



Correlates and Pattern of Psychiatric Morbidity among Patients attending the Dermatological Clinic of a Tertiary Hospital in South-South Region of Nigeria

Bolaji Otike-Odibi¹, Chukwuma U. Okefor² and Dasetima D. Altraide^{1*}

¹*Dermatology Unit, Department of Internal Medicine, UPTH, Nigeria.*

²*Department of Psychiatry, UPTH, Nigeria.*

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/IJTDH/2021/v42i530466

Editor(s):

(1) Dr. Giuseppe Murdaca, University of Genoa, Italy.

Reviewers:

(1) Rădulescu Daniela, University of Medicine and Pharmacy "Carol Davila" Bucharest, Romania.

(2) Atheer Kadhim Ibadi, Al Furat Al Awsat Technical University, Iraq.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/68336>

Original Research Article

Received 05 March 2021

Accepted 27 April 2021

Published 28 April 2021

ABSTRACT

Introduction: Higher rates of psychiatric disorders have been reported among patients with dermatological lesions. These problems could negatively impact the quality of life of these patients.

Objectives: The study aimed to assess the psychiatric morbidity among patients attending the dermatology clinic of University Port Harcourt Teaching Hospital (UPTH). It also sought to assess the relationship between socio-demographic factors and presence of psychiatric morbidity.

Methodology: The study employed a cross-sectional design, involving ninety patients consecutively recruited from the dermatology clinic of University of Port Harcourt Teaching Hospital (UPTH). Consenting patients filled the study questionnaire which was inclusive of a socio-demographic questionnaire and general health questionnaire (GHQ-12). A GHQ score of ≥ 3 was considered as having psychiatric morbidity. Statistical analysis was performed at a statistical significance level of 0.05.

Results: The mean age (\pm Standard deviation) of the patients was 32.3(\pm 13.2) years. The study had a male to female ratio of 1:2.2. Psychiatric morbidity was noticed in 34 patients giving a

*Corresponding author: Email: daltraide@yahoo.com;

prevalence rate of 37.8%. The prevalence of psychiatric morbidity was higher among females (40.3%) in comparison to males (32.1%), but this difference was not statistically significant ($P=0.459$). Age ($P=0.840$) and duration of dermatological disorder ($P=0.211$) showed no significant relationship with psychiatric morbidity.

Conclusion: This study has shown that psychiatric conditions are common among patients with dermatological lesions. Hence it is necessary that mental health care is considered in the routine management of these patients.

Keywords: Dermatology; psychiatric disorders; mental health.

1. INTRODUCTION

The relationship between dermatological disorders and psychiatric problems have long been highlighted [1,2]. Additionally, the physical and mental well-being of individuals are affected to a large extent by their skin appearance [3]. The brain and the skin are not only of the same ectodermal origin, but are also influenced by the same neurotransmitters [1]. It has been noted that at least 30% of dermatologic disorders have background psychiatric problems [2]. Thus, some dermatology patients may require mental health care, in addition to the standard dermatologic therapies they receive [4]. Therefore, in the management of patients with dermatological disorders, psychiatric evaluation could be described as important.

However, in sub-Saharan Africa and Nigeria, the relationship between psychiatric and dermatological disorders has not been extensively elucidated in the literature. Thus, psychodermatology, a clinical specialty that combines dermatology and psychiatry is rarely recognized [5]. However, psychiatric problems have been noted to occur among patients diagnosed with dermatological disorders in these sub-Saharan Africa [6]. These problems have a negative impact on the quality of life of patients, and also forestall holistic well-being of the sufferers of skin disorders. Depression and anxiety are common psychiatric disorders which affect patients with dermatological problems [7]. Therefore, this study aimed to determine the prevalence of psychiatric morbidity among patients with dermatological disorders; and determine the relationship between socio-demographic characteristics and psychiatric morbidity.

2. MATERIALS AND METHODS

Study site/area: The study was conducted in the University of Port Harcourt Teaching Hospital (UPTH), a tertiary health facility located in South-

South geopolitical zone of Nigeria. Dermatology is among the various sub-specialties that are available in the hospital. The out-patient clinic runs weekly with an average of 12 new patients.

Study design and study population: This is a cross-sectional study involving patients with dermatology disorders, receiving care at the dermatology clinic of University of Port Harcourt Teaching Hospital (UPTH). Diagnosis was made by the consulting dermatologist in the clinic.

Sample size calculation and sampling: The formula for cross-sectional study was employed in this study [8]. A minimum sample size of 86 was obtained based on an alpha level of 0.05, beta of 0.20, 12.5% prevalence of psychiatric illness among dermatology patients from a Nigerian study,⁶ and precision level of 5%. This was rounded off to 90. Hence, ninety patients with dermatological disorders were involved in the study. Patients were selected consecutively from the dermatology out-patient clinic.

