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Prevalence, pattern and management of tonsillitis in students-an online survey

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ABSTRACT



Tonsillitis is inflammation of the tonsils, two oval-shaped pads of tissue at the back of the throat-one tonsil on each side. Signs and symptoms of tonsillitis include swollen tonsils, sore throat, difficulty swallowing and tender lymph nodes on the sides of the neck. The objective of the study is to study the prevalence of tonsillitis in adults, to evaluate which triggering factors contributes to tonsillitis and to evaluate the treatment strategy for tonsillitis. A Prospective survey will be carried out in 49 peoples using the information's gathered from students in Pharmacy colleges in Trivandrum. This study provides the prevalence of tonsillitis. Past history, medication usage, diagnosis, treatment and triggering factors was collected and analysed properly. Also response is recorded. In the current research, a survey on prevalence of tonsillitis in adults was formulated. Approximately, 77% female are affected with tonsillitis than 22.9% of male. Among the responders, 75% have tonsillitis and remaining 25% not. About 13% of patients taken self-medication, 47.8% consulting physician and 41% are taken home remedies. From this study, most of the responders were satisfied with OTC medicines and home remedies and recurrent attack of tonsillitis are increasing day by day to abolish Tonsillitis, to reduce the frequency and severity of recurrent throat infections to improve general well-being, behaviour, and educational achievement with minimal adverse effects.

Keywords: Patient; Disease; Tonsillitis.

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INTRODUCTION

Tonsillitis is infection of the parenchyma of the palatine tonsils. Recurrent severe tonsillitis results in significant morbidity, including time lost from school or work. The definition of severe recurrent tonsillitis is

arbitrary, but criteria used recently as a measure of severity were five or more episodes of true tonsillitis a year, symptoms for at least a year, and episodes that are disabling and prevent normal functioning^[6]. The tonsils are two small glands found at the back of the throat behind the tongue. The function of these glands is not entirely clear, but research suggests that they help to fight infections. The main symptoms in children and adults are sore throat, difficulty swallowing, hoarse or no voice, a high temperature of 38C or above, coughing, headache, feeling sick, earache, feeling tired^[1].

Tonsillitis can be caused by either a virus or bacteria, although most cases are viral. The incubation period is usually two to four days. Bacterial tonsillitis is typically caused by certain types of streptococcus bacteria. But not everyone who has these bacteria in their body also ends up getting tonsillitis^[2].

Tonsillitis can spread from person to person through hand contact (then touching your mouth with contaminated hands), breathing in the airborne droplets after someone with tonsillitis has sneezed or sharing the utensils or toothbrush of an infected person.

Diagnosis is commonly made on the basis of clinical symptoms and examination of the back of the throat which may reveal swollen and inflamed tonsils. However, in some cases, bacterial infection is the underlying cause and swab analysis can reveal the type and strain of bacteria and therefore the most appropriate antibiotic can be chosen.

Treatment usually involves alleviating symptoms such as pain, fever and difficulty in swallowing. Paracetamol or ibuprofen can reduce pain and fever. Adequate hydration with drinking fluids and bed rest are also important for recovery.

People with recurrent tonsillitis or chronic tonsillitis, may require surgery to remove the tonsils^[3]. Repeated acute infections may cause chronic inflammation of the tonsils, evidenced by tonsillar enlargement, repeated or persistent sore throat, and swollen lymph nodes in the neck. The treatment in this case is surgical removal (tonsillectomy)^[4].

The exacerbation of chronic tonsillitis is also sometimes called purulent tonsillitis. Exacerbation occurs in the form of bacterial or viral angina. Depending on the type of pathogen, it can be a herpetic sore throat, streptococcal or adenoviral tonsillitis^[5].

OBJECTIVE

This study is to conduct a survey based on prevalence of tonsillitis in adults in colleges of Thiruvananthapuram. The objective of this study the assess the prevalence of tonsillitis in adults.

To find out whether male and female are more prone to develop tonsillitis

To evaluate which triggering factors contributes to tonsillitis.

To evaluate the treatment strategy for tonsillitis.

METHOD

A Prospective survey will be carried out using the information's gathered from students in one of the Pharmacy college in Trivandrum. This study provides the prevalence of tonsillitis. Past history, medication usage, diagnosis, treatment and triggering factors was collected and analyzed properly. Also response is recorded. The duration of the study was 1 month, in October 2018.

An 20 item web based questionnaire was developed and employed to collect data from students at different colleges in Thiruvananthapuram. It was prepared in Google form and distributed through sending link to students through social media. Inclusion criteria are the students of Age over 18-28years and exclusion criteria are the Pregnancy, Lactation, age below 18years and age above 28years people.

Study procedure: Data collection was done with the self-filled online forms. Data were collected during the month, October 2018. Willing participants were only chosen for study. Questionnaires were filled by 50 subjects. 49 responded to the questions. The study was descriptive and data was summarized as counts and percentages.

