Children and the inverse care law

Elspeth Webb

Department of Child Health, University of Wales College of Medicine, Cardiff CF4 4XN

Elspeth Webb, *senior lecturer*

Correspondence to: Dr Webb

BMJ 1998;316:1588–91

It is over 25 years since Tudor Hart described the inverse care law. This states that "the availability of good medical care tends to vary inversely with the need for it in the population served."[1] Although Tudor Hart did not provide hard evidence to support his hypothesis, others have since. West and Lowe showed that for children's services need and provision were badly matched.[2] Given the lack of strategic planning centred on children and the low priority given to the commissioning of children's services, this situation is unlikely to have changed.[3]

The inverse care law also operates in terms of access to services. Those with least need of health care use the health services more, and more effectively, than do those with greatest need.[4] This applies to preventive interventions as well as treatments. Health promotion based on providing information in standard formats to the population as a whole has had the greatest impact on people who are socially and economically advantaged.[5]

Summary points

- Half a million socioeconomically deprived children and young people are marginalised within society in the United Kingdom
- Social exclusion is associated with poor health and very poor access to health services
- Addressing the needs of these young people ought to be a priority since poor health has implications for their adult health and welfare
- Strategies to improve their health care, with particular emphasis on the role of primary care, must be developed and implemented
- If Britain is to change its attitudes to children fundamentally, a children's rights commissioner must be appointed

Background

Over one third of the children in the United Kingdom grow up in conditions of socioeconomic deprivation. In consequence they experience poorer health than their more affluent peers.[6] Within this socioeconomically deprived population exist several groups of children and young people who are profoundly marginalised—for example, homeless children, those in care, travellers, and refugees. They have both poor health and poor access to health services.[7–14] Other groups, such as children from minority ethnic communities and adolescents, have poor access to services.[15–17] These young people are not in themselves inherently unhealthy, except if they are disadvantaged in some other way. They then face double or triple jeopardy.

Homeless children

The indifferent health and poor access to services of homeless people are well described.[7–9] Official statistics, however, are available only for subgroups of this population, such as those housed by the local authority. In 1993, 149 410 households were accommodated by councils in England and Wales, 75% of which had dependent children.[18] Those resident in women's aid refuges comprise a relatively unstudied subgroup of homeless people.[19] In England and Wales over 35 000 children each year pass through these refuges, with an unknown but similar number referred on to other safe houses (personal communication, Women's Aid). It is not known how many children live on our streets; some are as young as 12. Every year 10 000 young people leave the care system, and a large but unknown proportion of them end up "living rough."

Travellers

Travellers are often viewed as a subgroup of homeless people, but this view is both incorrect and unhelpful. It certainly does not reflect the profound discrimination these people experience within society. Traditional traveller communities in Britain include people of Roma extraction. Others have their origins in indigenous nomadic communities. Some of these are ancient, while others took to the road in later centuries—for example, during the Irish famine and the Highland clearances. Travellers were not included in the 1991 census. Estimates are based on Department of Environment figures for caravans on official sites. There are probably at least 50 000 travellers, 30 000 of whom are children. It is claimed that they have the poorest health of any minority community in the United Kingdom.[11]

Latterly, so called "new age" travellers have adopted a nomadic lifestyle in response to different social pressures. They do not have rights of access to official sites, so their situation in respect of health and health care may be even worse than that of the traditional

communities. They are an unstudied phenomenon, but they have not given up rights to statutory services. We continue to have a duty of care to their children.

Refugees

Refugee communities experience disadvantages at many levels. They share with other minority ethnic communities the experiences of racial discrimination, poverty, and poor access to services.[15 16 20] Over and above this, refugees and asylum seekers have great difficulty accessing services, particularly primary health care.[13 14] Disadvantageous factors that they meet after their arrival in the United Kingdom include racism, homelessness, language difficulties, uncertain residency status, and difficulties in adapting to peace. These factors are over and above the extreme trauma experienced by many refugees and the loss that pervades their lives—loss of home, parents, family, friends, culture, work, health. The population of young people in custody, another hugely disadvantaged group, includes over 70 young asylum seekers, many of whom arrived in Britain as unaccompanied minors.

Children in care

About 80 000 children are currently "looked after" in the United Kingdom, abandoned, unwanted, or removed from care of their parents. They may have been abused, neglected, or beyond parental control. Illness or disability in the child or parental illness, disability, or drug abuse may have precipitated family breakdown.[21] These factors are associated with poverty. Thus, this is a group of children who are already vulnerable and disadvantaged before coming into the care of the local authority.

General interventions

Responding to the healthcare needs of these groups requires the development of appropriate strategies. Given the emphasis currently placed on local planning and commissioning of health services, "plugging" them back into primary care is crucial. Fundholding, the attachment of health visitors to general practice, and targets linked to payment have led to an erosion of the public health role of the health visitors, the development of an inflexible system unable to respond to changing demography, and the advent of groups who are considered "budget unattractive"—too great a drain on resources. This has exacerbated the already poor access that these groups experience. Contracts for providing primary care to these communities should be agreed separately, and their immunisation and surveillance uptake rates should be excluded from calculations of general target attainments.

The Audit Commission recommended that services should be targeted at children in need.[22] The welfare of these children should be as high on the agendas of departments of community child health as are child protection and developmental medicine. Consultants in community health should be key players and ensure that named health professionals within their departments have responsibility for these children. This may include hands-on care, audit, demography, training, and interagency working. It may be that a team including people from other disciplines is needed. Whether these named professionals are doctors or health visitors will depend on the needs of the group in question. They should carry their work beyond mere statutory obligations and be proactive. The appointment of a named professional for "adoption and fostering" has not in itself been enough to address the unmet needs of children in the care system. The model of a specialist health visitor serving groups with special needs of one sort or another is one that needs further exploration and development in the context of marginalised communities with poor access to health care.

Acute services should work within a truly combined child health service that retains traditional paediatric values—that is, a "whole child" view that encompasses the family and social contexts of illness. These holistic values may be lost in hospital care that is increasingly based on specialties. Appropriate response demands health professionals who are familiar with the concepts underlying equal opportunities and non-discriminatory practice. This is an area that is currently neglected in medical education in Britain.

