

The obtained data is then processed, analyzed, and critically appraised without statistical tests using IBM SPSS Statistic v.21. The data is described as socio-demography data which consist of year of visit, sex, age, age group, education, occupation, and comorbidity. Data is also described as special characteristics, such as type of onset and classification of the lesion. Data is presented in tables and diagrams form with narrative description.

Result

Year	Cases	Percentage (%)
2011	8	14.8
2012	20	37
2013	3	5.6
2014	10	18.5
2015	13	24.1
Total	54	100

Table 1: Cases of senile AD in geriatric outpatient clinic Dermatovenereology Department Cipto Mangunkusumo Hospital in 2011-2015

There were 54 cases of senile AD in geriatric outpatient clinic Dermatovenereology Department Cipto Mangunkusumo Hospital during 2011-2015. The most number of cases was established in 2012, which is 20 cases, followed by 2015, 2014, 2011, and the least is 2013 (Table 1). Table 2 describes sociodemographic characteristic of subjects.

Variables	N	%
Sex		
Male	22	40.7
Female	32	59.3
Age group		
60-69	34	63
70-79	13	24.1
80-89	5	9.3
>90	2	3.7
Age group for male patients		
60-69	16	72.7
70-79	5	22.7
80-89	1	4.6
>90	0	0
Age group for female patients		
60-69	18	56.3
70-79	8	25
80-89	4	12.5

>90	2	6.2
Education background		
Unknown	37	68.5
Elementary School	0	0
Secondary School	6	11.1
Diploma/bachelor	8	14.8
Uneducated	3	5.6
Occupation		
Retired/unemployed	31	57.4
Housewife	19	35.2
Entrepreneur/employee	4	7.4
Comorbidity		
Present	40	74.1
Not present	14	25.9
History of atopy/allergy		
Present	17	31.5
Not present	37	68.5

Table 2: Overview of the Sociodemographic Characteristics of Senile AD Patients in Geriatric Outpatient Clinic Dermatovenereology Department Cipto Mangunkusumo Hospital in 2011-2015.

The youngest subject in this study is 60 years old and the oldest is 92 years old. The most number of cases belong in age group 60-69 years old (N=34, 63%). Thirty two of the 54 subjects (59.3%) are female and the rest, 40.7%, are male.

The education background of most subjects (37 subjects) is unknown. Six subjects (11.1%) are secondary school graduates, eight subjects have diploma or bachelor degree, and three subjects didn't have any educational background. Thirty one of 54 subjects are unemployed or already retired, 19 subjects are still doing domestic work as housewives, and only four still have active occupation.

Forty subjects were also diagnosed with comorbidities, such as non-dermatology chronic diseases or other skin-related diseases. Top 10 comorbidities are shown in Table 3.

No	Comorbidities	Amount
1	Hypertension	14
2	Diabetes mellitus	6
3	Heart disease	6
4	Others (BPPV, OA, tumor, etc)	6
5	Dyslipidemia	5
6	Seborrheic dermatitis	5
7	Stasis dermatitis	4
8	Neurodermatitis	4

9	Asthma	3
10	Hyperuricaemia	2

Table 3: Top 10 comorbidities in subjects.

Seventeen of the fifty four subjects (31.5%) have history of atopy or allergy, while the rest, 37 subjects (68.5%), don't have it. However, the history of previous treatment for those who have history of atopy is unclear.

Senile AD is classified into three groups based on the type of onset, which is senile onset, recurrent or continuation from adult AD, and recurrent with classical AD in childhood. In this study, majority of the cases were senile onset AD (N=45, 83.3%). Eight cases (14.8%) were continuation from adult AD and only one case (1.9%) was a recurrent case with history of classic AD in childhood (Figure 1).

