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ORIGINAL ARTICLE

Sociodemographic and Clinical Profile of Geriatric Patients seen at the Southern Philippines Medical Center Department of Dermatology from January 2016 to December 2019

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ABSTRACT

INTRODUCTION Geriatric health has become a major issue worldwide. According to the World Health Organization(WHO), between 2015 and 2050, the proportion of the world's population over 60 years will nearly double from 12% to 22%. There is paucity of literature involving the spectrum of frequencies of Filipino geriatric dermatoses.

OBJECTIVES To report on sociodemographic and clinical profiles of geriatric patients seen at the department of Dermatology of Southern Philippines Medical Center from January 2016 to December 2019.

METHODS A retrospective descriptive study was conducted. Sociodemographic and clinical parameters were recorded and analyzed. Descriptive statistics such as frequencies and percentages were used.

RESULTS Study population involved 470 patients with 372 out-patients and 98 in-patients. There was a preponderance of elderly patients with ages of 70-79 and a slight female predominance. Most were married, residents of Davao City, retired or unemployed and had no vices. About 711 dermatologic dermatoses were recorded. Majority of concerns(22.08%) were classified under allergic and eczematous disorders. A greater number of cases were managed by a combination of topical and oral medications. A proportion of these patients(38.09%) had at least one known co-morbid condition; most common of which is hypertension.

The top 10 most common dermatoses include (1)xerosis, (2)contact dermatitis, (3)lichen simplex chronicus, (4)dermatophytosis, (5)stasis dermatitis, (6)seborrheic dermatitis and seborrheic keratosis, (7)acrochordon, (8)psoriasis vulgaris, (9)herpes zoster and (10)verruca plana.

CONCLUSION Geriatric dermatology is an emerging branch in the new millennium. Raising the level of awareness about these dermatoses may be crucial in proper management and improved quality of life for Filipino elderly patients.

KEYWORDS Geriatric dermatoses, elderly, geriatric dermatology, aging, Philippines

INTRODUCTION

BACKGROUND OF THE STUDY

Geriatric health has become a major issue worldwide, as the pace of population aging has become much faster than in the past. With the development of new medications, eradication of diseases, better standards of living, and improvements in the health delivery system, people worldwide are living longer. According to the World Health Organization, between 2015 and 2050, the proportion of the world's population over 60 years will nearly double from 12% to 22%.[1] In the Philippines, despite the larger number of young Filipinos, the older population ages 60 and above is expected to increase by 4.2%, whereas the 80 years and older population is expected to increase by 0.4% from 2010 to 2030.[2] The Philippines' population has increased by 35% over the last two decades. The population with ages 60 and above is expected to overtake those with ages 0–14 years old by 2065.[2] Hence, the dermatology practice in the future may also see an increase in the number of geriatric patients.

According to the Philippine Statistics Authority, 7.5% out of 100,981,437 total population are senior citizens as of its latest census in 2015.[3] Majority of the senior citizens live in Calabarzon and Central Luzon. Davao Region ranks 8th place at 4.6% having 344,530 senior citizens, with a slight female predominance among the total senior citizen population. Most senior citizens are married and literate with 51% having completed primary education. Several of them are categorized under gainful workers, skilled agricultural, forestry and fishery workers.

Aging is an inevitable process with variable manifestations in all organ systems including the skin. Due to the functional and structural chang-

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es in the skin as a person grows older, skin disorders are more commonly seen among elderly patients. Prevalence of skin diseases may reflect underlying systemic diseases. Skin disorders in the elderly are not only due to physical consequences of aging; but also, due to effect of prolonged environmental exposure especially UV radiation, decreased skin barrier function, impaired wound healing, low immune responsiveness, and impaired DNA repair. These dermatoses may lead to significant morbidity affecting a patient's quality of life.

