

Editorial-educational

Student Selected Components in Undergraduate Medical Curriculum

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Student selected components (SSCs) - formerly known as special study modules or SSMs are optional elements within the undergraduate curriculum catering for student choice.

The concept of a core curriculum with options or SSCs is arguably one of the most significant developments in medical educational thinking in recent years. It features prominently in the recommendations by the General Medical Council (1993, 2002) to UK medical schools; it required 25% and 33% of curricular time to be available for SSCs¹. The aim of this editorial is to draw attention to the importance of its integration in undergraduate medical curricula.

Student selected components serve to solve the problem of curriculum overload. They provide diversity and flexibility of curriculum and ensure that students acquire the knowledge, skills and attitudes required for the maintenance of standards. They also allow students to be responsible for their own learning by choosing subjects they wish to study in greater depth and proceed at a pace which suits their individual development. This would facilitate the achievement of higher-level objectives, such as critical thinking and reasoning.

SSCs make provision for the inclusion of certain specialized topics like clinical genetics, molecular diagnostics or radiology that a student will be unlikely to be exposed to otherwise. SSCs also allow for the introduction of new topics such as palliative care, drug abuse, health promotion and facilitating multidisciplinary and multi-professional directions without neglecting traditional course content. They allow for significant extension of the range of subjects catering for different interests and career aspirations, leading to achievement of new skills including the potential to develop areas of interest as well as life-long learning skills. Medical students will have the opportunity to gain certain needed skills such as critical analytical thinking and medical research writing. They will have the opportunity to experience rare interests that they may have, to explore future career possibilities, to enhance certain personal developmental skills that otherwise may be overlooked during the busy regular core curriculum²⁻⁶.

Besides that, SSCs pave the way for early clinical exposure in community and hospital settings as well as enriching their professional development by being involved in areas outside the mainstream of medical education²⁻⁴.

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Through the wide selections of SSCs, a student may take the opportunity to strengthen certain aspects of his or her skills depending on what line of future specialty he or she is likely to pursue. For example, an SSC that leads to a research paper, or an audit, is likely to enhance and support their applications for future competitive posts whether academic or service related.

Simon Watmough described different specific types of SSC that can be offered. These include⁶:

- Structured review SSCs that emphasize literature review and medical writing skills. This also includes an opportunity to enhance presentation skills.
- Survey-based SSCs that familiarizes students with the process of undertaking primary research by developing a research proposal, data analysis and the writing up of the results.
- Interpretative-based SSCs that allow students to interpret quantitative or qualitative data.
- Laboratory-based SSCs that give the opportunity to students to carry out their own laboratory tests and procedures implementing standard laboratory methodology
- Case-based SSCs that allows interpreting patient-related information in the context of the current literature.

Moreover, as schools move towards a common core, the range of SSCs offered in any medical school may reflect that school's direction or emphasis. A menu of interesting SSCs may attract potential students and influence their choice of medical school. SSCs can also utilize a range of teaching resources and encourage the involvement of staff who may not otherwise have a role in the curriculum. They can be attractive, both to staff and students.

However, SSCs have certain inevitable drawbacks. They strain resources. They may not be comparable across the curriculum. They may lead to student anxiety because of the diversity of workloads and assessment, as well as the allocation process, and criteria involved; as it may not be as explicitly spelled out to the students as the core curriculum. This also suffers from the risk of lack of systematic approach to assessment, lack of formal teaching sessions as well as lack of equitable marking. Time is limited to apply all the potential diverse possibilities of SSCs especially that it may not always be clear of what is expected.

For overseas-based SSCs, students may be expected to make their own travel arrangements, which have to be commenced at least a year in advance, requiring immunizations, medical check-ups and medical insurance and expecting risks of exposure to danger in countries where there are civil/military unrests^{4,5}.

Nevertheless, the need to liberate the medical curriculum from its present factual overload is pressing and well-recognized, as is the need to provide both breadth and depth of study.

Freedom of choice while maintaining standards and mastery of the essential competencies required for medical practice are a real step forward in thinking about medical education. Any disadvantages of introducing a core curriculum with options or SSCs are greatly outweighed by the advantages.

The core and options concept is one of the most significant current advances in medical education.

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