A Study to Determine the Knowledge, Attitude and Usage of Traditional (AYUSH) Systems of Medicine among the Students Seeking Admission to the Bachelor in Homoeopathic Medicine and Surgery (BHMS) Course - Telangana, India

Prof. Dr Sneha Bevinamarad¹, Prof. Dr Priya V. Patil²

¹HOD, Department of Repertory & Case-taking, MNR Homoeopathic Medical College & Hospital, Sangareddy, Telangana, India

²HOD, Department of Surgery, MNR Homoeopathic Medical College & Hospital, Sangareddy, Telangana, India

Corresponding Author: Prof. Dr Sneha Bevinamarad

DOI: https://doi.org/10.52403/ijrr.20230850

ABSTRACT

AYUSH system of medicines consists of seven systems - Ayurveda, Yoga, Naturopathy, Unani, Siddha, Sowa- Rigpa, and Homeopathy.¹ Apart from these many other systems like, acupuncture, Chinese medicines, Chiropractic and osteopathic medicine, etc. are included Complementary under and Alternative medicines (CAM). In India, only the abovementioned. AYUSH systems and educational courses related to these systems are considered under medical stream. AYUSH medicines though are popular among people, the knowledge regarding these systems in medical science and medical course is not evident. Hence this study is aimed to estimate the knowledge, attitude towards, and usage of AYUSH systems of medicine among the students seeking admission to the BHMS course.

Materials and Methods: For this observational, cross-section study, a total of 132 students of both sexes, seeking admission to the BHMS course between October 2022 to May 2023, were selected by random sampling. A closedended, self-structured online questionnaire was used after validation and approval, to assess the knowledge, attitude towards and usage of the AYUSH system of medicines. Descriptive statistical analysis was done using MS EXCEL. **Result:** The study revealed that students had good knowledge and positive attitudes towards AYUSH systems. 74% of students had used AYUSH medicines at least once. 84% of students willingly joined the course. The most popular system was Homoeopathy, while no student was aware of Sowa-Rigpa as the system of medicine.

Conclusion: This study concludes that the knowledge and attitude among the students seeking admission to the BHMS course, regarding Homoeopathy is good compared to other AYUSH systems.

Keywords: Alternative; Complementary; AYUSH; Traditional; Attitude; Knowledge; Usage; BHMS

INTRODUCTION

Under the Government of India, on 9th November 2014, the Ministry of AYUSH was formed with a vision of upgrading and standardizing the education and research of traditional and ancient systems of medicine. ¹ In recent times AYUSH medicines are gaining popularity and choice, especially in the management of chronic illnesses like diabetes, hypertension, etc. They are extensively used for enhancing immunity and were used for prevention during the Covid-19 pandemic.

AYUSH medicines have an immense scope because of their holistic approach, fewer

side effects, cost-effectiveness, and easy availability, in conditions where modern medicines fail to manage or treat.²

Establishing the Ministry of AYUSH:

After Independence all the systems of medicine were supported by the government of India, offering people to choose their health care system. This institutional and public support widened the strength of these systems in developing different health aspects like, curative, preventive, and promotive.²

Since 1947 various committees were set up by the government for improving and developing the healthcare sectors with a special focus on traditional medicines. Also, various policies like national education policy in Health sciences were formed to improve the status of medical education in India including the Indian system of medicines and Homoeopathy³.

Department of Indian System of Medicine and Homoeopathy (ISM&H) was formed in 1995 and was responsible for the development of these systems. In November 2003, it was renamed 'AYUSH' with the intention of improving education and research in Ayurveda, Yoga and Naturopathy, Unani, Siddha, Homoeopathy, and Sowa- Rigpa which was later included. Ultimately Ministry of AYUSH was formed in November 2014.

The number of students seeking admission to the courses related to AYUSH systems is increasing yearly in India, but data related to knowledge, and attitude towards the AYUSH systems among students seeking admission to these courses is limited hence in this study the knowledge, attitude towards, and usage of AYUSH medicines is assessed among the students taking admission to AYUSH courses, which can help in integrating of these systems into the health care system for the benefit of the mankind. Also, their willingness to take admission to these course

Aim:

To assess the knowledge, attitude towards, and usage of the AYUSH systems, and medicine among the first BHMS students while taking admission

Objectives:

To assess the knowledge, attitude, and usage regarding the AYUSH system of medicine. To assess the willingness for taking admission to the BHMS course. To assess the knowledge regarding BHMS course among students seeking admission for BHMS.

