



# Prevalence of Patients Taking Homeopathy Medicine for Non Communicable Diseases under Alternative Medical Care in Bangladesh: A Cross-sectional Study

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## Authors' contributions

*This work was carried out in collaboration with all authors. Authors NH and MAH designed the study, performed the statistical analysis, wrote the protocol, managed the analyses of the study and wrote the first draft of the manuscript. Author EK managed the literature searches. All authors read and approved the final manuscript.*

## Article Information

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## ABSTRACT

**Aim:** This current study was intended to evaluate the respond of patients to the available homeopathic medicine health services at the designated government health facilities in Bangladesh. As a part of that, the potentiality of homeopathic medicines in managing non-communicable diseases (NCDs) including gynecological problems, skin diseases, and Ear-Nose-Throat (ENT) complaints was also determined.

**Study Design:** This study was conducted in a cross-sectional method; designed to collect two sets of data, one from the hospital registry, and another set was collected by interviewing the visiting patients.

**Place and Duration of Study:** This exploration was conducted within 10 (ten) randomly selected government hospitals, and data from first March 2017 to twenty-eighth February 2018 was considered.

**Materials and Methods:** In this study, 5 (five) upazilla health complexes (UHC), and 5 (five) district health complexes (DHC) were included. The collected data from these hospital registries were used for clinical data analysis. Using a predesigned questionnaire, another set of data was collected by interviewing the visiting patients; a group of 150 individual patients from these 10 hospitals (15\*10=150, one hundred and fifty), was randomly nominated for demographic data analysis.

**Result:** The study revealed that there were 8% of patients taking homeopathic medicines among visiting patients at government hospitals. Both males (43%), females (57%) were taking help from this service. A calculated 35.33% of these patients completed the secondary school certificate, and patients with garments jobs (38%) are the principle consumers of this medical service. Patients with various non-communicable diseases including female diseases (22%), skin diseases (21%), ear-nose-throat (ENT) diseases (14%), cardio vascular diseases-CVD (13%), Hemorrhoid (13%), rheumatic fever (7%), and asthma (6%) were seeking homeopathic medicine service at the government hospitals.

**Conclusion:** This study result suggests with limited manpower, homeopathic medicine service helping significantly in the national health services.

*Keywords: Eczema; ENT; hemorrhoid; leucorrhoea; menstrual disorder; ovarian cyst; ringworm.*

## 1. INTRODUCTION

Amalgamating Hippocrates' expression of cure 'like cures like' and 'a minimum number of medicine', Hahnemann introduced 'Homeopathy' by adding few more regulation including minimum dose, medicine per individual, the theories of chronic diseases, vital force and the doctrine of dynamisation medicinal substance [1]. Homeopathic drugs are prepared by following a unique formulation and prescribed in accordance with the previously listed consequences of those drugs in the apparently healthy human being [1,2]. Hahnemann accentuated the life force as 'Vital force', as if in Ayurveda it is called 'Prana', in Chinese traditional medicine they called it 'CHI' and common people named it 'Atman' or 'soul' [3]. Identifying and characterizing each person is an interesting determinate followed in homeopathy which amplifies its unicity [4]. Dynamisation of drugs is a step by step strictly followed procedure resulting in surfacing the latent medicinal properties and amplifying into an incredible degree [5]. However, homeopathy faced a tremendous threat from the very beginning of its venture as people accepted its philosophical and simultaneously experimented concept [6]. As a matter of fact, the exact reason to oppose homeopathy was not its lack of scientific evidence but cutting into the health business [7]. Homeopathic medicine has a distinct medal of 'No Side effect' which encourages people all over the world including England, France, Netherland

and many countries in Asia to accept this as an alternative medicine [8]. In southern Europe, homeopathy has earned people's trust due to its clinical evidence [9]. Gaining potential benefits using homeopathic medicine in chronic back problems, headaches and anxiety boosted interest in homeopathic medicine in the USA [10]. Homeopathy is the third most seeking medical services in India, following Allopathy and Ayurveda [11], approximately 14% of the total sick population, choose homeopathic medicine due to lower price [12]. In Nepal, a randomized, double blind and placebo-controlled study evidenced the efficacy of homeopathic medicine in diarrhea [13]. A study revealed that, in Pakistan, the use of homeopathic medicine is more popular in women than men in various chronic disease including skin lesions and rheumatism [1].

