

REVIEW

Adolescent medicine in paediatric practice

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Adolescents are a growing area in paediatric practice in both hospital and community settings. They make up around one quarter of the practice of many paediatricians. Yet until recently there has been little formal interest in young people's health in the UK. The situation is now changing, particularly following the publication of the "National Service Framework for children, young people and maternity services", which places a major emphasis on adolescent health. Given that this area is relatively new to many paediatricians, this article aims to provide an overview of the range of health problems that affect young people, to provide practical advice for working with this group in paediatric practice, and to outline current and future opportunities for training in adolescent health in the UK.

adolescents. Indeed, the decrease in age specific mortality since 1960 for the under 1s, 1–4s, and 5–9s (74–76% in each age group) is over twice that in young people (38% for 15–19 years).⁷ Additionally, trends in adolescent health in priority areas have uniformly been static or adverse, in contrast to gains made in other age groups. While adult smoking declined during the 1980s and early 1990s,⁸ there has been no significant change in smoking among adolescents aged 11–15 in the last 20 years.⁹ Rates of uncomplicated chlamydia infections among young women aged 16–19 doubled during the 1990s and live birth rates to women aged 15–19 in the UK have shown little change since the late 1970s, compared to a marked decline in other European countries.¹⁰ In contrast to dramatic declines in suicide rates between 1950 and 1998 among men and women over 45, suicide rates among 15–24 year olds doubled in young men over the same period.^{11 12}

Furthermore, the prevalence of chronic illnesses, such as asthma, diabetes (types 1 and 2), and obesity has increased, as has the burden of other chronic conditions in adolescence, such as cystic fibrosis, inflammatory bowel disease, chronic arthritis, metabolic diseases, and neuromuscular disorders. The use of hospital beds and outpatient services increases rather than decreases through adolescence.^{7 13}

ADOLESCENT HEALTH: WHERE ADOLESCENCE AND HEALTH INTERSECT

In the USA and Canada, over one thousand adolescent physicians provide primary and secondary care to adolescents. In Australia, New Zealand, and many European countries, a specialty of adolescent medicine exists, with hospital departments in major cities and fellowships for advanced paediatric trainees. In the UK, while adolescents are a major focus of many psychiatrists and there are hospital and community paediatricians interested in adolescent health, there is only one department of adolescent medicine (in London) and no formal training programmes. Adolescent health in the UK is not therefore a distinct specialty, but is practised wherever adolescence and health intersect.

While many paediatricians see young children as their "core business", a high proportion of time is spent looking after adolescents. Data from the acute Trusts in the North Central sector of London show that one quarter of hospital admissions under 14 years are for 10–14 year olds (personal communication, Russell Viner), with teenagers accounting for approximately one third of admissions under 17 years.⁷ A similar trend has been described in Melbourne.¹⁴

The UK has been slow to embrace the concept of adolescent health, in contrast to many European countries, Australia, New Zealand, Canada, and the USA.¹ However, this is changing. Adolescence is now firmly on the health agenda,² as shown by the prominence given to adolescent health in two recent Department of Health publications—the "National Service Framework (NSF) for children, young people and maternity services" and "Delivering choosing health: making healthier choices easier"^{3 4}—alongside the publication of a joint colleges report, "Bridging the gaps: health care for adolescents".⁵ However, many paediatricians may be unsure what adolescent health means and how it differs from the rest of paediatrics. Our aims are to illustrate the range of health issues relevant to adolescents, to provide practical advice on working effectively with young people, and to identify opportunities for adolescent health training in the UK. Although targeted at paediatricians, this review is relevant to all health professionals working with young people.

HEALTH ISSUES IN ADOLESCENCE

Adolescents aged between 10 and 20 years make up 13–15% of the UK population, a similar proportion to the under 10s.⁵ While young people are generally perceived to be healthy, data show that the adolescent years are associated with significant morbidity and mortality, principally related to accidents, chronic illness, and mental and sexual health problems.^{2 4–7} The major improvements in health outcomes achieved for infants and children have not been matched in

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In hospital, the main focus of adolescent health is on chronic illness, much of which is outpatient based. Oncology is another area with a significant adolescent workload. Hospital physicians also care for patients with complex disorders that may benefit from an inpatient stay, such as eating disorders, chronic fatigue/pain syndromes, and unexplained symptoms, which require a coordinated, multi-disciplinary management approach.

