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**PATTERN OF SKIN DISEASES IN PATIENTS ATTENDING DERMATOLOGY CLINIC AT
UNIOSUN TEACHING HOSPITAL, OSOGBO, NIGERIA**

PATTERN OF SKIN DISEASES IN PATIENTS ATTENDING DERMATOLOGY CLINIC AT UNIOSUN TEACHING HOSPITAL, OSOGBO, NIGERIA

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ABSTRACT

Introduction: Skin diseases constitute major health challenge in developing country where low educational level, poverty, overcrowding, unemployment are abundant. This study seeks to evaluate the current pattern of presentation of skin diseases to help in health planning and resource allocation.

Methods: This is a retrospective study of patients who attended dermatology clinic of the UNIOSUN Teaching Hospital, Osogbo, Nigeria, between July 2021 and June 2022. The medical records of the patients were reviewed. Data on demographics and diagnosis of the skin disease were obtained. Univariate and bivariate statistics were done.

Results: The study had 313 patients out of which 197(62.2%) were females, 116(37.1%) were males and most 139(44.4%) were in the age range of 15-34years. Papulosquamous disease was the commonest skin disease, 63(20%), followed by eczemas, 47 (15%) of which atopic dermatitis, 21(44.7%), was the most prevalent. Acne vulgaris and skin infection affected 31(9.9%) patients each with acne vulgaris been most common in the age group 15- 34 years. Skin tumor was the least in occurrence, 1(0.3%).

Conclusion: Non-communicable skin diseases are the commonest skin diseases in our centre, however, skin infection also has a

high prevalence. Health education and easy accessibility of skin health care to the populace are advocated.

Keywords: Pattern; Skin disease; Presentation.

INTRODUCTION

Skin disease is a major health problem in all age groups. Reports indicate that about a third of patients presenting in outpatient medical clinics are dermatology patients.¹ This indicates that the burden of skin diseases is enormous in Sub-Saharan Africa. Factors that affect the pattern of skin diseases includes the following: poor hygiene, cultural practices, poverty, unemployment, low socioeconomic status, low educational status, overcrowding, occupation, genetic factors and racial factors.²

The requirement of level of infrastructural development and expertise needed in a community could be determined by the pattern of presentation of skin disease and this will chart the course for health planning, health policies and training required in the community invariably improving health care delivery.³ Dermatological disease pattern varies between countries; for example, the pattern of dermatological disease encountered in Ghana was predominantly infection and the predominant skin disease found in the United Kingdom (UK) were premalignant and

malignant skin diseases.⁴

This study aimed to determine the pattern of presentation of skin diseases at the UNIOSUN Teaching Hospital, Osogbo, in southwestern Nigeria with the goal of assisting relevant health agencies in health planning and accurate interventions.

METHODS

This study was conducted at the UNIOSUN Teaching Hospital, a tertiary health facility located in Osogbo, Osun State in southwestern Nigeria. Osogbo is a town surrounded by many rural communities. The state is bounded by Ondo, Oyo, Kwara and Ekiti states and has a population of about 3.4million according to the 2006 population census.

This is a cross-sectional retrospective study conducted between July 2021 and June 2022. The medical records of the 313 patients seen at the skin clinic during the study period were reviewed and all relevant data obtained such as sex, age and diagnosis of skin disease using a proforma. All the patients in this study were attended to by a consultant dermatologist and relevant tests were done to arrive at the various diagnoses. The data obtained were analysed using IBM SPSS version 20.0 and results are presented in tables and charts.

RESULTS

Table 1 showed that 197 patients (62.9%) were females and 116(37.1%) were males with a male to female ratio of 1:1.6. One hundred and thirty-nine patients (44.4%) were within 15-34years. One hundred and sixty patients (51.1%) were seen in the year 2021. Sixty-three patients (20.1%) had papulosquamous lesions while only one patient (0.3%) presented with skin tumor and genodermatosis (figure 1).

