Internship Training

At

Dr Rao's ENT Super Speciality International Hospital, Hyderabad

'Assessment of Knowledge, Treatment Adherence, and Satisfaction Among Participants of ENT Health Camps: A Descriptive Study'

By

Harshavardhan Chettikindi

PG/23/037

Under the guidance of

Dr. Anandhi Ramachandran

PGDM (Hospital and Health Management)

2023-2025

International Institute of Health Management Research, New Delhi

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Date: **27.06.2025**

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Mr. Chettikindi Harshavardhan** bearing Emp ID: RESS-00892 has completed his Internship in **Dr. RAO'S ENT SUPER SPECIALITY INTERNATIONAL HOSPITAL** KPHB Hyderabad as **"Intern- Operations(MD Office)"** from 27.02.2025 To 27.06.2025.

Dr. Rao's ENT Super Speciality International Hospital is a 100 bedded ENT Super Speciality Hospital has been born of a vision of creating a truly global-standard ENT research, training and healthcare institution that brings the finest and the latest ENT healthcare to everyone. Rao's ENT care is one of the largest, advanced and best ENT service providing hospital in India

During his tenure his character was found good and satisfactory.

We wish him the very best in his future endeavours.

Dr. Rao's ENT Hospitals LLP HR KPHB, Hyd-72.

Mr. K. GANESH

MANAGER-HR

TO WHOMSOEVER IT MAY CONCERN

This is to certify that HARSHAVARDHAN CHETTIKINDI student of PGDM (Hospital & Health Management) from International Institute of Health Management Research, New Delhi has undergone internship training at DR RAO'S ENT SUPER SPECIALITY INTERNATIONAL HOSPITAL HYDERABAD from 27/02/2025 to 27/06/2025.

The Candidate has successfully carried out the study designated to him during internship training and his/her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish him all success in all his/her future endeavors.

Dr. Sumesh Kumar
Associate Dean, Academic and Student Affairs
IIHMR, New Delhi

Mentor
IIHMR, New Delhi

Dissertation Writing

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Certificate of Approval

The following dissertation titled **Assessment of knowledge, Treatment Adherence, and Satisfaction Among Participants of ENT Health Camps a Descriptive Study** at **DR Rao's ENT Super Specialty International Hospital KPHB 3rd phase, Hyderabad.** is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **PGDM (Hospital & Health Management)** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name DR PUNIT YADAV

Signature

Rahul Khandelwal

Dr Divya Aggarwal

Certificate from Dissertation Advisory Committee

This is to certify that **Mr. HARSHAVARDHAN CHETTIKINDI,** a graduate student of the **PGDM (Hospital & Health Management)** has worked under our guidance and supervision. He is submitting this dissertation titled "**Assessment of knowledge, Treatment Adherence, and Satisfaction Among Participants of ENT Health Camps a Descriptive Study** at **DR Rao's ENT Super Specialty International Hospital"** in partial fulfillment of the requirements for the award of the **PGDM (Hospital & Health Management).**

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

Institute Mentor Name: Dr. Anandhi
Designation: Professor
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Designation: Consultant
Organization: Dr Rao's ENT Hospital

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH, NEW DELHI

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **Assessment of knowledge, Treatment Adherence, and Satisfaction Among Participants of ENT Health Camps a Descriptive Study** and submitted by HARSHAVARDHAN CHETTIKINDI Enrollment No. PG/23/037 under the supervision of Dr. Anandhi for award of PGDM (Hospital & Health Management) of the Institute carried out during the period from 2023 to 2025 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

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Harshavardhan Chettikindi.

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CERTIFICATE ON PLAGIARISM CHECK

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Title of the Dissertation/Summer Assignment	Assessment of Knowledge, Treatment Adherence, and Satisfaction Among Participants of ENT Health Camps: A Descriptive Study		
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Annexure F

FEEDBACK FORM

Name of the Student: Harshavardhan

Name of the Organisation in Which Dissertation Has Been Completed:
Dr. RAO's ENT International Hospital

Area of Dissertation: Hyderabad

Attendance: 100%.

Objectives achieved: Yes

Deliverables: Insurance audit, Insurance reconcillation, hospital sales tracker.

Strengths: hard working, focused, communication

Suggestions for Improvement: NA

Suggestions for Institute (course curriculum, industry interaction, placement, alumni):
NA

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Date: 10/6/2025
Place: Hyderabad

ACKNOWLEDGEMENT

I received a lot of advice and assistance from these folks, whose help was crucial to the project's success. I could not have accomplished anything without this advice and assistance. They assisted me in this undertaking, for which I am grateful.

I would like to take this opportunity to thank the Dr Rao's ENT Super Speciality International Hospital Kukatpally, Hyderabad Mr. Manivanan (Business advisor) and Miss. Shobiya (Consultant Health care Expertise) Miss. Prarthita (MD Office Manager) Hardik Sharma (Senior Executive) for their genuine interest in the project and willingness to share their opinions despite their extremely busy schedules. I would like to thank Marketing Department for their support. I consider it a privilege to have worked in, Dr Rao's ENT Super Speciality International Hospital Kukatpally, Hyderabad under their skilled leadership. The entire staff at Dr, Rao's Hospital deserves my sincere thanks and obligation for their outstanding support and assistance during the entire operation.

My sincere appreciation is extended to Dr ANANDHI RAMACHANDRAN (PROFFESOR) Furthermore, I would like to thank IIHMR for giving me the opportunity. I owe a debt of appreciation to Ms ANJU SEHRAWAT (PLACEMENT) for allowing me to work on this research and for providing me with all the guidance and support necessary to complete the project on "**Assessment of Knowledge, Treatment Adherence, and Satisfaction Among Participants of ENT Health Camps: A Descriptive Study**." I owe her a debt of appreciation for her helpful advice and guidance. First and foremost, this big task cannot be completed without my friends and loved one.

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ABBREVIATIONS

OPD	Outpatient department
IPD	In patient department
OT	Operation theatre
ICU	Intensive care unit
ENT	Ear Nose Thraot
CT	Computed tomography
WHO	World health organisation
NPPCD	National Programme for Prevention and Control of Deafness
NICU	Neonatal intensive care unit

ABOUT DR RAO'S ENT HOSPITAL

Dr. Rao's ENT Super Speciality International Hospital is the first of its kind, state of the art training and healthcare institution that brings the latest ENT treatment solutions for everyone. Dr. Rao's ENT Super Speciality International Hospital offers groundbreaking healthcare services, carrying forth the vision of creating a truly global standard entity in the ENT care.

Spread at an expanse of 47,000 square feet at the prime location of KPHB, Hyderabad, Dr. Rao's ENT Super Speciality International Hospital is India's largest and best equipped ENT Super Speciality Hospital. Offering best ENT services in Hyderabad, the hospital's design and construction is NABH compliant to ensure maximum safety against potential manmade and natural incidents.

Dr. Rao's ENT Super Speciality International Hospital offers comprehensive ENT care services with evening and Sunday OPDs for added convenience. The ENT specialities available here cover an entire spectrum and include Otology, Audiology, Cochlear Implantation, Skull-Base Surgery, Rhinology, Allergy, Phonosurgery, Speech and Swallowing surgeries, Snoring and Sleep Apnoea Surgery, Rhinoplasty and Facial Plastic Surgery, and Head and Neck Surgery. The hospital is equipped with most modern equipment and gadgets that are at par with the best in the world. Dr. Rao's ENT Super Speciality International Hospital has a team of highly qualified doctors, surgeons, and paramedics who understand the value of providing quality healthcare with empathy for the patients and their caregivers. The hospital also invites leading ENT surgeons from other countries for consultations, lectures and training workshops for doctors from India and abroad as part of its CME initiatives.

The hospital is founded and headed by India's eminent ENT surgeon, Dr. G. V. S. Rao whose professional experience stretches over 30 years and who has featured in The Limca Book of World Records for completing 20 Tympanomastoid ear surgeries in 12 hours. Dr. Rao is renowned for mentoring and training young ENT surgeons, conducting mass awareness programmes and free check up camps, providing expert answers to ENT-related queries in leading publications, lecturing at national and international ENT forums, and making meaningful contribution to research and training of ENT medicine.

Vision

To contribute to build a healthier community, nation and world by facilitating premier ENT healthcare that is accessible to all

Mission

To adhere to courtesy, compassion and commitment and integrate cutting-edge ENT medical care for the greater good of humanity.

Values

Excellence

Always prepared to go the extra mile, and offer nothing less than the best to each of our patients; we strive to reach excellence by surpassing patrons expectations while adding value to each of our services

Nobility

An essential virtue that keeps us humble, wise and committed and ever so determined to maintain transparency for all who depend on us

Trustworthiness

With a strong foundation of integrity and sincerity, we adopt a transparent, inclusive and flexible approach, even as we nourish our spirit of continuous learning that enables us to enrich and enhance our service delivery to care seekers

Our ultra modern seven floored complex houses:

- Centrally air conditioned 100 beds facility
- 7 OPDs, 3 OTs
- Multiple high end amenities
- Examination rooms with laminar air flow
- Pharmacy, Casualty
- Radiology, Pathology
- Specialised ICU

- Multiple specialist labs
- Suites and Deluxe rooms, Cafeteria
- Ample car parking
- Exhaustive staff library
- Dining rooms
- Separate lounges for doctors and paramedics
- Two exclusive dormitories for the guests
- 2 auditoriums with a combined seating capacity of 150 connected to OTs through audio visual transmission.

Round the Clock ENT Care Services

Dr. Rao's ENT Super Speciality International Hospital offers the following ENT Specialties:

- Otology
- Audiology
- Cochlear Implantation
- Rhinology
- Allergy
- Phonosurgery
- Snoring and Sleep Apnoea Surgery
- Rhinoplasty
- Facial Plastic Surgery
- Skull Base Surgery
- Speech and Swallowing Surgeries
- Head and Neck Surgery

Key Activities Undertaken

1. Created insurance audit checklists and templates for auditing of insurance bills.
2. Completed insurance audits for Star Health, Medi assist, Care Health, FHPL, and GHPL, preparing detailed audit reports with clear findings and recommendations.
3. Completed insurance reconciliation processes from April 2024 to March 2025, checking claim settlements, TDS calculations, and payment accuracy.
4. Built a marketing tracker to monitor campaigns, referrals, and conversion rates across different areas
5. Cordinated in the budget planning FY 25-26. Collecting the data opd, ipd, branches data, P&L statementsFY24-25. Created detailed analysis of indirect expenses for FY 24-25 to determine percentage allocation and support better budget management.
6. Coordinated in implementation of Shivam software and also coordinated between departments to fix Shivam software issues and improve daily operations.
7. Worked with marketing team on branding initiatives including RBC hoarding, traffic booths, and backlights to increase hospital visibility and also a marketing team planning Hierarchy.
8. Worked on pharmacy consumption Audit.

Introduction

Ear, Nose, and Throat (ENT) disorders make up a considerable part of the global disease burden and are frequently overlooked, even though they are common and significantly affect quality of life. These disorders encompass a variety of conditions, including ear infections, hearing impairment, sinusitis, nasal polyps, throat infections, and voice issues. The World Health Organization (WHO) reports that more than 430 million individuals around the globe need rehabilitation for their hearing loss, a figure projected to exceed 700 million by 2050 without intervention. In India, approximately 6.3% of the population experiences considerable hearing loss, and ENT-related issues account for about 7%–8% of outpatient visits in general hospitals.

