

Implementation of The Integrated Curriculum of Faculty of Dentistry, Universitas Indonesia

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Abstract

Since the last five years, Faculty of Dentistry Universitas Indonesia has implemented an integrated curriculum as a process of change from teacher centered to student centered learning, as well as problem based learning, community based and practicing in a small group discussion. The dental curriculum is divided separately into seven semesters for academic and followed by three semesters for clinical years. The aim of this qualitative study is to evaluate the implementation of the integrated curriculum. Evaluation of this five year program showed less than 10% of the 5th year students were able to finish their study on time. Most of the students needed more than three semesters to complete the clinical requirements; therefore, the recent curriculum should be revised.

Keywords: dental education, integrated curriculum, Universitas Indonesia

Introduction

The National Curriculum of Faculty of Dentistry in Indonesia consists of an academic program which must be completed minimally in 5 years or 10 semesters. In 2001, the Universitas Indonesia (UI) introduced a new paradigm for higher education incorporating a problem based learning (PBL) strategy. Since 2003, the Faculty of Dentistry of Universitas Indonesia has undertaken

an effort to implement the new curriculum by implementing a Problem Based strategy, a Community Based, together with practicing Small Group discussions. These efforts are some of the components of SPICES. The 6 components of SPICES are Student centered learning, Problem based learning in an Integrated curriculum, Community-based, systematic, Early clinical exposure, and allow the students to work in Small

groups. Through SPICES it is hoped that the Competency-based curriculum from the Indonesian Medical Council will be achieved¹. At this time, the **E** component of SPICES is not included in the curriculum because Universitas Indonesia Faculty of Dentistry is in a transitional period where the academic/preclinical program is still separated from the Clinical Program. This Early Clinical Exposure has not been fully launched and explained to all the faculty members. Therefore there is still a dichotomy between faculty members wanting to have academic courses followed by the clinical courses, which they have carried out for years, and those wanting to accommodate a more integrated curriculum. The present curriculum is divided into 7 semesters of academic courses and clinical skills laboratory with 144 credits and 3 semesters of clinical practice with 26 credits².

The Dental Curriculum

This ten semester dental curriculum is divided into 2 stages: the first stage is 7 semesters (semesters 1 to 7) of academic courses and clinical skills laboratory, and the second stage is 3 semesters (semesters 8 to 10) of clinical practice. Each semester in the academic courses consists of two

blocks with 3-5 modules in each block. (Table 1) These modules are systematically organized to provide an integration and interrelation between subjects matter in each block. The following are details of the curriculum.

Academic courses and clinical skill laboratory

Year 1:

The first module is a horizontally integrated module called the University Basic Higher Education Program which is centralized and run by the university. In this semester, the student is also introduced to modules of health sciences, ethics and law, which are given in block 2. In the second semester, the student learns about basic medical and dental sciences to prepare them for the clinical dental sciences in later years.

Year 2 and year 3:

Dental clinical sciences program run for two years or 4 semesters and is divided into 8 blocks. The student learn basic biomedical and dental sciences in integrated modules, to learn further about various diagnosis, etiology, and treatment management so that they can understand how to prevent and treat diseases or other cases related to dental and oral health problems or systemic diseases of the head and neck.

Table 1: Integrated Curriculum of The Faculty Of Dentistry, Universitas Indonesia