Intersectorial working parties should address the needs of particular groups within a local context, with community development as a core ethos. They should not be merely advisory but have executive authority to develop and implement local strategies. Public health involvement is essential in addition to informed input from those who provide health care. Liaison with local authorities may lead to fruitful partnerships that can address the links between environment and health. Environmental improvements should be planned with the communities themselves, such as travellers and those in temporary accommodation. Local authority hostels should be safe environments that include provision for safe play and do not house children in the same buildings as Schedule 1 offenders (those with a previous conviction for an offence against a child). Particular hostels could be tailored for families with children or for those with a disabled or sick child.

Specific interventions

Children in refuges

The key issue for children in refuges is violence. Over half are victims of violence. Nearly 75% have witnessed violence to their mothers first hand, including 10%

PAUL BALDESARE/PHOTOFUSION

Poverty and social exclusion combine to adversely affect the health and health care of at least half a million British children

JEZ COULSON/INSIGHT

Missing out

who have witnessed sexual abuse or rape.[23] These experiences are emotionally very damaging and must be addressed in any strategy. Clinical psychologists with experience in counselling after abuse need to develop links with refuges and support their child care workers .

Children living rough

Street children are marginalised in every way. As adolescents they are a hard to reach group. Their lifestyle makes the use of standard services difficult, and their often profound alienation and distrust of statutory and mainstream services preclude access to care. Many of them have been abused previously, and all of them risk violence, prostitution, and drug abuse.[24 25] Their needs are unique, and specific and imaginative strategies are needed. Mobile night-time clinics, for example, could provide services valued by the clients themselves, not just those that reflect professional priorities. In policy development, linking in with voluntary agencies such as Voices from Care would seem desirable.

Refugees and asylum seekers

Refugee children have unique needs ranging from tuberculosis prevention to the treatment of victims, and witnesses, of human rights abuses. Since these children often come from war torn areas they may have received no immunisations or child surveillance. At the very least, catch up surveillance and immunisation services should be provided.

Responding to the emotional needs of these children is hampered by the broader issues of poor access to service. There are additional difficulties in providing psychological and psychiatric care to populations in whom the experience and the language of distress may be vastly different from our own, and for whom our models of psychosocial pathology and our treatment strategies are invalid.

A survey of Somali refugees in Cardiff revealed a large number of children with important health problems whose life experience included violence, bereavement, separation, disruption, homelessness, and poverty.[26] The authors believed that distress was exacerbated by the inappropriate responses of the statutory services to the arrival of these children—responses based on glib assumptions that they were developmentally intact and would slot easily into Western systems of education, health care, and welfare. An increase in Somali workers at all levels was essential for "culturally appropriate care" to be provided. The expertise within the refugee community was not tapped, partly because of regulations preventing professionals qualified in Somalia from working within our agencies except as interpreters and link workers. The refugees included doctors, nurses, pharmacists, and teachers who no doubt could have been invaluable. Some flexibility and imagination is necessary to allow skilled and experienced refugees to work in partnership with their Western counterparts.[26]

Conclusion

The children discussed here experience the disadvantages of socioeconomic deprivation but face additional barriers to services as a result of their social marginalisation. There are nearly half a million of these children in the United Kingdom at any time (excluding street children and refugees, for whom reliable figures are not available). This is about 5% of the 12 million young people aged under 16 years. If disadvantaged children from minority ethnic communities are added, the figure is higher still—about 8% of the under 16 population of Great Britain belong to these communities and face a greater likelihood of living in poverty than do members of the ethnic majority.[20 27] Given what we know about the health status of all these groups, and the implications this has for adult health, strategies to address needs of these children must be a priority for central government and those charged with commissioning and providing health care.

Responding to the plight of these children requires not just implementation of the measures described above but social and legislative change. The Criminal Justice and Public Order Act 1994, the Asylum and Immigration Act 1996, and the withdrawal of benefits to those aged under 18 have been detrimental to the health and welfare of children and young people.[11 29] We have a parliament that is not bound or inclined to consider the impact of its wider legislation on children, reflecting the marginalised status all children have in our political culture. It is one in which, in a mature Western democracy, politicians can propose curfews for teenagers as a solution to the symptoms of poverty and social exclusion, and cut benefits to lone parents to address the fiscal problems of the welfare state. Largely absent from the debate on cuts in benefits paid to single parents has been any assessment of its likely impact on the health and welfare of already disadvantaged children, or the acknowledgment of parenting as an important occupation. Britain needs a radical cultural change in its attitudes to children, a change that is unlikely to be achieved without the appointment of a children's rights commissioner.

Funding: No additional funding.
Conflict of interest: None.

1 Tudor Hart J. The inverse care law. *Lancet* 1971;i:405-12.
2 West RR, Lowe CR. Regional variations in need for and provision and use of child health services in England and Wales *BMJ* 1976;ii:843-6.
3 Webb E, Naish J, MacFarlane A. Planning and commissioning of health services for children and young people. *J Public Health Med* 1996;18: 217-20.
4 Whitehead M. *The health divide*. London: Penguin, 1988.