Acute otitis media, chronic suppurative otitis media, allergic rhinitis, and pharyngitis are frequently seen conditions in both primary and secondary healthcare environments. Failure to achieve timely diagnosis and proper treatment may result in complications like lasting hearing impairment, challenges in communication, and decreased productivity. Although these conditions are quite prevalent, ENT services are primarily available in tertiary care facilities, which can be difficult for rural or economically disadvantaged communities to access.

Ear, Nose, and Throat (ENT) disorders, commonly referred to as otolaryngologic conditions, encompass a broad spectrum of ailments that impact the ear, nose, and throat regions. These disorders rank among the leading causes for patients seeking care in emergency rooms. They also represent a significant percentage of referrals from general practitioners and other healthcare professionals, with almost one out of every ten primary care consultations involving ENT issues.

ENT conditions can profoundly affect numerous essential body functions, such as hearing, speech, taste, smell, respiration, swallowing, voice production, and the body's ability to clear mucus naturally. Additionally, they are crucial for safeguarding the lower respiratory system. Thus, having a thorough understanding of ENT disorders is vital for both general and specialized healthcare providers**.**

Community-oriented health camps act as valuable outreach mechanisms to close the gap in healthcare access. These camps offer chances for early detection, immediate management or referrals, and patient education. Health camps centered on ENT care can meet both the medical and educational requirements of the community by delivering services directly to those in need.

The Government of India has introduced the National Programme for Prevention and Control of Deafness (NPPCD) with the objective of diminishing the prevalence of hearing impairment through prompt identification, diagnosis, and treatment. Nonetheless, a significant hurdle persists in accessing remote and economically underprivileged regions. Community-based ENT health camps are essential in addressing this issue by providing outreach services to groups with restricted access to advanced healthcare.

Importance and Rationale for the Study

The current healthcare delivery system in India is often challenged by uneven distribution of specialists, lack of awareness among the population, and barriers to accessing hospital-based care. As ENT conditions often present with mild or non-specific symptoms, many individuals delay seeking care until complications arise. In this context, ENT health camps organized by super specialty hospitals like Dr. Rao's ENT Super Specialty Hospital play a crucial role in promoting awareness and providing timely care.

The rationale for this study stems from the need to systematically assess the impact of these camps on early diagnosis and treatment initiation, as well as to evaluate patient awareness, satisfaction, and adherence to follow-up care. Moreover, understanding the effectiveness of marketing strategies used to promote these camps can help improve outreach and participation in future programs.

There is currently limited research available on the measurable impact of ENT camps on public health outcomes, especially in the Indian context. This study aims to fill that gap by providing evidence-based insights into how community-based ENT interventions can contribute to better health outcomes, reduce the burden on tertiary care centers, and enhance community trust in healthcare services.

By assessing patient perceptions, knowledge, and satisfaction levels before and after attending these camps, and tracking their adherence to follow-up and treatment, this study hopes to generate valuable data for both academic and policy-making purposes. The results can also help in strengthening community-based strategies for ENT care and support the scaling up of such initiatives across other regions.

A recent study by Patel et al. (2023) in tribal Gujarat demonstrated that over 30% of attendees at ENT health camps had never previously sought medical attention for persistent symptoms, indicating both a lack of awareness and access. ENT health camps provide not only treatment

but also create opportunities for health education, screening, and referral, which are crucial for managing chronic conditions and preventing complications. Moreover, these camps can enhance community trust and perception of healthcare institutions, which may lead to improved follow-up and adherence to treatment.

REVIEW OF LITERATURE

A cross-sectional study by **Sagar Maharjan, MSa, Rohit Shrestha, MSa, Pramit R. Shrestha, MBBSb, Suyash Acharya, MBBSb, Sushant K. Khadka, MSb, Sangharsha Thapa, MSb, and Aashutosh Chaudhary, MBBS (2024)** A health camp is a transient medical intervention, either mobile or static, carried out for specific groups in the community in order to give community members access to medical examinations and medications. A particular demographic of individuals is the subject of in-depth evaluations and, as a result, improved outcomes at a specialized health camp. From 2016 to 2019, this was a retrospective cross-sectional investigation. The pro forma's recorded data was saved in an Excel spreadsheet, which was later analyzed using SPSS 16.0. The study focused on analyzing the main complaints as well as other pertinent demographic information. The average age of the 1554 patients treated was 49.9 years old. Knee discomfort was the most prevalent complaint, occurring 544 times (35.00%), followed by back pain, which occurred 513 times (33.01%). In conclusion, a community benefits from a specialized health camp since it leads to early disease diagnosis and treatment. People from rural communities are also more aware as a result of it**.**

A community-based observational study conducted by **Muralidhar Parthasarathy, Deepti Mishra, Aruna Prabhu, Sunitha Jayarani, and Gowsika Palanivel (2024)**. Considering accessibility and outreach, this study compares the effects of community-based screening camps to hospital-based screening in the setting of a district-level hospital. To compare the screening and awareness offered during community-based screening camps with hospital-based screenings, a comparative study was carried out at Thangam Hospital in Namakkal. Raising awareness about breast cancer, demonstrating self-breast examinations, and providing clinical assessments are all part of these camps, which employ mobile devices. The study found that community-based screening camps greatly enhanced screening coverage, particularly in rural locations. Community-based screening programs are shown to be viable by the fact that the two approaches have similar cancer detection rates. Furthermore, these camps had greater patient satisfaction, which may have led to greater engagement in subsequent screenings. In district-level healthcare environments in India, community-based screening camps have proven to be a promising approach for improving the accessibility of breast cancer screening while maintaining detection effectiveness. Highlighting the value of community-centric healthcare programs for efficient breast cancer management in resource-constrained settings, these camps provide a more welcoming and inclusive strategy.

Eye Camp and Its Effects on Patients and the Community, by **Salman Ahmed Taher Hamid a*, Md. Mahmudul Hasan a, and Imtiaj Hossain Chowdhury (2024)**. In underprivileged communities, eye camps are essential for improving eye health. The organizers of eye camps carefully organize, advertise, and deliver a full range of eye care services, covering prevalent ailments and providing health education. Better access, early detection, and treatment benefit patients, resulting in improved eyesight and greater knowledge. Eye camps also help to reduce financial hardship, promote community support, and improve patients' emotional well-being. They help increase access, raise awareness, and provide education at the community level, which lowers visual impairment, boosts productivity, and promotes economic empowerment. With sustainability ensured through collaborations with local healthcare providers, these programs bring about long-lasting beneficial improvements. To sum up, eye camps are essential to community-based eye health, providing short-term fixes that have long-term effects on well-being and development.

A cross-sectional study conducted by **Alenezi M, Al-Harbi F A, Alharbi R S, et al. (2024)** in the Qassim region found that the general public had a high level of knowledge and awareness of common ENT-related problems. Many people seek medical attention for ENT issues. Despite the fact that antibiotics are ineffective against viruses, a widespread misconception is that they may be used to treat viral infections of the upper respiratory tract. Therefore, it is imperative to evaluate the general public's knowledge and awareness of prevalent ENT-related problems in the Qassim area. Techniques Using a random sampling method, we surveyed 415 individuals aged 18 and over in a cross-sectional study. Utilizing SPSS version 26 the data were analyzed after being gathered using an online self-administered survey. The questionnaire measured participants' understanding of a range of ENT concerns, and scores were determined to assess general awareness. The majority of participants had a fair level of knowledge, with an average knowledge score of 9.37 3.59. There were notable gender differences, with females exhibiting superior knowledge levels (61.9%, $p < 0.05$). Furthermore, a higher level of education was associated with a greater understanding of ENT problems. Despite the fact that the Qassim area has sufficient general awareness of issues pertaining to ENT, there are still knowledge gaps, especially when it comes to treating viral infections. To address these gaps, targeted educational programs are necessary, with a focus on communities where awareness is lower.

A Comparative Analysis **by Manpreet Singh Nanda, Sumeet Chadha, and Suresh Chand Chadha (2023)** The research was conducted in Himachal Pradesh's rural mountainous regions. Between August 2022 and November 2022, eight conventional health camps and eight door-to-door health camps that also included medical students were established. The happiness of the students and patients was assessed at these camps. Compared to traditional health camps (82%), door-to-door health camps had considerably better patient satisfaction (93%). Our hospital saw more patients for follow-up care who had attended door-to-door camps. Students also enjoyed taking part in door-to-door camps. Their enthusiasm for medical study was also increased. Health camps that go door-to-door are more beneficial for patients, particularly in mountainous, hard-to-reach areas. These camps increase students' enthusiasm for learning about medicine and can be helpful.

A Descriptive study by **Umesh Pradhan, MD1, Somjin Chindavijak, MD2, and Napas Tanamai, MD (2021)** The Thai Rural ENT Foundation has been organizing ear camps in Bhutan. Between January 6 and January 8, 2020, the research recruited patients with ear conditions who visited the mobile ear camp at Monggar Regional Referral Hospital in Bhutan. The data listed below were collected: demographic information, preoperative otoscopic and clinical symptoms, preoperative audiogram, treatment or surgery performed, postoperative wound infection, postoperative middle ear and mastoid infection, graft condition, any complications, and postoperative audiogram of treated patients. Patients who had surgery were followed up at 1 day, 6 weeks, and 2 months after the operation. Out of the 210 patients who had otologic disorders, 43 had surgery. The most prevalent illness discovered was otitis media, and tympanoplasty was the most frequent procedure carried out. The tympanic membrane closure rate was 92.1% and the rate of hearing improvement was 63.2%. The ear camp proved to be helpful and produced positive outcomes**.**

Allamprabhu B. Kudachi, Dayanand M, and Mahantesh Kunchanur are all Rajashree Koppad. KLE's Dr. Prabhakar Kore hospital conducted a study on the scenario and evaluation of health camps in northern Karnataka in order to improve healthcare access for the local population. For the study, 219 recipients were interviewed using a questionnaire that was self-structured. These were divided into sections that asked about the participants' sociodemographic data, 21 questions that assessed the satisfaction of health camps, and questions about what they anticipated would happen after the camps. Responses were collected using a 4-point rating scale, ranging from bad (1) to excellent (4). Ages ≥14 for both men and women. The questionnaire covered a variety of topics, including the accessibility of the

campsite, reception counters, first medical checkups, screening tests, the behavior of doctors and other staff, wait times, the availability of medications, preliminary information, referrals, the length of the health camp, cleanliness, and the overall performance of the camp, in addition to medical or non-medical services. The average age of the study participants was 40.2 years. The study included an equal representation of both genders, with 76% of participants married and 46% completing high school. 59% of the respondents belonged to nuclear families, 81% lived in rural areas, and 33% were housewives and 26% were businesswomen. Through the town announcement, more people (46.51%) learned about the camps. Most of the participants liked the health camp, which recommended that the same program be continued in order to improve everyone's health in the region.

RESEARCH METHODOLOGY

Problem Statement:

Despite the increasing number of ENT health camps, being conducted by many hospitals, However, there is limited research evaluating their effectiveness in enhancing patient knowledge, promoting treatment adherence, and ensuring satisfaction. Understanding the actual outcomes from the participant's perspective is essential to validate and improve the impact of such community-based interventions.

