

## RESEARCH ARTICLE

### Use of complementary and alternative medicines in ENT outpatient department of tertiary care hospital in Southern Rajasthan

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#### ABSTRACT

**Background:** Complementary and alternative medicine (CAM) use is highly gaining popularity along with main treatment streams these days. Physicians cannot ignore this fact and should question and counsel patients about pros and cons of CAM for cure of different ailments. **Aim and Objectives:** The objective of the study was to know about use of CAM among patients visiting Ear, Nose, and Throat (ENT) outpatient department (OPD) in tertiary care hospital of Southern Rajasthan. **Materials and Methods:** An observational cross-sectional study was conducted in ENT OPD for 2 months. Two hundred and fifty patients were considered for the study. Semi-structured questionnaire was prepared and made to be filled by the patients during their visit to ENT OPD after taking informed consent. Various questions were asked like extent of use of alternative therapies, type of CAM used by the patients, patient's knowledge about ADRs and drug interactions, reasons for which alternative medicine might have been used. **Results:** Among 250 patients, CAMs were used by 36 patients. The most common CAMs were either Ayurveda or Homoeopathy medicines or both. The majority of patients obtained their information from family and friends. Maximum patients used these alternative medicines for relief of cough and hoarseness of voice. **Conclusion:** The study throws light on use of alternative drug therapy and streams of medicine along with routine hospital treatment among patients visiting ENT OPD. This knowledge helps to understand about patients' alternative approach to diseases, about self-medication, patient's belief about different types of therapies and also ignorance of possible health hazards, side effects, and complications due to use of concomitant main and alternative medicines for treatment purposes.

**KEY WORDS:** Complementary and Alternative Medicines; Ear, Nose and Throat; Outpatient Department


#### INTRODUCTION

In the present times, we cannot ignore the exploding popularity, interest, and use of a variety of schools of medicinal therapies for the cure of different ailments.<sup>[1,2]</sup> When a patient visits

hospital, he has firm belief in a certain school of treatment, if due to some reasons, the things do not turn out as per patient's expectations, they tend to switch and gain experience from different treatment therapies or schools of medicine.<sup>[3,4]</sup>

Complementary and alternative medicine (CAM) has been defined aptly by National Centre of Complementary and Alternative Medicine as diverse medical and health-care systems, practices, and products which are not considered as a part of conventional medicinal stream.<sup>[5]</sup>

The current scenario strongly supports use of CAM by people globally.<sup>[6-8]</sup>

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In our country, Homoeopathy, Ayurveda, Yoga, Sidha, and Unani have been traditionally in vogue and have been highly recognized as CAM systems of medicine.<sup>[9]</sup> They are not yet part of the conventional curriculum of medicines but are recommended and used by people profoundly. Hence, it becomes necessary for medical graduates and physicians to take CAM into consideration and properly comprehend the patient's attitude and perception regarding use of CAM.<sup>[10]</sup>

Ear, Nose, and Throat (ENT) ailments are very common among different age groups of people. Apart from the regular treatment courses that are practiced in modern day medicine, people also switch or gain experience from a variety of medicinal schools such as Homoeopathy and Ayurveda to treat ailments of Otorhinology.

The present study aims to gain knowledge of this variety of people's interest in CAM for the search of desired treatment for different ailments of ENT.

Many studies related to this objective have been conducted worldwide, but not many studies have been done to find and research about CAM use in Southern Rajasthan.

### Objective

This study aims to find out the prevalence and pattern of CAM in ENT outpatient department (OPD) of a tertiary care teaching hospital in Southern Rajasthan

### MATERIALS AND METHODS

A sample size of 250 patients visiting ENT OPD was considered for the study over a period of 2 months.

#### Study Design

A descriptive cross-sectional study was done for 2-month duration from August–September 2018 in ENT OPD of Maharana Bhupal Hospital, Udaipur.

#### Inclusion Criteria

All the patients above 18 years age and those who gave informed consent and reply to the questionnaire were included in the study.

#### Exclusion Criteria

All the patients <18 years of age who did not give informed consent or did not reply to the questionnaire were excluded from this study.

#### Ethics Committee Approval

The study was approved by the Ethics Committee of M.B. hospital, Udaipur.

A semi-structured questionnaire was prepared and many questions related to CAM were interrogated face to face from the patients attending ENT OPD after informed consent.