With advancement of medical sciences, the average human life expectancy has invariably increased. Given that Asian countries have rapidly aging populations, there is a need to address the tremendous burden of care for elderly patients. Geriatric patients are considered to belong amongst the vulnerable populations of society and unfortunately, there is paucity of literature involving spectrum of frequencies of age-related skin changes. Even though the elderly are the ones who need the most medical attention, they are also the ones who are most often neglected.[4] A detailed knowledge about the pattern of geriatric dermatoses will help health care workers in implementing essential changes in disease control and preventive strategies in the future.

SIGNIFICANCE OF THE STUDY

Dermatological diseases in the geriatric population are increasing, putting a great burden on health care systems. Dermatologists worldwide are likely challenged by increasing difficulties and complexities involved in delivery of skin health care to the geriatric population.

Information regarding the sociodemographic and clinical profiles of elderly patients coupled with the extent and patterns of dermatologic concerns affecting this population may create heightened awareness to mobilize medical and community resources targeting this vulnerable sector.

Moreover, data from this study may be utilized to generate a template for educational materials which may be shared to either family members or caregivers at senior residential facilities so that they may be able to provide enhanced quality of care addressing the dermatologic concerns of geriatric patients. Gathered data from this research will help influence health care providers and policy makers in assessing the health care status and needs related to dermatologic concerns of geriatric patients for better allocation of resources and distribution of manpower, to improve on health care programs tailored to the needs of the elderly.

Furthermore, although an almost similar study has been done in 1999 by Serrano et al,[5] the present study intends to bring up-to-date the scope of dermatologic concerns affecting the geriatric population two decades later.

OBJECTIVES

GENERAL OBJECTIVE

1. To report on the sociodemographic and clinical profiles of geriatric patients seen at the Department of Dermatology of SPMC (Southern Philippines Medical Center) from January 2016 to December 2019

SPECIFIC OBJECTIVES

1. To describe the volume of consults involving geriatric patients seen at the Department of Dermatology of SPMC from January 2016 to December 2019
2. To describe the sociodemographic profile of geriatric patients seen at the Department of Dermatology of SPMC from January 2016 to December 2019 according to these parameters: age, sex, marital status, place of residence, nature of employment, smoking and/or alcohol drinking history
3. To describe the clinical profile of geriatric patients seen at the Department of Dermatology of SPMC from January 2016 to December 2019 using these parameters: type of cutaneous condition, management strategy, associated co-morbid condition/s
4. To identify and enumerate the top 10 most common chief complaints and most common cutaneous diseases among geriatric patients seen at the Department of Dermatology of SPMC from January 2016 to December 2019

METHODOLOGY

RESEARCH DESIGN

A retrospective descriptive study was conducted which included patients aged 65 and above seen at the Department of Dermatology of SPMC (Southern Philippines Medical Center) from January 2016 to December 2019.

STUDY SETTING AND PARTICIPANTS

This study was conducted at Southern Philippines Medical Center. Medical records of geriatric patients seen at the Department of Dermatology from January 2016 to December 2019 were analyzed.

The investigators recorded the sociodemographic parameters which included patients' age, marital status, place of residence, nature of employment, smoking and/or alcohol drinking history. Clinical profile parameters which included type of cutaneous condition, management strategy, and associated co-morbid condition/s were described. The most common dermatologic concerns were identified, tallied, and reported.

A. INCLUSION CRITERIA

- Patients aged 65 and above seen at the Department of Dermatology of SPMC from January 2016 to December 2019
- All patient with initial consults
- Patients for follow up who have a new and different diagnosis as compared to the previous consults

- If the patient has more than one diagnosis, all diagnoses were accounted for

B. EXCLUSION CRITERIA

- Follow ups with the same diagnosis as the first consult
- Charts with incomplete data and essentially non-medical diagnosis

SAMPLE SIZE

This study made use of random sampling of patients aged 65 and above who consulted at the Department of Dermatology of SPMC from January 2016 to December 2019. Slovin's formula was used to calculate the sample size to get a power of 95% with a standard deviation of 50% and 5% margin of error for the patients seen at the Dermatology outpatient department.

