

**Title:**

Capacity building of primary care physicians for treatment of tobacco dependence in Bangladesh  
(Project ID: 13472363)

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## **Abstract**

Purpose: The goal of the project is to develop effective cessation services by appropriately trained health care professionals to reduce the overall tobacco burden in Bangladesh.

Scope: Bangladesh is one of the high tobacco consumption countries of the world. There is no effective cessation service available for patients attending different tiers of public hospitals or clinics of Bangladesh. Therefore a project for capacity building of primary care physicians will be an important step in establishing cessation services in Bangladesh.

Methods: To develop a core group health professional with expertise for providing training for treatment of tobacco dependence organization of training of trainers (TOT) were planned. To motivate and increase the knowledge for treatment of tobacco dependence among primary care physicians, several training sessions for general physicians and other health care providers were planned in different parts of the country. Consultative meetings with relevant government and non-government stakeholders were also planned to sensitize policy makers. Establishment of cessation clinics in five hospitals and at one rural community of Bangladesh was planned.

Results: A training manual was developed to conduct training sessions with the aim of imparting knowledge to primary care physicians for treatment of tobacco dependence. The World Health Organization's training module was used as template for the training modules with some modifications. A TOT was done and 18 physicians were trained as trainer. Training sessions were organized in five tertiary care hospitals and in a community social organization. 175 physicians and 359 nurses underwent one day training on tobacco dependence treatment with emphasis on brief intervention. Tobacco cessation service has been established in five tertiary care hospitals. A consultation meeting was conducted to sensitize policy makers and relevant stakeholders for implementation of FCTC article 14.

Conclusion: Few barriers in implementation of tobacco cessation service in Bangladesh such as lack knowledge of health care providers, lack of motivation of physicians, high cost and unavailability of medication etc. However overall, administrators of hospitals were supportive for establishment cessation clinic. Physician organizations are requesting for organizing more training sessions at different level of health systems. Mobile phone companies also showed in mobile based intervention. Drug administration authority of Ministry of Health and Family welfare has shown keen interest for licensing and production of NRT. Also National Tobacco Control Cell have committed to explore the ways for enlisting NRT as essential drug after sensitization at stakeholders meeting.

Key Words: Bangladesh, Tobacco, Cessation, FCTC

## **PURPOSE / OBJECTIVES**

The goal of the project is to develop effective cessation services by appropriately trained health care professionals to reduce the overall tobacco burden in Bangladesh

Tobacco control is one of the main programs of National Heart Foundation of Bangladesh (NHFB) for prevention of cardiovascular diseases in Bangladesh. The foundation has formed a network “United Forum Against Tobacco (UFAT)” with other health professionals bodies such as Bangladesh Lung Foundation, Bangladesh Cancer Society, Associations of Physicians of Bangladesh and Bangladesh Society of Medicine with a view to engage physicians in tobacco control advocacy and for providing training for tobacco cessation. A grant from Bloomberg Foundation with the technical support from Campaign for Tobacco Free Kids (CTFK), USA has been secured by NHFB for involving physicians’ for tobacco control advocacy since 2011. Cessation services have been initiated in the National Heart Foundation hospital and research institute for with technical assistance of World Health Organization, Country office For Bangladesh. However health care professional’s knowledge on cessation is poor in this country. The Global Bridge and Pfizer grant for training health care professional for tobacco cessation will help NHFB to develop cessation service in Bangladesh by imparting evidence based knowledge and training.

The objectives of the project were-

1. To develop a core group health professionals with expertise for treatment of tobacco dependence
2. To motivate and increase the knowledge for treatment of tobacco dependence among primary care physicians of Bangladesh
3. To establish model tobacco cessation clinics in selected tertiary care hospitals in divisional cities of Bangladesh

## SCOPE

### Baseline data summary, initial metrics, or project starting point

Bangladesh is one of the high tobacco consumption countries of the world. Unlike many other countries, Bangladeshi population use both smoking tobacco mainly cigarette and biri and smokeless tobacco products such as zarda, gul, sada pata. Approximately 43% of all adults (age 15+) use some form of tobacco (male 58%; female 29%).<sup>1</sup> About 45% of males and 1.5% of females smoke, and 26% of males and 28% of females use smokeless tobacco. It is estimated that about 40.1 million adults use tobacco in some form or other in Bangladesh.<sup>1</sup> It is reported that 69.4% of the male and 20.8% of the female adult population are exposed to SHS in public places in Bangladesh.<sup>1</sup> This high rate of use of tobacco usage has large impact on health of the nation. About 16% of all deaths among people age 30 years and above are attributable to tobacco use and over 57,000 people die in Bangladesh each year from tobacco-related diseases. There are about 1.2 million cases of tobacco-attributable illness in Bangladesh each year.<sup>2</sup>

