

Awareness about bibliographic databases among students of Ayurveda and qualified Ayurveda practitioners

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ABSTRACT

Students of Ayurveda and qualified Ayurveda practitioners were assessed for awareness about bibliographic databases. One hundred and four volunteers (age range 17–64 years; group mean \pm SD, 24.3 \pm 7.9 years; 62 females) participated in this cross-sectional study. There were 3 groups. Group I had 60 undergraduate students of a bachelor's level course in Ayurveda, Group II had 20 graduate students of a 1-year *Panchakarma* course, and Group III had 24 Ayurveda physicians who were working in a yoga and Ayurveda center. An 8-question questionnaire was used for assessment. Undergraduates were found to be the best informed, followed by those who were working, while those doing post-graduation were the least well informed. The sample was from one institution; however, the findings emphasize the importance of updating the knowledge of post-graduates or those in practice.

Key words: Ayurveda, bibliographic databases, complementary and alternative medicine

INTRODUCTION

Health care systems not included in conventional medicine are known as complementary and alternative medicine (CAM).^[1] There is inadequate scientific evidence to indicate that CAM practices are safe.^[2] Earlier CAM practitioners based their practice on tradition and intuition but recently they have been influenced by available evidence. Education and training were required to improve a CAM practitioner's understanding and application of evidence-based practice.^[3] Incorporating scientific evidence-based medicine in CAM may help to integrate it in mainstream medicine.^[4]

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Trainees from various specialties felt that they had poor training in evidence-based medicine and needed further training. The attitude toward evidence-based medicine differed with specialties. Trainees in nonsurgical specialties without research experience believed that evidence-based medicine had little impact on practice.^[5] Chiropractic students stated that more training is required in evidence-based practice and basic research concepts.^[6] Pediatric occupational therapists experienced multiple barriers in presentation and accessibility of research.^[7]

The highest quality care and best patient outcomes are achieved with evidence-based practice.^[8] However, a difference in specialties and time since qualification can influence the practitioner's attitudes toward evidence-based practice.^[9] Clinicians are often unaware how to access relevant publications. The present pilot study aimed at assessing the attitude and awareness about three bibliographic databases among Ayurveda students and practitioners.

MATERIALS AND METHODS

The setting was in a yoga and Ayurveda center in North India. Participants were 104 in number, with age range 17–64 years; group mean \pm SD, 24.3 \pm 7.9 years and 62 females. Respondents were selected by written announcements in the center. The participants belonged

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to three groups; Group I had 60 undergraduate students doing a bachelor's level course in Ayurveda, Group II had 20 graduate students of a 1-year *Panchakarma* course, and Group III had 24 Ayurveda physicians who were working in the centre. The Institution's Ethical Committee approved the study. The participants' consent was obtained.

This was a cross-sectional, pilot study. The present questionnaire assessed the awareness about evidence-based information among Ayurveda students and physicians based on three bibliographic databases. There were eight questions. They were (1) "If you want to know more about the proven effects of Ayurveda in treatment do you read?" [Please mark any one of the eight options] (a) books, (b) magazines, (c) medical journals, (d) internet searches using search engines such as Google, (e) internet searches using databases such as PubMed/Medline/PubMed Central, (f) newspapers, (g) seminars/conference handbooks, and (h) any other. (2) "Are you aware about international bibliographic databases such as PubMed/Medline/PubMed Central?" [If you have no idea please mark X]. (3) "Do you use Ayurveda for your own health?" (4) "Would you like to know more about recent studies on Ayurveda?" Questions nos. 3 and 4 were close-ended questions with options "YES"

and "NO." (5) "If your answer to No. 4 was "YES" please mention "Why you would like to know the recent studies in this area?". (6) "Which aspect of Ayurveda needs to be researched the most according to you?" (7) "Do you find it difficult to get the information you need?" There were two options, "YES" and "NO." (8) "If your answer is "YES" to question no. 7 please mention the reason." There were five options: (a) there are not adequate books in the library, (b) there are not adequate journals in the library, (c) you do not have adequate internet access, (d) you do not have adequate training to do a search as you would like to have, and (e) any other reason. The responses were scored and converted to percentages.

RESULTS

Responses to close-ended questions numbered 1, 2, 3, 4, 7, and 8 are in Table 1 and the responses to open-ended questions numbered 5 and 6 are in Table 2.