Objectives:

1. To analyze the knowledge and self-care skills gained by participants in managing common ENT conditions through health camps.
2. To understand participants' perceptions regarding adherence to follow-up care, medication, and lifestyle recommendations.
3. To assess participants' satisfaction with camp services and their perception of care quality.

Research Questions:

1. What is the level of knowledge among patients about common ENT problems before attending the health camps?
2. How does attending the health camps affect patients' knowledge and skills in managing common ENT problems?
3. What are patients' perceptions regarding their adherence to recommendations for follow-up care, medication, and lifestyle changes after attending the camps?
4. How satisfied are patients with the services provided during the ENT health camps?

Methodology

Study Design

This study follows a descriptive cross-sectional design aimed at assessing patient knowledge, adherence, and satisfaction regarding the management of common ENT problems through community-based health camps.

Study Setting

The study was conducted at ENT health camps organized by Dr. Rao's ENT Super Specialty Hospital, including both community outreach locations. 2 camps.

Study Population

The population included individuals who attended the ENT health camps.

Inclusion criteria:

- Patients aged ≥18 years
- Willing to participate and able to provide informed consent
- Completed both the pre- and post-camp sections of the questionnaire

Exclusion criteria:

- Individuals unwilling to participate
- Those unable to comprehend or complete the questionnaire

Sampling Technique and Sample Size

A non-probability convenience sampling method was used to select participants. A total sample size of 120 patients was targeted based on expected attendance at the health camps and feasibility. This sample size was considered adequate for descriptive statistical analysis.

Data Collection Tool

Data were collected using a structured, pre-tested questionnaire divided into the following parts:

- Demographics (age, gender, education, occupation, residence)
- Pre-camp assessment: Patient's existing knowledge of ENT conditions, symptoms, and home remedies
- Post-camp assessment: Knowledge gained, understanding of self-care, and satisfaction with camp services
- Adherence-related questions: Evaluating perception of compliance with medication and lifestyle advice
- Satisfaction: Feedback on interaction with healthcare providers and services received

The questionnaire used a combination of Yes/No responses, checklists, and 5-point Likert scales, each tailored to suit the nature of the questions and ensure simplicity for respondents.

Data Collection Procedure

Participants filled out the pre-camp section during registration and the post-camp section after receiving consultation and educational input. Field investigators assisted patients when required. All responses were anonymized and securely recorded.

Data Analysis

The data collected were entered into Microsoft Excel and analyzed using descriptive statistical methods:

- Demographic data were summarized using frequencies and percentages.
- Knowledge levels (pre- and post-camp) were compared using mean scores and percentage change.
- Adherence behaviors were analyzed using frequency distributions for Yes/No responses.
- Satisfaction levels were presented using average ratings and visualized through bar graphs and pie charts.
- Where applicable, subgroup analysis (e.g., by age, education) was conducted to explore patterns and trends.

Limitations of the Study

- The use of convenience sampling may limit the generalizability of results to other populations.
- Only quantitative data were collected, which may not capture deeper insights or subjective experiences.
- The reliance on self-reported responses could introduce recall bias or social desirability bias.
- The short duration of the camp limits the ability to assess long-term adherence and health outcomes.

Ethical Considerations

- Informed consent was obtained from all participants prior to data collection.
- Participants were informed about the study purpose, voluntary participation, and confidentiality of their responses.
- No personal identifiers were collected; data were anonymized and used solely for academic and research purposes.
- Ethical clearance was obtained from the relevant institutional authority prior to initiating the study.

Significance of the Study:

This research will provide valuable insights into the role of community-based ENT health camps in promoting early diagnosis and improving patient outcomes. Additionally, it will guide healthcare administrators in designing effective marketing strategies and improving patient satisfaction, ultimately leading to better community engagement and healthcare delivery.

DEMOGRAPHIC DATA

TABLE-1

GENDER	FREQUENCY	PERCENTAGE
male	64	**53.33**
female	56	**46.67**

FIGURE-1

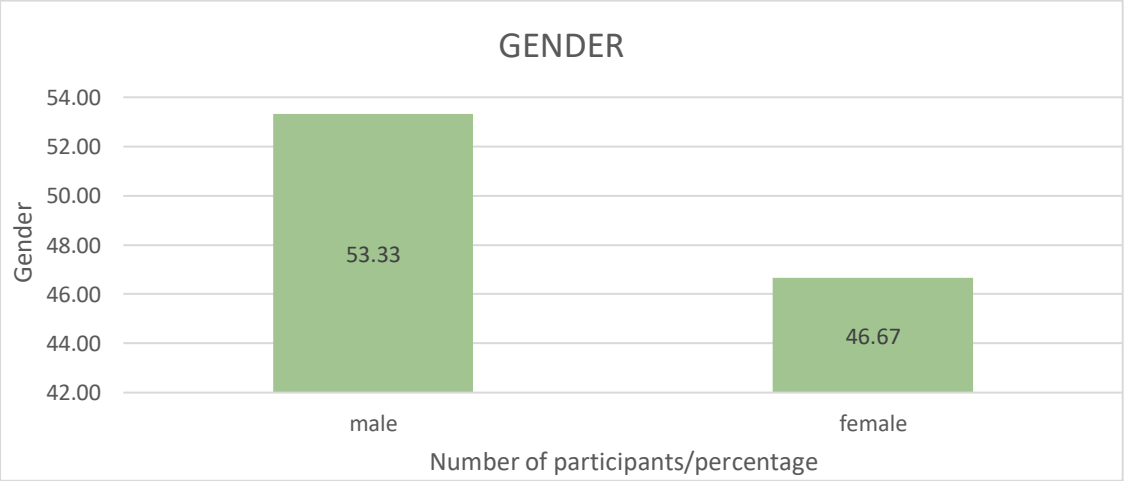


TABLE-2

AGE	FREQUENCY	PERCENTAGE
21-30	56	**46.67**
31-40	49	**40.83**
41-50	15	**12.50**

FIGURE-2

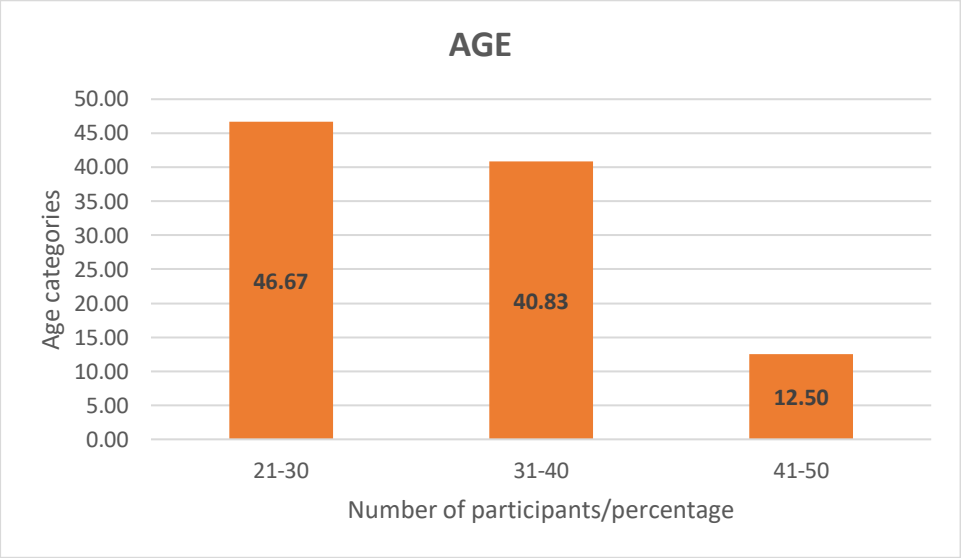


TABLE-3

EDUCATION	FREQUENCY	PERCENTAGE
graduate	48	**40.00**
Post graduate	72	**60.00**

FIGURE-3

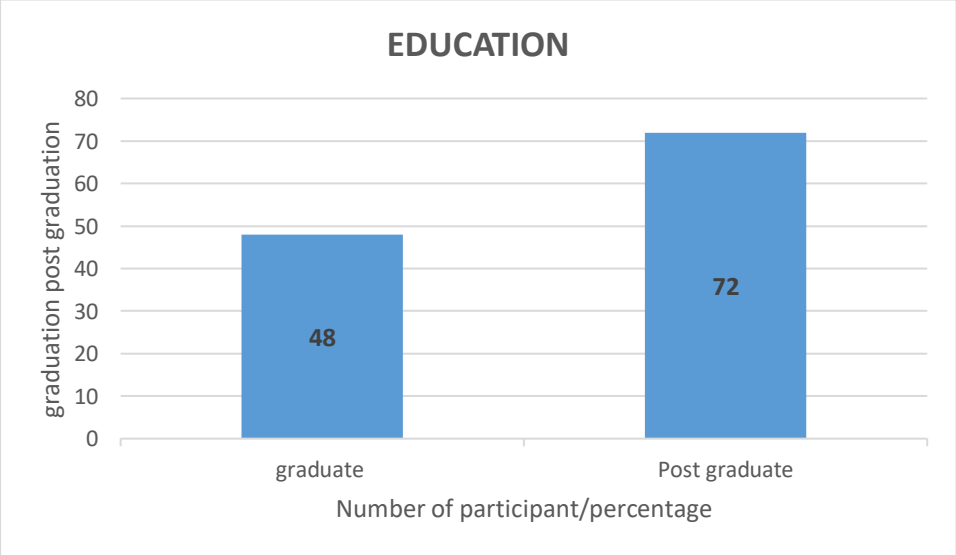


TABLE-4

OCCUPATION	FREQUENCY	PERCENTAGE
analyst	16	**13.33**
QA	7	**5.83**
BUS DRIVER	1	**0.83**
HR	1	**0.83**
IT	11	**9.17**
SALES	2	**1.67**
SE	79	**65.83**
TECHNICIAN	3	**2.50**

FIGURE-4

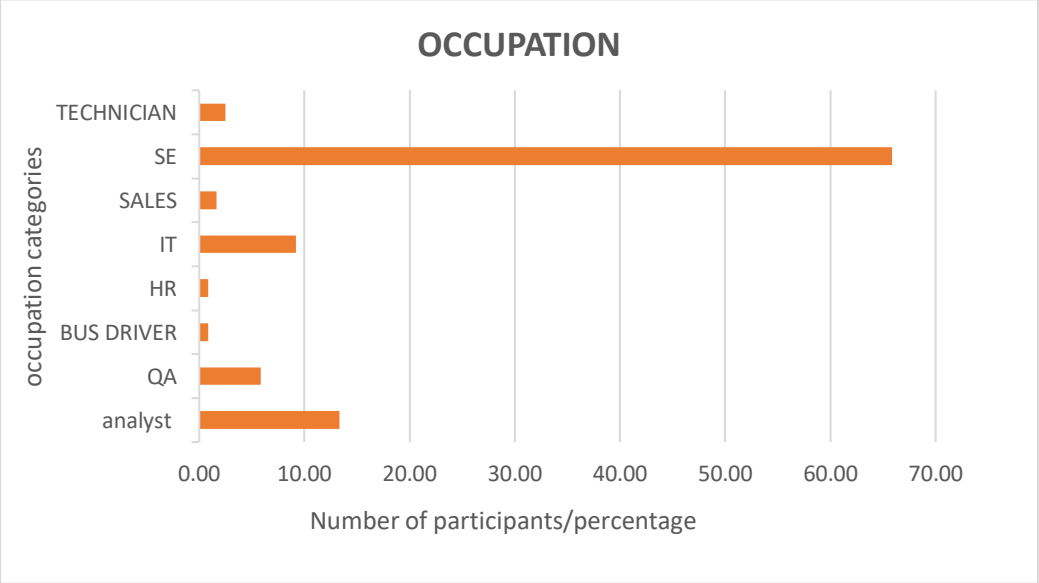


TABLE-5

AREA	FREQUENCY	PERCENTAGE
rural	36	**30.00**
urban	20	**16.67**
semi urban	64	**53.33**

