

## Quality of Life for Patients with Eczema

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### Abstract

**Background:** Patient with eczema can often have physical problems e.g. Bacterial skin infections and viral skin infections. It's also possible for eczema to become infected with the herpes simplex virus, which normally causes cold sores that effect on patient quality of life and their relation with other family member and their colleagues in the work. **Aim:** This study aimed to assess the quality of life for patients with eczema. **Research design:** A descriptive exploratory design was used in this study. **Subjects:** Purposive sample of 74 patients from both gender were participated. **Setting:** The study was conducted in Dermatological clinic at Dairut Central Hospital in Assiut. **Tools:** Four tools were used in this study: **I:** Patients interviewing questionnaire. **II:** Observational check list to assess patients' level of practice regarding care of eczema. **III:** SCORAD scale was used to assess the level of severity of eczema, **Tool IV:** Dermatology life quality index (DLQI) and **Tool IV:** Hospital anxiety and depression scale. **Results:** 36.5% of the studied patients had good level of knowledge of eczema, 56.8% of the studied patients had negative attitude toward eczema, 68.9% of the studied patients had unsatisfactory level of practice and 18.9% of them had high level of quality of life. **Conclusion:** More than one third only of the studied patients had good level of knowledge regarding eczema and more than half of the studied patients had negative attitude regarding eczema. While, less than half of them had positive attitude about eczema. **Recommendation:** Providing health education about food, personal, and environmental hygiene for both patients and their family. Planning and conducting health education programs in outpatient clinic for patient about the causes and prevention of eczema episode. Regular follow up is needed to ensure the efficiency of management and to diagnosis new site of eczema.

**Key words:** Eczema, Patients & Quality of Life

### Introduction

Eczema (also known as atopic eczema or atopic dermatitis) is an important condition that affects about 20% of children and up to 10% of adults and is associated with a high burden of morbidity and costs to individuals and health services. Gaining insight into global trends over time is a major priority, as it might provide insight into risk factors amenable to public health intervention. These changes in eczema prevalence over time are important, not only from a health services perspective, but also in terms of understanding eczema etiology (Berezhanskiy, 2023).

It can occur in dry and wet form, differs in the polymorphism of manifestations in the form of a rash. The inflammatory process in eczema is of an allergic nature, but the causes of the disease can be different, for example, long-term skin contact with allergens, metabolic disorders, nervous and endocrine system pathologies. Therefore, complex therapy is used in

the treatment of eczema and it is selected individually by the doctor for each patient (Voss *et al.*, 2021).

Eczema can be acute and chronic, has a cyclical development with periods of remission, often relapses of the disease are observed. Skin rashes and unpleasant feelings related to it not only spoil the appearance of the patient and cause him discomfort, but also significantly worsen his psychological condition. Taking into account the neuro-allergic nature of the disease, this only increases the pathological process and, in turn, slows down recovery. Treatment measures include various therapeutic directions, the most effective options of which are selected for each individual case (Celebi Sozener *et al.*, 2022).

Additionally, 26.1% of Atopic eczema - afflicted adults developed the disease in adulthood. Even though Atopic eczema can go into remission past childhood, it can also begin a cascade of immune reactions later on in life (such as asthma and allergies) in a process termed the

“atopic march”. Atopic eczema is also associated with an increased incidence of heart disease, and heart failure is 70% more common in people with severe Atopic eczema (Ferrucci et al., 2021).

### **Significance of the study**

Eczema by itself is not fatal, but if left untreated, it can have fatal side effects. Usually, we can catch it early and handle it. However, some bacteria and viruses can induce infections in eczema patients, which can result in serious or even fatal complications (Berezhanskiy, 2023). As a result, nurses play a major role in research. It was important to look into the issue, give it more attention, and hope that this would help the patients adjust better and provide information for additional improve their quality of life.

### **Aim of the Study**

This study aimed to assess the quality of life for patients with eczema through:

- Assessing the patients' level of knowledge about eczema.
- Assessing the patients' level of practice regarding caring of skin.
- Assessing the patients' level of severity of eczema.
- Assessing level of anxiety and depression for those patients.
- Assessing quality of life for patients with eczema tool IV.

### **Research questions:**

To fulfill the aim of the study the following research questions were formulated:

- 1-What is the patients' level of knowledge and practice about eczema?
- 2- What is the level of severity of eczema?
- 3- What are the level of anxiety and depression for patients with eczema?
- 4- What is the quality of life for patients with eczema?

### **Subjects and Methods**

**The study was portrayed under the four main designs as following:**

- 1-Technical design
- 2- Operational design
- 3-Administrative design
- 4-Statistical design

**1-Technical design:** The technical design includes research design, setting, subjects and tools of data collection.

#### **a) Research design:**

A descriptive exploratory study. Descriptive exploratory research design is a research design

that explores and explains an individual, group or a situation and conducted for formulating a problem for more clear investigation (Surbhi, 2017).

