

Assess the Skin Disease and Associated Health Related Quality of Life in Urban Area at Vadapalani

Bhuvanewari G^{1*}, Sharmila R², Arunya³¹Associate Professor, Saveetha College of Nursing, SIMATS, Chennai, Tamilnadu, India^{2,3}B.Sc (N) IV Year, Saveetha College of Nursing, SIMATS, Thandalam, Chennai, Tamil Nadu India

Article History

Received: 25.11.2020

Accepted: 07.12.2020

Published: 11.12.2020

Journal homepage:

<https://www.easpublisher.com>

Quick Response Code



Abstract: Introduction: The skin is the largest body organ and is a sensitive indicator of general health. Skin disorders are the most common health problems among adult. Skin disorder may cause emotional and psychological stress for the adult and family. There is a wide range of skin diseases present in different age groups. **Aim:** The main aim of the study is to assess the skin problem and quality of life among adults. **Methodology:** The research design for the study was descriptive research design. Purposive sampling technique was used to select samples. Structured interview was used to collect demographic variables, DLQI scale for assessing skin problems and quality of life among skin problems. Data were collected by 70 from skin problem at vadapalani. **Results:** The present study revealed that 5(7.14%) were no effect on skin problem, 28(40%) were small effect, 27(38.5%) were moderate effect, 15(21.4%) were very large effect. The study reveals that out of 70 samples most of them are small effect on skin problem. The results shows that mean and standard deviation 18.75 were mean and 9.44 were standard deviation. **Conclusion:** Create awareness and frequent routine checkup should be scheduled for adults to enable the dermatologist to recognize the early signs of skin problem to prolong the life of healthy skin.

Keywords: Skin problem, quality of life, descriptive research.

Copyright © 2020 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

The skin is the largest body organ and is a sensitive indicator of general health. Skin disorders are the most common health problems among adult. Skin disorder may cause emotional and psychological stress for the adult and family. There is a wide range of skin diseases present in different age groups. But certain factors which predisposes to skin problems include personal hygiene, family history, traditional taboos, nutritional status, large family size, overcrowding and poverty. Maintaining personal hygiene and avoiding contact with infected person is the most important preventive measures for common skin problems [1].

Skin disorders affect 20-30% of general population in the world. Socio demographic factors play a vital role in determining the pattern of skin diseases. More over adolescent are more frequently exposed to various risk factors. Since prevalence of skin diseases is more among adult from low socioeconomic classes and developing countries like India. Studies on skin diseases are inevitable [2].

Adult are more Vulnerable and constitute Special risk group in any population deserving Special health care. A variety of cutaneous lesions may occur in adult. The close proximity in the occupational setting

provides opportunities to be exposed to infectious agents like viruses, bacteria, fungus, insects and animals. The commonest skin problems of adult include scabies, dermatitis, impetigo, eczema, melasma, tinea corporis [3].

Scabies is a skin disease commonly found among school children produced by the burrowing action of a parasite insect mite (sarcoptes scabiei) in the epidermis. It results in irritation and formation of burrows, vesicles and pustules. Scabies is usually transmitted by direct skin to skin physical contact. It can also be spread through contact with other objects. Such as clothing, bedding, furniture's or surfaces with which a person infected with scabies might have come in contact [6].

Impetigo is a contagious, superficial infection of the skin caused by staphylococcus and Streptococcus bacteria. Impetigo is more common in children than in adults. Impetigo is most likely to occur in warm and humid environments and is most commonly spread by close contact [5]. Skin conditions contributed 1.79% to the global burden of disease measured in DALYs from 306 diseases and injuries in 2013. Individual skin diseases varied in size from 0.38% of total burden for dermatitis (atopic, contact, and seborrheic dermatitis), 0.29% for acne vulgaris,

0.19% for psoriasis, 0.19% for urticaria, 0.16% for viral skin diseases, 0.15% for fungal skin diseases, 0.07% for scabies, 0.06% for malignant skin melanoma, 0.05% for pyoderma, 0.04% for cellulitis, 0.03% for keratinocyte carcinoma, 0.03% for decubitus ulcer, and 0.01% for alopecia areata. All other skin and subcutaneous diseases composed 0.12% of total DALYs[6]. Contact dermatitis is considered to be occupational if it is the direct consequence of a cutaneous contact with the materials used in the work place [4].

