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Prevalence of Mood Disorders Amongst Dermatological Patients in a Tertiary Care Hospital

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RESEARCH

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ABSTRACT

Background

The prevalence of psychiatric conditions among dermatology clinic patients is quite high.

Aims

This study aims to assess and measure the prevalence of anxiety and depression disorders, and to assess any significant association with clinical, social, and epidemiological variables.

Methods

The study is a cross-sectional study conducted at King Abdulaziz Medical City, Jeddah, Saudi Arabia. Hospital Anxiety and Depression Scale (HADS) was used and delivered to patients attending the dermatology clinic from 2019 to 2020.

Results

Out of the total 305 patients, 135(44.3per cent) were males and 170(55.7per cent) were females. The mean age of this study's participants was 37.13±15.24. Almost sixteen percent of the patients' anxiety score was abnormal, and 17.5per cent of the patients' depression score was abnormal. Anxiety was significantly associated with both male gender (P=0.008), and severity of the disease (P=<0.001). Furthermore, both depression and anxiety were positively associated with the number of dermatological diseases (anxiety P=0.010, depression P=0.014).

Conclusion

The percentage of patients that had an abnormal HADS for anxiety is 16.6per cent, and for depression was 17.5per cent. For that, a multidisciplinary approach to dermatology patients would help both the dermatologists and the patients to have a better disease prognosis, and to early detect and manage any psychiatric condition caused by dermatological diseases.

Key Words

Depression, Anxiety, Dermatology

What this study adds:

1. What is known about this subject?

It has been shown that that there is an association between Cutaneous diseases and mood disorders.

2. What new information is offered in this study?

This study further explores more specifically the association in a specific population in Jeddah, Saudi Arabia.

3. What are the implications for research, policy, or practice?

There is a need for a more general health-encompassing approach while treating dermatological patients in Saudi Arabia, possibly in the form of screening for mood disorders.

Background

For a long time, people thought of health as the ability of accomplishing routine daily activities while not having any physical symptoms. Since 1946, however, The World Health Organization (WHO) has defined health as physical, mental, and financial well-being, and has slowly but surely widened the general public's notion of health[1]. Mood disorders are conditions in which a person's mood is severely disturbed. One of the two major classifications of mood disorders are depressive disorders. Dermatological diseases have shown a particularly strong association with these mood disorders to the point that some dermatologists have incorporated the psychological aspects into treatment to give rise to new science, appropriately named dermatopsychosomatics[2]. 24-90per cent of patients suffering from psoriasis, for example, have been majorly linked to many serious mental disorders, such as depression (27.6per cent) and anxiety (30.4per cent)[3]. Furthermore, it is imperative that dermatologists and other health professionals take the psychological effects of skin disease further into consideration when diagnosing and treating their patients rather than diagnosing and treating dermatological diseases[4].

Previous studies have shown the relationship between cutaneous diseases and mood disorders, and how it can affect health in general. The literature review revealed similar studies in Saudi Arabia but none in the western region. The aim of this study is to further explore and assess the prevalence of mood disorders in dermatology patients in King Abdulaziz Medical City, Jeddah, Saudi Arabia.

Method

This cross-sectional study was carried out at Dermatology outpatient clinic, King Abdulaziz Medical City in Jeddah, Kingdom of Saudi Arabia. In this study, participants were elected using a consecutive sampling technique, which is a non-probability sampling technique in which we take every subject that meets our criteria of being 18 years or older, having the ability to read and comprehend the questions, and consenting to take the questionnaire.

The survey consisted of two parts. The first part comprised the patients' socio-demographic variables like gender, marital status, educational level, occupation, and monthly salary. Moreover, disease severity and the number of dermatological conditions were assessed. The second part was The Hospital Anxiety and Depression Scale (HADS). This Scale is widely used to detect and assess psychological distress in general. HADS contains 14 items which are further divided into two subscales, anxiety and depression subscale. Each item was scored from 0 to 3, giving a maximum of 21 points. A score of 0-7 is considered normal, a score of 8-10 is borderline, and a score more than 11 is considered abnormal for both anxiety and depression subscales.

The obtained data from the survey was entered into Microsoft Excel 2016. Then entered and analyzed in IBM Statistical Package for the social sciences (SPSS) version 25.0. Qualitative variables were presented using descriptive statistics in the form of categories and summarized as frequencies and percentages. Data comparison was interpreted using Fisher's exact test. The test was two-sided, and a p value that is less than 0.05 was considered to be significant. All the participating patients agreed to take the questionnaire and were aware that their data was to be used for research. All patients' data was confidential and ethical approval was received from the Institutional Review Board at King Abdullah International Medical Research Centre, National Guard Health Affairs (MNG-HA), Jeddah, Saudi Arabia.

