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Physicians Perception on Complementary and Alternative Medicine (CAM): A Cross Sectional Survey at Tertiary Care Hospital in India

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Abstract

Background: Allopathic physicians are relatively unfamiliar with Complementary and Alternative Medicine (CAM) but they're in common use. A cross sectional survey was conducted to understand physician's perception of it.

Method: All 385 physicians from St. John's Medical College & Hospital, Bangalore were approached. Data were collected using anonymised questionnaires on its use, perceptions, recommendation and inclusion in medical curricula. Responses were analysed according to their experience (<5, 5-10 & >10 years) and qualifications (specialists with: MD, MS, MCh, DM, Diploma or GPs with MBBS and Fellowship).

Results: Responses were received from 247 (64%) of physicians. 173/38/36 (70/15/15%) had <5/5-10/>10 years' experience, half were specialists, half GPs. Their mean age was 33 years, 114 (46%) were males. 168/169/152/133/91/84 (68/68/53/54/37/34/27%) reported their patients used CAM for chronic diseases/consult their patients about CAM/said their patients informed them about it/considered it may be useful but harmful/that it increases side effects of allopathic medication/ that it worsens the condition. 67 (27%) physicians recommended it. Yoga/meditation, 57/47 (23/19%) were commonest. Most, 97/143/154/98 (39/58/62/40%) disagree with using it when allopathy is ineffective/disagree with including it in medical curricula/disagree on training doctors about it/do not recommend it.

Conclusion: CAM is used ubiquitously, especially for chronic diseases. Allopathic doctors need knowledge about them and their appropriate use for better outcomes.

Keywords: Complementary and alternative medicine; Physician; Perception; Chronic diseases

Introduction

Complementary and Alternative Medicine (CAM) is defined by the National Centre for Complementary and Alternative Medicine (NCCAM) as a group of diverse medical and health care systems, products, and practices that are not presently considered part of conventional medical care, consequently it's not included in the medical curriculum. It is generally assumed that complementary medicine is used in conjunction with allopathic medicine and alternative medicine replaces allopathic medicine [1].

An integrative approach was recently recommended, providing affordable and practical solutions to the global healthcare crisis, especially in developing countries like India. The department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy (AYUSH), under the Ministry of Health and Family Welfare proposed a new approach by integrating with the allopathic system, ensuring health for all citizens across the country [2].

The success of the new, 'integrative', approach depends on its ability to identify the respective values, beliefs, fundamentals, practices, strengths, and weaknesses of all the systems. China's bottom up approach incorporates practices from both traditional and modern medicine effectively. Chinese medical students take compulsory courses in both modern and traditional medicine, applying their knowledge in practice. Therefore, Chinese physicians are aware of the advantages of both systems and can opt for the right combination. The role of integrative medicine is still at its infancy in India [3].

The scope of integration between CAM and allopathic medicine in future depends on the attitudes of allopathic physicians, especially postgraduate residents. Their attitudes and beliefs may strongly affect the way they ultimately practice medicine. In previous studies in developed countries, medical students have consistently expressed interest in gaining more exposure to CAM [4,5]. Medical colleges are becoming aware of the need to provide CAM related education and training [6].

CAM such as Ayurveda, homeopathy, herbal treatment, meditation and yoga are widely used in chronic illnesses such as diabetes mellitus, hypertension, coronary artery disease, stroke, COPD, asthma, arthritis, gout and other chronic neurological diseases. CAM's utilisation in developed and developing countries has almost doubled in recent years, particularly where long term treatment is required [7]. The utilization rate of CAM in India ranges from 32-63% in chronic medical conditions [8]. Little is known about CAM, particularly their adverse effects on routine allopathic treatments for chronic diseases.

Despite uncertainties about their effectiveness, the use of CAM is well documented. Studies suggest 30–68% of patients use some form of CAM therapy [9]. Several international studies have surveyed physicians' practices and beliefs on CAM [10]. These studies showed considerable variation in responses regarding physicians' practice, referrals for and belief in the efficacy of specific types of CAM. Possible explanations cited for variations between these surveys include:

(i) Different demographics (greater acceptance of CAM in some European countries);

(ii) Survey wording (including CAM therapy definitions);

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(iii) Differences in the ratio of general practitioners to specialists; and

(iv) Local or regional differences in their familiarity or availability [11].