FIGURE-5

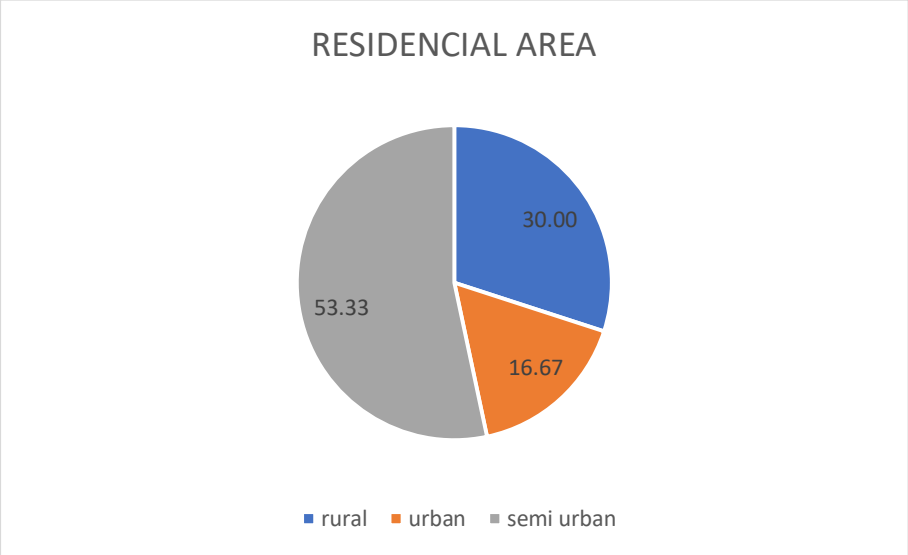


TABLE-6

06.Have you previously consulted any ENT specialist before this camp?	frequency	**percentage**
yes	62	**51.67**
no	58	**48.33**

FIGURE-6

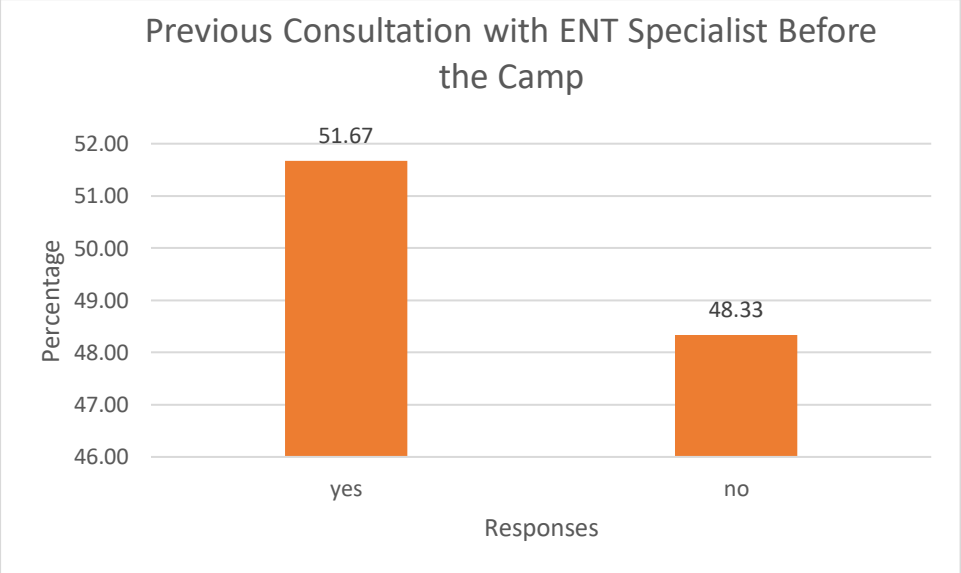


TABLE-7

7.Can you name any three common ENT problems?	frequency	**percentage**
no answere	55	**45.83**
cold	5	**4.17**
ear pain	9	**7.50**
nose bleeding	6	**5.00**
nose block	4	**3.33**
sinus	20	**16.67**
TONSILS	6	**5.00**

FIGURE-7

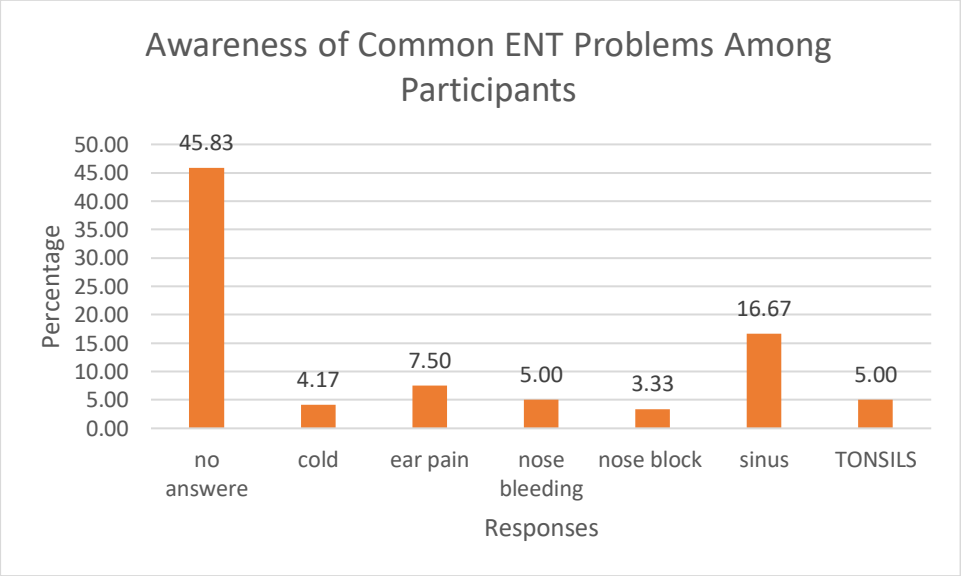


TABLE-8

08.What symptoms were you experiencing before attending the camp?	frequency	**percentage**
ear pain	15	**12.50**
hearing loss	2	**1.67**
nasal block	8	**6.67**
no complain	33	**27.50**
others	9	**7.50**
sinus	21	**17.50**
throat pain	25	**20.83**
no answer	7	**5.83**

FIGURE-8

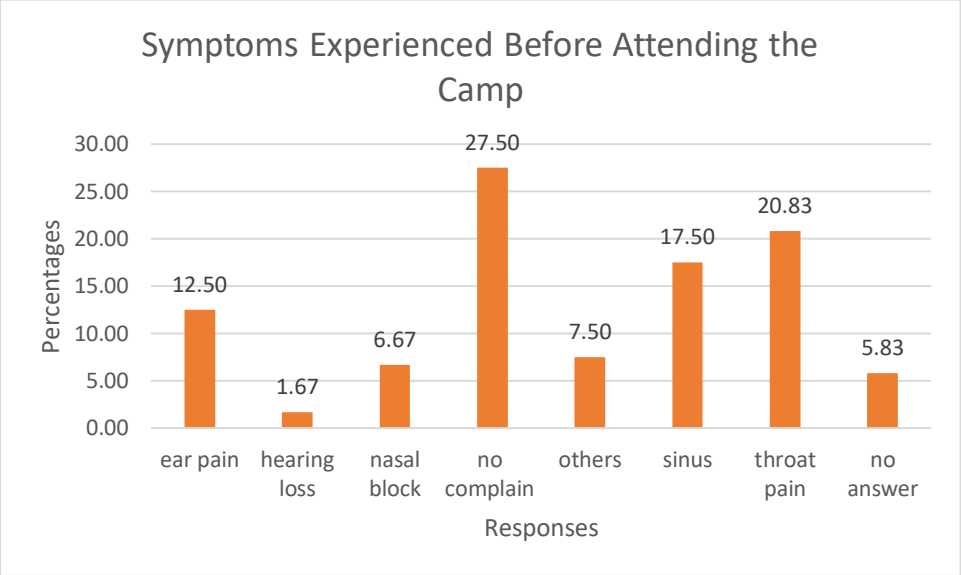


TABLE-9

9. What are some symptoms of an ear infection?	frequency	**percentage**
difficult in hearing	18	**15.00**
discharge from ear	43	**35.83**
ear pain	48	**40.00**
fever	11	**9.17**

FIGURE-9

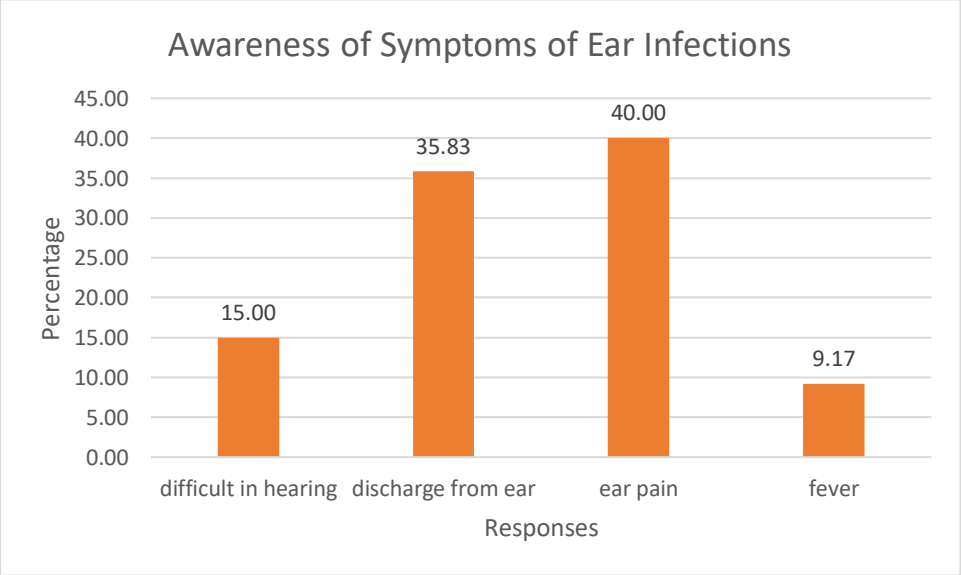


TABLE-10

10. What might cause them?	frequency	**percentage**
Allergy	12	**10.00**
bacterial and viral	68	**56.67**
change of whether	31	**25.83**
self injury	6	**5.00**
others	2	**1.67**
no answer	1	**0.83**