Demographic data of patients were taken into account and distinguished schools of therapy were recorded with reasons. Multivitamins and nutritional supplements were not included in CAM data.

### Statistical Analysis

Data were entered in Microsoft Excel and evaluated using descriptive statistics such as number, percentage, mean, and Fisher exact test.  $P \leq 0.05$  was considered significant.

### RESULTS

In this study, 250 patients were taken into consideration who were asked to give details and answers to the questions on the basis of questionnaire constructed to gain knowledge about use and prevalence of CAM among the patients. Out of 250 patients, 36 patients (14.4%) reported CAM usage.

For future calculations,  $n = 36$ . The age was taken 18 years and above with a mean age of 45.13. Eleven patients (30.5%) were in age group 18–40, 16 patients (44.4%) were of age group 41–60 and 9 patients (25%) were more than 60 years. Among 36 patients, 17 patients (47%) were males while 19 patients (53%) were females.

Other demographic characteristics taken into account were education, employment, and earnings of the patients [Table 1].

**Table 1: Demographic characteristics of the patients**

Variables	Number (%)
Gender	
Males	17 (47)
Females	19 (53)
Education	
Up to 10th standard	7 (19.4)
Up to 12th standard	4 (11.1)
Up to graduation	8 (22.2)
Up to postgraduation	6 (16.6)
Illiterate	11 (30.5)
Employment	
Yes	21 (58.3)
No	15 (41.6)
Income range	
5000 rs	2 (5.5)
20000 rs	3 (8.3)
>20000 rs	10 (27.7)
No earning	21 (58.3)

Regarding education, 7 patients (19.4%) had studies up to 10<sup>th</sup> standard, 4 patients (11.1%) studied up to 12<sup>th</sup> standard, 8 patients (22.2%) studied up to graduation, and 6 patients (16.6%) studied up to postgraduation, while 11 patients (30.5%) were illiterate. Twenty-one patients (58.3%) were occupied while 15 patients (41.6%) were not working at all. Among income slabs, 2 patients (5.5%) had monthly income of 5000, 3 patients (8.3%) earned 20,000, 10 patients (27.7%) earned more than 20,000, and 21 patients (58.3%) did not earn at all.

An account of different diagnosis of patients was taken as separate heads for ENT [Table 2].

Nine patients (25%) had ear problems, 7 patients (19.4%) had nose-related problems while 18 patients (50%) had throat ailments, 1 patient (2.7%) had all ENT problems, and 1 patient (2.7%) had both ear and throat ailments [Figure 1].

Among ear diagnosis, maximum patients reported allergic itching, chronic suppurative otitis media, and perichondritis, minimum cases were of tinnitus and wax in ear.

Among nose diagnosis, maximum cases were of sinusitis, allergic rhinitis, and nasal cyst. Minimum cases were of the left side deviated nasal septum.

Among throat diagnosis, maximum patients reported cough and hoarseness of voice and minimum cases were of follicular tonsillitis, mucoids, subacute gland excision, and oral submucous fibrosis.

Finally, an account of CAM therapies was evaluated. Among CAM therapies, 13 patients (36.1%) were taking Homoeopathic treatment, 17 patients (47.2%) were following Ayurveda course of therapy, and 6 patients (16.6%) were simultaneously taking both Homoeopathy and Ayurveda treatment [Figure 2].

Thirteen patients (36.11%) were taking homoeopathic treatment (subacute gland excision, left side deviated nasal septum, hoarseness of voice, allergic itching in ear, wax in ear, and ear pain).

Seventeen patients (47.22%) were taking Ayurveda (oral submucous fibrosis, hoarseness of voice, gastroesophageal reflux disease, acidity, nasal cyst, follicular tonsillitis, wax in ear, ear pain, chronic suppurative otitis media, tinnitus, mucoids, cough, and nasal discharge with maxillary sinusitis) therapy.

Six patients (16.66%) were taking both Homoeopathy and Ayurveda (cough, nasal cyst, and gastroesophageal reflux disease) [Table 3].