#### **b) Setting:**

The study was conducted at Dermatological clinic at Dairut Central Hospital in Assiut. It is a multi-specialty hospital which provides health services to Assuit Governorate and surrounding areas. Dermatological clinic is located on the ground floor. It consists of 1 room for examination with bed capacity 1 bed.

#### **c) Subjects:**

Purposive sample of 74 patients from both gender, were selected according to sensitive analysis in relation to the total number of eczema patients 300 who attending to outpatient dermatologic clinic (2022) at Dairut hospital.

**d) Tools of data collection:** Five tools were used to conduct the study as the following

#### **Tool (I): Patients interviewing questionnaire:**

This tool was developed by the researcher after reviewing the literature and consisted of four parts:

**Part (1): Socio demographic characteristics** such as; age, sex, social status, educational level, work, type of work, living with, place of residence, family income level and smoking at home.

**Part (2): Patients history:** it concerned with patients past medical history and family history.

**Part (3): Patients knowledge:** it was developed based on review of the previous literatures and it concerned with patients level of knowledge regarding eczema and was adopted by (Kim et al., 2015) and. It consists of 10 questions with total score 10.

#### **Scoring System:**

The responses were measured on a 2 point's Likert scale (1) correct answer, (0) incorrect answer.

- Good Knowledge if percent  $\geq 75\%$
- Average knowledge if percent =  $60\% < 75\%$ .
- Poor knowledge if percent  $< 60\%$ .

**Part (4): Level of attitude of patients with eczema** was adopted by (Mollerup et al., 2013), it concerned with assessing the patient's level of attitude regarding eczema. It consists of 17 statements with total score = 85.

**Scoring System:**

The responses were measured on a 5 point's Likert scale (1) never, (2) rarely, (3) sometimes, (4) often and (5) always.

- Positive attitude  $\geq 60\%$ . (52 – 85).
- Negative attitude  $< 60\%$ . (0 – 51).

**Tool (II): Observational checklist:** It used to assess patients' level of practice regarding care of eczema. It was developed by Investigator according to recent literature review and consists of 10 statements with total score 10 (Mitchell, 2022).

**Scoring System:**

The responses were measured on a 2 point's Likert scale. Done (1), Not Done (0).

- Satisfactory practice  $\geq 60\%$ . (7 – 10).
- Unsatisfactory practice  $< 60\%$ . (0 – 6).

**Tool (III): SCORAD scale:** This tool was adopted by (Lee., 2021). It was used to assess the level of severity of eczema. It consists of three items as; Total SCORAD index (Extent area of the affected body & Intensity of the affected body surface & Apparent symptoms), Total objective SCORAD (surface area of the affected body & Signs of the affected body surface) and Total subjective symptoms (TIS).

**Scoring system:**

The SCORAD and its subcomponents (extent and intensity criteria for lesions, and subjective symptoms composed of pruritus and sleep loss scores) were calculated by the physician. The SCORAD score range is between 0-103 points and defines three classes of AD severity (i.e. mild if SCORAD  $< 25$ , moderate if  $25 < \text{SCORAD} < 50$  and severe if SCORAD  $> 50$ ).

**Tool (IV): Dermatology life quality index (DLQI):** This tool was adopted from Micali, (2017) to assess quality of life for patients with eczema with total score 195. It consists of three dimensions physical side 15 statements, social and family aspect 11 statements and psychological side 13 statements.

**Scoring System:**

The instrument measures in 5 points Likert scale, Very much (5), A lot (4), To some extent (3), Too little (2) and Not at all (1).

- Good Knowledge if percent  $\geq 75\%$ . (147 – 195).
- Average knowledge if percent =  $60\% < 75\%$ . (117 – 146).
- Poor knowledge if percent  $< 60\%$ . (0 – 116).

**Tool (V): The Hospital Anxiety Depression Scale:** Standardized tool is a self-report rating

scale of 14 items on a 4-point Likert scale (range 0–3). It was designed to measure anxiety and depression (7 items for each subscale). The total score is the sum of the 14 items, and for each subscale the score is the sum of the respective seven items (ranging from 0–21) (Cassiani-Miranda, 2022).

**Scoring System**

Levels	Scoring system for anxiety	Scoring system for depression
Mild	8-10	8-10
Moderate	11-14	11-14
Severe	15-21	15-21
Note:	For both scales, scores of less than 7 indicate none cases.	

**2-Operational Design:**

It includes preparatory phase, content validity and reliability, pilot study and field work.

**A) The Preparatory Phase:** This phase includes a review of the past and current related literatures and studies, using available books, periodicals, magazines and articles to be acquainted with the various aspects of the study. The structured questionnaire tool was developed in an Arabic language by the researcher after reviewing the related literatures, then revised and adjusted by supervisors.

**B) Content Validity:** It was ascertained by a group of 5 experts in the branch of medical surgical nursing from Aim Shams University, their opinions were elicited regarding format, layout, consistency, accuracy and relevance of the tools.