Most allopathic physicians are unaware of CAM's effects in chronic disease. Many studies concern the prevalence, pattern, and frequency of CAM use in various chronic diseases. Few include details of patient's perspectives of CAM. Although studies assessing physicians' perceptions of CAM come primarily from Western countries, data from the developing countries are scarce. Factors influencing Indian views on CAM might be completely different from those prevalent in the West. Routine enquiry of patients' CAM therapies may improve and enhance their care by avoiding potentially harmful drug interactions and the art of medicine by improving the quality of doctor-patient therapeutic relationships. Investing more time on evidence based CAM therapies in medical curriculum may improve communication concerning CAM self-prescribed by many health consumers. Therefore physician's opinion on CAM needs assessment in our specific setting. To broaden their understanding in this area, we conducted a cross sectional survey on their perception on Complementary and Alternative Medicine, gaining important perspectives from treating physicians.

Methods

This study was approved by the Institutional Ethics Review Board of St. John's Medical College and Hospital, Bangalore. 385 physicians from the departments of Psychiatry, Urology, Dermatology, Paediatrics, Cardiology, Gastroenterology, Neurology, Pain & palliative, Physical and Medical Rehabilitation, Medical Oncology, Medicine, Surgery, Nephrology, Obstetrics and Gynaecology, Community Medicine, Orthopaedics, Surgical Oncology, Chest Medicine, Emergency Medicine and Endocrinology were approached. Specialities which could not conceivably involve use of alternative medicine in management of chronic diseases, such as radiology and anaesthesiology were excluded.

Data were collected using a structured questionnaire, approaching individual doctors in the hospital during their non-OPD days or during department academic sessions such as seminars, journal clubs or case presentations. Physicians failing to respond after 5 attempts were classed as non-responders. The two page anonymous questionnaire had 14 questions, including details of the prevalence of CAM therapy, opinions on different CAM therapies they know, their use in chronic disease and incorporating CAM education in routine medical curricula. Data on patients' sources of information about CAM, whether they informed the treating doctors about their use of CAM and the physicians' opinion on prescribing CAM or referring patients to CAM therapists were collected.

Data management and statistical analysis

Data were entered in Epi-Info version 7. Continuous data were analysed using descriptive statistics and categorical data presented as frequencies. Analysis of responses was based on physicians' years of experience (three groups: <5 years, 5-10 years and >10 years) and qualifications [two groups: Specialist (MD, MS, MCh, DM, Diploma) and General Practitioner (MBBS and Fellowship)]. Groups were compared using Chi-squared tests, p-values < 0.05 were considered significant. All statistical analyses were performed with SPSS version 17.

Results

Responses were received from 247 (64%) of 385 physicians with various years' of experience. Half were specialists, half general

physicians. Their median number of years in practice was 2 (IQR; 1-5), mean age 33 years (SD \pm 8.6), 114 (46%) were males. Table 1 shows characteristics of responding physicians.

Among 168 (68%) physicians who reported that their patients use CAM, 104 of them opined that- 10-30% of their patients used CAM for chronic diseases, physicians consult their patients about CAM [169; (68.4%)], and said their patients informed them about it [152 (61.1%)]. 50 physicians reported patients didn't disclose CAM therapy to doctor for personal reasons, 128 that most patients take CAM therapy recommended by friends and relatives.

Half of the physicians considered it may be useful but might cause harm by increasing side effects of allopathic medication, worsening the condition. 67 physicians most commonly recommended yoga or meditation and 22 referred patients to CAM therapies, mostly yoga, meditation and Ayurveda. Senior doctors made most recommendations and referrals. Table 2 shows overall opinion of physicians.

Tables 3 and 4 shows how physicians' years of experiences and specialist experiences influences their recommendations for Ayurveda, homeopathy naturopathy and herbal medicine. Physicians <10 years of experience and specialists opined that its patients choice to take CAM therapy. General physicians didn't recommend them. Most physicians were aware of and recommended yoga, meditation, massage, spiritual healing, dance and music therapy but many were unaware of Siddha, Unani, Chiropractic therapy & Reiki therapy.

Most physicians disapprove CAM therapy for patients refractory to allopathic treatment, including CAM education in medical curricula or training doctors in CAM therapy. Over a third of physicians don't advise their patients to take CAM therapy, see Tables 5 and 6.

Discussion

Most respondents to this comprehensive survey of physicians' perceptions on CAM therapies at a tertiary care teaching hospital had <5 years of experience. Their mean age was 33 years and median number of years in practice 2. Most physicians reported their patients use CAM for chronic diseases, half opined that CAM may be useful but also harmful. A quarter of physicians recommended CAM to their patients, especially yoga and meditation. A few physicians referred patients to CAM therapies, including Yoga, Meditation and Ayurveda. Senior doctors made most recommendation and referrals.

