



Knowledge, Practice and Perception of Complementary and Alternative Medicines: A Descriptive Study Among residents of Sangam Vihar, New Delhi.

Name of authors: Salma Amin¹, Mohammad Alyas Shah²

¹M.Sc. Nursing(OBG), Rufaida College of Nursing, Jamia Hamdard.

²M.Sc.Nursing (Psychiatry), Rufaida College of Nursing, Jamia Hamdard

Corresponding contributor: Ms. Salma Amin, M.Sc. Nursing, Jamia Hamdard University

Knowledge, Practice and Perception of Complementary and Alternative Medicines: A Descriptive Study Among residents of Sangam Vihar, New Delhi.

Abstract

Introduction: Complementary and Alternative Medicines (CAM) are widely used worldwide for their perceived efficacy, safety and cultural acceptability. However, little is known about the attitudes, behaviours, and awareness of CAM use among Indian urban people, especially in Delhi.

Aim: The purpose of the study was to evaluate Delhi inhabitants' perceptions, practices, and knowledge regarding the use of CAM.

Methodology: The study used a descriptive survey design and a quantitative research methodology. Convenient sampling was used to choose 60 samples. A structured interview schedule for knowledge assessment, a practice assessment checklist, and a rating scale for perception assessment were the tools created for the study.

Results: According to the study's findings, the majority of participants had good perceptions (78.3%) and average knowledge (53.3%). One person out of sixty was using CAM in a good way. The research participants' top two chosen medical modalities were Ayurveda (38%) and Allopathy (57%). The survey participants' most frequent reasons for utilizing CAM were joint pain, coughing, and upset stomachs.

Conclusion: Study participants were found to be both aware of and using CAM. They can make use of these resources to advance health if they are inspired and supported. Increased understanding of CAM and its use is a priority for health services.

Keywords: Complementary and Alternative medicine, Knowledge, Practice, Perception.

INTRODUCTION

A collection of various medical and health care systems, procedures, and goods that are not typically regarded as belonging to traditional medicine is known as complementary and alternative medicine, or CAM. Alternative medicine is used in place of conventional treatment, and complementary medicine is used in addition to it. (1)

The history of medical healing makes it clear that traditional therapies have been effectively employed in conjunction with conventional medical procedures to treat patients. In many nations, traditional medicine is referred to as "complementary and alternative medicine." "The sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, used in the maintenance of health and in the prevention, diagnosis, improvement, or treatment of physical and mental illness," is how the World Health Organization defines traditional medicine. Scientific and traditional medicines are contrasted. (2)

The terms "alternative medicine" or "complementary medicine" refer to a wide range of medical procedures that are not entirely included into the prevailing healthcare system and are not a part of the nation's own customs or conventional medicine. The term "alternative medicine" refers to the history of a collection of various medical practices that were collectively marketed as "alternative medicine" starting in the 1970s, as well as the history of western medical practices that the western medical establishment labelled "irregular

practices." It covers the background of integrative and alternative medicine. Herbal therapy, traditional therapies, mind-body intervention, and other methods are all included in the broad category of complementary and alternative medicine. Despite being widely used in India, complementary and alternative medicine is not being incorporated into the mainstream healthcare system. (3)

In India, the Ministry of Ayurveda, Yoga and Naturopathy and Unani, Siddha and Homeopathy, or AYUSH, is a government agency dedicated to the advancement, teaching, and study of alternative medicine. The traditional Indian medical system, known as Ayurveda, is an alternative medicine that emphasizes food, herbal medicines, exercise, meditation, physical therapy, and breathing techniques in order to cure and integrate the body, mind, and spirit in a holistic manner. The technique of acupuncture involves putting needles into the body to create anaesthesia, which lessens pain. In a broader sense, acupuncture is a family of treatments that use a range of methods to stimulate specific anatomical sites on or within the skin. Yoga is a practice that helps people balance their natural power and enhance it. It provides a way to achieve total self-realization. Thus, yoga can be described as a method of bringing one's own spirit into harmony with God's universal spirit. Simply said, homeopathy is the practice of treating illnesses with remedies that, when taken by healthy individuals, might cause symptoms that are comparable to the disease. These remedies are administered in little amounts. Hippocrates' famous four humor theory serves as the foundation for the Unani system's basic premise. This assumes that the four humors—blood, phlegm, yellow bile, and black bile—are present in the body. The following seven elements make up the human body: Miraj (temperature), Akhlat (humors), Aaza (organs), Arwah (spirits), Quwa (faculties), Afaal (functions) and Arkan (elements). (4)

Aim

The study aimed to assess the knowledge, practice and identify the indications for usage and types of CAM utilization by the residents of Sangam Vihar, New Delhi.