Statistical analysis: All data collected were statistically analyzed and performed. All statistical assessments were two-tailed and the level of significance was set at $p < 0.05$.

RESULT

In the current research, a survey on prevalence of tonsillitis in adults was formulated. Approximately, 77% female are affected with tonsillitis than 22.9% of male. Among the responders, 75% have tonsillitis and remaining 25% not. About 13% of patients taken self medication, 47.8% consulting physician and 41% are taken home remedies. Tonsillitis worsened in 56.8% patients with sore throat, 31.8% ear ache, 36.4% with head ache, 6.8% with stiff neck and 40.9 have scratchy sound voice.

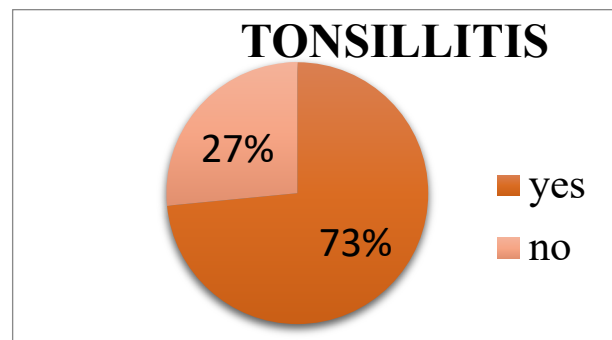


Figure 1: shows 73% have tonsillitis and 27% not

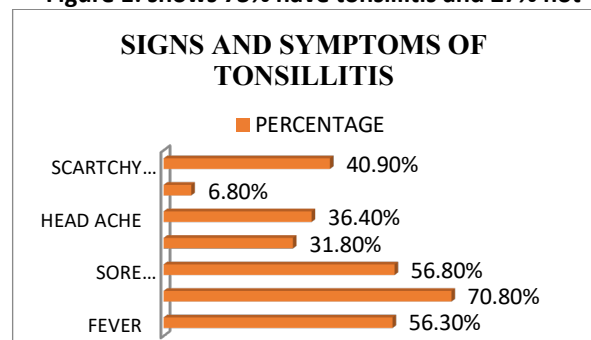


Figure 2: and symptoms of tonsillitis

DISCUSSION

In the current research, a survey on prevalence of tonsillitis in adults was formulated. About 49 responders were responded questionnaire based survey through google form. Approximately, 77% female are affected with tonsillitis than 22.9% of male. Among the responders, 75% have tonsillitis and remaining 25% not. The main signs and symptoms affected such as fever (56.3%), swallowing problem

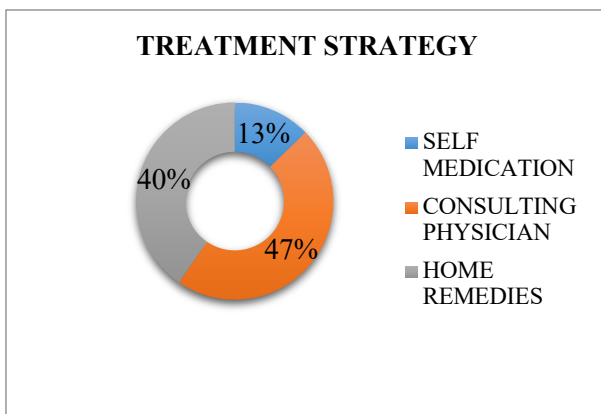


Figure 3: Treatment strategy shows 47% consulting physician, 40% home remedies and 13% self medication

The P-Value is < 0.001 . The result is significant at $p < 0.05$.

(70.8%), sore throat (56.8%), ear ache (31.8%), headache (36.4%). About 69.6% responders were consulted physician in each occasion. About 13% of patients taken self medication, 47.8% consulting physician and 41% are taken home remedies. The most commonly used OTC medicines for tonsillitis was paracetamol and home remedies used for tonsillitis treatment are rest (17%), gargle with warm salt water (85.1%), throat lozenges (17%), using humidifiers (17%). About 62.2% responders was using antibiotics and the most commonly used antibiotics are Amoxicillin-clavulanic acid (61.5%). About 88.4% responders were effectively managed by this treatment.

From this survey, most of the responders were experienced tonsillitis at least once a year and about 77.3% responders were treated tonsillitis through OTC medicines and home remedies rather than antibiotics given in hospitals. Most of the responders were experienced at least one of the symptoms such as fever and sore throat which is due to climatic changes, due to triggering factors, etc.

CONCLUSION

From this study, most of the responders were satisfied with OTC medicines and home remedies and recurrent attack of tonsillitis are increasing day by day. To abolish Tonsillitis, to reduce the frequency and severity of recurrent throat infections to improve general well-being, behavior, and educational achievement with minimal adverse effects.

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CONFLICTS OF INTEREST

The author declares no conflict of interests.

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