

STUDY ON CATARRHAL FEATURES EXPERIENCED BY UNDERGRADUATES IN THE FACULTY OF MEDICAL SCIENCES IN UNIVERSITY OF SRI JAYEWARDENEPURA

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INTRODUCTION

Catarrhal features are a common health problem in society. It is usually considered a mild disease condition in general health care practice and often not managed appropriately. The prevalence of allergic rhinitis is increasing in most countries of the world, and particularly in areas with low or medium levels of prevalence (Bousquet *et al.* 2008). The effects of allergic rhinitis /catarrh on the quality of life of individuals include impairment of day-to-day activities, which may lead to an economic burden (Bousquet *et al.* 2008).

Rhinitis is clinically defined by several common symptoms such as nasal discharge, itchy nose, eyes and palate, sneezing, nasal blockage or congestion and headache. There are three common types of rhinitis allergic, non allergic and infective rhinitis. Rhinitis symptoms can be seasonal (symptoms in peak times during the year) or perennial (year round symptoms). Catarrhal features lasting for less than four days or less than four consecutive weeks are defined as acute catarrhal symptoms and catarrhal features lasting for more than four days or more than four consecutive weeks are defined as chronic catarrhal symptoms

The aim of this study was to describe catarrhal features experienced by undergraduates in the Faculty of Medical Sciences in University of Sri Jayewardenepura.

RESEARCH METHODOLOGY

A descriptive cross sectional study was carried out in the Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka among 400 participants. The target population comprises all first year (2010/2011 batch) and fourth year (2007/2008 batch) students both male and female undergraduates in the B. Sc Nursing, B. Pharmacy, B. Sc. Medical Laboratory Sciences and Medicine courses. Few undergraduates who were lateral entrants were excluded because of the differences of age compared to direct entry undergraduates.

Data were collected within the first two weeks of October 2012 using a pre- tested self administered questionnaire developed by the investigator according to the 'Allergic rhinitis management pocket reference 2008'.

Data were analyzed using SPSS 16.0 Statistical package.

RESULTS AND DISCUSSION

In the present study, prevalence of participants experiencing catarrhal features was 68% (n=275). Among them 52.7% (n=145) were with perennial catarrhal features and 47.3% (n=130) with seasonal catarrhal features. In this study 73% (n=201) had acute catarrhal features and out of this 54.5% (n=150) were suffering from catarrhal features for a period of less than four days per week and 18.5% (n=51) had catarrhal features for less than four consecutive weeks. Only 26.9% (n=74) participants were suffering from chronic catarrhal features. Out of those 14.9% had symptoms for more than four days per week and 12% had symptoms more than four consecutive weeks

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The prevalence of catarrhal features were comparatively high in the present study when compared with studies conducted in other countries. The prevalence of rhinitis in a study done in South West London community among adults aged 16- 65 years was 24%, consisting of 3% with seasonal symptoms and 13% with perennial symptoms (Sibbald & Rink 1991). In another study done among University students in Pakistan 38% of participants reported to have allergic rhinitis (Ghazal, Musmar and Minawi, 2007).

Among participants with catarrhal features a majority 73% (n=201) had acute catarrhal features. . Most common acute catarrhal features were watery runny nose and sneezing (Table 1). Prevalence of those two was 87.3% (n=240) from all participants with catarrhal features (n=275). Only 26.9% (n=74) participants were suffering from chronic catarrhal features. These results are different from findings of research study conducted in South West London (Sibbald & Rink, 1991).

Table 2: Common catarrhal symptoms experienced by participants

Characteristics	Frequency (n= 275)	Frequency Percentage (% f)
Watery runny nose	240	87.3
Thick green or yellow color discharge from the nose	65	23.6
Sneezing (more at one time	240	87.3
Nasal obstruction		
Only one side of the nose	180	65.4
Both sides of the nose	103	37.4
Nasal itching	140	50.9
Throat itching	180	65.4
Red watery itchy eyes	101	36.7
Itchy ears	108	39.3
Thick mucus flow down the back of throat with runny nose	107	38.9
Thick mucus flow down the back of throat without runny nose	72	26.2
Fullness of throat	65	23.6
Persistent throat clearance	85	30.9
Sore throat	132	48.0
Loss of smell	99	36.0
Troublesome cough especially at night	72	26.2
Wheezing	87	31.6
Cough or wheezing after exercise	51	18.5

Table 3: Frequency of impact on daily activities

Characteristics	Frequency (n= 275)	Frequency Percentage (% f)
Sleep disturbances	192	69.8
Impairment of normal daily activities	151	54.9
Disturbances to academic activities		
Concentrating	182	66.2
Attending lectures	68	24.7
Disturbances to sports activities	71	25.8

Table 4: Frequency of predisposing factors

Characteristics	Frequency (f) (n= 275)	Frequency Percentage (% f)
Exposure to dust	223	81.1
Cleaning cob webs	173	62.9
Exposure to grass pollen	107	38.9
Exposure to animal dander	72	26.2
Strong odors	70	25.4
Pollen of flowers	31	11.3
Cigarette smoke	64	23.3
Exposure to air pollutants	120	43.6
Stress due to examinations	118	42.9
Weather changes	199	49.8

Some participants reported catarrhal symptoms associated with asthma 36 % (n= 87), wheezing 31.6% (n=72) and troublesome cough especially at night and 18.5% (n=51). Similar to many studies already conducted, the present study also showed a relationship of asthma and catarrhal features (Bousquet *et al.* 2008). And also according to the table 2 in the present study it was shown that catarrhal features interrupt daily activities and life style of the participants (Bousquet *et al.* 2008).

In the present study common predisposing factors including exposure to house dust (81.1%, n= 223), weather changes (49.8%, n= 199), strong odors 25.4 % (n=70), smoke 23.3%, (n=64) were compatible with findings of study done by Ghazal, Musmar and Minawi, (2007). Prevalence of predisposing factors except strong odors and smoke were considerably high in the present study. Findings of previous study was house dust 46.7%, strong odors 40.6 %, smoke 33.8%, weather changes 34.2%) (Ghazal, Musmar and Minawi, 2007).

CONCLUSION

There is a high prevalence of catarrhal features among undergraduates in Sri Lanka. The prevalence of seasonal catarrhal features and perennial catarrhal features were almost similar (around 50%). Acute features are common but still there is considerable percentage of undergraduates who are suffering from chronic catarrhal features. Symptoms are bothersome and affect negatively for activities of daily living and quality of life. House dust, breaking cob webs, weather changes, grass pollen, strong odors, smoke, air pollutants and stress due to examinations are common triggers for catarrhal features.

Common health problems related to catarrhal features among young adults are described in this study. The findings would be useful in preventing experiencing and exaggerations of symptoms by avoiding predisposing factors. It could also help them to cope with symptoms and motivate them to take early treatment to prevent asthmatic symptoms.

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