Methodology

The research design used in study was descriptive research design. Data was collected through structured interview schedule, checklist and rating scale from 60 residents of Sangam Vihar, New Delhi, using non-probability convenient sampling. The tools were divided into 2 sections: section A for demographic profile of study subjects and section B includes structured interview schedule to assess the knowledge on CAM utilization, checklist to assess the practice based on CAM utilization, and rating scale to assess the perception of residents regarding CAM utilization.

Ethical Considerations

The Institutional Ethics Committee (IEC) at Jamia Hamdard, New Delhi, approved the study for pilot and final phases. Informed consent was obtained from all participants, who were assured of confidentiality and privacy. Self-introduction and introduction of the nature and purpose and study was given to the samples to obtain their free and frank responses. Participation was voluntary, and individuals could withdraw from the study at any time.

Findings

The study findings revealed that majority of study subjects were having average knowledge (53.3%) and good perception (78.3%). 1 out of 60 was having good practice regarding CAM utilization. Allopathy (57%) followed by Ayurveda (38%) were the most preferred medicine modality among the study subjects. Stomach upset, cough and joint pain were the most common reason for using CAM by the study subjects.

SECTION A: Description of sample characteristics according to demographic profile (age, educational status, occupation, religion and usage of complementary and alternative medicines)

TABLE 1

Frequency and percentage distribution of adults by their age, educational status, occupation, religion and utilization of complementary and Alternative Medicines (CAM).

n=60

S.NO.	Sample Characteristics	Frequency (f)	Percentage
1.	Age in years <ul style="list-style-type: none"> 18 – 25 years 16 – 30 years 31 – 35 years >35 years 	17 12 17 14	28.3 20.1 28.3 23.3
2.	Educational status <ul style="list-style-type: none"> Illiterate Primary Higher secondary Graduate Post graduate 	4 7 25 22 2	6.6 11.7 41.7 36.7 3.3
3.	Occupation	19	31.7

	<ul style="list-style-type: none"> Housewife Labourer Private service Govt. service Student 	5 18 6 12	8.3 30 10 20
4.	Religion <ul style="list-style-type: none"> Hindu Christian Muslim Sikh 	44 3 11 2	73.3 5.1 18.3 3.3
5.	Heard about CAM <ul style="list-style-type: none"> Yes No 	32 28	53.3 46.7
6.	Utilized CAM <ul style="list-style-type: none"> Yes No 	37 23	61.7 38.3

Table 1 data shows that most of the respondents are between the age group of 18 – 25 years (17,28.3%) and 31 -35 years (17,28.3 %) followed by more than 35 years (14, 23.3%) and least no. of respondents were in the age group of 26 – 30 years (12, 20.1%). Their educational status reveals that majority i.e., 25 (41.7 %) were having secondary education followed by 22 (36.7%) respondents who were graduate. However, there were 11 (18.3%) respondents who were just illiterate or had primary education only. The occupation of the respondents reveals that majority i.e., 19 (31.7%) housewives followed by 18 (30%) were at private service, 6(10%) were at govt. service, 12 (20%) were students and 5 (8.3%) were labourer. Majority of the respondents were Hindu i.e., 44 (73.3%) followed by 11 (18.3%) Muslim, 3(5.1%) were Christian, 2 (3.3%) were Sikh. The table depicts that 32(53.3%) have heard about CAM and 28 (46.7%) have not heard about CAM. It also depicts that 37 (61.7%) have utilized CAM and 23 (38.3%) have never utilized CAM.

SECTION – B: Findings related to knowledge, practice and perception scores:

The structured interview schedule was used to assess the knowledge of respondents which consists of 10 objectives questions with five alternative answers from which the participants have to choose one best option. The total knowledge scores ranged from 0 – 10. Based on these scores a range was created to divide the category of knowledge among study subjects into Good (8- 10), Average (4-7), and Poor (0-3).

