

Editorial

The growing pains of adolescent health research in general practice

Until about 10-15 years ago the health needs of young people in general practice had been relatively neglected, both by providers and researchers. Teenagers were considered to be a healthy population who rarely sought or wanted health advice, and whose health needs were largely trivial. However, early cross-sectional questionnaire studies, marking the birth of real interest in the primary health care of adolescents, revealed that they have a wide range of significant health concerns, and often engage in risky behaviours, but do not always access health services appropriately because of misconceptions about their right to do so, and concerns about confidentiality (Bewley *et al.*, 1984; MacFarlane *et al.*, 1987; Epstein *et al.*, 1989; McPherson 1996). Numerous subsequent studies have confirmed these findings in different populations, but only recently have attempts been made to identify the extent to which their attitudes influence actual help-seeking behaviour (Churchill *et al.*, 2000a).

The importance of long-term consequences of health-related behaviours and problems in teenage years are becoming increasingly recognized: addiction to cigarettes usually begins in the early teens, and may be a prerequisite for illicit drug use in the short term, although other adverse health consequences in terms of respiratory and heart disease take years to develop; genito-urinary infections may produce acute symptoms, but asymptomatic chlamydial infection can result in subfertility many years later with a subsequent requirement for assisted fertilization; and a variety of psychological disorders, including obsessive compulsive disorders and anxiety states, have their onset at this time. However a degree of experimentation and risk taking seem to be an integral part of the transition from childhood to adulthood, and most young people come through this phase of life relatively unscathed. So the challenge to researchers and clinicians alike is to be able to identify those at most risk of adverse consequences, without interfering with normal development, and to

evaluate possible interventions that will result in improved long-term outcomes.

A potential shorter-term complication of adolescent 'risk-taking' behaviour, more amenable to research, is that of teenage pregnancy. Early assumptions that one of the main reasons that teenagers became pregnant was because of lack of knowledge or access to contraception were recently challenged by the finding that 70% of teenagers had discussed contraception with a clinician in general practice in the year before conceiving, and 50% had actually been prescribed the oral contraceptive pill (Churchill *et al.*, 2000b). Given that this represented an underestimate of contraceptive provision (since data from family planning and young people were not included) this was a startling finding which attracted a range of opinions in an attempt to explain it. These ranged from 'Teens get pill but are too daft to take it' (The Sun) to "'Pill" fails to curb teen pregnancies' (Daily Telegraph). The true interpretation, as always, is much more complex, with a variety of factors contributing, including lapsed contraceptive provision, cessation due to side effects, and contraceptive failure or incorrect use (Churchill *et al.*, 2002). The additional finding that teenagers who became pregnant unintentionally were more likely to have used emergency contraception in the past highlights the importance of challenging seemingly simplistic solutions to complex issues.

This study also raised questions about the effectiveness of the general practice consultation in educating young women about the pill. The 'consultation' is seen as a central component in most clinical settings, but particularly in general practice. It concerns the interaction between the clinician and the patient, and the extent to which this meets the needs and agenda of both. It is recognized that consultations between teenagers and general practitioners are shorter than those with adults, and teenagers and clinicians often feel uncomfortable

about the interaction (Jacobson *et al.*, 1994; Jacobson *et al.*, 2001). Indirect evidence suggests that the personal characteristics of the clinician may be important: practices with younger GPs, female GPs, and more practice nurse hours, having lower teenage pregnancy rates (Hippisley-Cox *et al.*, 2000). However, overall, little research has been performed into the nature and effectiveness of general practice consultations with teenagers and how these might be improved.

In recent years, with increased recognition about the importance of teenage health, many general practices have established 'specialist' clinics in an attempt to improve accessibility for teenagers. Despite the interest, most of the limited evaluation that has been undertaken has focussed on uptake of such services, which has often been disappointingly low. This is not surprising since teenagers tend to want a reactive service with quick availability when they have a problem, and do not share the same long-term perceptions of health as adults. An additional potential problem of such services is that they obey the 'inverse care law', with those attending being at lowest risk. However, despite these problems, one of the only randomized controlled trials to evaluate teenage health promotion clinics in general practice, demonstrated some modest benefits in the short term in terms of behaviour change and improved mental health (Walker *et al.*, 2002).

