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Original Research Article

CLINICO-EPIDEMIOLOGICAL PROFILE OF GERIATRIC DERMATOSES IN A RURAL TERTIARY CARE CENTRE: A CROSS-SECTIONAL STUDY

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ABSTRACT

Background: Population aging is rapidly increasing worldwide, leading to a growing burden of age-related health conditions. Dermatological disorders represent a significant yet often under-recognized component of morbidity in elderly individuals. Structural and functional changes in aging skin, compounded by environmental exposure and systemic comorbidities, predispose older adults to a wide spectrum of cutaneous manifestations. Region-specific epidemiological data are essential for optimizing geriatric dermatological care. **Materials and Methods:** A hospital-based cross-sectional study was conducted over 18 months among 150 patients aged ≥60 years attending a tertiary care dermatology outpatient department. Detailed clinical history, complete dermatological examination, dermoscopic evaluation where indicated, and relevant laboratory investigations were performed. Dermatoses were categorized into physiological and pathological conditions. Data were analyzed using descriptive statistics, and associations between dermatological conditions and systemic comorbidities were evaluated. **Result:** The majority of participants were aged 66–70 years (32.7%), with a male predominance (60%). Xerosis (73.3%), wrinkling (64.0%), and solar lentigines (54.7%) were the most common physiological changes. Infectious dermatoses constituted the predominant pathological category (40%), with fungal infections accounting for 60% of infectious cases. Eczematous disorders were observed in 36.7% of patients. Bullous disorders (8.7%) and premalignant/malignant lesions (4%) were less frequent. Nail changes were present in 95.3% of patients, and hair graying was universal. Diabetes mellitus (32%) and hypertension (29.3%) were the most common systemic comorbidities and were frequently associated with increased infections and pruritus severity. **Conclusion:** Geriatric dermatoses represent a substantial clinical burden, with xerosis, infections, and eczematous disorders being most prevalent. Intrinsic aging, occupational ultraviolet exposure, and metabolic comorbidities significantly influence disease patterns. Early recognition, barrier restoration strategies, metabolic control, and integrated geriatric dermatological care are essential to reduce morbidity and improve quality of life in the elderly population.

INTRODUCTION

Population ageing is one of the most profound demographic transitions of the 21st century. Globally, the proportion of individuals aged ≥60 years is increasing rapidly, with projections estimating that older adults will constitute over 20% of the world population by 2050.[1] In India, the elderly population is expanding steadily, with estimates suggesting it will reach nearly 179 million by 2031, thereby posing significant public health challenges.[2] Among the various health concerns affecting this age group, dermatological disorders represent a substantial yet often under-recognized burden.

Ageing induces complex structural and functional alterations in the skin through intrinsic biological ageing and cumulative extrinsic influences such as ultraviolet radiation, occupational exposure, and environmental pollutants.[3] These changes include epidermal thinning, impaired barrier function, reduced sebaceous and sweat gland activity, diminished collagen and elastin content, decreased immune surveillance, and delayed wound healing.[4] Collectively, these alterations predispose elderly individuals to both physiological changes—such as xerosis, wrinkling, and pigmentary alterations—and

pathological dermatoses including infections, eczematous disorders, papulosquamous diseases, autoimmune bullous disorders, benign neoplasms, and cutaneous malignancies.[5]

Immunosenescence plays a critical role in geriatric dermatology. Age-related decline in innate and adaptive immune responses increases susceptibility to infections and malignancies while altering inflammatory responses.[6] Fungal infections, bacterial dermatoses, and viral reactivations such as herpes zoster are frequently reported in elderly populations.[7] Furthermore, xerosis-associated pruritus is one of the most common symptoms in older adults and significantly impacts sleep quality and overall well-being.[8]

The epidemiological pattern of geriatric dermatoses varies across geographical regions due to climatic factors, occupational exposure, socioeconomic status, and healthcare accessibility. Indian hospital-based studies have consistently reported infectious dermatoses, eczematous conditions, and benign tumors as the most common dermatological presentations among the elderly.[9,10] Sahoo et al. identified fungal infections as the predominant dermatosis in elderly patients in Eastern India,[9] while other tertiary care studies have emphasized the rising burden of eczema and benign neoplastic conditions.[10,11] However, regional heterogeneity remains substantial, and comprehensive data from semi-urban and rural tertiary care settings are limited.

