

## CHITTAGONG MEDICAL COLLEGE RECOMMENDATIONS FOR MBBS CURRICULUM 2002 REVIEW

MBBS 2002 Curriculum Review Committee 2009, Chittagong Medical College \*

### Executive Summary

These recommendations for updating of the MBBS Curriculum 2002 have been based on 18 macro elements of the strategic framework based on the gained experiences over 7 years after operationalization. The review picks up some major strategic framework elements that are: total duration of MBBS course, total number of professional exams, exams attempts per year per professional exam, carryon, starting time of block posting, preparatory period for final professional, starting time for third year, formative assessment, item exam, MCQs (Multiple Choice Question), SAQ (Short Answer Question) and question answer script, OSPE (Objective Structured Practical Examination) and OSCE (Objective Structured Clinical examination) questions and materials, SOE (Structured Oral Examination), PBL-Integrated Teaching-EBM practice (Problem Based Learning, Evidence Based Medicine), Generic Competence, RFST (Residential Field Site Training), IT-Digital Bangladesh (Information Technology) and ELT (English Language Teaching).

The major recommendations are: 5 years duration MBBS course with two clear years for preclinical subject; 4 professional exams with two opportunities of attempts per professional exam per year at 45 days apart with first at the end of 2nd year, second at the end of third year, fourths at the end of 4th year and final at the end of fifth year; voiding carry-on, ELT program and block posting, starting time for third year after passing first professional, card completion/ward ending to be the formative exams and if marks are added mandatory pass should be void, context sensitive item exams for pre, para and clinical subjects; MCQs should be multiple patterns with negative marking; SAQ should be centrally controlled from the university with supply of question-answer script; OSCE and OSPE questions and materials should be centrally controlled with supply of questions and materials from the university; SOE to be centrally prepared and supplied from the university; GMP (Good Medical Practice) guideline of GMC UK (Gneral Medical Council of UK) to be customized and introduced

replacing the aimless ambiguous behavioral science; integrated PBL-Integrated Teaching-EBM practice to adopted through a user friendly template; RFST should be a linked to national health program learning exercise; IT-Digital Bangladesh learning should be customized to the need.

### Background

Any curriculum needs periodic updating through a standardized process to incorporate the relevant information. These informations are off KSA review responses and consistencies with available resources. This is more so for basic medical curriculum here in this case the MBBS program the mission of which is to produce 'Safe Doctors and Scientists for the Nation'. Without strictly full filing the criteria and attributes of curriculum review process MBBS 2002 Curriculum was introduced all on a sudden with paradigm shift regarding main strategic framework with operation implications that were not envisioned. Over the last 7 years in operation the faculty of Chittagong Medical College has identified some major and crucial flaws of the MBBS 2002 Curriculum in both frameworks, strategic and operational, which are deterrent for the mission of MBBS program that has began be reflective through serious deterioration of health care delivery jeopardizing the public health on one hand and attitudinal plus mindsets of teachers and students on the other. Based on gained experience CMC Faculty feels that it is an implied task of them the guarding of national, professional and peoples interest in so doing the review of the MBBS 2002 Curriculum to identify the inconsistencies and drawbacks with recommendations for ameliorating and there by updating that to be forwarded to appropriate agencies responsible for curriculum formulation and implementation.

### Introduction

A quality educational program should have the following attributes that are more prudent and relevant where a professional education not less than producing basic medical graduates who have to take the responsibilities of maintaining and promoting health of the people. These are:

1. It must be consistent with its institution's mission,

have clearly defined outcomes it intends to produce,

2. Use the best combination of learning experiences to help each learner achieve these results,
3. Include an assessment process that shows whether the results are being achieved, and
4. Use the findings of assessment to improve program effectiveness.

On the other hand the historically generic mission of medical education in terms of responsibilities, outcomes and indicators respectively are as follows in the table.

#### Historical Responsibilities/Dimensions of Medical Education

Medical Education		
Responsibilities	Outcome	Indicators
Medical academia	Safe doctors	Satisfied patients
Medical Science	Scientists	Credible international publications & Resource persons

The curriculum review demands addressing of four key questions that are: Being clear about purpose and desired results: Mission statements, goals, and objectives, Monitoring program quality knowing and improving actual results, The education process producing learning, and, Relevant important considerations.