To get a 95% confidence level, a minimum of 372 patients charts seen as out-patient were reviewed and included in this study. Meanwhile, all patients referred as in-patients who were able to satisfy the inclusion criteria were also included in the study.

DATA GATHERING

A written request to the head of the medical records section was sent prior to data gathering. A list of patients aged 65 and above seen during the four-year study period was requested and obtained from the hospital records section. The list was prepared and randomization was done to complete the calculated sample size of 372 for patients seen at the out-patient division, while all patients listed as in-patients were included. These charts were then retrieved and reviewed. A data collection form was utilized to collect all pertinent data for this study.

DATA HANDLING AND ANALYSIS

Descriptive statistics was used to summarize the general and clinical characteristics of the study participants. Categorical data were recorded as frequencies and percentages. All valid data were included in the analysis. Missing variables were neither replaced nor estimated.

ETHICAL CONSIDERATIONS

The protocol for this study was approved by the Department of Health Region XI – Cluster Ethics Review Committee (DOH XI-CERC). Approval from the Medical Records Section of the hospital was also obtained prior to commencement of the study to access the medical records of the patients.

No patient was contacted, nor any home visit was done during data collection. The data collected were anonymized. Names of the patients were not used. Patients were assigned a designated number to conceal their identity and further prevent other parties from linking it to them.

RESULTS

Table 1 shows that a total of 11,064 consults involved geriatric patients in the Department of Dermatology of SPMC from January 2016 to December 2019. The study population involved a total of 470 elderly patients. About 372 patients with ages 65 and above who sought consult at the out-patient clinic of the Department of Dermatology of SPMC from January 2016 to December 2019. All 98 admitted patients with ages 65 and above who were referred to the Department of Dermatology of SPMC from January 2016 to December 2019 were included and accounted for in this study. Table 2 shows that most of the retrieved charts were those of patients seen in 2019 (35.74%) followed by those seen in 2016 (24.26%), 2017 (122.34%) and 2018 (17.66%).

Table 3 highlights the sociodemographic profile of the elderly patients. A large number of patients belonged to the age range of >70-79 years (44.47%), followed closely by those aged >65-69 (41.06%). A little more than half of the population were females (53.83%). Majority of the patients were married (54.68%); In terms of place of residence, almost all are residents of Davao City, with 47.87% belonging to the second congressional district (District 2) of the city. Only about 10% of the patients resided outside Davao City. It is quite understandable that the bulk of the patients were retired / unemployed while about 9% who were previously employed were involved with either primarily manual labor or primarily intellectual work. Employment data for about 37.66% of patients were not stated. Up to about 65% of patients neither smoked nor consumed alcoholic beverages.

Table 4 shows that a total of 711 dermatologic diagnoses were recorded. A preponderance of the dermatologic concerns

Table 1. Total number of patients seen from 2016 to 2019.

Year	Number of Patients with Ages 65 and above seen by Dermatology OPD	Number of In-Patients with ages 65 and above seen by Dermatology	Total
2019	2,857	36	2,893
2018	2,863	37	2,900
2017	2,698	18	2,716
2016	2,536	19	2,555
TOTAL	**10,954**	**110**	**11,064**

Table 2. Patient charts reviewed and analyzed in this four-year study period.

Year of consult	n (%)
2019	114 (24.26%)
2018	105 (22.34%)
2017	83 (17.66%)
2016	168 (35.74%)
TOTAL	**470**

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Table 3. Sociodemographic Profile of Geriatric Patients seen at the Department of Dermatology of SPMC from January 2016 to December 2019.