Results

Of the total participating 305 dermatology outpatient clinic patients, 135 (44.3per cent) were males and 170 (55.7per cent) were females. The mean age of this study' participants was 37.13±15.24. Almost half of the patients are married (55.1per cent). The most common dermatologic condition was acne in 102 (33.4per cent), followed by eczema in 87 patients (28.5per cent). The Majority, 253 patients (83per cent), have only one dermatologic disease. Nearly half of the patients 142 (46.2per cent) graded their dermatologic condition as moderate.

The score of the anxiety part of HADS was normal in 201 (66.5per cent) patients, borderline in 51(16.8per cent), and abnormal in 50 (16.6per cent). Depression scores were normal in 209(69per cent) patients, borderline in 43(14per cent), and abnormal in 53(17.5per cent). Graph 1 shows the results of The Hospital Anxiety and Depression Scale (HADS) where the majority scored normal in both the anxiety and depression scales.

The relation between depression and anxiety with the number of dermatological conditions was significant (P=0.014, P=0.010). Moreover, gender and disease severity showed a significant association with anxiety (P=0.008, P < 0.001). Tables 1 and 2 illustrate some socio-demographic variables and their association with normal, borderline, and abnormal anxiety and depression scores.

Discussion

From 1990 to 2017, Depression disorder has increased in incidence by approximately 50per cent[5]. Globally, Anxiety disorder were the sixth leading cause of disability in both low and high-income countries[6]. Mood disorders are common among dermatology patients. Therefore, this study

aimed to measure anxiety and depression prevalence among patients attending Dermatology Clinic in Jeddah, Saudi Arabia and to assess any significantly associated variables. HADS was used for the evaluation of anxiety and depression scores among this study's patients.

The prevalence of mood disorders varies due to different geographic locations and diagnosis criteria. A study done in Brazil targeting hospitalized patients found that 45.3per cent of patients had depression, while 52per cent of patients had anxiety, which is significantly higher than our study which only involved outpatients[7]. A study, conducted in Saudi Arabia, reported that the frequency of anxiety disorders in dermatology patients was 29per cent, and 14per cent for depression disorders[8]. In our study, 16.6per cent of the patients' anxiety score was abnormal, and 17.5per cent of the patients' depression score was abnormal. Another study had been done in King Abdulaziz Medical City in Riyadh, which had used the Arabic version of the Depression, Anxiety, and Stress Scale instead of HADS, the results showed that 12.6per cent of patients had depression, and 22.1per cent of patients had anxiety[9].

According to a study that assessed psychiatric disorders in dermatological diseases patients, there was no significant difference in gender regarding psychiatric conditions in general[10]. However, they found differences in anxiety and depression proportions where female patients were perceived to have depression more than male patients[10]. Another study also found that female patients reported more psychological symptoms than males[11]. On the contrary, in our study, there was no significant difference between male and female patients regarding depression (P= 1.000). The same first study also found that male patients have anxiety disorders more than female patients[10]. This is mirrored in our study too, where males scored borderline or abnormal anxiety scale more than female patients (P=0.008). Another dimension to add is the recognition of this issue by the physicians. A study found that male dermatological patients' psychiatric comorbidities tended to be unrecognized by dermatologists[12]. On the other hand, female psychiatric comorbidities were more likely to be detected by general physicians[12]. This might be explained by the less-expressive attitude of males generally[12].

In another study, dermatological disease patients with chronic severe and visible manifestations were perceived to have higher scores on the psychological measures. Moreover, patients with moderate or severe dermatological conditions tend to have depression or anxiety more than patients with milder dermatological conditions[8]. In addition to these 2 studies, this study shows that disease severity has a significant association with the anxiety part of Hospital Anxiety and Depression Scale (P=<0.001). Nevertheless, there was no significant correlation between the disease severity and depression scores (P=0.142).

Patients with more than one dermatological condition tend to be more anxious and depressed in comparison with patients with only one dermatological condition[8]. This present study also shows that the number of dermatological diseases has a significant association with anxiety scores (P= <0.010). In regard to the depression part of Hospital Anxiety and Depression Scale, there was a significant association with the number of dermatological conditions (P=0.014), which showed that 3 or more dermatologic conditions is associated with anxiety.

