



BELIEF, ATTITUDE AND SELF-USE OF COMPLEMENTARY AND ALTERNATIVE MEDICINE (CAM) AMONG ALLOPATHIC DOCTORS: WHERE ARE WE?

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ABSTRACT

Background: Holistic care is imperative to Universal Health Coverage in India.

Objectives: To estimate knowledge, attitude and self-use of CAM among allopathy doctors.

Methodology: Five domains were assessed using structured questionnaire viz. participant characteristics, knowledge, attitude, self-use and practices related to CAM.

Results: A total of 220 doctors participated. Median age of study participants was 30 years. Majority (90%) had heard about CAM. Most commonly quoted CAM modalities were Ayurveda (88%) and Homeopathy (78%). Majority (80%) opined simultaneous CAM use by patients. Mean Attitude Score was 71.5 ± 10.98 (95% CI 70.05–72.96). Self-use of CAM was reported by 39%. Respiratory, musculoskeletal and gastrointestinal disorders were most common reasons for self-use. Integration of CAM in medicine curriculum was suggested by 48% doctors.

Conclusion: Attitude towards CAM was favourable. Limited knowledge and dilemma regarding scientific correctness were major barriers towards use of CAM modalities among doctors.

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INTRODUCTION

Complementary and Alternate Medicine (CAM) is referred to as a broad set of health care practices which either are not part of a country's own tradition, or are not integrated into its dominant health care system. These healing approaches are also known as "Complementary" or "Alternative" or "Non-Conventional" Medicine. World Health Organisation (WHO) uses the term "Traditional medicine" and defines it as "diverse health practices, approaches, knowledge and beliefs incorporating plant, animal, and/or mineral based medicines, spiritual therapies, manual techniques and exercises applied singularly or in combination to maintain well-being, as well as to treat, diagnose or prevent illness".¹

India has a pluralistic health care delivery system which assents various recognised non-allopathic approaches including AYUSH (Ayurveda, Yoga, Unani, Siddha, and Homeopathy). Also, many other healing approaches exist in the country viz. Meditation, Chiropractic, Acupuncture and Massage Therapy among others.

Despite presence of critical issues regarding scientific research, upgradation, efficacy, quality, safety, availability, preservation, and evidence-baseness associated use of CAM among general population has been reported to be ever increasing across developed as well as in developing countries.^{2,3}

In India, under NHM (National Health Mission), mainstreaming of AYUSH at primary health care level has been envisaged as a solution measure to overcome human resource shortage in healthcare. There is an unmet need to study medical, social and ethical issues associated with practice of CAM such as cross practice, cross referral, confused pleural approach availability, and disparity in approaches of management of clinical conditions by different practitioners for efficient and functional mainstreaming of CAM into existing health care delivery system in the country.⁴ However, there is dearth of studies on the topic from the country. Thus, the present study was carried out to determine the knowledge and attitude towards CAM and its self-use among allopathy practicing doctors constituting the dominant health care delivery system of the country.

MATERIAL AND METHODS

Across sectional study was carried out among allopathy practicing doctors in a tertiary care teaching hospital. The sample size was calculated using finite correction among 423

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posted doctors (sampling frame), assuming population proportion () to be 50%, with 5% level of significance and 95% confidence interval and 5% error of margin. The minimum sample size calculated was 202. However, during conduct of the study, a total of 220 doctors participated in the study. Simple random sampling was carried out. A Self-administered structured questionnaire was designed which had 5 major domains, assessment of demographic profile and participant characteristics, knowledge, attitude, self-use and miscellaneous practices. Modified Attitude Assessment Questionnaire⁵ (22 questions) was used to assess the attitude towards CAM. It was framed in five-point likert scale format with options “Strongly Disagree”, “Disagree”, “Neutral”, and “Agree”, “Strongly Agree” scoring 1 to 5 respectively were used. Mishmash of 13 positively worded and 09 negatively worded questions was carried out to maximise consistency while completing the questionnaire. Scoring was reversed for negatively worded questions. The highest possible score was 110 (highly positive attitude) and 22 (highly negative attitude) was the lowest. Further, the score obtained by the study participant was recategorised as ‘Favourable’ (>55) and ‘Unfavorable’ (score ≤ 55) for subsequent analysis. Data was analysed using SPSS 21 software.