Bangladesh Government has already affirmed its commitment to curb use of tobacco in the country. In that spirit the Government signed and ratified FCTC. Strategic Plan of Action for Tobacco Control has been formulated and Tobacco Control Law has been passed in the parliament. Because of various steps taken by the Government and Non-government organizations, it is expected that fewer people will start use of tobacco in coming future. However it is equally important to offer help to those, who wishes to quit. Unfortunately the service has not evolved in Bangladesh as expected. GATS Bangladesh has shown that about 47% of smokers made an attempt to quit in the last 12 months and 68% of the current smokers are thinking of quitting in 12 months time. However only 50% of the who have visited doctors in the last 30 days were advised to quit.<sup>1</sup> There is no effective cessation service available for patients attending different tiers of public hospitals or clinics of Bangladesh.

National Heart Foundation Hospital & Research Institute (NHFH&RI) has been running a clinic based cessation service in Dhaka for patients admitted in the hospital with cardiac diseases. However, there are some limitations in running the clinic as there is lack of trained personnel in tobacco cessation, lack of physicians' motivation for referring cases to clinic, and lack of sustained resources. Lack of adequate knowledge about NRT and other medications such as Bupropion and Varenicline, although available in

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<sup>1</sup> Ministry of Health and Family Welfare, Government of Bangladesh. Global Adult Tobacco Survey - Bangladesh Report 2009. Dhaka, Bangladesh: World Health Organization, Country Office for Bangladesh. 2009

<sup>2</sup> Zaman MM, Nargis N, Perucic AM, Rahman K (Editors). Impact of Tobacco Related Illness in Bangladesh. SEARO, WHO, New Delhi, 2007.

the market, are also a barrier to deliver effective treatment of tobacco dependence as patients and smokers expects to have a prescription in addition to behavior counseling. One recent survey done in Bangladesh have shown that almost 91.9% physicians were never been trained in smoking cessation.<sup>3</sup> Therefore a project for capacity building of primary care physicians will be an important step in establishing cessation services in Bangladesh thus will facilitate to implement the article 14 of FCTC and “Offer help to quit” strategy of MPOWER.

## **METHODS**

To achieve the objective 1, (To develop a core group health professionals with expertise for treatment of tobacco dependence) following activities were planned.

Activity 1: Adaptation and development of a training manual on tobacco cessation for health professionals of Bangladesh

Activity 2: Organization of training session for core expert group

Activity 3: Attendance of the WCTOH 2015 at Abu Dhabi for workshop

To achieve objective 2, (To motivate and increase the knowledge for treatment of tobacco dependence among primary care physicians of Bangladesh) following activities were done-

Activity 1: Training for Capacity building of primary care physicians at seven divisions

Activity 2: Consultative meetings with regulatory authorities for inclusion of tobacco dependence treatment in medical curriculum.

To attain the objective 3, (To establish model tobacco cessation clinics in selected tertiary care hospitals in divisional cities of Bangladesh) following activity was done.

Activity 1: Establishment of cessation clinics in five hospitals and at one rural community of Bangladesh

Activity 2: Cessation service from the established clinics

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<sup>3</sup> Prevalence of smoking among the physicians of Bangladesh. OHDIR Foundation, Dhaka. Study report submitted to John Hopkins Bloomberg School of Public Health in 2013. (Manuscript under preparation).

## RESULTS / OUTCOME

To achieve the objective 1, (To develop a core group health professionals with expertise for treatment of tobacco dependence) following activities were done.

Activity 1: Adaptation and development of a training manual on tobacco cessation for health professionals of Bangladesh

As a part of development of trainers for tobacco cessation training, two core staff of the project Professor Sohel Reza Choudhury and Dr Shamim Jubayer have successfully completed “A Comprehensive Course on Smoking Cessation: Essential Skills and Strategies”, presented by the Training Enhancement in Applied Cessation Counseling and Health (TEACH) Project at the Centre for Addiction and Mental Health, Faculty of Medicine, University of Toronto, online, from May 20 - June 24, 2015.

