**Summary Report on Training Strategy**

**Final Report**

**Introduction**

It has been observed that most of the retail drug shops in Bangladesh are run by the people who have no formal pharmacy education. According to DGDA a minimum level of pharmacy certificate course (at least grade C) as qualified person is mandatory to open a pharmacy. There have one lac twenty thousand registered pharmacy shops in the country, out of which only about 77,000 are run by Grade-C certificate holders. Most of the drug sellers in the pharmacies are acting as proxy physicians for the common people in the community without any pharmaceutical knowledge.

The pharmacy education program imparted in different public and private universities

/institutions are designed only to produce qualified pharmacists to meet the demand of pharmaceutical industries, where community, retail or hospital pharmacy education remains unaware.

Pharmacists worldwide are considered as the most visible and one of the most accessible healthcare professionals; unfortunately in Bangladesh pharmacists are invisible in the health service management in government sector. Virtually in the health system, public sector is the mirror of respect and dignity hence excluding pharmacists from national health system surely creates a gap in the health services resulting compromised patient care. A handful of private hospitals have position for hospital pharmacists and practically there is no position for graduate pharmacists in public hospitals unlike other health professionals i.e. doctors and nurses.

Appropriate guidance and pharmacy education is the demand of time to involve qualified pharmacists in retail practice to minimize drug related hazards and maximize patients care. For implementation of such retail pharmacy practice a project titled “Designing Implementation Strategy for Accredited Drug Seller model in Bangladesh” has been awarded and is funded by Joint Donor Technical Assistance Fund (JDTAF)—a consortium of donors led by the Department for International Development (DFID) implemented by Management sciences for Health (MSH). The main stakeholders playing vital roles with this profession are-

(i) Directorate General of Drug Administration (DGDA), (ii) Pharmacy Council of Bangladesh (PCB) and

(iii) Bangladesh Chemist & Druggist Society (BCDS).

The primary objective of the project is to design a Bangladesh pharmacy model to be introduced as the Bangladesh Pharmacy Model Initiative (BPMI) program. It is expected that this program will strengthen the capacity of the Directorate General of Drug Administration (DGDA) and the Pharmacy Council of Bangladesh (PCB) to ensure improved access to and appropriate use of quality medicines and pharmaceutical services in Bangladesh through accreditation and monitoring of private sector drug shops and pharmacies.

The PCB is regulating the practice of pharmacy throughout Bangladesh which includes approval of registration for pharmacists, approval of subjects and courses of examination, conditions and procedures for admission of candidates etc. PCB also prescribes required equipment and facilities for students, does inspection to institutions that are offering any

course of study in pharmacy; prepares and maintains register of pharmacists and apprentices in pharmacy, grants certificates of registration, holds examination for registration of pharmacy apprentice and undertakes any other activities that may be required to do by the council under The Pharmacy Ordinance, 1976.

**Pharmacy Courses in Bangladesh:**

In Bangladesh there have three types of pharmacy education system.

**i) Bachelor of Pharmacy (B. Pharm):** Thirteen public universities and 25 private universities are offering Bachelor of Pharmacy program (Honors) which is mostly a 4 years program, but very few universities are offering 5 years full time course with prior approval by the UGC and PCB. After completion of B. Pharm, degree the students are registered as Grade A by PCB. One year postgraduate course (M. Pharm) has been also been started in public and private universities with few exceptions. Dhaka University also offers B Pharm Professional (Five years) with six months hospital training, M. Pharm (one year), M.Phil and Ph.D courses in Pharmacy and related subjects.

**ii) Diploma in Pharmacy**: The duration of Diploma in Pharmacy course is 3 years long with one year of internship. A total of 8 public and 42 private institutes are offering diploma in pharmacy course under PCB. These pharmacists are called Grade-B and registered as grade B by PCB. There have job opportunities for only Grade B pharmacists in public hospitals. But, since 2013 due to judicial dispute recruitments are held up in public hospitals for grade B pharmacist. Presently the institutes are running short of students and most of them are closed.

