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Herbal Medicine: Knowledge and Attitude of Students Towards Traditional Methods of Treatment

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***Abstract*: *Background:* There is an increasing usage of herbal remedies worldwide. In India traditional methods of treatment are being less viewed due to the increased spread of knowledge about the modern Healthcare system and allopathic medicines. Traditional methods include various methods like physiotherapy, cupping, herbalist, hydrologist, etc.,**

***Objective:* The aim of the study is to assess the knowledge and attitude of students towards the herbal medicine and to know their opinion about including this in medical curriculum.**

***Methods:* A cross sectional study was conducted among 200 students of Mamata educational institution, Khammam 2019.Out of which 132are females and 68 are males.**

***Results:* This study shows that more than 50% of students have better knowledge about herbal medicine even before they were medical students and majority of them accept to include the subject about the traditional methods in present medical curriculum.**

***Conclusion:* Although with limited knowledge, the medical students showed a high level of personal use and good attitude towards traditional medicine, introduction of herbal medicine course in their medical curriculum should increase their knowledge and attitude so they can further adequately manage patients.**

***Keywords*: Herbal Medicine**

1. Introduction

In India, traditional medicine has long roots and it has been in existence even before the advent of modern medicine. It is still widely used in prevention and treatment of physical and mental disorders. Traditional medicine is the sum total of knowledge and practices whether explicable or inexplicable used in diagnosing, preventing and eliminating a disease which may rely exclusively on past experience or observations handed down from generations to generations, verbally or in written [1].

As a part of traditional method of treatment or prevention, herbal products have seen an increasing level of use and it is now approximately used by higher percentage of population.

For people in developing countries high dependence on herbal medicine may be due to ease of accessibility, affordability, availability, and acceptability [2].

Previously Neustadt (2006), reported that interaction between herbs and allopathic drugs leads to undesirable pharmacokinetic and pharmacodynamic effects. Issues of adverse effects and drug-herb interactions should be of important public health concerns because of their overall affects on human health and safety [3].

Few studies have been conducted to measure the medical students knowledge and attitude towards herbal medicine specifically. The purpose of this study is to assess the

1. Knowledge and attitude of students towards the traditional methods of treatment in Khammam especially towards herbal products and their usage in our daily life.
2. Opinion of the students to spread the knowledge or increase the knowledge of herbal products in the present allopathic syllabus.
3. To create or increase awareness of the plant products as medicine for the treatment of various illness.

2. Methodology

A cross sectional survey was conducted among the students of internship studying in Mamata college, Khammam, Telangana about the awareness of herbal products as medicine in the year 2019 during the time period from 29th July 2019 to 3rd August 2019. A self-structured questionnaire was used for data collection from the students. The questionnaire was pre-tested and necessary modifications were done and finalized before the final collection of data. Consent is taken prior to study from the study objects.

The required permissions were taken from the head of the department of public health dentistry and the respective departments where the students are given the questionnaire for the necessary data collection.

All the interns of Mamata college present during the study on the days of data collection were included. Both male and females of different age groups present during the working hours of the college i.e., 9:00am to 4:00pm. Students (interns) who were absent during the days of data collection and the students who were not willing to participate were excluded among the Mamata college interns.

Total number of students present during the days of data collection were about 200 which includes both males and females of age groups between 21 to 25 years. The background questionnaire included questions on a range of demographic variables such as age, gender, and course of study. The age of the students was varying from 21years to 25 years, gender- both male and female.

The questionnaire includes total of 18 questions which covers various aspects such as previous usage of herbal products, various forms of medicine and their usage, knowledge among the students about herbal products, students opinion about present medicinal syllabus and further increase of knowledge about the plants in the present syllabus, a few commonly used plant products in our daily life and their indications. All the questions were provided with multiple choice answers and students were asked to select the best answer they know for the respective questions. Some questions were yes or no type questions. Most of the questions were closed ended questions. Finally, the questionnaire included the date (which the data was collected). All the data collected in the form of questions was entered in the Microsoft excel sheet by providing necessary codes respectively for each variable and then sent for the analysis purpose

Statistical analysis: after the entry of data in the Microsoft excel sheet, statistical analysis was done using the Statistical Package for the Social Services (SPSS) 25. Descriptive statistics were performed. Association between participants demographic variables and both knowledge and attitude scores were assessed using the Chi- Square test. Relationship between knowledge and attitude scores was determined by calculating the Pearson`s correlation coefficient. Statistical significance was assumed at $p<0.005$.