Eczema was the most common diagnosis accounting for 22% participants and of which 60% were females and 40% were males. Of the total male participants of the study, 20% suffered from eczema and of all the female participants, 24% were the sufferers from eczema. Of all the patients suffering from eczema, patients from age group 21 to 50 years suffered from contact dermatitis (7.3%), hand dermatitis (3.6%), seborrheic dermatitis (32.8%), and photodermatitis (26.3%), and those above 50 years of age suffered from Lichen simplex chronicus (19%) and asteatotic eczema (11%). Fungal infection was the next commonly observed dermatosis (13%) of study group of which males were more commonly affected. Elderly participants of age 50 years and above were more susceptible to dermatoses such as benign skin tumors and pigmentary disorders [8].

C.I.Wootton S, *et al.*, [9] Skin disease are common and often have an impact on an individual's health-related quality of life. In rural communities where access to healthcare may be limited and individuals rely on farming for food and income, the impact of skin disease may be greater. This study were to perform an assessment of skin disease prevalence in a rural village in Laos and assess the associated impact of any skin disease found using the dermatology Life Quality Index(DLQI) the six most common disease were; eczema (22%), dermatophyte infection (19%), acne (10%), scabies infestation(9%), mealasma (8%), and pityriasis versicolor (4%). Just over half of those with skin disease (51%) completed the DLQI, where score ranging from 0 to 24. Those with skin problems on examination were significantly more likely to be farmers, have had a previous skin problem, be older or live in a smaller family.

A Svensson *et al.* [10]. There is a lack of prevalence data on skin disease in the general adult population; most studies have been carried out in small, national or consecutive clinical samples. To determine the prevalence of common skin disease in the general European population and to assess differences in the characteristics of treatment between countries. A random sample consisting of 12377 participants aged 18-74 years was drawn from the general population of five European countries. This was a cross-sectional study and all participants were interviewed using a standardized questionnaire that assessed the occurrence of 10 common skin disease during lifetime, past year

and past month. If a skin disease was reported, we additionally assessed who performed the diagnosis and treatment, and whether drugs had been prescribed [9].

When we are posted on vadapalani primary health center, we saw most of people affect with skin problem and we planned to do research on skin assessment and their quality of life.

METHODS AND MATERIAL

A descriptive study was conducted to assess the skin disease and associate health related quality of life in urban area at vadapalani. The main study was conducted on 4.1.2020 to 13.1.2020 at Urban population. The 70 samples who met the inclusion criteria were selected by purposive sampling technique. The investigator introduced and explained the purpose of the study to the samples and obtained the written informed consent. A questionnaire was divided into two sections which include, Section A – Demographic variable, Section B consists of DLQI scale for assessing skin disease Very much scored - 3, A lot scored - 2, A little scored - 1, Not at all scored - 0, Not relevant scored - The resulting maximum of 30 and a minimum of 0. The higher the score, the more quality of life is impaired. Section C consists of quality of life among skin disease The score interpretation among quality of life Excellent - 110-89, Good - 88-67, Fair -66-45, Poor - 44-22. The demographic variables was collected by using structured interview questionnaire methods. After the general instructions, the investigator collected the demographic data and assessed the skin problem and quality of life among adults i.e 6 hours per day for 7 days. Data collection period was for 1 week in urban population at Vadapalani. The data were analysed using descriptive and inferential statistics.

RESULT

Section A: To Assess The Demographic Variable Among Skin Problems Patients at Vadapalani.

Table 1 - Shows that regarding age out of 70 sample 10(14.2%) samples were come under type age group of 19-15, 16(22.8%) were the age group of 26-35 years , 28(40%) samples were under the age group of 36-45 years, 16(22.8%) were the age of above 45 years. Regarding gender 28(40%) were the gender of female 42 (60%) were the gender of male. Regarding educational qualification out of 70 sample 32(45%) were no formal education, 10 (14%) were completed primary, 23(32%) were completed higher secondary, 5(7%) were completed graduation. Regarding occupation out Of 70 samples 31 (44%) were unemployed, 32(45%) were skilled worker, 7(10%) were professional worker. Regarding environmental sanitation 32(45.7%) were hygienic and 38(54.2%) were poor. Regarding economic status out of 70 samples 12(17%) were upper level, 34 (48%) were middle level, 24 (34 %) were lower level. Regarding previous skin infection out of 70 sample 24(34.2%) were yes and 46(65.7%) were no previous skin

infection. Regarding nutritional status out of 70 samples 38(54.2%) were vegetarian and 32(45.7%) were non vegetarian.