Systemic comorbidities such as diabetes mellitus and hypertension, which are highly prevalent in older adults, significantly influence dermatological manifestations.[12] Diabetes, in particular, increases susceptibility to fungal infections, impairs wound healing, and predisposes individuals to specific dermatoses such as diabetic dermopathy and bullosis diabeticorum.[13] Polypharmacy further complicates management by increasing the risk of cutaneous adverse drug reactions, which are more frequent and often more severe in elderly individuals due to altered pharmacokinetics and pharmacodynamics.[14]

Despite the high prevalence of dermatological conditions in geriatric populations, these disorders are frequently underreported or considered a normal consequence of ageing, leading to delayed diagnosis and reduced quality of life.[8,15] With increasing life expectancy and demographic shifts, there is a growing need for updated regional clinico-epidemiological data to guide healthcare planning and optimize geriatric dermatological care.

Therefore, the present study was undertaken to evaluate the clinical pattern and epidemiological profile of dermatological disorders among patients aged 60 years and above attending a tertiary care centre, and to analyze their association with systemic comorbidities and demographic factors.

MATERIALS AND METHODS

Study Population: The study population comprised elderly patients aged 60 years and above who presented to the Dermatology outpatient department with cutaneous complaints or were referred from other departments for dermatological evaluation during the study period. Patients below 60 years of age, those who were critically ill, and individuals unable to undergo complete clinical evaluation due to severe cognitive impairment were excluded. Only patients who provided written informed consent were included in the final analysis.

Sample Size: The sample size was calculated using the standard formula for cross-sectional studies based on an expected prevalence of fungal infections of 20% from previous Indian studies, with a 95% confidence interval and an allowable error of 8%. The minimum required sample size was estimated to be 96 participants. To enhance statistical reliability and account for potential data variability, a total of 150 eligible participants were included in the final analysis.

Inclusion Criteria

- Patients aged ≥60 years
- Patients attending Dermatology OPD with cutaneous complaints
- Patients referred from other departments for dermatological evaluation
- Patients who provided informed consent

Exclusion Criteria

- Patients aged below 60 years
- Patients who were critically ill or medically unstable
- Patients with severe cognitive impairment precluding clinical evaluation
- Patients unwilling to provide consent

Sampling Technique: A consecutive sampling technique was employed, wherein all eligible geriatric patients attending the Dermatology outpatient department during the study period were recruited sequentially until the predetermined sample size was achieved. This method ensured feasibility within the study timeframe and reduced potential selection bias in the hospital-based setting.

Data Collection Procedure: After obtaining written informed consent, each participant underwent a comprehensive clinical evaluation conducted by the principal investigator under the supervision of qualified dermatologists. Data were collected using a predesigned structured proforma to ensure uniformity and completeness of documentation.

Clinical History: A detailed clinical history was recorded for each participant, including demographic characteristics such as age, gender, occupation, and place of residence. Information regarding presenting complaints, including onset, duration, progression, and associated symptoms, was documented. Past dermatological history, presence of systemic comorbidities such as diabetes mellitus, hypertension, and thyroid disorders, and detailed drug history including polypharmacy were noted. Family history of skin diseases, occupational

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exposure, and relevant lifestyle factors were also recorded.

Clinical Examination: A thorough dermatological examination was performed in all patients. This included general physical examination followed by complete cutaneous evaluation, including examination of skin, hair, nails, and mucous membranes. Lesions were assessed based on morphology, distribution pattern, and associated systemic findings. Dermatoses were categorized into physiological age-related changes and pathological conditions, including infectious, eczematous, papulosquamous, bullous, pigmentary, benign, premalignant, and malignant disorders, based on established dermatological criteria.

Dermoscopy and Laboratory Investigations: Dermoscopy was performed wherever clinically indicated to enhance diagnostic accuracy, particularly in cases of pigmentary lesions, benign tumors, and suspected malignant conditions. Relevant laboratory investigations were advised as necessary to support clinical diagnosis. These included potassium hydroxide (KOH) mount for suspected fungal infections, complete blood count, blood glucose estimation, thyroid function tests, and skin biopsy with histopathological examination in selected cases.