**C) Reliability:** The tools of data collection were tested for its reliability by using Cronbach's Alpha test in statistical package for social science (SPSS) version 25. The internal consistency of the study tools were 0.703 for Patients' knowledge of eczema interviewing questionnaire, 0.876 for level of eczema attitude interviewing questionnaire, 0.890 for Patients' level of practice regarding care of eczema observational check list and 0.963 for Index of the impact of skin diseases on the quality of life interviewing questionnaire

**D) Pilot Study:** A pilot study was carried out on (10%) (No = 8) of patients at dermatological clinic at Dairut Central Hospital to test clarity, applicability of tools and time consuming to fill the tools after analyzing the results of the

pilot study needed modifications was done accordingly, and refinement of the tools was full filled. Pilot study subjects were included in the study sample as no major modification was done.

**E) Field Work:** It included the implementation of the study as the data was collected by the researcher at dermatological clinic at Dairut Central Hospital in Assuit, which include filling the: patient structured questionnaire, Dermatology quality of life scale and SCORAD scale filling the questionnaire took about 20 minutes. The data collection process took three months started from February 2023 to May 2023.

**3- Administrative Design:** An approval to carry out this study was obtained from the medical and nursing directors of Dairut Central Hospital in Assuit and the director of dermatological clinic at Dairut Central Hospital where the study was conducted.

#### **Ethical consideration:**

**The ethical research considerations in this study include the following:**

- The research approval was obtained from scientific research ethical committee in faculty of nursing at Ain Shams University before starting the study.
- The researcher clarified the objective and aim of the study to the patients included in the study.
- The researcher assured maintaining anonymity and confidentiality of the subjects' data of the patients included in the study.
- Patients were informed that they are allowed to choose to participate or not in the study and that they have the right to withdraw from the study at any time.
- An official letter was submitted from the dean of Faculty of Nursing to the director of Dermatology clinic at Dairut Hospital to obtain an approval to carry out the study.

#### **4- Statistical design:**

Up on completion of data collection the data were tabulated, synthesized and analyzed through data entry and analysis by computer using the Statistical Package for Social Science (SPSS) version 25. Data were analyzed using the descriptive statistics in the form of Frequency distribution, Percentage, Mean and Standard deviation. Also the form of significance chi-square test was used to identify the relation among the study variables. The P value > 0.05 indicate non significance result while, the \*P value < 0.05 is

significant and the \*\*P value < 0.01 is highly significant.

#### **Results**

**Table (1):** Shows that, 60.8% of the studied patients their age ranged between 18 to 30 years, the Mean  $\pm$  SD of age 32.9 $\pm$ 12.9 years. As regard to gender, 58.1% of them are female. In addition, 43.2% of the studied patients were married, 35.1% of the studied patients were secondary – diploma education. Also 56.8% of the studied patients were not working, and 87.8% of them were living with family. Also 63.5% of them live in the urban and 45% of them their income level of the family was not enough. In addition, 35.1% of the studied patients were smoking at home.

**Table (2):** Displays that, 52.7% of the studied patients were visit the clinic from 1-3 times during the month. While, 54.1% of them their duration of the disease were from 1- 5 years. Also 48.6% of them were complaining from chronic diseases, and 44.4% of them were complaining from chest disease. In addition, 45.9% of them winter season effect on the severity of the disease.**Figure (1):** Shows that, 36.5% of the studied patients had good level of knowledge about eczema. While, 35.1% of them had average level, and only 28.4% of them had poor level.

**Figure (2):** Displays that, 56.8% of the studied patients had negative attitude regarding eczema. While, 43.2% of them had positive attitude.

**Figure (3):** Indicates that, 68.9% of the studied patients had unsatisfactory level of practice. While, 31.1% of them had satisfactory level of practice.

**Figure (4):** presents that 48.6% of the studied patients had severe eczema. While, 25.7% of them had mild and moderate eczema.

**Figure (5):** Displays that: 52.7% of the studied patients had poor level of quality of life. And 28.4% of them had average level. While, 18.9% of them had high level of quality of life.

**Figure (6):** Displays that: 32.4% of the studied patients had no anxiety and 20.3% of them had mild level. Also 24.3% of them had moderate level of anxiety. In addition, 23% of them had severe level.

**Figure (7):** Presents that: 32.4% of the studied patients had no depression and 8.1% of them had mild level. Also 25.7% of them had moderate level of depression. In addition, 33.8% of them had severe level.

