



# NUMBER PATIENT VISITS OF OTORHINOLARYNGOLOGICAL HEAD AND NECK SURGERY AT HASAN SADIKIN HOSPITAL DURING COVID-19 PANDEMIC

*Rana Mufidah Raydian, Wijana*

Departemen Telinga Hidung Tenggorok Bedah Kepala dan Leher, Fakultas Kedokteran, Universitas  
Padjadjaran, Rumah Sakit Dr. Hasan Sadikin Bandung

## ABSTRACT

**Background:** Otorhinolaryngology head and neck surgery (ORL-HNS) can cause symptoms similar to COVID-19. During the COVID-19 pandemic, many ENT-HNS patients were reluctant to take ENT-HNS-related complaints to the hospital due to negative stigma, advice to stay at home, and fear of misinformation about COVID-19 among patients with COVID-19. Therefore, the purpose of this study is to determine the visits and diseases of ENT-HNS patients at Hasan Sadikin General Hospital in Bandung during the COVID-19 pandemic.

**Methods:** This study uses a retrospective descriptive method. The data taken are secondary data from the medical record of the patient in the outpatient clinic, emergency clinic and hospital ORL-HNS RSUP Dr. Hasan Sadikin Bandung 04/01/2020 to 31/04/2022.

**Results:** Between April 1, 2020 and April 31, 2022, there were 1,551 patient visits, 702 emergency department visits, and 17,776 outpatient visits at Hasan Sadikin General Hospital Bandung ORL-HNS. When diagnosed with ENT-HNS patients, most of them receive chemotherapy for malignancy. At the same time, upper airway obstruction was the most frequently diagnosed ENT-HNS emergency patient. The largest number of visits to the ORL-HNS polyclinic was for head and neck surgery

**Conclusion:** the number of ENT-HNS visits in hospital, emergency room and outpatient care decreased in 2020-2022 compared to 2018-2020.

## INTRODUCTION

The first case of Corona Virus Disease 2019 (COVID-19) was detected in China at the end of 2019. <sup>1</sup> The disease then spread so rapidly and globally that in 2020 the World Health Organization (WHO) declared COVID-19 a pandemic and the Indonesian government declared a public health emergency due to the 2019 coronavirus disease (COVID-19). <sup>1,2</sup> One of the government's efforts to stop the spread of the COVID-19 virus is to encourage people to always stay at home and not go to the hospital unless there is an urgent need. The purpose of this appeal is to maintain social distance and avoid mass gatherings. Otorhinolaryngology head and neck surgery (ORL-HNS) is a group of diseases that people often suffer from. Many complaints of patients with ENT-HNS overlap with symptoms of COVID-19. <sup>4,5</sup> That people would hesitate to investigate complaints related to ENT-HNS. This is because there is a negative stigma attached to patients suspected of being infected with COVID-19. Along with the government's call to stay at home and the fear and anxiety, people feel when they have to leave their homes. The hospital itself was limited in terms of poly and surgical procedures as available resources were diverted to deal with COVID-19. <sup>6</sup> Central Hospital (RSUP). Dr. Hasan Sadiki Bandung is one of the main referral points

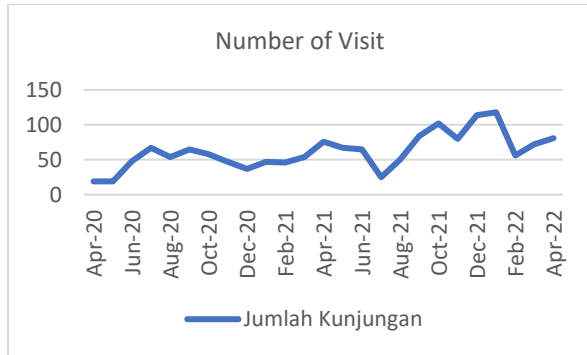
for patients with COVID-19. However, the presence of stigma and misinformation creates a reluctance to investigate ENT-HNS-related complaints in the hospital, although the hospital has made changes in facilities and services in line with health practices. This led the researchers to identify patient visits and ENT-HNS diseases at the Bandung Hasan Sadikin General Hospital during the pandemic, i.e. from April 2020 to April 2022.

