



“FROM TRADITION TO TREND”-THE GROWING POPULARITY OF ALTERNATE MEDICINE IN MODERN HEALTHCARE”

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Abstract:

Alternative medicine is a term used to refer to medical products and practices that are not part of standard medical care. Ayurveda, Homeopathy, Siddha, Yoga, Unani are considered alternative therapies in India. During World War II, vitamins and other medications grew popular, and this health trend was not just restricted to cities. and III. It gradually spread to cities. Relying solely on alternate medicine, especially for serious conditions, can delay or prevent patients from receiving necessary conventional treatments. Studying usage patterns can help address this issue and ensure appropriate healthcare access. Objective was to estimate the prevalence of drug use and identify factors associated with using alternative medicine methods using across-sectional community survey.

Data from 384 houses was collected in urban Warangal using a systematic random sampling technique. Data was collected through home visits. The study duration is 3 months. Descriptive and inferential statistics, such as the chisquare test, were performed. P value ≤ 0.05 was considered significant. 176 out of 384 participants, 45.8% of the subjects, use alternative medicine. Homeopathy is used by the majority followed by Ayurveda, constituting 24% and 16.7%, respectively. 68 subjects among 176 were using alternative medicine along with allopathy. Conclusion as Alternative medicine is used mainly for chronic diseases. Major reasons for usage are effectiveness, lesser side effects, easy availability of alternate medicine, and health conditions not relieved with allopathic medicine.

Keywords: Alternative medicine, allopathy, chronic diseases.

Introduction:

Selective drug packages have revived older treatments that claim to have preventive or curative effects. In Asia, selective drug use is very high in the lowest and median wage countries¹. NCCAM (National Centre for complementary and alternative medicine) defines CAM (Complementary and

Alternative Medicine) as a collection of diverse systems of recovery and health care that focus on topics not directly considered a possibility by conventional medicine. In developing countries, approximately 80% rely on traditional medicines, mainly domestically produced. India is home to the most experienced Ayurvedic treatment system, which originated over 2000 years ago. Ayurveda, yoga, Siddha, Unani, and homeopathy are recognized in India as the basis of Indian medicine⁴. The terms complementary medicine or alternative medicine imply a wide range of medical centers outside of the country. This is wholly at odds with the overall medical framework, commonly acknowledged medications, and billing guidelines.

In some countries, it is used and sold along with traditional medicines⁵. Non-vitamin, non-mineral, and conventional remedies, cardiorespiratory effect, contemplation, chiropractic, yoga, obstacle; Diet-based treatments are commonly used. Restorative herbs and compositions are readily available in herbal and homeopathic stores for self-treatment⁷. India has a pluralistic restorative culture with a well-known history and cultivation of Ayurveda, Yoga and Naturopathy, Unani, Siddha, and Homeopathy. They are now collectively referred to as AYUSH⁸. Routine use of the drug is observed in patients with ongoing serious illnesses such as asthma, headaches, and joint pain. For these people, routine medication appears to provide a more appropriate effect⁹. As with any therapeutic science, alternative treatments emerge to achieve goals despite a lack of logical information and clinical trials¹⁰. They rely on customs, religion, superstitions, pseudoscience, and other unofficial sources. Some of them are based on assumptions that limit the physiological functions of the human body. Most of the time, what is expected happens because of the belief that it will work. Equivalent medications that are adjusted and used in conjunction with medical professionals include those referred to as selective, complementary, natural, peripheral, general, and over-the-counter.