DISCUSSION AND CONCLUSION

This study evaluated the level of awareness of accessing three

Table 1: Responses of Ayurveda students and practitioners to close-ended questions

Question no.	Question	Alternatives	Group I Undergraduate students	Group II Graduate students, but studying further	Group III Qualified and working Ayurveda doctors
1	If you want to know more about the proven effects of Ayurveda in treatment do you read? [Please mark any one of the eight options]	(a) Books	26	55	62
		(b) Magazines	23	0	4
		(c) Medical journals	2	10	13
		(d) Internet searches using search engines such as Google	25	25	17
		(e) Internet searches using databases such as PubMed/Medline/PubMed Central	2	0	4
		(f) Newspapers	2	10	0
		(g) Seminars/conference handbooks	20	0	0
		(h) Any other	0	0	0
2	Are you aware about international bibliographic databases such as Pubmed/Medline/PubMed Central?	Yes	95	5	21
		No	5	95	79
3	Do you use Ayurveda for your own health?	Yes	93	100	100
		No	7	0	0
4	Would you like to know more about recent studies on Ayurveda?	Yes	100	100	96
		No	0	0	4
7	Do you find it difficult to get the information you need?	Yes	65	60	71
		No	35	40	29
8	If your answer to question no. 7 is "yes" please mention the reasons.	(a) There are not adequate books in the library	5	9	24
		(b) There are not adequate journals in the library	18	17	18
		(c) You do not have adequate internet access	18	58	6
		(d) You do not have adequate training to do a search as you would like to have	46	8	34
		(e) Any other reasons	13	8	12

Table 2: Responses of Ayurveda students and practitioners to open-ended questions

Question	Group I		Group II		Group III	
	Response	Percent	Response	Percent	Response	Percent
Question 5. If your answer to No. 4 is "YES," please mention why you would like to know the recent studies in this area?	To increase my knowledge	68	To increase my knowledge	100	To know the different aspects and benefits of Ayurveda	96
	To understand side effects if any	15	—	—	No idea	4
	To show whether descriptions can be proven	17	—	—	—	—
Question 6. Which aspects of Ayurveda need to be researched the most according to you?	Ayurvedic medicines	29	<i>Panchakarma</i>	30	Herbal plants	29
	Herbal plants	15	Ayurvedic medicines	25	Treatment	29
	Surgery	15	<i>Samhitas</i>	10	Ayurvedic text	25
	No idea	13	<i>Nadi Vigyan</i>	10	<i>Nadi Vigyan</i>	17
	Treatment	7	Practical and theoretical base	5	—	—
	<i>Marma Vigyan</i>	5	Body and mind	5	—	—
	<i>Sushrut Samhita</i>	5	Emergencies	5	—	—
	<i>Astanga Hridaya</i>	3	Herbal plants	5	—	—
	<i>Kaya Chikitsa</i>	2	No idea	5	—	—
	Principles of Ayurveda	2	—	—	—	—
	Neurologic disorders	2	—	—	—	—
<i>Doshas</i>	2	—	—	—	—	

bibliographic databases among Ayurveda undergraduates, those who were doing their postgraduation, and qualified graduates practicing Ayurveda for 3–360 months.

Undergraduates were the best informed, followed by those who were already working (who were older than the others), while the postgraduate students were the least well informed. As already mentioned CAM practitioners need continuous updating about the positive and negative effects of CAM.^[10]

The fact that the younger undergraduates were better informed than the older Ayurveda practitioners (those in jobs as well as in postgraduation) reflects the growing awareness about using the internet in academic activities.^[11] Informal questions not in the survey revealed that participants' awareness about these learning resources was obtained from their colleagues rather than through formal teaching. Interestingly, qualified practitioners in jobs were better informed than those doing postgraduation.

Ayurveda among CAM therapies is a rapidly expanding field with increasing research on the effects of herbs individually and in combination.^[12] Awareness of the contra-indications and the conditions posing a risk are as important as knowing the benefits, as certain Ayurveda preparations had undesirable effects when inappropriately used.^[13]

The answers to the other questions (eg, question 6) were diverse but showed no difference between groups. Also, question 3 ("Do you use Ayurveda for your own health?")

was not directly related to the aims of the study.

In summary, undergraduates are well informed compared with their senior colleagues, but they get their knowledge from peers rather than the teaching system. Major limitations of this pilot study were (i) the small sample size, (ii) sampling from one center alone, (iii) the numbers in the three groups differed, (iv) the questionnaire was not comprehensive, and (v) the participants were not questioned about all relevant bibliographic databases, as 41 have been described as relevant to Ayurveda.^[14]

Future directions for research could include a larger sample from several institutions, combining qualitative research methods with simple nonparticipant observation, and exploring responses in depth.

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