In the community, common adolescent problems include specific learning difficulties, the dyslexias, attention deficit disorders, autistic spectrum disorder, epilepsy, and neurodisability (for example, cerebral palsy and spina bifida). In primary care, adolescents present with a range of issues, particularly respiratory, dermatological, and musculoskeletal problems.¹⁵ Sexual (contraception, sexually transmitted infections, family planning) and mental health problems are also seen in primary care, with adolescent mental health services caring for adolescents with the most severe mental health problems. Other key areas include student health and working with juvenile justice facilities, homeless organisations, drug and alcohol services, and gay/lesbian youth.

Given this diversity, the current emphasis on adolescent health is welcome and training must become a priority. Adolescents suffer from a lack of appropriate services and many health professionals feel uncomfortable dealing with this age group or perceive the need for further training.^{16–19} Fortunately, there is evidence that adolescent health training is not only effective, resulting in gains in knowledge, clinical skills, and competence, but also that these benefits may persist for at least five years.^{20–22}

AN APPROACH TO ADOLESCENT PATIENTS

The approach needed to work with young people differs considerably from that of mainstream paediatrics. Reasons for this include:

- Communicating with adolescents can be a challenge
- Their priorities are different to those of adults
- Issues of consent and confidentiality become challenging in a way they were not in childhood
- The problems with which adolescents present often appear insoluble.

Communicating with adolescents

Developing a rapport

Effective communication with adolescents requires empathy, mutual trust, and respect. Time needs to be spent at the outset in developing a relationship that will last beyond the initial consultation. Developing rapport provides a basis from which to approach most problems, however complex, with optimism. The process is helped by seeing adolescents alone for part of the consultation. This shows an interest in them, rather than just their parents, and conveys a message to the family that it is appropriate for the adolescent to begin to take more responsibility for their own health. A major advantage of seeing adolescents alone is that it increases the chance that they will actually talk to us. Adolescents rarely contribute much to consultations when parents are present and the change that occurs when they are seen alone can be striking. Asking questions about school, friends, and activities shows an interest in them as an individual, rather than their medical problem, and allows us to assess knowledge, understanding, and health risks in a fashion that is impossible in the standard paediatric consultation. Box 1 shows an approach to “getting into adolescent *headss*”, now widely used around the world.²³

Paediatricians rarely feel comfortable discussing sex, smoking, or drug use with their patients—yet these are key

Box 1: HEADSS—a guide for taking an adolescent psychosocial history²³

H Home

- Where do you live? Who lives with you?
- How do you get on with the people you live with?
- Who would you talk to if you had a problem?

E Education (or employment)

- Which school do you go to? Which year are you in?
- Which subjects do you enjoy? What are you good at?
- Who do you spend time with at school? What are the teachers like?

A Activities

- What do you enjoy doing outside of school?
- Are you in any clubs or sports teams?
- Who do you meet up with at weekends?

D Drugs

- Do any of your friends smoke cigarettes or drink alcohol? How about you?
- Have you ever tried marijuana?
- How much do you smoke/drink? Every day? At weekends?

S Sexuality

- Do any of your friends have girlfriends/boyfriends? How about you?
- Have you ever had sex? Do you use condoms/the pill?

S Suicide

- How would you describe your mood? Do you ever get really down?
- Some people who feel really down often feel like hurting themselves or even killing themselves. Have you ever felt like that? Have you ever tried to hurt yourself?

issues for managing adolescents with chronic illness, who often take more risks than their healthy peers. Using the HEADSS framework is important in identifying difficulties in these areas, which may indicate poor adjustment as a result of other problems.

Establishing confidentiality

Before starting any consultation, it is essential to explain to adolescents that your conversation will remain confidential and that, while you may have to consult with colleagues, you will not discuss things with their parents, without their permission.² The limits of confidentiality must also be made explicit. The disclosure of any activity that puts the patient at serious risk of significant harm (such as suicidal thoughts or physical/sexual abuse) cannot remain confidential. Neither can the disclosure of activities that put others at risk. If adolescents are assured of some degree of confidentiality,

Box 2: Fraser guidelines on young people's competence to consent to contraceptive advice or treatment²⁵

A young person is competent to consent to contraceptive advice or treatment if:

- The young person understands the doctor's advice
- The doctor cannot persuade the young person to inform his or her parents or allow the doctor to inform the parents that he or she is seeking contraceptive advice
- The young person is very likely to begin or continue having sexual intercourse with or without contraceptive treatment
- The young person's physical or mental health or both are likely to deteriorate if he or she does not receive contraceptive advice or treatment
- The young person's best interests require the doctor to give contraceptive advice or treatment, or both, without parent consent

they are more likely to speak frankly.²⁴ In practice, this allows consultations to address issues such as treatment adherence, substance misuse, and self-harm, thus opening up the possibility of providing effective health care.