Age in years	Number	Percentage
20-35	180	72.9
36-45	40	89.1
46-55	21	8.5
>56	6	2.4
Gender		
Male	114	46.2
Female	133	53.8
Medical Specializations		
Specialist (DM,MCh,MD,MS,Diploma) 124	51.2	
Generalist (MBBS)	123	49.8
Years of experience		
< 5 years	173	70.0
5-10 years	38	15.4
>10 years	36	14.6

Mean age 33 years (SD \pm 8.6), Mean years since highest degree 5.6 (SD \pm 6.1), Median number of years of experience 2 (IQR 1-5). IQR-Inter Quartile Range 25%-75%, SD- Standard Deviation,

Table 1: Characteristics of 247 respondents on CAM.

Physician opinions on CAM therapy	Number	Percentage
Are your patients using CAM for chronic disease	168	68.0
10-30%	104	60.8
<10 %	43	25.1
31-50%	20	11.7
>75%	3	1.8
51-75%	1	0.6
Do you ask patients whether they are using CAM	169	68.4
Patients inform you about using CAM	151	52.6
10-30%	71	46.7
<10 %	43	28.9
31-50%	18	11.8
>75%	11	7.2
51-75%	8	5.3
General utility		
May be useful, but also harmful	133	54.3
Useless, can be harmful	60	24.5
May be useful, but harmless	16	6.5
Don't Know	14	5.7
Is useful and helps in improving patient condition	13	5.3
Useless & harmless	9	3.7
Interaction with allopathic medication		
Increases side effects of allopathic medicine	91	37.0
Does not affect action of allopathic medicine	66	26.8
No effect, but helps control severity of Disease	51	20.7
Reduces the effect of allopathic medicine	25	10.2
Improves the effect of allopathic medicine	9	3.7
Decreases side effect of allopathic medicine	4	1.6
Effect of CAM		
CAM- Worsen the patient condition	84	34.3
CAM can have mild to moderate side effect	62	25.3
CAM can have serious side effects	34	13.9
CAM-Improves the patient condition	27	11.0
CAM- Doesn't change the patient condition	24	9.8
CAM - Has no side effects	14	5.7
Physicians recommending patients to CAM	67	27.1
Yoga	57	85.0
Meditation	47	70.1
Massage	14	20.8
Ayurveda	13	19.4
Spiritual healing/prayer	12	17.9
Dance/Art/Music therapy	8	11.9
Homeopathy	6	8.9
Acupuncture	5	7.4

 Table 2: Physicians opinion on CAM therapy.

Most physicians opine that CAM shouldn't be used in patients refractory to allopathic treatment and on including CAM education in medical curricula or training doctors on CAM therapies, Most physicians in all groups (based on years of experience and qualification) were aware of and recommended yoga, meditation, massage, spiritual healing, dance and music therapy. They were unaware of Siddha, Unani, Chiropractic therapy & Reiki therapy.

The 64% response rate is comparable to that of a nationwide study of New Zealand general practitioners conducted in 2006 [12] and among general practitioners in Doha, Qatar in 2010 [13]. Previous studies have shown utilization of CAM therapy was between 19-68%, as in our study [14-20].

68% of the physicians who responded to our questionnaire said

their patients use CAM therapy for chronic disease. A study done in Australia [7] by JCS Mak reported 85% were familiar with CAM. The commonest therapies were acupuncture (80%), yoga (74%) and Tai-Chi (72%). We found that majority of physicians, regardless of experience, were familiar with most CAM therapies, recommending yoga and meditation.

About half opined that CAM may be useful but also harmful, over a third said it increases the side effect of allopathic medication and a third thought CAM therapy worsens the condition of patients. Most physicians advise against taking CAM therapy.