FIGURE-10

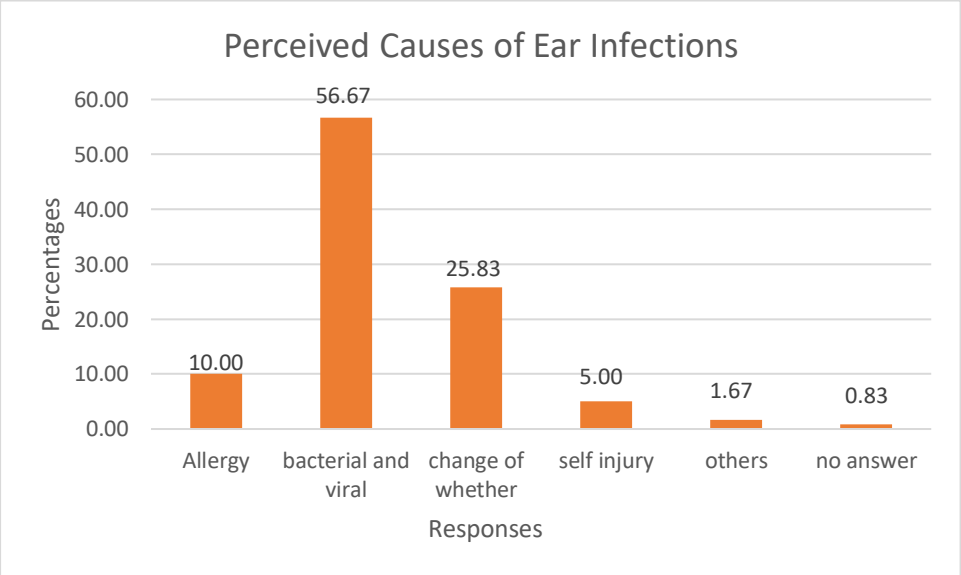


TABLE-11

11. What are some things you can do at home to help manage ear infection at home?	frequency	**percentage**
NO ANSWER	21	**17.50**
CLEAN WAX	14	**11.67**
CLEANING EAR WITH BUDS	20	**16.67**
EAR DROPS	17	**14.17**
H2O2	6	**5.00**
HYGIENE	3	**2.50**
tablets	13	**10.83**

FIGURE-11

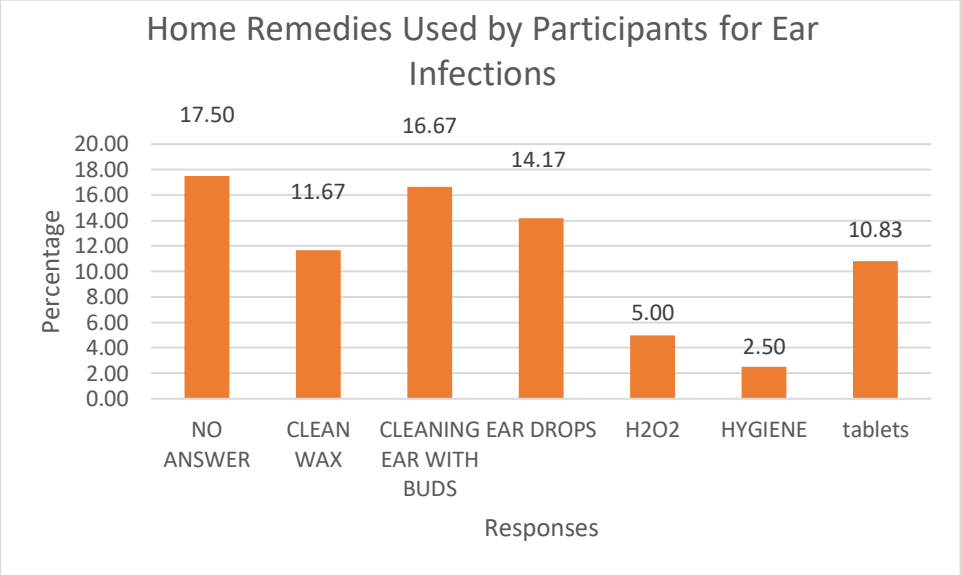


TABLE-12

12.What are the reasons for sore throat?	frequency	**percentage**
allergy	1	**0.83**
bacteria and viral Infection	44	**36.67**
change of whether	13	**10.83**
drinking chilled water	48	**40.00**
exposure to smoke	14	**11.67**

FIGURE-12

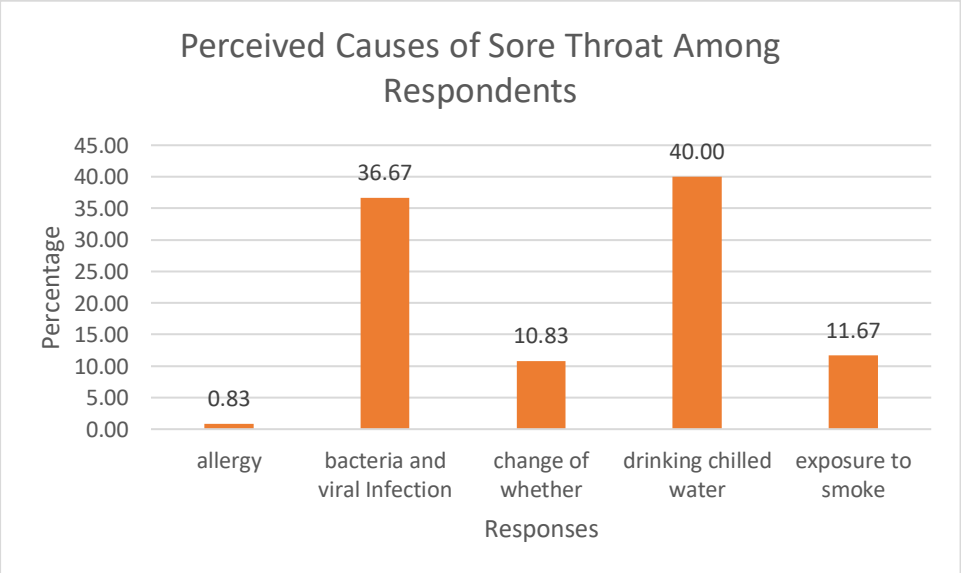


TABLE-13

13. What steps can you take to prevent a sore throat? What are some things you can do to manage a sore throat at home?	frequency	**percentage**
cofsils	8	**6.67**
more fluids	6	**5.00**
hot water	41	**34.17**
ginger tea	6	**5.00**
vicks	8	**6.67**
no answere	13	**10.83**

FIGURE-13

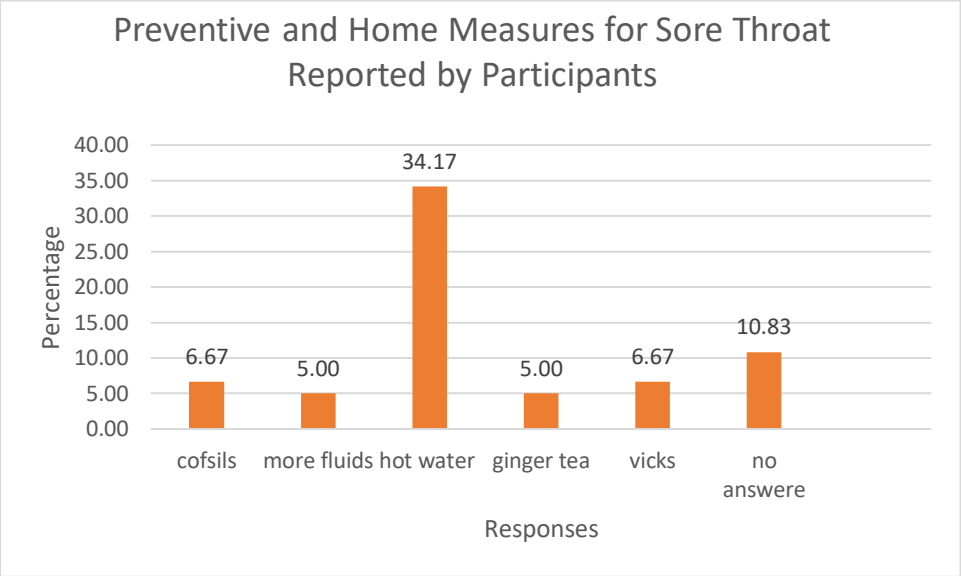


TABLE-14

14.How did you learn about this ENT camp?	frequency	**percentage**
friend and family	29	**24.17**
poster flyer	53	**44.17**
social media	38	**31.67**

FIGURE-14

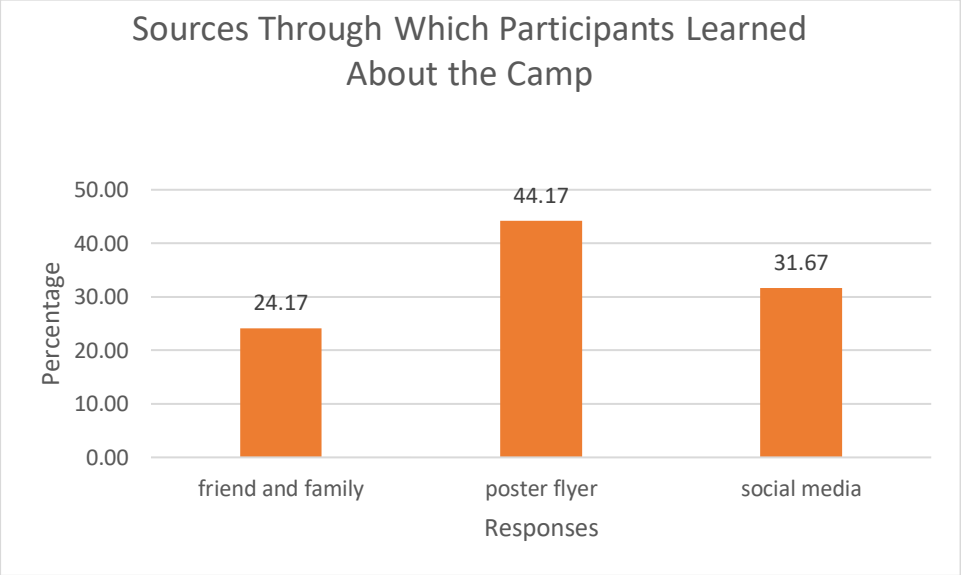


TABLE-15

15.On a scale of 1 to 5, how would you rate your knowledge about ENT problems before attending the camp?	frequency	**percentage**
1	4	**3.33**
2	32	**26.67**
3	38	**31.67**
4	26	**21.67**
5	20	**16.67**

