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Electives in the medical degree programme

PERSPECTIVES

JAN C. FRICH

E-mail: jan.frich@medisin.uio.no
Professor Jan C. Frich (born 1970) is project manager for the review of the medical degree programme at the Faculty of Medicine, University of Oslo. He chairs the elective courses committee.
The author has completed the ICMJE form and declares no conflicts of interest.

JARLE BREIVIK

Professor Jarle Breivik (born 1969) is a teaching coordinator at the Institute of Basic Medical Sciences, the Faculty of Medicine, University of Oslo.
The author has completed the ICMJE form and declares no conflicts of interest.

KNUT E.A. LUNDIN

Professor Knut E.A. Lundin (born 1958) is a teaching coordinator at the Institute of Clinical Medicine, the Faculty of Medicine, University of Oslo.
The author has completed the ICMJE form and declares no conflicts of interest.

ELIN O. ROSVOLD

Professor Elin O. Rosvold (born 1962) is a teaching coordinator at the Institute of Health and Society, the Faculty of Medicine, University of Oslo.
The author has completed the ICMJE form and declares no conflicts of interest.

INGRID OS

Ingrid Os (born 1950) is vice-dean of medical studies and heads the executive committee for the review of the medical degree programme at the Faculty of Medicine, University of Oslo.
The author has completed the ICMJE form and declares no conflicts of interest.

As a part of a major review of the medical degree programme in Oslo, elective courses were introduced for the first time in the spring term of 2017. We believe this will give opportunities for in-depth study and provide useful experience with a view to future career choices.

It is common practice in other countries for electives to form part of their medical degree programmes (1–3). For example, in 1993, Great Britain saw the nationwide introduction of electives as a mandatory component in all medical degree programmes (4). Many medical schools split their curriculum into a core curriculum and options, elective courses or elective periods (5).

Students can attend elective courses abroad or at their own place of study. For example, the Karolinska Institute's 5 ½-year medical degree programme incorporates a 25-week elective period (6). Elective periods can provide the scope required to teach groups of particularly interested students and may allow students to focus on their chosen field of study.

The new medical degree programme in Oslo incorporates an elective period at the half-way point, and another towards the end of the programme (7, 8) (figure 1). In the third year of study, a three-week period has been set aside for students to attend methodology and thematic courses of their own choosing (9). The second and final elective period is scheduled for the final year of study and will involve a four-week medical practice placement. The plan is for the elective practice placement to be in a clinical ward, a general practitioner's surgery or a nursing home, a laboratory, a research group or any other relevant institution. It is also possible for the practice placement to be set at a foreign institution.

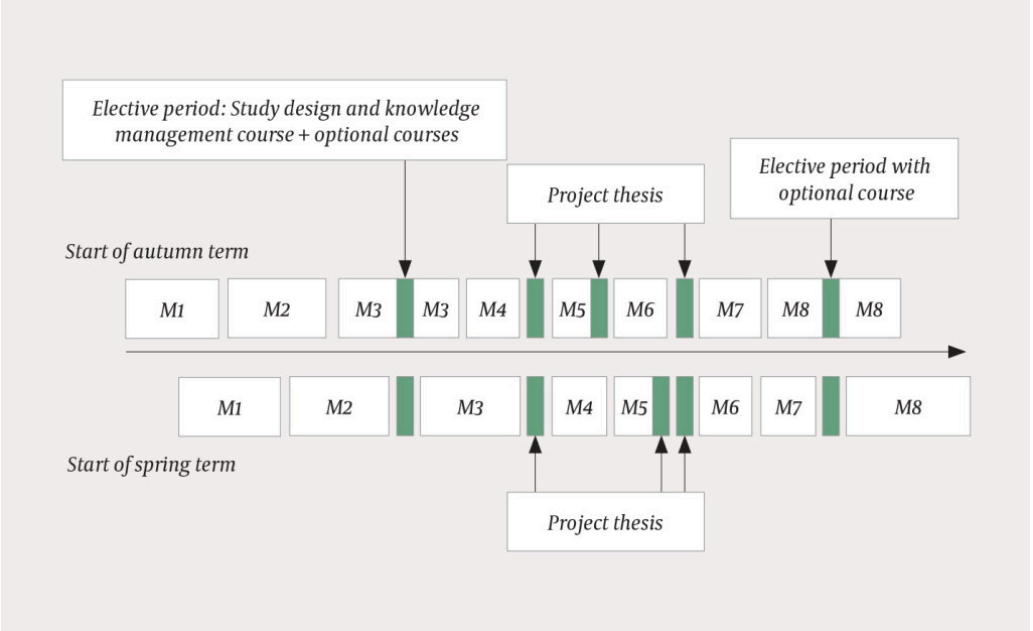

Figure 1 The elective periods are scheduled for the 3rd and 6th year of study. Over the course of the degree programme, 12 weeks are dedicated in their entirety to work on a medical project dissertation.

The duration of the elective period is a total of seven weeks and is worth 10 credit points. In addition, a 12-week period is set aside for independent study and a scientific project thesis worth 20 credit points. The purpose of the elective methodology courses is to give students more knowledge of methods that may be useful in their project thesis work (figure 1). The thematic courses are intended to give an opportunity for in-depth study beyond the core curriculum.