A review study on side effects of CAM therapy by Niggemann B and Grubber C described the adverse effects and drug interactions with

Types of CAM	Experience	Unaware	Not recommend	Recommend	Patients choice	p-value	
	<5	26 (15.1)	51 (29.7)	35 (20.3)	60 (34.9)		
Ayurveda	5-10	7 (18.4)	8 (21.1)	7 (18.4)	16 (42.1)	0.001	
	>10	17 (47.2)	5 (13.9)	2 (5.6)	12 (33.3)		
	<5	27 (15.6)	53 (30.6)	31 (17.9)	61 (35.3)		
Homeopathy	5-10	7 (18.4)	8 (21.1)	7 (18.4)	18 (42.1)	0.003	
	>10	18 (50.0)	7 (19.4)	3 (8.3)	8 (22.2)		
	<5	33 (19.1)	44 (25.4)	40 (23.1)	55 (31.8)		
Naturopathy	5-10	8 (21.1)	11 (28.9)	7 (18.4)	11 (28.9)	0.008	
	>10	18 (50.0)	5 (13.9)	2 (5.6)	11 (30.6)		
	<5	28 (16.2)	38 (22.0)	35 (20.2)	71 (41.0)		
Acupuncture	5-10	11 (28.9)	10 (26.3)	8 (21.1)	8 (21.1)	0.030	
	>10	9 (25.0)	2 (5.6)	5 (13.9)	20 (55.6)		
	<5	32 (18.5)	57 (32.9)	24 (13.9)	58 (33.5)		
Herbal	5-10	13 (34.2)	8 (21.1)	3 (7.9)	14 (36.8)	0.006	
medicine	>10	18 (50.0)	6 (16.70)	1 (2.8)	11 (30.6)		
	<5	6 (3.5)	4 (2.3)	129 (74.6)	32 (18.5)		
Yoga	5-10	2 (5.3)	2 (5.3)	31 (81.6)	3 (7.9)	0.285	
-	>10	4 (11.1)	0	24 (66.7)	8 (22.2)		
	<5	16 (9.2)	17 (9.8)	81 (46.8)	58 (33.5)		
Massage	5-10	7 (18.4)	6 (15.8)	20 (52.6)	5 (13.2)	0.190	
	>10	6 (16.7)	2 (5.6)	14 (38.9)	14 (38.9)		
	<5	8 (4.6)	6 (3.5)	122 (70.5)	35 (20.2)		
Meditation	5-10	3 (7.9)	2 (5.3)	27 (71.1)	5 (13.2)	0.305	
	>10	5 (13.9)	0	21 (58.3)	10 (27.8)	5.000	
	<5	71 (41.0)	62 (35.8)	6 (3.5)	33 (19.1)		
Siddha	5-10	17 (44.7)	14 (36.8)	0	7 (18.4)	0.482	
	>10	22 (61.1)	8 (22.2)	0	6 (16.7)		
	<5	76 (43.9)	60 (34.7)	5 (2.9)	31 (17.9)		
Unani	5-10	17 (44.7)	14 (36.8)	0	7 (18.4)	0.535	
	>10	23 (63.9)	8 (22.2)	0	5 (13.5)		
Spiritual	<5	13 (7.5)	13 (7.5)	80 (46.2)	66 (38.2)		
healing/	5-10	5 (13.2)	2 (5.3)	20 (52.6)	11 (28.9)	0.755	
prayer	>10	6 (16.7)	2 (5.6)	16 (44.4)	12 (33.3)		
Dance, Art,	<5	14 (8.1)	13 (7.5)	91 (52.6)	54 (31.2)		
Music	5-10	4 (10.5)	2 (5.3)	25 (65.8)	7 (18.4)	0.377	
tnerapy	>10	6 (16.7)	0	18 (50)	12 (33.3)		
	<5	80 (46.2)	33 (19.1)	20 (11.6)	38 (22.0)		
Chiropractice	5-10	20 (52.6)	4 (10.5)	5 (13.2)	9 (23.7)	0.696	
therapy	>10	19 (52.8)	6 (16.7)	1 (2.8)	10 (27.8)		
Reiki /	<5	74 (42.8)	39 (22.5)	14 (8.1)	44 (25.4)		
Therapeutic	5-10	17 (44.7)	5 (13.2)	5 (13.2)	10 (26.3)	0.557	
touch	>10	20 (55 6)	5 (13 9)	1 (2.8)	10 (27 8)		

Table 3: Physicians responses on different type of CAM therapy based on experience (years), # (%).