Data collection: Data were collected using an interviewer based study tool comprising of socio-demographic questionnaire (age, sex, and duration of dermatology disorder), general health questionnaire (GHQ-12), and perceived stigma scale. The GHQ-12 is a validated instrument for assessing psychiatric morbidity in out-patient settings; a score of ≥ 3 was considered as having psychiatric morbidity in accordance to literature [9,10,11]. GHQ-12 has been reported to be valid and reliable among patients with skin disorders [9].

Statistical analysis: Data collected were analyzed with the aid of Statistical Package of Social Sciences (SPSS) version 20. Frequencies, proportions, means \pm standard deviation, median and range were used to summarize data. Normally distributed data were analyzed using independent t-test, a parametric test. Data on duration of dermatological disorders was not normally distributed, thus Mann-Whitney U, a non-parametric test was used to compare

significant difference across psychiatric morbidity in the study. Chi square test was used to determine significant differences in proportions. Statistical significance was set at $P < 0.05$.

3. RESULTS

Socio-demographic information: A total of ninety patients with dermatological disorders were involved in the study. They comprised of 28 (31.1%) males and 62 (68.9%) females, yielding a male to female ratio of 1:2.2. The mean age (\pm SD) of the participants was 32.3 (\pm 13.2) years. The mean duration (\pm SD) of dermatological disorder was 3.9 (\pm 7.6) years; the median duration of skin disorder was 8 months with minimum and maximum duration of 1 week and 50 years respectively.

Psychiatric morbidity: Psychiatric morbidity was reported in 34 patients giving a prevalence rate of 37.8%.

Psychiatric morbidities and dermatological disorders: The distribution of psychiatric morbidities across dermatological disorders are presented in Fig. 1. Psychiatric morbidity had the highest frequency among patients with *Tinea* infection (21.4%), followed by acne (14.3%).

Socio-demographic information and psychiatric morbidity: Table 1 shows the socio-demographic findings across psychiatric morbidity. There was no significant difference

between mean age of dermatology patients with psychiatric morbidities and those without ($P=0.840$). Psychiatric morbidity was higher among females (40.3%) in comparison to males (32.1%) in the study, but this was not statistically significant ($P=0.459$). Although, not statistically significant ($P=0.211$), the median duration of dermatological disorders was lower among those with psychiatric morbidity in comparison to those without psychiatric morbidities as represented in Table 1.

4. DISCUSSION

Psychiatric morbidity prevalence of 34.8% reported in this study is consistent with that of Korabel et al. [12] that noted that 30% to 60% of dermatology patients have psychiatric morbidity. The findings of the study showed that indeed psychiatric morbidity is not uncommon among patients suffering from skin disorders. However, the rate of psychiatric morbidity reported in the present study is higher than that reported in a Nigerian study by Aina et al. [6] Unlike the index study, the study population in the research by Aina et al. [6] comprised of only patients with more than six months duration of dermatological disorders, which limits the external validity of their study. Notably, the patients in the index study had a wide range of duration of dermatological disorders, which was from 1 week to 50 years. Thus, the present study could be described as having a wider external validity in comparison to that of Aina et al. [6].

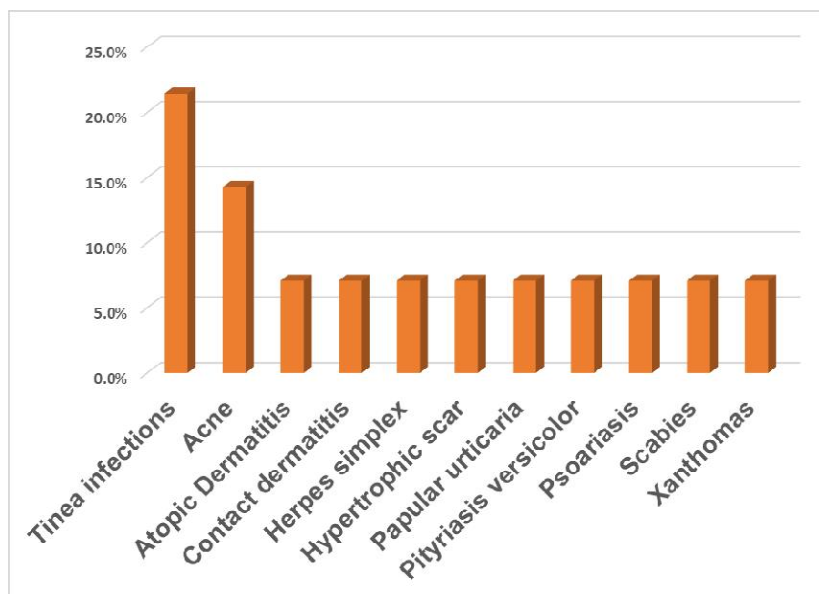


Fig. 1. Frequency distribution of psychological morbidities across dermatological diagnoses