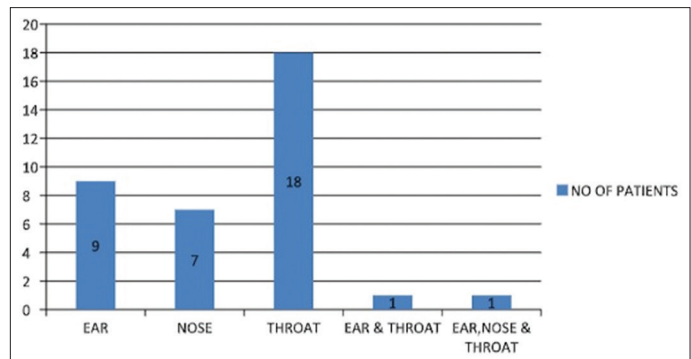
Main reasons for taking CAM were inadequate relief from the allopathic course of therapy, strong belief in CAM therapy, advice from family members and friends, and

**Table 2: Different diagnosis of ENT of patients**

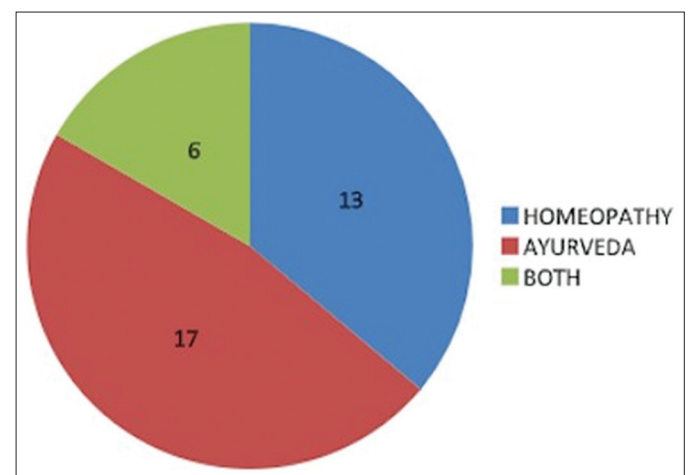
Variables	Different diagnosis
Ear Diagnosis	
Maximum	Allergic itching, Chronic suppurative otitis media, and Perichondritis
Minimum	Tinnitus and Wax in ear
Nose Diagnosis	
Maximum	Sinusitis, Allergic rhinitis, and Nasal cyst
Minimum	Left side deviated nasal septum
Throat Diagnosis	
Maximum	Cough and Hoarseness of voice
Minimum	Follicular tonsillitis, Mucoids, Subacute gland excision, and Oral submucous fibrosis

**Table 3: Percentage of patients using different CAM therapies**

CAM therapy	n (%)
Homoeopathy	13 (36.11)
Ayurveda	17 (47.22)
Both	6 (16.66)



**Figure 1: No of patients suffering from different ENT ailments**



**Figure 2: No of patients using suffering from different CAM therapies**

influence of media such as magazines, internet, and television commercials.

All the patients were unaware of adverse drug effects and drug interactions of CAM therapy and its simultaneous use with allopathic treatment courses. None of the patients conveyed this information to their attending ENT physician.

## DISCUSSION

Our study mainly indicates use of CAM by females in the age group of 40–60 years. Dissatisfaction and inadequate cure were driving factors to use CAM therapies. Most commonly treated ailments were throat problems. However, it is notable and risky finding that almost all patients lacked knowledge about details, ADRs, and drug interactions related to CAM and their simultaneous use with other therapies, and neither of the patients conveyed their CAM use to their main treating physician which totally deprives them of any counseling or advice from doctor's end and point of view. There have been many studies done in the past<sup>[11-13]</sup> which throw enough light on the prevalence and profound use of CAM therapy as a single course or along with the main allopathic treatment course and this study is especially focused for the research in the region of Southern Rajasthan.