A training manual was developed to conduct training sessions with the aim of imparting knowledge to primary care physicians for treatment of tobacco dependence. The World Health Organization’s training module “Strengthening health systems for treating tobacco dependence in primary care - Part III: Training for primary care providers: Brief tobacco interventions” was used as template for the training modules with some modifications. The training manual was developed in Bangla to conduct training sessions for better understanding of all trainee healthcare providers.

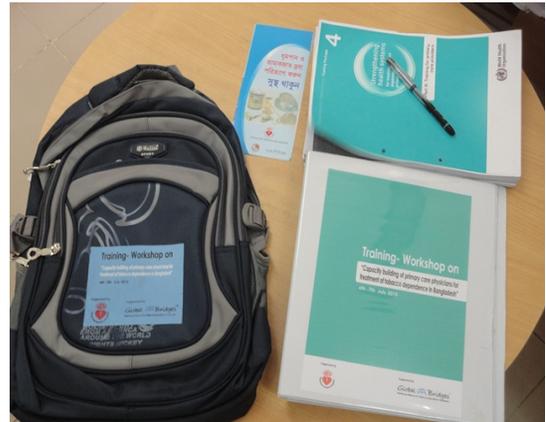


Fig. 1: Training materials

## Activity 2. Organization of training session for core expert group

A two-day training workshop at National Heart Foundation of Bangladesh, Dhaka was held on 6 & 7 July

2015 at Hall B, 10th Floor of National Heart Foundation Hospital and Research Institute, Mirpur, Dhaka. Eighteen primary care physicians from the different hospitals of affiliated bodies of National Heart Foundation of Bangladesh and Community based organizations were present in this two days training workshop. The inaugural session of the program was attended by National Professor Brig. (Rtd) Abdul Malik, Founder & President, National Heart Foundation of Bangladesh, Professor AHM Enayet Hussain, Line Director, (NCD), Directorate General of Health Services, Dr. Syed Mahfuzul Huq, Technical Officer, Tobacco Control, World Health Organization, Country office of Bangladesh. There were six physician participants from National Heart Foundation Hospital & Research Institute, Dhaka, two from National Heart Foundation Hospital, Sylhet, two from National Heart Foundation Hospital, Faridpur, two from Zia Heart Foundation Hospital and Research Center, Dinajpur and two from Gazi Medical College & Hospital, Khulna. Four community health

workers including a village doctor from Ekhlaspur center of Health, Motlob and OHDIR Foundation, Kishoreganj also took part in the training. The training workshop included eight sessions over two days and covered following topics- Current tobacco control status: Global and Bangladesh perspectives, The role of primary care providers in tobacco control and tobacco dependence treatment, Motivational approach for behavior change, nicotine addiction treatment etc. Training materials such as module



Fig. 2: Inaugural session



Fig. 3: Core group training

book, bag, pen, note books etc. were supplied to the participants. A training completion certificate was given to participants after completion of workshop.



Fig. 4: Training participants

#### Activity 3: Attendance of the WCTOH 2015 at Abu Dhabi for workshop

Registration of for attending the congress was done but could not attend due to non-availability of visa.

To achieve objective 2, (To motivate and increase the knowledge for treatment of tobacco dependence among primary care physicians of Bangladesh) following activities were done-

#### Activity # 1: Training for Capacity building of primary care physicians at seven divisions

Training of primary care physicians at five cities such as Dhaka, Sylhet, Fardipur, Khulna, Rangpur and one rural community in Chadpur Matlab was done during the project period. In total 175 primary care physicians were trained on tobacco dependence treatment.

Training for the rural practitioners was organized in March 2015 with the collaboration of Ekhlaspur Centre of Health (ECOH), a local NGO working for health promotion in the area. In that one day program 18 health care providers including nurses, community health worker (CHW) and village doctors were

trained. CHWs of ECOH were instructed to include tobacco cessation advice in their regular yard meetings. A list of adult tobacco users participated in the yard meetings were kept and later followed by mobile phone to ascertain tobacco use status.



