

## **Electives in Graduate Medical Education**

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### **Abstract**

Modern curricula have both compulsory portions and electives or portions chosen by students. Electives have been a part of graduate and postgraduate general higher education. Electives are included in various standards for graduate medical education and are also included in proposed Medical Council of India Regulations on Graduate Medical Education-2012. This article also briefly describes how to introduce electives in MBBS curriculum with an example of an elective in Urology.

### **Key Words**

Electives, Graduate Medical Education, Medical Council of India, MBBS Curriculum.

### **What are Electives?**

The word elective means “chosen by the student rather than compulsory” when it is used in relation to a course of study.<sup>1</sup> In traditional curricula all curricular portions are to be studied by all students. Thus traditional curricula have only compulsory portions. Modern curricula have both compulsory portions and electives or portions chosen by students. In general education, electives have been part of graduate and postgraduate education. Central Board of Secondary Education (CBSE) have introduced electives in higher secondary education.<sup>2</sup> In medical education, Harden et al in 1984 described the SPICES model of curriculum planning consisting of six educational strategies.<sup>3</sup> The letter “E” of the acronym SPICES denotes substitution of uniform curriculum by “Elective Driven” curriculum. Compulsory portion of the curriculum is also called core curriculum.<sup>4</sup> Electives are also known by the names of options,<sup>4</sup> special study modules<sup>4</sup> and student selected components.<sup>5</sup>

### **Why are Electives Educationally Essential?**

As students differ in aptitudes and interest, it is considered educationally essential to give them freedom to choose some areas which interest them for study in depth. When students study areas of their own interest they will be intrinsically motivated and this elicitation of intrinsic motivation is also considered desirable.

### **Electives in Assessment Criteria for Accreditation of Health Science Institutions by National Assessment and Accreditation Council**

National Assessment and Accreditation Council assessment of Health Science Institutions for accreditation comprises seven criteria.<sup>6</sup> Criterion I (Curricular Aspects) includes academic flexibility as a key aspect. Academic flexibility means “choice offered in the curriculum in terms of programme, curricular

transactions and time-frame options.”<sup>6</sup> Assessment for academic flexibility includes the presence of elective options in the curriculum.

### **Electives in World Federation for Medical Education (WFME) Global Standards for Quality Improvement in Basic Medical Education**

World Federation for Medical Education (WFME) global standards for quality improvement in basic medical education includes 9 Areas and 36 Sub-Areas.<sup>7</sup> Each Sub-Area has a basic standard and a quality development standard. The basic standard of Sub-Area 2.6. Curriculum Structure, Composition and Duration under Area 2. Educational Programme states that “The medical school must describe the content, extent and sequencing of courses and other curricular elements, including the balance between the core and optional content.”<sup>7</sup> The related annotation states that: “Core and optional content refers to a curriculum model with a combination of compulsory elements and electives or special options. The ratio between the two components can vary.”<sup>7</sup>

### **Electives in Standards of Tomorrow’s Doctors (2009) of General Medical Council, UK, for Undergraduate Medical Education**

Standards for Curriculum Design and Structure of Tomorrow’s Doctors (2009) of General Medical Council, UK, for Undergraduate Medical Education state that a minimum of 10% of curricular time must be allowed for student choice for studying an area of interest.<sup>5</sup> The assessment of student selected components must be integrated with overall assessment of students.

### **Electives in Standards for Accreditation of Medical Education Programs Leading to the MD Degree of Liaison Committee on Medical Education (USA and Canada)**

Standards for Accreditation of Medical Education Programs leading to the MD degree of Liaison Committee on Medical Education (USA and Canada) state that elective opportunities must be included in medical education programs to deepen their understanding of medical specialities and to pursue individual academic interests.<sup>8</sup>