TABLE 2

Frequency and Percentage distribution of adults by their scores regarding Complementary and Alternative Medicines (CAM)

n= 60

S.NO.	Category of Knowledge scores	Frequency (f)	Percentage (%)
1.	Good Knowledge (8-10)	12	20
2.	Average Knowledge (4 – 7)	32	53.3
3.	Poor Knowledge (0 -3)	16	26.7

The data in table 2 reveals the findings related to frequency and percentage distribution of respondents regarding CAM utilization. The data shows that majority of the study subjects i.e., 32 (53.3%) were having average knowledge regarding CAM and 12 (20%) had good knowledge whereas one – third i.e., 16 (26.7 %) had poor knowledge regarding CAM.

Practice multiple choice questions

The multiple-choice questions were intended to assess the expressed practice regarding CAM among the study subjects. It consists of two parts i.e., Part-A and Part- B.

- Part A consists of eight questions to which the participants have to choose a single correct option and score was given on the basis of correct practice.

Based on these scores a range was created to divide the category of practice among study subjects into good, average and poor. The total practice scores ranged from 0 -10. The score is further divided arbitrarily as follows; Good practice (8-10), Average Practice (4 – 7) =, Poor Practice (0-3).

- Part B consists of two questions to which the participants can choose multiple options about their practice regarding CAM.

Based on their answers, it revealed about the most preferred CAM which is being practiced among the adults and also about the most reasons for using CAM.

Table 3

Frequency and Percentage distribution of adults by their practice scores regarding Complementary and Alternative Medicines (CAM)

n=60

S.NO.	Category of Practice scores	Frequency	Percentage
1.	Good Practice (8-10)	1	1.6
2.	Fair Practice (4-7)	22	36.7
3.	Poor Practice (0-3)	37	61.7

The data in table 3 reveals the findings related to category wise frequency and percentage distribution of respondents by their practice scores. The table shows that majority of the study subjects i.e., 37 (61.7%) were under poor practice category, 22 (36.7%) were having fair practice and only 1 (1.6%) out of 60 had this practice score related to CAM utilization.

Table 4

Frequency and percentage distribution of adults to describe indications regarding Complementary and Alternative Medicines (CAM)

n=60

S.no.	Category of Practice scores related to indications regarding CAM	Frequency (f)	Percentage (%)
	Most preferred medicine modality		
	Ayurveda	23	38
	Unani	5	10
	Homeopathy	18	30
	Allopathy	34	57
	Most common reason for using CAM		
	Back pain	26	43%
	Cough/cold	32	53%
	Joint pain	28	47%
	Anxiety/ depression	8	13%
	Stomach upset	36	60%
	Headache / Migraine	5	10%
	Insomnia	7	12%
	Skin problems	22	37%
	Hair fall	18	30%

The data in table 4 represents the practice regarding the most preferred CAM which is being practiced among the adults and also about the most common reasons for using CAM. Allopathy is the most preferred medicine modality among respondents i.e., 34 (57%) and Ayurveda was the second most preferred medicine modality i.e., 23 (38%) chosen over other complementary and alternative medicines. Stomach upset was chosen by 36 (60%) as the most common reasons for using CAM, followed by 32 (53%) cough/ cold, 28 (47%), joint pain and 26 (43%) back pain.

Rating Perception Scale

Rating scale was used to assess the perception of adults which consists of 10 statements to which the participants will respond to a five point scale by saying strongly agree (SA), agree (A), neutral (N), disagree (D) and strongly disagree (SD) according to what they perceive about different aspects of CAM utilization among adults. Based on these scores, a range was created to divide the category of perception among study subjects into good perception (31-50) and poor perception (10-30).

Table 5

Frequency and percentage distribution of adults by their perception scores regarding Complementary and Alternative Medicines.

n=60

S.no.	Category of Perception scores	Frequency (f)	Percentage (%)
	Good perception (31 -50)	47	78.3
	Poor perception (10-30)	13	21.7

The data in table 5 reveals the findings related to category wise frequency and percentage distribution of adults by their perception scores regarding CAM utilization. The table shows majority of the study subjects i.e., 47 (78.3%) were having good perception and 13 (21.7%) were having poor perception.

Discussion

The current study revealed that majority of study subjects were having average knowledge (53.3%) and good perception (78.3%), and majority (61.7%) were having poor practice regarding CAM utilization. Allopathy (57%) followed by Ayurveda (38%) were the most preferred medicine modality among the study subjects. Stomach upset, cough and joint pain were the most common reason for using CAM by the study subjects.