Outcome Measures: The primary outcome measure was the pattern and prevalence of various geriatric dermatoses among the study population. Secondary outcomes included the association between dermatological conditions and systemic comorbidities, as well as the correlation of demographic factors such as age, gender, occupation, and rural or urban residence with disease patterns.

Statistical Analysis: Data were entered into Microsoft Excel and analyzed using the Statistical Package for the Social Sciences (SPSS) version 24.0. Descriptive statistics were used to summarize demographic characteristics and disease distribution. Categorical variables were expressed as frequencies and percentages, while continuous variables were presented as mean ± standard deviation. Associations between categorical variables were analyzed using the Chi-square test or Fisher's exact test where appropriate. Odds ratios were calculated for significant associations. A p-value of less than 0.05 was considered statistically significant.

RESULTS

A total of 150 geriatric patients aged ≥60 years were included in this cross-sectional study conducted over an 18-month period. The clinical spectrum demonstrated a broad range of physiological, infectious, inflammatory, autoimmune, neoplastic, appendageal, and psychocutaneous manifestations.

Demographic Characteristics

Age Distribution: The majority of patients were in the early geriatric age group, with 66–70 years accounting for the largest proportion (32.7%), followed by 71–75 years (24.0%) and 76–80 years (21.3%). Only 7.3% of participants were aged ≥80 years.

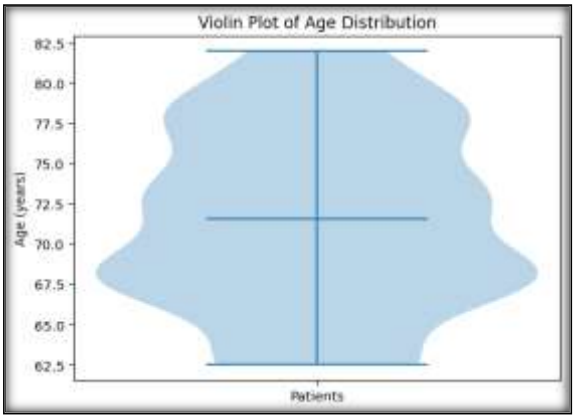

Figure 1: Violin plot showing age distribution

Gender Distribution: Males constituted 90 patients (60%), while females accounted for 60 patients (40%), yielding a male-to-female ratio of 1.5:1.

Table 1: Age Distribution (n = 150)

Age Group (years)	Number (n)	Percentage (%)
60–65	22	14.7
66–70	49	32.7
71–75	36	24.0
76–80	32	21.3
≥80	11	7.3

Table 2: Gender Distribution

Gender	Number (n)	Percentage (%)
Male	90	60.0
Female	60	40.0

Occupational Distribution: Agriculture was the predominant occupation (58.7%), reflecting chronic ultraviolet exposure and environmental contact.

Table 3: Occupational Profile

Occupation	Number (n)	Percentage (%)
Agriculture	88	58.7
Homemaker	34	22.7

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Manual labor	16	10.7
Others	12	8.0

Physiological Cutaneous Changes: Physiological aging-related changes were highly prevalent. Xerosis was observed in 110 patients (73.3%), wrinkling in 96 patients (64.0%), and solar lentigines in 82 patients (54.7%).

Table 4: Physiological Skin Changes

Condition	Number (n)	Percentage (%)
Xerosis	110	73.3
Wrinkling	96	64.0
Solar lentigines	82	54.7

Pathological Dermatoses

Overall Distribution: Infectious dermatoses were the most common pathological category (40%), followed by eczematous disorders (36.7%).

Table 5: Major Pathological Categories

Category	Number (n)	Percentage (%)
Infectious dermatoses	60	40.0
Eczematous disorders	55	36.7
Papulosquamous disorders	21	14.0
Bullous disorders	13	8.7
Premalignant & malignant tumors	6	4.0
Psychocutaneous disorders	22	14.7

(Note: Some patients had multiple diagnoses.)