¹¹. Complementary medications are used in addition to standard medications, and generic medications are used instead of standard medications. Homeopathy is based on the belief that a substance that causes symptoms of a disease in a healthy person will cure the patient's side effects. There is an opinion that the validity of alternative drugs has not been proven¹⁶. Few drug developers would argue that alternative medicines should be regarded as counterfeit treatments whose effects are not expected to have any beneficial value¹⁷. Complementary therapies are often used in palliative care to treat persistent pain. Ayush Services, a service of the Government of India, can provide training, research, and development in Indian traditional medicine systems. Ayush may be a name composed of the names of optional health care systems offered by this service (Ayurveda, Yoga and Naturopathy, Unani, Siddha, Sowa Rigpa, and Homeopathy¹⁸). Routine medications are used more frequently by adults than by children, with higher rates of use found in East Asian countries. The World Health Organization (WHO) states that 80% of the world's population relies on traditional solutions. Many experts believe that routine medication should not be part of clinical care due to unclear effects and side effects. The use of complementary and selective drugs has acquired standard status and this beneficial behavior is not limited to large cities but also applies to second and third-tier cities. Selective treatment could be a new direction in health care. India's promotion of Ayush reflects a commitment to preserving traditional knowledge, improving healthcare access, promoting holistic health practices, and contributing to global healthcare diversity and innovation. Knowing how many people use alternative medicine in India is essential for healthcare planning, integration with conventional medicine, ensuring safety and regulation, promoting public health awareness, supporting research, and understanding cultural perspectives on health. This information helps create a more comprehensive and responsive healthcare system that meets the diverse needs of the population.

Materials and Methods:

A community-based cross-sectional study was conducted among the urban population of Warangal. The questionnaire was prepared after multiple literature searches, compiled, and validated according to the feasibility. Among 34 municipal wards of Warangal, the 11th division is randomly selected for

my study which includes approximately 10000 population with 2573 houses in which every 6th house was selected in a systematic random manner for data collection. Of the 428 homes, twenty-one were unresponsive and twenty-three were locked.

Data is collected from 384 houses, one person from each household by house-to-house visits using a validated semi-structured questionnaire. The questionnaire was validated with a conceptual framework, pilot testing, content validity, refinement, and final validation. Data is taken from next if the house is locked or subjects are not willing to participate or give consent. One person from each household who gave consent was included in the study. Subjects who were not willing to participate and bedridden patients, children less than 5 years, and infants were excluded from the study. Child assent was taken for children aged 6-12 years.

The duration of the study was three months from January 2024 to March 2024. The sample size of 384 is derived from the formula ZPQ/L^2 with a p-value of 40 and a q-value of 60 with 5 as absolute precision¹. Demographic variables age, gender, religion, education, occupation, and per capita income were collected and categorized into upper, upper middle, middle, lower middle, and lower classes using a modified BG prasad scale 2024²⁰. Alternative medicine variables ayurveda, homeopathy, naturopathy, acupuncture, Siddha, Unani, and yoga were included in the study. Details about the type of alternate medicine used and the duration of usage were collected.

Reasons for alternate medicine usage were asked regarding their perception like more effective like modern medicine, comparatively cheaper, easily available, lesser side effects, chronicity of disease, no allopathic treatment for their disease, not relieved with allopathy, perceived success of alternative medicine, preference of natural materials. Sources of Advice to use alternative medicine were asked like own will, quacks, social media/advertisements, and family/friends. Descriptive statistics and inferential statistics were performed using the chi-square test. Chi-square distribution provides a way to understand the likelihood of observing certain values in categorical data and plays a fundamental role in statistical inference, particularly in hypothesis testing involving categorical variables considering p value < 0.05 was considered statistically significant. Likely bias in this study included recall bias, placebo effect, selection bias, reporting bias, confounding effect, and cultural bias. Addressing these biases requires careful study design, rigorous methodology, appropriate statistical analysis, and transparency in reporting to ensure that research on alternative medicine provides valid and reliable insights into its efficacy and safety. The internal validity of this cross-sectional study appears strong given the appropriate sampling methods used to ensure the representativeness of the study population. This study employed a systemic random sampling technique, which helped to capture a possible range of participants. Nonetheless, age, socioeconomic position, and health-related activities were recognized as possible confounding variables and accounted for in the statistical analyses. It is limited in its ability to determine causal correlations between variables due to the cross-sectional character of the study, even with efforts to eliminate biases through strict data collection processes and standardized assessment tools.

