# Alternative Medical Care in Bangladesh: An Empirical Study

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**Abstract:** Unani medical service is being used as an alternative method of treatment in our country. In recent years WHO has given special emphasis on traditional medicine. Government of Bangladesh has taken steps to develop traditional medicine and run with integrated health services and also introduced Alternative Medical Care (AMC) services in 1998 under HPSP program through appointing 45 alternative medical officer including 15 unani graduate physicians. The overall objective of the present study is to explore the different characteristics of medical service rendered by unani service providers and to know their professional information along with relevant issues. Fifty unani service providers were randomly selected from two types of districts such as districts with formal AMC and districts without formal AMC service. Findings on background and professional characteristics of unani service providers, features of services rendered by them, different issues of unani medicines, problems faced together with their recommended solutions were explored in the study. Some interesting and useful findings were obtained in the study. Chi-square test indicates that significantly higher (p-value <0.000) number of patients were treated in districts with AMC compared to districts without AMC. Findings of the research will be helpful for development of unani medical services delivery throughout the country.

**Keywords:** AMC; Unani Medical Service; Traditional Medicine; HPSP; BUMS; Chisquare test

#### Introduction

Unani system of medicine had its own origin in the fifth and fourth centuries B.C. under the patronage of Hippocrates in Greece (Unan). Later on it was introduced by Arabs in to Indian subcontinent. Unani is an Islamic healing philosophy that incorporates major elements of ancient Greek medicine. Unani system of medicine is regarded as a part of Traditional Medicine (TM) or indigenous medicine. In our country this system of medicine is practiced since long and is playing an active role in preventing and curing the ailments [1].

Since the beginning of civilization the use of traditional medicine remains wide spread all over the world and especially in the Indian Sub-continent. Even in the developed countries, interest in TM is increasing appreciably and people are seeking more services

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from this sector. Different forms of Traditional medicines have been used in this country. Traditional medicine practice in Bangladesh includes two distinct forms: one is the most primitive forms of folk medicine and other is the improved and modified form based on Unani-Tibb or Graeco-Arab system and Ayurvedic system. Thus unani system is essential part of TM in this country. The practice of traditional medicine in this country has flourished tremendously in the recent years and is being used as an alternative method of treatment in our country. As a result, even at this age of highly advanced allopathic medicine, a large majority (75-80%) of the population of this country, particularly in the rural and semi-urban areas, still prefer to use traditional medicine [2].

The Government of Bangladesh has taken different initiatives for the development of unani system of medicine. Traditional medicine have been brought under Drug Ordinance act 1982 and also included in National Health Policy (NHP) in 1998. A Directorate for Traditional Medicine (unani & ayurvedic) has been established at the office of Director General of Health Services (DGHS), Mohakhali, Dhaka [3].

Under Health and Population Sector Program (HPSP, 1998-2003) a project namely, Alternative Medical Care (AMC) has been introduced which include mainly Unani, Ayurvedic and Homeopathic services. Also in HPSP, the Government of Bangladesh has appointed 30 (15+15) unani and ayurvedic graduate physicians in 30 selected district level hospitals so that the people of remote area have the chance to take traditional medicinal service with cheaper rate. By this time the post of 467 gardeners have been created for 467 herbal gardens in 64 districts & 403 upazilla health complexes premises after the decision of National Steering Committee on 5th September 2002 [3]. Recently in 2014, the Government has appointed some other personnel of unani and ayurvedic graduate physicians under Health Population and Nutrition Sector Development Program (HPNSDP, 2011-16).

Since 1989, the Government Unani and Ayurvedic Degree College in Dhaka offers a five years degree course plus one-year internship in the attached 100-bedded hospital with facilities of research work. The admission criterion of the college is similar to the MBBS course. After completion of 5 years course BUMS (Bachelor of Unani Medicine and Surgery) and BAMS (Bachelor of Ayurvedic Medicine and Surgery) degrees are offered. From this institution 100 Unani and Ayurvedic graduate physicians come out every year. Both of the hospitals provide indoor and outdoor medical care services. Graduate Service providers are now available to provide quality services for the community at large. Besides, since many years a four year degree DUMS (Diploma of Unani Medicine and Surgery) is being offered by different unani colleges [4].