Below we would like to share the experiences we gained in the winter of 2017 when we introduced the first elective period of optional methodology and thematic courses.

Optional methodology and thematic courses

The first elective period was conducted in 2017 and was run for two cohorts in parallel, involving a total of 177 second and third-year students (figure 1). The period incorporated a one-week methodology course and a two-week thematic course. There were six methodology courses and 12 thematic courses to choose from (box 1). Two of the elective thematic courses required students to attend other study programmes run by the faculty.

Box 1 List of optional methodology and thematic courses introduced in 2017 as electives in the medical degree programme in Oslo.[1]

Methodology courses

Practical epidemiology

Qualitative methods in health research

Epigenetic analysis of stem cells and cancer cells

Logistic regression and lifetime analysis

Literature reviews and systematic overviews

Clinical and experimental research methods

Thematic courses

Medical ethics

Migration health

Global health

Neurodegenerative diseases – biochemistry and cell biology

Immunity – evolutionary and patient-focused perspectives

Medical, surgical and psychiatric research

Health communication and disease understanding

Pre-hospital acute medicine

Sports and physical activity medicine

Cancer research

Leadership in healthcare[1]

Power and knowledge in the health service[1]

The portfolio of courses was established by giving each of the three institutes at the Faculty of Medicine responsibility for devising a certain number of methodology and thematic courses. A dedicated elective courses committee was set up to coordinate the work. Members included the deputy programme director for the medical study programme, the teaching coordinators for each of the institutes and two student representatives. Based on contributions from each of the institutes, the committee proposed a portfolio of courses which in turn was approved by the faculty's programme council. Part of the institutes' operating budget was earmarked to cover the extraordinary costs of running the courses.

Options and the distribution of students

It was an overall objective for students to have a genuine choice (box 1). Consequently, the total number of places available on each of the courses exceeded the number of students. Some medical research students were granted approval of external courses on their syllabus and therefore did not take part in the draw.

Each of the students listed three methodology courses and six thematic courses in order of personal preference. They were allocated a random draw number and were assigned to the various courses based on this number. Of the 177 students who submitted their methodology preferences, 156 (88 %) were assigned to their first choice, while 18 students (10 %) were assigned to their second choice.

A total of 176 students submitted their thematic course preferences. Of these, 100 (56 %) were assigned to their first choice and 65 (37 %) to their second choice, while eight students (5 %) were assigned to their third choice. The students' wishes were evenly distributed, and all courses had sufficient applicants to go ahead as planned.

Implementation and evaluation

On average, 30 students attended each of the methodology courses, while 15 students attended each of the thematic courses. Teachers considered it a positive experience to be given an opportunity for closer contact with a smaller group of students. Many of the courses included student-activating teaching methods, such as group work, excursions, simulation exercises and laboratory work.

For example, students who attended the migration health course visited a reception centre for recently arrived asylum seekers and later worked together in groups to give a presentation that focused on a topical problem. The course entitled 'Immunity – evolutionary and patient-focused perspectives' challenged students to write a blog post about an immunological condition. This was later posted on the course blog site (10).

Students attending each of the methodology courses were sent a digital evaluation form, and 67 (38 %) of the 177 participants responded. The average overall course evaluation score was 4.2 on a scale from 1 (lowest) to 5 (highest). As for the thematic courses, 76 (43 %) of 176 students responded to the evaluation, and the average overall score was 4.5 on the same scale (from 1 to 5).

Comments

Our experiences with implementing an elective period as a part of the medical degree programme in Oslo have so far been good. Students were generally satisfied with their learning outcomes. In future, it will be important to improve the evaluation response rate in order to get a more valid indication of how students rate their experience of, and benefits from, elective courses.

Considerable academic and administrative efforts have gone into devising the portfolio of courses and organising the external framework for the elective period. There were clear learning objectives for all elective courses and the expected learning outcomes were clearly described, as for other courses. Students and teachers alike voiced a great need for information about the scheme, and dedicated information meetings were organised, a dedicated web page was set up and detailed descriptions of the various courses were provided. Those responsible for the academic content of electives held meetings before and after the courses, during which ideas, plans and experiences were shared.

Elective courses have proved to develop competencies and inspire students, whilst also increasing their influence and co-determination (11). Electives enable students to study parts of their discipline in depth and they provide an opportunity for attending courses with other groups of students and under other study programmes. The courses may form a basis for work on project theses or master's theses at a later stage in the degree programme, and they may even arouse an interest in applying for the medical research programme or getting involved with research (12). Over time, the plan is to modify the portfolio of elective courses available at the medical degree programme in Oslo, in order to facilitate contributions from the faculty's other disciplines.

One of the other Norwegian universities is also working to introduce electives in their medical degree programme (13). By coordinating the scheduling of elective periods in the curriculum, students may be able to opt to attend an elective course at a different university. This may promote greater mutual collaboration between medical schools in Norway. Electives may increase the level of interaction across the medical schools and provide practice placements both in Norway and abroad. All things considered, they may provide a better and more varied educational offer for Norwegian medical students.

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