RESULTS

As shown in Table 1, majority (56%) were in age-group 30-45 years with median age of 30 years (IQR= 28-33). Further, 74% (95% CI = 68-80%) were males, 70% were married, 87% were Hindus, 86% (95% CI = 81-90%) had less than 15 years of medical practice, 82% (95% CI = 77-87%) were Post Graduate (PG) residents, 70% (95% CI = 63-75%) were practicing medicine or allied subject while 30% (95% CI = 24-37%) belong to surgical and allied specialties. 59% doctors (95% CI = 52-66%) belong to a clinical subjects.

Majority 90% (95% CI = 85-94) of doctors had heard the term CAM. Total 22 different modalities of CAM were quoted by the study participants out of which Ayurveda (88%, n=194), Homeopathy (78%, n=172), Yoga (42%, n=92), and Acupressure (32%, n=70) were the most commonly quoted. However, as shown in Table 2, Self-declared knowledge was found best for Yoga (71%, n=92), Ayurveda (58.8%, n=194), Homeopathy (51%, n=172) and Acupressure (37.1%, n=70). Television (32%, n=70), Newspaper (23%, n=51) and friends (21%, n=45) were referred as most common sources of their existing knowledge regarding CAM.

The attitude towards CAM was found favourable among 90% of the participants (Attitude score > 55). The highest Attitude score attained in modified attitude assessment questionnaire was 104 whereas lowest score attained was 36. The mean score attained in the group was 71.5 ± 10.98 (95% CI = 70.05-72.96). Some salient conclusions from questionnaire are “75% of the participants believed that the patient’s expectations, health beliefs and values should be integrated into the patients care process”, “68% doctors agreed that CAM treatments which are not tested in a scientifically recognised manner should be discouraged”, “Majority (60%) agreed that CAM should only be used in minor ailments only”, “59% doctors believed that CAM can be dangerous as it may prevent people from getting proper treatment”. However, about “51% doctors agreed that CAM therapies include ideas and methods from which conventional medicine could benefit”, “Majority (46%) disagreed that the CAM can produce longer lasting and more complete clinical results than conventional medicine”, and “Only 30% doctors agreed that effects of CAM are placebo”. Among respondents, 39% (n=86) doctors agreed that they do self-use of CAM therapies in some or the other form.

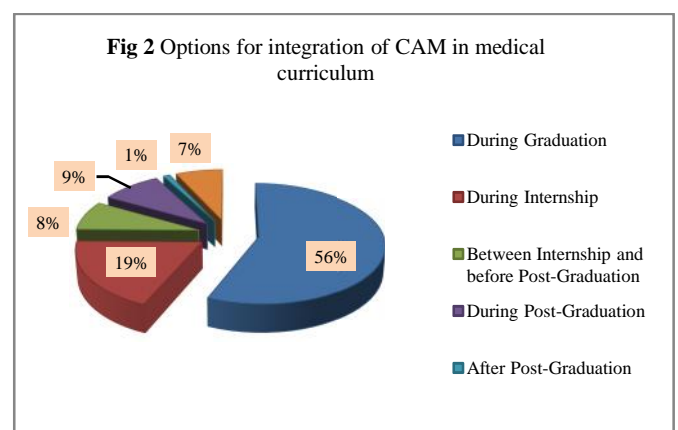
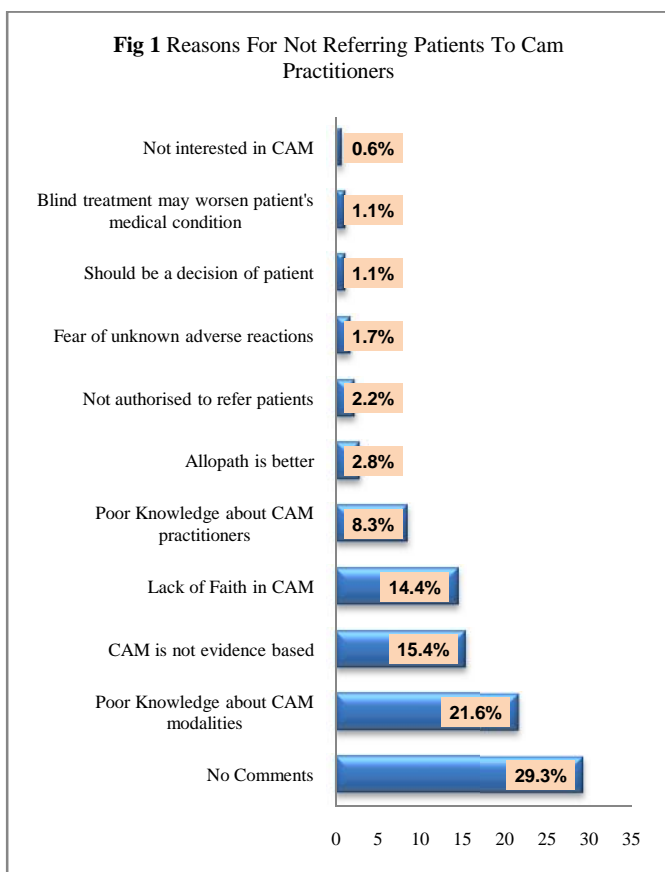
Table 1 Participant characteristics