INTEGRATED CURRICULUM OF THE FACULTY OF DENTISTRY, UNIVERSITAS INDONESIA				
Y R	ODD SEMESTER		EVEN SEMESTER	
1	BLOCK 1	BLOCK 2	BLOCK 3	BLOCK 4
	Basic Program of Higher Education <i>University program</i>	Introduction of Health Sciences, Ethics & Law <i>Community Dental Health and Preventive sciences, Ethics and Law sciences</i>	Basic Medical Sciences <i>Oral Biology, Basic medical sciences, medical Radiology</i>	Basic Dental Sciences <i>Oral Biology, Basic Medical Sciences, Dental Materials, Dental Radiology</i>
2	BLOCK 5	BLOCK 6	BLOCK 7	BLOCK 8
	Clinical Dental Sciences 1 <i>Clinical Dental sciences, Basic Medical sciences, Basic Dental sciences, and Community Dental Health sciences</i>	Clinical Dental Sciences 2 <i>Clinical Dental sciences, Oral Biology, Dental Material sciences, Clinical Medical sciences</i>	Clinical Dental Sciences 3 <i>Clinical Dental sciences, Clinical Medical sciences (Internal medicine, Dermatology, Neurology)</i>	Clinical Dental Sciences 4 <i>Clinical dental sciences, Community dental health and Preventive sciences</i>
3	BLOCK 9	BLOCK 10	BLOCK 11	BLOCK 12
	Clinical Dental Sciences 5 <i>Clinical Dental sciences, Oral Biology, Dental Material sciences</i>	Clinical Dental Sciences 6 <i>Clinical Dental sciences, Oral Biology, Dental Material sciences</i>	Clinical Dental Sciences 7 <i>Clinical Medical and Dental sciences, Oral Biology</i>	Clinical Dental Sciences 8 <i>Clinical Medical and Dental sciences, Oral Biology</i>
4	BLOCK 13	BLOCK 14	SEMESTER 8	
	Community Dental Health program 2 <i>Community Dental Health and Preventive sciences, Clinical Dental sciences</i>	Scientific Report and Elective program <i>All faculty member</i>	CLINICAL CASE SEMINARS <i>INTEGRATED CLINICAL PRACTICE</i>	
5	SEMESTER 9		SEMESTER 10	
	CLINICAL CASE SEMINARS		CLINICAL CASE SEMINARS	
	INTEGRATED CLINICAL PRACTICE		INTEGRATED CLINICAL PRACTICE	

Year 4:

The Community Dental Health and Statistics module is intended to identify and plan a community preventive dental health program in the 8th semester. This course is based on epidemiological data. Research activities will be carried out by the students, either individually or in groups, to be presented as a final report and as a requirement to continue to the subsequent stage, which is clinical practice.

Clinical practice

Year 4 and 5

In semester 8-10, the students will be involved in an integrated clinical practice where they work in a team under the supervision of clinical tutors. Here they will apply various simulated laboratory skills which they have acquired throughout the previous academic semesters. They will also have the opportunity to solve problems comprehensively related to etiology, diagnosis, and treatment plan. They must take part in clinical seminars where they can either prepare a comprehensive clinical based case report or a community health services based report in a team. In this way, they will be encouraged to treat patients either in dental hospital, comprehensively

and with good clinical practice procedure or in community health services.

Discussion

An evaluation of this 5 years program showed less than 10% of the 5th year students could finish their study on time³. This number is similar to the previous conventional curriculum used before the integrated curriculum. Several reasons may be questioned why only a small number of students graduate on time. First, there may be a shortage of available patients with various types of cases in the dental hospital during the allotted 3 semesters of study. Second, there might be an insufficient Integrated Clinical arrangement of dental equipments to share. Third, the clinical assessment methods are mostly based on departmental requirements. The students work in a departmental approach since the concept of an integrated clinic is vague.

In 2006, the Indonesian Medical Council approved a standard competency for health personnel¹. This indicates that there must be adjustments in the curriculum for medical and dental faculties, in order to comply with the

Indonesian government regulation for Good Practice for doctors. This requires a competence

based new curriculum to take into account the standard of competence and better clinical competence practices for dental and medical residents.

Since most of the students need more than 3 semesters to complete the clinical requirements, the concept of Competence Base Curriculum may be developed by adopting the Early Clinical Exposure component of SPICES. This will simultaneously integrate both the first and second stages of the dental curriculum.

Conclusion

This qualitative study showed that the Faculty of Dentistry of Universitas Indonesia has gradually implemented a new paradigm of education. This

study concludes that an integrated curriculum need to be developed into a competence based curriculum with early clinical exposure and good clinical practice arrangement. Therefore, the curriculum should be routinely evaluated in every semester.

References

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