FIGURE-15

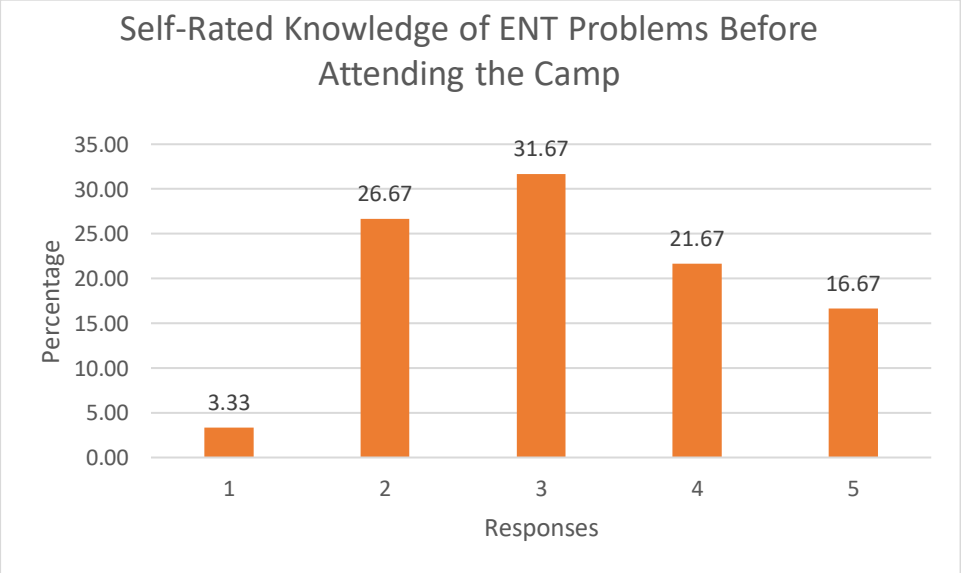


TABLE- 16

16.Do you feel more informed about ENT conditions after attending the camp?	frequency	**percentage**
Yes	89	**74.17**
No	31	**25.83**

FIGURE-16

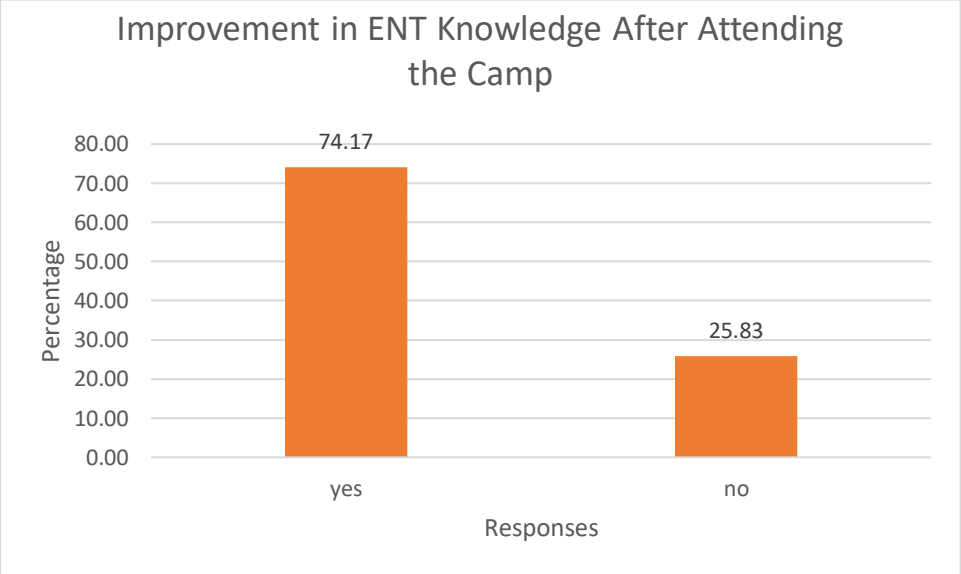


TABLE-17

17.Were you provided with demonstrations or educational materials during the camp?	frequency	**percentage**
yes	103	**85.83**
no	**17.00**	**14.17**

FIGURE-17

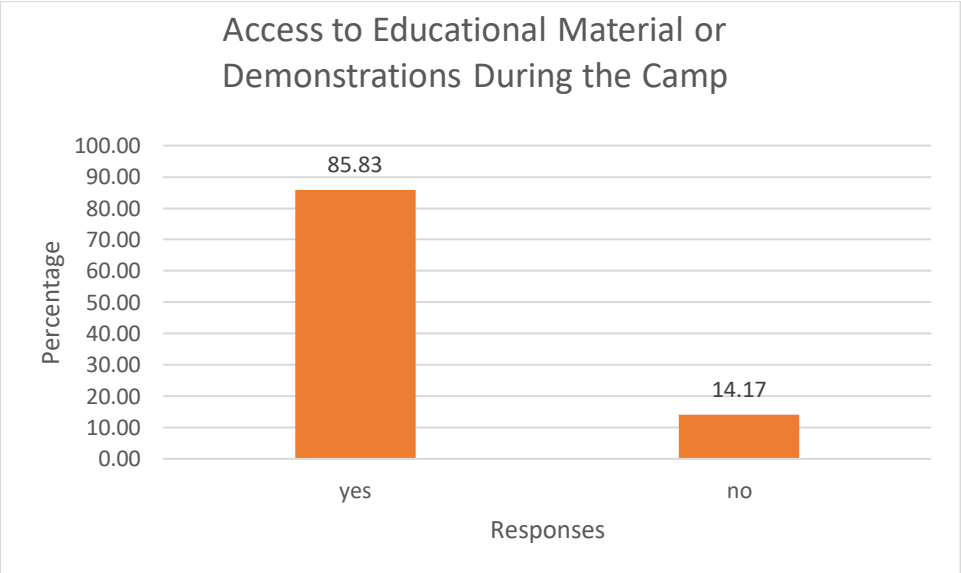


TABLE-18

18.Did the camp teach you how to manage minor ENT issues at home?	frequency	**percentage**
yes	91	**75.83**
no	**29.00**	**24.17**

FIGURE-18

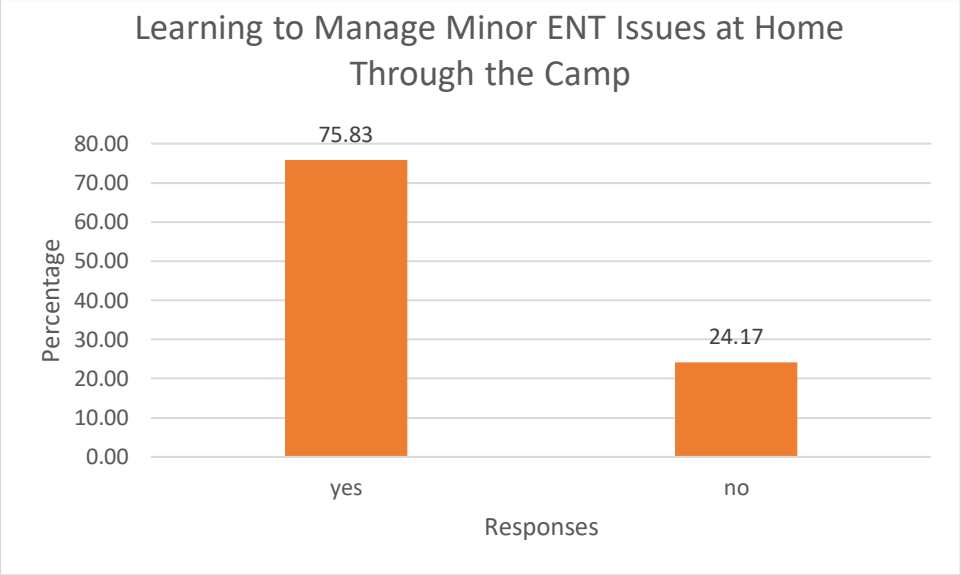


TABLE- 19

19.On a scale of 1 to 5, how would you rate your knowledge about ENT problems after attending the camp?	frequency	**percentage**
2	2	**1.67**
3	16	**13.33**
4	71	**59.17**
5	31	**25.83**

FIGURE-19

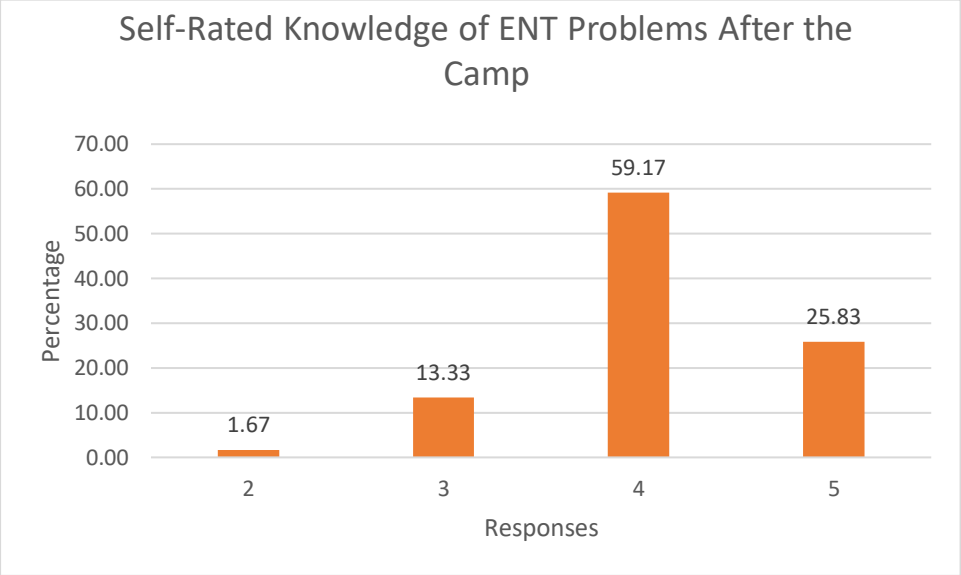


TABLE-20

20.Do you ever forget to take your prescribed medicine?	frequency	**percentage**
yes	84	**70.00**
no	36	**30.00**

FIGURE-20

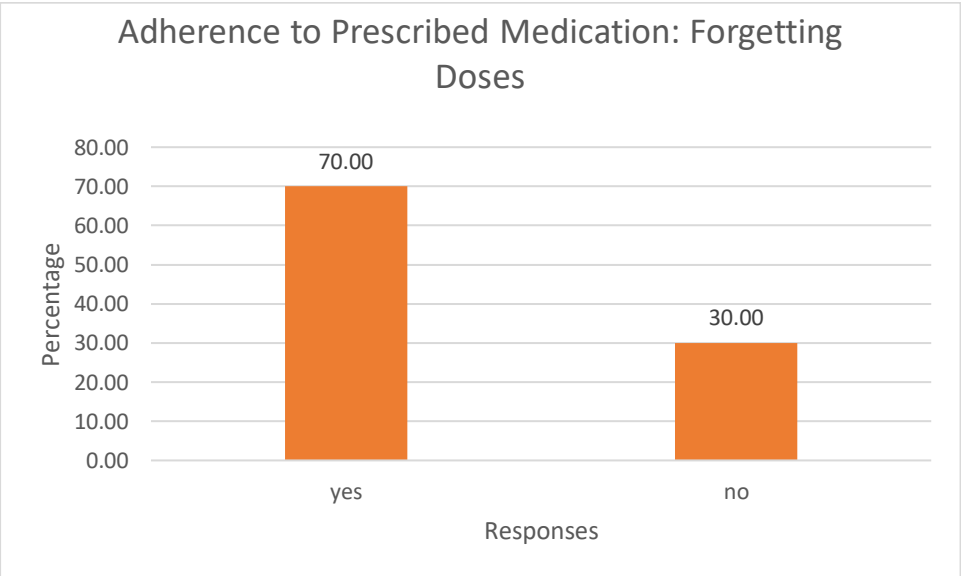


TABLE-21

21.Do you find it difficult to remember when and how to take your medication?	frequency	**percentage**
yes	60	**50.00**
no	60	**50.00**

