



(RESEARCH ARTICLE)



## Health education service facilities at Upazilla Health Complexes

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### Abstract

Health education can play important role in increasing a community's economy by reducing health care spending and improving productivity which is otherwise lost by preventable illness. A descriptive cross sectional study was carried out in the selected four Upazilla Health Complexes (UHCs) from January to December 2019 to assess the health education service facilities at UHCs. A total of 164 health education providers and 220 health education receivers were taken conveniently as sample. Data were collected by using pre tested semi-structured questionnaire with face to face interview. From the health educators' perspective 29% of the respondents belonged to the age group of 24-29 years, mean age of the health educators were  $36 \pm 8.62$  years. About 85% got training on health education, (97%) gave health education to patients. About 51% health educators' opinion was they had not fixed place/room for health education. All of the health educators (164) opinion poster and leaflet they used as teaching aids, 154 convey their health education through lecture method. From the health education receivers perspective mean age of the health educators were  $36 \pm 13.36$  years, about 83% health education receivers know which health education services are available in UHC. Here, 37% health education receivers faced problems during health education session, 13% mentioned sitting problem, 9% stated health education time was limited. Highest (54%) respondents were satisfied regarding cooperation of health education providers. The findings highlight the need to implement policies that focus on promotion of health education service facilities in the UHCs.

**Keywords:** Health; Health education; Lifestyle; Quality of Life; Wellness

### 1. Introduction

Health education is a relatively new multidisciplinary field concerned with educational programs that empower individuals and communities to play active roles in achieving, protecting, and sustaining their health. Health education is a social science that draws from the biological environment. Health education services are the most important issue to develop the overall health services for the people of Bangladesh. Many unwanted health related disease and events can be prevent and control by effective health education services.

Health is both a major pathway to human development and an end product of it. Health and development converge and contribute to each other. While it is true that health is not everything, it is also true that without health, everything else becomes meaningless Health sector is an important indicator of the level of economic development and it includes mainly morbidity and mortality. Health has importance in three distinct ways: (a) intrinsic importance, (b) instrumental importance at personal and social levels, and (c) empowerment importance [1].

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Over the last 48 years since independence, Bangladesh has made lot of strides in the Health Sector. Undoubtedly there is proliferation in health infrastructures - medical colleges, medical universities, private medical colleges, private clinics, private hospitals, district hospital, rural health centers and community clinics. The number of health care facilities under DGHS is 2257 which is a great contribution for the health sector in Bangladesh [2].

Due to huge number of population, Bangladesh faces double burden of diseases: Non-Communicable diseases: Diabetes, Cardiovascular diseases, Hypertension, Stroke, Chronic respiratory diseases, Cancer and Communicable diseases: Tuberculosis, HIV, Tetanus, Malaria, Measles, Rubella, leprosy and so on. The health problems of Bangladesh include communicable and non-communicable disease, malnutrition, environmental sanitation problems, and others [3].

Health education is an important part of public health. Through effective education and lifestyle modification, a country can reduce both mortality and morbidity rate and health expenditure. The 4th HPNSP have an operation plan on 'Lifestyle, and Health Education & Promotion (L&HEP)' under the DGHS. Main goal of this Operational Plan is to provide support to influence and promote healthy lifestyle and to identify different target audience by arranging workshop, seminar, and campaign [2].

There are many laudable interventions already implemented by Bureau of Health Education throughout Bangladesh. These are: (i) School Health Education (ii) Hospital Health Education (iii) Occupational and Industrial Health Education (iv) Environmental Health Education (v) Community Health Education for selected and vulnerable groups (vi) Prevention and control of communicable and non-communicable diseases etc [4].

The Alma-Ata declaration of September 1978 defined the concept of PHC as, essential care based on practical, scientifically sound and socially acceptable health care methods and technology, made universally accessible to individuals and families in the community through their full participation, and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of any country's health system, of which it is the central function and focus, and of the overall social and economic development of the community. It is the first level of contact for individuals, the family and the community within the national health system, bringing health care as close as possible to where people live and work, and constitutes health care services [5].

The Seven Areas of Responsibility are a comprehensive set of Competencies and Sub-competencies defining the role of an entry-level health educator. These Responsibilities were verified through the Competencies Update Project (CUP), conducted from 1998 to 2004, and serve as the basis of the Certified Health Education Specialist (CHES) exam [6].