MATERIALS & METHODS

Study Design and Setting

This cross-sectional study was carried out between October 2022 to May 2023, at MNR Homoeopathic Medical College and Hospital, Sangareddy, Telangana, among the students who came seeking admission to the BHMS course. The institutional ethical committee approval was taken before conducting the study. One hundred & fortyeight (148) students were selected by random sampling method. A close-ended, self-structured questionnaire, was used to assess the knowledge, attitude, and practice regarding AYUSH systems of medicine among these students. All the questions were explained in the local language, and verbal consent was taken from the students. First BHMS students of both genders who came to seek admission for the first time to the course were included in the study. Students who came through the sliding process or those who cancelled admissions previously from any medical course were excluded.

The questionnaire

A self-structured, close-ended questionnaire was formulated by the medical fraternity of MNR Homoeopathic Medical College and Hospital. It was validated and approved by the Research department. The same was used to collect the data. The questionnaire was circulated through Google Forms. The

link was shared with the students and their feedback was recorded. Participation in this study was voluntary and confidentiality of collected data was maintained.

The questionnaire consisted of fourteen questions. It was divided into four parts.

Part 1 was related to demographic details like age, gender and religion.

Part 2 consisted of four questions to assess the knowledge, out of which two questions were to be answered with 'Yes' or 'No' and the other two were multiple options and the correct one was to be selected.

Part three had four questions related to attitude which included three questions with, 'Yes' or 'No' as answers and one multiple-choice question. The fourth part had three questions about usage with two questions in 'Yes' or 'No' form answers and the last one multiple choice question. Meanings of words like acute, chronic and preventive were explained to the students before sending a link of the questionnaire.

STATISTICAL ANALYSIS

Statistical analysis was done using Microsoft Excel. For reporting demographic data, knowledge, attitude, and usage, descriptive statistics like, percentages were calculated.

Knowledge and attitude were categorized as poor when scores were less than 50% and good when scores were fifty per cent or more.

RESULT

Demographic profile

One hundred and forty-eight students in the age group 18- 21 years (mean = 19.5 years) participated in the study who came to seek admission for 1st BHMS admission at MNR Homoeopathic medical college, Sangareddy out of which 16 (19.5%) students who went through the sliding process or were previously taken admission under any branch of medical science were excluded. Only the responses from 132 students out of 148 were considered for the study.

1	Age	18yrs- N=18	19yrs - N=66 20 yrs- N=38		21yrs- N=10	
		13.63%	50%	28.78%	7.57%	
2	Sex	Male- N=10	Female- N=122	-	-	
		7.5%	92.42%	-	-	
3	Religion	Hindu – N=98	Muslim - N=20	Christian - N= 14	Others - $N=0$	
		74.24%	15.15%	10.66%	00%	

Table 1 – Demographic variation (Frequency – 'N') (Percentages – '%')

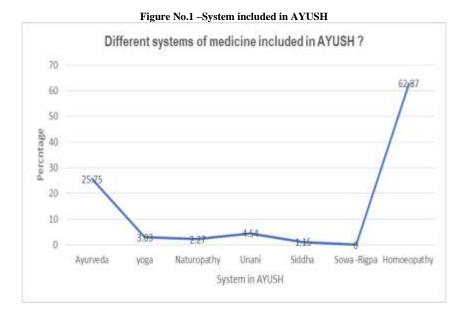
It was observed that most of the respondents were females (92.12%) with a female: male ratio being 12:1 approximately. A large number of students were followers of the Hindu religion (74.24%) followed by Muslims (15.15%) and Christians (10.66%).

Knowledge of students about AYUSH

Around 80% of students responded positively and were aware of the AYUSH system of medicines. Out of 132 students 112 (84.84%) students had knowledge about the BHMS course, its duration, scope, and limitation before joining the course.