5 Whitehead M. Tackling inequalities: a review of policy initiative. In: Benzeval M, Judge K, eds. *Tackling inequalities in health an agenda for action.* London: King's Fund, 1995.
6 Spencer N. *Poverty and child health.* Oxford: Radford Medical Press, 1996.
7 Barrie-Foy GE. The health of children in temporary accommodation. *Health Visitor* 1996;70:144-5.
8 Health Visitors Association, British Medical Association. *Homeless families and their health.* London: BMA, 1989.
9 Lissauer T, Richman S, Tempra M, Jenkins S, Taylor B. Influence of homelessness on acute admissions to hospital. *Arch Dis Child* 1993;69:423-9.
10 Utting W. *Children in the public care.* London; HMSO, 1991.
11 Hawes D. *Gypsies, travellers and the health service: a study of inequality.* Bristol: Policy Press, 1997.
12 Walker PC. The health of travellers. *BMJ* 1986:293:1322.
13 Refugee Council. *The health of refugees.* London: Refugee Council, 1994. (National Development Team Conference Report.)
14 Deale J. Refugee access to primary health services. *Share* 1997;16:78.
15 Smaje C. *Health, "race" and ethnicity—making sense of the evidence.* London: King's Fund Institute, 1994.
16 Webb E. Meeting the needs of minority ethnic communities. *Arch Dis Child* 1996;74:264-7.
17 Malus M. Towards a separate adolescent medicine. *BMJ* 1992;305:789.
18 Brooks R, Ferguson T, Webb E. The inverse care law and children resident in refuges for women who are victims of domestic violence [abstract]. In: *Proceedings of the Royal College of Paediatrics and Child Health*, 1997;1:83.
19 Bradshaw J. Racial disadvantage. In: *Child poverty and deprivation in the UK.* London: National Children's Bureau, 1990:40.
20 Packman J. *Who needs care.* London: Blackwell, 1996.
21 Blackman C, Fitsimons B. *Seen but not heard: coordinating community child health and social services for children in need.* London: Audit Commission, 1994.
22 Abrahams C. *The hidden victims: children and domestic violence.* London: National Children's Homes Action for Children, 1994.
23 Poweres JL, Eckendorode J, Jaklitsh. Maltreatment among runaway and homeless youth. *Child Abuse Neglect* 1990;14:87-98.
24 Lawrenson F. Runaway children: whose problem? *BMJ* 1997;314:1064.
25 Davies M, Hayes S, Webb E. The health and healthcare of Somali refugees in Cardiff. In: Hindley P. *Today's children, tomorrow's parents: mental health promotion and prevention with children and families.* London: Conference Unit, St George's Hospital Medical School, 1997:156-67. (Conference proceedings.)
26 Berlin A, Gill P, Eversley J. Refugee doctors in Britain: a wasted resource. *BMJ* 1997;315:264-5.
27 Woodroffe C, Glickman M, Barker M. *Children, teenagers and health—the key data.* Buckingham: Open University Press, 1993.
28 Jobbins D. The impact of the Asylum and Immigration Act 1996 on the health of refugees and asylum seekers in the UK. *Share* 1997;16:5-6.

(Accepted 16 January 1998)

Administration of medicines in school: who is responsible?

M J Bannon, E M Ross

By the age of 4 years, Jamie had experienced three severe allergic reactions after exposure to peanuts. His general practitioner diagnosed peanut allergy and advised that Jamie's carers should not only be capable of recognising the early signs of anaphylaxis but should also be prepared to administer subcutaneous adrenaline if necessary. After a meeting with Jamie's schoolteacher, his mother was disturbed to be told that, while the school was sympathetic, teaching staff were unable to administer adrenaline injections as this was a medical rather than a teaching responsibility. She was also advised that the school nurse covered several schools during the working week and could not be always available to give adrenaline injections. Jamie's mother then raised a question that has been asked by many other parents: just who is responsible for the administration of medicines to children while they are at school?

This has been a contentious issue for many years, regularly resulting in conflict between parents and teachers.[1] The background to the problem is complex and is a result of diverse factors.

Summary points

- Chronic illness is relatively common in schoolchildren and often requires treatment during school hours
- There is no legal requirement for schoolteachers to administer medicines to children at school
- School health services are non-resident and are focused on health promotional activities rather than providing acute medical care for pupils
- Both parents and prescribers of drugs for children must liaise effectively with school staff
- The use of individual healthcare plans in this context represents a constructive way forward, but these have yet to be widely implemented in practice

Paediatric Directorate, Northwick Park and St Mark's NHS Trust, Northwick Park Hospital, Harrow HA1 3UJ
M J Bannon, *consultant paediatrician*
King's College London, Mary Sheridan Centre, London SE11 4QW
E M Ross *professor of community paediatrics*
Correspondence to: Dr Bannon.

BMJ 1998;316:1591–3

Changing nature of childhood illness

Not only is chronic illness common among schoolchildren but inadequate treatment may impair a child's academic progress and general wellbeing.[2,3] There is also evidence that the epidemiology of childhood illness is changing. Recent research suggests that, for every 1000 schoolchildren, as many as 160 may have symptoms suggestive of asthma,[4] four have a diagnosis of epilepsy established by the age of 11,[5] and between one and two children have insulin dependent diabetes.[6] Furthermore, the prevalence of asthma and diabetes seems to be rising.

There are, in addition, an increasing number of children who present with "new" disorders that have implications for their treatment at school. Foremost among these is peanut allergy, which represents the most common cause of food mediated fatal anaphylaxis and which may affect as many as one child in every 200.[7] Difficulties also arise for children who have attention deficit hyperactivity disorder and who require the administration of methylphenidate during school hours,[8] those who are known to be infected with HIV,[9] and those who suffer from haemoglobinopathies, particularly sickle cell disease.[10]

After the implementation of the 1981 and 1993 education acts, an increasing number of children with substantial physical and medical disorders now receive their education in mainstream schools.[11] These include children with cystic fibrosis[12] or malignant disease[13] and those who have had surgical repair for congenital

heart lesions.[14] An increasing number of children who have had tracheotomies and gastrostomies performed are also taught in mainstream schools.[15] Consequently, teachers in mainstream schools are likely to encounter a wide variety of childhood illness that may require treatment during school hours.

Parental expectation

With the publication of the patient's and children's charters,[16 17] many parents now feel empowered to demand that teachers take responsibility for treating childhood illness during school hours. Handbooks such as *Contact a Family* list the flourishing number of parental support groups, many of which would be willing to endorse parents in this respect.[18] Some parents hold the view that teachers act in loco parentis with respect to the supervision of children while they are at school and that this role should include taking responsibility for the administration of medicines if necessary. Parents would also argue that numerous devices and techniques have been developed to enable non-professionals to deliver drugs effectively to children. These devices include asthma inhalers, rectal diazepam sachets, and preloaded apparatus such as the EpiPen, which allows the administration of adrenaline in case of suspected anaphylaxis. Parents argue that, if they can learn to use these devices safely, why cannot teachers?