## METHODS

This study uses a retrospective descriptive method. The data taken are secondary data from patient medical records of Poli, emergency and outpatient ORL-HNS RSUP Dr. Hasan Sadiki in Bandung between 04.01.2020 and 31.04.2022. The research sample was obtained using general sampling technique. and met the inclusion criteria. Inclusion criteria were patients who visited Hasan Sadikin General Hospital Bandung Polyclinic, Emergency Clinic and Polyclinic, Emergency Outpatient Clinic and Outpatient from April 1, 2020 to April 31, 2022. This study assessed the number of patient visits and the type of illness. The disease type of the patient was determined based on the disease diagnosed in the medical history.

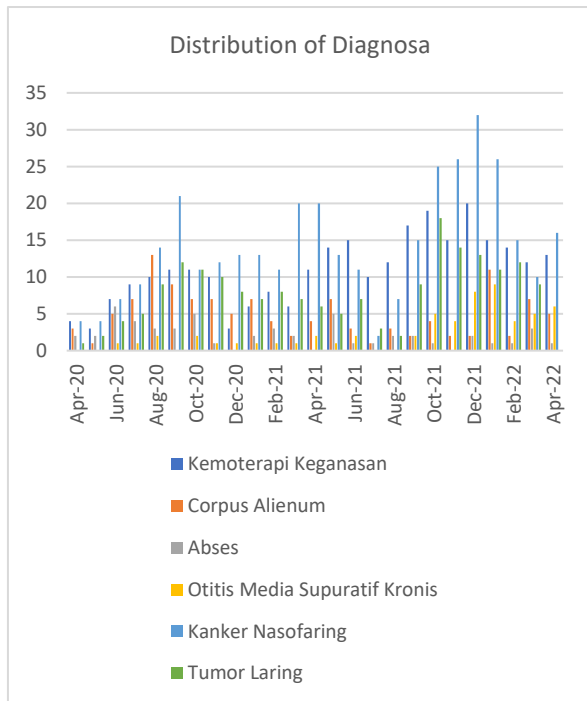
**RESULTS**

During the period April 1 2020 to April 31 2022 at ORL-HNS at Hasan Sadikin General Hospital Bandung there were 1551 inpatient visits, 702 T ORL-HNS emergency patient visits, and 17,776 outpatient visits. The lowest number of inpatient visits was obtained in April 2020, namely only 19 visits, while January 2022 had the highest number of inpatient visits, namely 118 of the total number of visits per month during the April 2020-April 2022 period (Graph 1)



Graph 1. Distribution of the number of ORL-HNS Inpatient Visits from April 2020 to April 2022

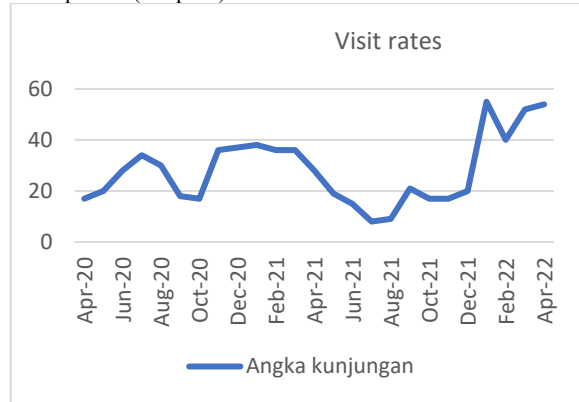
The most frequent diagnoses of ORL-HNS inpatients from April 2020 to April 2022 were malignancy chemotherapy followed by corpus alienum, head and neck abscess, chronic suppurative otitis media and malignancy at ORL-HNS (Graph 2). The most common diagnosis in inpatients during the study period was malignancy in the ORL-HNS field (Graph 2).



Graph 2 Distribution of ORL-HNS inpatient diagnoses from April 2020 to April 2022

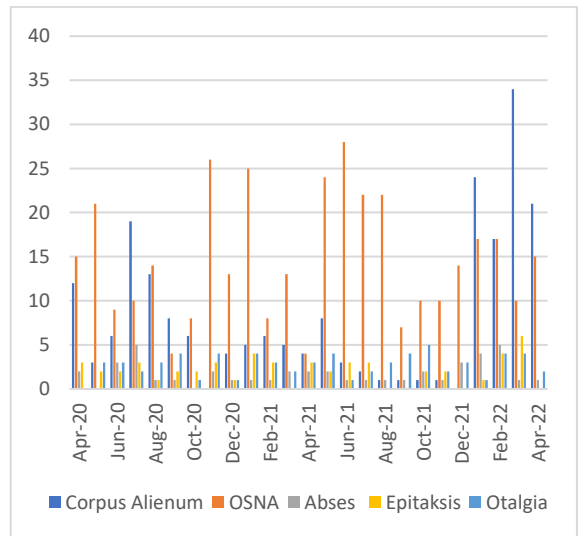
The number of ORL-HNS emergency room visits in April 2020-April 2022 is 702 patients. In April 2020 the number of ORL-HNS emergency room visits was 17 patients,