This study has limitations. First, it was conducted in a single center at king Abdulaziz Medical city. In addition, the limited sample size and the scoring system used depends on patients' subjective responses. For that, this study's findings cannot be generalized.

Conclusion

This present study shows a significant association between patients' gender, the number of dermatological diseases, and the severity of the disease with anxiety. While depression was observed more in patients who have multiple dermatologic conditions. Owing to the high prevalence of psychiatric comorbidities in dermatology patients, a multidisciplinary approach to dermatology patients would help both the dermatologists and the patients to have a better disease prognosis and to early detect and manage any psychiatric condition caused by dermatological diseases.

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PEER REVIEW

Externally peer reviewed.

CONFLICTS OF INTEREST

The authors declare that they have no competing interests.

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ETHICS COMMITTEE APPROVAL

King Abdullah International Medical Research Center, institutional review board. Study number: SP18/357/J Ref. No. RYD-18-417780-145624

Figures and Tables

Graph 1

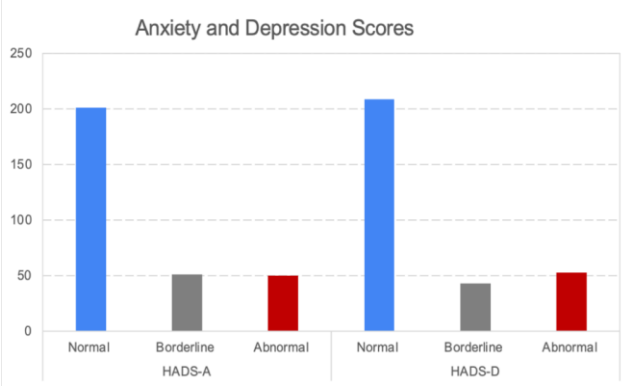

Table1: Clinic Demographic variables correlated with HADS depression

Gender	-Male	116 (0.38)	54 (0.18)	1
	-Female	93 (0.30)	42 (0.14)	
Marital status	-Single	82 (0.27)	37 (0.12)	0.827
	-Married	116 (0.38)	52 (0.17)	
	-Divorced	3 (0.01)	1 (0.003)	
	-Widowed	8 (0.03)	6 (0.02)	
Occupation	-Student	57 (0.19)	24 (0.08)	0.715
	-Employee	82 (0.27)	34 (0.11)	
	-Un-employed	50 (0.16)	29 (0.09)	
	-Retired	20 (0.06)	9 (0.03)	
Numbers of dermatologic condition	-1	180 (0.59)	72 (0.24)	0.014*
	-2	22 (0.07)	11 (0.04)	
	-3	4 (0.01)	9 (0.03)	
	- >3	3 (0.009)	3 (0.009)	
Disease severity	-Mild	85 (0.28)	28 (0.09)	0.142
	-Moderate	90 (0.29)	51 (0.17)	
	-Severe	34 (0.11)	17 (0.05)	
Disease duration	< 1year	62 (0.20)	28 (0.09)	0.439
	1-5 years	93 (0.30)	41 (0.13)	
	5-10 years	26 (0.08)	8 (0.03)	
	>10 years	28 (0.09)	19 (0.06)	

Table 2: Clinic demographic variables correlated with HADS anxiety

Variable		Normal HADS-A	Borderline/Abnormal HADS-A	P value
Gender	-Male -Female	101 (0.33) 100 (0.328)	69 (0.23) 35 (0.12)	0.008*
Marital status	-Single -Married -Divorced -Widowed	78 (0.26) 113 (0.37) 2 (0.07) 8 (0.03)	41 (0.13) 55 (0.18) 2 (0.07) 6 (0.02)	0.736
Occupation	-Student -Employee -Un-employed -Retired	56 (0.18) 80 (0.26) 44 (0.14) 21 (0.07)	25 (0.8) 36 (0.12) 35 (0.11) 8 (0.03)	0.179
Numbers of dermatologic condition	- 1 - 2 - 3 - >3	173 (0.57) 21 (0.07) 3 (0.01) 4 (0.013)	79 (0.26) 12 (0.04) 10 (0.03) 2 (0.007)	0.010*
Disease severity	-Mild -Moderate -Severe	93 (0.31) 83 (0.27) 25 (0.08)	20 (0.07) 58 (0.19) 26 (0.08)	<0.001*
Disease duration	< 1year 1-5 years 5-10 years >10 years	58 (0.19) 93 (0.31) 23 (0.07) 27 (0.09)	32 (0.10) 41 (0.13) 11 (0.04) 20 (0.07)	0.499

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