S NO	Study variable	Frequency	Percentage (%)	95% CI
1	Age (in years)			
	• 15 – 30	123	56	49.08 – 62.58
	• 31 – 45	81	37	30.43 – 43.56
2	Gender			
	• Male	163	74	67.77 – 79.75
3	Marital Status			
	• Unmarried	57	26	20.25 – 32.23
4	Religion			
	• Married	154	70	63.48 – 75.98
5	Experience : Years of medical practice			
	• Hindu	192	87	82.13 – 91.37
	• Muslim	8	4	1.58 – 7.04
	• Sikh	7	3	1.29 – 6.45
	• Christian	5	2	0.74 – 5.22
	• Others	8	4	1.58 – 7.04
6	As per Appointment			
	• > 15 years	189	85.9	80.60 – 90.22
7	As per Nature of specialty			
	• < 15 years	31	14.1	9.78 – 19.40
8	As per type of specialty			
	• PG Resident	181	82	76.57 – 87.08
9	As per type of specialty			
	• Faculty	39	18	12.92 – 23.43
10	As per Nature of specialty			
	• Surgical and allied	67	30	24.45 – 37.00
11	As per type of specialty			
	• Medicine and allied	153	70	63.00 – 75.55
	• Preclinical	22	10	6.37 – 14.75
12	As per type of specialty			
	• Paraclinical	68	31	24.87 – 37.47
13	As per type of specialty			
	• Clinical	130	59	52.28 – 65.65

Table 2 Distribution of self-declared level of knowledge regarding various modalities of CAM quoted by participants

S No	Various modalities of CAM quoted by participants	Frequency	Self-declared level of Knowledge		
			A*	B*	C*
1	Ayurveda	194	80	114	0
2	Acupressure	70	43	21	1
3	Acupuncture	49	21	21	7
4	Aromatherapy	11	8	3	0
5	Herbal medicine	4	3	1	0
6	Homeopathy	172	89	83	0
7	Massage therapy	5	3	2	0
8	Meditation	17	7	9	1
9	Naturopathy	35	28	7	0
10	Siddha	53	45	8	0
11	Traditional Chinese medicine	16	11	5	0
12	Unani	14	12	2	0
13	Yoga	92	24	67	1
14	Diet based therapy	2	1	1	0
15	Megavitamin therapy	1	0	1	0
16	Chiropractic	14	9	5	0
17	Reikel	13	9	4	1
18	Tai chi	2	0	2	0
19	Hypnotherapy	6	4	2	0
20	Magneto therapy	3	3	0	0
21	Osteopathy	2	1	1	0
22	Reflex therapy	3	3	0	0

LEGEND A*means “Just heard about it”.
 B*means “Have some knowledge about it”.
 C*means “Have thorough knowledge about it”.



Majority (80%, n=175) believed that their patients would be using CAM. Most probable reasons quoted for the same were “poor satisfaction with conventional therapy” (46.4%), “Cultural belief of patients” (45.9%) and faith in CAM (21.8%). When a patient asks about CAM to them, 56% acknowledged that they remained neutral (56%). However, 28% doctors encouraged their patients to seek CAM but from authorised practitioners only and 11% discouraged their patients to get involved in use of CAM for their illnesses.