Table 2 showed that 29 patients (9.3%) presented with acne vulgaris followed by 28 patients (8.9%) who presented with lichen planus. Table 3 showed a significant association between age of patients and their

Table 1: Socio-demographic characteristics and dermatological lesions

Variable		Frequency	Percentage
Gender	Male	116	37.1
	Female	197	62.9
Age group	14 yrs and below	41	13.1
	15-34 yrs	139	44.4
	35-64 yrs	105	33.5
	65yrs and above	28	8.9
Year of presentation	2021	160	51.1
	2022	153	48.9
Group of dermatological lesions	Papulosquamous lesion	63	20.1
	Eczematous disorder	47	15.0
	Bullous eruption	7	2.2
	Fungal infection	27	8.6
	Connective tissue disorder	8	2.6
	Acne vulgaris and acneform eruption	31	9.9
	Alopecia	7	2.2
	Urticaria and related disorder	19	6.1
	Vitiligo	11	3.5
	Tumor and genodermatosis	1	.3
	Skin infestations	7	2.2
	Skin infections	31	9.9
	Others	54	17.3

skin presentations ($p<0.001$). Patients who were 14 years and below were likely to present with eczematous disorders while those aged 35 to 64 years were likely to present with papulosquamous lesions and fungal infection. Age group 15 to 34years were more likely to present with acne vulgaris and acneform eruption while the elderly were likely to present with vitiligo and skin infections. Papulosquamous lesion rank the highest with 63(20.1%) followed by eczematous disorder 47(15.0%), skin infection 31(9.9%), acne and acneform

