This outlines possible career tracks for academic, specialist, and general trainees. Of central importance is the lecturer grade. I argue that this grade is the critical second of three stages in a research career. The first is the fellowship to doctoral level. The second, the lecturer post, offers up to four precious years during which the incumbent is given every opportunity to begin developing skills in generating grant income for original ideas and supervising the work of others, skills which are prerequisites for applying for the third stage, a senior lectureship in due course. I argue that it is the abuse of the lecturer in being regarded to be an "ordinary" registrar which is one of the main reasons for the poor standing of British academic medicine. Equivalent rigour needs to be applied to the training of lecturers who wish to develop a career in medical education.

Improvements in the cultural expectations of lecturers must be matched by more precise manpower planning for academics in general, and in subspecialties in particular, in order to provide hard fact to young investigators in planning their research topics, and in generating confidence of the end point of the training. Innovation is needed in generating seven year training programmes which progress seamlessly (depending upon performance) from research fellow to senior lecturer or specialty consultant.

What are the responsibilities of senior members of the specialty?

There is clearly a massive agenda to be tackled, and this has to be lead by senior colleagues. Action has already been taken in the last 12 months through the offices of the ACP to work closely with our new Royal College of Paediatrics and Child Health (RCPCH) to improve the standing of science in our specialty. Thus, the voice of the ACP has been given prominence in the new committee structure of the RCPCH, particularly through the creation of a Science Advisory Committee chaired by the Academic Vice President, Professor Richard Cooke. Its task is to provide advice, both strategic and practical, on matters relating to the development of a high science profile in the college and specialty. There will be a need for dialogue with non-clinical scientists and with research active NHS consultants in the RCPCH's specialty groups.

The RCPCH itself has created an Academic Panel which I have the privilege to chair, with a fourfold remit. First, to provide advice on entry into the Specialist Register through the academic route; second, to provide guidelines and criteria against which a period of time in research would be recognised as an appropriate component of specialist training; third, to provide the means for the counselling of individual junior staff in the structure of a research career, and finally, to provide guidelines for individual specialties on the training programmes for research within that specialty. This is a formidable work load, which will require much further thought. However, one possible way, for example, of delivering advice on research training could be through the formal appointment of Regional Advisors for

Research Training, and linked to the registration of research fellows and a requirement for documented regular appraisal.

The Academic Panel is at the earliest of stages in its development and further reports will be made as appropriate through the RCPCH. None the less, these steps reflect a commitment from the British professoriat in paediatrics and child health, and from the College to address seriously at a national level the requirements for training in science.

Regional centres must be more proactive role in defining training programmes, monitoring the activity, and auditing the product. Perhaps it is going too far at this stage to propose that centres and units themselves should be accredited for research training. A more sensible approach might be to produce agreed minimum quality standards for training which research fellows and lecturers can expect to be delivered.

Finally, there must be a much greater requirement for academic unit heads to be more vigorous in the process of research organisation and rigorous in monitoring the quality of supervision if our specialty is to deliver the numbers of trained scientists that will be needed for the new millennium. Ultimately, it is the quality of supervision upon which the whole edifice of research performance is built.

Conclusions

Raine's paper documenting the difficulties of obtaining an MD reflect but one facet of a highly complex problem. Of the threat to the future science of paediatrics and child health there can be no doubt. This is an issue which affects every paediatrician, not just those in erudite disciplines and rarefied regional centres. Improving the health of children depends upon research, and the delivery of services demands an evaluative culture. At last, there is a growing recognition of the urgency of the problem, and steps are now being taken at a national level to improve the profile and the reality of research training. There is much to be done, and despite the despondence expressed by others,⁵ I am optimistic that with good will, hard work, and above all commitment, the prospects for our trainees should be brighter than they have been for years.

The views expressed in this paper are personal and do not represent any official statement of the ACP or the RCPCH.

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Parents, parenting, and family breakdown

Most couples undertake the serious business of parenting with the belief that they will be able to provide their children with emotional and financial security. The major shifts in family life associated with social and economic changes have made these goals much harder to achieve. An increased emphasis on the desire for individual fulfilment

may result in parents making decisions which they hope will improve their own lives, but which their children do not always view as positive. There have been frequent and simplistic attempts to explain the growing insecurities shown by children in educational and social settings simply by blaming changing family structures. Paediatricians,

when faced in practice by children presenting with a range of difficulties, will be well aware of the wide range of influences at work in producing “symptoms” or aggravating an organic disorder.