Patients believe in homeopathy to get relief from chronic diseases including skin diseases, gastro-intestinal disease, the genital-sexual diseases in both sexes, ENT diseases, musculo-skeletal diseases, etc. and more popular in the higher economy and young group of patients [14]. Frustration and lack of satisfaction from the low grade health services encourage the use of alternative medicine [15]. Another study revealed that approximately 79% of patients are comfortable to use complementary and alternative medicines contrary to conventional medicine (21%) and among them, 23% of patients were fond of homeopathic medicine [16].

In Bangladesh, the availability of homeopaths is almost 33 homeopaths per 10,000 population and researchers observed that a large number of 44% population is served by traditional healers; however, success in various [17,18]. Moreover, various evidence increases the popularity of homeopathy in Bangladesh, successes in female diseases, sexual diseases in both sexes, kidney stones and tumors are in the list [17].

Non-communicable diseases (NCDs) have higher morbidity and mortality rate globally, hundreds of NCDs are listed under this including heart diseases and diabetes [19]. Around 35.6% death caused by NCDs in the African and Asian settings [20] and diseases like tobacco smoking and alcohol drinking induced hypertension is more frequent in male and high cholesterol were found in the females [21]. In Bangladesh list of major NCDs are included diabetes, CVD, hypertension, stroke, chronic respiratory disease and cancer [22]. WHO advised Bangladesh an agenda of 6 objectives to control non-communicable diseases [23]. Non-communicable diseases like stress induced hypertension, vascular complaints including vasculitis, diabetes, and diabetic foot, warts, nephrolithiasis, female genital complaints including cysts, tumors, menstrual disorder, and leucorrhoea, non-contagious skin lesion like psoriasis, etc. were found to be cured or managed by homeopathic medicine [24].

A number of homeopathic medical officers were being appointed in the government hospitals by Director General of Health Services (DGHS), a fragment of The Ministry of Health and Family Welfare (MHHW) of Bangladesh, under Health, Population and Nutrition Sector Development Project (HPNSDP), at secondary and tertiary health complexes and there are a lot of patients taking this health service [25]. Epidemiological studies regarding homeopathic medical services in government hospitals in Bangladesh are uncommon while common in many countries including Israel, Pakistan, and India. This current study was designed to assess the prevalence of patients are taking homeopathic medicine services in the government health facilities; the socio-economic status and distribution of diseases among the visiting patients were sorted as a part of the study.

## 2. MATERIALS AND METHODS

This study was performed with a cross sectional method, 5 upazilla health complexes (UHC)

namely, UHC of Dhamrai (UHCD) from Dhaka district, UHC of Gopalpur (UHCG) from Tangail district, UHC of Comilla sodor-south from Comilla district (UHCCoS), UHC of Atgharia from Pabna district (UHCA) and UHC of Srimongol from Moulvibajar district (UHCS), 3 district health complexes namely, Sathkhira Sodor hospital (DHS), Khagrachari Sodor hospital (DHK) and Hobigong Sadar hospital (DHHo), 2 medical college hospitals, Mymensingh medical college hospital (MMCH) from Mymensingh district, and Government Homeopathic Medical College Hospital (GHMCH) from Dhaka district was randomly selected to conduct this study. All the above mentioned health centers have respected medical doctors, appointed by Alternative Medical Care (AMC), DGHS and facilitated to provide homeopathic medicines to the OPD patients. Retrospective data of one year, dated from first March 2017 to twenty eighth February 2018, were collected from the hospital registry used for clinical data analysis. And, data collected from the visiting patients by interviewing them (15 people from each center \* 10 randomly selected centers = 150 individuals) were used in demographic data analysis. A predesigned questionnaire was used as a data collecting tool. A written consent form was filled and signed by all respected participants.

## 3. RESULTS

After collecting all the desired data, an interesting picture of homeopathic medicine seeking patients revealed. On an average of 10989.6 (8%) patients were seeking homeopathic medicine in compare to conventional medicine seeking group, which is an average of 136426 (12%) patients, in randomly selected upazilla and district health complexes under govt. health facilities (Table 1). Among homeopathic patients, 4725.53 (43%) were male and 6264.08 (57%) were female. Patients were divided into various age groups, the highest 18.67% of patients were from 0-10 years age group. Patients from 11-20 years of age group were in the next with 18.19% followed by 21-30 years, 31-40 years, 41-50 years, 51-60 years and >60 years group, with 17.43%, 16.67%, 15.51%, 9.90%, and 3.63% patients respectively (Tab. 1). Education level was observed among the visiting patients and found that the highest 35.33% of the patients completed secondary school certificates. A calculated 18.67% of the patients didn't complete the primary level, 16% of the patients completed the primary level, and 15.33% of the patients completed the graduate level of education.