## Background and objective of the study

Bangladesh is a developing country with large population living in rural areas in the midst of poverty. People can hardly afford modern medical and treatment facilities. The Government of Bangladesh (GOB) has taken different steps for the development of indigenous system of medicine, as it is cheap, simple, easily available and widely

acceptable in the country. Also private sectors are contributing a lot in this field. Hamdard – the oldest and popular unani medicine producer and service provider in this subcontinent, has been providing unani service through out the country. The Government of Bangladesh has been providing Alternative Medical Care (AMC) services to improve the health status of the grass root level people. It is about 30 years since the inception of unani medical care in the public sector. Although some impressive developments have been observed, the field of unani system of alternative treatment methods had failed to draw attention of researchers as hardly any research was found in the field. Among the rare collection of the studies on this field, a study conducted by Mollah. et. al. [4] presented the features of AMC services in Bangladesh. All three wings of AMC services i.e. Unani, Ayurvedic and Homeopathic treatment methods were included in their study combinedly. Their study however, did not reflect the whole scenario as private services of these alternative methods of treatment were not included at all in that study. Another study entitled "The use of traditional medicine (herbal medicine) in rural Bangladesh, 2000" was done by Kabir. et.al.[5] that highlights the use of medicinal plants as alternative treatment method. The study showed that medicinal plants are one of the methods of primary treatment in rural areas of Bangladesh and a substantial proportion of the rural population use medicinal plants in simple ailments. However, these studies did not provide intensive scenario of unani service rendered by unani service providers. The personnel who are engaged in unani profession in Bangladesh contribute a lot in providing the service for patients and reasonably they know much about their field. Therefore, the present study aims at carrying out an empirical investigation of the unani service providers to have a comprehensive knowledge in this field.

#### Methodology

The cross sectional study was conducted on 50 unani medical service providers from randomly selected 10 districts of Bangladesh. Five districts were selected from those 15 districts where AMC service of unani system were provided by the government of Bangladesh and 5 from the remaining 49 districts without this AMC service. From each district, the district town was considered and also an upazilla was selected randomly from the district. Thus we got 5 district towns and 5 upazillas from districts with AMC service and another 5 district towns and 5 upazillas from districts without AMC service. From each study site (10 district towns and 10 upazillas), 2 unani medical service providers were selected randomly. Thus a total of  $\{(10+10) \times 2\} = 40$  unani medical service providers were selected for interview. Also 10 Hamdard medical officers were interviewed from the 10 selected district towns. So a total of (40+10) = 50 unani service providers were interviewed. The selection criteria of unani service providers followed the priority sequences of BUMS, DUMS, Certificate Course and unani service providers by generation (if other three were not available). In case of 5 districts having formal unani services, unani medical officers posted by government were interviewed from sadar district health complex. A well designed and structured questionnaire was used to collect data and the data have been analyzed through different statistical tools like frequency

table, cross table and chi square test. The study was conducted during the month of April, 2006.

### Result and discussion

According to the objectives of the study the surveyed unani service providers were asked about their background characteristics, professional characteristics, characteristics of services rendered by them and different issues of unani medicines. Also the information on the problems faced by them, together with their recommended solutions had been collected. All these collected information are described below under different sections.

## **Background Characteristics of unani service providers**

Information on background characteristics of unani service providers such as gender, religion, sex, age, monthly income and educational status were collected and are presented in this subsection.

# Gender, Religion, Age and Monthly Income of Unani Service Providers

Table 1 shows the results relating to gender, religion, age and monthly income of unani service providers. The data show that 96% were male and only 4% were female, i.e. The ratio of male to female is 24:1. Among the total 50 unani service providers interviewed, almost all (98%) unani service providers were Muslims and only 2% were Hindus. The age distribution of unani service providers reveals that 30% were within the age group 25 to 30 years, 36% belonged to the age group 31 to 40 years, 20% were in the age group 41 to 50 years and rest 7% were older than 50 years of age. The findings of the study indicate that 34% of the unani service providers are in the income group Tk. 3000 to Tk. 6000, 22% of the unani service providers' monthly income varies from Tk. 6001 to Tk. 8000, 18% of unani service providers' income fall in Tk. 8001 to Tk. 10000 and rest 26% of unani service providers earn more than Tk. 10000 per month and it varies up to Tk. 50000. The mean monthly income of unani service providers is found to be Taka 11525.00 and the median income is found to be Taka 8000.00.