No.	Question	Frequency (N)	Percentage (%)		
1	Were you aware of the AYUSH system of medicine before joining the course?	106	80.30%		
2	Did you know about the BHMS course, its duration, scope, and limitation before joining?	112	84.84%		
	Table 2. Participant's knowledge of the AYUSH System of Medicine				

Most of the students had good knowledge regarding Homoeopathy followed by Ayurveda, but knowledge regarding the other systems under AYUSH was comparatively poor.



Source of information about the AYUSH system:

Source of information regarding AYUSH systems was social media (31.81%), friends, and relatives (19.69%) in second place

followed by AYUSH doctors (10.6%), however, it was observed that maximum (34%) students got information from all the three sources while only a few (3%) from other sources than mentioned.

Source of information regarding the AYUSH system	AYUSH Doctor	Friends & relatives	Social media & Internet	Television	All of above
Frequency	N = 14	N = 26	N = 42	N = 4	N = 46
Percentage	10.60%	19.69%	31.81%	3.03%	34.84%
T-bl-2 Same of information about the AVIICIT metan					

Table 3 – Source of information about the AYUSH system

The attitude of students towards AYUSH

The next four questions were regarding the assessment of attitude. According to 106 students (80.3%), AYUSH medicines have few side effects than allopathic medicines. Among 132 students, 105 (84.8%) willingly

joined the BHMS course, however, for only

30 (22.7%) students BHMS course was the first choice.

The overall attitude among these students regarding the AYUSH system of medicines was positive.

No.	Question	Frequency (N)	Percentage (%)
1	Do you think that AYUSH medicines have fewer side effects than allopathic medicine?	106	80.30%
2	Was the BHMS course your first choice?	30	22.72%
3	Did you join BHMS Course willingly?	105	83.33%

Table 4 – Participant's Attitude towards AYUSH

Homoeopathy was the most popular system (63.63%) followed by Ayurveda with 28.78%. The least popular were Siddha and Yoga (0%) and Unani (1.15%), however, 6.6% of students were not sure about the popularity of the systems.

Question	Frequency (N) and Percentages (%)				
Which AYUSH system course do you find is	Homoeopathy	Ayurveda	Unani	Yoga, Naturopathy	Don't know
more popular among students seeking admission?		-		Siddha and Sowa- Rigpa	
Frequency	N = 82	N = 38	N = 02	$\mathbf{N} = 0$	N = 08
Percentage	63.63%	28.78%	1.15%	0	6.06%

Table 5 – Popularity of the AYUSH system

Usage of AYUSH medicines by students

Three questions were framed to assess the usage of AYUSH medicines.

Seventy-four percent of students had used AYUSH medicines for themselves or their family members and approximately 80% of students reported that they got positive results. AYUSH medicines were mostly used in Acute conditions (36.3%) followed by Chronic (25.7%). AYUSH medicines were also used for the prevention of diseases in 20 students (15.15%) and for all 15 (22.7%) students.

No.	Question	Frequency (N)	Percentage (%)
1	Have you ever used AYUSH medicine for yourself or a family member?	98	74.24 %
2	Did you get positive results?	106	80.30 %

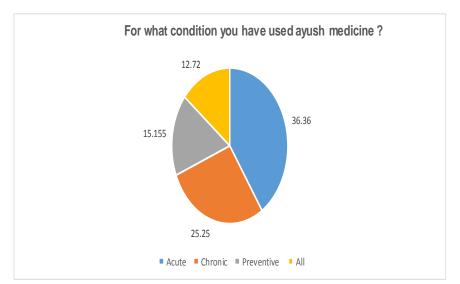


Table No 6 - Usage of AYUSH medicines

Figure 2: Use of AYUSH medicines for different conditions

DISCUSSION

The study was planned to evaluate the knowledge regarding the AYUSH system of Medicine among the first BHMS student and also their willingness to take admission. In the present study, knowledge and attitude toward AYUSH or CAM were assessed through a self-structured questionnaire which consisted of 14 questions, divided into four parts- demographic data consisting of three questions, four questions each for knowledge and attitude, and the last three questions related to usage. Descriptive statistical analysis was done and percentages were calculated.