The study revealed that a significant proportion of the respondents were aware of CAM and could name at least one form of alternative medicine. This finding aligns with prior research conducted in urban and semi-urban settings, where high awareness of CAM was reported (5,6). However, it is worth noting that the depth of knowledge varied, with many participants lacking an understanding of the scientific principles or therapeutic mechanisms underlying CAM practices. This gap in detailed knowledge suggests the need for targeted educational interventions to improve health literacy regarding alternative therapies.

In this study, the perception of CAM among the respondents was generally positive (78.3%), with many expressing trusts in its natural origin and minimal side effects. These findings resonate with earlier studies, which attribute the favourable perception of CAM to its holistic approach and alignment with traditional health beliefs (7).

The present study also reveals that majority (61.7%) of residents were in poor practice category. Previous studies have similarly highlighted the disconnect between awareness and proper utilization of CAM, attributing it to factors such as lack of access to certified practitioners, financial constraints, and misconceptions about safety. (8,9)

The findings of this study align with existing literature that highlights the paradox between the average knowledge, favourable perception, and poor practices surrounding complementary and alternative medicine (CAM). Studies have shown that while individuals often view CAM positively due to its natural, holistic approach and perceived minimal side effects, their understanding is often limited to superficial aspects, leading to misconceptions and improper usage (10,11). For instance, self-medication and irregular use, commonly reported among CAM users, can compromise treatment efficacy and safety (12). This gap underscores the need for targeted educational interventions to enhance knowledge and guide responsible usage. Moreover, regulatory frameworks must address the unchecked availability of CAM products and services to mitigate risks associated with misuse (13). Overall, while the positive perception of CAM provides an opportunity for integration into healthcare systems, bridging the knowledge-practice gap is essential for optimizing its benefits.

Conclusion

The study result reveals that majority of the subjects had average knowledge but had good perception regarding CAM. Most of the study subjects had poor practice regarding CAM utilization. Stomach upset, Cough/cold, joint and back pain were the most common indications for using CAM.

Limitations

The study was confined to the residents of Urban community of Sangam Vihar, New Delhi Which might limit the generalization of the findings of the study.

Acknowledgements

The authors extend their gratitude to all study participants and to the ethical Committee of Jamia Hamdard for granting permission to conduct this study.

Funding and Conflict of Interest

No funding was received, and the authors declare no conflict of interest. The researcher conducted this study independently.

REFERENCES

1. National Centre for Complementary and Alternative Medicines. Five year strategic plan. URL: <http://nccam.nih.gov.in> (accessed 13 December 2000).
2. Wong HCG, et.al. Side effects of CAM / Chinese herbal meds. BC Med J.2008; 50: 58. Chinese herbal meds. URL: http://www.bcmj.org/letters/side_effects.com.
3. WHO Traditional, Complementary and Integrative Medicine. URL: <http://www.who.int/traditional-complementary- integrative-medicine. About>.
4. Ministry of AYUSH. About the Ministry. URL: <http://ayush.gov.in>.
5. Sharma DC, Sharma A. Awareness and utilization of complementary and alternative medicine in urban India. J Complement Integr Med. 2020;17(1):1-9.
6. Gupta SK, Rana P. Knowledge and perception of alternative medicine among semi-urban populations in northern India. Indian J Public Health. 2019;63(3):213-8.

7. Bodeker G, Ong CK, Grundy C, Burford G, Shein K. WHO Global Atlas of Traditional, Complementary, and Alternative Medicine. Geneva: World Health Organization; 2005.
8. Rastogi R, Pandey A. Challenges in the practice of complementary and alternative medicine: A systematic review. BMC Complement Altern Med. 2021;21(1):25-30.
9. Ministry of AYUSH. National health statistics on the utilization of AYUSH systems of medicine. New Delhi: Government of India; 2022.
10. Barnes PM, Bloom B, Nahin RL. Complementary and alternative medicine use among adults and children: United States, 2007. Natl Health Stat Report. 2008;(12):1–23.
11. Bishop FL, Yardley L, Lewith GT. A systematic review of beliefs involved in the use of complementary and alternative medicine. J Health Psychol. 2007;12(6):851–67.
12. Astin JA. Why patients use alternative medicine: results of a national study. JAMA. 1998;279(19):1548–53.
13. World Health Organization. WHO global report on traditional and complementary medicine 2019. Geneva: World Health Organization; 2019.