**Table (3):** Displays that, there was a statistically highly significant relationship between number of visits during the month of the studied patients with their total level of impact of skin diseases on the quality of life at P-Value 0.001. Also there was a statistically

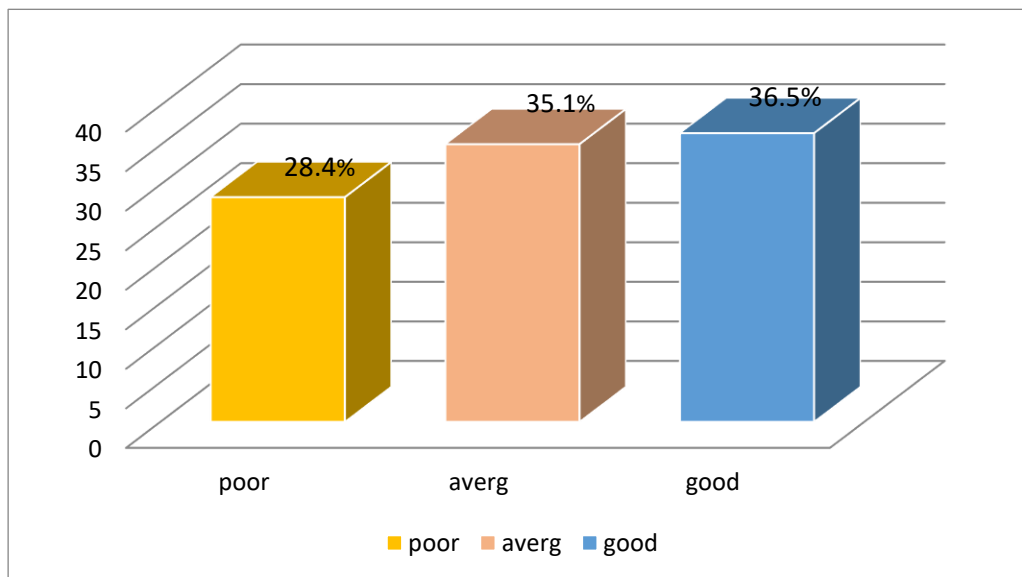
significant relationship between duration of the disease, the chronic diseases of the studied patients with their total level of impact of skin diseases on the quality of life at P-Value 0.036, 0.018 respectively.

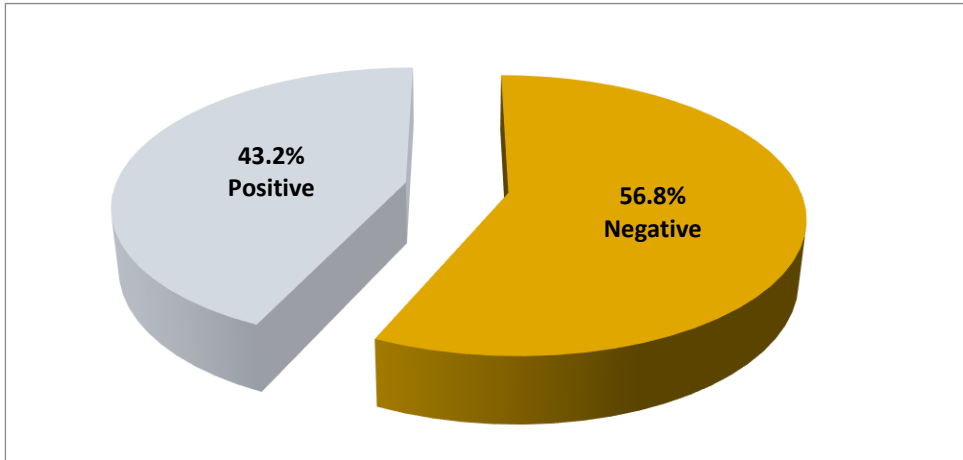
**Table (1):** Number and percentage distribution of socio-demographic data of the patients with eczema (n=74)

Demographic characteristics		n.	%
Age	18<30 years	45	60.8
	30<50 years	20	27
	More than 50	9	12.2
	Mean $\pm$ SD	32.9 $\pm$ 12.9	
Gender	Male	31	41.9
	Female	43	58.1
Social status	Single	25	33.8
	Married	32	43.2
	Divorced	10	13.5
	widower	7	9.5
Educational level	Can't read and write	12	16.2
	Basic education	12	16.2
	Secondary -diploma	26	35.1
	University	24	32.4
Work	Working	32	43.2
	Not working	42	56.8
Type of work	Office work	5	15.6
	Craftwork	17	53.2
	Administrative work	10	31.2
Living with	Alone	9	12.2
	with family	65	87.8
Place of residence	Rural	27	36.5
	Urban	47	63.5
Income level of the family	Not enough	45	60.8
	Enough	29	39.2
Smoking at home	Yes	26	35.1