**iii) Pharmacy Certificate Registration Course:** Pharmacy certificate registration course started to fulfill the demand of the private pharmacy business and to meet the requirement of the registration of the drug shops since 1994 according to DGDA. Pharmacy council of Bangladesh approved this course as grade-C certificate to meet huge demand of the establishment of drug shops in the country. This grade C course is 3 months long (total 40 classes, 1.5 hours per class, 2 class per week) with the minimum eligibility of trainees at least secondary school certificate with any discipline. The content of grade C training textbook “Sahoj Oshood Biggan” is given below:

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| --- | --- |
| Chapter | Topics |
| 1 | General knowledge on medicine |
| 2 | Ethical practices of a pharmacist |
| 3 | The common medicine related rules and regulation of Bangladesh |
| 4 | Human Physiology |
| 5 | Microbiology |
| 6 | Preparing medicine |
| 7 | Stability and preservation of medicine |
| 8 | Routes of medicine administration |
| 9 | Surgical dressing |

|  |  |
| --- | --- |
| 10 | Different medicine used to different treatments in Bangladesh |
| 11 | Community Pharmacy |
| 12 | Family planning |
| 13 | Nutrition and health |
| 14 | Environmental Health |
| 15 | Health care and government’s role |
| 16 | First aide |
| 17 | Alternate treatment: Local medicine |

In Bangladesh no existing training was identified for the business owners (pharmacy shop owners) so far.

**Pharmacy Dispensers Training Strategy:**

According to the meeting discussion with key stakeholders the training strategy defining the general training framework for grade A, B, pharmacists and grade C certificate holders, specially focusing on grade C dispensers seeking to dispense medicines in accredited drug shops. The final training strategy will:

1. reflect on nationwide feasibility study of drug shops in both rural and urban areas

2. define minimum personnel qualifications and entry procedures for drug shop owner and dispenser training

3. define optimal BPMI training duration for new and existing private drug shop owners and grade C dispensers

4. propose a long-term strategy for regularly updating BPMI training curriculum for grade C

dispensers as necessary

5. recommend common nomenclature of dispensers (A,B, and C) grades according to their functions

6. propose strategy for offering continuing education courses for dispensers working in

BPMI accredited drug shops. Strategy should consider both short-term and long-term continued education needs

7. identify a modality for sustainably offering the training courses. Potential modalities to explore should include use of:

a) existing training institutions or organizations, particularly those providing pharmaceutical-related trainings.1

b) Bangladesh Chemist and Druggist Samity (BCDS) to facilitate or provide drug shop owner and dispenser training

8. describe costs and resources required to introduce and maintain the trainings; propose strategy for covering costs (e.g., training fees)

9. define qualification criteria for training institutions or organizations to offer the BPMI

training; both public and private institutions should be considered

10. describe a training-of-trainers (TOT) plan, which should include content, duration, location, and frequency of TOT training, and criteria for trainers

**Pharmacy Training Strategy for Bangladesh Pharmacy Model Initiative (BPMI) Drug**

**Dispenser**

***Objective of development of training strategy*:**

To provide support to strengthen the capacity of the Pharmacy Council of Bangladesh to ensure improved access to and appropriate use of quality medicines and pharmaceutical services in Bangladesh by ensuring the sustained availability of well trained competent BPMI dispensers.

***Training strategy for grade C certificate holders*:**

Although there is an existing pharmacy certificate registration course, but according to BPMI accredited drug sellers program for Level 1 and Level 2 pharmacy shops this training requires some reformation.

A) Nationwide feasibility study of drug shops is required to assess the present status in rural and urban areas with involvement of different categories and service providing

B) Selection of drug shops in the piloting areas:

The Level 1 and Level 2 types of drug outlets will be designed in the piloting area. The Level

1 will be supervised by pharmacists with Grade-A registration and Level-2 will be supervised by Grade B pharmacists or Grade C certificate holders. Level 1 drug outlet will be designated as Pharmacy with a logo approved by DGDA distributed by the project implementing body and the Level 2 will be designated a Drug or Medicine Shop/Corner/ but not Pharmacy or Store with a logo of level 2.