Table 1. Socio-demographic findings by psychiatric morbidity among patients with dermatological disorders

Variables	Psychiatric morbidity		Test	p-value
	Yes	No		
Age (years)				
Mean age (±SD)	32.7 (±12.1)	32.0 (±13.9)	0.203*	0.840
Duration of dermatological disorder				
Median duration (range)	6months (2wks – 30yrs)	1yr (1wk – 50yrs)	691.00 [†]	0.211
Sex				
Male n (%)	9 (32.1)	19 (67.9)	0.549**	0.459
Female n (%)	25 (40.3)	37 (59.7)		

SD – Standard deviation *Independent t-test [†]Mann-Whitney U**Chi square test

The highest proportion of psychiatric morbidity was noticed among patients with *Tinea* infection and acne in comparison to other dermatological disorders in the index study. Thus highlighting the need for mental health screening among dermatology patients especially those with *Tinea* infection. Mental health screening for patients at dermatology out-patient clinics is further supported by the apparently high prevalence of 34.8%; as this invariably implies that about 3 in 10 patients with dermatological disorders suffer from psychiatric morbidity. Although, the present study did not investigate quality of life of the patients, the finding of high prevalence of psychiatric morbidity could connote negative effects on the quality of life of the patients. The mental health issues facing patients with skin problems need to be adequately addressed in order to ensure their holistic care.

The study showed no significant relationship between the demographic findings (age and sex) and occurrence of psychiatric morbidity. Thus, the authors recommend that interventions targeted at promoting optimal mental health among dermatology patients should be carried out irrespective of the age and sex characteristics of the patients. The study did not have a control group, the authors therefore advocate for further studies involving comparison groups. Studies involving different centers across Nigeria’s geopolitical zones should also be conducted to further highlight the occurrence of psychiatric morbidity among dermatology patients.

5. CONCLUSION

Psychiatric morbidity is seen commonly among dermatology patients. The occurrence of psychiatric morbidity has no significant relationship with age and sex of the patients. Mental health screening at dermatology out-

patient clinic will ensure that patients who require intervention in addition to dermatology treatment are timely identified.

CONSENT

Informed consent was obtained from patients prior to their being engaged in the study. Confidentiality and anonymity were maintained in the course of the study. Patients identified with psychiatric morbidity were counseled and referred for further evaluation and expert care.

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Koblentzer C. Psychosomatic concepts in dermatology: A dermatologist-psychoanalyst’s viewpoint. Arch. Dermatol. 1983;119:501–512.
2. Gupta MA, Gupta AK. Psychiatric and Psychological Co-Morbidity in Patients with Dermatologic Disorders. Am. J. Clin. Dermatol. 2003;4:833–842.
3. Aktan Ş, Özmen E, Şanlı B. Psychiatric disorders in patients attending a dermatology outpatient clinic. Dermatology. 1998;197:230–234.
4. Basavaraj KH, Navya MA, Rashmi R. Relevance of psychiatry in dermatology: Present concepts. Indian J. Psychiatry. 2010;52:270–5.

5. Shenoi SD, Prabhu S, Nirmal B, Petrolwala S. Our experience in a psychodermatology liaison clinic at manipal, India. *Indian J. Dermatol.* 2013;58:53–5.
6. Aina OF, Owoeye AO. Psychological distress among attendees of a dermatology clinic in Lagos, Nigeria. *J. Chinese Clin. Med.* 2010;5:216-220.
7. Aslam R, Qadir A, Asad F. Psychiatric morbidity in dermatological outpatients: An issue to be recognized. *J. Pakistan Assoc. Dermatology.* 2016;17:235–239.
8. Kirkwood BR Sterne JAC. Calculation of required sample size. *Essentials Med. Stat.* 2nd Ed. UK. Blackwell Sci. 2003;P420-1.
9. Picardi A, Abeni D, Pasquini. Assessing psychological distress in patients with skin diseases: Reliability, validity and factor structure of the GHQ-12. *J. Eur. Acad. Dermatology Venereol.* 2001;15:410–7.
10. Picardi A, Amerio P, Baliva G. Recognition of depressive and anxiety disorders in dermatological outpatients. *Acta Dermatovenereologica.* 2004;84:1–5.
11. Bashir K, Dar N, Rao S. Depression in adult dermatology outpatients. *J Coll Physicians Surg Pak.* 2010;20:811–3.
12. Korabel H, Dudek D, Jaworek A, Wojas-Pelc A. Psychodermatology: psychological and psychiatric aspects of dermatology. *Przegl. Lek.* 2008;65:244–8.

© 2021 Otike-Odibi et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:

<http://www.sdiarticle4.com/review-history/68336>