The number of female students seeking admission to the BHMS course outnumbered the male students. There was a big gap and the Female: Male ratio was almost 12:1. Similar observations were recorded in a survey done in Gujarat by Times of India in 2019, among eight medical colleges, where females outnumbered male students during admission to MBBS course.⁴

While assessing the knowledge, regarding systems included under AYUSH it was observed that knowledge regarding the BHMS course (duration. scope, and limitations) before seeking admission was good, but regarding the different systems of was comparatively less. AYUSH The good knowledge students had about Homoeopathy followed by Ayurveda whereas it was very less regarding the other systems of AYUSH.

Similar studies were conducted in many parts of the world including India, to assess the knowledge, and attitude towards CAM

systems among students from different medical and paramedical colleges.

A study conducted in Andhra Pradesh by Akram Ahmed et, al in 2015 concluded that the overall attitude and beliefs of pharmacy students about the CAM system were positive though not included in the pharmacy curriculum. According to this study, the major source of information for AYUSH medicine were family, friends, and relatives (40.7%), and Ayurvedic medicines were (42.5%) most commonly used followed by Homoeopathy (35.3%) and Unani (13.8%). However, in the present study social media & internet (31.80%) was the major source of information followed by friends & relatives (13%) and Homoeopathy (63.63%) was the most popular system followed by Ayurveda (28.78%) and Unani.⁵

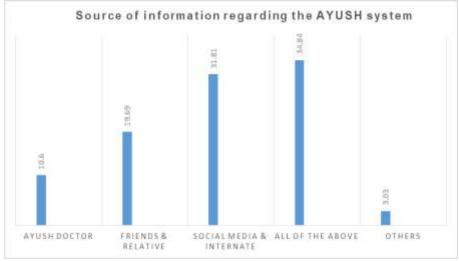


Figure 3: Different sources of information about the AYUSH system (in percentages)

The results of the present study were very similar, to a cross-sectional study conducted by, Ahmed M Samara et al, in 2019, where the major source of information was social media and the internet followed by friends, relatives, and doctors. However, the source of information for the maximum number of participants (34.84%) of the present study was 'all of the above', which included social media, the internet, friends, relatives, and doctors.⁶

A study conducted in India, Atlanta, and USA, by Kritika Subramanyam et al, concluded that, for university students of India. CAM was the cost-effective. alternative and conventional way of treatment, whereas in Western countries the observations were contradictory. Also, according to this study, 75.6% of participants in Delhi used homoeopathic medicines at least once.⁷

A recent study in September 2022, was done, in Saudi Arabia, to know the opinion

of medical students towards the application of CAM medicines in healthcare. It was observed that forty-eight per cent of participants were positive about the knowledge of CAM because according to them many patients preferred CAM, especially for chronic diseases and most of them (78%) agreed that CAM therapy should be integrated for better healthcare outcomes.

But in the present study it was observed that more participants i.e., twenty- six per cent are using AYUSH medicines for acute conditions.⁸

The attitude of the medical students of Palestine was good towards CAM even though the knowledge was not up-to-date which is similar to the results of the present study. Also, the attitude of the medical students of Turkey was good and they were willing to receive training on the subject, as was observed in a study carried out by Hulya Akan in 2015.⁹

Prof. Dr Sneha Bevinamarad et.al. A study to determine the knowledge, attitude and usage of traditional (AYUSH) systems of medicine among the students seeking admission to the bachelor in homoeopathic medicine and surgery (BHMS) course – Telangana, India

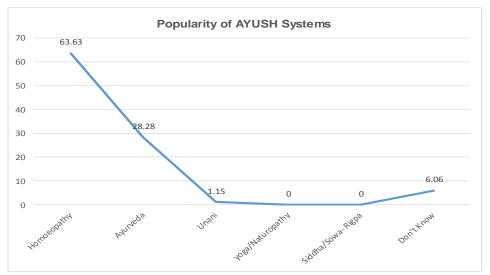


Figure 4: Popularity of AYUSH systems (in percentages)

In a study conducted in Mumbai, by Viplav Kshirsagar et al, it was found that 79.5% used CAM medicines at least once which is very close to the present study with 74.24%, and Homoeopathy and Ayurveda were the most commonly used AYUSH medicines.¹⁰