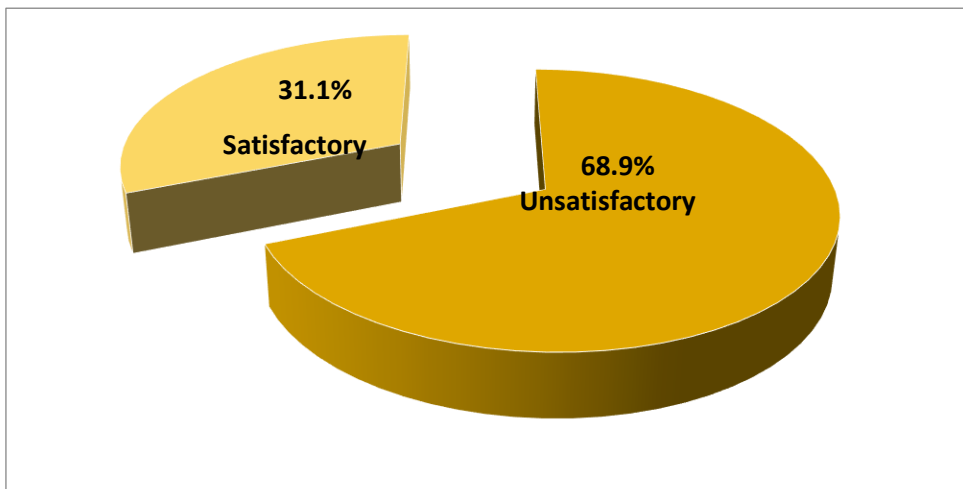
**Table (2):** Number and percentage distribution of history data of the patients with eczema (n=74)

Items		n.	%
Number of visits during the month	1-3 times	39	52.7
	4-6 times	28	37.8
	7 times or more	7	9.5
Duration of the disease	1 year < 5 years	40	54.1
	5 < 10 years	20	27.0
	10 < 15 years	8	10.8
	15 years and over	6	8.1
Suffering from chronic diseases	Yes	36	48.6
The diseases(n=36)	Diabetes Mellitus	11	30.5
	Blood pressure	8	22.2
	Kidney disease	4	11.1
	Heart disease	4	11.1
	Chest disease	16	44.4
	Rheumatic disease	3	8.3
	Thyroid disease	4	11.1
Effect of the following factors on the severity of the disease	Summer	28	37.8
	Winter	34	45.9
	Dust	23	31.1
	Perfume	18	24.3
	Wool	20	27
	Animals	21	28.4
	Medicines	18	24.3
	Food or detergents	25	33.8

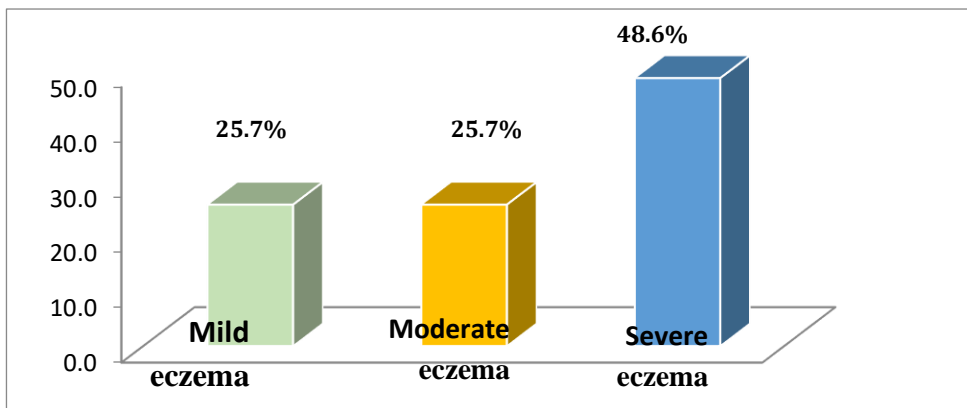
**Figure (1):** Percentage distribution of the patients' total level of knowledge about eczema (n=74)



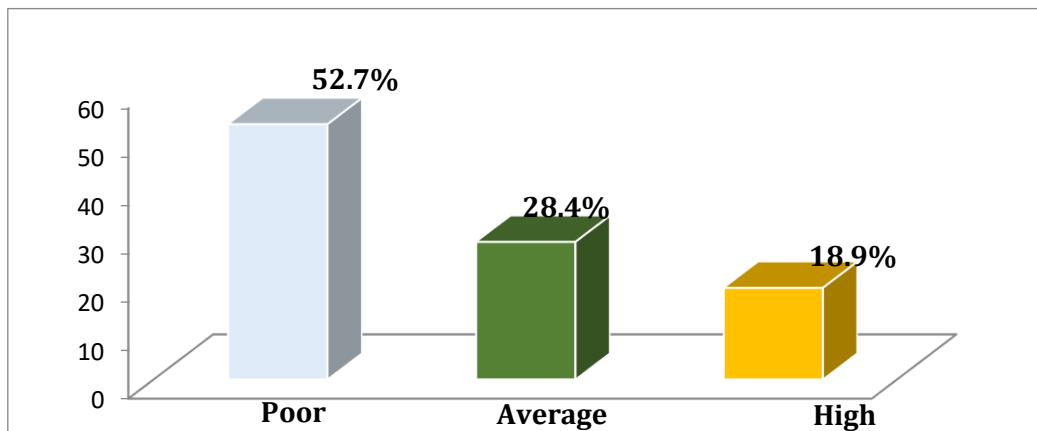
**Figure (2):** Percentage distribution of the patients' total level of attitude patients with eczema (n=74)