However, 12% of the patients found illiterate, and rest 2.67% completed masters level of education (Table 1). The highest 38% of the patients were garments workers following by farmer, service holder and small business owner with 30.67%, 12.67%, and 11.33% respectively, while only 7.33% of the patients were day-labor (Table 1).

All kinds of patients were seeking help at homeopathic service provider, however, the patients with female diseases were highest with 22%, followed by skin diseases, Ear-Nose-Throat (ENT) complaints, cardio-vascular diseases (CVD), hemorrhoids, rheumatic fever and asthma with 21%, 14%, 13%, 13%, 7%, and 6% respectively of the total patients. However, patients with common surgical complaints including kidney and ureteric stone (nephrolithiasis) estimated 2%, tumor (including ganglion cyst, lipoma, and bony tumor) and diabetes mellitus with 1% respectively, were searching help at the homeopathic medical officer (Fig. 1).

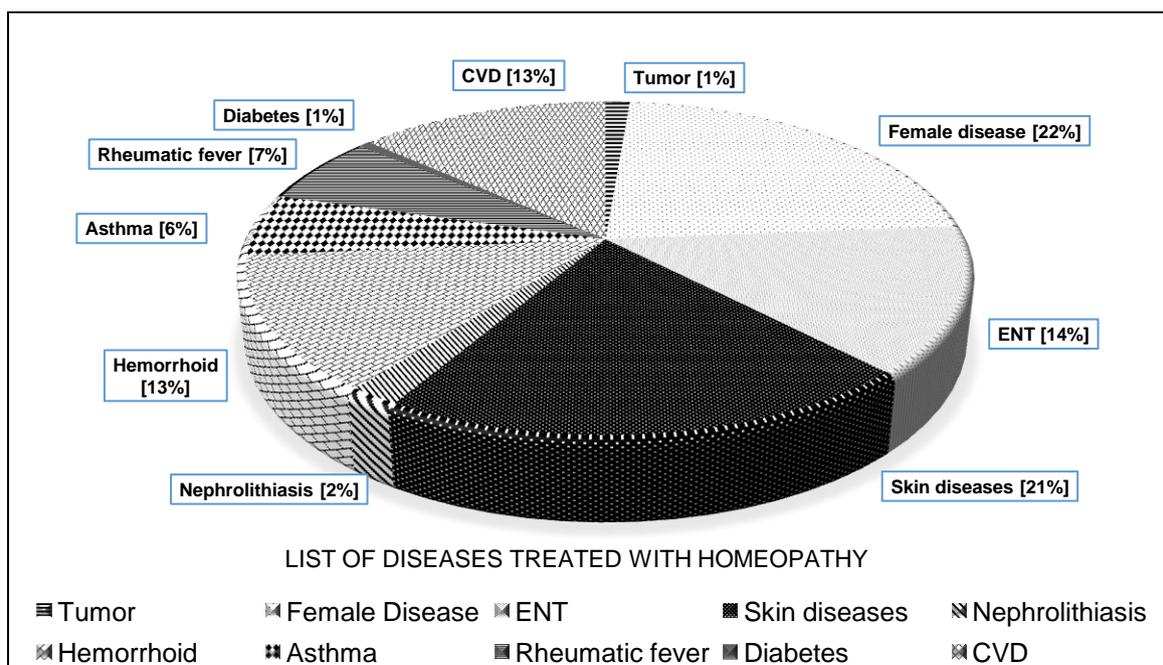
Around 28% of female patients were suffering from leucorrhoea and menstrual disorder, individually. This study also found an ovarian cyst in 18%, uterine fibroid in 10% of patients. Beside this, 6% of patients had fibro adenoma of the breast, and other female complaints were found in 10% of patients (Fig. 2).

Among the patients with CVD, a sum of 73% patients were suffering from various CVDs including hyperlipidemia, hypertension, valvular diseases, etc.; a calculated 18% and 5% of CVD patients were suffering from Arrhythmia and coronary artery diseases (CAD) respectively, whereas 3% of patients with congenital heart diseases (CHD), and 1% of patients with vascular disease (VD) were seeking help from homeopathic medical services (Fig. 3).

