# **Original Article**

# Pattern Of Different Eczema Among Outdoor Patients Attended Faridpur Medical College Hospital, Faridpur, Bangladesh

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## **Abstract**

Eczematous dermatitis is very common in our country and all over the world. The aim of current study was to assess the burden, frequency and pattern of different eczema at outpatient department of Faridpur Medical College Hospital in the year 2009. Retrospective data were collected from medical records of patient. Patients of all ages & both sexes attending at the dermatology outpatient department of Faridpur Medical College Hospital in the year 2009 suffering from different eczema were included in this study. The frequency of eczema among patients attending at outpatient department of Faridpur Medical College Hospital was 12.8%, and the male to female ratio was almost 1:1. The most affected age group among patients was 0-5 years. Of all cases of eczema, 77.05% were endogenous and 22.52% were exogenous. The most common type of eczema was seborrhoeic dermatitis (27.17% of all cases), followed by contact dermatitis (20.00%) and Hand eczema (14.18%). Seborrhoeic dermatitis is commonest in young adult (21-45 yrs), whereas atopic dermatitis is common in infant and children (0-10 yrs). Eczema is a public health problem in Faridpur, Bangladesh, and this necessitates prospective studies to determine its incidence and prevalence.

Key words: Eczema, Atopic dermatitis, Faridpur

## Introduction

Eczema is a disease in a form of dermatitis, or inflammation of the epidermis. The term eczema is broadly applied to a range of persistent skin conditions characterized by one or more of these symptoms: redness, skin edema (swelling), itching and dryness, crusting, flaking, blistering, cracking, oozing, or bleeding. Classification of eczema is difficult because of many different clinical forms and unknown etiology. However, eczema is divided into two groups; exogenous eczemas, e.g. contact dermatitis, are related clearly to defined external triggering factors, although inherited tendencies can also play a part, whereas endogenous eczema, e.g. atopic dermatitis, seborrhoeic dermatitis, is not a result of exogenous or external environmental factors, but is mediated by processes originating within the body.

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No data has been reported so far about the prevalence of eczema in Faridpur. Therefore, the aim of this study was to provide preliminary data about the burden of eczema among dermatologic patients by assessing the following: the proportion of various types of eczema, the distribution of eczema according to gender and age, and its incidence according to the month or season.

# **Materials and Methods**

This retrospective case study describes the clinical patterns of endogenous and exogenous eczema in patients seen in outpatient department of Faridpur Medical College Hospital from 1st January 2009 to 31st December 2009. The study also describes the clinical pattern of eczema, its relation to age and gender of patients, and its seasonal variation. After a detailed history and clinical examination, a clinical diagnosis was made. Relevant investigations e.g. hematological and biochemical profile, urine examination, X-ray chest, scrapings for fungal elements, biopsy and histopathology etc. were done if required. All the findings were recorded, compiled, tabulated and analyzed.

# Results

We screened 19,047 new dermatologic patients, out of which 4,725 (24.81%) were found to be affected by at least

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one type of eczema. Eczema affected all age groups, including infancy, but its contribution declined after the fifth decade of life (Table I). Female to male ratio was 1.02:1.

Table I: Age and sex distribution of patients

Age group	Male (N)	Female (N)	Total	Total (%)
(Yr)				
0 - 5	427	372	799	16.91%
6 - 10	179	211	390	8.25%
11 - 15	161	215	376	7.96%
16 - 20	265	309	574	12.15%
21 - 25	296	275	571	12.14%
26 - 30	181	228	409	8.66%
31 - 35	160	169	329	6.96%
36 - 40	155	202	357	7.56%
41- 45	104	108	212	4.47%
46 - 50	109	102	211	4.47%
51 - 55	59	51	110	2.33%
56 - 60	84	80	165	3.49%
61 - 65	52	18	70	1.48%
> 65	108	44	152	3.22%
Total	2340	2385	4725	100%

Endogenous eczema was far more common than exogenous eczema (77.05% versus 22.52% respectively) and only 0.42% cases were unclassified.