The MBBS Curriculum 2002 in most instances possibly in not a position to align and is reflective appropriately with these afore mentioned key aspects, So it is the prerogative of the faculty members to look in to the matter with insight, vision and mission to review the curriculum and with implied professional empowerment to develop a set of recommendations for the future shaping and reshaping.

#### Process

CMC has been doing detail home works on the MBBS 2002 Curriculum and has developed some resource persons who have been studying the curriculum in detail and monitoring the impacts that are regularly being communicated in the in-house CME/CPD programs to sensitize and orient faculty members over the years. The responses form faculty members of these CME/CPD programs have been documented. The consensus that has been gained so far is that the strategic framework macro elements should be addressed first to be followed by aligning the operational framework adjustments.

#### Embedded Inconsistencies of MBBS 2002 Curriculum

In General the Framework Attributes of MBBS 2002 Curriculum revealing gross inconsistencies are as follows:

1. Specificity: Highly task specific, time bound, personnel and logistic demanding, no flexibility, compelling documentation need
2. Increase: In preclinical subjects course contents increased
3. Too many: formative exams that put students and teachers in great jeopardy
4. Ambiguity: For mandatory formative exams no guideline for those students who fail
5. Reduction: Pre clinical period by 6 months
6. Enhancement: Increasing clinical period by 6 months as block placing
7. Insertion: In the tight reduced preclinical years - English Language Course, Community Medicine and Non focused/targeted behavioral sciences
8. Professional exams: 3 professional exams with disproportionate subjects allocations per exam, Carryovers, 6 months spacing between two exams, MCQs, OSPEs and Others
9. Disproportion: between available time and the course dispensation and assessments
10. Series linking of activities/events: In a very tight manner course dispensation and assessments are temporally linked in series.
11. Blind: to realities

#### Reflections in Medical Education so far

The 7 years of implementation has unmasked the following crucial issues in relation to basic medical education that are:

1. Preclinical teaching learning seriously disturbed and deteriorated
2. Over stretching of the existing grossly inappropriate teachers-students-facility ratio (mainly in pre and paraclinical subjects)
3. Most pre and paraclinical courses cannot be properly covered and lab experiments cannot be done
4. Overlapping of inter and intra departmental schedules (Class of one subject is overshadowed

by the formative exam of another department as period for the later is not allocated in the curriculum)

5. No clinical subjects have any departmental set ups and hence gaps in curriculum demanding documentations eg attendance, formative records eg card/term exam results
6. Students are reluctant to attend teaching learning sessions and remain absent from current course dispensation for clearing the exams that are carried over and at the end pressurize or seeking mercy for clearance from attendance requirement and passing
7. Students as a whole do not attend or take seriously the English Language Training that is dispensed by a hired company at the expense of hard earned public money. More over the relevance to and standard of the training are questionable that is leading to wastage of time and resource.
8. The examiners in most medical colleges are compelled for giving the empirical marks where new exam methods are being in operation without resource and personnel and period support eg without going for OSPE the examiners at preclinical subjects may have to convert the marks based on traditional exams.
9. The ambiguous markings and related competition have been leading to avalanche of honors marks as there is no set criteria and SOP for that.
10. Preclinical period is less in the countries where there are very strong premedical courses at the HSC equivalent level. Without that basis reduction of pre medical period leads to very weak anatomical-physiological-biochemical grooming of basic knowledge and increase in the volume of course makes the situation more critical.
11. Making up: Because of personnel, setup and logistic plus period shrinkages there are ever increasing make ups that are given to students to add in decreasing the standard.
12. The block placing puts the concerned departments in to work overload and supervision paucity leading to non utilization of this period appropriately, a period severed from the preclinical years.

13. Three professional exams with disproportionate subject versus period allocations put the students in to waxing and waning of stress and strain for appearing; too tight preclinical years, relax in early paraclinical/clinical periods, too stressful before second professional and relaxed period prior to final professional exams.

#### **Recommendations**

On this backdrop the Curriculum Review Committee nominated by the Academic Council of Chittagong Medical College identified some inconsistent elements in the MBBS 2002 Curriculum that is labeled as Strategic Framework Macro Elements. Through the process described earlier a set of consensus recommendations are framed for onward transmission to the relevant authorities for appropriate consideration.

