienced moderate level of health anxiety in terms of healthy worry and preoccupation, fear of illness and death, re-assurance and seeking behaviour and interference with life (**Table: 4**). However, females significantly suffered more from health anxiety than males (**Table:5**). The present findings specified females with more concerns regarding their physical health. As the basis of health anxiety, measured by HAQ, lies in cognitive-behavioural model of analysis, therefore, it can be interpreted that beliefs and thoughts people having regarding health are cogent determinants of their anxiety. Accordingly, dysfunctional beliefs, experience of illness symptoms and allied consequences constitute healthy anxiety (Lucock & Morely, 1996). Participants, especially females, in the present study, made negative interpretation of their bodily complaints, with the help of dysfunctional beliefs, that might have induced more apprehension and worry related to health. A previous study also has shown the connection of metacognition beliefs such as: biased thinking and uncontrollable thoughts related beliefs with cyberchondria and as well as health anxiety cyberchondria (Nadeem e t al., 2022). In adults, disturbance also occurs owing to the anxious ruminations pertaining to the physical complaints they have (Fink et al., 2004). Women suffer more from anxiety and depression as compared to men (Shawon et al., 2024). In both disorders, negative thinking and beliefs contribute a lot. Women of the present study experiencing health anxiety might have more worrying thoughts and took actions accordingly than men. They seemed to interpret their bodily complaints as the indication of having serious illness. Somatic sensations are misinterpreted and considered as underlying problem (Tenne et al., 2020). Probably, because of these underlying factors, gender difference in health anxiety was emerged among present sample.

Conclusion

Health Anxiety Questionnaire (HAQ)-Urdu sounds reliable instrument to examine the anxiety pertaining to health status. People with bodily complaints experienced health anxiety in terms of health worry and preoccupation, fear of illness and death, re-assurance and seeking behavior and interference with life. However, females experienced more health anxiety than male counterparts. Females are more likely to interpret their apparent physical symptoms as the indication of having serious illness or disease.

Limitations and Recommendations

Besides, translation and standardization of research instrument, examination of prevalence and gender difference were the focus of present study excluding correlates from the circle of investigation. Role of other demographics (e.g, age, socio-economic status, marital status, family illness history, etc.) were also out of scientific discussion. Future researchers should examine the problem of health anxiety considering essential contributing factors and correlates as well. Future researchers may also determine further psychometric properties (reliability & validity) of Urdu version of HAQ by applying it on large sample probably different from the present one.

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