In a study conducted among the medical students in Gahana, herbal medicine was the best-known and used CAM.¹¹

Also, an article published in Times of India in 2012, states that, then, Union health minister of India, Ghulam Nabi Azad, based on a study conducted by ICMR, declared in Lok sabha,, that outdoor attendance of patients to Homoeopathy was higher compared to Ayurveda, Unani and Siddha.¹² Moreover according to WHO, Homoeopathy is the second largest system of medicine.¹³

CONCLUSION

The present study, concludes that knowledge and attitude towards AYUSH medicines are good and are using AYUSH medicines with positive results. Also, this study can conclude that knowledge among the students seeking admission to BHMS course, regarding Homoeopathy is good. The most popular AYUSH system was found to be Homoeopathy followed by Ayurveda. Around 85% of the participants had good knowledge about the BHMS course before seeking admission and had willingly taken admission to the course even though it was the first choice for very few. The number of female students joining the course was observed very high compared to male students, however, higher percentages of male students willingly took admission to the course compared to females.

As only a few students had knowledge of Yoga, Naturopathy, and Siddha, and none were aware of Sowa- Rigpa as a system of medicine, there is a need to create awareness, to improve knowledge and attitude among the students regarding different systems of medicine, their scope, limitations, and also the opportunities which each system offers.

Further studies are required to be carried out among students from various states of the country in rural and urban colleges to establish a thorough database estimating the knowledge, and attitude regarding the AYUSH system of medicines and also the willingness of students in joining these courses as the first choice over modern medicine.

Declaration by Authors Ethical Approval: Approved Acknowledgement: None Source of Funding: None Conflict of Interest: The authors declare no conflict of interest.

REFERENCES

- 1. Ministry of AYUSH Government of India. Available from: https://main.AYUSH.gov.in/AYUSHsystems/homoeopathy/ https://main.AYUSH.gov.in/AYUSHsystems/homoeopathy/introduction-ofhomoeopathy/
- 2. National Health Portal Gateway of Authentic Health Information. Available from: https://www.nhp.gov.in/AYUSH_ms
- 3. Wikipedia The free Encyclopaedia. Available from: https://en.wikipedia.org/wiki/Ministry_of_A YUSH
- 4. Bharat Yagnik. Girls outnumber boys at seven medical colleges in Gujarat, Ahmedabad news, 20 Aug., 2019, The Available Times of India. from: https://timesofindia.indiatimes.com/city/ah medabad/girls-outnumber-boys-at-sevenmedical-colleges-ingujarat/articleshow/70745833.cms
- 5. Akram Ahmed et al, Beliefs, attitudes and self-use of Ayurveda, yoga, and Naturopathy, Unani, Siddha, and Homoeopathy medicines among senior pharmacy students: An exploratory insight from Andhra Pradesh, India Published by Pharmacognosy Research-21-10-2015/ vol7/ issue 4. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC4660507/
- 6. Ahmad M. Samara et al, Use and acceptance complementary of and alternative medicine among medical students: a cross-sectional study from Palestine, BMC Complementary and (2019) Alternative Medicine 19:78. Available from: https://doi.org/10.1186/s12906-019-2492-x
- 7. Kritika Subramanian et al. Prevalence and of Complementary Perspectives and Alternative Medicine among University Students in Atlanta, Newcastle upon Tyne, and New Delhi Hindawi Publishing Corporation International Scholarly Research Notices Volume 2016. Article ID 9309534, 9 pages. Available from: http://dx.doi.org/10.1155/2016/9309534
- 8. Syed Meraj Ahmed et al, Medical Student's Opinion Toward the Application of Complementary and Alternative Medicine in Healthcare: Saudi Journal of Medicine &

Medical Sciences. Wolters Kluwer – Medknow, September 23, 2022, IP: 106.0.37.119. Available from: http://www.sjmms.net

