Wherever you train to be a doctor, there are some experiences common to all medical students, which may set you apart from other undergraduate students. Thinking about how you tackle challenges during this time will enable you to cope with the pressures of a career in medicine and facilitate an understanding of how doctors, other professionals and patients deal with their own difficulties (see The profession of medicine, pp. 164–165).

The need for ongoing curriculum evolution in response to developments in medicine and society is well-recognized worldwide. In the 1990s UK medical schools underwent several curriculum reforms. Research into students’ experiences of newer curriculum models (e.g. early clinical exposure, a focus on clinical and communication skills and professionalism, integration of basic and clinical sciences content, small group and self-directed learning) and the resulting changes in students’ knowledge, clinical and cognitive skills and professional behaviours have followed.

Where strong evidence exists, the impact of newer curriculum approaches has been generally positively reviewed. For example, one systematic literature review concluded that problem-based learning during medical school had positive effects on competency after graduation. Similarly, a questionnaire survey of all UK medical students who graduated between 1999 and 2005 showed that self-reported preparedness improved 1 year after graduation. In addition, initiatives such as student assistantships and shadowing schemes in the final year of medical school, changes to postgraduate training that aims to improve the working conditions for junior doctors (e.g. the European Working Time Directive) and strategies to improve supervision and feedback, all suggest a positive trajectory in terms of experience in medical school and early clinical practice.

Despite these encouraging developments, the challenges of preparing students for practice are still substantial, and high levels of anxiety and stress persist amongst doctors and medical students (see Life as a trainee doctor, pp. 162–163; The profession of medicine, pp. 164–165). The proportion of doctors and other health care professionals experiencing above threshold levels of stress is around 28% (see What is stress?, pp. 126–127). A recent systematic review (Hope and Henderson, 2014) suggested prevalence rates of 7.7% to 65.5% for anxiety, 6% to 66.5% for depression and 12.2% to 96.7% for psychological distress for medical students outside North America.

**What is different about medicine?**

Many of the pressures on medical students are not qualitatively different from those on other students: they worry about coursework, exams, money and relationships. There are specific aspects of a medical degree that may cause additional pressure, however, and these can be categorized into individual, interpersonal, academic and clinical factors.

Individual factors include personality type, tolerance of ambiguity, health and finances. The personality traits of individuals choosing medicine as a career may differ and personality traits are recognized as predictors of well-being (see Personality and health, pp. 18–19). Ambiguous situations are commonplace in medicine, and some medical students are more intolerant of ambiguity than others, which can result in distress and may influence attitudes towards certain patient groups and career choice. The length of the course potentially increases the burden of financial debt and also means that statistically more students will experience personal illness as an undergraduate.

Dyrbye et al. (2006) recognized the strong relationship between personal life events and professional burnout among US medical students.

Interpersonal factors leading to anxiety include competition and familial expectations (see Anxiety, pp. 112–113). The fact that medical students have been high achievers prior to medical school may lead to a competitive environment within medical school, which may be reinforced through assessment and the need to rank students for intercalation and training places. Familial context may add to the pressure because parents may have high expectations of their offspring.

Academic factors include workload and the transition to medical school learning. Medical students’ workloads may be heavier than other degrees, which can be a stressor (Dahlin et al., 2005), and students are sometimes unfamiliar with the approach to learning required for success within medical programme. Uncertainty about individual study behaviour, progress and aptitude when coming close to exam time was the main stressor.

Clinical factors include relationships with clinical supervisors and exposure to death and dying (see pp. 130–131). Swedish students were worried about their personal endurance and/or competence in the future and reported ‘non-supportive climate’ as an important stressor (Dahlin et al., 2005). Similarly, 18% of medical trainees across multiple hospital, community and mental health trusts in London responded yes to the question “In this post, have you been subjected to persistent behaviour by others, which has eroded your professional confidence or self-esteem?” and more junior trainees were more likely to respond yes (Paice et al., 2004). The perpetrators were mostly other doctors within the medical hierarchy. It is to be hoped that earlier and phased introduction to clinical experience and faculty development of clinical teachers will reduce these complaints, but there is little research evidence to support such a belief, and the challenges are likely to be cultural rather than individual. An encouraging development is the creation of validated scales that can unpick aspects of quality of instructional quality within clinical placements.

**Coping strategies and student support**

Grant et al. (2015) offer a conceptual model to differentiate the different stages
at which interventions can be targeted, including prevention, identification and treatment (Fig. 80.1). Clearly strategies aimed at prevention are most desirable.