The media, in its crusade to explain family values in language that ascribes to a “black or white formula”, has somehow demanded that allegiance be paid to one side or the other of an often acrimonious debate: either the nuclear family is the only answer for children, or that one family group can be as supportive to children and as effective as any other. Family professionals know the truth to be more elusive and complex. Acknowledging that family breakdown is disadvantageous to children has, in some way, become associated with a “right wing” reactionary view of society and has thus made the discussion of possible remedial action more difficult. We might hope that primary prevention may be assisted by the swing of the pendulum away from its present emphasis on personal freedom and fulfilment back towards responsibility and duty, neither of which are mutually exclusive. This paper presumes no such swing, but addresses issues of secondary prevention.

Doctors will wish to assist this process and, as esteemed members of society with considerable power to influence other service providers for families and children, they are in a position of advantage. Paediatricians, with their trusted and intimate contact with families, may be among those professionals who can inform and advise parents about the common outcomes associated with a range of life events which the child may experience. This will include ways in which children’s anxiety may become manifest, how to build and maintain self esteem and self worth, and how to work towards developing the child’s own protective mechanisms. Such interventions at the disposal of the paediatrician will at best ameliorate difficulties, but, if wrongly understood and applied, may actually exacerbate problems. Alternatively, an accurate and sensitive interpretation of a problem by a paediatrician, with a secure understanding of the issues that may be involved, can support both parent and child.

This annotation aims to give the practising clinician some insight into the complexity of the possible links between events in children’s lives and outcomes in terms of wellbeing, functional disorder, and behavioural difficulty. This may assist paediatricians and others to provide parents with strategies with which to minimise the adverse effects of parental separation.

No longer under one roof: parenting in the 1990s

There is no dispute among sociologists, medical practitioners, or the legal profession that the huge increase over the last two decades in the number of children under the age of 16 who will experience their parents’ separation presents a challenge. It presents a challenge to the children themselves, to their parents and relatives, to their teachers, to family doctors, legal advisers, and to those required to provide specialist support when the challenge threatens to overwhelm.

Long term adult relationships do not only include marriage; cohabitation, which has become almost universal at some stage of the partnering cycle, presents as an increasingly more attractive, but sociologically more risky, option. Cohabitations are four times more likely to break down than marriages. Thirty four per cent of all children born in England and Wales in 1994 were born to parents who were not married to each other. Twenty two per cent live in households headed by a lone parent. After separation, married fathers remain, on the whole, more committed to their children than departing cohabiting fathers or acquired stepfathers.¹

Defining the problem

Birth cohort studies² carried out in the UK have clearly shown over several decades that there are both short and long term disadvantages to children after parental separation.³ Early effects include lower self esteem and increased health, educational, and social difficulties. Longer term outcomes such as earlier school leaving, lower vocational achievement, earlier serious relationships, departure from the family home, pregnancy, marriage, and divorce. Published research gives a general consensus on outcomes.⁴ In contrast, the causal relation between these outcomes and the experience of parental divorce *per se* is hotly disputed.

Causes of disadvantage

Some research has suggested that economic factors and a change in physical circumstances such as home and school are associated with the greatest disadvantage to children.⁵ The fact of relative poverty in reordere lone parent families is beyond dispute, with such families over-represented (75%) among children living in poverty.⁶ In the USA research has shown that one year after separation mothers and children are living on an income reduced by 40%, and by as much as 30% five years after divorce.⁷ The fact that the rapid increase in particular social problems such as criminality and psychological ill health has coincided with periods of unprecedented prosperity for larger numbers of people and major reductions in absolute poverty for most in the late 1960s and 1970s, has led to questioning of the relevance of material disadvantage to general and, in particular, psychological wellbeing.⁸

The adjustments that parents need to make in their own lives when relationships fail and the necessity to look after their own psychological and social recovery means that they are less able to recognise the requirements of their children. There is a body of research that describes how the physical and mental health of adults also often suffers during the traumas associated with family breakdown.⁹ This is so for both partners, whether they chose to end the relationship or not. The parent who moves out (usually the father) faces challenges of loss of role and loss of contact and often cramped or shared accommodation, which limits the ability to offer overnight visits to children. Parents describe feelings of loneliness and of being distanced from involvement and decision making in their children’s lives.¹⁰ Parents who are the main carers (usually the mothers), even if relieved at reduced marital tension, face the challenges of greatly increased responsibilities and the loss of practical support both in household tasks and child discipline. They often underestimate the amount of help that even an unwilling spouse had been able to provide. Wallerstein and Kelly¹¹ and Hetherington *et al*¹² have shown that reduced parental functioning which limits the parental resources available to the child often continues for two years after separation; for some parents the adjustment takes much longer.