Table: 1 Gender, Religion, Age and Monthly Income of unani service providers

Indicators	Frequency	Percent (N = 50)
Gender	·	
Male	48	96.0
Female	2	4.0
Religion		
Muslim	49	98
Hindu	1	2
Age	•	•
25 - 30	15	30
31 - 40	18	36

Indicators	Frequency	Percent (N = 50)	
41 - 50	10	20	
51 +	7	14	
Monthly Income (in Taka April, 2006)			
3000 - 6000	17	34.0	
6001 - 8000	11	22.0	
8001 - 10000	9	18.0	
10001 - 50000	13	26.0	
Mean Income: Taka 11525.00, Median Income: Taka 8000.00			
Total	50	100.0	

Educational attainment of unani service providers

Among the respondents 30% were graduate or above, 42% passed HSC, 14% were found SSC pass, 10% completed education from class VI – IX and rest 4% were Madrasa educated. Among the respondents 24% completed their 5 years course BUMS from the Government Unani And Ayurvedic Medical College & Hospital, 52% of the unani service providers completed their 4 year diploma course DUMS, 10% completed the certificate courses of 2 months duration and another 10% of unani service providers were practicing unani treatment which was handed down generation to generation (Table 2).

Table 2: Educational attainment of unani service providers

Indicators	Frequency	Percent $(N = 50)$		
General Education				
Graduate or above	15	30.0		
SSC passed	7	14.0		
HSC passed	21	42.0		
Class VI - IX	5	10.0		
Madrasa education	2	4.0		
Unani Education				
BUMS	12	24.0		
DUMS	26	52.0		
Certificate Course	5	10.0		
Unani education by generation	5	10.0		
Others	2	04.0		
Total	50	100.0		

### Professional information of unani service providers

Professional information of unani service providers such as Principal occupation, secondary occupation, years of engagement in unani treatment, reasons for choosing unani profession, influential persons to adopt unani profession and family members engaged in unani occupation were collected and are presented in this section.

## Occupational characteristics of unani service providers

Most of the unani service providers (84%) practiced unani service as their principal occupation and rest (16%) considered this profession as their secondary occupation. Among the respondents who considered this profession as their secondary occupation, their principal occupations were agriculture, teaching and business. Among the unani service providers 6% were engaged for less than one year, 16% engaged for 1 to 5 years, 28% for 6 to 10 years, 20% for 11 to 15 years, 6% for 16 to 20 years and the rest 24% were engaged for more than 20 years with the unani service. Average years of engagement in unani service of the respondents were 11.2 years (Table 3).

Table 3: Occupational characteristics of unani service providers

Indicators	Frequency	<b>Percent</b> ( <b>N</b> = <b>50</b> )		
Unani service delivery as principal occupation				
Yes	42	84.0		
No	08	16.0		
Principal occupation of Unani ser	vice providers			
Unani as Principal occupation	42	84.0		
Agriculture	3	6.0		
Ayurvedic & Agriculture	2	4.0		
Teacher	2	4.0		
Business (small)	1	2.0		
Years of engagement in unani serv	Years of engagement in unani service			
< 1 Year	3	6.0		
1 - 5	8	16.0		
6 – 10 3	14	28.0		
11 – 15	10	20.0		
16 – 20	3	6.0		
21 - 40	12	24.0		
Mean	11.2			
Total	50	100.0		

## Motivation for choosing unani profession

Highest number of the respondents (42%) told that they were self-motivated to adopt this occupation. Among the respondents 26% informed that they were influenced through relatives, 20% were motivated by the family members and rest 12% by their friends and neighbors. In response to the query about any one of their family members engaged in unani occupation, 38 percent of the unani service providers reported that their family member were engaged in unani occupation and rest 62% replied in negative. Among the respondents whose family members were engaged in unani occupation, about 63% reported that their brother/sister and 52.63% reported that their father/mother were engaged in unani occupation. About 16 percent said the relationship of the engaged family members in unani occupation were grandson or granddaughter. Other reported relationships were spouse, son or daughter (Table 4).

Table 4: Motivation for choosing unani profession

Indicators	Frequency	Percent (N = 50)	
Influential person to adopt unani profession			
Self	21	42.0	
Relative	13	26.0	
Family member	10	20.0	
Neighbour / Friend	6	12.0	
Involvement of family members in	unani profession	•	
Yes	19	38.0	
No	31	62.0	
Total	50	100.0	
Respondent's relationship with family member engaged in unani profession (Multiple response)			
Brother / Sister	12	63.15	
Father / Mother	10	52.63	
Grandson / daughter	3	15.78	
Son	1	5.26	
Daughter	1	5.26	
Spouse	1	5.26	

### Training and skillness development program of unani service providers

The information on the types of training demanded by the unani service providers, training received by them and place of training received were collected and are presented in this section.