Only 13% (n=29) doctors referred their patients to CAM practitioners. Fig 1 mentions various reasons for not referring patients to CAM Practitioners. The three most common modalities of CAM of referral were Yoga (31%, n=9), Ayurveda (24%, n=7) and Homeopathy (21%, n=6). Arthritis (21%, n=6), Lifestyle diseases (21%, n=6) and Skin diseases (14%, n=4) were the most common disease conditions for referral to CAM modalities. The most common reasons quoted by doctors (n=191) for non-referral of patients to CAM practitioners were poor knowledge about CAM (20%), non-evidence based healing approaches (15%) and lack of faith in CAM (14%).

General well being (34%), Respiratory diseases (23%), Musculoskeletal disorders (14%) and gastrointestinal disorders (10%) were the most common diseases or conditions for the self-use of CAM by them. “Logical acceptance to CAM” and “Dissatisfaction with conventional medicine” were the most common reasons to use CAM therapies (30% and 29% respectively).

Forty eight percent (95% CI = 45-59%) of participants suggested that the integration of CAM should be done in the current conventional medicine curriculum. As shown in Fig 2, majority (57%) suggested that this integration should be done during graduation (MBBS). This was followed by 17% who suggested Internship phase for the same. Half (50%) of them opined that an orientation capsule of one month duration would be adequate for it. Lack of evidence based approach (88%) and Poor awareness about CAM among them (29%) were the most common perceived barriers for integration of CAM in conventional medical curriculum by participants. Factors which can positively influence them towards CAM were Studies/Evidence quoted in Standard Medical Journals/Textbooks (55%, n=122) and Positive personal experience (50%, n=109).

Table 3 Distribution of Sources of knowledge about various modalities of CAM

S No	Sources of Knowledge	Frequency	Percentage
1	Television	70	31.82
2	News Paper	51	23.18
3	Friend	45	20.45
4	Books	37	16.82
5	Internet	30	13.64
6	Family	29	13.18
7	Doctors	14	6.36
8	Magazine	8	3.64
9	Patients	5	2.27
10	Professional Journal	5	2.27
11	Workshop	2	0.91
12	School	1	0.45

df=2). However, Self-use of CAM was found significantly different based upon the nature of specialty i.e self-use was significantly higher (p=0.031, df =1, Chi square test) among doctors belonging to medicine and allied as compared to surgery and allied specialties (28.3%). Self-use of CAM was also significantly different (p=0.029, df=2, Chi square test) among various types of specialties (Preclinical=41%, Para-clinical=44% and Clinical=33%). Similarly, referral of patients was significantly higher (p=0.002, df=1, Chi square test) among CAM users (61.5%) than CAM non-users (34.3%).

DISCUSSION

The present study documents evidence on the belief, attitude and self-use of CAM among allopathic doctors. It was found that majority (90% (95% CI = 85-94)) doctors have heard the term CAM, which is similar to the findings of previous studies on the topic.⁶ In current study, Ayurveda, Homeopathy, Yoga and Acupressure were the commonly quoted CAM modalities by doctors but in study by Kong *et al* Yoga, Ayurveda, Meditation, Unani and Siddha were the common quoted ones. In Berman *et al* it was kept as a closed ended question for 18 selected modalities.⁷ The most common sources of information quoted in this study were TV (32%), Newspaper (23%), Friends (21%) etc while in Brown *et al* study, media (60%), Friend (57%), Internet (35%) were quoted as most common sources of knowledge.⁸ In current study approx, 45% doctors believed that few of their clients would be using CAM therapies while in literature it ranges from 20% to 83.5%.^{9,10,11}