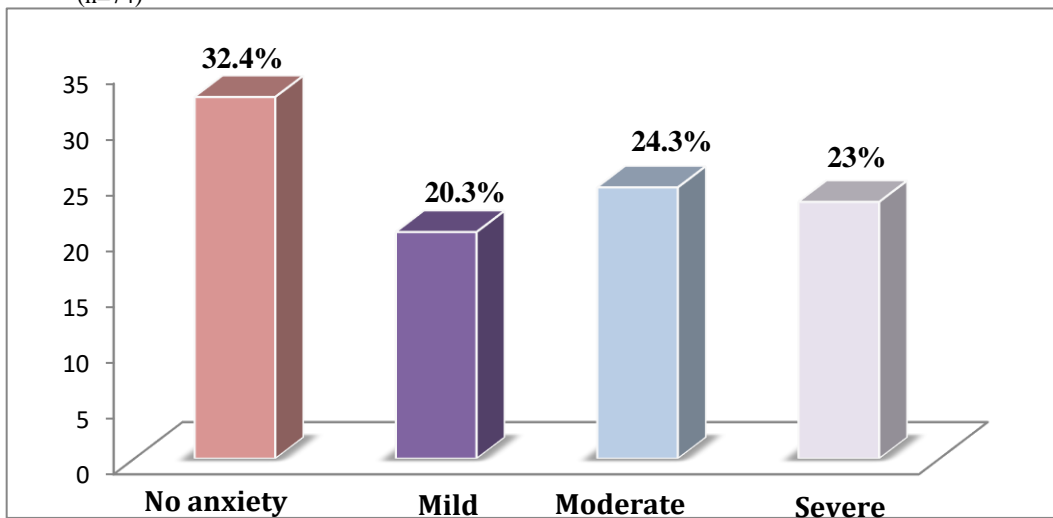
**Figure (3):** Percentage distribution of the patients' total level of practice of patients regarding eczema (n=74)



**Figure (4):** Percentage distribution of the patients' total level of severity of allergic dermatitis for patients with eczema (n=74)



**Figure (5):** Percentage distribution of the patients' total level of impact of skin diseases on the quality of life (n=74)



**Figure (6):** Percentage distribution of the patients' total level of anxiety (n=74)



**Table (4):** Relation between history data of the patients and their total level of impact of skin diseases on the quality of life (n=74)

Patient history data		Total level of impact of skin diseases on the quality of life						Chi-square Test	
		Mild quality (n=39)		Moderate quality (n=21)		Severe quality (n=14)		X <sup>2</sup>	P-Value
		n	%	n	%	n	%		
Number of visits during the month	1-3 times	28	71.8	9	42.9	2	14.3	17.81	0.001**
	4-6 times	10	25.6	10	47.6	8	57.1		
	7 times or more	1	2.6	2	9.5	4	28.6		
Duration of the disease	1 year < 5 years	20	51.3	11	52.4	9	64.3	13.491	0.036*
	5 < 10 years	12	30.8	3	14.3	5	35.7		
	10 < 15 years	6	15.4	2	9.5	0	0		
	15 years and over	1	2.6	5	23.8	0	0		
Suffering from chronic diseases	No	26	66.7	8	38.1	4	28.6	8.047	0.018*
	Yes	13	33.3	13	61.9	10	71.4		

P-Value > 0.05: No significant ( ); P-Value < 0.05: significant (\*); P-Value < 0.01: highly significant (\*\*)

## Discussion

Eczema is a chronic, relapsing, and remitting inflammatory skin disease that significantly affects patients' physical, emotional, mental, and social relations and thereby impairing health-related quality of life. Eczema is common up to 10% of adults in developed countries and is a major cause of years lost because of disability. Emerging evidence suggests that biologic agents, an effective treatment modality for severe atopic eczema, may also reduce symptoms of depression and anxiety among people with atopic eczema (Foster et al., 2023).

Regarding number and percentage distribution of socio-demographic data of the patients with eczema the current study showed that more than two thirds of the studied patients their age ranged between 18 to 30 years old. This might be due to they have genatic inherited as regard to gender, less than two thirds of them were females

From the researcher point of view these results are due to that eczema is a common disease among young adults and the prevalence of eczema more common in females than males.

This result was supported by Johansson et al., (2022), they studied (Prevalence and characteristics of atopic dermatitis among young adult females and males report from the Swedish population-based, reported that atopic dermatitis was significantly more prevalent among females compared with males. Also this result was on the same line with Meding & Järholm, (2004), they studied (Incidence of hand eczema a population-based retrospective study), and found that more than two thirds of participants were females.