Fig. 5: Training participants at ECOH, Matlob North, Chandpur

Training session for general practitioners in Sylhet Metropolitan City was conducted on March 2015 with the collaboration of Sylhet Heart Foundation. 29 Physicians participated in the training.



Fig. 6: Training participants at Sylhet Heart Foundation Hospital, Sylhet

Training session for general practitioners in Khulna Metropolitan City was conducted on 21 April 2015 with the collaboration with Gazi Medical College Hospital. 21 Physicians participated in the training.



Fig. 7: Training participants at Gazi Medical College, Khulna

In May 2015, cessation training was organized in Faridpur with the collaboration of Faridpur Heart Foundation. 22 physicians were trained.



Fig. 8: Training participants at Faridpur Heart Foundation Faridpur

In 24-25 July 2016 training sessions for physicians working in National Institute for Cancer Research and Hospital were (NICRH) organized. In total 55 physicians took part in the training. Emphasis was given on the brief intervention for cessation by physicians.



Fig. 9: Training participants at NICRH, Dhaka

In 16 August 2016 training session for physicians working in Rangpur city was organized with the collaboration of Rangpur Hypertension Research Center. In total 22 physicians took part in the training. Emphasis was given on the brief intervention for cessation by physicians.



Fig. 10: Training participants at Hypertension Research Center, Rangpur

In National Heart Foundation Hospital & Research Institute, Dhaka had also organized training for treatment of tobacco dependence for nurses as nurses play a significant role and trusted sources of information and advice for the patients and interventions for tobacco cessation. 359 nurses of the hospital were trained in nine batches. This training was intended to provide direction to practicing nurses on tobacco cessation assessment and intervention for patients who were admitted in National Heart Foundation Hospital and have had history of using any form of tobacco such as cigarettes, pipe, cigar, snuff smokeless tobacco. All tobacco users admitted patients are given a brief advice by nurses in the ward. Patients are advised to attend the cessation clinic of the hospital for advance support.



Fig. 11: Nurses training NHFH&RI, Dhaka

Activity # 2: Consultative meetings with regulatory authorities for inclusion of tobacco dependence treatment in medical curriculum.

Consultative meeting for implementation of FCTC Article 14 in Bangladesh was held on 21 December 2016 in National Heart Foundation Hospital and Research Institute, Mirpur, Dhaka National Professor Brigadier (Rtd.) Abdul Malik, Founder & President, National Heart Foundation of Bangladesh presided over the meeting. Representatives from National Tobacco Control Cell (NTCC), Center for Medical Education, and Directorate General of Health Services & Director, Drug Administration, WHO Country office, CTFK Country lead consultant, Telenor Health and relevant stakeholders from National NGOs were present. Current situation of tobacco cessation as well as the importance of implementation of FCTC Article 14 in Bangladesh was presented by Prof. Sohel Reza Choudhury. After discussion & suggestions from the participants, following recommendations were made.

- Incorporate tobacco cessation training in medical curriculum and health care service provider's training manuals
- Incorporate cessation service in primary health care delivery especially brief intervention by all health care providers
- Ensure availability of the Nicotine replacement therapy and low cost drug
- Establishment of Quit lines and explore mobile phone based intervention

A brief policy brief is being prepared to submit the outcome of the meeting to Ministry of Health & Family Welfare, Government of Bangladesh.



Fig. 12: Consultative meeting for implementation of FCTC article 14 in Bangladesh

To attain the objective 3, (To establish model tobacco cessation clinics in selected tertiary care hospitals in divisional cities of Bangladesh) following activity was done.

Activity 1. Establishment of cessation clinics in five hospitals and at one rural community of Bangladesh  
& Activity 2: Cessation service from clinics

Tobacco cessation clinics have been established in National Heart Foundation Hospital & Research Institute, Dhaka; Sylhet Heart Foundation Hospital, Sylhet; Faridpur Heart Foundation Hospital, Faridpur, Hypertension & Research Centre, Rangpur, and Gazi Medical College & Hospital, Khulna. A community based tobacco cessation service is also established by a non-governmental organization named Ekhlaspur Centre of Health (ECOH) at Ekhlaspur village, Motlob North, Chadpur. For proper

documentation treatment guideline, enrollment registers were provided to the each cessation clinic. For better understandings about tobacco cessation service 30,000 leaflet containing information about tobacco cessation and dependence treatment were also provided to the cessation clinic for general distribution in the clinic. Enrollment enrolled tobacco users are followed up after one week, two month and six months over telephone to ascertain their tobacco use status. About 1244 tobacco user was observed in the project period after the establishment of clinics, most of them were helped by giving brief advice .