Education has a significant effect on participation in health services and administrative factors could play a significant role in increasing the people's participation in Bangladesh's health sector. But the present health policy is not people oriented. It mainly emphasizes the construction of Thana Health Complexes (THCs) and Union Health and Family Welfare Centers (UHFWCs) without giving much attention to their utilization and delivery services. The study reveals that financial and technical support is very helpful to ensure health service among village people. However, the Government allocates only 5 percent of the budget to the health sector, while it allocates 13 percent for defense [7].

The government of Bangladesh spends substantial amounts of resources on health services but dissatisfaction is often expressed over availability and quality of these services. Many health professionals presume that health promotion has always been the core business of medicine in general and hospitals in particular. This view may be challenged for a variety of reasons.

Health education is a profession of educating people about health. Areas within this profession encompass environmental health, physical health, social health, emotional health, intellectual health and spiritual health. It can be defined as the principle by which individuals and groups of people learn to behave in a manner conducive to the promotion, maintenance or restoration of health. For giving health education to the patients or clients in Upazilla Health Complexes need all facilities available like human resource, physical facilities and materials facilities also. This study was aim to assess the health education service facilities in some Upazilla health complexes in Bangladesh.

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## 2. Material and methods

A cross sectional study was conducted for a period of 12 months from 1<sup>st</sup> January to 31<sup>st</sup> December, 2019. The study was conducted in four Upazilla health complexes (UHC). These were UHC, Chilmari, Kurigram, UHC, Ulipur, Kurigram, UHC, Nagershawri, Kurigram and UHC, Rajarhat, Kurigram. The study population consisted of Patient attending in outpatient department and health care providers (Nurses, SACMO, HA, FWV, FWA, MT (epi), Councilors. Inclusion

criteria were health education providers and receivers who were available during the time of data collection, health education receivers who were above 16 years of age and patient receiving services at least once. Convenient sampling technique was used to select 384 samples. As per estimation within the data collection period (1 month) 164 respondents (health education personnel) and 220 respondents (health education receiver) were enrolled. Hence eventual sample size was  $n= 384$ . Face-to-face interview was by a semi-structured questionnaire. The statistical analysis was conducted using SPSS (statistical package for social science) version 25 statistical software.

### 2.1. Purpose of the study

To assess the health education service facilities at Upazilla health complexes.

## 3. The discussion of the results

The present study entitled “Health Education Service Facilities at Upazilla Health Complexes”. For fulfillment the purpose 4 Upazilla Health Complexes were selected to see the health education service facilities from 164 health education personnel and 220 health education receiver. Data were collected during 4 weeks data collection period by pretested semi structured questionnaire from SSN, SACMO, HA, FWA, FWV, MT (EPI), Midwives and Councilor working in 4 Upazilla Health Complexes. This chapter presents findings of those data. The analyzed data were presented under followings:

**Table 1** Distribution of respondents (health educators) according to socio-demographic characteristics (n=164).

Age range	Frequency	Percent
24-29 years	48	29.3
30-35 years	39	23.8
36-41 years	32	19.5
42-47 years	23	14.0
48-53 years	17	10.4
More than 53 years	5	3.0
Mean $\pm$ SD = 36 $\pm$ 8.62 years		
<b>Sex of the respondents</b>		
Female	124	76.00
Male	40	24.00
<b>Educational qualification</b>		
Diploma in Nursing	63	38.4
B. Sc. in Nursing	20	12.2
MPH/MSC in Nursing	4	2.4
Diploma in Midwifery	12	7.3
SSC	2	1.2
HSC	28	17.1
BSC	24	14.6
MATS	11	6.7
<b>Professional status</b>		
Senior Staff Nurse	84	51.2
Nursing Supervisor	3	1.8
HA	40	24.4

SACMO	11	6.7
FWV	3	1.8
FWA	3	1.8
MT (EPI)	5	3.0
Counsellor	3	1.8
Midwives	12	7.3
<b>Working experience in UHC</b>		
Less than 2 years	31	18.9
2 years-4 years	32	19.5
5 years-7 years	18	11.0
8 years-10 years	38	23.2
More than 10 years	45	27.4
<b>Have training on health education</b>		
Got training	137	85
Didn't get training	27	15
Total	164	100.0

