

## A Needs-Based Curriculum Review for Diploma in Pharmacy Programme at a Malaysian University

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Programmed, systematic and structured curriculum review is essential to ensure quality professional education. Curriculum evaluation enables the institution to validate the compliance of didactic and experiential strategies with the current needs and future demand of the profession. The four conceptions of curriculum as highlighted by Ewell namely designed curriculum, expectational curriculum, delivered curriculum and the experienced curriculum must be evaluated for an effective curriculum review [1]. Involvement of stakeholders in curriculum review is essential.

In Malaysia, Universiti Teknologi MARA (UiTM) is the only public sector university together with 19 private colleges offering a three year (six-semester) Diploma in Pharmacy accredited by Malaysian Qualifications Agency (MQA)[2]. The program was first started in 1996. The construct of first two years is didactic and laboratory practical based. However, in the final year (3<sup>rd</sup> year) students are exposed to the experiential hospital based training and research projects. Faculty of Pharmacy, UiTM reviews the curriculum every three years. In an attempt to develop a "Needs Based" curriculum a cross sectional survey was undertaken to assess knowledge and skills required to become a competent Pharmacy assistant.

Structured validated questionnaires were mailed to randomly chosen 8 hospitals across Malaysia along with a detailed cover letter explaining the purpose of the study. The sample consisted of pharmacists and pharmacy assistants who were willing to participate in the study.

### Key words:

*Curriculum, Diploma in Pharmacy, Universiti Teknologi MARA (UiTM)*

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The questionnaire consisted of 2 sections. Section one consisted of socio-demographic characteristics and section 2 included lists of potential subjects deemed necessary for Diploma in Pharmacy curriculum. A 5-point Likert scale ranging from "not required at all" to "really required" was used to elicit the responses. The face and content validity was done by two faculty members of UiTM. Of 250 sent questionnaires, 116 were returned (Response rate = 46.4 %). Sixty four (55%) pharmacists and 52 (45%) pharmacy assistants participated in the study. The results revealed that compounding of Drugs (100%) followed by Pharmaceutical Calculations (98%), Sterile Compounding, Aseptic Technique and IV Admixture (98%) and Medication Error Deterrence (96%) were the most frequently cited topics required to be the part of an effective curriculum. In addition, Dispensing (92%), Good Manufacturing Practice and Quality Control (95.7%), and Interpreting Medication Order and Prescriptions (94%) were also thought to be a required component of the curriculum. On the other hand, knowledge on topics like Patient Monitoring (46%), Research in Pharmacy Practice (60%) and Complementary and Traditional Medicine (62%) were assumed not required by a pharmacy assistant. Effective communication (99.5%) Computer and Information Technology (93.9%), and supply chain management skills (89.6%) were among the most frequently cited skills required to become a competent pharmacy assistant. Faculty of Pharmacy UiTM propose amendments in the curriculum keeping in view the findings of the study. This was the first step towards need based education. Further research is needed to gather evidence on the teaching and assessment methods optimal to achieve the learning outcomes.

### References:

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2. Diploma in Pharmacy. Malaysian Qualifications Agency. Available at: <http://www.mqa.gov.my/eskp/KResult.cfm> [Accessed January 8, 2010].

### Conflict of Interests:

Authors have no Conflict of Interest

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