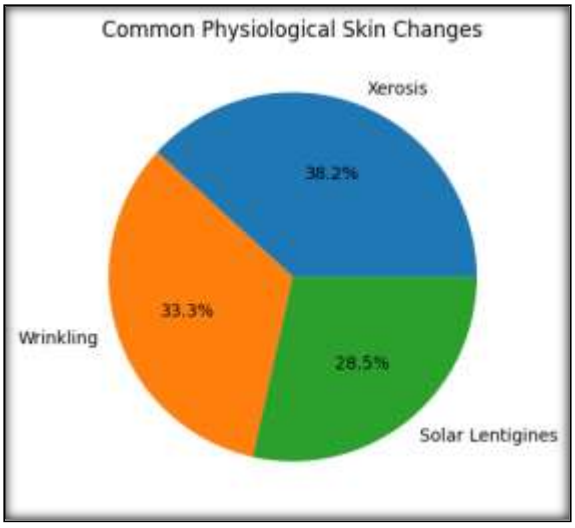

Figure 2: Pie chart showing common physiological changes

Infectious Dermatoses: Fungal infections accounted for 36 cases (60% of infectious dermatoses). Dermatophytosis was the most frequent fungal infection (29 cases), followed by candidiasis (7 cases).

Among bacterial infections, cellulitis (6 cases) and folliculitis (5 cases) were common. Viral infections were predominantly herpes zoster (7 cases).

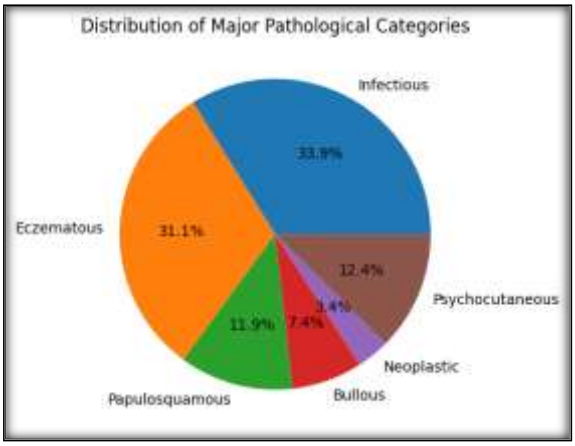

Figure 3: Pie chart showing major pathological categories.

Table 6: Infectious Dermatoses (n = 60)

Type	Subtype	Number	Percentage (%)
Fungal	Dermatophytosis	29	48.3*
	Candidiasis	7	11.7*
Bacterial	Cellulitis	6	10.0*
	Folliculitis	5	8.3*
	Impetigo	3	5.0*
Viral	Herpes zoster	7	11.7*
	Viral warts	3	5.0*

(*Percentage calculated out of total infectious cases.)

Eczematous Dermatoses: Chronic eczema (30.9%) and asteatotic eczema (25.5%) were predominant.

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Table 7: Eczematous Disorders (n = 55)

Type	Number	Percentage (%)
Chronic eczema	17	30.9
Asteatotic eczema	14	25.5
Contact dermatitis	9	16.4
Stasis eczema	7	12.7
Infectious eczematous dermatitis	4	7.3
Seborrhoeic dermatitis	4	7.3

Papulosquamous Disorders: Psoriasis was the most common papulosquamous disorder.

Table 8: Papulosquamous Disorders (n = 21)

Condition	Number	Percentage (%)
Psoriasis	16	76.2
Lichen planus	5	23.8

Bullous Disorders: Bullous pemphigoid constituted the majority.

Table 9: Bullous Disorders (n = 13)

Condition	Number	Percentage (%)
Bullous pemphigoid	9	69.2
Pemphigus vulgaris	4	30.8

Premalignant and Malignant Tumors

Table 10: Neoplastic Lesions (n = 6)

Type	Number	Percentage (%)
Basal cell carcinoma	4	66.7
Squamous cell carcinoma	1	16.7
Bowen's disease	1	16.7

Appendageal Changes

Nail Changes: Nail dystrophy was observed in 143 patients (95.3%).

