

Research Article

Pattern of Pharyngitis and Tonsillitis Patients at ENT Clinic of Wlingi Hospital in 2019-2021

Pola Pasien Faringitis dan Tonsilitis di Klinik THT RSUD Wlingi tahun 2019-2021

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ABSTRACT

A survey conducted by the Ministry of Health in 2010-2012 in seven provinces in Indonesia found that the number of ENT disease sufferers in Indonesia was approximately 35.6 million, or 16.8% of the total population. Pharyngitis and tonsillitis are examples of ENT cases often faced in daily practice. Both diseases indicate symptoms that resemble Covid-19, which has become a problem recently. This study aimed to analyze pharyngitis and tonsillitis patient visits at the ENT clinic of Wlingi Hospital during the Covid-19 in 2019-2021. Benefit of this study is to know pattern of pharyngitis and tonsillitis at the ENT clinic of Wlingi hospital in 2019-2021 during Covid-19 time. This research used a descriptive statistics method with an epidemiological cross-sectional design. The data in this study were secondary data from the medical records of ENT clinic patients at Wlingi Hospital and were analyzed univariately. Sampling in this study was done using the total sampling method. Based on medical record data at the ENT clinic of Wlingi Hospital in 2019-2021, there were 2292 visits in 2019, 1811 visits in 2020, and 1255 visits in 2021. Based on medical record data for pharyngitis and tonsillitis cases at the ENT clinic of Wlingi Hospital in 2019-2021, there were 247 pharyngitis and tonsillitis case visits in 2019, 114 pharyngitis and tonsillitis case visits in 2020, and 69 pharyngitis and tonsillitis case visits in 2021. There was a decrease in the number of pharyngitis and tonsillitis case visits in the ENT clinic of Wlingi Hospital during 2019-2021.

Keywords: Covid, outpatients, pharyngitis, tonsillitis

ABSTRAK

Survei yang dilakukan Kementerian Kesehatan pada tahun 2010-2012 di tujuh provinsi Indonesia menemukan bahwa jumlah penderita penyakit THT di Indonesia berkisar sebanyak 35,6 juta atau 16,8% dari keseluruhan penduduk. Faringitis dan tonsilitis merupakan contoh kasus THT yang sering ditemui di praktik sehari-hari. Kedua penyakit ini memiliki gejala yang hampir menyerupai COVID-19 yang menjadi permasalahan saat ini. Penelitian ini bertujuan untuk menganalisa kunjungan pasien faringitis dan tonsilitis di klinik THT RSUD Wlingi era Covid-19 tahun 2019-2021. Manfaat dari penelitian ini adalah mengetahui pola penyakit faringitis dan tonsilitis era Covid-19 tahun 2019-2021 di klinik THT RSUD Wlingi. Metode penelitian yang digunakan adalah deskriptif retrospektif dengan desain *cross-sectional* epidemiologi. Data yang digunakan dalam penelitian ini adalah data sekunder dari rekam medis pasien klinik THT RSUD Wlingi. Pengambilan sampel pada penelitian ini menggunakan metode total sampling. Analisis data dilakukan secara univariat. Berdasarkan data rekam medis di klinik THT RSUD Wlingi tahun 2019-2021, terdapat 2292 kunjungan di tahun 2019, 1811 kunjungan di tahun 2020, dan 1255 kunjungan di tahun 2021. Berdasarkan data rekam medis kasus faringitis dan tonsilitis di klinik THT RSUD Wlingi 2019-2021, terdapat 247 kunjungan kasus faringitis dan tonsilitis di tahun 2019, 114 kunjungan kasus faringitis dan tonsilitis di tahun 2020, dan 69 kunjungan kasus faringitis dan tonsilitis di tahun 2021. Terjadi penurunan jumlah kunjungan kasus faringitis dan tonsilitis di klinik THT RSUD Wlingi selama tahun 2019-2021.

Kata Kunci: Covid, faringitis, tonsilitis, rawat jalan

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INTRODUCTION

Ear, Nose, and Throat (ENT) diseases are often found in society and in everyday life. A survey conducted by the Ministry of Health in 2010-2012 in seven provinces in Indonesia found that the number of people with ENT disease in Indonesia was around 35.6 million, or 16.8% of the total population. The Ministry of Health of the Republic of Indonesia stated that nasal and sinus disease ranks 25th among the top 50 diseases in Indonesia ($\pm 102,817$ outpatients in hospitals) (1). Pharyngitis and tonsillitis are examples of ENT diseases often found in daily practice.