	n (%)
Age	
>65 – 69	193 (41.06%)
>70 – 79	209 (44.47%)
>80 – 89	64 (13.62%)
>90 – 95	4 (0.85%)
Study Population	470
Patients >65 w/ Derma Consult	11,062
Sex	
Male	217 (46.17%)
Female	253 (53.83%)
Marital Status	
Single	22 (4.68%)
Married	257 (54.68%)
Widow/er	154 (32.77%)
Not Indicated	37 (7.87%)
Place of Residence	
District 1 Davao City	112 (23.83%)
District 2 Davao City	225 (47.87%)
District 3 Davao City	85 (18.09%)
Outside Davao City	48 (10.21%)
Nature of Previous Employment	
Primarily manual labor	32 (6.81%)
Primarily intellectual work	12 (2.55%)
Retired/Unemployed	249 (52.98%)
Not Stated	177 (37.66%)
Smoking / Alcohol Consumption	
Smoker	22 (4.68%)
Alcoholic Drinker	24 (5.11%)
Both	74 (15.74%)
Non-Smoker/Non-Alcoholic	308 (65.53%)
Not Indicated	42 (8.94%)

among elderly patients in this study were classified under allergic and eczematous disorders (22.08%) and the top condition in this classification is contact dermatitis. The second most common dermatologic concern involved infectious diseases (21.23%) followed by xerosis (16.46%) and then proliferations & cutaneous tumors (14.77%). The least common diagnoses involved autoimmune & metabolic disorders, vesicobullous diseases, and infestations. With regard to management strategy, most of the cases (23.49%) were managed by combination of both oral and topical medications. Closely following at second is procedural interventions which may include electrocauterization of the various acquired benign epithelial tumors or proliferations which may be quite common with advancing age.

Table 5 shows that about 304 patients out of the 470 (64.68%) had associated co-morbid condition. A proportion of those patients (38.09%) had at least one (1) known co-morbid condition and the most of common of which is hypertension.

Table 6 enumerates the top 10 chief complaints of geriatric patients seen at the Department of Dermatology of SPMC from January 2016 to December 2019. Figure 1 depicts how the top 10

Table 4. Clinical Profile of Geriatric Patients seen at the Department of Dermatology of SPMC from January 2016 to December 2019.

	n (%)
Classification of Consult	
In-patient	98 (20.85%)
Out-patient	372 (79.15%)
Type of Cutaneous Condition	
Xerosis	**117 (16.46%)**
Infectious Diseases	**151 (21.23%)**
Fungal Infections	**50**
Dermatophytosis	43
Candidiasis	5
Chronic Paronychia	2
Bacterial Infections	**34**
Cellulitis	13
Impetigo/Folliculitis	7
Leprosy	6
Furuncle/Carbuncle	3
Ecthyma	4
Erythrasma	1
Viral Infections	**67**
Herpes Zoster	25
Verruca Vulgaris	15
Verruca Plana	17
Herpes Simplex	3
Post Herpetic Neuralgia	7
Infestations	**13 (1.83%)**
Scabies	12
Pediculosis	1
Allergic and Eczematous Disorders	**157 (22.08%)**
Nummular Dermatitis	4
Seborrheic Dermatitis	34
Contact Dermatitis	89
FDE/Drug Hypersensitivity	15
Insect Bite Hypersensitivity	2
Urticaria	7
Dyshidrotic Eczema	1
Miliaria Rubra	5
Papulosquamous Diseases	**38 (5.34%)**
Psoriasis Vulgaris	26
Pityriasis Rosea	2
Lichen Planus	1
Lichen Sclerosus	1
Erythroderma	8
Psychodermatoses	**50 (7.03%)**
Lichen Simplex Chronicus	47
Prurigo Nodularis	3
Vesicobullous Diseases	**8 (1.13%)**
Bullous Pemphigoid	7
Paraneoplastic Pemphigus	1
Pigmentary Disorders	**22 (3.09%)**
Idiopathic Guttate Hypomelanosis	3
Vitiligo	5
Solar Lentigines	3
Post-Inflammatory Hypo/hyperpigmentation	7
Leukoderma	1
Ochronosis	1
Melasma	2
Vascular Disorders	**40 (5.63%)**
Vasculitis	5
Stasis Dermatitis	35
Autoimmune & Metabolic Disorders	**2 (0.28%)**
Alopecia Areata	1
Lichen Amyloidosis	1
Proliferations and Cutaneous Tumors	**105 (14.77%)**
Acrochordon	28
Dermatosis Papulosa Nigra	4
Seborrheic Keratosis	29
Basal Cell Carcinoma	5
Keloid/Scar	3
Epidermal Inclusion Cyst	5
Seborrheic Hyperplasia	4
Milia	6
Pyogenic Granuloma	2
Lipoma	4
Corn	1
Xanthelasma	3
Fibrous papule	1
Cutaneous Metastasis	1
Syringoma	2
Trichoepithelioma	1
Neurofibroma	2
Cutaneous Horn	3
Mycosis Fungoides	1
Others	**8 (1.13%)**
Acanthoma fissuratum	1
Senile Comedones	1
Friction Blister	3
Pressure Ulcer	2
Hematoma	1
Management Strategy	
Emollients	75
Topical Medications	77
Oral Medications	68
Combination of Topical and Oral Medication	167
Combination of Topical and Emollients	25
Combination of Emollients and Oral Medication	41
Emollients, Topical and Oral Medications	105
Procedural Intervention/s	136
Observation / Referral to Other Departments	17