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Types of CAM	Physicians	Unaware	Not recommend	Recommend	Patients choice	p-value	
Assumeda	Specialist	32 (25.8)	25 (20.2)	16 (12.9)	51 (41.1)	0.006	
Ayurveda	Gen. physician	18 (14.6)	39 (31.7)	28 (22.8)	37 (30.1)	0.000	
	Specialist	58 (46.8)	39 (31.5)	1 (0.8)	26 (21.0)	0.267	
Siddna	Gen. physician	52 (42.3)	45 (36.6)	5 (4.1)	20 (16.3)	0.207	
Unoni	Specialist	62 (50.0)	36 (29.0)	2 (1.6)	24 (19.4)	0 471	
Unani	Gen. physician	54 (43.9)	46 (37.4)	3 (2.4)	19 (15.4)	0.471	
l la mana a mathair	Specialist	33 (26.6)	30 (24.2)	15 (12.1)	46 (37.1)	0.050	
Homeopathy	Gen. physician	19 (15.4)	38 (30.9)	26 (21.1)	39 (31.7)	0.056	
	Specialist	35 (28.2)	26 (21.0)	17 (13.7)	45 (36.3)	0.040	
Naturopatny	Gen. physician	24 (19.5)	34 (27.6)	32 (26)	32 (26)	0.042	
	Specialist	37 (29.8)	30 (24.2)	9 (7.3)	48 (38.7)	0.004	
Herbai medicine	Gen. physician	26 (21.1)	41 (33.3)	19 (15.4)	35 (28.5)	0.024	
A	Specialist	30 (24.2)	19 (15.3)	22 (17.7)	52 (41.9)	0.167	
Acupuncture	Gen. physician	18 (14.6)	31 (25.2)	26 (21.1)	47 (38.2)		
	Specialist	13 (10.5)	3 (2.4)	82 (66.1)	25 (20.2)	0.121	
Meditation	Gen. physician	3 (2.4)	5 (4.1)	88 (71.5)	25 (20.3)		
No see	Specialist	10 (8.1)	2 (1.6)	88 (71.0)	23 (18.5)	0.161	
roga	Gen. physician	2 (1.6)	4 (3.3)	96 (78.0)	20 (16.3)		
	Specialist	19 (15.3)	10 (8.1)	57 (46.0)	38 (30.6)	0.307	
Massage	Gen. physician	10 (8.1)	15 (12.2)	58 (47.2)	39 (31.7)		
	Specialist	17 (13.7)	8 (6.5)	56 (45.2)	43 (34.7)	0.040	
Spiritual healing/ prayer	Gen. physician	7 (5.7)	9 (7.3)	60 (48.8)	46 (37.4)	0.243	
Dance / Art Music therapy	Specialist	14 (11.3)	3 (2.4)	65 (52.4)	42 (33.9)	0.065	
	Gen. physician	10 (8.1)	12 (9.8)	69 (56.1)	31 (25.2)		
Chiropractice	Specialist	57 (46)	19 (15.3)	11 (8.9)	37 (29.8)	0.076	
therapy	Gen. physician	62 (50.4)	24 (19.5)	15 (12.2)	20 (16.3)		
Deilei/The second state of the	Specialist	53 (42.7)	22 (17.7)	8 (6.5)	40 (32.3)	0.000	
Reiki/ i nerapeutic touch	Gen. physician	58 (47.2)	27 (22.0)	12 (9.8)	24 (19.5)	0.209	

Specialist- MD, MS, MCh, DM, Diploma and General physicians (MBBS and Fellowship)

Table 4: Physicians responses on different type of CAM therapy based on Specilization, # (%).

Physicians' Opinion	Group	Disagree	Unsure	Agree	p-value
	< 5 years	70 (40.5)	68 (39.3)	35 (20.0)	0.489
	5-10 Years	11 (28.9)	15 (39.5)	12 (33.3)	
CAM for uncured patients	>10 years	16 (44.4)	12 (31.6)	8 (22.2)	
	Specialists	45 (46.4)	49 (51.6)	30 (54.5)	0.504
	Gen. physicians	52 (53.6)	46 (48.4)	25 (45.5)	0.591
	< 5 years	104 (60.1)	25 (14.5)	44 (25.4)	0.162
	5-10Years	16 (42.2)	11 (28.9)	11 (28.9)	
CAM in medical curriculum	>10 years	23 (63.9)	6 (16.7)	7 (19.5)	
	Specialists	66 (46.2)	26 (61.9)	32 (51.6)	0.193
	Gen. physicians	77 (53.8)	16 (38.1)	30 (48.4)	
All doctors need to learn CAM	< 5 years	111 (64.2)	34 (19.7)	28 (16.2)	0.423
	5-10 years	20 (52.6)	10 (26.3)	8 (21.1)	
	>10 years	23 (63.9)	10 (27.8)	3 (8.3)	
	Specialists	78 (50.6)	31 (57.4)	15 (38.5)	0.194
	Gen. physicians	76 (49.4)	23 (42.6)	24 (61.5)	

Table 5: Physicians opinion on CAM based on years of experience and specializations.

allopathic medication [21]. Most side effects were from acupuncture leading to pneumothorax, cardiac tamponade or spinal injury. Infectious complications after acupuncture include hepatitis and bacterial endocarditis. Organ toxicity has been associated with various herbal preparations involving the liver, kidneys, and the heart. Some herbs may have carcinogenic properties. Severe nutritional deficiencies can occur in infants and small children given strict alternative diets adulterated with steroids [21].