Future longitudinal studies could provide deeper insights into the temporal relationships observed in this study.

Results:

The data collected is entered into Excel and analysis is done using SPSS. Demographic variables such as age, gender, religion, education, occupation, and socio-economic status were collected. The majority of the subjects lie between 31-45 years of age. Data followed a normal distribution. The mean age is 43.75 ± 11.74 years. Minimum and Maximum age is 14 and 72 years, respectively.

The majority of the subjects were males (65.6%). One-third of the subjects pursued high school education and two-thirds belonged to the upper socioeconomic class. Among 384 study participants,

176 members are using alternate medicine. Factors such as literacy, suffering from chronic diseases, having conditions not relieved by allopathy, fewer side effects and easy availability of alternate medicine have shown significant association on the Chi-square test. 24% of the Alternative medicine users were using homeopathy followed by 16.7% Ayurveda. More effective, lesser side effects and relief with Alternative medicine were the most common reasons for the usage in this study. Among the users 47.7% were suggested by family & friends and 43.3% were used with their own will.

Discussion:

Alternative medicine is used mainly for chronic diseases like psoriasis, bronchial asthma, rheumatoid arthritis, sinusitis, hemiparesis, dermatitis, hypothyroidism, and migraine. Major reasons for usage are effectiveness, lesser side effects, easy availability of alternate medicine, and health conditions not relieved with allopathic medicine. Maximum usage of alternative medicine in this study population lies between the ages 40-50 years. There are licensed medical facilities in India that sell medications associated with complementary and alternative medicine. Ray, Chakrabarty, et al. conducted a cross-sectional survey at a tertiary care hospital in Kolkata, West Bengal, involving 442 study participants. The overall prevalence was 40.7. The proportion of Alternative medicine users who used it once in a lifetime was higher than those used in the last 5 years. Similar to my study, the majority of them use with own will followed by family & friends' suggestions. Use of Alternative medicine will be high in non-curable chronic diseases for example an outpatient-based hospital study done by Bhalerao et al with 4664 participants which was done in a tertiary care hospital resulted in a higher extent of usage in diabetes than in rheumatoid arthritis followed by epilepsy similar to my study in which alternative medicine was used for chronic diseases, The most used was ayurveda⁹. Self-care practices for diabetes include adherence to prescribed treatment and clinical management plans, following a healthy lifestyle, and a balanced diet. In addition to all these, many patients also use alternative medicine. In this study preference for naturality was one of the reasons for the usage of Alternative medicine like the household-based survey which was done in Nigeria by Oniyapat et al. Most used were biological-based products followed by spiritual health. Honey was most preferable among biological products. Usage of Alternative medicine was peak among young adults and middle-aged persons³. Homeopathy is the most used Alternative medicine in my study followed by ayurveda similar to the study done on 200 doctors and 403 patients in a tertiary care hospital in India by Roy, Gupta et al in which 58% of doctors and 37% of patients were using Alternative medicine. The majority were using homeopathy among doctors and Ayurveda among patients⁴. In my study, 68 participants used Alternative medicine along with modern medicine. The widespread usage of Alternative medicine may result in drug interactions that are unpredictable because of the variable concentration of ingredients. So, patients should be aware of the products they are using as some can be harmful to the body. For example, cinnamon can inhibit CYP3A4 leading to the hypoglycaemic effect which was the common herbal supplement as mentioned in a systematic review done by Alzahrani et al². According to the World Wellbeing Association, there are more than 400 million people with diabetes worldwide, and this number is expected to reach 592 million by 2035. Understanding this alternative medicine usage among the population and discussing the potential hazards with them helps the health professionals in a way that they can minimize the drug interactions thereby helps the patients in proper management of their situation. In my study, 27% of the alternate medicine users belong to the upper class similar to the study done by Rudra et al ⁸and Singh et al which mentioned as usage of alternate medicine is more among households among the upper class¹⁹ contrary to the WHO-SAGE survey where usage of alternative medicine was more people belonging to low socio-economic status and rural people. However pluralistic medicine is a growing aspect in India where the government is providing AYUSH health care services. Strength of the current study Adherence to ethical guidelines and considerations, such as informed consent, confidentiality, and respect for cultural beliefs and practices, enhances the study's credibility and ensures participant welfare. Limitations of this study are the placebo effect, heterogeneity of practices, limited scientific evidence, safety concerns, patient compliance, and

integration with conventional medicine. External validation is done by sampling adequacy to the KMO test and acceptability is 0.81 which is highly acceptable.