#### **Consensus on Strategic Framework Macro Elements**

1. Total Duration of MBBS Course and Distribution: 5 Years (2+2+3)

Course Duration Distribution: Preclinical 2 Years; Paraclinical 2 Years; Clinical 3 years (Paraclinical and clinical shall begin simultaneously)

Reason: There is no strong premedical course in higher secondary period and there is increase in course and subject volume in preclinical period. This is seriously crippling the KSA base of students and compromising the standard.

2. Total Number of professional exams: 4 (First+Second+Third+Final)

There should be 4 professional exams: First, Second, Third and Final Professional. Professional Exams will be serially organized. At the end of 2 years First Professional exam for three preclinical subjects Anatomy, Physiology and Biochemistry; at the end of 3 years Second Professional Exam for Pharmacology and Forensic Medicine; at the end of 4 years Third Professional Exam for Community Medicine, Pathology and Microbiology; and at the end of 5 years Final Professional Exam for Medicine, Surgery and Midwifery. The years to be counted from the entry year.

Reason: The course and task load for second professional exam for 5 subjects become too vast to be managed by students where as they remain too relaxed during third year period.

3. Exams attempts per year per professional: 2 (Regular and Supplementary)

For any professional exam there should be two opportunities for attempt per year and that should not be more than 45 days apart, first attempt will be the regular to be followed the second attempt to be called supplementary.

Reason: If the exams are spaced 45 days apart then with the same momentum of preparation the examinee can get add-on capability for passing by covering up the deficits. In addition to that successful candidates in the second attempt can keep space with the next level course without the need for arranging new schedule for them. Moreover there must be discrimination between regular attempt and subsequent attempt through labeling regular and supplementary otherwise the endeavor for enhancing standard will be compromised.

4. Carryon: To be void

Carry-on should be void.

Reason: Medical curriculum is arranged on the basis of add-on knowledge-skill-attitude. Carry-on is a gross violation of that. Moreover while preparing for the carry-on subject's students totally ignore the current programs and therefore it is not useful rather counterproductive on many counts.

5. Starting Time of block posting: To be void

Block-posting per se is to be void.

Reason: During the period of block-posting the bulk of student creates problem through over loading work therefore running current batch program becomes difficult. Moreover it is not providing the expected outcome. Rather than this the final 3 months of the final year period can be utilized in an integrated manner between 3 clinical subjects with an aim of holistic care learning that very meager now.

6. Preparatory period for final professional: 3 months integrated and holistic

This should be 3 months, one each for Medicine, Surgery and Midwifery prior to final professional exam that can be utilized in an integrated holistic manner.

Reason: During this period students can consolidate their learning and can prepare for final exam.

7. Starting time for third year: After passing First Professional

This should be after passing first professional.

Reason: Without passing the first professional the student cannot claim that he is prepared for acquiring further learning. Moreover for compelling mindset for passing the first professional the students ignores the beginning of learning (ABC) of the clinical subjects that is totally different from preclinical and preclinical sciences, a paradigm shift, which perpetually diminish their clinical and related acumen.

8. Formative Assessment: Card Completion / Ward Ending

Card Completion and Word Ending respectively should be the formative assessment in non-clinical and clinical subjects. If marks are extracted for adding then passing of otherwise should not be made mandatory.

Reason: This will reduce too many formative exams, allows students to consolidate learning and relieves department from the stress of over work and ambiguity in this behalf.

9. Item Exam: Should be context sensitive of Pre Para and Clinical Subjects

For three categories of disciplines ie pre, para and clinical the item exam should be evolved as per context.

Reason: This will provide flexibility to accommodate the unforeseen events with compromising or violating the curriculum directives.

10. MCQs: Should be of multiple patterns with negative markings

It should be of multiple patterns with negative markings

Reason: At present without multiple pattern and negative marking a pattern has been developed and students are able to catch the pattern and it becomes very easy for them to get more than qualifying marks without gathering the insight knowledge for which MCQs system is evolved.

11. SAQ and Question-Answer Script: Centrally prepared with centrally supplied answer script

This should be done centrally and supplied from the university centrally

Reason: At present SAQs are prepared by examination center wise thereby without any harmony, and central standard control plagued with

individual bias. To maintain uniform standard through uniform template there by removing individual bias like that of the Written Question SAQ should be prepared centrally along with answer script.