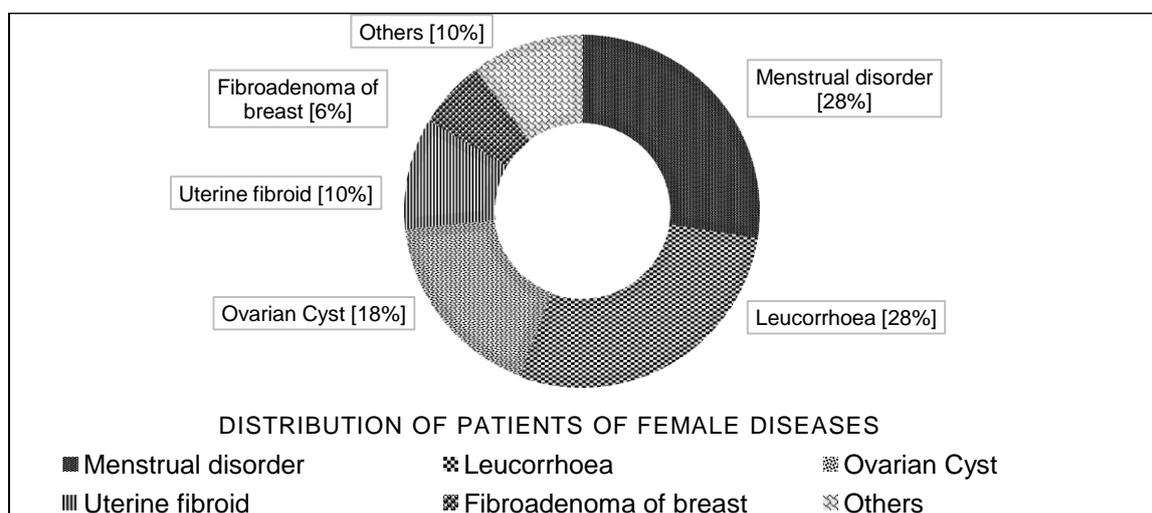
A good portion of the visiting patients was seeking homeopathic medicine for skin diseases, there was Ringworm in 44%, Eczema in 29%, Dermatitis in 8%, and Psoriasis in 6% of the

**Table 1. Demographic presentation of the study population**

<b>Variables</b>	<b>Results</b>
<b>Number of Patients in the hospitals (Average)</b>	
Allopathy OPD	136426 (92%)
Homeopathy OPD	10989.6 (8%)
<b>Distribution of Homeopathic patients (Average)</b>	
<b>Gender</b>	
Male	4725.53 (43%)
Female	6264.08 (57%)
<b>Age</b>	
0-10 years	2050.5 (18.67%)
11-20 years	1998.7 (18.19%)
21-30 years	1915.7 (17.43%)
31-40 years	1832.5 (16.67%)
41-50 years	1705 (15.51%)
51-60 years	1088.1 (9.90%)
>60 years	399.1 (3.63%)
<b>Education (Head of the family)</b>	
Illiterate	18 (12%)
Primary incomplete	28 (18.67%)
Primary complete	24 (16%)
Secondary school complete	53 (35.33%)
Graduate	23 (15.33%)
Masters and higher	4 (2.66%)
<b>Occupation (Head of the family)</b>	
Day labor	11 (7.33%)
Farmer	46 (30.67%)
Small Business	17 (11.33%)
Service holder	19 (12.67%)
Garments worker	57 (38%)



**Fig. 1. List of mostly treated diseases with homeopathic medicine under AMC, in government health facilities**



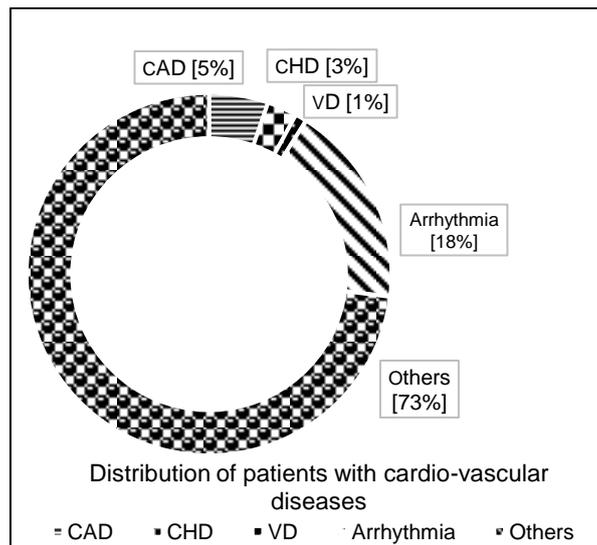
**Fig. 2. Distribution of patients of female diseases taking homeopathic medicine. Total 28% of patients were suffering from leucorrhoea, menstrual disorder 28%, ovarian cyst 18%, uterine fibroid 10%, fibro adenoma of breast 6% and others 10%**

patients. An estimated 13% of skin diseases like acne, warts, boils, and eruptions were grouped in 'others' (Fig. 4).

