

**KNOWLEDGE, ATTITUDE AND WILLINGNESS TOWARDS INTEGRATION OF TRADITIONAL AND MODERN MEDICINES, AMONG MEDICAL STUDENTS IN THE SCHOOL OF MEDICINE, ADDIS ABABA UNIVERSITY, ETHIOPIA**

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**Summary**

A cross-sectional study was carried out among medical students of the School of Medicine, Addis Ababa University to assess knowledge, attitude and willingness of the students towards the integration of traditional medicine (TM) and modern medicine (MM). A cluster random sampling technique was used and a self-administered questionnaire was employed. The findings of the study showed that most respondents have encouraging general knowledge about TM. However, 60% of respondents said that they do not have in-depth awareness about it. Majority of the respondents (80%) believe that integration of the two forms of medicines could enhance the health service coverage of the country. About 70% of respondents were willing to integrate and actively participate in the process of integration. On the other hand, 67% of the respondents do not know the National Policy of TM. Most respondents expressed willingness to take a course on un-conventional medicine to scale up their knowledge of TM. Therefore, despite the above promising findings, the endeavors of the School were found to be unsatisfactory. This shows that the school of Medicine as well as the College of Health Sciences of Addis Ababa University should take efforts towards integration of traditional medicine to modern health care system.

**Key words:** Traditional medicine, Knowledge, Attitude, Willingness, Integration

**Introduction**

The term traditional medicine (TM) implies the ancient and culture bound medical practices which existed and practiced since the time immemorial (1). According to the World Health Organization (WHO), TM is defined as the sum total of all the knowledge and practices, whether explicable or not, used in diagnosis, prevention and elimination of physical, mental or social imbalance and relying exclusively on practical experience and observation handed down from generation to generation, whether verbally or in writing(2). It is a diverse health practice, approach and beliefs incorporating plant, animal and/or mineral based medicines, spiritual therapies, manual techniques and exercises applied alone or in combination to maintain well-being (2). About 80% of the world population particularly those in the developing countries still depend on TM to meet their health care need. Due to the holistic approach as well as accessibility, affordability and cultural acceptability, TM continues to be the best alternative care available for the majority of the global population(2).

According to WHO, the promotion of TM in health care services particularly in primary health care (PHC) should be intensified using a selection of essential remedies especially herbs in PHC

and policy support for integration of TM and MM (3). Many countries such as China have an integrated system of traditional and modern medicines (4). In South Africa, an integrative pilot study has come up with a favorable clinical efficacy, cost-effectiveness, and provision of improved quality of life (5).

In Ethiopia, TM has played crucial role in combating multiple and complex health conditions affecting the people. It was the only system available for health care prior to introduction of MM for the prevention, diagnosis and treatment of social, mental and physical illnesses. Even after the introduction of modern medicine, traditional medicine continued to maintain its popularity for historical and cultural reasons (6). About 80,000 traditional healers, drug collectors and vendors are believed to exist throughout Ethiopia (7). Despite the support and encouragement to TM in policies, there is a limited effort to practically implement (8).

Integration of a health system is believed to be implemented if there is a good awareness, positive attitude, and higher commitment with significant participation. Therefore, this study is conducted to assess knowledge, attitude and willingness of medical students to the integration of traditional and modern medicines.

### **Materials and Methods**

**Study design:** A cross-sectional study was carried out using self-administered questionnaire. The questionnaire addresses issues related to demographic characteristics, knowledge of TM and attitude towards TM as well as willingness to integrate the two medical systems. In addition, questions to assess endeavors of the school were involved and related factors affecting awareness of students on TM were also included in the questionnaire. The study was conducted in October 2011. By that time, there were 1062 regular undergraduate medical students in the faculty.

**Study area:** The study was done on medical students of the School of Medicine, College of Health Sciences, Addis Ababa University. This School of Medicine is the pioneer medical Institution in Ethiopia. It is located in Addis Ababa, the capital city of Ethiopia.

**Study population:** The source population was all the 1062 medical students distributed into four clusters. A proportional number of students taken from each cluster (batch) by appropriate sampling from the source population constitute the study population.

**Sampling technique:** A cluster random sampling technique was used for sampling from a population of regular medical students. The student population was divided into four clusters (year-I, year-II, year-III, and Year-IV & above) so that a cluster random sampling technique with proportional number of study subjects (36%) from each cluster comprises the study population.