On the other hand, many teachers understandably express anxiety about accepting liability for what they perceive to be a medical rather than an educational issue and one for which they have received little or no training.[1] Storage of medicines at schools is also fraught with difficulty. A recent survey has indicated that, regrettably, a minority of schools allow children to be responsible for their own asthma inhalers.[19]

Teachers' awareness of childhood illness

Surveys conducted by health professionals have shown that teachers have limited understanding of common chronic childhood illness including asthma,[20] diabetes,[21] and epilepsy[22] and that they are given little if any instruction on medical issues during their training. However, they showed a positive attitude towards the integration of children with chronic disorders into mainstream education and requested further specific training about the classroom implications of such disorders. A further study showed that teachers had an imperfect understanding of the school health service in terms of its remit and administration.[23]

JEZ COULSON/INSIGHT

Few schools allow children responsibility for their own inhalers

Summary of recommended core activities for school nurses[25]

5 year old children (year 1)
- Conduct structured school entrant health interview with parent
- Measure height and weight, ensure completion of preschool examination of heart, testes, and other preschool concerns
- Measure visual acuity
- Measure hearing (sweep test)
- Discussion with teacher to identify concerns

7-8 year olds (year 3)
- Measure visual acuity
- Measure height and weight
- Opportunity for general health check

11-12 year olds (year 7)
- Measure visual acuity
- Measure height and weight
- Opportunity for general health check

14 year olds (year 10)
- Conduct general health check
- Send questionnaire to parents and pupils

Role of the school health service

Most parents have some contact with the school health service and may be aware that each school should have a named nurse and doctor. Surely the school nurse would be ideally placed to administer drugs or deal with other medical issues as they arise in school? The reality, however, is that school health workers are not resident and have numerous schools on their individual caseloads. Secondly, since its inception in the early years of this century, the school health service has been preventive rather than therapeutic in its focus, with activities that have always been based on health promotion and disease reduction.[24] The roles, responsibilities, and recommended set of core activities of the school nurse have been defined recently in a report by a multidisciplinary working party (see box).[25] School nurses are registered general nurses, who often also have specialist qualifications in sick children's nursing or school health. A key activity for them is the definition of a health profile for each school, which outlines the health needs of pupils and which is updated regularly.[26] Sadly, the number of school nurses seems to have been reduced in many districts.[27]

Supporting Pupils with Medical Needs in School

Several voluntary support organisations have already produced excellent information about common childhood illnesses for teachers, and at least one interprofessional group has carefully considered the issue.[28] However, the most important recent develop-

ment has been the publication of *Supporting Pupils with Medical Needs in School*.[29] This document represents a rare but welcome example of interdepartmental collaboration between health and education. It was produced at the request of teachers, their unions, and local educational authority staff after many months of extensive consultation and considers three main areas.

- The complex legal framework (which includes the Health and Safety at Work Act 1974, the Medicines Act 1968, and the Education Act 1993) is interpreted. The conclusion is that there is no legal duty requiring school staff to administer drugs to children, which remains a voluntary role. The term in loco parentis is obsolete and is not relevant in this context. However, school staff who are in charge of pupils have a duty in common law to act in the same manner as a responsible parent in order to ensure that children remain safe and healthy while on school premises. In certain circumstances teachers might be expected to administer drugs or to take appropriate action in an emergency.
- Each school is advised to draw up general policies and procedures in order to support pupils with medical needs.
- The use of individual healthcare plans is suggested in order to ensure that school staff are sufficiently informed about a pupil's medical needs, including the administration and storage of drugs. It is recommended that such plans should be jointly agreed between a child's parents, medical carers, and teachers and should provide explicit advice about appropriate measures to be followed in an emergency. Drugs must be readily available in an emergency and must not be locked away.

The way forward

Supporting Pupils with Medical Needs in School represents a positive step forward, but it is advisory rather than statutory. We recommend that further action should be taken.

- The school health service must take a lead in this area, with the school nurse as the focal point. In particular, school health profiles could be used as an index of local need, which might be incorporated into children's services plans. Health professionals should arrange training events, which could be supported by written material for teachers on childhood illness.
- Local educational authorities should ensure that each school has general policies with respect to the administration of medicines to children in place as a matter of urgency.
- Teachers must continue to respond as positively as they can when they encounter a child with medical needs. They should try to increase their knowledge of childhood chronic illness and they should be supported in this respect by local educational authorities and trade unions.
- Parents and carers must acknowledge that they hold the prime responsibility for their children's welfare and that accountability for the administration of medicines must be negotiated with rather than demanded of school staff.

Funding: None.
Conflict of interest: None.

CAROLINE PENN/IMPACT

The school nurse: a vanishing species?