Table 11: Nail Changes

Nail Change	Number (n)	Percentage (%)
Loss of luster	102	68.0
Longitudinal ridging	84	56.0
Nail thickening	52	34.7
Subungual hyperkeratosis	32	21.3
Onychomycosis	21	14.0
Beau's lines	9	6.0
Pitting	7	4.7

Table 12: Hair Changes

Hair Change	Number (n)	Percentage (%)
Graying	150	100
Androgenetic alopecia (males)	75	83.3% of males
Diffuse hair loss (females)	44	73.3% of females
Telogen effluvium	12	8.0

Systemic Comorbidities: Diabetes mellitus was present in 48 patients (32.0%), and hypertension in 44 patients (29.3%). Twenty-one patients (14%) had both conditions.

Table 13: Systemic Comorbidities

Condition	Number (n)	Percentage (%)
Diabetes mellitus	48	32.0
Hypertension	44	29.3
Both DM & HTN	21	14.0
No systemic disease	32	21.3

Pruritus Severity: Severe pruritus (VAS 7–10) was observed in 23 patients (15.3%), moderate pruritus in 38 patients (25.3%), and mild pruritus in 27 patients (18.0%).

Table 14: Pruritus Severity (n = 88 with pruritus)

Severity	Number (n)	Percentage (%)
Mild	27	30.7
Moderate	38	43.2
Severe	23	26.1

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Dermoscopic Findings: Dermoscopy revealed solar elastosis in 126 patients (84.0%), pigmentary network disruption in 118 patients (78.7%), epidermal atrophy in 108 patients (72.0%), and telangiectatic patterns in 95 patients (63.3%).

Table 15: Major Dermoscopic Findings

Dermoscopic Feature	Number (n)	Percentage (%)
Solar elastosis	126	84.0
Pigmentary network disruption	118	78.7
Epidermal atrophy	108	72.0
Telangiectasia	95	63.3

Thus, this study demonstrates that xerosis, infectious dermatoses, and eczematous disorders constitute the predominant dermatological burden in elderly individuals. Appendageal changes were nearly universal. Metabolic comorbidities were highly prevalent and frequently coexisted with dermatological manifestations.

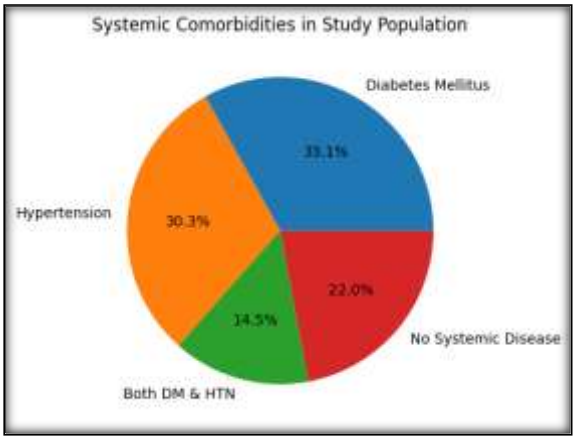

Figure 4: Pie chart showing systemic comorbidities

DISCUSSION

The present cross-sectional study evaluated the clinico-epidemiological pattern of geriatric dermatoses in a rural tertiary care setting in Tamil Nadu and demonstrated a wide spectrum of physiological and pathological cutaneous manifestations influenced by intrinsic aging, environmental exposure, and systemic comorbidities. The majority of patients belonged to the 66–70-year age group (32.7%), indicating increased dermatological consultation during early geriatric years. A male predominance (60%) was observed in our study. Similar findings were reported by Sheethal and Shashikumar, who documented a male predominance of 68% among elderly dermatology patients.[16] Likewise, Goyal et al. reported male predominance in their geriatric cohort in Rajasthan.[15] This gender disparity may reflect occupational exposure differences, sociocultural determinants, and healthcare accessibility patterns in rural India.

Xerosis emerged as the most common physiological change (73.3%) in our study. Comparable prevalence rates were documented by Agarwal et al., who reported xerosis in 69% of elderly patients in Northern India,[10] and by Sahoo et al., who observed similar findings in Eastern India.[9] Xerosis in elderly individuals is primarily attributable to age-related reduction in sebaceous gland activity, diminished epidermal lipid content, and impaired stratum corneum barrier function, as described in structural aging studies.[3,4] These changes predispose elderly skin to pruritus and inflammatory dermatoses.

