

A Study to Assess Knowledge Regarding Prevention of Allergic Rhinitis among Adult Patients Attending General OPD in Selected Hospitals

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Abstract: Background: Rhinitis is group of disorders characterized by inflammation and irritation of mucosa of the nose. Epidemiologic studies suggest that the prevalence of allergic rhinitis (AR) is increasing worldwide. Every year four hundred millions of people suffer from rhinitis. The cause of this increase is unknown, although some contributing factors include high concentrations of airborne allergens and pollution, less ventilation indoors, dietary factors, smoking. Objectives: 1) Assess the knowledge regarding prevention of allergic rhinitis among adult patients attending general OPD. 2) Associate the knowledge regarding prevention of allergic rhinitis among patients attending general OPD with selected demographic variables. Material and Methods: The study was conducted in selected hospitals. The research design was descriptive research design and sampling technique used was non probability convenience sampling technique in this study. Three hundred adult patients attending general OPD were selected for the study. Structured knowledge questionnaire was used to collect the data. Result: It shows that 55% had poor level of knowledge, 26.66% were having average level of knowledge and 9% were having good level of knowledge and 9.33% were having very good level of knowledge. Conclusion: The study represents that major adult patients attending general OPD had poor knowledge regarding prevention of allergic rhinitis. Hence there is a need of health education for the awareness regarding allergic rhinitis among general population.

Keywords: Knowledge; Allergic Rhinitis, Adult Patients, OPD, Selected Hospital

1. Introduction

Rhinitis is group of disorders characterized by inflammation and irritation of mucosa of the nose. It may be classified as non-allergic and allergic.¹ Mucus produced from the membrane of nasal passages is a one of the body's defense systems: Moisture from the mucus conditions the air before reaches the lungs the mucus traps small particles and bacteria which may enters the nose as a person breathes. The trapped bacteria usually don't cause harm in healthy individuals but, prolonged exposure to etiological factors may alter the normal respiratory mucosa which can lead to respiratory allergic condition namely Rhinitis, Bronchitis Asthma.²

Rhinitis involves the mucosa or lining of the upper respiratory tract whereas other disorders like bronchial asthma confined to bronchial tubules of lower respiratory system. Most People with rhinitis may experience greatest difficulty in summer season because of the environmental factors like pollens from trees, grasses, flowers that are prevalent. In many cities an official pollen count is issued every day and there with severe difficulties can avoid some trouble by staying as little as possible on high count day. Antihistamines drugs are used to contract with the nasal engorgement in rhinitis these drug counteract the effect of histamine which is one of the major substance produced by allergic reaction.³ Allergic rhinitis is caused by breathing in microscopic particles of specific allergens, airborne substances to which an individual is sensitive or allergic.

This substance is called an allergen. In most people, microscopic particles that are in the air.⁴

2. Problem Statement

A study to assess knowledge regarding prevention of allergic rhinitis among adult patients attending general OPD in selected hospitals

3. Objectives

- Assess the knowledge regarding prevention of allergic rhinitis among adult patients attending general OPD.
- Associate the knowledge regarding prevention of allergic rhinitis among patients attending general OPD with selected demographic variable.

4. Hypothesis

H0:- There is no significant knowledge about prevention of allergic rhinitis among adult patient attending general OPD with selected demographic variables.

H1:- There is a significant knowledge about prevention of allergic rhinitis among adult patient attending general OPD in selected hospital.

5. Methodology

The study was conducted in selected hospitals of Wardha city. In this study Descriptive Research Design was used.

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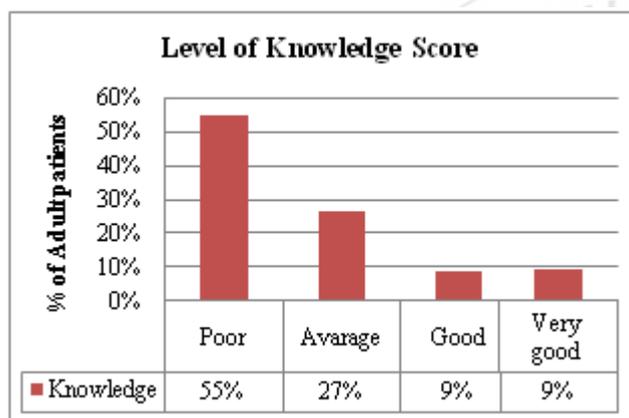
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Three hundred adult patients attending general OPD were selected for the study. Sampling technique was non probability convenience sampling technique. Inclusion criterion was patients who are willing to participate in the study and patients available at the time of study were taken. Exclusion criteria were patients who are medical personnel. Structured questionnaire were used to assess the knowledge. The level of knowledge score was seen in four levels poor, average, good and very good.

6. Results

The present study has been taken up to assess the knowledge regarding prevention of allergic rhinitis among adult patient attending general OPD in selected hospitals. Analysis and interpretation is based on the objectives of the study. A structured questionnaire to assess knowledge of adult patient attending general OPD was used for data collection. The analysis was done with the help of inferential and descriptive statistics.



Graph 1: Knowledge score of adult patients regarding allergic rhinitis

The graph no. 1 shows that (55%) had poor level of knowledge, (27%) were having average level of knowledge and (9%) were having good level of knowledge score and (9%) were having very good level of knowledge. The minimum score was 0 and the maximum score was 16, the mean score for the test was 7.94 ± 0.16 and mean percentage of knowledge was 39.7 ± 0.8 .