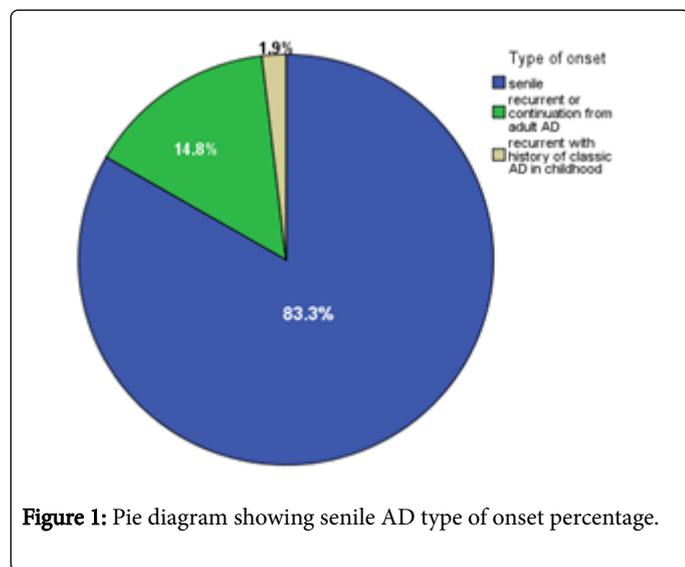


Figure 1: Pie diagram showing senile AD type of onset percentage.

Based on skin lesion efflorescence, senile AD is classified into acute, subacute, and chronic. The percentage is shown in Figure 2.

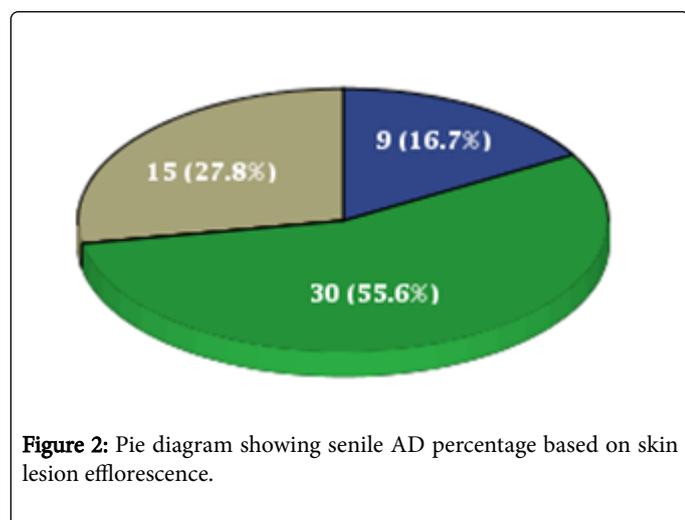


Figure 2: Pie diagram showing senile AD percentage based on skin lesion efflorescence.

From fifty four subjects, 30 of them (55.6%) were subacute lesions, 15 (27.8%) were chronic lesions, and only 9 (16.7%) were acute lesions.

Discussion

All patients aged 60 years and older who came to geriatric outpatient clinic Dermatovenereology Department Cipto Mangunkusumo Hospital and diagnosed with atopic dermatitis become the subject of this study. Most of them came with itch as the chief complaint. There were fifty four patients in five years period, from January 2011 to December 2015. The most number of cases was recorded in 2012, as many as 20 cases (37%).

The age of subjects varied from 60 years old, as the youngest, and 92 years old, as the oldest. More than half of the total subjects belong to the age group 60-69 years old (N=34, 63%). From the results, the number of female patients is more than male patients with almost 3:2 ratios. This result is different from Tanei [14], which most senile AD patients found are male with 3:1 ratio to female. This is probably because in Indonesia, the number of female elderly is higher than male [2].

Through this study, it is shown that most of the cases happened to unemployed/ not working population (57.4%), followed by housewives (35.2%), and entrepreneurs or employees (7.4%). The level of education were not identified in 37 subjects, 14.8% of the subjects have diploma or bachelor degree, 11.1% of the subjects have graduated from secondary school, while 5.6% of them were uneducated.