### Opinion on need of special training for unani service providers

Unani service providers were positively responding about the need of special training program for them. About 86% of unani service providers replied that they needed special training. When they were asked about types of training demanded, they mentioned a number of training programs. Among the respondents who replied in favour of training program, 32.55% said about the training program on modern treatment facilities, testing procedure and diagnosis of diseases, 32.55% on diseases symptom and special training on specific diseases and 25.58% on medicinal plants and herbal medicines. Besides, 18.60% respondents sought the opportunity of higher degrees like MD or M Phil degrees and 18.60% showed their interest about surgical training (Table 5).

Table 5: Opinion on need of special training on unani

Indicators	Frequency	<b>Percent</b> ( <b>N</b> = <b>50</b> )	
Opinion on need of special training on unani			
Yes	43	86.0	
No	07	14.0	
Total	50	100.0	
Types of training demand by unani service providers (multiple response)			
Modern treatment facility and test or diagnosis of disease	14	32.55	
Disease symptom / specialization on specific disease	14	32.55	
Medicinal plants and herbal medicine	11	25.58	
Higher degree (MD or M Phil)	8	18.60	
Surgical	8	18.60	

# Professional training received by unani service providers

Unani service providers were asked whether they had ever received any training regarding treatment and 54% replied positive response and rest 46% had not get any training throughout the period of providing unani service (Table 6). The most frequent trainings received by the unani service providers were on diarrhoeal diseases (33.3%), sexual diseases (29.6%), herbal medicine (25.9%) and health education (22.2%). Other training programs were received on the diseases of jaundice, tuberculosis, leprosy, EPI, CDD, paralysis, arthritis, asthma, arsenic and diabetes. Table 6 also shows the places of training received by the unani service providers. The most frequent places of training were Directorate General of Health Services (21.3%), Hamdard head office (21.3%), District General Hospital (14.9%) and Govt. Unani & Ayurvedic Hospital (10.6%). Other training programs were conducted on the place of Govt. Tibbiya College, ICDDR,B, EPI head quarter, BSMMU Hospital, Mitford Medical Hospital, TB & Leprosy Hospital.

Table 6: Training received by unani service providers

Indicators	Frequency	<b>Percent</b> ( <b>N</b> = <b>50</b> )
Received any training regarding treatment		<b>-</b>
Yes	27	54.0
No	23	46.0
Total	50	100.0
Types of training received by unani service	providers (multiple re	esponse)
Diarrhoea / Dysentery	9	33.33
Sexual disease	8	29.62
Herbal medicine	7	25.92
Health education	6	22.22
Jaundice	3	11.11
TB (Tuberculosis)	3	11.11
Leprosy	2	7.40
EPI	2	7.40
CDD	1	3.70
Paralysis	1	3.70
Arthritis	1	3.70
Asthma	1	3.70
Arsenic	1	3.70
Diagnostic criteria	1	3.70
Diabetes	1	3.70
Place of training received(multiple response	?)	
Directorate General of Health Services	10	21.27
Hamdard head office	10	21.27
District General Hospital	7	14.89
Govt. Unani & Ayurvedic Hospital	5	10.63
Under supervision of unani professional	3	6.38
Govt. Tibbiya College	3	6.38
ICDDR,B	2	4.25
EPI head quarter	1	2.12
BSMMU Hospital	1	2.12

Indicators	Frequency	Percent (N = 50)
Mitford Medical Hospital	1	2.12
TB & Leprosy Hospital	1	2.12
Directorate of Youth	1	2.12
North East medical college	1	2.12
MXN modern herbal	1	2.12

### Characteristics of services rendered by unani service providers

This section discusses about the services rendered by unani service providers, like number of patients treated by unani service providers last months of the period of data collection, diseases most frequently treated by unani service providers, most frequently prescribed medicine, types of investigation advised, referral information of unani patients.