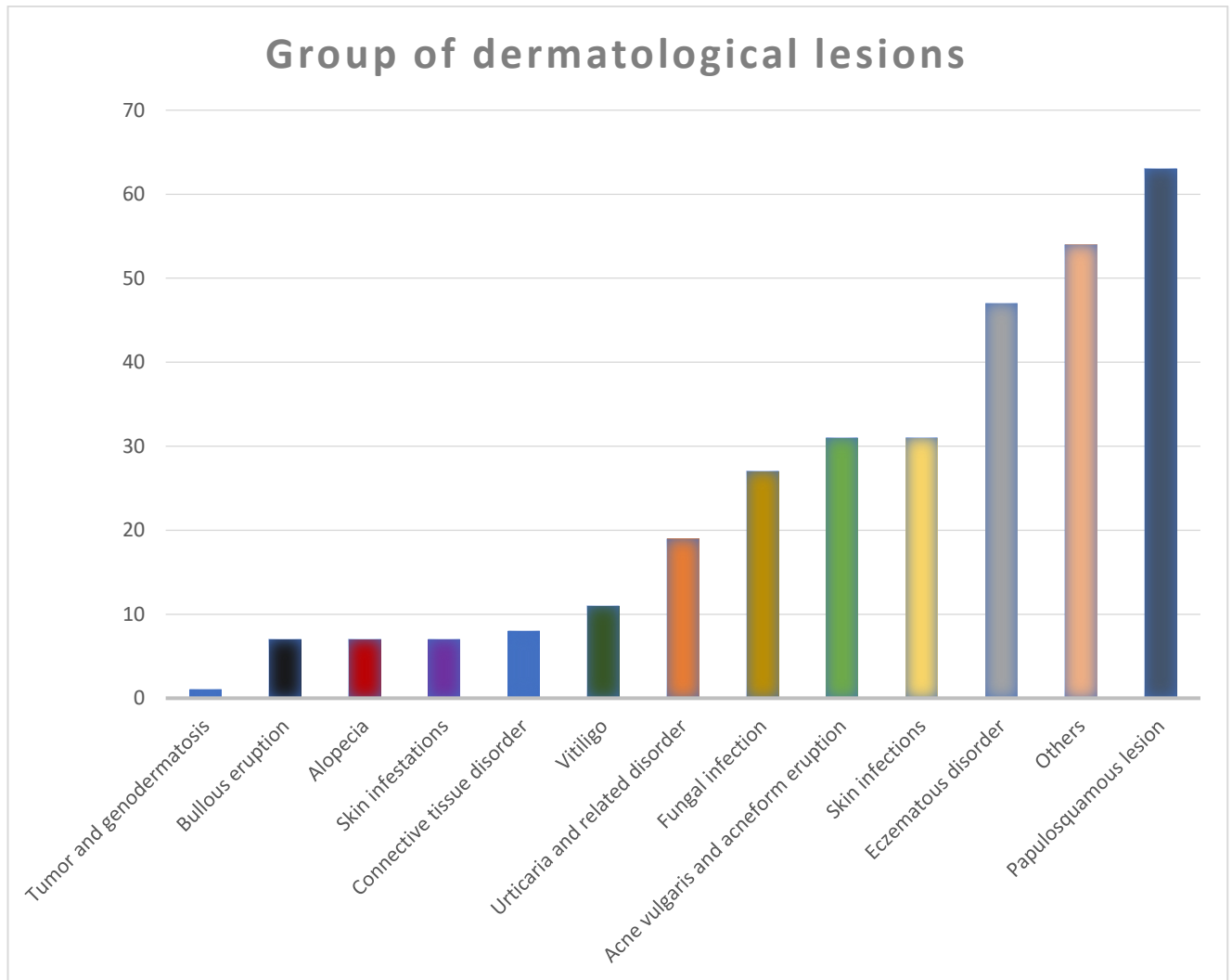


Figure 1: Groups of dermatological lesions

eruption 31(9.9%), fungal infection 27(8.6%), urticaria and related disorder 19(6.1%). The least common diseases were skin tumour and genodermatosis, 1(0.3%).

DISCUSSION

This study had more females than males. This is probably due to the fact that females tend to be more sensitive to issues concerning their health especially having to do with the skin, as observed in some of the previous studies.⁶⁻¹⁰ It was noted that papulosquamous skin disease group has the highest frequency of occurrence with 63(20%). This is contrary to the findings of Olanrewaju et al.² which showed eczemas and skin infection to rank highest; this could be explain by increasing use of accurate diagnostic tools like skin biopsy. Akinboro et al. also discovered that non communicable skin diseases are on the`rise.¹⁸

This study showed a high frequency of occurrence of eczema, 47(15%), in keeping with previous studies.¹⁰⁻¹⁵ Skin infection category ranked third highest with 31(9.9%) in the pattern of skin presentation; this finding is in keeping with a previous study which showed that skin infection is very high in low socioeconomic part of the world.¹⁶ A study by Onayemi et al. in northwestern part of Nigeria found that skin infection had the highest pattern with 44.4%.¹⁶

Acne vulgaris was found in 31(9.9%) of the patients attending the clinic who were aged 14-35years. This is in line with a study that found that acne vulgaris was common in teenagers and adolescents.¹⁷ The frequency of fungal infections