In our study, females were more in number, results are similar to study by Shakeel *et al.* and Vayisoglu and Gur<sup>[1,14]</sup> Most common age groups in our study were 40–60 years, results were different from the study by Shakeel *et al.*<sup>[1]</sup> It shows firm belief rather than a little blind belief of females in a variety of schools of medicine. In our study, patients' education was highest up to graduation, the results were similar to study by Shakeel *et al.* and Vayisoglu and Gur.<sup>[1,14]</sup> Hence, even an educated group of patients do not hesitate in trying traditional CAM treatments to cure their problems. In our study, as per interrogation from patients, it was found that the reasons for taking CAM therapies were mainly inadequacy of current allopathic therapy which are quite similar to study by Shakeel *et al.*<sup>[1]</sup> while different from study by Karkos *et al.*<sup>[15]</sup> Most common ailments in our study were throat problems, similar to study by Asher *et al.*,<sup>[16]</sup> while quite different from study by Karkos *et al.*, Matovina *et al.*, Suh *et al.*, Lavin *et al.*, Billings and Maddalozzo, Nguyen *et al.*<sup>[15,17-22]</sup> Throat and voice ailments are the result of abuses such as trauma, infection, and swelling. Special emphasis should be laid on reducing oxidative stress, nullifying the tension of vocal cords. Combination of modern treatment plans and traditional CAM can rule out many hazards of voice.<sup>[16]</sup> In our study, ADRs and drug reactions were not known for concomitant therapies. The results match with study by Newton *et al.*<sup>[12]</sup> This hints toward hazards of drug interactions among various substances of different natures being used by the patient simultaneously. An ignorant and impulsive behavior toward treatment modalities is simply a result of lack of awareness and should be helped not only at individual level but responsibility is to be taken to educate and make patients aware at higher levels of medicine centers, hospitals, and dispensaries. As

far as, sources of CAM therapy are concerned, in our study, friends and family members and media were potent sources of influence and information, results are similar to study by Vyas *et al.* and Vayisoglu and Gur.<sup>[13,14]</sup> Most of the patients were taking CAM to get better relief for their ailments and not simply for physical well-being, these results different from study by Vyas *et al.*<sup>[13]</sup> Almost all patients in our study had no discussion or they did not convey to the physician the ongoing CAM usage, these results are similar to studies by Shakeel *et al.*, Vayisoglu and Gur, Matovina *et al.*<sup>[1,14,17]</sup> Our study specifically focuses on Homoeopathy and Ayurveda schools of medicine, while multivitamins and minerals and different therapies such as Yoga, Acupuncture, and massage were not included in CAM account in our study, similar results are seen in study by Nguyen *et al.* while results are different from study by Shakeel *et al.* and Vyas *et al.*<sup>[1,13]</sup> Maximum no of patients were following Ayurveda treatment methods, this shows strong belief in age old established, traditional school of medicine. It is well known that Homoeopathy principle targets the body's homeostatic healing responses through different substances which are prepared as diluted solutions and should be well shaken before use. Such treatment methods are useful for a variety of allergic disorders and influenza.<sup>[21]</sup>

## Strengths and Limitations of Study

Strengths of this study highlight the knowledge of highly prevalent use of CAM by patients for ENT pathologies, secondly, great insights were gained about reasons, sources and patient behavior, attitude, and perception related to CAM use. It is valuable information for physicians to be used at their ends positively to improve treatment strategies and help out patients more than before. Our study had limitations of not inquiring about CAM duration and effectiveness from the patients. If details of comorbidities had been understood and documented well, use of CAM by patients could be better justified. Low CAM usage is directly related to a small number of patients and specific focus on Homoeopathy and Ayurveda schools of medicine. Nutritional supplements such as vitamins and minerals and therapies such as yoga, massage, and acupuncture were not accounted as CAM treatments in our study. The study can be expanded by including more patients from other OPDs and hospital centers. It can be conducted for longer time periods and apart from emphasizing focus on only Homoeopathy and Ayurveda, other CAM methods such as yoga, acupuncture, and massage can be studied well to maximize results and know the patient's interests.

## CONCLUSION

CAM is quite popular regardless of concerns such as efficacy, safety, and cost. Physicians cannot ignore the widespread use and growing trends of CAM and should be aware that patients do not convey, they should specially interrogate the patients about CAM use and themselves inform the patients

and their relatives about ADRs and possible drug interactions and hazards of simultaneously following different treatment methods and medicinal schools. Efforts from physician ends can be organizing awareness seminars and campaigns to spread proper treatment guidelines and knowledge about CAM and main allopathic treatment courses etc. They can hold counseling sessions conveying risks and benefits of each of the schools of medicine and their comparative aspects. Lastly to state, though CAM is not included in our conventional treatment methods, if its benefits are studied and adopted well, along with utmost care, supervision, and follow-up, physicians can integrate some high quality CAM treatment methods along with modern allopathic treatment courses to ensure maximum patient satisfaction and best treatment options.

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