which was the lowest number of visits during the second quarter of 2020 (Graph 3). And in the 3rd trimester of 2021, namely July, it shows the lowest number in 2021, namely at number 8 visits of ORL-HNS Emergency Room patients, this number is also the lowest number of ORL-HNS IG patient visits throughout the April 2020-April 2022 period (Graph 3).



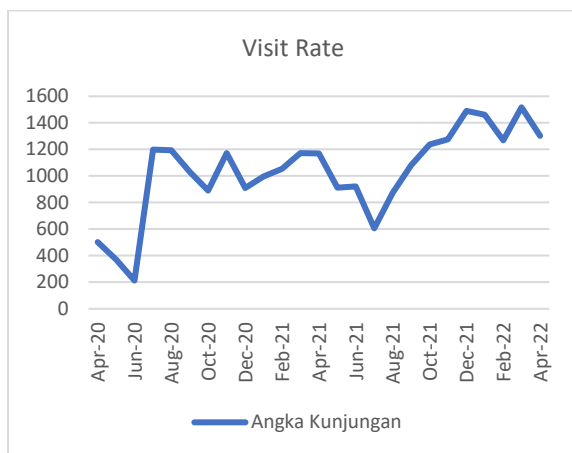
Graph 3. Distribution of ORL-HNS Emergency Room Visit Rates from April 2020 to April 2022.

The most frequent patient diagnoses at the ORL-HNS ED from April 2020 to April 2022 were Upper Airway Obstruction with a total of 366 visits, followed by corpus alienum with 204 cases, Otaglia 68, and the lowest was epitaxy with 52 cases (Graph 4).



Graph 4. Distribution of ORL-HNS emergency room diagnoses from April 2020 to April 2022

The number of ORL-HNS Poly patient visits from April 2020 to April 2022 was 17,776 visits. The lowest number of visits was found in the second trimester of 2020, namely 213 visits (Graph 5)



Graph 5. Distribution of ORL-HNS Outpatient Visit Rates from April 2020 to April 2022

The highest number of patient visits to the ORL-HNS Polyclinic was the Head and Neck Surgical Oncology Polyclinic with 11,872 visits from April 2020 to April 2022, followed by the otology polyclinic with 2,780 visits, the audiology-vestibular polyclinic with 1,865 visits and the rhinology-allergy polyclinic with 1,259 visits (Graph 6).

## DISCUSSION

The number of inpatient visits in April 2020 reached the lowest number compared to all the visits per month during the study period, namely 19 visits because the COVID-19 outbreak had entered Indonesia, which caused people to start to panic and reduce their visits to the hospital. During the Large-Scale Social Restrictions (PSBB) period from June 2020 to May 2021, the number of visits fluctuated. During this period of restriction, health service facilities also reduced health services for general patients (non-COVID-19 patients) and focused more on treating COVID-19 patients.<sup>6</sup> By a study by Grag et al. that a pandemic causes patients with surgery plans that don't have urgency to be postponed first to reduce the risk of transmission in health facilities so that the number of hospitalizations decreases<sup>7</sup>. From the results of this study, it was found that the highest number of ORL-HNS inpatient visits from April 2020 to April 2022 were patients with chemotherapy for malignancies in the ORL-HNS field because these patients had already received a schedule and were required to complete their chemotherapy cycle even during a pandemic.