Conclusion:

In this study, most participants felt that alternative medicine has fewer side effects and is cheaper than modern medicine. These factors might have contributed to the usage of alternative medicine for chronic diseases like migraine, diabetes, psoriasis, and bronchial asthma. Among users of both alternative medicine and modern medicine, none of the participants have reported life-threatening adverse effects. Sensitivity to cultural contexts and beliefs surrounding alternative medicine practices can influence treatment outcomes and participant engagement. Studying alternative medicine in India can advance knowledge, improve healthcare practices, and foster a more inclusive and patient-centered approach to healthcare delivery. By bridging traditional practices with modern scientific inquiry, researchers can contribute to a comprehensive healthcare system that addresses the diverse needs and preferences of the population.

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Table 1: Socio-demographic variables of the study participants (n=384)

Demographic characteristics		Frequency	Percentage
Age	<15	4	1.0
	16-30	56	14.5
	31-45	168	43.7
	46-60	128	33.3
	61-75	28	7.2
Gender	Male	252	65.6
	Female	132	34.4
Religion	Hindu	344	89.6
	Muslim	24	6.3
	Christian	16	4.1
Education	Illiterate	40	10.4
	Primary school	80	20.8
	High school	116	30.2
	College	72	18.8
	Graduate	64	16.7
	Postgraduate	12	3.1
Occupation	Unemployed	67	17.4
	Unskilled	93	24.2
	Semiskilled	120	31.3
	Skilled	52	13.5
	Semiprofessional	36	9.4
	Professional	16	4.2
Socio economic status	Upper	248	64.6
	Upper middle	60	15.6
	Middle	36	9.4
	Lower middle	20	5.2
	Lower	20	5.2

Table 2: Association between usage of alternative medicine with variables (n=384).

VARIABLE	Alternate medicine users		Chi-square value χ^2	P value
	Yes	No		
Along with allopathy	68	316	97.657	0.00*
More effective	76	308	111.985	0.00*
Cheaper	28	356	35.694	0.003*
Easy availability	40	344	52.770	0.00*
Lesser side effects	68	316	97.657	0.00*
Chronicity of the disease	36	348	46.947	0.001*
Relieved with alternate medicine	48	336	64.831	0.00*
The success of alternate medicine	28	356	35.694	0.003*
Preference of naturality	20	364	24.935	0.018*

*p-value is significant

Figure Legends:

Figure 1: Distribution of study participants based on the type of alternative medicine used

