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How can we better embed the social determinants of health into postgraduate medical training?

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Newly qualified doctors tend to have a fairly limited understanding of the many ways that social, cultural and environmental factors can influence people's health and illness. What can be done to compensate for this deficiency as the doctors go through postgraduate training and development? The good news is that there are usually plenty of opportunities at all stages. The not-so-good news is that too many of these opportunities are missed and postgraduate training programmes are too focused on the acute setting, too narrowly clinical and too inflexible. As with undergraduate medical education, learning about the impact of social inequalities on health and illness should take place throughout postgraduate training and development, revisiting different aspects at different stages of the pathway – spiral learning. In the UK, postgraduate training and development is divided into three phases:

- the two-year foundation programme
- specialty training (including general practice)
- continuing professional development (CPD) and lifelong learning.

The challenge is to foster an understanding of issues around social determinants, and the skills to influence them for the benefit of patients, families and communities, through well-designed flexible training programmes and a tailored range of practical experiences.

The foundation programme

Newly qualified doctors enter the UK-wide two-year foundation programme which provides a broad general experience before they choose an area of medicine in which to specialise. Trainees are typically employed by the NHS and learning takes place on the job. The programme comprises rotating placements of four to six months, focusing on patient safety and acute clinical medicine and surgery, with regular workplace-based assessments. Rotations are rigidly prescribed in the first year, covering generic specialties leading up to registration with the General Medical Council (GMC). But more flexibility is usually allowed in the second year to cover areas of particular interest to the trainee and prepare them for higher specialist training, including general practice.

The foundation programme curriculum takes a rather narrow view of public health and sees it as little more than educating the patient to adopt healthy behaviours with regard to smoking, drinking, diet and exercise.[1] There is currently scant recognition of the doctor's potential role in promoting and protecting health beyond the immediate one-to-one clinical situation. Consideration of social determinants, health inequalities and the fundamentals of public health is minimal and needs to be made much more explicit.

Opportunities for appreciating the impact of social influences exist throughout the programme. In the first year (F1) examples include clerking new patients, team discussion in wards and clinics, and structured learning events predominantly in acute settings. But the second year (F2) could provide more in-depth opportunities – particularly with rotations in community-based specialties, such as general practice, community paediatrics and public health. Cross-fertilisation between such clinical specialties and public health through innovative shared learning programmes and placements could be especially productive.

F2 placements in public health, usually with local public health teams in primary care organisations, have generally worked well and been much appreciated by those trainees taking them up. However, the numbers who do so are still small.[2] For more foundation doctors to understand and appreciate population-based approaches to protecting and promoting health and preventing ill-health, many more public health F2 placements need to be created and filled and many more 'taster' sessions organised. This may prove difficult in the current climate of cuts and, in England, the forthcoming restructuring of public health delivery.

Higher specialist training

Again opportunities exist in all specialty training programmes. The Academy of Medical Royal Colleges' framework has mapped the core generic knowledge and skills that should be acquired and maintained by every specialist trainee doctor, whatever their specialty, according to the range of curricula approved by the GMC.[3] A number of common competences refer to social determinants, mostly under the objective of working with individuals and communities to reduce levels of ill-health, remove inequalities in healthcare provision and improve the general health of a community. For example, training and assessment programmes should ensure that the trainee doctor:

- understands the factors which influence health and illness – psychological, biological, social, political, cultural and economic (especially poverty)

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- identifies the interaction between mental, physical and social wellbeing in relation to health
- engages in effective team-working around the improvement of health.

However, these good intentions do not always play out in practice. Training programmes set up by postgraduate deaneries across the country vary enormously in their content and the degree to which they adhere to stated learning objectives. The above core elements are much more likely to be reflected in 'generalist' specialties such as public health medicine, general practice, paediatrics or psychiatry, especially those which involve a substantial community-based element.

As with the foundation programme, opportunities exist for cross-placement of trainees into other specialty training programmes for defined periods, for example general practice trainees having a placement in a public health department or vice versa. A training placement in a developing country can be an excellent way to be immersed in the harsh realities of people's day-to-day lives, and more deaneries are recognising the value of such experience either within the training programme or as an out-of-programme experience.

The specialty of public health medicine

The social determinants of health and illness are a fundamental and all-pervasive theme in the specialty of public health medicine. The impact of inequalities on health improvement, health protection and healthcare quality and planning – the three key domains of public health practice – are core to the specialty's training programme. Specialist public health physicians are steeped in an understanding of the influence of social, cultural, environmental and economic factors on people's health and illness, and strategies to tackle disadvantage and vulnerability. Doctors who enter the specialty of public health medicine contribute medical expertise and experience to the wider multidisciplinary family of specialist public health professionals.

The Darzi Review called for strengthening of the numbers and skills of the public health workforce and, in particular, for an expansion of training in the specialty of public health medicine.[4] It also strongly advocated an injection of public health skills and experience into the clinical training of all doctors. As we move towards more flexibility in postgraduate training, both in the foundation programme and higher specialist training, we need to create more opportunities for cross-fertilisation between specialties, partly through multidisciplinary working and learning, partly through placements, and partly through a formalised modular approach to gaining competences.

