



Original Research Article

ASSESSMENT OF MENTAL DISORDERS USING THE PATIENT HEALTH QUESTIONNAIRE AS A GENERAL SCREENING TOOL

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ABSTRACT

Background: To assess mental disorders using the patient health questionnaire.

Materials and Methods: Four hundred ten participants, aged 20 to 60 years were administered structured questionnaires—the PHQ and GHQ to assess mental disorders.

Results: The age group 20-30 years comprised 30, 30-40 years had 65, 40-50 years had 105 and 50-60 years had 210 subjects. The difference was significant ($P < 0.05$). Mental disorders were seen among 330 subjects. Depression was identified in 32, somatoform disorders in 133, panic disorders in 45, general anxiety in 70, alcohol problems in 10, and eating disorders in 40 subjects. The difference was significant ($P < 0.05$). PHQ- 9 demonstrated mental disorders, in 14 subjects in the age group 20-30 years, 45 in the age group 30-40 years, 76 in the age group 40-50 years, and 195 in the age group 50-60 years. GHQ-12 showed a maximum in the age group 50-60 years (57). It was observed in 140 males and 190 females. Education level was nil in 90, primary in 170 and secondary and above in 70 subjects. Marital status was single in 105 and married in 225 subjects. A significant difference was observed based on PHQ- 9 and GHQ- 12 ($P < 0.05$). Predictors of psychopathology were subjects who were singles (OR = 0.65), worried about finance (OR = 1.82), worried about family life (OR = 2.70, worried about health (OR = 3.08), and work stressed (OR = 1.17).

Conclusion: There was high prevalence of psychopathology. The prevalent mental illnesses include alcohol-related issues, depression and anxiety disorders, and somatoform disorder. The aging population, male sex, and loneliness were the risk factors linked to mental health issues. This study shows that PHQ has a larger false positive value than GHQ. As a screening tool for certain mental diseases, PHQ should be utilized instead of serving as a generic screening instrument for psychiatric morbidity at the population level.

Keywords: Psychiatric morbidity, mental, somatoform disorder.

INTRODUCTION

According to estimates, mental illnesses affect at least 20% of primary care patients; nevertheless, between 50% and 75% of these instances appear to go undiagnosed and untreated.^[1] Primary care physicians treat most patients with mental illnesses, not those in the mental health field. The bulk of mental problems in primary care are classified into four categories: alcohol, somatoform, anxiety, and

depression.^[2,3] Research has repeatedly demonstrated that up to 50% of patients with common diseases go undiagnosed and untreated by doctors in office settings, which typically results in significant patient suffering, impairment, and healthcare expenses.^[4]

In the diagnosis and treatment of mental illnesses, screening instruments are a vital and significant tool. It has been discovered that PHQ is a crucial screening tool for particular mental illnesses, particularly depression.^[5] At least 50% of instances

of serious depression are missed by family physicians when there is no systematic screening process in place. PHQ-9 has undergone extensive testing as a screening tool for particular mental disorders, including depressive illness in all age groups and across multiple national contexts.^[6] It has demonstrated utility in general populations, including outpatient clinic settings, and is sensitive to changes in older adults. Its sensitivity and specificity as screening parameters have also been validated and are advised for use in primary care depression screening.^[7] We performed this study to assess mental disorders using the patient health questionnaire as a general screening tool.

MATERIAL AND METHODS

After considering the utility of the study and obtaining approval from the ethical review committee, we selected four hundred ten participants, aged 20 to 60 years. Patients' consent was obtained before starting the study.

Data such as name, age, etc. was recorded. All were administered structured questionnaires—the PHQ and GHQ. The PHQ served as the study's survey tool. It is a self-reported measure that was developed from PRIME-MD, a quick, standardized process that is effective in primary care for the diagnosis of any psychiatric disease. The Diagnostic and Statistic Manual of Mental Disorders, Fourth Edition (DSM IV) diagnostic criteria were used to diagnose particular disorders for the first time by the PRIME-MD, an instrument intended for use in primary care. The results were compiled and subjected to statistical analysis using the Mann-Whitney U test. P value less than 0.05 was regarded as significant.

