

Validity of Screening Questionnaire for Detection of Psychiatric Manifestations in Chronic Dermatoses

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ABSTRACT

Skin being the largest organ of the body determines its appearance that may aid in sexual and social communication. Changes in a person's external appearance secondary to any dermatologic disease can deter self-esteem and social interaction. Psychosocial burden of skin disease can affect the overall disability experienced by the person. The present study attempted to find out the validity of a screening questionnaire [General Health Questionnaire 12 (GHQ-12)] to find the psychiatric morbidity in patients suffering from chronic dermatoses. The questionnaire was found to be a valid and reliable instrument to screen psychiatric morbidity in patients with chronic dermatoses attending outpatient setting. There were only 6 (30%) false-positive cases and reliability was found to be 91.4%.

Keywords: Chronic dermatosis, General Health Questionnaire-12.

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INTRODUCTION

Skin being the largest organ of body determines its appearance that may aid in sexual and social communication. Its healthiness is one of the factors that determine not only a person's mental and physical well-being but also their level of confidence.¹

There appears to be variation in the type of dermatosis and from individual to individual in terms of quantity and quality of skin damage. Approximately 30% of persons having dermatological disturbance suffer from psychiatric illness and psychosocial impairment. Depression and anxiety are most common psychiatric illnesses reported in this group, and their early recognition may help in proper management.²

Changes in a person's external appearance secondary to any dermatologic disease can deter self-esteem and social interaction. Psychosocial burden of skin disease can affect the overall disability experienced by the person.³ Interaction between skin and psychiatric illnesses is complex. On the one hand, psychiatric comorbidity can influence occurrence and course of skin disease.⁴ On the contrary, skin disease, because of its cosmetic influence, can result in much psychological distress.⁵ There is underrecognition of psychiatric illnesses and their consequence on quality of life in persons with dermatological disorder. Early identification of psychiatric illness and timely changing management approach can improve patient outcomes.⁶ So far, studies are available on specific dermatologic illnesses, such as acne, alopecia areata, psoriasis, vitiligo, genital herpes, hirsutism, and their association with comorbid psychiatric conditions. Mechri et al⁷ found that psychiatric comorbidity is the most important factor in reducing quality of life in vitiligo patients. The prevalence of psychiatric comorbidity in dermatologic outpatients was 33.45% in a study by Aktan.¹

AIMS AND OBJECTIVES

The aim was to assess the validity of a screening questionnaire to find out psychiatric morbidity in chronic dermatosis.

MATERIALS AND METHODS

Sample

The sample included 200 consecutive patients having chronic dermatoses (psoriasis, acne, vitiligo, eczema, atopic dermatitis) attending skin and venereal disease outpatient department (OPD) at Mahatma Gandhi Medical College and Hospital, Jaipur, Rajasthan, India.

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Tools

- General Health Questionnaire-12.
The GHQ contains 12 items. It is a self-administered screening tool, designed to use in persons with psychiatric disorder. A 4-point Likert scale is used to score. Its original version had 60 items (GHQ60) that were reduced to 12 items.⁸⁻¹⁰
- Sections C, D, and E of Indian Psychiatric Schedule.

Procedure

First of all, informed consent was taken from all the subjects under study. These patients were screened by GHQ-12. The patients who were found to be positive on GHQ-12 were interviewed in detail using sections C, D, and E of Indian Psychiatric Interview Schedule to make a psychiatric diagnosis according to International Classification of Disease (ICD)-10.¹¹

RESULTS

Table 5 shows that there is no significant difference in GHQ screening and ICD-10 diagnosis because the minimum required value for significance is 3.84.

The sociodemographic characteristics of the population studied are summarized in Table 1. Both male and female are almost equally represented. In the population studied, 70% of the subjects were in the middle-aged group (31–50 years), most of the subjects (78%) were married, 58% of the subjects were educated from primary to secondary level, while 27% were graduates and only 15% were illiterate; 47% had monthly income of less than Rs 10,000/- per month, while 53% had monthly income of more than Rs 10,000/-. Table 2 shows the distribution of GHQ-positive and GHQ-negative patients according to different types of chronic dermatoses. It is evident from the results that out of 200 patients, only 70 (35%) were found to be positive on GHQ-12, i.e., probable psychiatric disorders.