### Patients treated by unani service providers last month

In the study it was found that the 50 selected unani service providers treated 16326 patients last month of the period of data collection in which 11969 patients were from Sadar upazilas and rest 4357 were from other selected upazilas. Again out of 16326 patients 11059 (67.73%) were from districts with formal AMC unani service and rest 5267 (32.27%) were form districts without formal AMC unani service. Chi-square test indicates significant difference (p-value < 0.000) between districts with AMC and districts without AMC in respect of number of patients treated by unani service providers (Table 7). Among the sadar upazilas, percentage of patients treated were significantly higher (70.89%) in those with formal unani services than in those without formal unani services. This indicates a positive impact of formal AMC unani services run by government in district sadar hospitals. Likewise, among the upazilas, the percent of patients is significantly higher (59.05%) in those with formal AMC unani service in district level than in those without this service. This implies that, though formal unani service exists in district sadar hospital, its effects are also reflected in other upazilas of the district.

Table 7: Number of patients treated in different places with presence and absence of formal AMC unani services.

	With formal unani	Without formal unani	Total
	service	service	
Sadar	8486	3483	11969
(% within	(70.89%)	(29.11%)	(100%)
sadar)			
Upazila	2573	1784	4357
(% within	(59.05%)	(40.95%)	(100%)
upazila)			
Total	11059	5267	16326
(% of total)	(67.73%)	(32.27%)	(100%)

 $<sup>\</sup>chi^2 = 205.09$ , p - value < .000

## Diseases most frequently treated by unani service providers

The unani service providers were asked about top ten diseases according to number of patients they treated during immediate past month of the month of data collection with prescribed medicine for those diseases from their register records and the total number of patients for all diseases obtained from their answers had been calculated. Then on the basis of these patient's numbers, top ten diseases had been selected with their mostly prescribed medicines and presented in Table 8. The Table shows that the highest number of patients of sexual debility was treated by unani service providers and the number of patients of sexual debility was found to be much higher in comparison to other diseases. Other mostly treated diseases were leucorrhoea, arthritis, skin diseases, dysentery and Gastric. The diseases cold and cough, fever, irregular menstruation and nervide (Nervous weakness) were also frequently treated by unani service providers.

Table 8: Top ten diseases according to number of patients with mostly prescribed medicines (in last month)

Name of the diseases	Number of patients treated	Mostly prescribed medicine
Sexual debility	1514	Tab Frodex
		Cap Libidex
		Cap Ebdyrex
		Majoon Mogallis
		Suzak
Leucorrhoea	1118	Majoon Suparipak
		Masturin
		Suzak
Arthritis	1049	Tab Suranjan
		Tab Azraqi
Skin disease	1030	Syrup Safi / Mosaffi
		Oshba
		Shahtara
		Chubchini
Dysentry	918	Tab Paichish
		Syrup Belgeri
		Tab Ral
Gastric	776	Tab Carmina / Hazmotab
		Sofuf Endermali
		Syrup Dinar
Cold & cough	478	Syrup Ezaj
		Syrup Saduri
		Tab Sualin
Fever	388	Syrup Alkuli

Name of the diseases	Number of patients treated	Mostly prescribed medicine
		Tab. Shefa
		Syrup Dinar
Irregular	367	Masturin
Menstruation		Tab Mudir
		Suhagsurth
Nervide (Nervous	326	Cinkara
weakness)		Tab Frodex
		Gawjuban

## Medicines most frequently prescribed by unani service providers

The unani service providers were asked about the top ten medicines they mostly prescribed and on the basis of their information the top 20 medicines had been selected and presented in Table - 9. The table will be helpful in planning for policy makers to supply these medicines in government health complex.

Table 9: Mostly prescribed medicines by unani service providers

Sl.No.	Name of medicine	Sl.No.	Name of medicine
1	Syrup Safi / Mosafi	11	Syrup Alkuli
2	Carmina	12	Syrup Ezaj
3	Cinkara	13	Tab Nishat
4	Syrup Dinar	14	Majoon Suparipak
5	Masturin	15	Tab Frodex
6	Tab. Paichish	16	Cap Libidex
7	Tab Suranjan	17	Syrup Saduri
8	Tab Azraqi	18	Syrup Buzuri
9	Suzak	19	Tab Shefa
10	Cap Endurix	20	Syrup Naunehal

# Types of investigations advised by unani service provider

Table 10 shows the referred type of investigations. Most of the unani service providers (74%) informed that they advised investigation to the patients if needed. Among the referred investigations most frequent types of investigations were urine test (38.3%), blood test (34.04%), stool test (26.6%) and X-ray (1.06%).