Section B: To determine the skin problem among adults at vadapalani

Table-1: Frequency and Percentage distribution of skin problems among adult

Assess the skin problems	Frequency	Percentage
No effect on skin disease	5	7.14
Small effect on skin disease	28	40
Moderate effect on skin disease	27	38.5
Very large effect on skin disease	15	21.4
Extreme large effect on skin disease	0	0

The above table 02 shows that 5(7.14%) were no effect on skin problem, 28(40%) were small effect, 27(38.5%) were moderate effect, 15(21.4%) were very

large effect. This reveals that out of 70 samples most of them are small effect on skin problem.

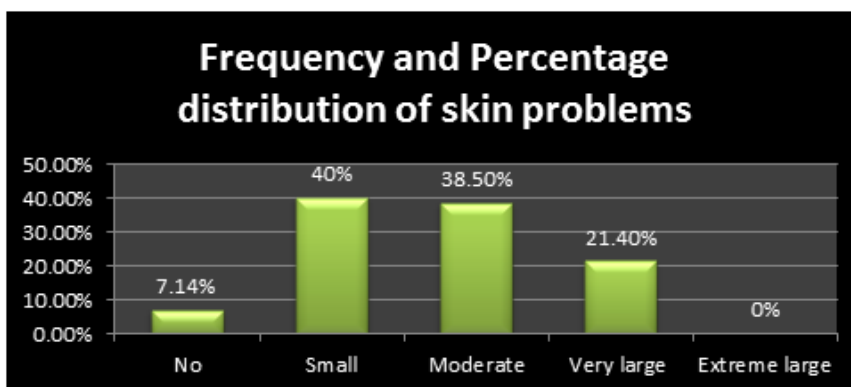


Fig-1: Frequency and Percentage distribution of skin problems among adult

Table-2: Mean score and standard deviation score of skin problems among adults.

Assess the skin problem	Mean	Standard Deviation
	18.75	9.44

The above tablet shows that mean and standard deviation 18.75 were mean and 9.44 were standard deviation.

Section C: frequency and percentage distribution of quality of life among adult

Table-3: Frequency and Percentage distribution of quality of life among adult

Quality of life among adults with skin problem	Frequency	Percentage
Excellent	9	13
Good	48	68
Fair	7	10
Poor	6	9

The above table shows that, Frequency and Percentage distribution of quality of life among adult out of 70 samples, 9(13%) were excellent, 48(68%) were good, 7(10%) were fair, 6(9%) were Poor quality of life among adult with skin problem.

Section d: To associate the demographic variable and quality of life among skin problem adults at vadapalani.

Table-3: This section deals with to associate quality of life with their demographic variables among adults