A quarter of our physicians recommended CAM to their patients, most commonly yoga and meditation.

Siddha, Unani, herbal medicine and Reiki/therapeutic touch were rarely recommended. A small proportion willingly referred their patients to CAM practitioners, notably Ayurveda and massage. In contrast a study by JCS Mak in Australia reported 84% of physicians referred their patients to CAM therapist, 38% personally used CAM and 94% inquired about CAM therapies [7].

Our physicians with <5 years' experience were more willing to refer patients, agreeing with a recent review by Kurtz et al. [22] However, a review study with 19 surveys conducted between 1982 and 1995 found no differences in referral rates for CAM by age [20–28]. Two surveys Citation: Kunnoor NS, Rathore R, Xavier D (2015) Physicians Perception on Complementary and Alternative Medicine (CAM): A Cross Sectional Survey at Tertiary Care Hospital in India. Med chem 5: 197-202. doi:10.4172/2161-0444.1000264

	Physicians' Opinion	Refuse CAM	Take at Own risk	Free Choice	Advocated CAM
Years of experience	< 5 years	68 (39.3)	40 (23.1)	59 34.1)	4 (2.3)
	5-10Years	13 (34.2)	7 (18.4)	15 (39.5)	1 (2.6)
	>10 years	17 (47.2)	6 (16.7)	10 (27.8)	2 (5.6)
	p value	0.512	0.612	0.569	0.564
Specialization	Specialists	49(50.0)	27(50.9)	41(48.8)	5(71.4)
	Gen. Physicians	49(50.0)	26(49.1)	43(51.2)	2(28.6)
	p-value	0.959	0.903	0.753	0.255

Table 6: Physicians advice on using CAM based on years of experience and specializations.

[22,23] found referral rates for CAM were higher among female physicians and three found no difference in referral rates according to physician's gender [22-24].

We found most physicians (58%) disapprove including CAM education in medical curricula, whereas most published surveys indicate physicians wish to learn about most common CAM therapies, a high proportion (62–81%) agreeing to receive more education on them [25-27]

We report 60% oppose training allopathy physicians about CAM, unsurprising, since many of them respondents were at medical school and residency during which CAM wasn't widely discussed and rarely included in medical school curricula [28]. Most physicians disapprove CAM for patients refractory to allopathic treatment. 64% of USA medical schools incorporate some element of CAM to their curricula and students voiced interest in evidence-based CAM [29]. Students need to experience CAM practice and educators should use evidencebased strategies to identify useful interventions, aiming to teach doctors to understand and practice two medical systems appropriately [30].

Dietary supplements like selenium, silver, zinc, fluorine etc which are considered complimentary medicine have beneficial effects in various disease conditions. Selenium supplements protect cattle from hypertension and prevent heart failure in pigs. Silver deficiency may account for cancers [31,32].

In Alzheimer's disease (AD), fluorine disrupts protein folding. The presence of fluorine in tea and fluorine released from breakdown of fluorinated anaesthetic (excreted by the kidneys as aluminum fluoride) gives temporary symptomatic relief from dementia in patients with AD [33-35]. But supplementing human diets with selenium, silver and fluorine to prevent heart disease, cancers and AD has yet to be widely accepted.

We had a good response rate to a comprehensive survey covering physician's difficulties in perceiving all possible types of CAM therap. However, it only reports the perceptions of CAM and its use as a therapy throughout one tertiary care hospital in south India treating chronic diseases. Further this study does not provide the views of the doctors from primary care centre.

Conclusion

Despite the high utilization of CAM therapy by patients, physicians opined that it shouldn't be used to treat chronic diseases and disapprove including CAM education in medical curricula or training doctors on CAM therapy.

CAM isn't all gospel truth, but its use is ubiquitous, especially for chronic diseases. Patients need open advice regarding CAM therapies and allopathic doctors need to be more aware of CAM to utilize evidence based information on better patient outcomes. Further comprehensive studies at different levels of health care are needed to better understand CAM utilization in chronic conditions.

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