Pharyngitis is inflammation of the pharynx, (2) which is a part of the Upper Respiratory Tract Infection (URI) and is quite often found (3). The Indonesian Basic Health Research in 2018 reported that the prevalence of URI, including pharyngitis, is 9.3%. Jambi Provincial Health Office in 2016 reported that URI was included in the top 10 diseases in Jambi city (4). Bali Provincial Health Office in 2016 reported that acute pharyngitis was one of the 10 most common diseases in patients in health facilities (77,042 visits), especially in pharmacies (5). Effendi and Evelin, in their research, found that acute pharyngitis was the most common URI diagnosis, with a total of 44.23% from 104 patients at Beji Depok Health Center during the period of January-June 2019 (6).

Acute pharyngitis is the acute inflammation of the oropharynx, characterised by sore throat and pharyngeal erythema, also symptoms and signs of a bacterial cause like sudden onset of fever and anterior cervical lymphadenopathy. Acute pharyngitis is usually a self-limiting illness with an average length of illness between 1-2 weeks. Chronic pharyngitis is a persistent pharyngitis more than 12 weeks. On examination, there is increased mucus secretion which may cover pharyngeal mucosa or pharyngeal wall may be studded with reddish nodules and appears thick (7).

Tonsillitis is an inflammatory process in the palatine tonsil area and is often found in children aged 5-15 years (8). In 2012, from epidemiological data on ENT diseases in seven provinces in Indonesia, chronic tonsillitis (3.8%) had the highest prevalence after acute pharyngitis. The Indonesian Ministry of Health stated that tonsillitis in Indonesia is around 23% (9). Kendari City Health Office reported that tonsillitis was ranked 13th out of the top 20 diseases in Kendari city in 2013-2015 (10). Bogor City Health Office in 2015 reported that acute tonsillitis had a prevalence of 2.52% (11). Based on data from the ENT department of Ulin Hospital Banjarmasin in 2012, chronic tonsillitis occupies the 8th place among the top 10 ENT diseases, with 345 patient visits. In 2014, the number of chronic tonsillitis patients became 431 and was in 5th place out of 10 ENT diseases at Ulin Hospital Banjarmasin (12). Data from the medical record of the larynx pharynx subsection of the ENT Head and Neck at Dr. M. Djamil Central General Hospital Padang in 2010 showed that the incidence of tonsillitis was 465 out of 1,110 visits (13).

Acute tonsillitis is inflammation of the tonsils (Waldeyer ring). Like acute pharyngitis, acute tonsillitis characterized by sore throat, trouble swallowing, fever, and large lymph nodes around the neck. Enlargement of the tonsils found on examination. Acute tonsillitis usually goes away within 1-2 weeks. Chronic tonsillitis is a persistent tonsillitis more than 12 weeks. On examination, tonsillar crypts are full of infected cheesy material, tonsils enlargement that may

interfere with speech, deglutition, and respiration, or small tonsils with history of repeated sore throats (14).

Pharyngitis and tonsillitis generally cause throat discomfort, fatigue, and low-grade fever. Patients with moderate and severe infections usually complain of throat pain, difficulty swallowing, headache, fatigue, and fever (2,8). Both diseases have symptoms resembling the Coronavirus Disease 2019 (Covid-19), which has become a pandemic. As of February 2021, there were more than 100 million cases in 219 countries, with a total death toll of more than 2 million people (15). In Indonesia, as of July 2021, the number of Covid-19 cases was more than 2 million, and the death rate was more than 50,000 (16). In Covid-19, symptoms such as fever, cough, shortness of breath, fatigue, and muscle aches are reported (17). Covid-19 can infect all individuals in all age groups and economic statuses. Older age groups and groups with comorbidities, such as diabetes, cancer, and other chronic diseases, have a higher risk of infection (18).

Symptoms of pharyngitis and tonsillitis that are often encountered resemble those of Covid-19. Therefore, patients sometimes are afraid to have themselves checked due to fear of contracting Covid-19. Therefore, the researchers were interested in conducting research regarding the analysis of pharyngitis and tonsillitis patient visits at the ENT clinic of Wlingi Hospital in 2019-2021 during the Covid-19 time. Also, lack of data of about pharyngitis and tonsillitis pattern in Wlingi piqued authors' interest to conduct research.

METHOD

This study was a descriptive study on secondary data that aimed to analyze the visits of patients with pharyngitis and tonsillitis at the ENT clinic of Wlingi Hospital in 2019-2021.