There are several strategies that are helpful in preventing and managing anxiety and stress. It is important to try to deal with the source of the stress by managing the workload (prioritizing, delegating), ensuring the expectations made upon you (by yourself and by others) are realistic for your stage of medical training, keeping healthy (e.g. diet, sleep, exercise), scheduling in time to relax (e.g. sport, yoga, music) and seeking support from friends and family. A recent study of best practice in supporting medical students’ well-being identified some curriculum interventions that successfully target whole student populations in the prevention of mental health issues. Grant (2013), for example, the use of health enhancement, including mindfulness, and the introduction of pass/fail grading.

There are also some well-known maladaptive coping strategies. One is avoidance, for example, by putting off work that is difficult. Similarly denial and dismissal of a negative event have been found to be coping strategies that increase stress levels, not reduce them. Alcohol abuse is another poor coping strategy (see Alcohol use, pp. 80–81), with prevalence of binge drinking reported at 58% recently in a private US Jesuit medical school (Trostler et al., 2014). Signs of psychological symptoms of anxiety and stress may include excessive worrying, difficulty sleeping or concentrating and/or an inability to relax. This may impact on performance in assessments at medical school.

Medical schools should offer support for students who are experiencing psychological distress. In the UK the General Medical Council (GMC) offers guidance to support medical schools in this task. The range of the support varies widely but often includes prevention strategies, peer-support initiatives, counselling, occupational health and avenues to explore such as interruption of medical studies and careers advice. Whilst many medical students perceive there to be a stigma (see Labelling and stigma, pp. 60–61) associated with help seeking, the GMC guidance aims to reassure students that they will be treated fairly and confidentially. There are many branches of medicine to consider as a specialty, not just general practice versus hospital medicine.

### A career in medicine

Despite the demanding conditions of medical training, there are many rewards in the practice of medicine. Students and young doctors can have experience of different specialties and are likely to settle eventually in one that suits their personality and abilities. Those who derive most interest from science and research can move towards academic medicine, and those who enjoy the ‘art’ of medicine will go into specialties that include closer contact with patients. Although very different, both types of career can bring enormous personal satisfaction.

#### Case study

Ian, a third-year medical student, appeared before a faculty committee appealing to stay on despite having twice failed an assessment. He had fallen behind in studying but assured the committee that he would not do so again. When asked whether there were any relevant circumstances, he described a catalogue of misfortune. During his third year he had been off for several weeks with abdominal pain that eventually proved to be appendicitis and resulted in an appendectomy. Then his parents separated, and he kept going home at weekends to help his depressed mother. His landlord evicted him because a drunken flatmate had smashed the furniture. By the summer term, he was camping out in friends’ flats and missing many days on clinical attachments. He was extremely anxious and unable to sleep or concentrate. Having failed the first assessment, he attempted to revise but had to earn money by working in a bar and made little progress. The committee took a sympathetic view but criticized him for not discussing his difficulties with a tutor and arranging to have time off officially, especially when he was ill. He was permitted to repeat his third year, but strongly advised to make contact with the accommodation service, the counselling service and his tutor.

### Medical students’ experience

- Medical students’ experience of stress may differ from that of other students: at first in terms of workload and then later in terms of clinical contact.
- Personality traits may influence the choice of medicine as an undergraduate degree, performance in assessments at medical school and career choice. They may also influence the likelihood of experiencing psychological distress.
- Medical school is challenging, in terms of both academic workload and support in adapting to the clinical environment.
- A range of effective strategies for preventing and managing psychological distress in medical students have been reported and evaluated. The vast majority of medical students will overcome these difficulties and go on to be effective clinicians.
- Medical schools offer a wide range of avenues of student support, including careers counselling.

#### Stop and think

There is evidence that levels of anxiety and depression in students are, to some extent, predetermined by personality. It has also been shown that teaching stress management to medical students enables them to control the symptoms of stress. Another view is that some experience of anxiety and depression may be helpful in working with patients who have those conditions. Given these various findings, and that lack of support from senior staff is a common complaint, should more be done for students? Interventions include stress management courses, regular meetings with members of staff or support groups across years.

- Is the stress of medical school perhaps part of the preparation for a challenging career that requires personal resilience? Remember to read also Life as a trainee doctor (pp. 162–163) and The profession of medicine (pp. 164–165).