Wrinkling (64%) and solar lentigines (54.7%) were highly prevalent, reflecting cumulative photoaging. The predominance of agricultural workers (58.7%) likely contributed to chronic ultraviolet exposure. Verma highlighted occupational sun exposure as a major determinant of photoaging in Indian elderly populations.[5] Dermoscopic documentation of solar elastosis in 84% of our patients provided objective validation of chronic photodamage.

Infectious dermatoses constituted the most common pathological category (40%), with fungal infections accounting for 60% of infectious cases. Similar findings were reported by Sahoo et al,[9] and Agarwal et al,[10] who identified infections, particularly fungal, as leading causes of dermatological morbidity in elderly populations. Immunosenescence, characterized by diminished cell-mediated immunity,[6] combined with metabolic comorbidities such as diabetes mellitus,[12] likely contributed to increased susceptibility.

Herpes zoster was the predominant viral infection in our cohort. Age-related decline in varicella-zoster virus–specific cellular immunity has been well documented by Yawn and Gilden,[17] explaining increased zoster incidence among elderly individuals. Eczematous dermatoses affected 36.7% of participants. Yalçin et al., in their analysis of 4,099 geriatric patients, reported eczematous dermatitis as the most frequent dermatosis.[18] Barrier dysfunction secondary to xerosis and altered lipid metabolism appears central to the pathogenesis of eczema in elderly individuals.[3] Papulosquamous disorders accounted for 14% of cases, with psoriasis being predominant. Similar trends were observed in Indian hospital-based studies.[10] Chronic low-grade inflammation and immune dysregulation associated with aging may influence disease expression.

Bullous pemphigoid was the most common autoimmune blistering disorder in our study. The increasing incidence of bullous pemphigoid with advancing age has been attributed to autoantibody-mediated damage to hemidesmosomal proteins, as described by Schmidt and Zillikens.[19]

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Premalignant and malignant tumours were identified in 4% of participants. Chronic ultraviolet radiation is a recognized etiological factor in non-melanoma skin cancers.[5] Goyal et al. also reported similar findings in their Rajasthan cohort,[15] emphasizing cumulative photodamage as a risk factor.

Appendageal changes were nearly universal. Nail dystrophy (95.3%) was common, with loss of luster and longitudinal ridging predominating. Comparable findings were reported by Pavithra et al. in Coastal Goa.[20] These changes reflect matrix senescence and reduced vascular supply. Hair greying was universal, while androgenetic alopecia affected 83.3% of males, consistent with hormonally mediated follicular miniaturization described in geriatric dermatology literature.[5]

Systemic comorbidities were highly prevalent. Diabetes mellitus (32%) and hypertension (29.3%) were common, consistent with epidemiological data on disease burden in elderly populations.[12] Eslavat et al. also reported high prevalence of metabolic comorbidities among geriatric dermatology patients.[21] In our study, diabetic patients demonstrated increased fungal infections and severe pruritus, consistent with the cutaneous manifestations of diabetes described by Romano et al.[13]

Severe pruritus was more frequent among patients with metabolic disorders. Beauregard and Gilchrest emphasized that pruritus significantly impacts quality of life in elderly populations.[8] Barrier dysfunction secondary to xerosis likely plays a central mechanistic role.

The systematic incorporation of dermoscopy in our study enhanced diagnostic precision and provided morphological confirmation of clinical findings. Few Indian geriatric studies have integrated a comprehensive dermoscopic evaluation, thereby representing a methodological strength of this study.

Overall, the findings underscore that geriatric dermatoses are influenced by a complex interplay between intrinsic aging, environmental exposure, immunosenescence, and metabolic comorbidities. With rising life expectancy, targeted preventive strategies focusing on barrier restoration, photoprotection, and metabolic control are essential for improving geriatric dermatological care.

CONCLUSION

The present study highlights the substantial burden of dermatological disorders among elderly individuals attending a tertiary care centre, with xerosis, infectious dermatoses, and eczematous conditions emerging as the most prevalent manifestations. Age-related structural skin changes, cumulative occupational ultraviolet exposure, and immunosenescence appear to play pivotal roles in shaping the dermatological profile of this population. Appendageal alterations, particularly nail dystrophy and hair changes, were nearly universal and represent important but often overlooked indicators of cutaneous aging. Metabolic comorbidities, especially diabetes mellitus and hypertension, were highly prevalent and demonstrated a notable association with infectious dermatoses and pruritus severity. These findings underscore the bidirectional relationship between systemic disease and cutaneous health in the geriatric population.