The subjects of this study were all patients with pharyngitis and tonsillitis who visited the ENT clinic of Wlingi Hospital in 2019-2021. The data were collected in the form of examination records obtained from the medical records of patients with pharyngitis and tonsillitis who underwent examinations at the ENT clinic of Wlingi Hospital in 2019-2021. The collected data analyzed by descriptive statistics method, then processed using Microsoft Office 2016 and Microsoft Excel 2016 and presented as a distribution table with explanations arranged in narrative form and grouped according to the research objectives.

RESULTS

The results showed a gradual decrease in the number of visits at the ENT clinic of Wlingi Hospital, starting from 2267 total visits in 2019 to 1811 total visits in 2020 and 1255 total visits in 2021. The data describes a mean decrease of 506 patients per year, or 25.4%. Patient visits at the ENT clinic of Wlingi Hospital were dominated by ear disease from 2019 to 2021.

Table 1. Number of patient visits and type of disease in the ENT clinic of Wlingi Hospital in 2019-2021

Year	Total Visits	Type of Disease	Number of Visits	Percentage
2019	2267	Ear	1561	68.9%
		Nose	385	16.9%
		Throat	321	14.2%

Table 1. Number of patient visits and type of disease in the ENT clinic of Wlingi Hospital in 2019-2021

Year	Total Visits	Type of Disease	Number of Visits	Percentage
2020	1811	Ear	1434	79.2%
		Nose	234	12.9%
		Throat	143	7.9%
2021	1255	Ear	956	76.2%
		Nose	177	14.1%
		Throat	122	9.7%

Based on Table 2, the variations in pharyngitis and tonsillitis cases found in the ENT clinic of Wlingi Hospital in 2019-2021 were acute pharyngitis, chronic pharyngitis, acute tonsillitis, and chronic tonsillitis. From the data obtained, patients with acute pharyngitis visited more than those with acute tonsillitis.

Table 2. Variation of disease and number of visits by patients with pharyngitis and tonsillitis at the ENT clinic of Wlingi Hospital in 2019-2021

Disease Variation	Total visits	Number of visits		
		2019	2020	2021
Acute Pharyngitis	292	157	83	52
Chronic Pharyngitis	2	0	0	2
AcuteTonsillitis	138	90	31	17
Chronic Tonsillitis	1	1	0	0

Patients with pharyngitis who visited the ENT clinic of Wlingi Hospital in 2019-2021 were dominated by patients with an age range of 45-64 years, followed by patients with an age range of 25-44 years. Furthermore, patients with tonsillitis who visited the ENT clinic of Wlingi Hospital in 2019-2021 were dominated by patients with an age range of 5-14 years, followed by patients with an age range of 15-24 years (Table 3).

Table 3. Number of visits by patients with pharyngitis and patients with tonsillitis at the ENT clinic of Wlingi Hospital in 2019-2021 by age

Age Distribution	Total Visits	Number of visits		
		2019	2020	2021
Patients with pharyngitis:				
0 – 28 days	1	0	0	1
28 days - <1 year	0	0	0	0
1 – 4 years	14	14	0	0
5 – 14 years	36	23	10	3
15 – 24 years	29	19	7	3
25 – 44 years	79	36	16	27
45 – 64 years	112	53	39	20
>65 years	23	12	11	0
Patients with tonsillitis:				
0 – 28 days	2	1	1	0
28 days - <1 years	0	0	0	0
1 – 4 years	14	12	2	0
5 – 14 years	64	50	11	3
15 – 24 years	37	17	10	10
25 – 44 years	17	9	6	2
45 – 64 years	3	1	0	2
>65 years	2	1	1	0

Patients with pharyngitis who visited the ENT clinic of Wlingi Hospital in 2019-2021 were dominated by women, which was 62.6%. Meanwhile, patients with tonsillitis who visited the ENT clinic of Wlingi Hospital in 2019-2021 were dominated by women, which was 50.3%. This figure is slightly different from the number of male patient visits (Table 4).

Table 4. Number of visits by patients with pharyngitis and patients with tonsillitis at the ENT clinic of Wlingi Hospital in 2019-2021 by gender

Gender	Number of Visits	Percentage
Patients with pharyngitis:		
Male	110	37.4%
Female	184	62.6%
Total	294	100%
Patients with tonsillitis:		
Male	69	49.7%
Female	70	50.3%
Total	139	100%

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Meanwhile, patients with tonsillitis who visited the ENT clinic of Wlingi Hospital in 2019-2021 were dominated by women, which was 50.3%. This figure is slightly different from the number of male patient visits.