Modular credentialing, certification and dual accreditation

Darzi defined modular credentialing as 'the formal accreditation of capabilities at defined points within the medical career pathway that takes into account knowledge, capabilities, behaviour, attitudes and experience'. In practice this would either mean distinct within-training modules covering defined elements of that particular training programme, duly accredited by the GMC and formally assessed and certified by an appropriate body, or similarly accredited and certified modules outside of specialty training programmes as part of lifelong learning. Such a modular approach would afford much more flexibility to career choices and workforce planning.

The UK Faculty of Public Health, the statutory standard-setting body for public health specialists in the UK (www.fph.org.uk), is currently developing certified modules in public health in collaboration with a number of other specialties, including paediatrics, general practice and psychiatry. Another approach advocated by Darzi is dual accreditation. This would involve developing a combined training programme, with elements drawn from each of two specialties, leading to a joint certificate of completion of training (CCT) in, say, general practice with public health medicine. Work on this more complex development is currently at an early stage and might be superseded as modular training and certification gains more traction.

Continuing professional development and lifelong learning

Again the challenge is to create opportunities in CPD to ensure that exposure to public health aspects of work is engaging, relevant and useful. Again the aim should be to help the doctor see the individual patient within the context of family and friends, social networks, communities and cultures – to understand the influences, the drivers and the barriers. Typical opportunities include certificated modules in public health, an MSc in public health-related subjects, work-based learning networks and structured seminars, workshops and conferences. A period of work overseas in a developing country can be an especially enlightening experience. Doctors embarking on an academic career, whether through the academic foundation programme, modified specialty training or post-CCT, will have further opportunities to pursue an interest in social determinants, especially through their research interests.

The future

The overall trend is to greater flexibility in training programmes and CPD. Taken together with an increased emphasis on disease prevention and health promotion in government policy, equity in health and healthcare, integration of health and social care and the wider wellbeing agenda, there is an ever-greater need for cross-fertilisation between clinical training and public health. Clinicians, particularly GPs, will be increasingly involved in planning or commissioning services for populations and will need a greater understanding of social, cultural, environmental and economic factors influencing need and demand. This wider public health vision is moving from the margins to the

mainstream and postgraduate medical training must respond if it is to play its full part in preparing tomorrow's doctors for a more interactive future.

References

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CONFERENCE SUMMARIES

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Improving perioperative diabetes care

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Diabetes is the most common metabolic disorder and has a significant impact on the cost of running the NHS. With an aging population and a rising prevalence of obesity the problem will continue to grow.[1] Specialist diabetes services have traditionally been based in secondary care often with diabetes centres situated within hospitals but, despite this, little attention has specifically been given to care of people with diabetes in hospital beds.

Although diabetes physicians will often participate in the general medical admissions rota and will perform an important role in looking after general medical inpatients, they may have little involvement in the care of diabetes for the vast majority of people with this condition admitted to hospital. This is despite the knowledge that diabetes control is difficult in the face of intercurrent illness. A number of studies have shown that diabetes leads to increased in-hospital morbidity and increased length of stay.[2,3] There is little published evidence that improving diabetes care improves outcomes but what evidence there is supports this.[4,5] The recent National Diabetes Inpatient Audit showed that between 15% and 20% of hospital beds are occupied by people with diabetes.[6] There is increasing awareness that clinical care needs to focus on this large group of patients.[7]

Over recent years a number of groups have shown that providing specialist diabetes services in hospital can significantly improve diabetes care.[8] Work carried out in the Plymouth Diabetes Service has shown that a specialist diabetes team can improve quality of care. A dedicated team of specialist nurses and doctors supported by dietetics can significantly improve inpatient diabetes care. Short-term quality of care is difficult to measure in hospital – a crude measure is the length of hospital stay. Having established an inpatient diabetes team in the service in late 2002, a significant reduction in length of stay between 2002 and 2006 was recorded. The mean reduction in length of stay was 0.7 days for a hospital diabetes population of approximately 6,000 in Derriford Hospital. This equates to approximately 4,000 less bed days per year occupied by people with diabetes. In addition to the clinical benefit to individuals this represents a major efficiency saving for the hospital, something that is being strongly encouraged in the current financial climate.

Disappointingly this work did not show a reduction in the length of stay for people attending hospital for elective procedures. As this group represents about 50% of people in hospital the service was very keen to understand the reasons why. For patients attending for planned procedures the path of the admission is often established before the person comes into hospital. Decisions are made about whether or not the person can be treated as a day case or whether admission to hospital overnight is required. It was clear from the service's work on the wards that for a proportion of patients with diabetes, admission to hospital had probably not been necessary but intervention when in hospital was too late. A project to map the pathway taken by people with diabetes attending for elective procedures was established to improve this process. Four key stages at which diabetes specialist input can improve care were identified.

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