Table 5. Associated Co-morbid Medical Conditions

	n (%)
Co-morbidities	
One co-morbidity	179 (38.09%)
Hypertension	116 (24.68%)
Diabetes	37 (7.87%)
Dyslipidemia	13 (2.77%)
Arthritis	7 (1.49%)
CKD	3 (0.64%)
Asthma/COPD	3 (0.64%)
Two co-morbidities	100 (21.28%)
Both Hypertension and Diabetes	55 (11.70%)
Both Hypertension and Dyslipidemia	25 (5.32%)
Both Hypertension and Arthritis	5 (1.06%)
Both Hypertension and Asthma/COPD	4 (0.85%)
Both Diabetes and Dyslipidemia	11 (2.34%)
Three co-morbidities	16 (3.40%)
Four co-morbidities	5 (1.06%)
Others (BPH, Hypothyroid, Gout, Schizophrenia, Malignancy)	4 (0.85%)
None	166 (35.32%)

Table 6. Top 10 Chief Complaints of Geriatric Patients Seen at the Department of Dermatology of SPMC from January 2016 to December 2019

1. Plaque
2. Papule
3. Pruritus
4. Vesicle
5. Patch
6. Erythema
7. Nodule and Scaling
8. Pain
9. Ulcer
10. Edema

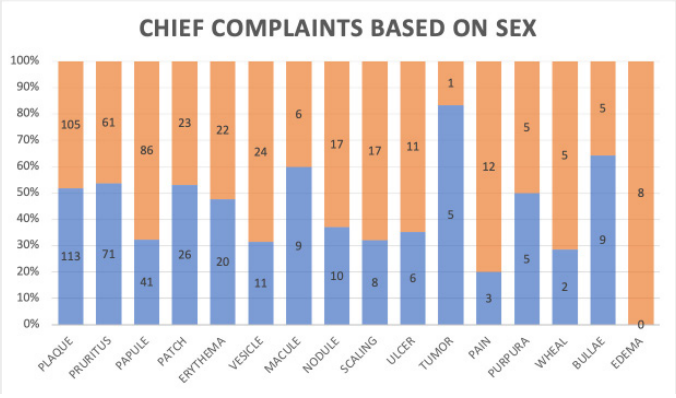

Figure 1. Top 10 chief complaints of male and female geriatric patients seen at the Department of Dermatology of SPMC from January 2016 to December 2019.

chief complaints differ based on sex. For both male and female patients, presence of plaques ranked 1st on the list.

Table 7 and Figure 2 enumerates and illustrates the top 10 most common cutaneous diseases involving geriatric patients. Notably, xerosis, contact dermatitis and lichen simplex chronicus are among the top 3 common conditions.