- Hulya Akan Knowledge and attitudes towards complementary and alternative medicine among medical students in Turkey BMC Complementary and Alternative Medicine 2012, 12:115. Available from: http://www.biomedcentral.com/1472-6882/12/115
- 10. Viplav Kshirsagar The practice, attitude, and knowledge of complementary and alternative medicine in Mumbai, India, Int J Community Med Public Health. 2020 Dec;7(12). Available from: http://www.ijcmph.com
- 11. Ameade EP, Amalba A, Helegbe GK, Mohammed BS. Medical students' knowledge and attitude towards complementary and alternative medicine - A survey in Ghana. J Tradit Complement Med. 9;6(3):230-6. 2015 doi: Apr 10.1016/j.jtcme.2015.03.004. PMID: 27419086; PMCID: PMC4936753.
- 12. Kounteya Shina. Homeopath doctors double in two decades. Sept.1, 2012, India News, The Times of India. Available from: https://timesofindia.indiatimes.com/india/ho meopath-doctors-double-in-twodecades/articleshow/16098627.cms
- 13. Homoeopathy, AYUSH, National Health Portal. Available From: https://www.nhp.gov.in/AYUSH/homeopat hy#:~:text=According%20to%20the%20Wo rld%20Health,gastric%20problems%20and %20various%20allergies.
- Yildirim, Y., Parlar, S., Eyigor, S., Sertoz, O Eyigor, C., Fadiloglu, C., & Uyar, M. (2010). An analysis of nursing and medical students' attitudes towards and knowledge of complementary and alternative medicine (CAM). Journal of Clinical Nursing, 19(7-8), 1157-1166. Available from: https://doi.org/10.1111/j.1365-2702.2009.03188.x
- 15. Ditte, D., Schulz, W., Ernst, G., & Schmid-Ott, G. (2011). Attitudes towards complementary and alternative medicine among medical and psychology students. Psychology, Health & Medicine, 16(2), 225-237. Available from: https://doi.org/10.1080/13548506.2010.532559

- 16. Gerard Flaherty et, al Attitudes of medical students toward the practice and teaching of integrative medicine 2015 Nov;13(6): 412-5. doi: 10.1016/S2095-4964(15)60206 Available from: https://pubmed.ncbi.nlm.nih.gov/26559366/
- 17. Yasemin Yildirim An analysis of nursing and medical students' attitudes towards and knowledge of complementary and alternative medicine (CAM) 12 March 2010. Available from: https://doi.org/10.1111/j.1365-2702.2009.03188.x
- Binod Bihari Dora, Importance of AYUSH in Present Health Care, Perspective Research & Reviews: Journal of Medical Science and Technology ISSN: 2319-3417(online), ISSN: 2349-1272(print) Volume 4, Issue 3. Available from: www.stmjournals.com
- 19. Janmejaya Samal, Role of AYUSH workforce, therapeutics, and principles in health care delivery with special reference to National Rural Health Mission Public Health Researcher, Pune, Maharashtra, India - An International Quarterly Journal of Research in Ayurveda, Published by Wolters Kluwer, Jan-Mar 2015 - Vol 36 -Issue 1. Available from:www.ayujournal.org
- K. Park, Park textbook of Preventive and social medicine, 25th edition published, M/s Banarsidas Bhanot.2019. Page no 2

- 21. Dr. D.D. Banerjee, M.B.S. (Hom) Augmented textbook of Homoeopathic Pharmacy, second edition 2006. B. Jain Publishers (P) LTD. Page no.578
- 22. Dr. Partha P Mandal et al A text book of Homoeopathic Pharmacy Revised and enlarged edition 2012. New Central Book Agency (P) Ltd, London. Page no.13,14.
- 23. Sarah Brown & Justin L C Bilszta Medical students use. attitudes towards. and complementary knowledge of and alternative medicine: A scoping review international journal of health professional education centred in Asia TAPS 5 October 2021, 6(4), 107-117. Available from: Medical students use, attitudes towards, and knowledge of complementary and alternative medicine: A scoping review -The Asia Pacific Scholar: The Asia Pacific Scholar (nus.edu.sg)

How to cite this article: Sneha Bevinamarad, Priya V. Patil. A study to determine the knowledge, attitude and usage of traditional (AYUSH) systems of medicine among the students seeking admission to the bachelor in homoeopathic medicine and surgery (BHMS) course – Telangana, India. *International Journal* of Research and Review. 2023; 10(8): 415-423. DOI: https://doi.org/10.52403/ijrr.20230850