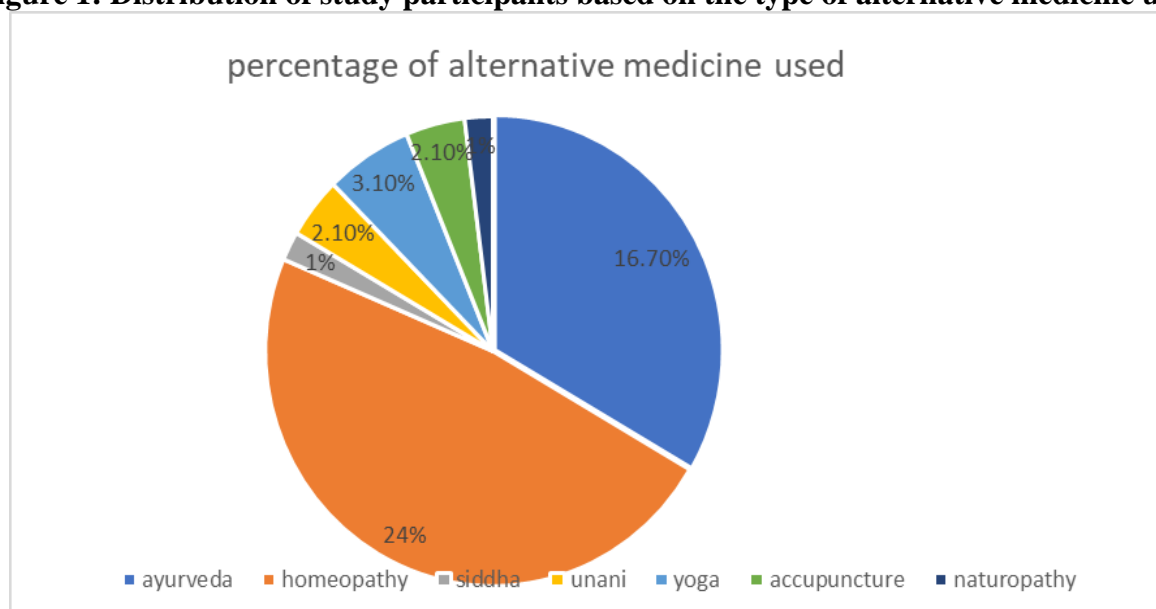


Figure 2: Distribution of reasons for alternative medicine use among study participants

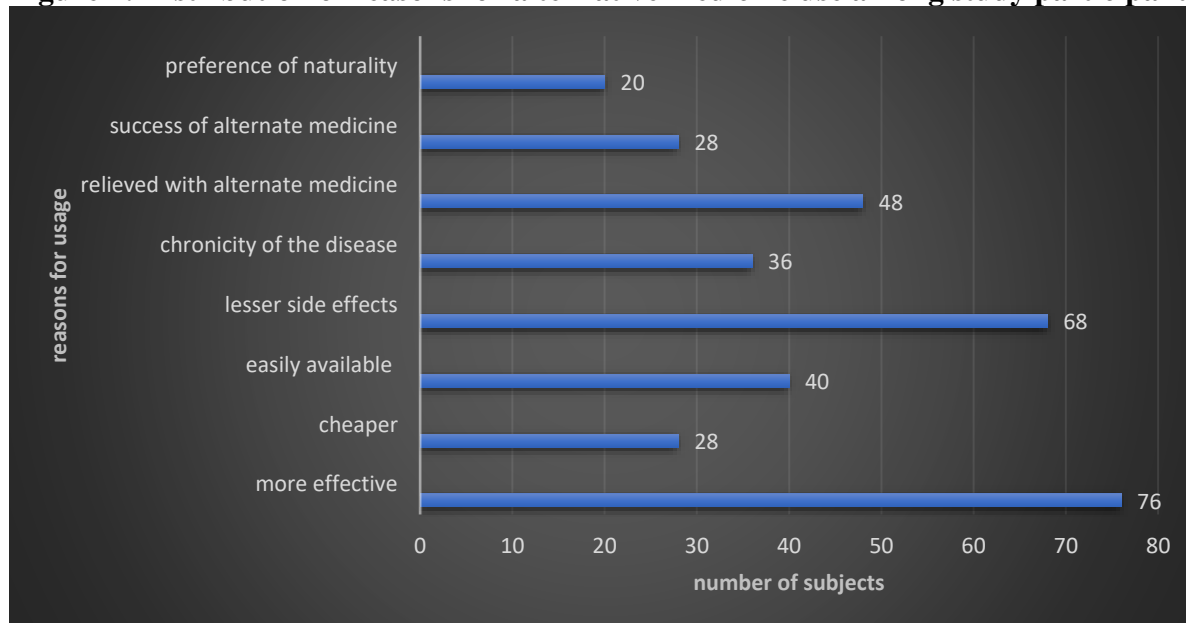


Figure 3: Distribution of source of advice for usage of alternate medicine among study participants