Table 4 CAM Health Belief among allopathic doctors

S No	Modified CAM Health Belief Questionnaire (CHBQ)	SA* (%)	A* (%)	N* (%)	D* (%)	SD* (%)
1	Physical and mental health is maintained by an underlying energy or vital force.	27	43	16	9	5
2	Health and disease are a reflection of balance between positive life-enhancing forces and negative destructive forces.	20	50	19	7	4
3	Patient's symptoms are a manifestation of general imbalance of dysfunction affecting the whole body.	18	51	20	10	1
4	Body is essentially self-healing and the task of a health care provider is to assist in the healing process.	25	46	16	11	2
5	Most complementary therapies stimulate the body's natural therapeutic powers.	8	41	36	11	4
6	CAM works to restore the body's own balance by creating a sense of well-being.	5	35	45	10	5
7	A patient's expectations, health beliefs and values should be integrated into the patient care process.	35	40	12	8	5
8	A health professional should be able to advise their patients about commonly used CAM.	8	31	36	17	7
9	CAM therapies include ideas and methods from which conventional medicine could benefit.	7	44	35	11	3
10	CAM can produce longer lasting and more complete clinical results than conventional medicine.	3	15	36	31	15
11	CAM is used because it has few side effects.	5	32	26	32	10
12	CAM should be encouraged in Govt. medical services.	6	31	37	17	9
13	CAM is useful as Preventive measure and not as Therapeutic	38	30	20	10	3
14	CAM should only be used in minor ailments and not in the treatment of more serious illness.	5	15	37	34	8
15	CAM represents a confused and ill-defined approach.	2	13	25	37	23
16	CAM can be dangerous as it may prevent people getting proper treatment.	8	24	32	28	9
17	CAM should only be used as a last resort when conventional medicine has nothing to offer.	5	17	18	38	21
18	CAM is merely a fashionable fad which will soon disappear.	13	31	32	15	8
19	CAM therapies are merely a financial con trick.	15	38	31	9	6
20	Effects of CAM therapies are usually the result of a placebo effect.	10	35	34	16	5
21	CAM treatments not tested in a scientifically recognized manner should be discouraged.	6	28	36	25	5
22	CAM therapies are a threat to public health.	11	35	31	17	6

LEGEND : SA* means 'Strongly Agree', A* means 'Agree', N* means 'Neutral', D* means 'Disagree', SD* means 'Strongly Disagree'.

No association was found between attitude of doctors towards CAM with the Gender (p=0.878, df=1), Experience (More or less than 15 years) of doctors (p=0.749, df=1), Nature (MD or MS) of specialty (p=0.884, df=1) and Type (Preclinical, Paraclinical or Clinical) of the specialty of doctors (p=0.847,

The common reasons mentioned for usage of CAM therapies by patients specified by the doctors in current study were "Not satisfied with conventional therapy" (46.4%), "Patients cultural beliefs" (45.9%) followed by "Faith in CAM" (21.8%) which is similar to the reasons mentioned in Renzi *et al* study

i.e Conventional treatments had not been satisfactory (41.2%), CAM have fewer adverse effects (29.4%), CAM was believed more effective (23.5%) and it represented the only treatment option for their health problems (17.7%).¹²

Present study showed 90% of the participants have favourable attitude towards CAM. Similarly, attitude was found to be favourable in many studies.^{3,12,13} When doctors were asked about simultaneous use of CAM therapies by their patients, majority of doctors (56%) in this study remained neutral while 11% of them discouraged and 27% encouraged to seek them CAM. In Study by Renzi *et al* 30% doctors considered discussion about CAM is unnecessary as these are non-effective healing modalities and 27.8% acknowledged that their knowledge about CAM is inadequate.¹² Moreover, study by Junnaid R *et al* revealed that 49.7% of doctors forbade their patients to use CAM.²

In present study 18% doctors were found to have referred their patient to CAM practitioners. In literature referral of patients varies from 14-80%.^{14,15,16,17} In this study, patients were referred to Ayurveda, Yoga, Homeopathy, Meditation and Acupressure therapies. However, in study by Kurtz *et al* they were referred to Multivitamin therapy, herbal therapy, lifestyle diet, massage therapy.¹⁷ In current study these patients were referred commonly for diseases like Arthritis, Lifestyle disorders and skin diseases. However, in Shaar *et al* study, they were referred for Chronic disease, psychiatric diseases and respiratory infections.³

In this study, 39% doctors acknowledged self-use of CAM. Earlier studies have shown self use rates varying from 27 - 32%.^{5,11} In present study, 48% participants agreed for integration of CAM in the conventional medicine curriculum. Krietzer *et al* study suggested this integration to be done at the level of school in curriculum.¹³

CONCLUSION

The present study documents evidence of positive attitude among allopath practitioners towards CAM apart from self-use among them. However, knowledge about CAM is limited, hence addition of an orientation capsule of optimal duration on evidence-based CAM modalities/treatments should be incorporated at undergraduate level. Increased interaction of CAM practitioners with allopathic doctors by organising multidisciplinary conferences, seminars and updates will also go a long way in enhancement of holistic care approach in the country.

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