FIGURE-21

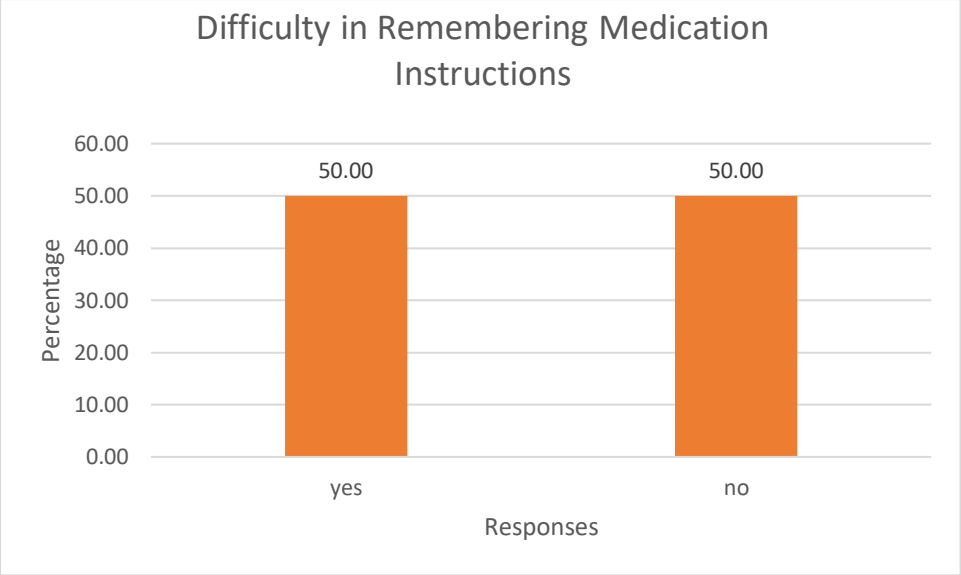


TABLE-22

22.When you feel better do you stop taking medication before completing the full course?	frequency	**percentage**
yes	84	**70.00**
no	36	**30.00**

FIGURE-22

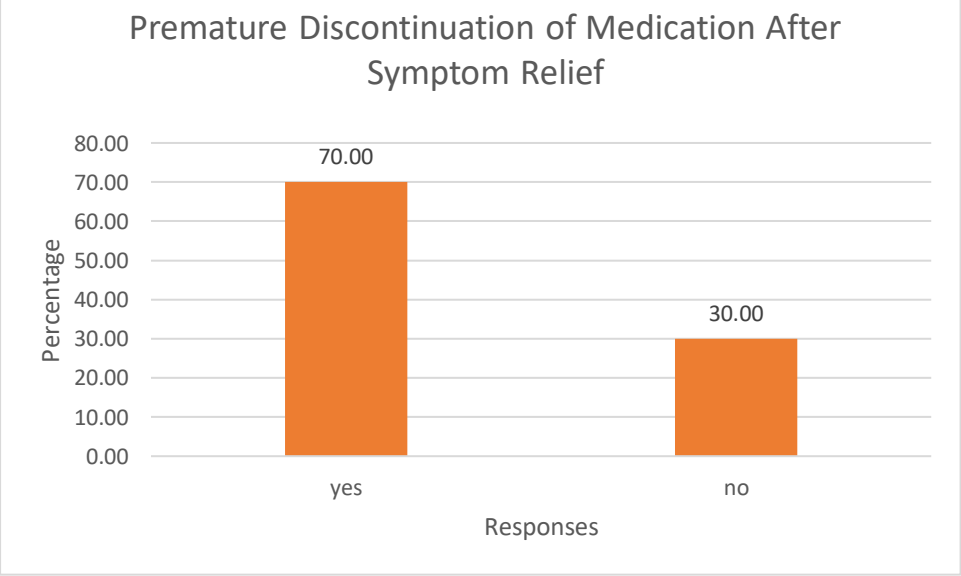


TABLE-23

23.Sometimes if you feel worse when you take your prescribed medicine, do you stop taking it?	frequency	**percentage**
yes	75	**62.50**
no	45	**37.50**

FIGURE-23

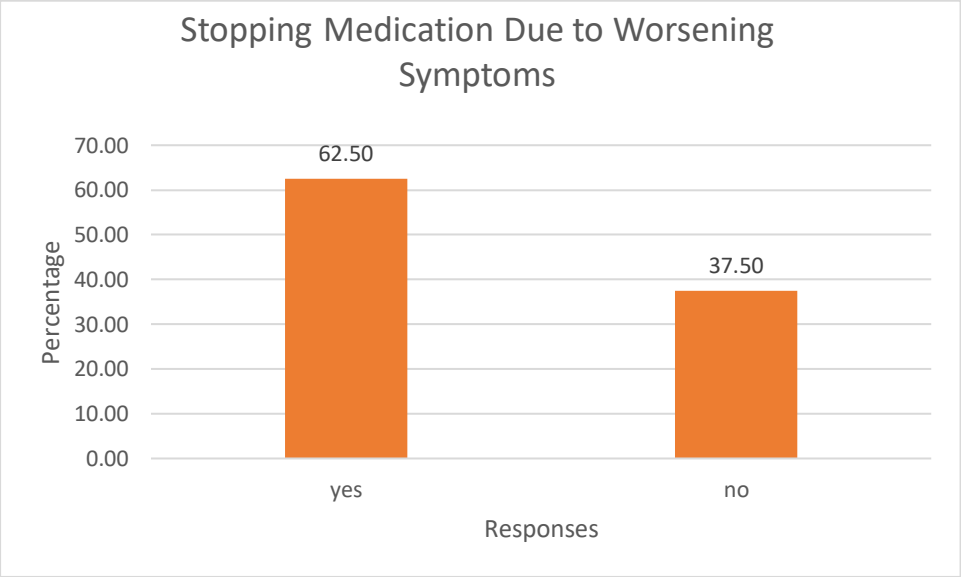


TABLE-24

24. How satisfied were you with the services at the camp?	frequency	**percentage**
2	3	**2.50**
3	18	**15.00**
4	56	**46.67**
5	43	**35.83**

FIGURE-24

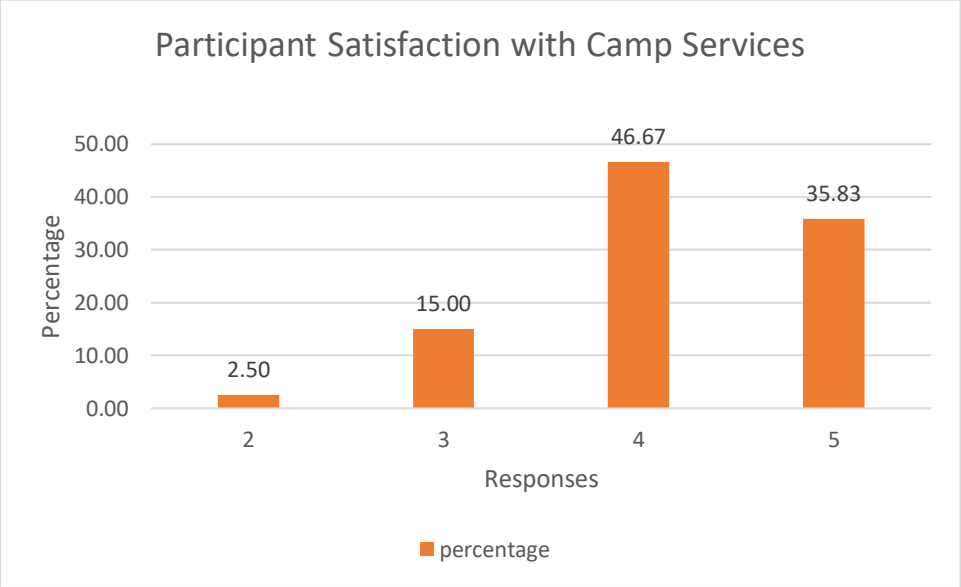


TABLE-25

25. How was your interaction with the doctors and staff?	frequency	**percentage**
average	10	**8.33**
good	60	**50.00**
excellent	50	**41.67**

FIGURE-25

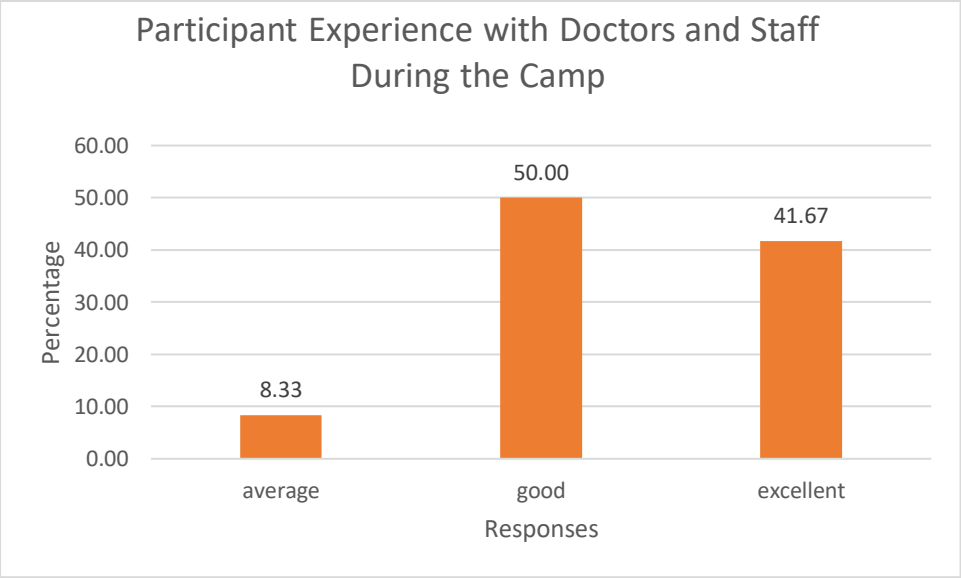
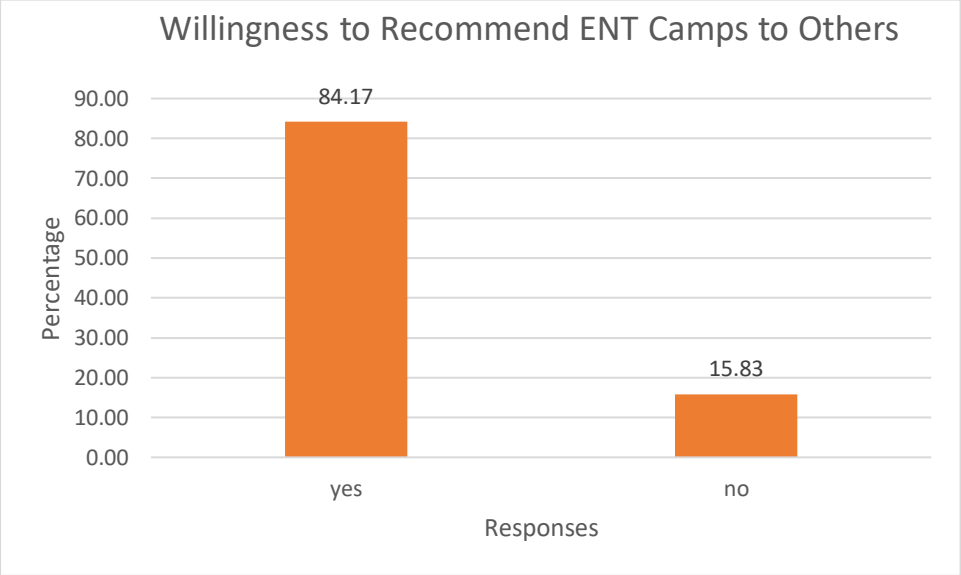