In the UK, adolescents aged 16 or over can be presumed to have the capacity to consent to treatment. The case *Re Gillick* established that patients under 16 may also consent to treatment, without parental consent, if considered by their doctor to be competent to do so (Fraser guidelines; see box 2).²⁵

This means that the doctor must be satisfied that their patient understands the consequences of their actions and highlights the need to assess adolescent development at each consultation (discussed below). The chances of effective communication are helped by remaining neutral, aligning oneself with neither the adolescent nor their parents, but remaining curious about the adolescent's behaviour, without judging them. While it is important to send messages that certain behaviours can have adverse consequences, these need to be portrayed in terms that adolescents can understand and identify with.

How to ask questions

Talking to adolescents requires sensitivity and can be a slow process, especially with younger adolescents. Skill is required in knowing how to ask questions, taking into account the patient's developmental stage.^{26–28} Younger adolescents think very much in terms of black and white, right or wrong (concrete thinking), with limited ability to consider choices or the future. Adolescents at this developmental stage struggle with open questions ("How's school?", "How are you?"), their replies providing little information ("OK", "Fine", "grunt"). Asking open questions can result in frustration, as the conversation never gets going. Simple, closed questions ("What school are you at?", "Which year are you in?") requiring an answer can make it easier for the conversation to gain momentum. Giving choices ("What do you prefer, science or English?") is another technique, which allows adolescents to open up. The primary purpose of these questions is to develop rapport, with the possibility of obtaining relevant information increasing as rapport develops. Talking to older adolescents is usually easier, given their greater ability to understand abstract ideas, consider

alternatives, and plan for the future. With increasing development, adolescents are better able to understand long term consequences of certain behaviours. This has implications for the approach used when discussing subjects such as treatment adherence and experimental behaviours (for example, smoking)—the younger the adolescent, the more the focus needs to be on the short term consequences of certain behaviours.

Adolescent priorities: the importance of understanding adolescent development

Paediatricians are familiar with the concept of monitoring development in infants and young children and intervening where appropriate. Adolescence represents another key phase of development. However, with the exception of puberty and physical growth, the idea of tracking development during adolescence is rarely considered.

One of the goals of adolescence is for individuals to establish their own identity and self-image (including sexuality). This involves developing independence from parents, challenging authority, and experimenting with different behaviours, along with forming relationships outside the family and learning vocational skills to be able to work.²⁸ A challenge for professionals working with adolescents is to acknowledge this process and appreciate the effect of illness, particularly chronic illness, on normal development.²⁷ Awareness of development allows us to make more sense of adolescents' behaviour and understand their priorities at any given stage.²⁹ The priorities of healthcare professionals are unlikely to match those of adolescents. However, the chances of delivering effective health care are increased if the adolescent's priorities are acknowledged, with an attempt to find common ground, so that both sides' goals might be achieved. It is helpful to acknowledge the important factors influencing the individual—family, friends, school, interests, cultural background—and see how their illness and its management fit within this context.

Solving insoluble problems

Sometimes, the problems with which adolescents present appear insoluble. Examples include patients with unexplained symptoms (for example, pain, tiredness, weakness, funny turns) despite exhaustive investigation,^{30 31} or the adolescent with a chronic illness, whose condition continues to deteriorate, despite numerous interventions. At these times, our professional status as the expert is challenged, as we may literally not know what to do next. In this situation, it is beneficial to let go of the familiar feelings of helplessness and frustration that can affect us. Whatever our initial reactions—dismissing a patient's symptoms as being "all in the head" or getting cross with them for not adhering to treatment—they are rarely helpful in resolving the situation.

A more useful approach is to acknowledge the difficulties and the resulting frustration felt by all concerned. This can defuse a tense situation by showing that we are working alongside, not against, the patient. It also puts the doctor in the position of non-expert. While this can be unsettling, it may also be liberating, reducing the pressure on us to order more tests, try more drugs and find the precise *cause* of the problem. This partnership shifts responsibility from the physician back to the family, promoting motivation on their part. It is helpful to reduce the emphasis on the "problem", without ignoring it, and pay attention to areas of the adolescent's life that are suffering as a consequence,³² as well as to areas where the young person is actually doing well. The former may include school, interaction with peers, and involvement in sports and hobbies, which are an integral part of adolescence and can be overlooked when our focus is too narrow. Learning skills for working with families is extremely useful: for example, identifying and attempting to