The present study displayed that more than two fifth of them were complaining from chest disease and season winter affect on the severity of the disease. From the researcher point of view these results are due to that chest diseases are more common and recurrent in winter, with increase dryness.

This result was in agreement with Alshammrie et al., (2022), they studied (Prevalence and Influencing Risk Factors of Eczema among Preschool Children in Hail City), and reported that more than three quarters of studied subjects had a history of pneumonia. Also this result was congruent with Gustafsson et al., (2000), they studied (Development of

allergies and asthma in infants and young children with atopic dermatitis--a prospective follow-up to 7 years of age), and found that more than two fifth of studied subjects developed asthma and less than half of them developed allergic rhinitis.

Regarding percentage distribution of the patients' total level of knowledge of eczema the present study showed that, more than one third of the studied patients had good level of knowledge of eczema. While, more than one third of them had average level of knowledge of eczema, and only more than one quarter of them had poor level of knowledge of eczema. This result was inconsistent with **Letule et al., (2014)**, they implicated that the level of knowledge on hand eczema was low. Also this result was incompatible with **Tuller & Arca-Contreras, (2023)**, they studied (Implementation of the Hand Hygiene Eczema Education Program to Improve Patient Knowledge and Symptoms), and demonstrated an improvement in patient's knowledge and reduction in symptoms after the education Program.

Concerning percentage distribution of the patients' total level of attitude patients with eczema the present study displayed that, more than two thirds of them had positive attitude of eczema. From the researcher point of view these results are due to patients desire to be treated and to get rid of eczema as it affects their social and psychological life.

This result agreed with **Shaharuddin & Ahmad, (2021)**, they studied (Original Research Article Knowledge, Attitude, and Practice on Paederus Dermatitis among Students in UiTM Puncak Alam, Selangor), and revealed that the majority of the students have a moderate level of practice towards paederus dermatitis. This result was incompatible with **Barradah, (2021)**, who studied (Atopic Dermatitis--Knowledge and Attitude of Primary Health Care Providers, Majmaah, Saudi Arabia), and concluded that the level of atopic dermatitis attitude was observed to be negative.

As regard to percentage distribution of the patients' total level of practice of patients with eczema the present study indicated that, more than two thirds of the studied patients had unsatisfactory level of practice. While, more than one third of them had satisfactory level of practice. From the researcher point of view

these results are due to lack of experience and patients negative feelings about eczema this underscore the need for educational program & stress on practice. This result was on the same line with **Kouotou et al., (2017)**, they studied (Knowledge, attitudes and practices of the medical personnel regarding atopic dermatitis in Yaoundé, Cameroon), and found that the general level of practice was inadequate.

Regarding distribution of number and percentage distribution of total of severity of allergic dermatitis of patients with eczema the current study revealed that, about three quarters of the studied patients had severe sleep loos and pruritus. And less than half of them had severe extent area of the affected body, intensity of the affected body surface and apparent symptoms. From the researcher point of view these results are due to itching intensity caused by eczema.

This result was supported by **Ziyab et al., (2022)**, they studied (Eczema among adolescents in Kuwait: Prevalence, severity, sleep disturbance, antihistamine use, and risk factors), and concluded that a large proportion of affected adolescents reported nocturnal sleep disturbance due to itchy rash. Also this result was compatible with **Fishbein et al., (2021)**, they studied (Sleep disturbance in school-aged children with atopic dermatitis: prevalence and severity in a cross-sectional sample), and estimated that sleep disturbance occurred in more than two thirds of participants.

As regard to percentage distribution of the patients' total level of impact of skin diseases on the quality of life the current study displayed that: more than half of the studied patients had poor level of quality of life. And less than one third of them had average level of quality of life. While, less than one fifth of them had high level of quality of life. From the researcher point of view these results are due to the strong association between eczema and quality of life, also it commonly limited life style in addition to participants individual differences. This result was supported by **Ring et al., (2019)**, they stated that more than half of participants showed moderate to extremely large impairment their quality of life.

This result was in agreement with **Andersen et al., (2020)**, they studied (Higher self-reported severity of atopic dermatitis in adults is associated with poorer self-reported health-related quality of life in France,

Germany, the UK and the USA), and found that participants with severe atopic dermatitis were eight times more likely to have had a moderate-to-severe effect on quality of life than those with mild atopic dermatitis.

As regard to percentage distribution of the patients' total level of anxiety the present study displays that: more than one third of the studied patients had no level of anxiety. And one fifth of them had mild level of anxiety. Also about one quarter of them had moderate level of anxiety. In addition, more than one fifth of them had severe level of anxiety. From the researcher point of view these results are due to lack of knowledge of participants regarding eczema as it can be controlled by treatment and relief of stress. This result was incompatible with **Silverberg et al., (2019)**, they studied (Symptoms and diagnosis of anxiety and depression in atopic dermatitis in US adults), and reported that about half of adults with atopic dermatitis had high levels of anxiety. This result was incompatible with **Weller et al., (2020)**, they studied (The patient-reported disease burden in adults with atopic dermatitis: a cross-sectional study in Europe and Canada), and found that two fifth of participants had high level of anxiety.