1 Bannon MJ. Teachers' awareness and role in childhood chronic illness. In: Spencer NS, ed. *Progress in child health*. Vol 1. Edinburgh: Churchill Livingstone, 1995:125-40.
2 Celano MP, Geller RJ. Learning, school performance, and children with asthma: how much at risk? *J Learning Disabilities* 1993;26:23-32.
3 Sturniolo MG, Galletti F. Idiopathic epilepsy and school achievement. *Arch Dis Child* 1994;70:424-8.
4 Anderson HR, Butland BK, Strachan DP. Trends in prevalence and severity of childhood asthma *BMJ* 1994;308:1600-4.
5 Verity CM, Ross EM. Longitudinal studies of children's epilepsy. In: Ross EM, Reynolds E, eds. *Paediatric perspectives on epilepsy*. Chichester: Wiley, 1985.
6 Metcalfe MA, Baum JD. Incidence of insulin dependent diabetes in children aged under 15 years in the British Isles during 1988. *BMJ* 1988:302:443-7.
7 Tariq SM, Stevens M, Matthews S, Ridout S, Twiselton R, Hide DW. Cohort study of peanut and tree nut sensitisation by age of 4 years. *BMJ* 1996;313:514-7.
8 Leffert N, Susman A. Attention deficit hyperactivity disorder in children. *Curr Opin Pediatr* 1993;5:429-33.
9 Papola P, Alvarez M, Cohen HJ. Developmental and service needs of school-age children with human immunodeficiency virus infection: a descriptive study. *Pediatrics* 1994;94:914-8.
10 Eboh WO, van der Akker O. Service provision for sickle-cell disease: school based education. *Br J Nurs* 1996;5:30-3.
11 *Education act*. London: HMSO, 1993.
12 Dyer J, Morais A. Supporting children with cystic fibrosis in school. *Professional Nurse* 1996;11:518-20.
13 Eiser C, Havermans T, Craft A, Kernahan J. Development of a measure to assess the perceived illness experience after treatment for cancer. *Arch Dis Child* 1995;72:302-7.
14 Casey FA, Craig BG, Mulholland HC. Quality of life in surgically palliated complex congenital heart disease. *Arch Dis Child* 1994;70:382-6.
15 Chetcuti P, Phelan PD. Respiratory morbidity after repair of oesophageal atresia and tracheo-oesophageal fistula. *Arch Dis Child* 1993;68:167-70.
16 NHS Management Executive. *The patient's charter and primary health care*. London: HMSO, 1992.
17 NHS Management Executive. *The children's charter*. London: HMSO, 1995.
18 *Contact a family. Directory of specific conditions and rare syndromes*. London: Stanley Mason Printers, 1991.
19 Fillmore EJ, Jones N, Blankson JM. Achieving treatment goals for schoolchildren with asthma. *Arch Dis Child* 1997;77:420-2.
20 Bevis M, Taylor B. What do school teachers know about asthma? *Arch Dis Child* 1990;65:622-5.
21 Bradbury AJ, Smith CS. An assessment of the diabetic knowledge of school teachers. *Arch Dis Child* 1983;58:692-6.
22 Bannon MJ, Wildig C, Jones PW. Teachers' perceptions of epilepsy. *Arch Dis Child* 1992;67:1467-71.
23 Fox TK, Rankin MG, Salmon S, Stewart MS. How school teachers perceive the school health service. *Public Health* 1991;105:399-403.
24 Whitmore K. The past, present and future of the health services for children in school. In: Macfarlane JA, ed. *Progress in child health*. Vol 1. Edinburgh: Churchill Livingstone, 1984.
25 Polnay L, ed. *The health needs of school age children*. London: British Paediatric Association, 1995.
26 Bagnall P, Dilloway M. *In a different light: school nurses and their role in meeting the needs of school age children*. London: HMSO, 1996.
27 Billingham K, Hall D. Turbulent future for school nursing and health visiting. *BMJ* 1998;316:406-7.
28 BMA Community Health Doctors Subcommittee. *Medication in schools*. London: British Paediatric Association, 1994.
29 Department of Education and Employment, Department of Health. *Supporting pupils with medical needs in school*. London: HMSO, 1996.

(Accepted 28 April 1998)

Personal paper: Attention deficit hyperactivity disorder is underdiagnosed and undertreated in Britain

Geoffrey D Kewley

Learning Assessment Centre, Horsham, West Sussex RH12 2PD
Geoffrey Kewley, *consultant paediatrician*
achorsham@aol.com

BMJ 1998;316:1594–6

Attention deficit hyperactivity disorder is a condition of brain dysfunction[1 2] that is misunderstood and underrecognised in Britain. Research shows that it is a genetic, inherited condition that can be effectively managed. Studies of twins suggest an exceptionally high concordance,[3] and genetic studies show a likely polygenetic basis for inheritance.[4] Evidence of brain dysfunction has been found in cerebral imaging studies, including functional magnetic resonance imaging, quantitative electroencephalography, and positron emission tomography.[5] If untreated the disorder may interfere with educational and social development and predispose to psychiatric and other difficulties. There is much myth and misinformation, fuelled by personal bias and the media, surrounding the existence and treatment of the condition, which has led to an assumption that it is overdiagnosed and overtreated in Britain.

Psychosocial approaches encourage the belief that poor parental discipline causes most children's behaviour problems. Such approaches generally ignore a biological basis to difficulties in self control, concentration, and hyperactivity. Widespread ignorance exists about attention deficit hyperactivity disorder and the need for drugs as a component of treatment. Trite and simplistic explanations for the symptoms of the disorder are perpetuated which encourage the view that merely naughty children are being diagnosed to absolve parental responsibility. Considerable care and expertise is essential in assessing children's emotional and behavioural problems to ensure accurate diagnosis. There are three main myths that need to be overcome: what constitutes attention deficit hyperactivity disorder, that the disorder is the same as hyperkinesis, and that the drugs used for treatment have serious side effects.

Confusion over nature of attention deficit hyperactivity disorder

Attention deficit hyperactivity disorder is a common but complex medical condition characterised by excessive inattentiveness, impulsiveness, or hyperactivity that significantly interferes with everyday life. The continuing presence of symptoms is essential for diagnosis. The condition manifests in many ways. For example, some children may be only inattentive; others may be persistently hyperactive; for some, hyperactivity may lessen with time. The wide range of possible presentations can be confusing. There are also many complications that may mask or overshadow the underlying core symptoms and worsen with time (box).

The core symptoms needed to be assessed both at home and school as does the functional impact of the complicating features. Children who are untreated and have conduct disorder are at much higher risk of later criminal activity.

Common coexisting conditions and complications of attention deficit hyperactivity disorder

Oppositional defiant disorder
Conduct disorder
Depression
Anxiety and obsessions
Specific learning difficulties
Speech and language disorder
Low self esteem
Social skills difficulties
Relationship problems
Substance abuse
Auditory processing difficulties
Dyspraxia
Asperger's syndrome

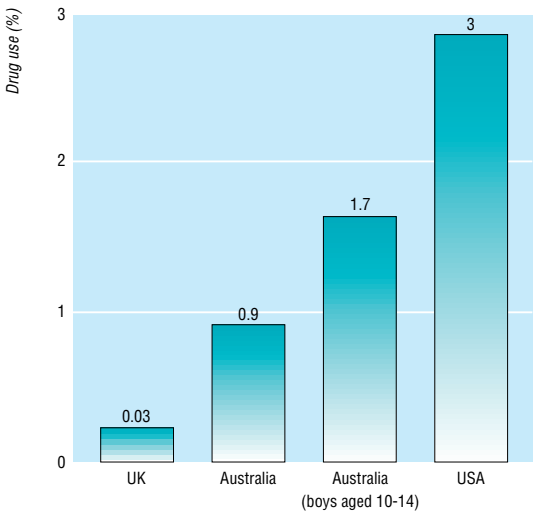
Hyperkinesis versus attention deficit hyperactivity disorder

British professionals have traditionally used the more restrictive World Health Organisation and ICD 10 term "hyperkinesis," which means severe, persistent hyperactivity. Many people wrongly believe that attention deficit hyperactivity disorder is the less severe form of hyperkinesis. In fact, hyperactivity is just one possible feature of the disorder.