#### **Variables of the study**

**Independent variables:** socio-demographic data age, sex, religion and batch

**Dependent variables:** knowledge, attitude, willingness to take a course, perception to integrate traditional and modern medicine.

**Data collection and analysis:** Ten volunteer students were recruited and introduced about the purpose of the research and how to collect data. Pre-test was conducted on twenty students and the corrected self-administered questionnaires were ready for distribution. Participants were introduced by trained students about the study before the actual distribution of self-administered questionnaire. A sample size of 384 was used and it will allow for a 50% prevalence estimate to get maximum sample size, and 95% significance level (5% margin of error) was taken. On return of the questionnaires, the data was checked for completeness and consistency, and 380 questionnaires were analyzed using SPSS version 15 software.

**Ethical consideration:** The study subjects were informed about the purpose of the study and how and why they were selected to be study participants. The participants were also informed that they could refuse to participate, and the information given for the survey will be kept secured so that their confidentiality should be ensured. Data was collected from those students who had given their full consent and were willing to be involved in the study.

## Results

### I. Socio-demographic characteristics

As indicated on Table-1, males in the age group 18-22 years accounted the majority. Orthodox and Muslim respondents accounted for 64% and 21% respectively. The number of students from year-I, II, III, and year-IV & above were 33%, 20%, 22% and 25% respectively.

Table-1: Socio-demographic characteristics of respondents participated in the study

Variables		Frequency (% , total = 380)
Sex	Male	288 (76)
	Female	92 (24)
Age	<18 years	49 (13)
	18-22 years	271 (72)
	22-24 years	41 (10)
	24 years	19 (5)
Religion	Orthodox	246 (65)
	Protestant	80 (21)
	Muslim	42 (11)
	Others	12 (3)
Batch	Year-I	123 (33)
	Year-II	76 (20)
	Year-III	85 (22)
	Year-IV & above	96 (25)

### II. Knowledge about traditional medicine

As indicated on Table-2, about 89% respondents said that people in developing countries mostly use traditional medicine (TM). Out of them, 47%, 43% and 41% said availability, cultural influence, poor economic status and lack of education respectively are factors for dependence on

TM for health care need. When asked about how traditional healing skill is acquired: family practice, thought training and natural gift were said by 65%, 35% and 27% of respondents respectively. Ten percent said any interested person can also practice regardless of acquisition of the healing skill. Ninety one percent of respondents said TM could serve as source of knowledge to MM, and 73% said it has some advantages over MM in certain illnesses. Harmful practices are said to be present in TM practice by 80% of participants. Sixty percent of respondents said, they do not have in-depth awareness on TM, and 67% were not aware of the national policy of the government on TM.

Table-2: Knowledge about traditional medicine by respondents participated in the study

Variable	Frequency (% , total = 380)
People in the developing countries mostly use TM	337 (89)
Why people generally use TM	
- Availability	160 (47)
- Cultural influence	187 (49)
- Poor economic status	164 (43)
- Lack of education	155 (41)
- Presence of refractor diseases to MM	99 (26)
Healing skill of TM is acquired by	
- Family experience	250 (66)
- Acquired through training	136 (36)
- Natural gift	106 (28)
- Interested person can be traditional healer	41 (10)
Risk of TM	
- Some harmful practices	302 (80)
- Unhygienic practice	248 (65)
- Unaffordable	58 (15)
TM has some advantage over MM in certain illnesses	279 (73)
TM can serves as source of knowledge of MM	348 (91)
Lack of in-depth awareness on TM	227 (60)
Know government policy on TM	127 (33)

### III. Attitude and willingness to integration of traditional and modern medicine

As indicated in Table-3, 94% respondents said that Ethiopian TM needs an improvement, and 70% said the government shall take a better control and support to the sector. On the other hand, 80% of respondents believe the health service coverage in Ethiopia can be increased by coordination of TM and MM. When asked about integration of the two systems of medicines, 68% of the participants are willing to integrate the two medical systems in their profession and 91% wanted to actively participate in such cooperation and would like to share their professional knowledge to healer. Sixty percent participants said they have suspicion on healing skill of traditional healers so that they do not mostly accept their skills. About 81% respondents showed their interest to take TM course, and the need to aware students about national TM policy is mentioned by 66% respondents as they do not know about the national policy on TM.