Table 1 shows that mean age of the health educators were  $36 \pm 8.62$  years, highest (29%) of the respondents belonged to the age group of 24-29 years followed by 24% were 30-35 years, 19% were 36-41 years and lowest (3%) was more than 53 years old. Among them 76% were female and only 24% were male and from the health education providers (nurses) highest (38%) were completed Diploma in Nursing and among the health education providers (non-nurses) highest (17%) were completed HSC. Among the health education providers highest (51%) were Senior Staff Nurse followed by 24% were Health Assistant & lowest (2%) were Nursing Supervisor, FWA, FWV and Counselor accordingly. In this regard highest (27%) health educators working experience in UHC is more than 10 years, followed by 23% respondents working experience in UHC is 8-10 years, 19% respondents working experience is 20 less than 2 years and 2-4 years and lowest (11%) respondents working experience in UHC is 5-7 years and (85%) respondents got training and lowest (15%) didn't get training on health education.

**Table 2** Distribution of respondents (health educators) according to information related to health education (n=164).

<b>provide health education to the patients</b>	<b>Yes</b>	<b>No</b>
Gave health education to patients	159	87.0
Didn't gave health education to patients	5	3.0
<b>Subject for health education</b>		
Environmental hygiene	110	54
Personal hygiene	149	15
Food and nutrition	151	13
Immunization	119	45
Antenatal care	63	101
Postnatal care	62	102
Breast feeding	98	66
Prevention of NCDs	53	111
Prevention of communicable diseases	73	91

Tuberculosis	16	148
Acute Respiratory Tract Infection (ARI)	26	138
Diarrhea	82	82
Fixed place or room for health education	81	83
<b>Furniture available in health education room</b>		
Table	84	80
Chair	84	80
Bench/tool for health education receivers	66	98
Teaching aids used for providing health education	Yes	No
Poster	164	0
Leaflet	164	0
Flipchart	134	30
Tape recorder	1	163
Television	2	162
Multimedia	3	161
<b>Teaching methods used for providing health education</b>		
Lecture	154	10
Group discussion	153	11
Poster	164	0
Flipchart	135	29
Multimedia	3	161
Audio aid	0	164
Audio visual aid	1	163
Total	164	100.0

Table no 2 shows, highest (97%) respondents gave health education to patients and lowest (3%) didn't give health education to patients. Among the health educators 151 health educators give health education on food and nutrition followed by 149 health educators give health education on personal hygiene, 110 health educators give health education on environmental hygiene, 98 health educators give health education on breast feeding and 53 health education provider gave health education on prevention of NCDs and 49% respondents gave opinion that they had fixed place for health education and 51% opinion no that is they had not fixed place/room for health education. Most of the respondents 98 opinion was there was not enough bench/tool for health education receivers. All of the respondents (164) opinion poster and leaflet they used as teaching aids. Most of the health educators (134) used flipchart as teaching aids. During delivering health education 163, 162 & 161 didn't use tape recorder, television and multimedia accordingly. Among the health educators 164 deliver their health education through poster, 154 convey their opinion through lecture method and 153 conduct health education session through group discussion.

Table no 3 illustrates whether the health educators face problem during health education or not. Among the respondents 61% didn't face problems and 39% faced problems. Those who were faced problem among them highest (26%) mentioned need another room for giving health education, 7% stated need excess manpower and lowest (.6%) expressed need another room and fixed day, need more CSBA and multimedia accordingly.

**Table 3** Distribution of respondents (health educators) according to face problem and kinds of problem faced during health education (n=164).

Problem faced during health education	Face any problem for providing health education		Total
	Yes	No	
Another room and fixed day	1	0	1 (.6)
Another room for giving HE	42	0	42 (25.6%)
Excess manpower need	13	0	13 (7.9%)
Health educator need	2	0	2 (1.2%)
Multimedia	1	0	1 (.6%)
Multimedia need	5	0	5 (3.0%)
No problem	0	100	100 (61%)
Total	64 (39%)	100 (61%)	164 (100%)

Table 4 shows that mean age of the health education receivers were  $36 \pm 13.36$  years, highest (27%) of the respondents belonged to the age group of 30-39 years followed by 24% were 20-29 years, 16% were 40-49 years and lowest (8%) was more than 59 years old. Among them highest (29%) respondents completed higher secondary level followed by 25% were graduation, 21% completed secondary school level and only 5% respondents were illiterate and 82% respondents were from rural area and 18% respondents were from suburban area.

