

Editorial

Spices Model

There are six curriculum issues which teachers or medical institution have to consider. Each issue is presented as a spectrum between two extremes. On the left are the more innovative approaches (SPICES Model) and on the right are the more traditional strategies.

The SPICES model of educational strategies remains a key tool for reforming and organising the undergraduate medical curriculum. The key elements promoted in the SPICES model are student-centred learning, problem-based learning, integrated teaching, community based education, elective studies and a systematic or planned approach. Together these provide an alternative approach to a traditional curriculum with its teacher-centred, information gathering, discipline-based, hospital-based, standardised programme and its opportunistic, apprenticeship-based learning. Medical schools with a reformed curriculum have incorporated aspects of the SPICES approach to various extents.

The issues of SPICES Model are described below:

Student-centered learning and teacher-centered learning:

In teacher centered approach, the teacher is the center or key figure. The emphasis is on the teachers and on what they teach. Individual students have little control over what they learn, the order in which they learn things and the methods they have to use. The learning itself tends to be more passive than active. In student-centered approach students under the guidance of teacher take more responsibilities for their own learning. The emphasis is on the students; this strategy increase motivation and encourage self-directed learning.

Problem based learning and information gathering:

In traditional teaching-learning system a large body of information on basic science and clinical knowledge has been imparted to the students. This type of undergraduate programme does not able to prepare the students adequately for effective delivery of health care. In a problem-based learning approach, students get the opportunity to nurture ideas

S	Student-centred	←————→	Teacher-centred
P	Problem-based	←————→	Information gathering
I	Integrated	←————→	Discipline-based
C	Community-based	←————→	Hospital-based
E	Electives	←————→	Standard programme
S	Systematic	←————→	Apprenticeship-based/ Opportunistic

regarding patient problems thereby problem-solving skills are developed that will prepare them to deal efficiently in their future work field. Orientation of clinical problems in early years of learning process encourage them to learn relevant basic subjects.

Integrated teaching and discipline-based teaching:

In traditional discipline-based teaching each subject is taught in its own block of time with an emphasis on the basic science in early years and clinical experiences in the later year. This teaching-learning approach does not allow students to develop the skills to investigate, analyze and prepare them to perceive the patient as a whole. Integration is the organization of teaching matter to interrelate or unify subjects frequently taught in separate academic courses or departments. Integrated teaching aims to provide knowledge to the students in a complete organized and wholesome manner. This will enable them to correlate knowledge gathered from different subjects in patient management practice.

Community based and hospital-based educations:

In traditional hospital-based approach to medical education, the teaching is centered on the main teaching hospital. Students attend the patients admitted to hospital wards. In this system students experience a narrow view of medical needs and health care problems. In community-based education, medical students receive their training in a community setting. The community provides useful learning experiences. During their training in community, students learn about social and economic aspects of illness also. They will be able to learn about the frequency and types of health-related problems outside hospital settings. The intended result is that the doctors produced will be better equipped to meet the needs of the community which they will serve.

Elective and standard programme:

In standard medical education programme, all students pass through a set of prescribed courses. In this system there is little opportunity to study a

subject in more details. Elective programme in a curriculum gives students the opportunity to select subjects of their own choice. Incorporation of elective programme are a way of coping up with an overcrowded curriculum. Elective can meet learners' individual aspiration. It can facilitate career choice by students.

Systemic and apprenticeship (opportunistic) programme:

In apprenticeship programme trainees are attached to one clinical unit or hospital wards for a period. They see all the patients passing through the wards and learn or are taught about the conditions as they present. In planned systemic approach, a set programme is designed for all students so that the experiences necessary to deal the patients are covered. The students will be given a list of skills which they have to master and a list of patients with conditions they are expected to have seen and examined. They may keep a log book to record their clinical experiences.

This SPICES model of curriculum strategy can be used in curriculum planning or review and in providing guidance related to teaching methods and assessment.

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