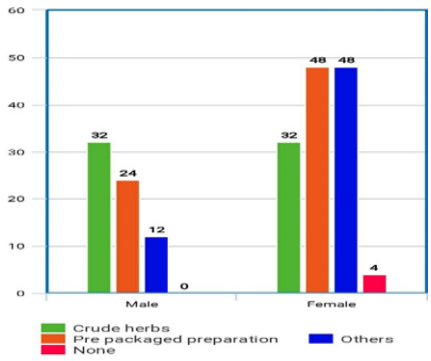
3. Results

Demographic profile: Out of the 200 students who received questionnaires, 200 students submitted their completed questionnaire which represented a response rate of 100%. The mean age of the student respondents was 23 years, with a standard deviation of 0.07. Majority of the students were females of about 132(66%).

	Frequency	Percentage	Valid percentage	Cumulative percentage
Male	68	34.0	34.0	34.0
Female	132	66.0	66.0	100.0
Total	200	100.0	100.0	

Majority of the students (72) answered they have used the plant products in the form of prepackaged preparations out of which 48 are females and 24 are males. The remaining 64 people have answered they used in the form of crude herbs and 60 people used in some other forms. The statistical difference was significantly observed among the males and females ($p=0.002$).

	Crude herbs	Prepackaged preparation	Others	None	Total
Male	32	24	12	0	68
Female	32	48	48	4	132
Total	64	72	60	4	200

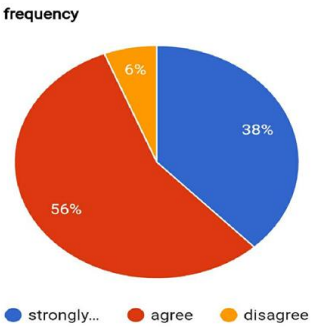


About 112 students were unaware of the herb drug interactions as a doctor out of which 76 were females and 36 were males and only 88 were aware of it. The statistical difference was not significantly observed($p>0.05$).

	Yes	No	Total
Male	32	36	68
Female	56	76	132
Total	88	112	200

About 112 students agreed for the deficit of knowledge in herbal medicine will limit physician`s ability to elicit information and usage of plant products and 76 students strongly agreed for the same, referring that statistical difference observed was significant($p=0.003$).

	Frequency	Percentage	Valid percentage	Cumulative percentage
Strongly agree	76	38.0	38.0	38.0
Agree	112	56.0	56.0	94.0
Disagree	12	6.0	6.0	100.0
Total	200	100.0	100.0	



Regarding the thought of encouraging or spreading the usage of plant products as medicine 112 people answered yes and

about 20 people answered no out which 68 were males and 132 were females, the statistical difference observed was significant among the variables (p=0.01).

	Yes	No	Sometimes	Total
Male	48	0	20	68
Female	64	20	48	132
Total	112	20	68	200

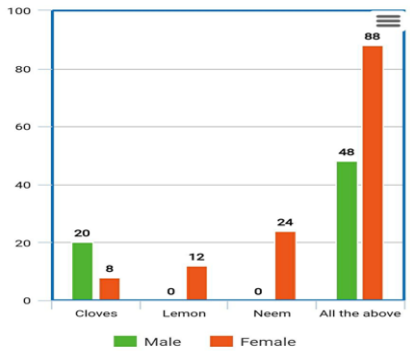
	Value	df	Asymptotic significance (2-sided)
Pearson Chi square	14.856	2	0.001

Although majority of the students (96) know about all the uses of neem as antimalarial, anti-bacterial, antipyretic only few (12) know it as only antimalarial, (88) know it as only antibacterial, (4) know it as only anti pyretic. The statistical difference among the variables was significant (p=0.000).

	Frequency	Percentage	Valid percentage	Cumulative percentage
Antimalarial	12	6.0	6.0	6.0
Antibacterial	88	44.0	44.0	50.0
Antipyretic	4	2.0	2.0	52.0
All the above	96	48.0	48.0	100.0
Total	200	100.0	100.0	

Knowledge about various herbal products used in dentistry was answered as all the above products mentioned in the question by 136 people but 28 students answered only cloves, 12 students only lemon, 24 students only neem. The statistical difference was significant(p=0.000).