The DSM IV criteria of the American Psychiatric Association provide a broader, more realistic concept and include all possible manifestations of the disorder. Reliance on hyperkinesis as a benchmark of diagnosis excludes many children displaying other manifestations of attention deficit hyperactivity disorder, and these children are often denied appropriate management of their problems. Rutter et al noted 30 years ago that hyperactivity lessened with time but that it was often replaced by other problems, especially antisocial and learning difficulties.[6]

Myths about medical management

Ignorance of the role of drugs such as methylphenidate (Ritalin) as an essential component of multidisciplinary management of attention deficit disorder has encouraged further controversy. Drugs are highly effective in improving concentration and impulsiveness and lessening hyperactivity. Often an associated improvement occurs in many of the other difficulties, although second drugs may be needed. Methylphenidate has a dopaminergic effect; each dose lasts about four hours. Experienced adjustment of dose and timing is essential for optimum treatment. The media have greatly exaggerated the side effects. The incidence of side effects is low. They are transient and dose related. Research indicates that concern about long term tolerance, addiction, or growth suppression is unfounded.



Proportion of children receiving psychostimulants in United Kingdom, Australia, and United States

Children do not usually grow out of attention deficit hyperactivity disorder by puberty and treatment is indicated for as long as benefit is obtained. About 60% of sufferers still have the condition in adulthood.

Substantial national differences exist in rates of treatment in Britain, Australia,[7] and North America[8] (figure). British government data show that in 1995 up to 6000 children were being treated with psychostimulants.[9] This equates to 0.03% of UK schoolchildren. As the incidence of severe hyperactivity in Britain is 0.5-1%,[10] this demonstrates considerable undertreatment of the disorder.

Overseas experience shows that both paediatricians and child psychiatrists have a role in effective multidisicplinary management of attention deficit disorder. Cooperation with general practitioners and educational and counselling services is esssential for effective service provision.

Previous reports on provision and purchasing of community paediatric and child and adolescent mental health services have failed adequately to recognise the importance of attention deficit disorder in such services.[11] Professionals must understand the reality of the disorder and its importance as a public health issue for children and adults. Drugs have an essential role when combined with educational, psychological, and other strategies as appropriate.

1 Barkley RA. *Attention deficit hyperactivity disorder—a handbook for diagnosis and treatment.* New York: Guilford Press, 1991.
2 Cantwell DP. Attention deficit disorder: a review of the past 10 years. *J Am Acad Child Adolesc Psychiatry* 1996;35:978-87.
3 Levy F, Hay DA, McStephen M, Wood C, Wildman I. Attention deficit hyperactivity disorder: a category or a continuum? Genetic analysis of a large scale twin study. *J Am Acad Child Adolesc Psychiatry* 1997;36:737-44.
4 Smalley SL. Genetic influences in childhood on psychiatric disorders. Autism and attention deficit-hyperactivity disorder. *Am J Hum Genet* 1997;60:1276-82.
5 Kewley GD. *ADHD—a guide for parents and professionals*. London: LAC Press (in press).
6 Rutter M, Graham P, Yule W. *A neuropsychiatric study in childhood.* London: Spastics International Medical Publications, Heinemann, 1970.
7 Australian National Health and Medical Research Council. *Report of working party on ADHD.* Canberra: Australian Government Publishing Service, 1996.
8 American Academy of Child and Adolescent Psychiatry. Practice parameters for the assessment and treatment of children, adolescents and adults with ADHD. *J Am Acad Child Adolesc Psychiatry* 1997; 36(suppl):1311.
9 Parliamentary Office of Science and Technology. Treating problem behaviour in children. *POST Tech Rep* 1997;92:1-8.
10 Taylor E, Hemsley R. Treating hyperkinetic disorders in childhood. *BMJ* 1995;310:1617-8.
11 Williams R. Richardson G. *Child and adolescent mental health services. Together we stand—the commissioning, role and management of child and adolescent mental health services.* London: HMSO, 1995.

Commentary: Diagnosis needs tightening

Eileen Orford

Child Psychotherapy Trust, London NW5 4BD

Eileen Orford, *consultant child psychotherapist*

cpt@globalnet.co.uk

Problems with the diagnosis of attention deficit hyperactivity disorder arise, at least partly, from the criteria for its diagnosis set out in *Diagnostic and Statistical Manual of Mental Disorders* (DSM IV) and ICD-10 (international classification of diseases).[1] These criteria are basically a list of symptoms. No indication of any underlying state is given. It is true that the criteria have been tightened up since earlier recognition of the condition and its original inclusion in DSM IV. However, Rutter's strictures as to diagnosis on the basis of a list of symptoms remain relevant, particularly with regard to those aspects of the criteria which pertain to attention deficit.[2]

Many reasons exist for children being forgetful, preoccupied, and unable to attend to school work or indeed anything else. These include depression and anxiety about problems such as family, school, relationships with peers, and undisclosed and unresolved traumatic experiences, which may include abuse. Children whose difficulties arise from such situations will not respond to treatments which do not address the underlying reasons for the symptoms. Anyone considering a diagnosis of attention deficit hyperactivity disorder must thoroughly assess the child's situation at home and school and his or her state of mind. Investigation by questionnaire (as may be undertaken in some situations) is a blunt instrument

unlikely to provide sufficiently sensitive information about a child's state of mind and behaviour.

Evidence is emerging from neurobiological investigations of patterns of hyperactivity linked to traumatic experience in infancy.[3] Such experience establishes neural pathways in infancy analogous to those evoked in trauma, which then persist into later life. If these patterns are established (with their consequent effect on children's neurological and biochemical functioning and on their emotional development) a more substantial diagnostic category may come to be recognised. However, Perry et al's work suggests that pharmacological intervention alone is not adequate for treatment of the condition, and they and others suggest a package of measures which importantly include psychological therapies.[3 4] Such therapies involve work with parents and individual work with children. Psychoanalytic psychotherapy is often effective since it addresses the original emotionally traumatic experience and offers the child an opportunity to relearn and integrate new ways to manage his or her behaviour. Neurobiological theorists such as Schore stress the importance of recognising the emotional concomitants of the original experience if primitive neural pathways are to be superseded by higher level cortical functioning.[5]

Is attention deficit hyperactivity disorder overdiagnosed? The answer has to be yes if the condition of hyperactivity is confused with more widespread difficulties emanating from a variety of causes. If the disorder were redefined more closely in terms of hyperactivities dating from early life and seen in neurobiological and socioemotional terms, then progress could be made towards a more effective programme of treatment. In refining the diagnostic criteria and separating out problems in attending and concentrating from those of hyperactivity, we might be able to address both sorts of disturbance more effectively by taking account of their origins.