DISCUSSION

The number and ratio of elderly population has been increasing in developing and developed countries. In comparison to a similar study done by Serrano et al[5] in this same institution from 1996 to 1999, there is a noted rise in dermatologic consults involving geriatric patients. The previous study recorded a total of 1,269 out-patient clinic dermatologic consults done within a four-year study period. Utilizing the same time frame, the current study recorded a total of 10,954 consults at the out-patient division alone.

Table 7. Top 10 Most Common Cutaneous Diseases among Male and Female Geriatric Patients seen at the Department of Dermatology of SPMC from January 2016 to December 2019

MALE PATIENTS	FEMALE PATIENTS	TOTAL FOR BOTH GENDERS
1. Xerosis	1. Xerosis	1. Xerosis
2. ACD/ICD	2. ACD/ICD	2. ACD/ICD
3. Seborrheic Dermatitis	3. Lichen Simplex Chronicus Dermatophytosis	3. Lichen Simplex Chronicus
4. Lichen Simplex Chronicus	4. Acrochordon	4. Dermatophytosis
5. Dermatophytosis	5. Seborrheic Keratosis	5. Stasis Dermatitis
6. Stasis Dermatitis	6. Herpes Zoster	6. Seborrheic Dermatitis Seborrheic Keratosis
7. Psoriasis Vulgaris	7. Verruca Plana Stasis Dermatitis	7. Acrochordon
8. Seborrheic Keratosis	8. Cellulitis Psoriasis Vulgaris Verruca Vulgaris	8. Psoriasis Vulgaris
9. Erythroderma	9. Drug Hypersensitivity Reaction	9. Herpes Zoster
10. Acrochordon Herpes Zoster	10. Scabies	10. Verruca Plana

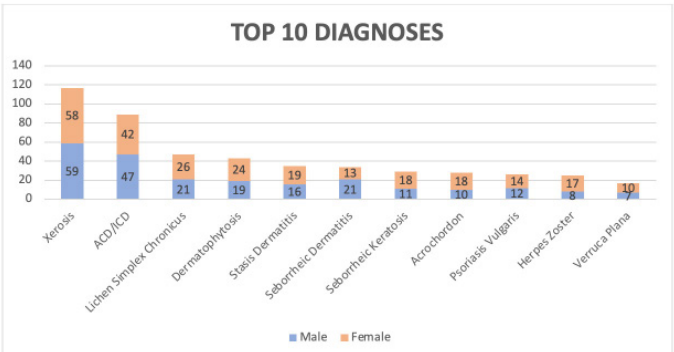

Figure 2. Top 10 diagnoses of male and female geriatric patients seen at the Department of Dermatology in SPMC from January 2016 to December 2019.

Another notable difference is that, in a similar study done previously, majority of the patients belonged to the age range of 65 to 74 with a male predominance, while this study noted that many patients belonged to the age range of >70 to 79 years (44.47%) with a female predominance.

Our findings also differ from the study by our colleagues in India which showed that more than 60% of their study population belonged to the >60-69 age group.[6] In the Philippines, the current optional retirement age is at 60 while the compulsory retirement age is at 65.[7] However, with advances in medicine and technology, people are now living longer and can still be productive long after the ages of 65. Findings from the 2007 Philippine study on aging by Cruz et al. showed that many older people continue to be economically productive, wherein three (3) out of ten of those aged 70–79, and one tenth of those aged 80 and over are still currently working.[8] In an interview with assistant national statistician Wilma Guillen conducted by One News PH, she said that as of June 2022, there are 11,000 individuals who are 65 years and older who are still looking for work, available for work and have no work.[9] This may be one of the reasons why in our study, majority of patients were in their 70s.