The incorporation of dermoscopic evaluation further strengthened diagnostic precision and provided objective validation of photoaging and neoplastic patterns.Given the progressive demographic shift toward an aging population, there is a pressing need for region-specific epidemiological data to inform preventive and therapeutic strategies. Early identification of barrier dysfunction, strict metabolic control, patient education regarding photoprotection, and integrated geriatric dermatological care are essential to reduce morbidity and improve quality of life among elderly individuals. Future multicentric and longitudinal studies are warranted to better elucidate evolving trends and establish evidence-based management protocols tailored to the geriatric population.

REFERENCES

1. United Nations Department of Economic and Social Affairs. World Population Ageing 2019. New York: United Nations; 2019.
2. Government of India. Ministry of Statistics and Programme Implementation. Elderly in India 2021. New Delhi: MOSPI; 2021.
3. Farage MA, Miller KW, Elsner P, Maibach HI. Structural characteristics of the aging skin: a review. Cutan Ocul Toxicol. 2007;26(4):343–57.
4. Yaar M, Gilchrest BA. Aging of skin. In: Fitzpatrick's Dermatology in General Medicine. 8th ed. New York: McGraw Hill; 2012.
5. Norman RA. Geriatric dermatology. Dermatol Ther. 2003;16(3):260–8.
6. Castelo-Branco C, Soveral I. The immune system and aging: a review. Gynecol Endocrinol. 2014;30(1):16–22.
7. Liao YH, Chen KH. Common skin diseases in the elderly. Int J Gerontol. 2010;4(3):111–6.
8. Beauregard S, Gilchrest BA. A survey of skin problems and skin care regimens in the elderly. Arch Dermatol. 1987;123(12):1638–43.
9. Sahoo A, Singh PC, Pattnaik S, Panigrahi RK. Pattern of skin diseases in geriatric patients: a hospital-based study. Indian J Dermatol. 2000;45(2):66–8.
10. Agarwal S, Sharma P, Chandra S. A clinical study of geriatric dermatoses in a tertiary care centre. J Clin Diagn Res. 2019;13(6):WC01–4.
11. Grover S, Narasimhalu CR. A clinical study of skin changes in geriatric population. Indian J Dermatol Venereol Leprol. 2009;75(3):305–6.
12. Prince MJ, Wu F, Guo Y, et al. The burden of disease in older people and implications for health policy. Lancet. 2015;385(9967):549–62.
13. Romano G, Moretti G, Di Benedetto A, et al. Skin lesions in diabetes mellitus: prevalence and clinical correlations. Diabetes Res Clin Pract. 1998;39(2):101–6.
14. Rout A, Panigrahi RK, Sahu B. Cutaneous adverse drug reactions in elderly patients: a prospective study. Indian J Pharmacol. 2014;46(6):567–70.
15. Goyal A, Balai M, Mittal A, et al. Pattern of geriatric dermatoses at a tertiary care centre in Rajasthan. J Clin Diagn Res. 2017;11(4):WC01–4.

ISSN (O): 2687-5365; ISSN (P): 2753-6556

16. Sheethal MP, Shashikumar BM. A cross-sectional study on dermatological conditions among the elderly population in Mandya city. Int J Med Sci Public Health. 2015;4(4):467–70.
17. Yawn BP, Gilden D. The global epidemiology of herpes zoster. Neurology. 2013;81(10):928–30.
18. Yalçin B, Tamer E, Toy GG, et al. The prevalence of skin diseases in the elderly. Int J Dermatol. 2006;45(6):672–6.
19. Schmidt E, Zillikens D. Pemphigoid diseases. Lancet. 2013;381:320–32.
20. Pavithra S, Shukla P, Pai GS. Cutaneous manifestations in senile skin in coastal Goa. J Dermatol Venereol. 2012;9(1):1–6.
21. Eslavat S, Vemu D, Kunti S, Naik NMP, Ramadas K. A clinicoepidemiological study of geriatric dermatoses. Eureka Health Sci. 2023;3:46–57.

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