### **Electives in Proposed Medical Council of India (MCI) Regulations on Graduate Medical Education 2012**

Eight weeks are assigned for electives after the completion of MBBS Phase III Part 1 Examinations and before the beginning of MBBS Phase III Part 2 course.<sup>9</sup> The first elective block of 4 weeks will be done in a preclinical or paraclinical laboratory or under a researcher in an ongoing research project.<sup>9</sup> The second elective block of 4 weeks will be done in a speciality or super speciality clinical setting including ICUs, blood bank and casualty or as a supervised learning experience in a rural or urban health centre.<sup>9</sup> The number and nature of electives, supervisors and number of students in each elective will be decided by individual medical colleges depending on available resources. Each student will maintain a learning

logbook for elective blocks. Submission of logbook and 75% attendance in elective blocks are required for eligibility to appear in final MBBS examination.<sup>9</sup>

### **How to Introduce Electives in MBBS Curriculum?**

Once decision is made to have electives in the MBBS curriculum, a series of consensus development meetings of Heads of Departments participating in MBBS curriculum or their representatives are required to decide on the list of electives to be made available for MBBS students. After the list of electives is decided, each elective can be developed into a module comprising learning objectives, teaching-learning methods and assessment methods. All information about electives should be made available to MBBS students to enable them to make an informed choice.

### **An Example of an Elective in Urology**

Name of Elective: Benign Prostatic Hyperplasia

Duration of Elective: Four weeks

#### **Learning Objectives**

1. Define benign prostatic hyperplasia.
2. Describe etiopathogenesis of benign prostatic hyperplasia.
3. Describe clinical features and investigations in benign prostatic hyperplasia.
4. Discuss medical treatment of benign prostatic hyperplasia.
5. Discuss surgical treatment of benign prostatic hyperplasia.

#### **Teaching-Learning Methods**

1. Four weeks' posting in Urology (OPD, Ward, Minor OT and Major OT)
2. Clinical study of at least five patients with benign prostatic hyperplasia
3. Presentation of at least four lectures pertaining to learning objectives in Departmental meetings
4. Presentation of at least four cases of benign prostatic hyperplasia in Departmental meetings
5. Maintenance of logbook

#### **Assessment**

1. Assessment of lecture presentations
2. Assessment of case presentations
3. Assessment of logbook
4. Theory/clinical assessment

#### **References**

1. Concise Oxford English Dictionary. Soanes C, Stevenson A, eds, Eleventh Edition, Oxford: Oxford University Press, 2004.
2. Central Board of Secondary Education (CBSE) (Accessed April 25, 2013, at [cbse.nic.in/currisyllabus/senior\\_curriculum\\_vol1\\_2012\\_FINAL.pdf](http://cbse.nic.in/currisyllabus/senior_curriculum_vol1_2012_FINAL.pdf))
3. Harden RM, Sowden S, Dunn WR. Some educational strategies in curriculum development: the SPICES model. ASME Medical Education

Booklet No. 18, Medical Education 1984; 18: 284-297

4. Harden RM, Davis MH. AMEE Medical Education Guide No.5. The core curriculum with options or special study modules. Medical Teacher 1995; 17(2): 125-148.
  5. Tomorrow's Doctors. General Medical Council, UK, 2009 (Accessed April 17, 2013, at [http://www.gmc-uk.org/static/documents/content/Tomorrow's\\_Doctors\\_2009\(1\).pdf](http://www.gmc-uk.org/static/documents/content/Tomorrow's_Doctors_2009(1).pdf))
  6. Institutional Accreditation: Manual for Self Study for Health Science Institutions. National Assessment and Accreditation Council, Bangalore, 2008.
  7. WFME Global Standards for Quality Improvement in Basic Medical Education. World Federation for Medical Education, University of Copenhagen, Denmark, 2003.
  8. Standards for Accreditation of Medical Education Programs Leading to the MD Degree. Liaison Committee on Medical Education (USA and Canada) (Accessed April 17, 2013, at <http://www.lcme.org/functions.pdf>)
  9. Medical Council of India Proposed Regulations on Graduate Medical Education, 2012, Medical Council of India, New Delhi.
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