The minimum size of Level 1 pharmacy shop will be about 250 sq-ft with air condition facility including dispensing and counseling area and for level 2 it will be about 120 sq ft with temperature below 30°C also including dispensing and counseling area.

The existing drug outlets which are already providing services to the community people with the above mentioned criteria and facilities supervised by grade-A/grade-B pharmacist may be included in the BPMI program as accredited drug sellers. At the same time the OPD pharmacies run by some privately owned tertiary level hospitals in urban areas may also be selected in this program.

C) Training Required and Course curriculum for drug Sellers and qualification

i) **The required trainings for development of private sector drug sellers’ skills and**

**knowledge on pharmacy business in the piloting area**-

1. Training of new applicant for grade C with HSC (Science)

2. Training of grade C certificate holders

3. Training of pharmacy owners

4. Training of grade B pharmacists

5. Training grade A pharmacists

6. Continue Pharmacy Education (CPE) for all pharmacy staffs

***Training duration for C grade*:** The existing textbook (Sahoj Oshood Bigyaan) published by PCB for the C grade training will be the reference material for curriculum development. Additional chapters may be added according to need of the BPMI standards for level 1 and level 2 pharmacies. The training manual will be prepared following the text book with help of subject matter experts and the training expert.

*Qualification*: The minimum qualification of drug dispenser training for entry will be minimum SSC pass in science group with grade C certificate holders. For training of the new applicants for grade C will be of HSC in science.

*Selection of the candidates*:

All grade C certificate holders with minimum SSC in any discipline will be eligible to participate in the BPMI training. The new applicants will be selected on the basis of prequalification examination upon invitation of application in the print or electronic media.

*Duration of grade-C training course*:

C-grade course should be 6 months 2 days a week, 4 hours each day. At least 2- 4 trainers should be involved in the course. OR

For piloting, the training duration of grade C apprentice will be 80 hours. The training will be residential and be completed at one stage. The duration of each class is 1.5 hour.

The following topics have been suggested to add in the training for grade C certificate:

a. Appropriate dispensing

b. Communication skill and basic ICT

c. Public health perspective d. Drug Interaction

e. Business ethics

f. Laws and regulations g. Basic business studies h. Patient counseling

***Training for grade B pharmacist***: The training manual for grade B pharmacists will be prepared who will be interested to work in Level 2 shops. Following this manual a one week long training or more will be conducted. The training program will be 6 hours per day for one week or more.

*Qualification*: The minimum qualification of such category of drug dispenser training for entry will be Diploma in Pharmacy students with grade B registration.

*Selection of the candidates:*

The new applicants will be selected on the basis of prequalification examination or interview process upon advertising and invitation of application in the print or electronic media. The purpose is to ensure the appropriate candidates only for enrollment in the training.

*Duration of grade -B training course*:

The training duration of grade B pharmacist will be 6 hours per day for one week or more. The each class duration will be 1.5 hour.

The following topics are suggested to add in orientation program of grade B pharmacist:

 Generic information about medicine

 Pharmacy rules and regulations

 Standards

 Communication skill and basic ICT

 Maximum therapeutic benefit of medicine

 Drug Interaction

 Ethics

 Public health orientation

 Patient counseling

 Basic business studies

***Training of grade A pharmacist*:** The orientation program for grade A pharmacists those who will be interested to work in Level 1 shops, a one week long orientation has been suggested. The orientation program will be 6 hours per day for one week or more.

*Qualification:* The minimum qualification of this category of drug dispenser training for

entry will be B. Pharm/M. Pharm. students from public and private universities accredited by

PCB with grade A registration.

*Selection of the candidates*:

The new applicants will be selected on the basis of prequalification examination or interview process upon advertising and invitation of application in the print or electronic media. The purpose is to ensure the appropriate candidates only for enrollment in the training.

*Duration of grade -A training course*:

The training duration of grade A pharmacist will be 6 hours per day for one week or more. The each class duration will be 1.5 hour.

