completion of a thesis as an end in itself, so that it can be notched up on the curriculum vitae, should surely not be a requisite for all consultants, and should certainly not be used as an entry criterion. The MS and MD examinations are not designed to be qualifying examinations. They often take a long (and elastic) time to complete, the objectives are often unclear, and regrettably research is supervised to a variable standard. Casualties of the system cannot necessarily salvage a thesis in contrast to professional and qualifying examinations where the opportunity to 'resit' is expected and quite routine. Yet if the letters after your name are to mean anything, failure must be a possibility.

The attributes encouraged and assessed in preparation of a thesis include a grasp of research methods and the critical evaluation of data. The sections and forums of The Royal Society of Medicine have provided opportunities for trainees to do just this, and to stretch their minds and try out their original ideas in front of a critical but usually supportive and encouraging audience including the members of their specialty self-selected for their interest in research and continuing education. From these sorties should follow scientific papers, subjected to peer review, which may well serve most trainees better than a thesis lost for ever in a dark corner of the University Library. Peer reviewed papers achieve the objective in a more flexible way, and provide the opportunity for a range of research experience, which may bring credit for its breadth, depth or volume. Peer reviewed papers are the currency of scientific endeavour. The degree by thesis, on the other hand, is a higher degree of the university which is intended to recognize a particular commitment and training in research, required of some consultants within the specialty but which is certainly not for all consultants.

In our own programme (the West London Rotation which comprises the cardiac and thoracic practices of Harefield, Hammersmith, The Middlesex and St George's Hospitals), we would prefer to take on trainees before they commit themselves to a protracted period of research, who when, and only when, trainers and trainee have confidence that the career choice is the correct one, plan some research exposure. That may be clinical research in service, laboratory work, undertaken in Britain or abroad, towards a thesis or peer reviewed publications, but it should be negotiated between trainers and trainee to enrich the educational experience. The would-be registrar should not assume that we will be bowled over by the wonder of it all when we are confronted with someone who, from our perspective, may have been used as a pair of hands in someone else's molecular biology laboratory.

So how should we respond to market forces? While one has to give credit where it is due, for effort, tenacity, and achievement, if we see candidate A who has spent 2–3 years up a blind alley doing so-called research, we may well prefer to appoint candidate B, 2–3 years younger, with no 'research' but the same potential as A had 2–3 years earlier. Otherwise candidate B will feel compelled to spend 2–3 years earning a place on the training programme by doing 'research' and the system will perpetuate itself. It is up to

the appointment committees, perhaps guided by the college and university representatives to take a view on this rather than slide into a situation where a research is seen as prerequisite to entering training rather than a well-judged component of the training process.

Tom Treasure
Deputy Editor

REFERENCE

1 Need all young surgeons be masters? Br J Hosp Med 1986;36:163

Children coping with the death of a sibling

Chronic childhood illness leading to death is uncommon in developed countries. In one major review of effects on siblings¹ three questions were asked: (1) does it help or hurt to involve siblings in the care of a dying child?; (2) what should the role of siblings be?; and (3) what anticipatory guidance should parents receive to help siblings? (see Jacobs et al., 'Hazard of using a child as an interpreter', in this issue JRSM, p 474P). The answers depend on contextual variables such as age, sex and general development of the siblings, the mental health of parents, the previous and current relationships within the families and the type of illness suffered by the dead or dying child. Our understanding of bereavement in children is based on a model applied not only to death but to many events involving losses. Three stages occur lasting about 6 months in total: numbness and denial; anger and guilt; and, finally, acceptance and resolution. However, the validity of this staged and time limited model has been criticized^{2,3} on the grounds of sample bias and conflicting evidence from larger epidemiological studies.

In normal bereavement, there is a process of detachment from the dead person and a re-investment of emotional energy into new relationships. In abnormal grief this fails to occur and it is thought that this is due to emotional ambivalence towards or guilt about the dead person, or because the death was sudden^{4,5}.

Anticipatory mourning is a rehearsing of detachment and likely to be helpful in the subsequent bereavement. It is thought^{2,5,6} that the circumstances of the death are important in determining outcome and it has been suggested that siblings should be told what is happening and should be prepared for and be part of the mourning process. In a study⁷ of 28 siblings aged between 5 and 21 years from 14 families who had lost a child from leukaemia, siblings were scored on a check-list of facilitative measures (knowledge of illness, participation in care, visiting regularly, attending the funeral and seeing the body after death). Self-report self-esteem and parental and teacher behavioural questionnaires were administered. High scores

on facilitative events were associated with higher self-esteem scores suggesting that these events may protect children's self-esteem. However, high self-esteem was not correlated with low levels of behavioural disturbance. Indeed, of 10 children who had deviant high scores on Rutter A and B scales, four had had many facilitative events, and another four had not been prepared for the fatal outcome of their sibling's illness. This implies that facilitative events do not always lessen the risk of behavioural disturbance in siblings. Finally, self-esteem scores were negatively correlated with duration of illness implying that chronic and drawn out deaths have a more negative effect on self-esteem than sudden death.