**Table 4** Distribution of respondents (service receivers) according to socio-demographic characteristics (n=220).

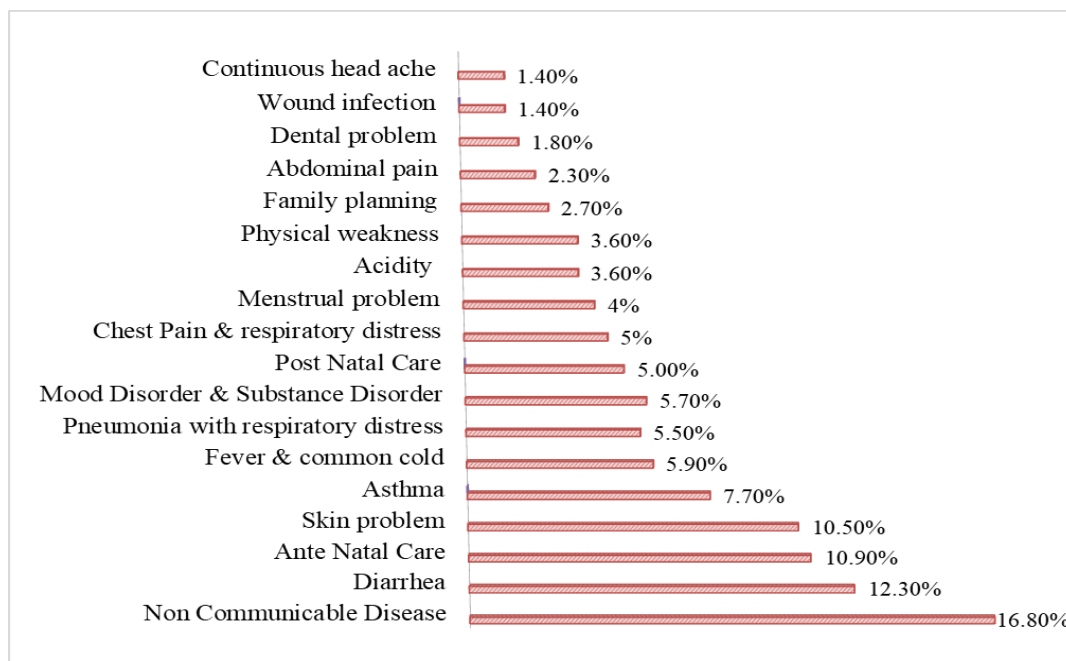
Age range	Frequency	Percent
Less than 20 years	25	11.4
20-29 years	52	23.6
30-39 years	59	26.8
40-49 years	36	16.4
50-59 years	30	13.6
More than 59 years	18	8.2
Mean $\pm$ SD = $36 \pm 13.36$ years		
Educational qualification		
Illiterate	11	5.0
Primary school	22	10.0
Secondary school	46	20.9
Higher secondary	63	28.6
Graduation	56	25.5
Simple read & write	22	10.0
Area of living		
Rural	181	82.0
Suburban	39	18.0

Table 5 represents that among the respondents highest (83%) opinion was yes and 17% opinion was no. From the respondents highest (75%) informed by health workers worked in the community followed by 11% informed from neighbors, 9% from relatives, 3% informed from radio & TV and lowest (2%) informed from newspaper. Within the respondents highest (76%) respondents came to the UHC for their self-illness followed by 14% respondents came for their baby's illness, 6% came to participate in health education session and lowest (4%) came with their relatives.

**Table 5** Distribution of respondents (service receivers) opinion about health education services in the upazilla health complex (n=220).

Know the health education services in the upazilla health complexes	Frequency	Percent
Yes	183	83.2
No	37	16.8
<b>Media informed for health education available in UHC</b>		
Radio, TV	6	2.7
Newspaper	4	1.8
Health workers	166	75.5
Relatives	20	9.1
Neighbors	24	10.9
<b>Reasons of coming in UHC</b>		
For self-illness	168	76.4
With relatives	9	4.1
For participate health education session	13	5.9
For my baby	30	13.6
Total	220	100.0

Figure 1 represents the subject of health education the respondents got from the UHC. Among the respondents highest (17%) got health education on Non Communicable Disease (NCD), followed by 12% on diarrhea, 11% on Ante Natal Care, 10% on skin problem, 8% on asthma and lowest (1%) got health education on continuous head ache & wound infection accordingly.