The nature of adolescence itself presents potential researchers with numerous challenges, and these should not be underestimated. Routine quantitative research techniques employ cross-sectional measurements do not necessarily reflect the fluctuating and dynamic nature of the teenage years: longitudinal studies are needed to track health behaviours and outcomes in order to identify modifiable risk factors, and then to evaluate suitable targeted interventions. However, as a wider range of health services become available to young people it will become increasingly difficult to map their utilization by individuals. There is also a need to develop an understanding of the teenage perspective, whilst recognizing the difficulty of doing so from that of a mature adult, and this will require continual challenging of popularly held beliefs and use of innovative research methods. Ethical considerations are significantly more complex when planning studies involving young teenagers, than those with adults. However, despite all of these difficulties, there is a wealth of research waiting to be done and a plethora of questions still to be answered.

So in conclusion, research into adolescent health in general practice has survived its infancy and enjoyed a healthy childhood. As it enters its teenage years, and grows in size and maturity, we should anticipate a var-

iety of changes in its nature in order that it can meet the challenges of adulthood.

Dick Churchill

Clinical Lecturer in General Practice

Division of Primary Care

University of Nottingham Medical School

Queen's Medical Centre

Nottingham, NG7 2UH

Email: dick.churchill@nottingham.ac.uk

References

- Bewley, B.R., Higgs R.H. and Jones, A. 1984: Adolescent patients in an inner London general practise: their attitudes to illness and health care. *British Journal of General Practice* 34, 543–46.
- Churchill, R., Allen, J., Denman, S., Williams, D., Fielding, K. and von Fragstein, M. 2000a: Do the attitudes and beliefs of young teenagers towards general practice influence actual consultation behaviour? *British Journal of General Practice* 50, 953–57.
- Churchill, D., Allen, J., Pringle, M., Hippisley-Cox, J., Ebdon, D., Macpherson, M. and Bradley, S. 2000b: Consultation patterns and provision of contraception in general practice before teenage pregnancy: case-control study. *British Medical Journal* 321, 486–89.
- Churchill, D., Allen, J., Pringle, M. and Hippisley-Cox, J. 2002: Teenagers at risk of unintended pregnancy: identification of practical risk markers for use in general practice from a retrospective analysis of case records in the United Kingdom. *International Journal of Adolescent Medicine & Health* 14, 153–60.
- Epstein, R., Rice, P. and Wallace, P. 1989: Teenagers' health concerns: implications for primary health care professionals. *British Journal of General Practice* 39, 247–49.
- Hippisley-Cox, J., Allen, J., Pringle, M., Ebdon, D., McPhearson, M., Churchill, D. and Bradley, S. 2000: Association between teenage pregnancy rates and the age and sex of general practitioners: cross sectional survey in Trent 1994–7. *British Medical Journal* 320, 842–45.
- Jacobson, L.D., Wilkinson, C. and Owen, P.A. 1994: Is the potential of teenage consultations being missed?: a study of consultation times in primary care. *Family Practice* 11, 296–99.
- Jacobson, L., Richardson, G., Parry-Longdon, N. and Donovan, C. 2001: How do teenagers and primary healthcare providers view each other? An overview of key themes. *British Journal of General Practice* 51, 811–16.
- MacFarlane, A., McPherson, A., McPherson, K. and Ahmed, L. 1987: Teenagers and their health. *Archives of Disease in Childhood* 62, 1125–129.
- McPherson, A. 1996: Primary health care and adolescence. In Macfarlane, A., editor, *Adolescent Medicine*. London: Royal College of Physicians, 33–41.
- Walker, Z., Townsend, J., Oakley, L., Donovan, C., Smith, H., Hurst, Z., Bell, J. and Marshall, S. 2002: Health promotion for adolescents in primary care: randomised controlled trial. *British Medical Journal* 325, 524–27.