Conflict

The importance of parental conflict has claimed the high ground as being the most damaging risk factor for children.^{13 14} The available data confirm that parental conflict within the family, or after family breakdown, is most strongly associated with adverse outcomes for the children. The correct interpretation of the data about conflict has been inappropriately extended by the well known adage: “Better a peaceful divorce than a conflictual marriage”. This statement reinforces a simplistic view of family breakdown and has led to much misunderstanding. It is often produced as a justification for divorce. Many divorces, however, occur in previously non-conflictual marriages

when one partner has an affair or becomes bored; because few divorces are peaceful the conflict is not resolved.¹⁵ In summary, there is no dispute that children do not flourish when exposed to parental conflict regardless of family type,⁸ but, equally, there is little evidence either in US or UK research that divorce removes children from parental conflict.^{15 16}

Parental separation, loss, and repartnering

Any breakdown of relationships involves loss, even when the expected gains offer recompense. For children, the loss is determined at least as much by paternity or residence as by legal marriage, so that the loss of a parent from a child-bearing cohabitation may be very significant for a child.

An increasing number of parents' relationships end within the first 10 years, 8% in the first three years and 30% in five to nine years, affecting a higher proportion of younger children.⁶ This causes difficulties for two reasons. Firstly, it is harder for the departing parent to maintain a relationship with a young child, so there are subsequently more residence and contact problems. Under the present system these problems often stand in the way of solutions at an early stage, and vital weeks pass by when a pattern of little or no contact sets in. Secondly, the child is more likely to experience one or more episodes of parental repartnering. Although financially supportive for all the family and emotionally supportive for the mother, a new step parent is less likely to be so for the child, and more likely (in a small minority) to be abusive.¹⁷

In one study, in which a group of children who had undergone multiple family breakdown was included, parental loss was found to have a marginally higher statistical association with adverse outcomes than had conflict: the subgroup who had had multiple reorganisation showed the highest rates of difficulty.¹⁵ These data reinforce US studies which found multiple breakdown to be associated with the most difficulty for children.¹⁸ Children can and do form warm and close bonds with step parents, only to experience added loss should this relationship subsequently breakdown.

General risk factors for children

Goodyer found that in the normal course of a year children will be exposed to an average of five "life events", some of which will be positive, others negative.¹⁹ Some events, such as the birth of a sibling, may appear to be positive to the parents, but can be emotionally devastating to the child. If the overall balance of life events experienced swings towards the negative, or if the experience of one event, such as parental separation, leads to the exposure of the child to a range of other negative factors, the effects may be additive or even multiplicative and the child will become more vulnerable.²⁰

Other research with school age children²¹ has emphasised the kinds of support necessary to reduce vulnerability and promote adaptation. These include warm and loving parental and adult relationships, stability in the environment, and economic security; unfortunately, factors often threatened by parental separation.

In recent years the UK and other governments have introduced changes to their legal systems which emphasise the rights of children to parental care and support. These are consistent with the World Health Organisation Charter on the Rights of the Child. The most recent legislation in the UK, and the most relevant to this discussion, is the Family Law Act 1996.

The Family Law Act (1996)

The intensive debate that the preceding Bill stimulated in both Houses during the drafting stages was largely focused

on the needs of children, with the positive outcome that children's issues have achieved a high media and public profile. The introduction to the Act outlines its purpose to support marriages in the interests of children and contains a number of measures aimed to reduce the conflict associated with divorce, in particular the removal of fault as a fact to evidence the ground for divorce and encouragement (by information giving and fiscal support) for couples to actively consider mediation. Measures to encourage parents to cooperate in joint future planning include: time to debate the outcome of separation (minimum one year) and possible routes to reconciliation; an imperative to receive and digest information about the effects of the decision to separate on themselves and their children; effective ways of approaching domestic violence and the protection of mothers and children; assessment of suitability for mediation; and mediation, not adjudication, as a preferred option for most parents.

Information giving and mediation

Mediation services have been available in this country since 1978 following the Finer Committee recommendation that a more conciliatory approach to the ending of marriage would be of more assistance to parents than separate adversarial representation. Mediation affords the opportunity for both parents to meet together with trained mediator(s) to plan living and contact arrangements and, if they choose, future financial provision for the family. Few of the wide range of professionals who provide services for families and children are aware of the importance of mediation and the availability of services has been limited by financial constraints.

Setting up new services to provide information about the process and consequences of divorce and the expansion of mediation services were piloted by the Lord Chancellor's Department and the Legal Aid Board in different parts of the country during 1997; phase II of piloting will begin in 1998.