Box 3: Useful websites for health professionals

- www.dh.gov.uk—Department of Health website, with access to publications such as the “National Service Framework” and “Delivering choosing health: making healthier choices easier”
- www.euteach.com—contains detailed syllabus for adolescent health and teaching resources
- www.rcgp.org/clinspec/adolesgr.asp—Royal College of General Practitioners website with link to Adolescent Task Group
- www.caah.chw.edu.au—website for the Centre for the Advancement of Adolescent Health, New South Wales, Australia, containing details of projects and literature (including a practical GP resource kit)
- www.cps.ca/english/prodev/NTIAH—Canadian Paediatric Society website outlining the National Training Initiative in Adolescent Health, a multidisciplinary training programme for adolescent health
- www.rcn.org.uk—Royal College of Nursing
- www.rcpch.ac.uk/education/projects/child_in_mind.html—Royal College of Paediatrics and Child Health link to Child in Mind training programme
- www.teenagehealthfreak.org—health information website targeted at young people

alter patterns of family behaviour which may contribute to the persistence of a problem.

For this approach to succeed, it is essential that doctors work collaboratively with other professionals,^{31 32} with genuine communication between the family and team members, sharing of information and an agreed management plan. However, it is also important to recognise situations which do not automatically require psychological or social input. Poor treatment adherence, for example, may be the result of purposeful choices due to differences in health and life priorities. In this situation, sensitive intervention by a physician, who understands adolescent development and its impact on health beliefs, may be simpler and more effective than formal referral to a psychologist or social worker.

ADOLESCENT TRAINING IN THE UK

The NSF states that all professionals working with adolescents should receive training in adolescent health.³ This applies to all paediatricians—even neonatologists deal with teenage parents—as well as adult physicians. Although there is currently no formal adolescent training programme in the UK, outside of mental health,³³ limited opportunities do exist. A number of specialist registrar posts providing general paediatricians with an interest in adolescent medicine are planned by the Department of Health, with one already in place in London (University College Hospital). An MSc course in Birmingham teaches components of adolescent health, and the Royal College of Paediatrics and Child Health’s “Child in Mind” project includes training in communication skills. EuTeach (European Training in effective adolescent care and health) provides a detailed syllabus and runs an annual course in Switzerland, with one planned in the UK in the future. The Royal Colleges of both General Practitioners and Nursing also run courses (box 3).

Box 4 outlines a potential syllabus for adolescent health, based on resources such as the report “Bridging the Gaps” and the EuTeach curriculum.⁵

Box 4: Key components of a training programme in adolescent health**Main general subject areas**

- Definition of adolescence and bio-psychosocial development during adolescence
- Family influences and dynamics
- Communication and clinical skills
- Multidisciplinary working and networking
- Transition from child to adult services
- The impact of the environmental context
- Resilience, experimental and risk behaviours
- Health education and promotion, including school health

Key physiological and medical areas

- Growth and puberty
- Nutrition, exercise, and obesity
- Sexual and reproductive health
- Common medical conditions of adolescence
- Chronic conditions which commonly bridge adolescence
- Mental health including eating disorders
- Substance use and abuse
- Injuries and violence, including accidents, self-harm, abuse

Delivering adolescent training to all health professionals, rather than creating a separate specialty, is the model favoured in the UK.⁵ However, a number of specialist adolescent physicians will be needed to coordinate adolescent health promotion at all levels and provide leadership. One area being targeted is transition from paediatric to adult care, with a proposal for key individuals (“champions”) to oversee its development. Transition programmes already exist for a variety of conditions (for example, diabetes, cystic fibrosis, chronic arthritis) and are largely outpatient based.^{34 35} Effective transition is helped enormously by the availability of adult departments with expertise in disease management and an interest in young people. Difficulties are felt most acutely when suitable adult expertise cannot be identified (for example, cerebral palsy, neuromuscular disorders, spina bifida).³⁶ One explanation for the lack of expertise among adult health providers is the survival of patients into adulthood, when previously death during childhood was inevitable. Another factor is the absence of formal adolescent training—hence the need to involve adult health professionals in future programmes. For a comprehensive review of transitional care the reader is referred to other published articles.^{5 34–40}

Adolescents require a different approach to young children and mature adults. That many doctors have concerns over their ability to deliver care to adolescents highlights the need for further training—something that is likely to feature much more prominently in the UK in the future, with benefit to both adolescents and health professionals.

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