RESULTS

The age group 20-30 years comprised 30, 30-40 years had 65, 40-50 years had 105 and 50-60 years had 210 subjects. The difference was significant ($P < 0.05$). [Table 1]

Mental disorders were seen among 330 subjects. Depression was identified in 32, somatoform disorders in 133, panic disorders in 45, general anxiety in 70, alcohol problems in 10, and eating disorders in 40 subjects. The difference was significant ($P < 0.05$). [Table 2, Figure 1]

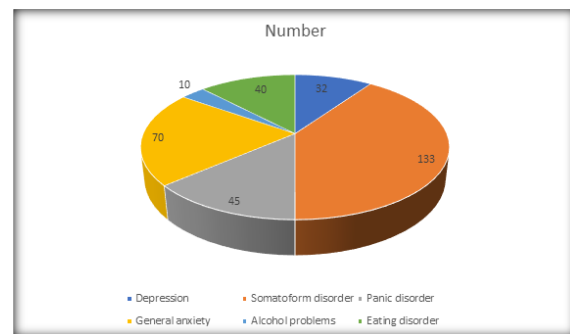


Figure 1: Prevalence of mental disorders

PHQ-9 demonstrated mental disorders, in 14 subjects in the age group 20-30 years, 45 in the age group 30-40 years, 76 in the age group 40-50 years, and 195 in the age group 50-60 years. GHQ-12 showed a maximum in the age group 50-60 years (57). It was observed in 140 males and 190 females. Education level was nil in 90, primary in 170 and secondary and above in 70 subjects. Marital status was single in 105 and married in 225 subjects. A significant difference was observed based on PHQ-9 and GHQ-12 ($P < 0.05$). [Table 3]

Predictors of psychopathology were subjects who were singles (OR = 0.65), worried about finance (OR = 1.82), worried about family life (OR = 2.70), worried about health (OR = 3.08), and work stressed (OR = 1.17). [Table 4]

Table 1: Patients distribution based on age group

Age group (years)	Number	P value
20-30	30	0.05
30-40	65	
40-50	105	
50-60	210	

Table 2: Prevalence of mental disorders

Mental disorders	Number	P value
Depression	32	0.05
Somatoform disorder	133	
Panic disorder	45	
General anxiety	70	
Alcohol problems	10	
Eating disorder	40	

Table 3: Assessment of psychopathology

Parameters	Variables	PHQ-9	P value	GHQ-12	P value
Age group (years)	20-30	14	0.01	6	0.04
	30-40	45		22	
	40-50	76		35	

	50-60	195		57	
Gender	Male	140	0.05	50	0.05
	Female	190		70	
Education	Nil	90	0.04	45	0.91
	Primary	170		55	
	Secondary and above	70		30	
Marital status	Single	105	0.01	48	0.02
	Married	225		72	

Table 4: Predictors of psychopathology using PHQ-9

Parameters	Variables	Adjusted OR (95% CI)
Gender	Male	0.92
	Female	1.00
Marital status	Single	0.65
	Married	1.01
Worried about finance	Yes	1.82
	No	1.03
Worried about family life	Yes	2.70
	No	1.00
Worried about health	Yes	3.08
	No	1.01
Work stress	Yes	1.17
	No	1.02

DISCUSSION

The lives of those with mental illnesses and their families are drastically impacted by these conditions. It affects society's economy significantly as well.^[8] It causes reduced functional ability, a rise in the requirement for medical attention, and a decline in life quality.^[9,10] Economic shifts, social and political unrest, and cultural upheavals could all contribute to the increased prevalence of mental illness.^[11,12] Economic factors that drive someone to move away from home, particularly in the wake of a global economic downturn, have been linked to a significant rise in the prevalence of various mental illnesses.^[13,14] We performed this study to assess mental disorders using the patient health questionnaire as a general screening tool.