Like most elderly, the majority of subjects also diagnosed with comorbidities. Ten most common comorbidities are shown in Table 3 and hypertension is the most common comorbidities suffered by the subjects. Some diseases have relevance with AD, such as those associated with allergy, for example: asthma, allergic rhinitis, etc. However, this type of disease was only in the ninth position. Only 17 (31.5%) of the 54 subjects have history of atopy or allergy on him/herself or on the family.

Conclusion

From these result, the senile AD patients' profile in geriatric outpatient clinic Dermatovenereology Department Cipto Mangunkusumo Hospital during 2011-2015 is shown. On observation, the amount of case remains fluctuating each year. Along with the increasing number of geriatric population every year, so does the related disease and AD should not be underestimated.

The data obtained in this study can be used as information, as well as advice, both for clinicians and patients to improve the management of patients. The research data could also be used as a baseline for further research on senile AD.

References

1. World Health Organization (2007) Global age-friendly cities: a guide. WHO Press, Geneva.
2. Infodatin Kementerian Kesehatan RI (2014) Situasi dan analisis lanjut usia. Kementerian Kesehatan RI.
3. Yannas I (2001) Tissue and organ regeneration in adults. New York: Springer-Verlag.
4. Williams HC (2000) Epidemiology of atopic dermatitis. *Clin Exp Dermatol* 25: 522-529.
5. Tanei R, Hasegawa Y, Sawabe M (2013) Abundant immunoglobulin E-positive cells in skin lesions support an allergic etiology of atopic dermatitis in the elderly. *J Eur Acad Dermatol Venereol* 27: 952-960.
6. Katsarou A, Armenaka MC (2011) Atopic dermatitis in older patients: Particular points. *J Eur Acad Dermatol Venereol* 25: 12-18.

7. Tanei R, Katsuoka K (2008) Clinical analyses of atopic dermatitis in the aged. *J Dermatol* 35: 562-569.
8. Schmitt J, Bauer A, Meurer M (2008) Atopic eczema in adulthood. *Hautarzt* 59: 841-852.
9. Wolkewitz M, Rothenbacher D, Löw M, Stegmaier C, Ziegler H, et al. (2007) Lifetime prevalence of self-reported atopic diseases in a population-based sample of elderly subjects: results of the ESTHER study. *Br J Dermatol* 156: 693-697.
10. Farage MA, Miller KW, Elsner P, Maibach HI (2007) Structural characteristics of the aging skin: a review. *Cutan Ocul Toxicol* 26: 343-357.
11. Farage MA, Miller KW, Berardesca E, Maibach HI (2009) Clinical Implications of Aging Skin: Cutaneous Disorders in the Elderly. *Am J Clin Dermatol* 10: 73-86.
12. White-Cu EF, Reddy M (2011) Dry skin in the elderly: Complexities of a common problem. *Clinics in Dermatology* 29: 37-42.
13. Garibyan L, Chiou AS, Elmariah SB (2013) Advanced aging skin and itch: addressing an unmet need. *Dermatol Ther* 26: 92-103.
14. Tanei R (2009) Atopic dermatitis in the elderly. *Inflammation & Allergy – Drug Targets* 8: 398-404.
15. Leung DYM, Boguniewicz M, Howell MD, Nomura I, Hamid QA (2004) New insights into atopic dermatitis. *J Clin Invest* 112: 252-262.
16. Furue M, Saeki H, Furukawa F, Hide M (2009) Guidelines for management of atopic dermatitis. *J Dermatol* 119: 1515-1534.
17. Akdis CA, Akdis M, Bieber T, Bindslev-Jensen C, Boguniewicz M, et al. (2006) Diagnosis and treatment of atopic dermatitis in children and adults: European Academy of Allergology and Clinical Immunology/ American Academy of Allergy, Asthma, and Immunology/ PRACTALL Consensus Report. *Allergy* 61: 969-987.