Table-3: Attitude towards traditional medicine and willingness to the integration of traditional and modern medicines by respondents participated in the study

<b>Variable</b>	<b>Frequency (% , total = 380)</b>
TM in Ethiopia need improvement	358 (94)
Government should take better control & support TM practice	266 (70)
Suspicion on healing skill of traditional practitioners	229 (60)
Health service coverage can be increased by integration	302 (80)
Willing to cooperate with traditional practitioners	346 (91)
Willing to integrate traditional and modern medicines	259 (68)
Willing to take unconventional medicine course	306 (81)
Government should publicize the national policy on TM	251 (66)

#### **IV. Factors affecting awareness on traditional medicine**

When participants were asked about influencing factors of awareness on TM, absence of unconventional medicine course and shortage of related literatures were mentioned by 241 (63%) and 196 (52%) respondents respectively. In addition, 169 (44%) said poor student initiative is another cause for low awareness. Whereas limited hours on TM in pharmacology course was mentioned by 59 (23%) respondents.

#### **V. Endeavour by the students and the school towards obtaining better awareness**

The participants as part of the community are doing well to gain better awareness on TM through Medias, occasional discussions and reading literatures on TM. On the other hand, 270 (83%) of the respondents said the university is not doing enough to promote awareness on TM.

### **Discussion**

This study has shown that most respondents expressed the possible increase of the National Health Service coverage through coordination of traditional and modern medicine. Majority of the participants said TM of Ethiopia, need a better government control and support. One of such support could be establishing cooperation with modern health professional as most participants in the study are willing to cooperate with traditional healers.

In our study, most students showed willingness to the integration of traditional medicine (TM) and modern medicine (MM). This is in line with previous studies done on medical students and modern-medicine practitioners that indicate the modern medical practitioners are willing to cooperate and integrate with traditional practitioners (9, 10). Such findings will alerts decision makers to give more concern to establish practical cooperation among the practitioners of the two systems of medicines. For such cooperation to exist, a strong legal recognition to TM is essential as to the Eastern World.

From the study, it is clear to understand that not only the School but also the government has not still made better concern towards promotion of awareness of medical students on TM. This is indicated in that, many of the participants said they do not have acquired in-depth awareness on

TM and the national policy on it. Conversely, willingness to take unconventional medicine course was found to be significant on the attitude of the participants to the integration of the two medical systems. Thus, change in the provision of medical students training in such a way by incorporating traditional medicine course is vital and occupy an essential role in realizing integration of traditional and modern medical systems.

The finding that most participants in the study had come across advertisement on TM showed that they do have good exposure to the media through which the government can effectively publicize programs and strategies on TM and hence can bring consensus and integration of the two forms of medical practices.

### **Conclusion**

The willingness of medical students to the integration of traditional and modern medicines shows the integration can better improve the health care system of the country. Thus, review of the curriculum of medical students is essential and has a pivotal role to realize integration of the two systems of medicine.

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### **References**

1. Farnsworth NR, Akerle O, Bingl AS, Soejarto DD, and Guo Z. Medicinal plants in therapy, *Bulletin of the World Health Organization* 1985; 63: 965–981.
2. WHO. WHO Traditional Medicine Strategy 2002–2005. 2002. WHO Geneva. URL: <http://www.who.int/medicines/publications/traditionalpolicy/index.html>
3. WHO. Promotion and development of Traditional Medicine, (WHO Technical Report Series, 1978: no 622.
4. WHO. Traditional Medicine, WHO, 2003, fact sheet no 134.
5. Rashid BA. African renaissance in health education, in: developing an integrative program of Unani-Tibb training for health care professionals in South Africa, 2004.
6. Abebe D and Ayehu A. Medicinal plants and Enigmatic Health Practice of Northern Ethiopia. B.S.P.E., Addis Ababa., 1993: 15-47.
7. Dessalegn D and Pierri B (2000). Uses and conservation status of medicinal plants used by the shinasha people2000.<http://members.lycos.co.uk/Ethiopianplants/shinasha.html>.
8. Kassaye KD, Amberber A. A historical overview of traditional medicine practices and policy in Ethiopia. *Ethio J of Heal Devel.* 2006; 20(2): 127-134.
9. Tsegaye GM. Attitudes of modern and traditional medical practitioners towards integration of the two practices. *Ethi J of Hea Sci.* 1991; 9 (1):17-23.
10. Bishaw M. Attitudes of modern and traditional medical practitioners towards cooperation. *Ethio Med Journal* 1990; 28(2): 63-72.