1 American Psychiatric Association. *DSM IV. Diagnostic and Statistical Manual of Mental Disorders*. Washington, DC: APA, 1994.
2 Rutter M. Syndromes attributed to minimal brain dysfunction in children *Am J Psychiatry* 1982;139:21-33.
3 Perry BD, Poland RA, Blakely TL, Baker WL, Vigilante D. Childhood trauma, the neurobiology of adaptation, use-dependent development of the brain, flaw states become traits. *Infant Mental Health J* 1995;16:271-91.
4 Taylor S, Samberg S, Thorley G, Giles S. *The epidemiology of childhood hyperactivity*. Oxford: Oxford University Press, 1991.
5 Schore A. *Affect regulation and the origin of self*. Hillsdale, NJ: Erlbaum, 1994.

Street children in Latin America

Thomas J Scanlon, Andrew Tomkins, Margaret A Lynch, Francesca Scanlon

Centre for International Child Health, Institute of Child Health and Great Ormond Street Hospital for Children NHS Trust, University College London Medical School, London WC1N 1EH

Thomas J Scanlon, *research fellow*

Andrew Tomkins *professor of international child health*

Newcomen Centre, UMDS, Guys Hospital, London

Margaret A Lynch, *reader in community paediatrics,*

Department of Child and Family Psychiatry, Horsham and Crawley Healthcare Trust, Horsham, West Sussex

Francesca Scanlon, *clinical assistant*

Correspondence to: Dr T Scanlon cich@ich.ucl.ac.uk

BMJ 1998;316:1596–600

Millions of children throughout the world live on the street. These children are among the most deprived; they usually have no access to health care or education and some of them have been victims of violence even before taking to the street. Street children are seen by many as worthless, and many countries have used violent and punitive measures to remove them. Recently new approaches have been introduced that aim to restore these children to their families and societies. Initial evaluation suggests that these schemes can be successful. This article discusses the phenomenon of street children in Latin America and seeks to provide some answers to commonly asked questions.

Summary points

- The definition of street children varies, although much research distinguishes two groups: home based, who usually return home at night, and street based, who remain on the street and have no family support
- Little accurate information exists about the numbers of street children
- Street children are more prone to several physical problems, although most research has focused on adverse effects of sexual activity and drug misuse
- Support programmes have succeeded in returning children to their homes
- Despite legislative changes, a vocal street children's movement, and adoption of advocacy strategies many street children continue to suffer violence and human rights abuses
- Much of society and the media remain to be convinced of the worth of street children

Methods

Much of the information on street children is unpublished, and most of the published information is not in peer reviewed journals. We decided to use both published and unpublished work for this review. We performed conventional searches using Medline, Geobase, PsychLIT, and CINALH. Additional information was obtained from the resource centre at the Institute of Child Health in London, the International Child Resource Unit in San Francisco, and the Henry Durrant Institute in Geneva. We also accessed numerous web sites with information on street children and posted requests for information to a street children forum ("Streetkid-L" -jwalenci@acc.jbu.edu). Our contacts with non-governmental organisations and academic institutions in South America helped to secure further information. This article concentrates on South America, which is where most research has been conducted and where two of us have some field experience.

What do we mean by street children?

The term "street children" was first used by Henry Mayhew in 1851 when writing *London Labour and the London Poor*, although it came into general use only after the United Nations year of the child in 1979.[1] Before this street children were referred to as

Definition of street children adapted from Unicef 1986

Children on the street: "Home based" children who spend much of the day on the street but have some family support and usually return home at night

Children of the street: "Street based" children who spend most days and nights on the street and are functionally without family support

homeless, abandoned, or runaways. Most definitions of street children concentrate on just two characteristics: presence on the street and contact with the family. The most commonly used definition comes from Unicef and distinguishes two groups (box).[2]

Some social scientists have constructed more revealing typologies and systems[3 4] which consider other dimensions of street life such as street territories, social organisation, economic activities, and integration with street culture. Others have sought to define street children in terms of human rights.[5] The Unicef definition was developed with Latin America in mind, where studies suggest that 80% to 90% of street children have some contact with their family.[2 3 6–8] It may be inappropriate for some countries such as India, where often whole families remain on the street.[9]

How many street children are there?

Most estimates of the number of street children fail to give a definition of street children or details of the method of counting. Nevertheless published estimates, which are essentially informed guesses, are quoted and requoted by different authors until they become accepted as fact. In 1986 the United Nations Department of International Economic and Social Affairs estimated that there were 30-170 million street children worldwide. The large range illustrates how difficult it is to count street children accurately.

Surveys of street children in Latin America[3 7 8] suggest that their ages range from 8 to 17 years, with the average age on entering the street being 9 years. Girls form just 10-15% of street children, probably because of alternative strategies open to them such as mothering younger siblings, domestic employment, and prostitution. The few authors who have considered race suggest that in Latin America at least, black and mixed race children may be over-represented among street children.

Why are there street children?

Several related economic, social, and political factors have been linked with the phenomenon of street children. Land reform, population growth, drought, rural to urban migration, economic recession, unemployment, poverty, and violence have all been implicated. Brazil, which is thought to have the highest numbers of street children in Latin America, has one of the most unequal distributions of wealth in the world: the top 20% of the population receive 26 times the income of the bottom 20%, and half the population survive on 14% of the national income. Street children have been described as victims of "economic violence."[10]

Much published research focuses on family breakdown. Compared with home based children, street based children are less likely to come from a home headed by their father and less likely to have access to running water or toilet facilities; their parents are more likely to be unemployed, illiterate, less cooperative, and less mutually caring with higher levels of violence.[11–14] Nevertheless, most children from poor and dysfunctional families remain at home. Research on street children's families could offer further potential to solve the problem, particularly if it focuses on what keeps children at home in difficult circumstances.

