

If the future requirements for medical services outside of hospitals are to be met, the strategy must be established now, and it will need to cost money.

## We must educate the doctors that society needs

Why do so many clever and dedicated young people wish to study medicine? When I have asked students this question over the years, I have received two answers: interest in natural sciences and/or the desire to work with people. As doctors, they can realise both of these. The website of the Norwegian University of Science and Technology tells us that «Medicine is the study of the human organism, from the smallest cells to major organs. You will learn how the body functions optimally, and what happens when disease occurs. In order to be a doctor, you must understand the machinery of the body right down to the smallest cell» (1). Most students will, however, discover that being a good doctor requires considerably more than reductionist knowledge about «scraps of debris in the machinery of the body.»

The Coordination Reform, the white paper *The primary health and care services of tomorrow* and the new Public Health Act switch the focus from the specialist health services to primary health care. Emphasis is placed on good patient pathways, coordination, greater user involvement, prevention and public health work. This development must be taken on board in medical training. We must educate the doctors that society needs by ensuring that a sufficient proportion of them wish to work in general practice and nursing home medicine. Our four medical faculties are working to meet this challenge, and the University of Tromsø has made the most progress – 12 of its students will spend the fifth and sixth year of their study programme affiliated to health centres and hospitals in Finnmark county, in accordance with the «rural clinical schools» model in other countries (2).

Several factors have been shown to influence students' thinking with regard to future specialisation (3). The two most important are the status of the specialties and perceptions of working conditions, finances and the possibility of a life outside of work. In the university hospitals, where students spend most of their time, the primary health service has not traditionally had a natural place, nor has it enjoyed great prestige. England is currently experiencing significant recruitment problems in general practice, and the Department of Health recommends that as many as half of all medical students should be prepared for this choice of career (4). Students' views on GPs have constituted one of the barriers to this: «They are seen as being overworked, unhappy people in drab buildings who have no professional pride in their specialty» (5).

How can we show students that work outside of hospitals is both exciting and rewarding? Firstly, they must experience this for themselves as early as possible. Many faculties now provide for «early patient contact» with GPs a couple of weeks into the first semester, with repeated visits during the first three years of their studies. «The body as machine» mindset thereby receives an early shot across the bow! Secondly, general practice must be made a clinical main subject in the degree programme, with a defined syllabus, separate textbooks and examinations. Irrespective of which disease is listed in the timetable – be it sciatica, depression or myocardial infarction – the focus must be patient-centred: The patient presents a symptom, almost always in a situation outside of hospital. In some cases, the patient pathway will entail a hospital admission – usually followed by discharge. This method of teaching requires GPs and relevant hospital specialists to work together – which is challenging for the teachers and undoubtedly beneficial for the students (6).

GPs practise their profession in a situation where patients present undifferentiated symptoms and generally several completely different

problems simultaneously. We see trivial complaints, but must also deal with complex, chronic conditions and multimorbidity that require multidisciplinarity and coordination of care. The low probability of all serious diseases – that nevertheless must not be overlooked – means that we must live with uncertainty. In this type of context, throughout the day we must make rational medical decisions while also taking account of the patient's preferences and a sustainable use of resources. This is said to be the most intellectually demanding situation that we as doctors can encounter (7). The students must have placements outside of hospitals that are long enough for them to experience this way of working: At least 6–8 weeks with a GP, in addition to placement at the accident and emergency outpatient clinic and also in nursing homes. Placement with a GP entails the study programme's longest ever master-apprentice scenario in which one student learns from one doctor. These «masters» will constitute important role models and in most cases counteract negative perceptions of GPs.

A recently published systematic review shows that students experience a high level of satisfaction with both the process and the learning outcome from placements outside of hospitals – but that nevertheless, this does not appear to influence their subsequent choice of career (8). No negative effects on patients were shown, while the GPs involved experienced increased professional satisfaction, but also an increased workload and reduced productivity. This type of master-apprentice learning, as well as placements in nursing homes and at municipal accident and emergency outpatient clinics, cost money. As yet, funding authorities have not come to terms with the impossibility of involving the municipal health service in future medical training on a zero budget. Moreover, we must ensure a sufficient number of academic GPs, who will lead the teaching of a clinical main subject, develop the curriculum, produce textbooks, teach and implement examinations – in addition to conducting and supervising research and preferably maintaining their clinical skills and competencies. We are not bored, but more of us are needed! At present we have an unacceptable imbalance with regard to investments in academic medicine within and outside of hospitals. Students must see that practising medicine in the primary health service is a valid career path that can also include an academic track.

**Mette Brekke**

*mette.brekke@medisin.uio.no*

Mette Brekke [born 1953], professor at the Department of General Practice, University of Oslo, and list-holding general practitioner.

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