Table 10: Types of investigations advised by unani service providers

Indicators	Frequency	<b>Percent (N = 50)</b>
Advise patients for investigation	•	
Yes	37	74.0
No	13	26.0
Total	50	100.0

Types of investigation advised (multiple response)			
Urine	36	38.3	
Blood	32	34.04	
Stool	25	26.6	
X-ray	1	1.06	

### Referral information of unani patients

The unani service providers were asked whether they referred / advised patients to receive other type of treatment like allopathic. In reply most of them (78.0%) gave positive response. In most cases they referred for allopathic treatment. Also the respondents were asked whether they treated patients referred from treatment method other than unani system and most of them (90%) replied in positive response (Table 11).

**Table 11: Referral information of unani patients** 

<u>-</u>			
Indicators	Frequency	Percent	
Unani service providers Advised patients to other treatment method			
Yes	39	78.0	
No	11	22.0	
Referred from other type of treatment method to unani service providers			
Yes	45	90.0	
No	05	10.0	
Total	50	100.0	

Diseases for which patients of unani treatment were referred to other type of treatment.

Table 12 presents the name of diseases for which patients of unani treatment were referred to other type of treatment. It is observed that surgical/operation patients were usually referred to allopathic treatment. Among other diseases heart disease, irregular menstruation and tumor were frequently referred to allopathic treatment.

Diseases for which patients of other type of treatment method were referred to unani treatment

Table 13 presents the name of diseases for which patients of other type of treatment method were referred to unani treatment. It is observed that patients of sexual debility were most frequently referred to unani treatment method. Jaundice, Gastric, Dysentry, Skin disease and Arthritis were also frequently referred to unani treatment method.

Table 12: Nan patients of referred to oth	unani medic	ine were				
Name of Disease	Number of service pr referred pa	oviders	Name of Disease	service p treated j	er of unani e providers ed patients rred from	
	Allopathic	Homeopa thic		Allopathic	Village practitio ners	
Operation patient	12	2	Sexual debility	30	2	
Heart disease	9		Jaundice	21	2	
Irregular Menstruation	9		Gastric	12	1	
Tumor	8	1	Dysentry	9		
Asthma	5		Skin disease	8	1	
Abdominal pain	5		Arthritis	6	1	
Eye disease	5		Leucorrhoea	5	1	
Dysentry	4		Irregular Menstruation	5		
Cold & cough	4		Asthma	4	1	
Gastric	4		Paralysis	3		
Diabetes	3		Diabetes	3		
Orthopedics	3		Abdominal pain	3	1	
Ear disease	2		Fever	2		
Jaundice	2		UTI	2		
Gallstone	2		Cold & cough	1		
Fever	2		Constipation	1	1	
Cancer	2		Anorexia	1		
Paralysis	2		Nervide (Nervous Weakness)	1		
Harniea	2		Piles	1	1	
Skin disease	2					
Arthritis	1					
TB	1					
Syphilis	1					
Anemia	1					
Piles	1					

## Problems faced by unani service providers

In the study the unani service providers were asked about the types of problems they usually faced. They were asked about the problems regarding patients, medicine and unani education; and the results found are described below. In each type of problems multiple responses had been obtained.

## **Problems regarding patients**

Table - 14 shows that 38.0% service providers were of the opinion that patients did not follow the prescription properly due to long duration of taking medicine or due to its bad smell and bad taste or due to high price. Thirty percent of them mentioned that patients had wrong conception about unani treatment due to lack of knowledge. A worth mentioning portion of service providers (26.0%) thought that the patients could not trust on unani system. This happened because of vast spread out of false treatment in the name of unani. Some of the service providers (24.0%) mentioned that the flow of patients for unani treatment was few in number. About 22.0% service providers said that patients did not usually come to unani service providers at early stage of a disease. They came after getting failed by other treatment system when the disease had already become complex. Some service providers told about some other problems e.g. lack of advertisement among patients etc.

Table 14: Opinion of service providers about problems regarding patients

Problems in unani treatment system regarding	Frequency	Percentage
patients (multiple response)		(N = 50)
Patients don't follow the prescription properly	19	38.0
Wrong conception about unani treatment	15	30.0
Less reliability	13	26.0
Patients are few in number	12	24.0
No faith due to false treatment	12	24.0
No treatment at early stage	11	22.0
No advertisement among the patients	11	22.0
Patients go away due to lack of modern instrument and	7	4.0
lack of unani service providers.		