Fig. 13: Tobacco Cessation clinics at Gazi Madical Collge, Khulna, Faridpur Heart Foundation, Faridpur & Sylhet Heart Foundation Sylhet Hospitals

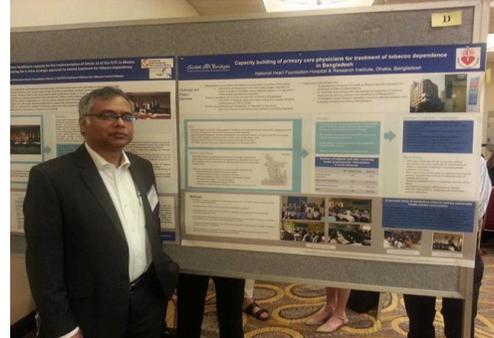


Fig. 14: Nurse based Tobacco Cessation intervention and follow-up at NHFH&RI, Dhaka

## Other Tobacco Cessation Related Activities

### A. Attendance in the Global Tobacco Dependence Treatment Summit 2016

The Global Tobacco Dependence Treatment Summit 2016 collaboration by the Mayo Clinic's Nicotine Dependence Center (NDC) and Global Bridges held on May 23-24 at Mayo Clinic in Rochester, Minnesota. Professor Sohel Reza Choudhury attended the summit from National Heart Foundation hospital & Research Institute as grantee.



### B. Tobacco Control Conference by National Heart Foundation of Bangladesh

A tobacco control conference was organized by National Heart Foundation of Bangladesh on October 2016. A session on tobacco cessation was organized and speakers talked about various aspects of tobacco dependence treatment.



### C. Incorporation of tobacco cessation module into the curriculum of certificate course on CVD management for general practitioners.

### D. Media coverage of consultation meeting

Good media coverage was obtained on the consultation meeting for implementation of article 14 of FCTC.

## Experts for tobacco use cessation facilities at hospitals

### FE Report

Experts at a discussion in the city on Wednesday recommended providing facilities for quitting use of tobacco at all the major hospitals and healthcare centers across the country.

They also suggested introducing specialised tobacco-related treatment facilities and advice centers for the users to help them quit the habit, said a press release on Wednesday.

The recommendations come at a consultative meeting, organised by the

National Heart Foundation of Bangladesh in collaboration with National Tobacco Control Cell (NTCC) under the Ministry of Health and Family Welfare at the National Heart Foundation Hospital and Research Institute at Mirpur in the city.

National Professor Brig (Retd) Abdul Malik, founder president of the National Heart Foundation of Bangladesh, presided over the meeting.

The speakers noted that as Bangladesh is obligated to implement the Article 14 of the Framework Convention on Tobacco Control, it

should expand the facilities at the healthcare centers and hospitals in the country for helping quit tobacco use.

They also called for more investment from the government and development partners to provide those facilities in the country.

Mr Mohammad Rahul Quddus, joint secretary, MoH&FW, Professor Sohel Reza Choudhury, head of the Department of Epidemiology and Research, and representatives from several government organisations and NGOs also took part at the discussion. [kabirhumayan10@gmail.com](mailto:kabirhumayan10@gmail.com)

## **CONCLUSIONS**

We have identified few barriers in implementation of tobacco cessation service in Bangladesh. These are-

1. Lack of knowledge about tobacco dependence treatment among the physician
2. Unwillingness or lack of motivation of specialist to refer patients to cessation clinics
3. High cost and unavailability of medication such as NRT.

However overall, administrators of hospitals were supportive for establishment cessation clinic. Physician organizations are requesting for organizing more training sessions at different level of health systems. Mobile phone companies also showed in mobile based intervention. Drug administration authority of Ministry of Health and Family welfare has shown keen interest for licensing and production of NRT. Also National Tobacco Control Cell have committed to explore the ways for enlisting NRT as essential drug after sensitization at stakeholders meeting.