Table 3 reveals distribution of psychiatric disorders in GHQ-positive patients according to different diagnostic categories of chronic dermatoses. Out of 70 GHQ-positive patients, 64 (71%) patients were found to be suffering from different psychiatric conditions, while

Table 1: Sociodemographic profiles

Sociodemographic profile		n = 200
Gender	Male	116 (58%)
	Female	84 (42%)
Age in years	20–30	38 (19%)
	31–40	76 (38%)
	41–50	64 (32%)
	51–60	22 (11%)
	Marital status	Married
Marital status	Unmarried	34 (17%)
	Separated/widow	10 (5%)
	Education	Illiterate
Education	Primary	40 (20%)
	Middle	30 (15%)
	Secondary and higher secondary	46 (23%)
	Graduate	54 (27%)
Income/month	1,000–5,000	42 (21%)
	5,001–10,000	52 (26%)
	10,001–20,000	52 (26%)
	>20,000	54 (27%)
Occupation	Unemployed	20 (10%)
	Semi-skilled	44 (22%)
	Farmer	36 (18%)
	Businessman	40 (20%)
	Professionals	40 (20%)
	Student	20 (10%)

Table 2: Distribution of GHQ scores according to different skin diseases

Name of disease	Total no. of patients (n = 200)	GHQ-12 positive (n = 70)	GHQ-12 negative (n = 130)
Psoriasis	40	16 (40%)	24 (60%)
Vitiligo	30	12 (40%)	18 (60%)
Eczema	40	14 (35%)	26 (65%)
Acne	60	18 (30%)	42 (70%)
Atopic dermatitis	30	10 (30%)	20 (70%)

only 6 (9%) were false-positive, i.e., were not having any psychiatric ailment. Depression was the most common psychiatric diagnosis in 36 (56%) patients followed by generalized anxiety disorder in 24 (37.5%) patients. Only a small fraction, 6.5%, were suffering from other psychiatric disorders, e.g., somatoform. Table 4 shows the significance of difference in the screening and ICD

Table 3: Distribution of psychiatric disorders in GHQ-positive patients according to different skin diseases

Name of disease	Depression (n = 36)	Generalized anxiety disorder (n = 24)	Other psychiatric disorders (n = 4)	No psychiatric disorders (n = 6)
Psoriasis-16 (40%)	10 (62.5%)	4 (25%)		2 (12.5%)
Vitiligo-12 (40%)	6 (50%)	4 (33.3%)	2 (16.67%)	
Eczema-14 (35%)	8 (57%)	6 (43%)		
Acne-18 (30%)	6 (33.3%)	6 (33.3%)	2 (11.1%)	4 (22.2%)
Atopic dermatitis-10 (30%)	6 (60%)	4 (40%)		

Table 4: Significance of difference in GHQ screening and ICD-10 diagnosis

<i>GHQ-12-positive patients</i>	<i>ICD-10 diagnosis</i>
70	64 (91.4%)

$\chi = 0.1342$; $df = 1$; $p < 0.05$ (nonsignificant)

Table 5: Percentage of psychiatric diagnosis in chronic dermatosis

<i>Total no. of patients</i>	<i>Patients with psychiatric diagnosis</i>	<i>Percentage</i>
200	64	32

diagnosis. No significant difference was found. This therefore, indicates that GHQ-12 is a valid tool for detecting psychiatric illnesses in patients suffering from chronic dermatoses. Table 5 shows that out of 200 patients with chronic dermatoses, 64 (32%) were suffering from different psychiatric disorders.

DISCUSSION

The study attempted to find out the validity of a screening questionnaire GHQ-12 to find out the psychiatric morbidity in patients suffering from chronic dermatoses. The results revealed that the questionnaire was found to be a valid and reliable instrument to screen psychiatric morbidity in patients with chronic dermatoses attending outpatient setting. There were only 6 (30%) false-positive cases and reliability was found to be 91.4%. Similar findings have been reported by other studies also.¹²⁻¹⁵

CONCLUSION

Based on the above findings, it can be conclusively said that GHQ-12 is a valid instrument to find out the presence of psychiatric disorders in cases of chronic dermatoses. The questionnaire is easy to administer. One requires only 5 to 10 minutes to fill in. Moreover, it is a self-administered instrument. Therefore, it can be easily used in the OPD settings to enable mutual collaboration between dermatologist and mental health professionals.

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