In our study, the age group 20-30 years comprised 30, 30-40 years had 65, 40-50 years had 105 and 50-60 years had 210 subjects. Mental disorders were seen among 330 subjects. Depression was identified in 32, somatoform disorders in 133, panic disorders in 45, general anxiety in 70, alcohol problems in 10, and eating disorders in 40 subjects. Amoran et al,^[15] utilizing the patient health questionnaire, determined the type and prevalence of mental disorders in the general population (PHQ). Healthcare professionals who were not physicians simultaneously administered the PHQ and GHQ-12 questionnaires to check for psychiatric symptoms. Out of the 758 individuals who participated in the study, 496 (65.4%) showed some type of psychopathology according to the PHQ, and 143 (18.9%) according to the GHQ questionnaire ($\chi^2 = 20.92$, $P = 0.000$). Out of the 371 patients (43.7%) who fulfilled the criteria for somatoform disorder, 6.0% had ever had treatment at PHC, 269 (35.5%) had depression and 4.8% had ever received treatment, 127 (16.8%) had panic disorder and 5.5% had ever received treatment, 165 (21.8%) for anxiety in general. Psychopathology

was associated with single status (OR = 0.64, CI = 0.49–0.93), health concerns (OR = 3.06, CI = 2.06–4.56), financial worries (OR = 1.84, CI = 1.27–2.67), family life concerns (OR = 2.68, CI = 1.61–4.72), and work-related stress (OR = 1.16, CI = 1.06–1.28). It was found that PHQ- 9 demonstrated mental disorders, in 14 subjects in the age group 20-30 years, 45 in the age group 30-40 years, 76 in the age group 40-50 years, and 195 in the age group 50-60 years. GHQ-12 showed a maximum in the age group 50-60 years (57). It was observed in 140 males and 190 females. Education level was nil in 90, primary in 170 and secondary and above in 70 subjects. Marital status was single in 105 and married in 225 subjects. A significant difference was observed based on PHQ- 9 and GHQ- 12. In our study, predictors of psychopathology were subjects who were singles (OR = 0.65), worried about finance (OR = 1.82), worried about family life (OR = 2.70), worried about health (OR = 3.08), and work stressed (OR = 1.17). Jorm et al,^[16] examined the general public's awareness of mental illnesses and their perspectives on the efficacy of different forms of therapy. 2031 people between the ages of 18 and 74, 1010 and 1021 participants, respectively, answered questions regarding the depression and schizophrenia vignettes. The majority of participants acknowledged the existence of a mental illness: 72% for the depression vignette (which was mistakenly identified as depression by 39%) and 84% for the schizophrenia vignette (which was mistakenly identified as schizophrenia by 27%). In the context of the depression vignette, the individuals most frequently assessed as helpful were general practitioners (83%) and counsellors (74%), whereas psychiatrists (51%) and psychologists (49%) were rated as unhelpful. The following information matched the schizophrenia vignette: GPs (74%), psychologists (62%), psychiatrists (71%), and counselors (81%). Certain nonstandard psychiatric treatments (increased physical or social activity,

relaxation and stress management, reading about people with similar problems) were highly rated, while many standard psychiatric treatments (antidepressants, antipsychotics, electroconvulsive therapy, admission to a psychiatric ward) were more frequently rated as harmful than helpful. Antidepressants and antipsychotics were considered as less beneficial than vitamins and special diets.

CONCLUSION

There was high prevalence of psychopathology. The prevalent mental illnesses include alcohol-related issues, depression and anxiety disorders, and somatoform disorder. The aging population, male sex, and loneliness were the risk factors linked to mental health issues. This study shows that PHQ has a larger false positive value than GHQ. As a screening tool for certain mental diseases, PHQ should be utilized instead of serving as a generic screening instrument for psychiatric morbidity at the population level.

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