DISCUSSION

There was a decrease in the number of patient visits at the ENT clinic of Wlingi Hospital in 2019-2021; in detail, 2292 visits in 2019, 1811 visits in 2020, and 1255 visits in 2021. Research by Widiartari and Ulandari also identified a significant decrease in the implementation of health services at West Denpasar Public Health Center II in 2019-2020, which was 16.64% (19). Another study conducted at the outpatient dental service at Guntung Manggis Public Health Center, Banjarbaru City, showed a decrease in the number of visits per month, from 275 people per month before the Covid-19 pandemic to 74 people per month during the pandemic (20). Setyorini analyzed the number of patient visits at a hospital in Bangil before and during the Covid-19 pandemic in 2019-2020 and concluded that a decrease in the number of pharmacy and radiology patients was because patients were afraid to go to the hospital due to Covid-19, while an increase in the number of laboratory patients was due to the increases in rapid antibody and rapid antigen examinations (21). It can be predicted that during the Covid-19 time starting from 2019, the number of visits decreased in almost all health facilities. Puspita found a relationship between anxiety in diabetes mellitus patients and the fear of being exposed to Covid-19, which caused patients to avoid making outpatient visits to the internal medicine clinic (22). According to Azizah, several influencing factors to making outpatient visits during the Covid-19 pandemic are the completeness of facilities and the application of health protocols in health facilities, the attitude and ethics of health workers in providing services, and the ease of accessing health service information (23).

The most common types of diseases found from patient visits at the ENT outpatient clinic of Wlingi Hospital in 2019-2021 were ear diseases with a total of 68.1% in 2019, 79.2% in 2020, and 76.2% in 2021, while nose and throat diseases ranked second and third, respectively. Research conducted by Kandouw in 2015 at Prof. Dr. R.D Kandou Central General Hospital showed that throat diseases were the highest case, which was 55.97%, followed by nose diseases (38.17%) and ear diseases (5.85%) (24). It shows the differences in the findings on the types of illness among health facilities.

Acute pharyngitis in the ENT outpatient clinic of Wlingi Hospital was dominated by patients aged 25-44 years. According to Kalra, pharyngitis is very common in children aged 5 to 15 years (25). Lisni found that the percentage of pharyngitis cases in adults was 46.43%, of the 56 patients studied (26). Effendi and Evelin reported that URI cases, especially pharyngitis, were found in patients aged 17-25 years at Public Health Centers in Depok city (6). Similarly, Trisia also reported that URI cases, including pharyngitis, were found in patients aged 17-25 years at a Public Health Center in Jambi city (27). The difference between the study results and the existing theory was due to the possibility of a change in the age prevalence in cases of acute pharyngitis.

Acute tonsillitis in the ENT outpatient clinic of Wlingi Hospital was dominated by patients aged 5-24 years. According to Alasmari, tonsillitis can occur at any age but is most commonly found in children aged 5 to 15 years (28). Research by Abraham in 2019 showed that acute tonsillitis cases at Dar es Salaam National Hospital Tanzania were mainly found in children aged 1-10 years (29). This study's findings align with other theories and research conducted.

Sari mentioned that pharyngitis was not influenced by gender (30), but a study by Trilana in 2013 showed that

pharyngitis was more common in males (31). From the research results, patients with pharyngitis who visited the ENT outpatient clinic at Wlingi Hospital were dominated by females (62.6%). Pontin, in his research, stated that tonsillitis was not influenced by gender (32), but a study conducted by Priyanka in 2019 showed that tonsillitis cases were more common in males (33). From the research results, patients with tonsillitis who visited the ENT clinic of Wlingi Hospital were also dominated by females (50.3%), showing a slightly different percentage compared to the males. These two findings differ from the results of several other studies, but from the theory obtained, there is no significant difference between pharyngitis and tonsillitis related to gender.

According to Renner, there are several non-infectious and environmental causes of sore throat, such as smoking, shouting, and smoke inhalation (using firewood or burning trash) (34). There is lack of data about smoking in Wlingi (districts of Blitar), but there are several studies conducted in city of Blitar. A study conducted by Qoni in 2022 showed that the smoking behaviour of 52.6% subjects in city of Blitar is included in the category of high (35). Sunariato, in his research, stated that there was a relationship between age and smoking behaviour from Blitar motorcycle club (36). These findings may contribute to number of visits at the ENT outpatient clinic of Wlingi.

The results of this study confirm a decrease in the number of visits at the ENT outpatient clinic of Wlingi Hospital in 2019-2021, that the most common disease was ear disease. Patients with pharyngitis who visited the ENT outpatient clinic of Wlingi Hospital in 2019-2021 were dominated by patients with an age range of 25-44 years, while tonsillitis was dominated by patients with an age range of 5-24 years. Patients with pharyngitis and tonsillitis who visited the ENT outpatient clinic at Wlingi Hospital in 2019-2021 were dominated by females.

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