The following topics have been suggested to add in orientation course of grade A

pharmacists:

 Generic information about medicine

 Pharmacy rules and regulations

 Standards

 Communication skill and basic ICT

 Maximum therapeutic benefit of medicine

 Drug Interaction

 Ethics

 Public health orientation

 Patient counseling

 Basic business studies

ii) **Sustainability of the Training Program for grade C certificate holder, grade B and grade A pharmacists**

1. Periodic review of existing training and course curriculum

2. Periodic arrangement or organizing of seminar or symposium for sharing of experiences as a part of CPE for refreshing

3. Refreshers training will be conducted if required

iii) **Orientation program for pharmacy owners**:

The BPMI regulations stipulate that any adult person can own a pharmacy shop. But the dispensing practices in BPMI model must be managed by a trained grade C dispenser. Duration of pharmacy shop owners’ orientation course for about 2 days will be designed with

4-6 hours each day. Those who will attend the course will be awarded a certificate of attendance offered by Pharmacy Council of Bangladesh and project implementing body.

Qualification of shop owner: The shop owner will be a tax payer BD national with necessary educational qualification.

The pharmacy shop owners’ training will be highlighted on the following topics:

1. Pharmacy ethics and practices

2. Entrepreneurs / business management

3. Law and Regulation

iv) **Entry Procedures of the training**:

This includes advertising in the print and electronic media and collection of application form from the trainee, selection of applicant/trainee through interview process and enrollment. The purpose is to ensure that appropriate candidates are the only ones can be enrolled for the training.

v) **Trainers and Trainer of the Trainees (TOT), duration and frequency of TOT**

**training and criteria for trainer**s:

a. Trainers will be of pharmacy background

b. TOTs also should be from Pharmacy background

c. A pool of TOTs should be developed with assistance of PCB and DGDA and academicians

The training of the trainers and TOTs will be residential for one week. The duration will be about 4-6 hours every day.

vi) **Institutionalization of Training conduction**:

a. PCB will conduct the training program as they are doing in organizing the grade C

certificate exam throughout the country

b. Any training institution or organization or center accredited by PCB upon their invitation may conduct the training session using the standard manual prepared by the project implementing body for sustainability of the program covering the personnel in the piloting area as well as whole drug dispensers in the country.

vi) **Training Venue:**

 MoU with PCB under MOHFW for using government institution and facilities or other NGOs facilities

 TOTs can he held in PCB auditorium, Dhaka

 The venue of the training institution or organization or center approved by PCB

vi) **Certificate Renewal and Requirements**

• The certificate may be renewed after every five years.

• One of the requirements may be at least 10 continuous pharmacy education (CPE) credit points which may be accounted as 2 CPE credit points for participation in one seminar or symposium. So in five years at least five seminars or symposium must be attended.

• Or may be evaluated through any form of test or orientation vii) **Specific Role of Stakeholders for training**

Role of Pharmacy Council of Bangladesh (PCB):

 PCB and its representatives will play a supervisory role for the trainings activities of

Grade A &B pharmacists and C certificate holders

 PCB will extend cooperation to project implementing body in the preparation of training modules, standards, minimum eligibility of trainees, and TOTs

 Prepare standards for refresher training

 Provide registration, certification to the trainee

 Identify changes in existing training strategy and adopt new strategy

 Institutionalize strategy for pharmacy shop owners training

 Coordinate TOTs for both grade A, B, C certificate holders and shop owners

Role of Directorate General of Drug Administration (DGDA):

 Trainings may be conducted with the support of DGDA simultaneously in a decentralized manner

 In district levels training will be conducted with the support of drug superintendent, doctor under civil surgeon, academician/Grade A pharmacists from Pharmacy department of public universities where DGDA will assist.

 This training will be supervised by DGDA when required

Role of Bangladesh Chemist & Druggist Samity BCDS):

 BCDS will send the owners for training and will arrange training with help of PCB

and DGDA

 Coordinate grade C certificate holders training under BPMI program

 Will assist during piloting of drug shops in the urban and rural areas



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