TABLE- 26

26. Would you recommend these camps to others?	Frequency	**percentage**
yes	101	**84.17**
no	19	**15.83**

FIGURE-26



Knowledge Score Comparison

- Pre-camp average score (Q15): 3.22
- Post-camp average score (Q19): 4.09
- Percentage increase: 27.02%

Interpretation

- Significant rise in participants' self-rated knowledge after attending the camp.
- Demonstrates the effectiveness of educational sessions, demonstrations, and doctor interaction

Findings

The ENT awareness camp provided valuable insights into the awareness levels, health behaviours, and satisfaction of participants regarding ENT-related issues. A notable portion of attendees had never consulted an ENT specialist prior to the camp, indicating a lack of prior exposure to specialized care. When asked about common ENT problems, symptoms, and causes, many participants initially struggled to answer confidently. The pre-camp self-assessment showed that most individuals rated their knowledge of ENT problems as low, typically between 1 and 3 on a 5-point scale. However, after attending the camp, there was a marked improvement in this self-rated awareness, with most participants reporting a knowledge level of 4 or 5. This positive shift highlights the effectiveness of the educational material and interactive demonstrations provided during the camp.

In terms of health behaviour, a concerning number of participants admitted to irregularities in medication adherence, such as forgetting to take prescribed medicines, discontinuing treatment once symptoms improved, or stopping medication due to side effects. Many also shared that they initially relied on home remedies before seeking professional help. On the service delivery front, the response was overwhelmingly positive. Most attendees were highly satisfied with the conduct of the camp, especially the interaction with doctors and staff, and expressed a strong willingness to recommend such camps to others.

Discussion

This study aimed to evaluate the knowledge gained, treatment adherence, and satisfaction among participants attending an ENT health camp organized by Dr. Rao's ENT Super speciality International Hospital at an IT company. The findings provide valuable insights into the effectiveness of camp-based interventions in promoting ENT health awareness and influencing health behaviour, particularly in an educated and working population.

Despite 60% of participants holding postgraduate qualifications, the baseline awareness regarding ENT conditions was relatively low. Nearly 45.83% of participants could not name three common ENT problems, and only a small proportion could identify early signs or causes of ENT infections. This aligns with the findings of Alassaf et al. (2023), who reported that while 78.6% of participants in the Qassim region of Saudi Arabia had fundamental knowledge of ENT problems, earlier studies in Riyadh showed that only 18.4% had good knowledge and 2.3% had exceptional knowledge of ENT-related illnesses. Similarly, a study in Bhutan evaluating outcomes of an ENT outreach camp observed that although the surgical

success rate was high, pre-operative awareness about hearing loss and ENT hygiene was poor among rural participants (Pradhan et al., 2020). These results collectively indicate that despite different educational backgrounds and settings, ENT health awareness remains suboptimal and requires structure community level intervention.

Encouragingly, the post-camp knowledge scores in this study showed substantial improvement. After receiving health education and demonstrations during the camp, 74.17% of participants reported feeling more informed about ENT conditions. This mirrors the positive impact observed in the Qassim study, where female participants—often primary caregivers—demonstrated higher post-intervention awareness, a trend also noted in this study. Additionally, in Bhutan's ENT camp, patient education efforts were directly associated with improved follow-up compliance and treatment success, emphasizing the value of combining clinical services with education.

A critical finding of the present study was the high rate of poor medication adherence. Seventy percent of participants reported stopping medications early or forgetting doses, often due to perceived improvement or side effects. This finding is concerning and aligns with studies conducted in other contexts. For example, Mishra et al. (2021) reported over 50% non-adherence in rural diabetic populations in Uttarakhand, and Ravi et al. (2024) found 57.6% non-compliance in NCD patients in Tamil Nadu. While these studies are not ENT-specific, the behavioral patterns reflect a broader challenge in long-term medication adherence, even among educated groups. In contrast, the Bhutan ENT camp reported higher adherence, partly due to structured post-operative counseling and community health worker follow-ups. The absence of such mechanisms in the present study may explain the lower adherence rate despite high satisfaction.

Participant satisfaction with the camp services was high. Over 84% of respondents stated they would recommend the camp to others, and 80% rated their interaction with doctors and staff as good to excellent. These findings are consistent with Singh et al. (2022), who found that 82% of participants in ENT and dental camps in rural India expressed satisfaction with camp services. The high satisfaction observed in the present study further reinforces the effectiveness of short-term, workplace-based outreach programs in meeting both preventive and promotive health needs.

Comparing the present study with international findings, such as those from Saudi Arabia and Bhutan, highlights both congruence and divergence. While awareness and satisfaction rates align well, treatment adherence emerged as a key area of divergence. The disparity suggests that even well-educated, urban populations may require additional behavioral support beyond knowledge transfer. Incorporating reminders, simplified regimens, and reinforcement strategies may bridge this gap. The study has several strengths. Conducting the camp in a corporate IT environment provided access to a highly educated yet time-constrained population—often underrepresented in community health research. generalizability.
In conclusion, ENT health camps are effective platforms for increasing disease awareness and improving participant satisfaction. However, they must be strengthened with post-camp behavioral interventions to address persistent challenges in treatment adherence. Comparing the present findings with recent studies confirms that while knowledge gains are achievable through educational outreach, translating awareness into sustained health behavior requires continued engagement and system-level support.

The data collected from the ENT camp suggests that community-based health education initiatives can play a significant role in bridging the knowledge gap regarding ENT conditions. The fact that many attendees had never previously consulted an ENT specialist underscores the lack of awareness or access to specialized care in daily life, especially among working individuals who tend to ignore minor symptoms. The shift in self-rated knowledge post-camp is a clear indicator of the impact that well-structured and engaging awareness sessions can have, even within a short time frame. However, the findings also point towards persistent behavioural issues, particularly concerning the use of prescribed medication. The tendency to stop medication prematurely or skip doses reflects a broader issue of health literacy, where awareness about disease is not matched by proper treatment adherence. Although participants found the camp useful and the staff supportive, the behavioural gaps suggest that one-time interventions may not be enough to produce lasting change without ongoing support or reinforcement.

Conclusion

The ENT awareness camp successfully fulfilled its objective of enhancing public knowledge and engagement regarding ENT health. It not only educated participants about common conditions, symptoms, and causes but also instilled a greater sense of confidence in managing minor issues at home. The positive feedback and satisfaction levels affirm the importance of such initiatives in community outreach. However, challenges related to medication adherence and delayed health-seeking behaviour remain prevalent and call for more sustained awareness efforts. The camp proved to be a step in the right direction, but the path toward lasting behavioural change requires continuous efforts.

Recommendations

To build on the success of the camp, future sessions should include structured follow-up mechanisms, such as reminders via SMS or WhatsApp to reinforce key learnings and support treatment compliance.

- Organizing focused sessions based on specific age groups or work environments—such as sessions dedicated to ear health for elderly participants or throat infection management for IT professionals—will ensure greater relevance and engagement. Interactive elements like symptom quizzes, feedback polls, and live demonstrations can enhance participant involvement and retention of information.
- Implement a Post-Camp Follow-Up System
- Conduct Interactive Awareness Activities
- Use Audio-Visual Aids and Live Demonstrations
- Promote Safe Home Remedies and Self-Care
- Focus on Medication Adherence Education
- Tailor Future Camps to Specific Groups
- Strengthen Promotion and Outreach
- Train Volunteers and Staff for Better Community Engagement

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15. http//www.pubmed.com

ANEXURE

ENT HEALTH CAMP QUESTIONAIRE

Basic Patient Information (Required)

1. Age: _____
2. Gender: ☐ Male ☐ Female ☐ Other
3. Educational Qualification:
   ☐ No formal education ☐ Primary ☐ Secondary ☐ Graduate ☐ Postgraduate
4. Occupation: _____
5. Residential Area: ☐ Rural ☐ Urban ☐ Semi-urban

Pre-Camp Assessment

6. Have you previously consulted an ENT specialist before this camp?

   ☐ Yes ☐ No

7. Can you name any three common ENT problems?

   1. _____ 2. _____ 3. _____

8. What symptoms were you experiencing before attending the camp?
   ☐ Ear pain ☐ Hearing loss ☐ Throat pain ☐ Sinus problems ☐ Nasal block ☐ Others: _____

9. What are some symptoms of an ear infection?

   ☐ Ear pain ☐ Fever ☐ Discharge from Ear ☐ Difficulty in Hearing ☐ Others: _____

10. What might cause them?

    ☐ bacterial/ viral infection ☐ self- injury ☐ change of weather ☐ allergy ☐ Others: _____

11. What are some things you can do at home to help manage ear infection at home?

    _____

12. What are the reasons for sore throat?

    ☐ bacterial/ viral infection ☐ drinking chilled drinks ☐ change of weather ☐ allergy
    ☐ Exposure to smoke, chemicals, or dry air ☐ excessive shouting☐ Others:

13. What steps can you take to prevent a sore throat? What are some things you can do to manage a sore throat at home?

    _____

14. How did you learn about this ENT camp?
☐ Poster/Flyer ☐ social media ☐ Referred by doctor ☐ Friend/Family ☐ Hospital website ☐ Other: _____

15. On a scale of 1 to 5, how would you rate your knowledge about ENT problems before attending the camp?
☐ 1 (Very poor) ☐ 2 ☐ 3 ☐ 4 ☐ 5 (Very good)

Post-Camp Knowledge and Skills

16.Do you feel more informed about ENT conditions after attending the camp? ☐ Yes ☐ No

17.Were you provided with demonstrations or educational materials during the camp? ☐ Yes ☐ No

18.Did the camp teach you how to manage minor ENT issues at home? ☐ Yes ☐ No

19.On a scale of 1 to 5, how would you rate your knowledge about ENT problems after attending the camp?
☐ 1 (Very poor) ☐ 2 ☐ 3 ☐ 4 ☐ 5 (Very good)

Patient perception regarding adherence to follow-up care, medication, or lifestyle changes

20.Do you ever forget to take your prescribed medicine? ☐ Yes ☐ No

21.Do you find it difficult to remember when and how to take your medications?

☐ Yes ☐ No

22. When you feel better do you stop taking the medication before completing the full course?

☐ Yes ☐ No

23.Sometimes if you feel worse when you take your prescribed medicine, do you stop taking it?

☐ Yes ☐ No

Patient Satisfaction and Community Perception

24.How satisfied were you with the services at the camp?

(1-5 Rating Scale)

25.How was your interaction with the doctors and staff?

(Excellent, Good, Average, Poor)

26.Would you recommend these camps to others?

(Yes/No)

Harshavardhan D report

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