12. OSPE & OSCE Questions and Materials: Centrally prepared with centrally supplied materials

This should be done centrally and supplied from the university.

Reason: At present OSPE/OSCE questions are prepared by examination center wise thereby without any harmony, and central standard control plagued with individual bias. To maintain uniform standard through uniform template there by removing individual bias like that of the Written Question OSPE/OSCE questions and materials should be prepared centrally along with answer script.

13. SOE: Centrally prepared and supplied from university

This should be done centrally and supplied from the University.

Reason: At present SOEs are prepared by examination center wise thereby without any harmony, and central standard control plagued with individual bias. To maintain uniform standard through uniform template there by removing individual bias like that of the Written Question SOEs should be prepared centrally for supplying to the exam centers.

14. PBL, Integrated Teaching, EBM Practice: To be integrated through a uniform template of practice

This should be integrated through a uniform template of practice for learners at the level of beginners to early intermediate level. This should be done by integrating with clinical schedule of 3 major clinical subjects.

Reason: This will provide a beginning guide for the students without being ambivalent.

15. Generic Competence- 5 Star Doctor: Through Customization of GMP Guideline of GMCUK a GMP Guideline for Bangladesh for medical students and practioners to be taught by Clinical Medicine and Forensic Medicine

A template for Generic Competence is needed and in this regard GMP (Good Medical Practice Guideline) that is developed and in practical by GMC (General Medical Council UK) can be taken as a model and customized to the context of the country.

Community Medicine and Forensic Medicine Departments may be given the main role with clinical subjects for specific practical implications teaching.

Reason: The ambiguous general behavioral lectures are not able to reshape the attitude of students that is to be optimally reflected when they become doctors. The GMP Guideline of GMC UK is a classical tested document which can be customized to our situation without going for futile experimentation.

16. RFST: Integrated learning linked Operation

The present form may be customized with establishing linkages and integration with national public health control programs and may be tasked with vertical small scale operational research to be done during 4 year period.

Reason: In appropriate serious linked and harmonized operation RFST can be highly useful for motivating, attitude changing, community orientation, gaining operational research taste and aligning with the national health programs in a very cost effective manner.

17. IT-Digital Bangladesh

To cope with the global advancement of integration of IT-Digital avenues in the medical arena relevant attributes should have to be incorporated beginning from basic IT-Digital Avenue usages, customization of these with learning, assessment and application of these in day to day medical care, communication and research. Dedicated home works based on situation analysis and the perceived needs should be done to end up with workshops for final recommendations.

Reason: Without this skill the future doctors cannot cope with the present day culture and practice of information gathering and usage plus keeping harmony with others be in the profession or beyond and not to speak of advance learning.

18. ELT: Should be void in favor of making this a admission prerequisite

This should be void as an insertion during MBBS course period in favor of making this a admission prerequisite.

Reason: From experience it neither attractive to students nor useful and during the beginning days of very stressful medical studentship it becomes nothing but an irritating avoidable exercise by the

students and they just simply don't attend. Moreover the standard of the course, relevance to medical curriculum and the efficiency of the conductors are questionable.

**Action Plan**

1. Recommendations to be submitted to Principal, Chittagong Medical College for placing to the academic council as per the mandate and after approval to be forwarded to the appropriate authority and also to be propagated to other medical colleges.
2. Set of recommendations to be developed for each macro elements with operational framework.

**Prologue**

This review and recommendation document was submitted to Principal of Chittagong Medical College on 25 August 2009. After getting full bench Academic Council approval the review and recommendation was forwarded to Director Medical Education and Health Manpower Development of Directorate General of Health Services of Bangladesh on 23 November 2009 by the Principal of Chittagong Medical College for further perusal.

**\* Appendix**

Curriculum Review Committee:- Chairperson - Professor Aminuddin A Khan, Vice Principal; Members - Professor Emran Bin Yunus, Professor Omar Faruque Yusuf, Professor Md Mahtab Uddin Hassan, Professor Mahmudul Haque, Professor Saroj Kumar Mazumder and Dr Shahanara Chowdhury.