DEMOGRAPHIC VARIABLES	EXCELLENT		GOOD		FAIR		POOR		Chi Square test
	No	%	No	%	No	%	No	%	
Age									X ² =2.5884
a.19-15	3	4.2	20	28.5	2	2.8	2	2.8	df=9
b.26-35	2	2.8	8	11.4	1	1.4	2	2.8	P=0.9784
c.36-45	3	4.2	12	17.1	3	4.2	1	1.4	NS
d.Above45years	1	1.4	8	11.4	1	1.4	1	1.4	
Gender									X ² =1.84
a.Male	5	7.1	28	40	5	7.1	5	7.1	df=3
b.Female	4	5.71	20	28.5	2	2.8	1	1.4	P=0.607
									NS
Occupation									X ² =1.185
a.Unemployed	4	5.71	19	27.1	4	5.71	3	4.2	df=6
b.Skilledworker	4	5.71	22	31.4	2	2.8	2	2.8	P=0.98
c.Professional	1	1.4	7	10	1	1.4	1	1.4	NS
Environmental Sanitation									X ² =3.0672
a.Hygienic	6	8.57	22	31.4	5	7.1	4	5.71	df=3
b.Poor	3	4.2	26	37.1	2	2.8	2	2.8	P=0.381
									NS
Education									X ² =3.07
a.Noformaleducation	4	5.71	22	31.4	4	5.71	2	2.8	df=9
b.Primaryeducation	1	1.4	6	8.5	1	1.4	2	2.8	P=0.961
c.Highereducation	3	4.2	14	20	1	1.4	1	1.4	
d.Graduation	1	1.4	6	8.5	1		1	1.4	NS
Previous skin problem									X ² =1.0694
a.Yes	3	4.2	20	28.5	4	5.71	3	4.2	df=3
b.No	6	8.5	28	40	3	4.2	3	4.2	P=0.7844
									NS
Socioeconomic									X ² =4.48
a.High	1	1.4	8	11.4	2	2.8	1	1.4	df=6
b.Middle	4	5.71	26	37.1	1	1.4	3	4.2	P=0.61
c.Low	4	5.71	14	20	4	5.71	2	2.8	NS
Nutritional status									X ² =3.9508
a.Veg	7	10	25	35.7	5	7.1	2	2.8	df=3
b.Non-veg	2	2.8	23	32.8	2	2.8	4	5.71	P=0.2668 NS

The results shows that there was non significant associate between the quality of life and age, sex, education, occupation, previous skin infection, environmental sanitation, nutritional status.

DISCUSSION

The first objective of the study is to assess the demographic variables of adults

Table-1: Shows frequency and percentage distribution of demographic variables of adults

The above table Shows that regarding age out of 70 sample 10(14.2%) samples were come under type age group of 19-15, 16(22.8%) were the age group of 26-35years, 28(40%) samples were under the age group of 36-45years, 16(22.8%) were the age of above 45years. Regarding gender 28(40%) were the gender of female 42(60%) were the gender of male. Regarding educational qualification out of 70 sample 32(45%) were no formal education, 10(14%) were completed primary, 23(32%) were completed higher secondary, 5(7%) were completed graduation. Regarding occupation out of 70 samples 31(44%) were unemployed, 32(45%) were skilled worker, 7(10%) were professional worker. Regarding environmental

sanitation 32(45.7%) were hygienic and 38(54.2%) were poor. Regarding economic status out of 70 samples 12(17%) were upper level, 34(48%) were middle level, 24(34%) were lower level. Regarding religion out of 70 sample 24(34.2%) were yes and 46(65.7%) were no previous skin infection. Regarding nutritional status out of 70 samples 38(54.2%) were vegetarian and 32(45.7%) were nonvegetarian.

The another study was conducted by Karima Akool Al - Salihi 2011. A study was conducted to know the prevalence of dermatological problems in west part of India in the year 2011. A clinical study among the children up to the age of 14 in the west part of India. There were a total of 390 boys and 310 girls. They found that the majority of skin condition are transient. The result shows that the most common dermatosis found was having infectious etiology (38.43%) incidence of scabies was (5.32%), impetigo (11.13%) and eczema (8.9%). The study was concluded that they were the most prevalent dermatosis found in the west part of India due to lack of awareness about the dermatological disorders.

The second objective of study to asses the skin problem among adults

Table-2: Frequency and Percentage distribution of skin problems among adults

The above table shows that 5(7.14%) were no effect on skin problem, 28(40%) were small effect, 27(38.5%) were moderate effect, 15(21.4%) were very large effect. This reveals that out of 70 samples most of them are small effect on skin problem.

The another study was conducted by C.I.Wootton S, *et al*. [9] Skin disease are common and often have an impact on an individual's health-related quality of life. In rural communities where access to healthcare may be limited and individuals rely on farming for food and income, the impact of skin disease may be greater. This study were to perform an assessment of skin disease prevalence in a rural village in Laos and assess the associated impact of any skin disease found using the dermatology Life Quality Index(DLQI) the six most common disease were; eczema (22%), dermatophyte infection (19%), acne (10%), scabies infestation(9%), mealasma (8%), and pityriasis versicolor (4%). Just over half of those with skin disease (51%) completed the DLQI, where score ranging from 0 to 24. Those with skin problems on examination were significantly more likely to be farmers, have had a previous skin problem, be older or live in a smaller family.