7. Discussion

A study to assess knowledge regarding prevention of allergic rhinitis among adult patients attending general OPD in selected hospitals. The finding of the study shows that, the mean score for the test was 7.94 ± 0.16 and mean percentage of knowledge was 39.7 ± 0.8 . The findings of the study have been discussed in terms of objectives, theoretical base and the hypothesis formulated.

The finding of the study shows that overall knowledge was Average, where there is no significant association between knowledge score and demographic variables and the patient's does not have certain attitude towards, where there is no significant association between knowledge score and demographic variable.

A community based cross sectional study was to assess the prevalence of allergic rhinitis in adults, the proportion of asthmatics among them, risk factors associated and treatment seeking behavior among the patients in Mehrauli, South Delhi among 1200 adults, aged 30 years and over selected by systematic random sampling from two randomly selected wards. A pre-tested questionnaire was used to collect information regarding symptoms, risk factors and treatment seeking behavior. Allergic Rhinitis was diagnosed as per ARIA guidelines. Spirometry was done to diagnose asthma among them. Multivariate logistic regression analysis was done to find the association of risk factors with disease. Result shows that the prevalence of Allergic Rhinitis was found to be 11% (132 subjects) and 33.3% (44 patients) among them also had asthma. Overcrowding (aOR = 6.4), absence of cross-ventilation (aOR = 2.5), occupational exposure to dust/ smoke (aOR = 2.1), tobacco smoking (aOR = 2.1), family history of allergic diseases (aOR = 2.7) and clinical allergy (aOR = 10.2) were found to be independent risk factors associated with Rhinitis. More patients of Rhinitis with asthma (75%) took treatment, relative to those without asthma (40%) who, mostly relied on home remedies (42%) or, did not seek any treatment (18%) ($P = 0.031$). The study concluded that, the burden of Allergic Rhinitis is high with a considerable overlap with asthma. These allergic diseases and emphasize the importance of early and regular treatment.⁵

A study was conducted about the increase occurrence of allergic rhinitis in developing countries. The study states that it is difficult to get a handle on the epidemiology of allergic rhinitis and the occurrence of allergic rhinitis is increasing in areas that used to have a low prevalence, such as developing countries. The study explained that it is related to the fact that those countries are adopting more western lifestyles. "More people are moving from rural, agricultural settings, which traditionally have had lower rates of allergies, to more urban settings, which have higher levels of air pollution."⁶

A study was conducted on avoidance of dust mite allergies, for controlling rhinitis among house women in USA. The study states that who purchase breathable mattress and pillowcase covers that are impermeable to dust mites, to wash bedding in hot water once a week and change the pillow case every three days showed that they could control the exposure to dust mites by 90%.⁷

8. Implications

The findings of the study have implications in nursing practice, nursing education, nursing administration and research.

Nursing Services: The finding of the study will motivate nursing personnel to improve the knowledge regarding Allergic Rhinitis.

Nursing Education: The findings can be utilized to prepare module and health education material to educate patients and their family members about prevention of allergic rhinitis. Nurse educator can educate the peripheral health worker and nursing student to improve the awareness and knowledge of people. Educators can help students, colleagues and junior

staff to be trained in dealing with patients suffering from allergic rhinitis and how to give emotional support to them and to ensure better cooperation in caring with them.

Nursing Administration: The findings of the study can be used to the Nursing Administrator in formulating plan for providing education to the patients suffering from allergic rhinitis and their family members. It will help the nursing administrator to be planned and organized and in giving continuing education to nurse and others students regarding prevention of allergic rhinitis.

Nursing Research: The findings of the study have added to the existing body of the knowledge in the nursing profession. Other researchers may utilize the suggestions and recommendations for conducting further study. The tool and technique used has added to the body of knowledge and can be used for further references.

9. Recommendations

On the basis of findings of the study, it is recommended that the following studies can be conducted

- A similar study can be undertaken for large sample to generalize the findings.
- A similar study can be conducted to assess the knowledge and attitude regarding prevention of allergic rhinitis among general population in view to develop an information booklet.
- A similar study can be conducted to assess the attitude towards allergic rhinitis among student nurses on a large population.
- A study can be undertaken to assess the effectiveness of self-instructional module on knowledge regarding prevention of allergic rhinitis among patient's attending general OPD.

10. Conclusion

A study to assess knowledge regarding prevention of allergic rhinitis among adult patients attending general OPD in selected hospitals

A descriptive study was undertaken on 300 purposively selected adult patients attending general OPD in Hospital of Wardha city, with the objective of assessing their knowledge on prevention of allergic rhinitis. Data was collected by using structured questionnaire. The objectives of the study are:

- 1) To assess the knowledge regarding prevention of allergic rhinitis in adult patients attending general OPD.
- 2) To associate knowledge score regarding prevention of allergic rhinitis among patients attending general OPD with selected demographic variables.

Data gathered was analyzed by using descriptive statistics in terms of percentage, mean and standard deviation.

Based on the objectives the data was analyzed by using various statistical tests such as frequency, percentage, mean, standard deviation, unpaired 't' test and one way analysis of variance (ANOVA). After the detailed analysis, this leads to

the following conclusion: In this research, that the knowledge level of adult patients attending general OPD reveals that 55% had poor knowledge and the 45% among them had some knowledge regarding prevention of allergic rhinitis. So, it is found that the null hypothesis and research hypothesis does not relate with the findings. But the assumption related to prevention of allergic rhinitis in patients attending general OPD is related. By using one way ANOVA and independent t-test, the outcome delivered as that the score of adult patients is associated with their age, gender, nature of living, occupation etc. It shows that overall knowledge was Average, where there is no significant association between knowledge score and demographic variables ($p > 0.05$).

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