A new house bill was proposed by senior citizen party-list representative Rodolfo Ordanes Jr. that seeks to amend the Labor Code of the Philippines.[9,10] In this proposed House Bill 3220, an employee who reaches 65 years can choose to continue their employment provided that the senior citizen qualifies under the bona fide occupational qualifications of his/her job. Hence, once approved, will repeal a provision in the Labor Code that sets the compulsory retirement age at 65 years.[10]

This current study reveals a slightly female-predominant population with computed male to female ratio of 0.9. This slight female predominance was likewise noted in the studies done by Durai et al. and Kartal et al.[11,12] Most of the patients were married, which was similar to the studies done by Chowdhury et al. in 2016 and Sheethal et al. in 2014.[6,13]

A greater number of our study population were identified as being unemployed or retired. It may be promising to note that increased benefits provided by the state may be evident in the Republic Act 9994 wherein elderly patients are given priority and granted additional benefits and privileges such as medication discounts and monthly pension to help them in their living expenses. In fact, in a survey done across provinces by Sangel et al., more than 90% of the respondents rated the implementation of RA 9994 as average to very satisfactory in terms of the 20% discount provision.[14]

Majority of the patients reside within the confines of the 2nd congressional district of Davao City and this may be reasonably explained by the fact that the institution itself belongs to this said district. This information may be further utilized to convince the district political representatives to modify programs to better cater to the health care needs of the poor and vulnerable geriatric sector.

Elderly patients may be dependent on others and may encounter difficulty in visiting hospitals. Paucity of institutional care programs in the Philippines means that older Filipinos are often cared for by family members at home. Although care-giving is expected of Filipino families, those who are of lower socioeconomic status may be financially strained in providing adequate care to an ailing loved one.[2] Thus, most of the skin diseases of these patients are notably chronic in nature.

In comparison to the two (2) previous surveys done by Tianco, et al. as well as Serrano, et al. involving skin concerns among Filipino elderly patients, lichen simplex chronicus only ranked 3rd as opposed to their identification of lichen simplex chronicus as the topmost cutaneous problem.[5,15]

Comparable to a number of studies, high incidence of xerosis was commonly observed and was often listed among the top 10 dermatologic consults/conditions. This current study's results showed that at least one known comorbidity was reported in majority of patients (38.09%). The most common co-morbidities included hypertension (24.68%) and diabetes (7.87%). This finding is similar to a study done by Krishnendra et al. in a clinico-epidemiological study at a tertiary care center in Ujjain and by Raveendra and Agarwal.[16,17,18] Furthermore, high incidence of xerosis may be theorized to be due to less use of emollients, certain medications, low indoor humidity and use of hot water and harsher soaps by patients.[4,16]

Decreased levels of skin lipids and epidermal barrier dysfunction may be quite common among the elderly population. These, in turn, lead to increased sensitivity and susceptibility to the allergens and irritants in the form of creams or even herbal preparations which are locally and easily available.[19,20,21] In a study done by Tolentino et al. in Batangas, they concluded that although there are known risks, most Filipinos still adhere to the old practice of utilizing traditional medicine such as plant-derived substances, in treating ailments and enhancing general health and well-being.[22] This may possibly explain why allergic and eczematous disorders in the form of contact dermatitis is among the top dermatologic conditions in our study. This is comparable to a study done by Yildiz in Turkey wherein they listed contact dermatitis as top 1 diagnosis.[21]

With advancing age, immune responsiveness status of the elderly patients decline thereby predisposing them to infections. This study shows that infections ranked 2nd among the top 10 most common cutaneous diseases. Viral infections occur frequently in old age secondary to impaired immune function.[20] In previous studies done, the prevalence of viral infection was at 2.1% by Mponda et al. in Tanzania, 4.6% by Polat et al. in Turkey, 6.8% by Souissi et al. in Tunisia.[23,24,25] Herpes zoster infection may be associated with a characteristic pain syndrome called post-herpetic neuralgia, which may explain why pain is among the top 10 common chief complaints in this study. The reduction of epidermal turnover, and immunologic functions as well as factors such as decrease in personal care, poor hygiene, neglect and

overcrowding are possibly responsible for the high prevalence of infections.[20] Studies done by Yap et al., Kilicet al., Souissi et al., Furue et al. and Yalcin et al. all found infections were quite common among elderly patients.[25,26,27,28,29,]