Sudden infant deaths are unexpected and have a major impact on families perhaps because there is no anticipation of death. In a case controlled study⁸ conducted a year after death, 38 children of average age 6 years, bereaved of an infant sibling, were rated on the child behaviour check-list by their mothers. The bereaved siblings had significantly higher total scores and higher sub-scale scores on depression, social withdrawal and aggression than the control group. The authors comment that this may be due to distorted parental perception because of parental depression or because of true sibling disturbance.

Siblings sometimes take on caring roles in families. A case controlled study⁹ of 24 pre-school children of siblings with major handicaps, found that on maternal self-report, sibling girls tended to have more responsibilities and household tasks compared to boys though the differences were not significant. Girls also had fewer privileges and were more restricted than boys, implying that mothers treated siblings differently depending on sex, i.e. being more lenient with sons and less so with their daughters.

Caring directly for their ill sibling may have detrimental effects due to developmental changes in the concept of causality. Young children often explain events by believing that they were responsible through unconnected actions or thoughts ¹⁰. There are many descriptive cases of this happening, particularly of children feeling guilty because they harboured aggressive or death wishes towards their siblings prior to death ⁵.

Younger children may be more vulnerable because they are more dependent on parents, and may view the parental preoccupation with their ill child as a rejection¹¹. The preoccupation may be related to whether parents are depressed and to the severity of the illness. A case controlled study¹² of 59 children with spina bifida and their 44 siblings showed that sibling adjustment measured by a teacher rating scale varied with severity of illness. Those children with mild spina bifida had siblings with the greatest behavioural problems which seems counter-intuitive. However, sibling social adjustment was negatively correlated with parental scores on the Rutter malaise inventory. Overall behavioural disturbance was four times greater than in the control group. There was no direct measure of parental depression in this study, but another study showed that maternal depression scores using the Beck depression inventory were higher in a

group of mothers caring for severely ill premature babies compared to healthy babies¹³. Maternal depression has a multifactorial causation and is known to affect maternal attending and caring capacity towards their children¹⁴ and to have a negative effect on their children's behaviour.

What anticipatory guidance should parents be given? First, parents should know that parental depression may not only distort how they perceive their children's behaviour but also have a direct effect on sibling behaviour. Secondly, parents should be aware that they may deal with their children differently depending on their child's sex. Thirdly, chronic illness and death of a child has a negative effect on sibling self-esteem and involvement of their children in caring and mourning usually has a positive effect on self-esteem. However, involvement will not always prevent considerable behavioural problems. Finally, professionals and parents should be aware that younger children may show their distress and worry through behavioural disturbance, poor sleep patterns and fantasies: such signs need appropriate attention from those involved.

L Kroll

Senior Registrar in Child and Adolescent Psychiatry, Prestwich Hospital, Manchester, England, UK

B Jacobs

Lecturer in Child Health, University of Manchester, Manchester, England, UK

Correspondence to: Dr L Kroll, Senior Registrar in Child and Adolescent Psychiatry, 96 Summerseat Lane, Ramsbottom, Bury, Lancashire BL0 9TP, England, UK

REFERENCES

- 1 Drotar D, Crawford P. Psychological adaption of siblings of chronically ill children: research and practice implications. J Devl Behav Paediat 1985;6:355-62
- 2 Dyregrov A. Childhood bereavement: consequences and therapeutic approaches. Assoc Child Psychol Psychiat News 1994;16:173–82
- 3 Eiser C. Growing Up With a Chronic Disease: The Impact on Children and Their Families. London: Jessica Kingsley, 1994
- 4 Baker JE, Sedney MA, Gross E. Psychological tasks for bereaved children. Am J Orthopsychiat 1992;62:105–16
- 5 Raphael B. The Anatomy of Bereavement. London: Hutchinson, 1984
- 6 Bowlby J. Loss, Sadness and Depression. London: Hogarth Press, 1980
- 7 Pettle MS, Lansdown R. Adjustment to the death of a sibling. Arch Dis Child 1986;61:278–83
- 8 Hutton CJ, Bradley BS. Effects of sudden infant death on children. A comparative study. J Child Psychol Psychiat 1994;35:723-32
- 9 Lobato D, Barbour L, Hall LJ, Miller CT. Psychosocial characteristics of preschool siblings of handicapped and non-handicapped children. J Abnorm Child Psychol 1987;15:329–38
- 10 Eiser C. Communication with sick and hospitalised children. J Child Psychol Psychiat 1984;25:181–9
- 11 Lansdown R, Goldman A. The psychological care of children with malignant disease. J Child Psychol Psychiat 1988;29:555-67
- 12 Tew BJ, Lawrence KM. Mothers, brothers, and sisters of patients with spina bifida. Der Med Child Neurol 1973;15:69-76
- 13 McGettigan MC, Greenspan JS, Antunes MJ, Greenspan DI, Rubestein SD. Psychological aspects of parenting critically ill neonates. Clin Paediat (Phila) 1994;1:77–82
- 4 Cox AD, Puckering C, Pound A, Mills M. The impact of maternal depression in young children. J Child Psychol Psychiat 1987;28:917–28