## **Problems regarding medicine**

The highest number of service providers (46.0%) mentioned the shortage of raw materials of unani medicine, 26.0% told that quality medicines were not available and medicine was costly and 24.0% said that unani medicines were not available for insufficient supply. Twenty two percent thought that preparing unani medicine was very much time consuming and expensive due to its traditional approach of preparation. A number of service providers (18.0%) said the treatment system is less profitable due to higher price of medicine. Few also mentioned the lack of equipments for preparing medicine (Table 15).

Table 15: Opinion of service providers about problems regarding medicine

Problems in unani treatment system regarding	Frequency	Percentage
medicine (multiple response)		(N=50)
Shortage of raw materials	23	46.0
Lack of quality medicine	13	26.0
Medicine is costly and not available	13	26.0
Insufficient medicine	12	24.0
Time consuming & expensive (for handmade medicine)	11	22.0
Less profitable due to higher price of medicine	10	20.0
No equipment available to prepare handmade medicine	9	18.0

#### Problems regarding unani education

About 54.0% of service providers mentioned the lack of scope for higher study and research in this field, followed by shortage of skilled and trained teachers (38.0%), shortage of unani educational institutes (34.0%) and lack of scope for practical education (30.0%). Some of them (20.0%) thought that the syllabus was not up-to-date while some said about unani malpractice of quack who claimed themselves as unani service providers by generation without institutional education (Table 16).

Table 16: Opinion of service providers about problems regarding unani education

Problems in unani education system (multiple	Frequency	Percentage (N =
response)		50)
Lack of scope for higher study /research	27	54.0
Lack of trained/skilled teacher	19	38.0
Shortage of educational institutes	17	34.0
Lack of scope for practical education	15	30.0
False treatment by quack	12	24.0
No up-to-date syllabus	10	20.0

# Suggestions of service providers to overcome the problems faced

This section contains the suggestions of service providers to overcome the problems they usually faced regarding patients, medicine, and unani education, which are described below under different heads. In each head multiple responses had been obtained.

### Suggestions of service providers to overcome the problems regarding patients

About 36.0% of the service providers suggested that, appropriate concept of unani treatment should be circulated and announced among the patients to remove their wrong conception and to encourage them in this field. It should be advertised that this treatment system is available and developed enough and the patients may trust and rely on this treatment system. About 22.0% recommended that action should be taken against false institutes as well as practitioners and 16.0% suggested that medicine should be supplied

at low prices while 14.0% suggested about employing more unani service providers and supplying necessary equipments in government hospitals (Table 17).

Table 17: Suggestions of service providers to overcome the problems regarding patients

Suggestions to overcome the problems regarding	Frequency	Percentage
patients (multiple response)		(N = 50)
Circulate reliability, effectiveness and availability of unani	18	36.0
treatment	11	22.0
Take action against false practitioner/institute	8	16.0
Provide low prices medicine	7	14.0
Employed more service providers/use modern		
equipment		

### Suggestions of service providers to overcome the problems regarding medicine

Over half of the service providers (52.0%) suggested to develop more herbal gardens and to expand these sufficiently and 26.0% urged the price of medicine should be reduced. Twenty four percent respondents suggested monitoring and supervising the quality of medicine and 20.0% respondents recommended supplying more raw materials while 18.0% proposed more medicines should be supplied. Some other opinions have been found about development of modern system and extension of research activities etc (Table 18).

Table 18: Suggestions of service providers to overcome the problems regarding medicine

Suggestions to overcome the problems regarding medicine (multiple response)	Frequency	Percentage (N = 50)
Develop more/sufficient herbal garden	26	52.0
Reduce medicine price	13	26.0
Monitor/supervision the quality of medicine	12	24.0
Supply more raw material	10	20.0
Supply more medicine	9	18.0
Production of medicine according to GMP	6	12.0
Develop modern system/extend research activity	8	16.0

Suggestions of service providers to overcome the problems regarding unani education

Table – 19 shows that about 50.0% suggested for creating more opportunities to higher study in this field and 40.0% emphasized on modernize and develop unani educational system and establishment of more unani educational institutions both for Diploma and

Bachelor degree while 36.0% service providers mentioned the need of skill teachers and modern equipments. Some of them suggested giving opportunity of practical education (26.0%) and opportunity for diploma degree holders to achieve bachelor degree (24.0%).