	Cloves	Lemon	Neem	All the above	Total
Male	20	0	0	48	68
Female	8	12	24	88	132
Total	28	12	24	136	200



When asked about the better option either herbal or allopathic medicine 104 students answered herbal is sometimes better, 52 students answered herbal medicine is better, 12 students answered allopathic medicine is better. The statistical difference observed was significant (p=0.000).

	Yes	No	Sometimes	Don't know	Total
Male	28	0	28	12	68
Female	24	12	76	20	132
Total	52	12	104	32	200

	Value	df	Asymptotic significance (2-sided)
Pearson Chi square	17.805	3	0.000

4. Discussion

Majority of the interns particularly females are aware of the herbal products before they were doctors. This might be due to the reason that many of the herbal products are used since ages back and followed by our ancestors, family members, relatives especially your grandparents in the daily life. This shows that many of them have pretty good knowledge about the plant medicine for treatment and prevention of many diseases.

As the time passes many plant products are available in the market as prepackaged preparations and many of the respondents used them as prepackaged preparations. Whereas only a few people used as direct crude herbs based on their accessibility and ease of affordability. Prepackaged preparations are easily available in the market and consume less time for the product to work when compared to crude herbs.

Being a doctor, many of the interns are unaware of the herb drug interactions and their effect on the body. This might be due to lack of knowledge towards plant products as medicine and insufficient syllabus in the medical curriculum. Many of the general physicians do not ask the history of usage of plant products as medicine in previous medical history. The present syllabus is focused on the usage of allopathic medicine/man made medicines. Students agree with the statement that "Deficit of knowledge in herbal medicines will limit the physician ability to elicit the information and usage of plant products". And majority of the students agree to include the study of plant products in the present medical syllabus and encourage the spread of usage of plant products in our daily life. This shows the positive attitude towards the herbal medicine.

Based on the previous experience of students towards a plant product utilization commonly used plants are Neem, Aloe Vera, Ginger. Mentioning about the dentistry, most of the students are aware about the plant products used for the oral hygiene and maintenance. Commonly used products are Cloves, Lemon and Neem. Many of the students know only Ayurvedic medicine which uses plant products, but only a few know about the Unani and Ayurvedic as a medicine. This might be due to increased social media advertisements towards the Ayurvedic medicine compared to Unani and other branches in India.

Next to the herbal medicine, most commonly heard traditional methods of treatment are Physiotherapy, Spiritual healers. Less commonly heard are cupping, bones settlers and others.

5. Conclusion

In the aspect of knowledge and attitude of people especially interns towards herbal medicine, it is noticed that many of the respondents are aware of the herbal products in the daily life of the prevention and treatment of any commonly occurring diseases/illness. This is due to the knowledge gained by our ancestors, family members/ relatives especially grandparents and parents.

As a physician/doctor many students are unaware of herb drug interactions which shows lack of knowledge in the medical

curriculum about plant products. As the students agree to include the study of plant products in the present medical curriculum, it shows the interest and positive attitude towards herbal medicine. As this study is conducted among limited students (especially interns) of limited area (particularly Khammam) further opinion of the students from different fields should be known by conducting various studies.

Students are even aware of other traditional methods such as Physiotherapy, spiritual healers, cupping, bones settlers and others. Further knowledge of students towards other various traditional methods must be encouraged and included in the syllabus. There should be increase of awareness programs through social media to spread the knowledge and benefits of various traditional methods.

References

[1] Gebremichael Kibreab Habtom, Perception and Attitude of modern and traditional medical practitioners about TMP in Eritrea, Int J Complement Alt Med 2018,11(1):00340.
[2] Evans. P. K. Ameade, Herbal medicine: survey on the knowledge and attitude of medical students in Tamale, Ghana. Peak journal of Medicinal plant research Vol 3(1).
[3] Neustadt J (2006) Herb drug interactions: what clinicians need to know? Integr. Med.5:16-26.
[4] Sekhri K, Bhanwra S, Nandha R (2013) Herbal products: A survey of student's perception and knowledge about their medicinal use. Int J Basic Clin. Pharmacol.2:71-76.
[5] Habtom G (2015) integrating traditional medical practice with primary healthcare system in Eritrea. J complement integr Med 12 (1): 71 -78.
[6] World health organization (WHO) (1976) Expects report committee on traditional medicine. WHO, Geneva.