One major advantage of identifying the problem areas for children in the present climate of family change and considering ways in which children may become vulnerable is to assist in the development of strategies to help parents support their children. It is important that paediatricians and other doctors understand both the philosophy and the practicalities of the Family Law Act 1996 and the associated information giving sessions and mediation services. They may also, however, be able to provide a different form of support in a clinical setting.

When parents contemplate separation, they often look first for support from within their own family circle and friendship networks. Unfortunately, just at a time when all their resources are needed, access becomes complicated by family and friends assuming divided loyalties, and by the secrecy which often surrounds the decision of one partner to leave.

Several studies have indicated that the family doctor is often the first person outside the family to be consulted by parents. Parents consider such a consultation as within the realms of normality and often produce physical symptoms as an outward sign of the inward emotional distress which is often the as yet unacknowledged trigger for the visit.^{9 15}

Parents recognise that help for the range of problems that they face, often for the first time, is hard to find, confusing, and often only available when crisis points are reached. In response to these findings that parents would welcome assistance at an early stage, One Plus One have developed a programme (Brief Encounters) which aims to provide health professionals with skills to enable the brief consultations possible in busy clinical practices to more

effectively support and direct couples to other services, and to use the time available to them to best advantage.

Doctors are aware of the front line part they play in the support of families, yet when they seek a service to which patients could be referred at an early stage of a relationship problem when there is still a commitment to resolve differences, they may find that they lack specific knowledge about the referral route to an effective service. Relate counsellors and others from similar organisations are increasingly providing services on primary health care premises, and in line with government directives have re-emphasised their role in persuading couples to reconsider their decision to separate. On the whole there is as yet little assistance for families as a matter of course when extraneous support is necessary. It is hoped that new initiatives will be encouraged by the philosophy of the Family Law Act 1996.

How can paediatricians support children

For children whose parents are going through, or have completed, divorce, there is little or no provision for separate advice and counselling outside the therapeutic setting in which paediatricians often see children. Because of their unique relationship with children and parents as trusted and non-labelling professionals they may have a real opportunity for diagnosis and treatment. Recognising the possibility of symptoms having a functional basis may be the key to moving forward for a child or young person with recurrent pain, sleep disorders, school difficulties, chronic fatigue syndrome, eating disorders, anorexia nervosa, or a variety of other symptoms.

There are clearly situations where immediate presumptions that in reordered families these issues are responsible for symptomatology can be more damaging than therapeutic. The clinical appointment offers an occasion for these issues to be raised with parents and a possible "treatment" plan discussed, which may have more to do with the reorganisation of family dynamics than medical intervention. Few professionals other than general practitioners have similar access and ability to address most areas of a child's life and paediatricians as "outside opinions" may have more clinical power and a more effective armamentarium of interventions at their disposal. Paediatricians as a group are also in a position where their power to lobby policy makers would be expected to result in new genuine initiatives to support children before recognised symptoms require orthodox treatment.

Some professionals consider that the school environment could provide a safe arena to discuss the shared problems of family separation and reorganisation. Successful small scale interventions involving parents and children have been introduced in the USA (N Kalter *et al*, Time limited developmental facilitation groups for children of divorce: early adolescence manual; unpublished manuscript, University of Michigan, 1993). In the UK there are pockets of good practice where family issues are part of a school personal and social education programme, but there is room for development. Organisations such as Relate have two pilot programmes to provide counselling for adolescents in Northern Ireland and the Midlands (Relateteen, details from Relate Marriage Guidance, Rugby).

Some mediation services provide the opportunity for children to be involved either directly or by being offered a separate mediation session. In both public and private law all ways of involving children raise important ethical issues surrounding confidentiality and the safeguarding of children's interests which have yet to be addressed, but require urgent attention.

There is a growing recognition that all professionals who are concerned with children and families should develop closer links with each other for training development and practice.

The implementation of the Children Act 1989 highlighted the fact that the medical and legal professions had important contributions to make to the practice of each other and allied professions. The National Council for Family Proceedings, based in Bristol, and the Family Justice Studies Committee under the direction of The Rt Hon Lord Justice Thorpe are promoting ways of developing interdisciplinary training and cooperation to promote understanding of the legal, medical, psychological, and social influences which affect families and children.

Marriage preparation and parenting: new initiatives

The public debate about marriage which surrounded the passage of the Family Law Bill through the UK Parliament has given a welcome emphasis to the necessity of preparing young people for long term adult relationships and parenting. Programmes which concentrate on the realities of marriage and the demands made by the arrival and management of children are being set up in various parts of the country in conjunction with Relate, the London Marriage Guidance Council, and One Plus One. Partnerships are also being formed with religious and ethnic groups such as the Jewish Marriage Council and the Afro-Caribbean support group, and those from the Asian community who represent and demand different beliefs and responses.