The third objective of the study to find association of quality of life with their demographic variables.

Table 3: This section deals with to associate quality of life with their demographic variables among adults

Table 3 reveals that chi square value for demographic variables is non-significant at $P < 0.005$. The above table shows that there was non significant associate between the quality of life and age, sex, education, occupation, previous skin infection, environmental sanitation, nutritional status.

The another study was conducted by Mostafa A Abolfotouh Patients with skin diseases experience a wide variety of symptoms which affect their lives, ranging from trivial problems to major handicaps.20 Although studies aimed at estimating the extent of their symptoms have been con-ducted in advanced societies, the QoL for patients with skin disease in developing countries has continued to be a major problem because related issues have not been adequately addressed. In the present study, a reaction to health changes was clearly seen in all of the QoL domains. Some patients had good QoL, but others showed a poor QoL. This finding seems to suggest that people react differently to stressful experiences. However, the majority of patients reported good QoL (69.2%), with no significant gender differences. This result was generally more favorable than those seen in several previous studies that reported

a significantly greater impact from skin disease. This discrepancy may be explained by biases in questionnaire responses or cultural differences in the skin disease experience and perception of disability. Further studies are needed to investigate this issue.

CONCLUSION

Skin problem was associated with age and quality of life, which demonstrates the needs to make the target population aware of the skin problems a well as the etiological factors involved and way to prevent skin disease. A change of unhealthy environment and sanitation remains the best way of prevention of skin problem

ACKNOWLEDGEMENT

We would like to extent our gratitude of the authorities of Saveetha College of Nursing, and Medical Officer, Urban Primary Health Centre, Vadapalani.

AUTHORS CONTRIBUTION

All the authors actively participated in the work of the study. All authors read and approved the final, manuscript.

REFERENCE

1. Hay, R. J., Johns, N. E., Williams, H. C., Bolliger, I. W., Dellavalle, R. P., Margolis, D. J., ... & Michaud, C. (2014). The global burden of skin disease in 2010: an analysis of the prevalence and impact of skin conditions. *Journal of Investigative Dermatology*, 134(6), 1527-1534.
2. Nair, P. A., Vora, R. V., Jivani, N. B., & Gandhi, S. S. (2016). A study of clinical profile and quality of life in patients with scabies at a rural tertiary care centre. *Journal of clinical and diagnostic research: JCDR*, 10(10), WC01.
3. Eckert, L., Gupta, S., Amand, C., Gadkari, A., Mahajan, P., & Gelfand, J. M. (2017). Impact of atopic dermatitis on health-related quality of life and productivity in adults in the United States: an analysis using the National Health and Wellness Survey. *Journal of the American Academy of Dermatology*, 77(2), 274-279.
4. Bhuvaneshwari, G., & Remy, A. R. A Study to Assess the Clinical Symptoms and Associated Risk Factors of Occupational Contact Dermatitis among Leather Shoe Production Industry Workers.
5. Karimkhani, C., Dellavalle, R. P., Coffeng, L. E., Flohr, C., Hay, R. J., Langan, S. M., ... & Vos, T. (2017). Global skin disease morbidity and mortality: an update from the global burden of disease study 2013. *JAMA dermatology*, 153(5), 406-412.
6. Hongbo, Y., Thomas, C.L., Harrison, M.A., Salek, M.S., Finlay, A.Y. (2005). Translating thescience if the quality of life into practice: what do

- dermatology life qualityindex scores mean? *J Invest Dermatol*, 125(4):659
7. Mey, S., Fuller, L.C., Bendick, C. (2015). The impact of skin disease on patients inCambodia– a survey and simple needs assessment. *Comm Dermatol J*, 11:23
 8. Gibbs, S. (1996). Skin disease and socioeconomic conditions in rural Africa: Tanzania. *Int J Dermatol*, 35(9):633
 9. Wootton, C.I.S. (2018). Skin disease are common and often have an impact on an individual’s health-related quality of life
 10. Svensson, A. (2018). There is a lack of prevalence data on skin disease in the general adult population; most studies have been carried out in small, national or consecutive clinical samples.