Table19: Suggestions of service providers to overcome the problems regarding unani education

Suggestions to overcome the problems regarding unani	Frequency	Percentage
education (multiple response)		(N=50)
Creating more opportunities for higher study and research	25	50.0
Need of skilled teacher/modern equipment	18	36.0
Creating more opportunities for practical education	13	26.0
Need a setup more educational institute	20	40.0
Give opportunity to higher study of diploma	12	24.0
Modernize education system and up-to-date syllabus	20	40.0

#### Conclusions

In recent years WHO has given special emphasize on traditional medicine. Government of Bangladesh (GOB) has taken steps to develop traditional medicine and run with integrated health services and also introduced Alternative Medical Care (AMC) services in 1998 under HPSP program. For further improvement of unani treatment system it is high time to conduct a research work. On the basis of major findings, important concluding remarks are as follows:

Participation of female in providing unani service is very low as seen from the fact that the ratio of female to male unani service providers was 1:24. Most of the unani service providers (84%) practiced unani treatment as their principal occupation and their mean income was found about Taka 11525.00 per month. About one fourth of them got this profession by generation, and 38% of unani service providers had family members engaged in this occupation, which implies family influence motivated a substantial number of service providers to choose unani profession. Most of the unani service providers (86%) felt the need of special training for them as they had very limited opportunity of professional training. They urged for the training on use of modern instrument and diagnosis of diseases, specialization on specific disease and medicinal plants and herbal medicine. Also they suggested for creating more opportunities of higher study and research activities.

A comparison between the districts with formal AMC unani service and without this service indicate the success of formal unani services run by government in district sadar hospitals as the number of patients treated by unani service providers were significantly higher (67.73%) in those districts. The study revealed the name of most frequently prescribed medicines by unani service providers which will help the planners and policy makers to make these medicines available. Unani service providers informed that patients were referred to unani treatment mostly for sexual debility, jaundice, gastric and skin

diseases. Unani service providers also had the practice of referring patients to allopathic treatment mostly for surgical intervention or operation, heart diseases, irregular menstruation and tumor.

Unani service providers mentioned some problems they usually faced regarding patients, medicines and unani education. They mostly mentioned: wrong conception about unani treatment, reluctance of patients to follow the prescription properly, shortage of raw materials of unani medicine, lack of quality medicines, high price of medicine, lack of scope of higher study and research in this field and shortage of educational institutes, insufficient advertisement for unani treatment by the government, lack of scope for practical education, unavailability of up-to-date syllabus.

Unani service providers provided some recommendations to overcome the problems they usually faced. They mentioned that the concept of unani treatment, its effectiveness, reliability and availability should be widely circulated. More herbal garden should be established and its extension is needed to overcome the shortage of raw materials of unani medicine. They sought the opportunities of higher study and modern education system with up-to-date syllabus. They also mentioned to create more scope of government employment and the need of more extension services by government to promote unani treatment.

#### Recommendations

Based on the major findings of the study, following recommendations are proposed.

- 1. There is a gender inequality among the unani service providers. The male: female ratio is 24:1. So female should be especially encouraged to engage with this treatment system.
- 2. Most of the unani service providers urged the professional training. Proper training program should be organized as per their demand. Provision may be kept for inservice training of unani medical service providers.
- 3. A comparison between the districts with formal AMC unani service and without this service indicates the success of formal unani services run by the government. So government should expand the formal unani services under AMC program to treat mass people in grass root level.
- 4. The study revealed the name of most frequently prescribed medicines by unani service providers which will help the planners and policy makers to make these medicines available by supplying in government hospitals.
- 5. Patients were referred to unani service providers mostly for sexual debility, jaundice, gastric and skin diseases. Therefore special care should be taken for the treatment of these diseases through unani method.
- 6. Several problems were mentioned by the unani service providers and also they provided some suggestions to overcome those problems. In light of their opinion

- steps should be taken by the policy makers. In particular, quality of unani medicine may be ensured by quality control by the directorate of drugs.
- 7. General drug stores should be encouraged more to supply unani medicines so that patients can get it easily.
- 8. As we observed that number of herbal gardens is not sufficient and the demand for those is more than the present supply. Therefore government should patronize establishing herbal garden in the public and private sector as well.
- 9. Bangladesh with 150 million populations has only one public unani and Ayurvedic Medical College and Hospital is facing a shortage of unani medical institutions. So, the government should plan to establish more unani medical colleges in the country. Also, establishment of a post-graduate research and training institution for unani medicine is a demand of time and government should reasonably consider the issue.
- 10. More research should be initiated and commissioned by the national and international research organizations. Provision of more funds should be ensured for this purpose.
- 11. Syllabus of the unani medical graduate courses should be updated and an accreditation body should look after the syllabus and course contents.

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