Education to communicate

A Schools Sex Education Programme at present being offered in some areas of the UK is based on methods of assisting pupils to acquire negotiation and communication skills within personal relationships and to withstand pressure more effectively. Evaluation has shown that it is possible to influence both beliefs and behaviour in a school based intervention.²⁴ Conflict is a feature of every viable personal relationship. Concentration on the acquisition of skills to successfully resolve conflict rather than deny or ignore its existence in everyday life may help to reduce the increasing numbers of children who find themselves at the centre of such continuing adult disputes.

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Developing injury surveillance in accident and emergency departments

Injuries are the leading cause of death among children and young people in the industrialised world and are a major contributor to disability.^{1,2} In the early 1990s, both the UK Department of Health³ and the Scottish Office⁴ identified accidents as a priority area for action in their respective policy statements. However, efforts to formulate and implement local, national, and international preventive policies have been hindered, at least in part, by the paucity of reliable data on injury frequency, cause, and outcome.

Many countries compile routine data on injuries derived from mortality statistics, occupational records, or through incident reporting—for example, to police and fire departments.^{2,5-7} These data are of variable relevance and quality, however, and are often inaccessible. The establishment of specially designed injury surveillance systems is widely advocated as a prerequisite for the development and evaluation of injury prevention strategies, particularly at a local level.^{4,7,8}

This paper reviews the published literature on injury surveillance based at accident and emergency departments and attempts to identify the characteristics of a successful injury surveillance system (ISS).

What is injury surveillance?

Surveillance has been defined as the "continuous analysis, interpretation and feedback of systematically collected data".⁹ It implies a proactive mechanism for identifying problems and implementing appropriate preventive strategies on a routine basis. Injury surveillance may be regarded as a specific form of public health audit. It can be designed to generate information on both the numbers and characteristics of injuries, such as the injury location, circumstances, cause, and mechanism. This information is crucial for detecting trends in injury incidence, identifying risk factors, developing injury control measures, and assessing their impact. This process is thus an epidemiological means to a public health end, namely prevention. As it is likely that most moderate and serious injuries present to hospital accident and emergency departments, many ISSs have been implemented in this setting.

Who needs injury surveillance?

Information about injuries is required at both national and local levels.¹⁰ Nationally, injury data are used by government departments for policy making and priority setting; by researchers investigating epidemiology, treatment, and prevention; and by a range of other voluntary and commercial organisations interested in injury. Locally, injury data are required for planning health services, developing and implementing safety policies and standards, and for evaluating the effectiveness of interventions.

National injury surveillance systems

Many industrialised countries now have national ISSs based within accident and emergency departments designed specifically to monitor injury events. Examples have been reported from the USA,² Australia,¹¹ Canada,¹² and elsewhere in Europe (personal communication, Consumer Safety Institute, Amsterdam) (table 1).¹³⁻¹⁵ Other countries have identified the need for such a system. A national ISS is being developed in Sweden¹⁶ and a national minimum data set for emergency departments has been advocated in New Zealand.¹⁷

Local injury surveillance systems

National systems are, however, often insufficient for effective injury prevention. Differences in local conditions are likely to contribute to differences in the distribution of injury, making local analyses important.⁷ As a result, many community based groups and professionals have attempted to establish local ISSs to fill this gap.

Pioneering work in this field has been carried out in North America and Australia.^{12,18-21} The UK has been slow to develop local accident and emergency based surveillance schemes, with a few notable exceptions. In 1993 the Canadian Hospitals Injury Reporting and Prevention Programme (CHIRPP) system was imported into the accident and emergency department at the Royal Hospital for Sick Children, Yorkhill in Glasgow, the largest children's hospital in Scotland.²² In Wales, the All Wales Injury Surveillance System (AWISS) was established in 1995 (table 2).²³

Other studies

In some centres, local data on injury are compiled by merging conventional accident and emergency department records with information on injuries.^{24,25} In one study, E codes were prospectively assigned to accident and emergency patient records on a trial basis to assess their usefulness. The accuracy of these E codes was estimated to be 98% when manually checked with case notes.²⁵ Although such initiatives may provide valuable local data on broad causal categories, they do not provide detailed information on the injury circumstances, location, and mechanism.

Methodological variations

Although most industrialised countries now operate some form of injury surveillance, there is little methodological consistency in their approaches. Sampling techniques, collection methods, collection location, data classification, and data coding vary between and within countries. Studies in the USA have identified wide variations in data collection