The most common type of eczema is seborrhoeic dermatitis (27.17%), the second common eczema is contact dermatitis (20.00%). Other common types are Hand eczema (14.18%) and Atopic dermatitis (12.23%)

Table II: Frequencies of different types of eczema

Types of eczema	Total	Percentage
Seborrhoeic dermatitis	1284	27.17%
Contact dermatitis	945	20.00%
Hand eczema	670	14.18%
Atopic dermatitis	578	12.23%
Nummular eczema	360	7.62%
Lichen Simplex Chronicus	346	7.32%
Foot eczema	275	5.82%
Scabies e Eczematization	119	2.52%
Scrotal dermatitis	111	2.35%
Nipple Eczema	17	0.36%
Others	20	0.42%
Total	4725 □	100%

Seborrhoeic dermatitis is commonest in age group 21-25, 26-30, 31-35, 36-40 & 41-45, whereas contact dermatitis is commonest in age group 11-15 & 16-20. Atopic dermatitis is common in 0-5 and 6-10 age group (Table III)

Table III: Highest incidence of eczema in different age group

Age group (Yr)	Types of eczema	Number
0 - 5	Atopic Dermatitis	338
6 - 10	Atopic Dermatitis	132
11 - 15	Contact Dermatitis	92
16 - 20	Contact Dermatitis	189
21 - 25	Seborrhoeic Dermatitis	190
26 - 30	Seborrhoeic Dermatitis	135
31 - 35	Seborrhoeic Dermatitis	106
36 - 40	Seborrhoeic Dermatitis	110
41- 45	Seborrhoeic Dermatitis	60
46 - 50	Hand Eczema	54
51 - 55	Seborrhoeic Dermatitis	29
56 - 60	Hand Eczema	54
61 - 65	Hand Eczema	20
> 65	Lichen Simplex Chronicus	43

The number of eczema cases was higher from December to March, after which it declined to reach the lowest point in July (Figure 1). The number of cases significantly higher in winter and autumn seasons combined (from December to April) in the year.

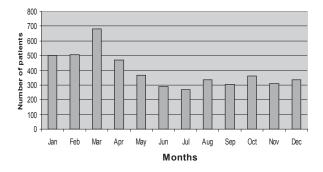


Figure 1: Monthly variation of eczema

# Discussion

Eczema is an important public health problem. A study in the UK examining the details of 6819 dermatological consultations of 3500 in a general practice from 1958

to 1985 showed that eczema patients comprised 19% of the consultations4. Our study results were somewhat higher (24.81%) than the UK. This may be due to tropical weather of this country. Certain patterns of eczema are commonly seen in particular age groups. Most cases of eczema that are seen in infants and young children are atopic in type. Discoid eczema occurs particularly in elderly males in winter, and asteatotic eczema of the legs is common among both elderly males and females<sup>5</sup>.

In an investigation of the pattern of endogenous eczema in the Northern frontier, Kingdom of Saudi Arabia, 1224 patients were studied over a three-year period from January 1991 to December 19936. Atopic eczema was the most common type of endogenous eczema, but we found seborrhoeic dermatitis is the commonest eczema. This may be due to hot and humid weather of our country in most period of the year.

In our study eczema accounted for 24.81% of dermatologic conditions, where as it was only 12.85% in Zliten, Libya7. In Zliten, contact dermatitis was highest (22.7%), in our study it was second commonest eczema (20%). In Libyan study Atopic dermatitis was 19.7%, seborrhoeic eczema 17.2% and Hand eczema in 9.1% of patients, while in our study in Faridpur, Bangladesh, the respective frequencies were 12.23%, 27.17%, and 14.18%. In our study eczema accounted for 24.81% of dermatologic conditions, in Egypt it accounted for 19.8%, and Pityriasis alba was the most common eczema (13.5%)<sup>8</sup>.

Hand dermatitis in the UK accounted for 15% of dermatologic conditions, similar to our finding (14.18%). However, in Faridpur contact dermatitis is much more common (20%) than in Ipswich, UK (12%), and the higher frequency in Faridpur could be attributed to the increase use of chemicals as fertilizer & insecticides in agriculture. Use of medically unapproved body cleansers, e.g. hair and face lotions or cosmetics of unknown brands imported from foreign countries is common, which may contributes to the increasing rate of this type of dermatitis.

## Conclusion

This hospital-based study provides some evidence that eczema is becoming a common public health problem requiring a proper strategy for care and prevention. Epidemiological studies at the community level are needed to determine the incidence and prevalence of this important skin problem in Faridpur and in other

cities of Bangladesh.

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