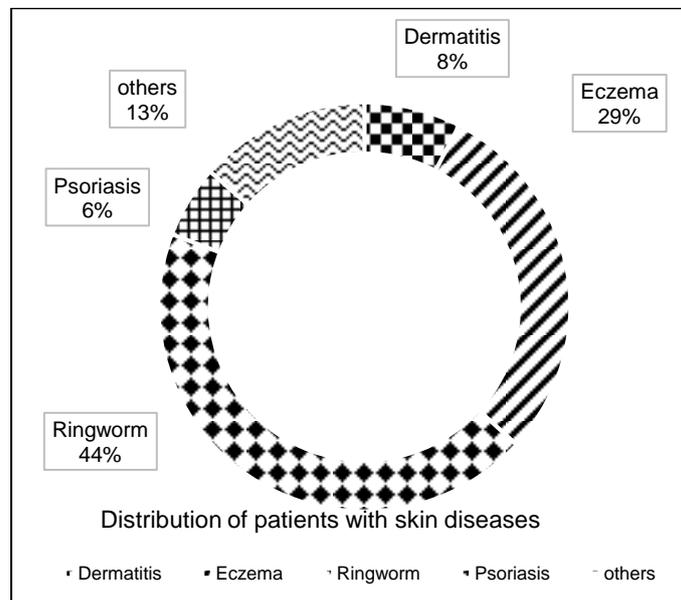
#### 4. DISCUSSION

This cross-sectional study among the visiting patients of the government health facilities reflects the impression of both allopathic and homeopathic OPD patient status in the hospitals (Table 1). This is to consider that this number of

patients was attended by only one homeopathic medical officer, on the contrary, the conventional medical services have a larger number of medical officers, though the number of patients attended by a single conventional medical officer was not considered. The outcome of this study, the prevalence of the visiting patients of the government hospitals, is considerably similar to the study conducted by SF Elahee et.al [14], which justifies the clarity of the current study. A number of patients are being helped by



**Fig. 3. Distribution of patients with cardio-vascular disease in homeopathic medicine; coronary artery disease (CAD) 5%, congenital heart disease (CHD) 3%, vascular disease (VD) 1%, arrhythmia 18%, and others 73%**



**Fig. 4. Distribution of skin diseases among the patients taking AMC services. Patients with ringworm visits in height 44%, eczema in 29%, dermatitis in 8%, psoriasis in 6% and others in 13%**

alternative medical care including homeopathic medicine, yet it is short of recognition and sustenance in the national health service of Bangladesh [25]. The percentage of patients seeking health services is considerably low in the government hospitals of Bangladesh, yet, this study result ascertains the similar results that, with limited manpower homeopathic medical services are helping the national health care [26]. The efficacy of homeopathic medicine

in eczema is not concluded previously [27], however, this study shows light of hope. Researchers found encouraging information regarding the treatment of female diseases with homeopathic medicine [28], which is also observed in this study. These current study results are very inspiring and an increasing number of homeopathic physicians will maximize the service of homeopathic medical service in the national health service of Bangladesh.

## 5. CONCLUSION

The progressive sector demands continuous development, homeopathy shouldn't be left out from this obvious phenomenon. Homeopathic medicine is surviving upon the shreds of clinical evidence which encourages patients to use. This current study result signifies the impact of AMC, as well as the homeopathic medicine in achieving primary health care goals set by the government of Bangladesh.

## DISCLAIMER

The tools used for this research are commonly and predominantly use products in our area of research and country. There is unconditionally no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by the personal efforts of the authors.

## CONSENT AND ETHICAL APPROVAL

Ethical clearance was sought from the appropriate body as per the direction of the Line Director (LD), AMC- DGHS. Necessary permission to conduct this study was taken from the respected authority.

All the participants signed consent form conserving the rights to share their data for, and only for sharing the knowledge which is preserved by the authors.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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