Table 2: Pattern of skin lesions

Diagnosis	Frequency (N=313)	Percentage (%)	Diagnosis	Frequency (N=313)	Percentage (%)
Atopic dermatitis	21	6.7	Tinea versicolor	4	1.3
Systemic sclerosis	3	1.0	Palma hyperkeratosis	5	1.6
Plantar hyperkeratosis	4	1.3	Tineacorporis	10	3.2
Alopecia areata	6	1.9	Herpes simplex infection	1	.3
Urticaria rash	16	5.1	Multiple tinea infection	0	.0
Seborrhoic keratosis	2	.6	Syringoma	2	.6
Pemphigus vulgaris	6	1.9	Micro filarial	1	.3
Acne keloidalisnuche	2	.6	Pyogenic granuloma	1	.3
Tineapedis	9	2.9	Ichthyosis vulgaris	1	.3
Seborroic dermatitis	11	3.5	DLE	2	.6
Leg cellulitis	6	1.9	Aquagenic pruritus	2	.6
Psoriasis	18	5.8	Contact dermatitis	7	2.2
S L E	3	1.0	Dematosispapilosisni grican(DPN)	2	.6
Acne Vulgaris	29	9.3	Hansen disease	2	.6
Perniculitis	1	.3	Furunculosis	2	.6
Vitiligo	11	3.5	Bullous pemphigoid	1	.3
Tineaungium	6	1.9	Pruritic papulaeruption(PPE)	2	.6
Pityriasisrosea	1	.3	Hypertrophyic scar	1	.3
Verucus vulgaris	0	.0	Neurofibromatosis	1	.3
Nervus	2	.6	Nutritional dermatosis	1	.3
Papularurticaria	3	1.0	Traction alopecia	1	.3
Somatization disorder	1	.3	Tineacapitis	1	.3
Viral warts	15	4.8	Post herpetic neuralgia	6	1.9
Scrufloroderma	2	.6	Tineamanum	0	.0
Scabies	6	1.9	Erythema multiformis	2	.6
Rheumatoid arthritis	3	1.0	Tinea incognito	1	.3
Post inflammatory hyperpigmentation	3	1.0	Palmoplanta hyperkeratosis	1	.3
Fixed drug eruption	3	1.0	Lichen planus	28	8.9
Hirsutism	1	.3	Keloids	12	3.8
Poly arthritis	1	.3	Lichenoid eruption	15	4.8
Kaposi sarcoma	1	.3	Total	313	100
Pytriasis alba	1	.3			

Table 3: Relationship between age group of patients and their dermatological lesions

Group of Dermatological lesions															
		Papulos quamo us lesion	Eczematous disorder	Bullo us erupti on	Fungal infectio n	Conn ective tissue disor der	Acne vulgari s&acne form eruptio n	Alop ecia	Uticar iaand relate d disord er	Vitilig o	Tumo randg enode rmat osis	Skin infestat ion	Skin infectio n	Others	Statistics
Age group	≥ 14yrs	5(12.2)	18(43.9)	0(0)	3(7.3)	0(0)	1(2.4)	0(0)	2(4.9)	3(7.3)	0(0)	1(2.4)	2(4.9)	6(14.6)	LR $\chi^2=$ 96.192 df= 36 p<0.001
	15- 34yrs	24(17.3)	22(15.8)	4(2.9)	8(5.8)	5(3.6)	24(17.3)	3(2.2)	8(5.8)	1(0.7)	0(0)	5(3.6)	15(10.8)	20(14.4)	
	35- 64yrs	31(29.5)	6(5.7)	1(1.0)	14(13.3)	3(2.9)	5(4.8)	4(3.8)	9(8.6)	3(2.9)	0(0)	1(1.0)	9(8.6)	19(18.1)	
	≥ 65yrs	3(10.7)	1(3.6)	2(7.1)	2(7.1)	0(0)	1(3.6)	0(0)	0(0)	4(14.3)	1(3.6)	0(0)	5(17.9)	9(32.1)	

*LR χ^2 = Likelihood Ratio Chi-square

27(8.6%) is similar to the findings of an earlier report by Akinboro et al.¹⁸

The disease group that has the least frequency of presentation was skin tumor and genodermatosis seen in 1 (0.3%) patient. This indicates that skin tumours and cancers are low in Africans in line with the findings of Doe et al. regarding skin diseases in Ghana and the UK.⁴ The study found that skin tumors are more prevalent in the UK than what was obtained in Ghana, a west African country.⁴

This study also showed that atopic dermatitis was the commonest form of eczema and it was found to be more prevalent in patients less than 14 years of age in agreement with the study of Abraham et al. on the pattern of skin diseases in the dermatology clinic of a referral hospital in southern Ethiopia which found that 23.9% of children in the clinic had eczema while 11.3% had atopic dermatitis.¹⁸

CONCLUSION

This study showed that non-infectious skin disease is common. The understanding of skin disease pattern as shown by this study will help health planning authorities in taking informed decisions regarding skin care and the prevention of skin diseases in the community.

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