There was a decrease in the number of visits to the ORL-HNS Emergency Room during the April 2020 - April 2022 period. This was due to the public's fear of visiting the Emergency Room, namely fear of contracting disease in the Emergency Room or fear of being diagnosed as a suspected COVID-19 and being treated in an isolation room due to patients with ORL-HNS symptoms overlap with symptoms of COVID-19. So the number of patients treated in the emergency room decreased. However, for emergency cases that cannot be postponed, the patient will still come to the emergency room, as in the case of OSNA, which is the most frequently visited disease in the ORL-HNS. In contrast to the number of emergency room visits and hospitalizations, the lowest number of outpatient visits was found in June 2020 because the new PSBB was enacted in June 2020 and at the start of the pandemic,

namely April and May 2020, many patients chose to continue visiting the ORL-HNS Poly (outpatient) because they already have a control schedule which is usually obtained 1 month in advance. The ORL-HNS malignancy case remains the highest number of visits because malignancy cases that are left unchecked will become more severe plus malignancy cases are often accompanied by chemotherapy appointments and scheduling and monitoring and evaluation of the results of supporting examinations so that the visit does not have too much of an impact during a pandemic. This is in line with the guidelines issued by the American Academy of Otolaryngology-Head and Neck Surgery (AAO-HNS) which makes patients with malignancy a priority for surgery.

The Indonesian Association of T.H.T.K.L Specialists (PERHATI-KL) recommends limiting activities in the field of ORL-HNS to reduce contact. It is recommended that the focus of ORL-HNS services should be directed at emergency services by reducing or even stopping elective services, to provide sufficient medical personnel for the service of COVID-19 patients with a fairly high spike rate of COVID-19. the highest road because the rate of malignancy in the field of ORL-HNS is the highest contributor to the number of diseases in the field of ORL-HNS RS Dr. Hasan Sadikin Bandung. The conclusion is when compared to the number of ORL-HNS Inpatient visits from 2018 to 2020, there has been a 40% decrease in ORL-HNS patients from April 2020 to April 2022. Where the lowest number of visits was in April 2020, namely 19 visits, and the highest in January 2022 i.e. 118 visits with a diagnosis of the highest number of visits being chemotherapy for malignancy ORL-HNS. Then, the number of ORL-HNS Emergency Room patient visits from April 2020 to April 2022 also decreased by 54% when compared to 2018 to 2020. The lowest visit rate was in July 2021 with 8 visits and the highest was in January 2022, namely 38 visits with OSNA being the highest diagnosis. And the number of ORL-HNS outpatient visits also decreased from April 2020 to April 2022 by 35% when compared to 2018 to 2020. The lowest number of polyclinic visits was in June 2020 with 213 visits and the highest in March 2022, namely 1517 visits with the highest number of visits to the Head and Neck Surgical Oncology Polyclinic.

## BIBLIOGRAPHY

1. WHO. Listings of WHO's response to COVID-19 [Internet]. 2020 [cited 2022 Sep 30]. Available from: <https://www.who.int/news/item/29-06-2020-covidtimeline>
2. Presiden Republik Indonesia. Keputusan Presiden Republik Indonesia Nomor 11 Tahun 2020 Tentang Penetapan Kedaruratan Kesehatan Masyarakat Corona Virus Disease 2019 (COVID- 19). 2020.
3. Menteri Kesehatan Republik Indonesia. Keputusan Menteri Kesehatan Republik Indonesia Nomor Hk.01.07/Menkes/413/2020 Tentang Pedoman Pencegahan Dan Pengendalian Coronavirus Disease 2019 (COVID-19).
4. Shereen MA, Khan S, Kazmi A, Bashir N, Siddique R. COVID-19 infection: Origin,

- 38 R. M. Raydian and Wijana transmission, and characteristics of human coronaviruses. Vol. 24, Journal of Advanced Research. Elsevier B.V.; 2020. Hal. 91–8.
5. Savtale S, Prashant Hippargekar, Sudhir Bhise, Shankar Kothule . Prevalence of Otorhinolaryngological Symptoms in Covid-19 Patients. Indian Journal of Otolaryngology and Head & Neck Surgery [Internet]. 2020; Available from: <https://doi.org/10.1007/s12070-021-02410-5>
6. PERHATI-KL. Buku Pedoman THTKL Selama Pandemi COVID - 19. Prof. Dr. Jenny Bashiruddin SpTHTKL, dr. Soekirman Soekin SpTHTKLMKes, dr. Marlinda Adham SpTHTKLPhD, F, Dr. dr. Yussy Afriani Dewi SpTHTKLMKes, F, editors. Vol. 1. PERHATI-KL; 2020.
7. Grag K, Kumar Shubhanshu. Effect of Covid-19 in Otorhinolaryngology Practice: A Review. Indian Journal of Otolaryngology and Head and Neck Surgery. 2020
8. Guidance for Return to Practice for Otolaryngology-Head and Neck Surgery Part Two [Internet]. Available from: <http://tiny.cc/ENTGuidance>

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