**Figure 1** Distribution of respondents (service receivers) according to subject they got health education from the Upazilla health complex (n=220)

**Table 6** Distribution of respondents (service receivers) according to face problem and kinds of problem faced during health education session (n=164).

Problem faced during health education receive	Face any problem for receiving health education		Total
	Yes	No	
Sitting problem	28	0	28 (12.7%)
Hearing problem	13	0	13 (5.9%)
Excess hot	11	0	11 (5.0%)
Limited time	17	2	19 (8.6%)
No problem	3	135	138 (62.7%)
So much crowded	3	1	4 (1.8%)
Long waiting time	7	0	7 (3.2%)
Total	82 (37.3%)	138 (62.7%)	220 (100%)

Table no 6 is a bivariate table that illustrates whether the health education receivers face problem during health education session or not. Among the respondents 37% faced problems and 63% didn't faced problems during health education session. Those who were faced problem among them highest (13%) mentioned sitting problem, 9% stated limited time, 6% mentioned hearing problem, 5% opinion was so hot place, 3% mentioned long waiting time and lowest (2%) expressed so much crowded.

**Table 7** Distribution of respondents (service receivers) satisfaction according to health education services in UHC (n=220).

Environment of health education services in UHC	Frequency	Percent
Very satisfied	1	.5
Satisfied	90	40.9
Neither satisfied nor dissatisfied	124	56.4
Dissatisfied	5	2.3
<b>Methods or medias of health education services in UHC</b>		
Satisfied	85	38.6
Neither satisfied nor dissatisfied	130	59.1
Dissatisfied	5	2.3
<b>Status of health education of health education providers in UHC</b>		
Very satisfied	26	11.8
Satisfied	100	45.5
Neither satisfied nor dissatisfied	94	42.7
<b>Level of cooperation of health education providers in UHC</b>		
Very satisfied	41	18.6
Satisfied	118	53.6
Neither satisfied nor dissatisfied	61	27.7
Total	220	100.0



Table 7 represents the level of satisfaction regarding environment of health education services in UHC. Within the respondents highest (56%) respondents were neither satisfied nor dissatisfied, 51% were satisfied and lowest (.5%) respondents were very satisfied. Satisfaction level in case of used method and media of health education services in UHC and highest (59%) respondents were neither satisfied nor dissatisfied, 39% were satisfied and lowest (2.3%) respondents were dissatisfied. Satisfaction of respondents regarding status of health education provided by health education providers and highest (45%) respondents were satisfied, 43% were neither satisfied nor dissatisfied and lowest (12%) respondents were very satisfied. Level of cooperation from health education providers towards their patients/clients. Among the respondents highest (54%) respondents were satisfied, 28% were neither satisfied nor dissatisfied and lowest (19%) respondents were very satisfied.

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#### 4. Conclusion

A cross sectional descriptive type of study was carried out January to December 2019 to assess the health education service facilities at Upazilla health complexes in Bangladesh. A total of 164 health education providers and 220 health education receivers were taken conveniently as sample. From the health education providers perspectives study concluded that half of them were Senior Staff Nurse. One third health educators working experience in UHC is more than 10 years, maximum got training on health education, most of the health education subject was food and nutrition, environmental hygiene, personal hygiene. More than half of the health educators opinion they had not sufficient manpower, need fixed room for health education, half of them mentioned they had not adequate furniture for providing health education. Near about all health educators used poster, leaflet as teaching aid, maximum use lecture, group discussion methods to provide health education. From the health education receivers' perspectives study concluded that most of the health educators were from rural area. Health education receivers got health education on NCDs, diarrhea, ANC, skin problems etc, some of them faced problems during health education session like sitting problem, limited time and hearing problem. In health education environment and method and media of health education more than half were neither satisfied nor dissatisfied, half of the health education receivers were satisfied regarding status of health education and cooperation of health educators.

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#### *Disclosure of conflict of interest*

None to declare.

#### *Statement of informed consent*

Informed consent was obtained from all individual participants included in the study.

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