Various benign proliferations were also noted. Acrochordon (3.94%) and seborrheic keratoses (4.08%) were among the most common. As compared to the findings of studies by Raveendra in India and Beauregard & Gilchrest in the West,[17,30] these numbers are by far less. Malignant tumors such as basal cell carcinoma and mycoses fungoides were only noted in 0.7% and 0.1% of patients. The lower incidence of skin tumors compared to data of studies from Western countries may be attributed to the fact that pigmented skin offers more protection against ultraviolet radiation compared to individuals with Fitzpatrick skin types I and II.[31]

In our study, papulosquamous disorders mostly psoriasis vulgaris were only seen among 6.05% of cases. These findings are similar to the study done by Verma et al. wherein psoriasis ranked highest amongst the papulosquamous disorders.[16] Pigmentary disorders and vascular disorders were also noted albeit in a small number of patients. Among cases of vesicobullous disorders, bullous pemphigoid was the most frequent condition at 1.13% of cases. Bullous pemphigoid is a disease found primarily in the elderly population at age 60 years and over.[20] Findings were comparable to the study done by Chopra et al. who observed 1.8 % cases of bullous pemphigoid.[32]

Management of cutaneous disorders in the elderly population is different from the general population. Treatment compliance is affected by several factors. These factors include declining cognitive status such as loss of memory and dementia, physical limitations, and impaired sensory functions.[19] This study showed that most cases were handled with a multidisciplinary approach with treatments done involving combination of emollients as well as topical and oral medications. Bulk of the topical medications belong to the corticosteroid class and this may be coincident with the sizeable percentage of steroid-responsive dermatoses among the listed most common cutaneous problems.

Roughly, around 40% of the patients had hypertension as a co-morbid medical condition either solely or in conjunction with other systemic diseases. This information may be significant since cutaneous events have been associated with intake of antihypertensive agents.[33] Increased awareness regarding the myriad adverse reactions to medications, notably antihypertensives, among clinicians may be essential to promote vigilance and proper education to elderly patients and their caregivers.

This study described and reported the sociodemographic and clinical profiles of geriatric patients seen at the Department of Dermatology of SPMC from January 2016 to December 2019 having a total of 470 elderly patients as its study population. A total of 711 dermatologic dermatoses were recorded, giving an updated scope of dermatologic concerns affecting the geriatric population in the country.

LIMITATIONS AND RECOMMENDATIONS

Due to the retrospective nature of the study and utilization of secondary data, the following limitations were encountered: first, a substantial proportion of data from the patients' charts were left blank and recorded as not applicable because of missing information that may be due to incomplete data from chart collection forms of the hospital. Second, data were based on the clinical judgement of the attending physician, with several diagnoses unconfirmed. Furthermore, only the diagnoses for which patient sought consultation have been noted thus other asymptomatic age-related changes may have been missed out.

Therefore, we recommend that patient chart collection forms of the hospital be reviewed and updated as well as highlight the importance of completing dermatological clinical records in the hospital to ensure that future studies will be more detailed and complete.

A larger, prospective, multicenter study may also be conducted preferably in different regions in the country to be able to reflect the true burden of geriatric dermatoses in the different communities and to explore if the variable environmental conditions may affect disease frequencies.

CONCLUSION

In conclusion, geriatric dermatology is undoubtedly an emerging branch in the new millennium therefore updates in current and emerging trends of dermatoses involving the Filipino elderly population in each locality may help us in implementing necessary changes in health education as well as cutaneous disease detection, control, and prevention. This study further highlights the pattern of xerosis, contact dermatitis, and lichen simplex chronicus as major top 3 cutaneous dermatoses affecting geriatric patients. Raising the general level of awareness about common geriatric dermatoses may be crucial in proper management and improved quality of life for Filipino elderly patients.

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