Regarding percentage distribution of the patients' total level depression the present study notably that more than one third of the studied patients had no level of depression. And minority of them had mild level of depression. Also one quarter of them had moderate level of depression. In addition, more than one third of them had severe level of anxiety. From the researcher point of view these results are due to participants' awareness of the nature of the disease and the success and effectiveness of treatment regimen and preventive measures that prevents disease transmission and spread.

This result was incongruent with **Silverberg et al., (2019)**, they reported that more than one third of adults with atopic dermatitis is associated with significantly increased depression. This result was incompatible with **Weller et al., (2020)**, they reported that about one third of participants had high level of depress.

Regarding relation between history data of the patients and their total level of impact of skin diseases on the quality of life the current study displayed that, there was a statistically

highly significant relationship between numbers of visits during the month of the studied patients with their total level of impact of skin diseases on the quality of life. Also there was a statistically significant relationship between duration of the disease, the chronic diseases of the studied patients with their total level of impact of skin diseases on the quality of life. From the researcher point of view these results are due to recurrent visits may be indicator of disease intensity which may affect the patients quality of life negatively.

This result was supported by **Rea et al., (2018)**, they reported that most children with eczema experienced an impact on their quality of life, and almost all individual quality of life items were associated with eczema severity and overall quality of life continued to be associated with eczema severity. Also this result was compatible with **Gånemo et al., (2007)**, they studied (Quality of life in Swedish children with eczema), they demonstrated and confirmed that eczema impairs the children's quality of life and also affects their families.

### **Conclusion**

**Based on the findings of this study, it can be concluded that,** more than one third only of the studied patients had good level of knowledge regarding eczema and more than one third of them had average level, while more than one quarter of them had poor level of knowledge about eczema. Also, more than half of the studied patients had negative attitude regarding eczema. While, less than half of them had positive attitude.

As well as, more than two thirds of the studied patients had unsatisfactory level of practice. In addition, the finding displayed that more than half of the studied patients had poor level of quality of life, While, only less than one fifth of them had high level of quality of life.

### **Recommendations**

**Based on important findings of the study, the following recommendations were suggested:**

- Providing health education about food, personal, and environmental hygiene for both patients and their family.
- Planning and conducting health education programs in outpatient clinic for patients about the causes and prevention of eczema episode.

- Regular follow up is needed to ensure the efficiency of management and to diagnosis new site of eczema.
- Fixed poster and pictures at the outpatient clinic and dermatology department should be available to explain well practices that must apply by patient with eczema.
- Educating patients how to deal with eczema to prevent its negative effect on their quality of life.
- Providing emotional support for patients and their relatives.
- Disseminating health education brochure to increase patients' awareness about eczema and healthy home precautions at outpatient clinics.

### References

- Berezhanskiy, P. V., Malakhov, A. B., Tataurshchikova, N. S., Gutyrchik, T. A., & Iushina, T. I. (2023):** Risk factors for allergic rhinitis in children residing in five different regions of the Central Federal District: Observational study. *Pediatrics. Consilium Medicum*, (1), 55-61.
- Celebi Sozener, Z.; Ozdel Ozturk, B.; Cerci, P.; Turk, M.; Gorgulu Akin, B.; Akdis, M.; Altiner, S.; Ozbey, U.; Ogulur, I.; Mitamura, Y.; et al. (2022):** Epithelial Barrier Hypothesis: Effect of the External Exposome on the Microbiome and Epithelial Barriers in Allergic Disease. *Allergy*, 77, 1418–1449.
- Hadi, H.A.; Tarmizi, A.I.; Khalid, K.A.; Gajdacs, M.; Aslam, A.; Jamshed, S. (2021):**The Epidemiology and Global Burden of Atopic Dermatitis: A Narrative Review. *Life*, 11, 936.
- Kim, J. E., Lee, Y. B., Lee, J. H., Kim, H. S., Lee, K. H., Park, Y. M., ... & Lee, J. Y. (2015):** Disease awareness and management behavior of patients with atopic dermatitis: a questionnaire survey of 313 patients. *Annals of dermatology*, 27(1), 40-47.
- Surbhi, S. (2017):** Difference between Exploratory and Descriptive Research. Available @: [https:// keydifferences. com/ difference- between-exploratory-and-descriptive- research.html](https://keydifferences.com/difference-between-exploratory-and-descriptive-research.html).
- Voss, M.; Kotrba, J.; Gaffal, E.; Katsoulis-Dimitriou, K.; Dudeck, A. (2021):** Mast Cells in the Skin: Defenders of Integrity or Offenders in Inflammation? *Int. J. Mol. Sci.*, 22, 4589.