What problems do street children encounter?

Physical health

Little information exists on the general physical health of street children (table 1[1]).[15] Trauma and certain infections are more common among children who are street based than among those based at home. In terms of nutrition, however, street children fare no worse than other children from similar backgrounds. Indeed astute begging and stealing might actually enhance the nutritional status of street children.[3]

Several studies have confirmed that around 80% of street children use drugs regularly.[15 16] Traditionally this has been glue, which is readily available and a cheap way of coping with hunger, fear, loneliness, and despondency.[6] Indeed communal drug use may be an important factor for integrating children into street life.[4] The use of crack cocaine is reported to have increased dramatically among street children, although accurate figures are as yet unavailable.

Table 1 Health of street children in Belo Horizonte, Brazil 1991[15]

	% of street based children (n=195)	% of home based children (n=199)
Trauma:		
Presence of cutaneous scarring	34	20
Infections:		
Ascaris lumbricoides	59	55
Trichuris trichiura	42	43
Schistosoma mansoni	31	21
Giardia lamblia	30	7
Nutrition:		
Chronic energy deficiency grade II (body mass index 16.0-17.0)	17	17
Chronic energy deficiency grade III (body mass index < 16.0)	11	11
Drug use:		
Shoemaker's glue	81	45
Marijuana	61	38
Nasal cocaine	21	10

Table 2 Sexual practices of street children in Belo Horizonte, Brazil[17]

	Boys (n=193)	Girls (n=54)
Mean age at sexual initiation	10.8 years	12.4 years
Opposite sex partner(s)	97%	98%
Same sex partner(s)	34%	11%
Sex while using drugs or alcohol	43%	49%
Ever used a condom	16%	28%
Used condom at last intercourse	9%	13%

MARCO SIQUEIRA/IMPACT

Victim of the massacre of street children, Rio de Janeiro

Sexual health

Street children are sexually active early in life (table 2). To obtain money, food, clothing, and shelter they may engage in "survival sex" with adults. Within their peer group sex is used for pleasure and comfort as well as to exert power and establish dominance, sometimes in ritualised gang rape. Sex under the influence of drugs, anal sex, and same sex encounters are common. Teenage pregnancy is almost universal among street girls, and over 25% of them report one or more abortions, procured illegally, usually with over the counter abortifacients.[6 11 15 18]

An outreach programme in Honduras reported that 85% of sexually active street children had been treated for a sexually transmitted disease.[14] HIV infection has been reported in 6% of street children, syphilis in 3%, and hepatitis B surface antigen in 2%.[15 18]

Mental health

Measurement of psychiatric and psychological morbidity in street children is fraught with practical problems. Tests often rely on fine motor skills and a vocabulary street children have not had the opportunity to develop; most have not been educated past the second year of primary school.[6 19]

There are also issues of interpretation. One small study of street children in Columbia recorded intelligence and neurological functioning below the national average.[3] The author argued, however, that given street children's low socioeconomic status, high rates of illiteracy, multiple siblings, and non-intact families the results were better than might have been expected and that the degree of self management required on the streets might enhance cognitive development.

Objective testing of self esteem is difficult to find. Street children make derogatory comments about themselves,[6] although such comments may be made to satisfy researchers or to enhance their earning potential from begging.[3] One study compared the views of adult helpers with those of street children.[20] Helpers characterised street children as lacking self esteem, will power, and the discipline to achieve unrealistic aspirations. By contrast the street children aspired to a diverse choice of careers and often had some experience in their chosen field. Half of them were optimistic about the future, and virtually all were determined to leave the streets.

Social circumstances

Most street based children do not gradually move from home to street but establish themselves on the street early on.[3] Most do intermittent, casual work such as hawking goods, cleaning and guarding cars, market work, begging, stealing, and prostitution.[3 6 19] Some form gangs with hierarchical structures loosely based on the family. More of them, however, form "near groups," which are less stable with more diffusely defined roles and territories and consequently more adaptable to the problems street life brings.[4]

A Honduran outreach programme found that half of street children had been arrested and 40% imprisoned.[11] São Paolo court figures show that the number of arrests of street children is increasing. However, despite the popular assumption that street children are all thieves, scant evidence exists about illegal activities.

Mainstream health and social services are often regarded with suspicion, mainly because so called welfare has historically been associated with punishment.[6 21] Health services are rarely geared to the needs of street children. They are often run at times and places that make them inaccessible. Furthermore, street children will tolerate adverse physical symptoms for long periods.[6 22]

Marginalisation and extermination

In Latin America many people in the judiciary, the police, the media, business, and society at large believe that street children are a group of irredeemable delinquents who represent a moral threat to a civilised society—a threat that must be exorcised.[23] The most frightening manifestation of this view is the emergence of "death squads": self proclaimed vigilantes, many of whom are involved with security firms and the police and seek to solve the problem by elimination.[24]

In Brazil, a pioneering study set up by the National Movement of Street Children[25] recorded 457 murders of street children between March and August 1989. The state juvenile court recently reported that an average of three street children are killed every day in the state of Rio de Janeiro. On 23 July 1993 a vigilante group openly fired on a group of 50 street children sleeping in the Candelaria district of Rio de Janeiro. Seven children and one adult were killed and many others injured. Of the eight defendants originally accused, just two have been imprisoned; a further two have been tried and released.[26] Amnesty International has estimated that 90% of the killings of children in Brazil go unpunished.[27]

What can be done to help street children?

Governments

For years many governments sought to discipline street children by imprisoning them. In the 1960s the emphasis changed from a correctional approach to one of offering help. However institutions and their staff remained the same and so called "assistance" and repression became intertwined.[21]

In the late 1980s the combination of the United Nations Convention on the Rights of the Child, greater democracy, and pressure from non-governmental organisations led some governments to introduce more enlightened legislation. In 1990 a new article based on the United Nations convention became law in Brazil. This new article details rights to free movement and free education up until the age of 8 years. Each municipality is required to set up a guardianship council composed of five elected professionals, including non-formal educators, who are responsible for handling the cases of children at risk or who have broken the law. These councils have access to a range of community and educational initiatives and represent children before the police, judiciary, education, and health bodies. Anyone can ask the council to intercede on a child's behalf. However, eight years after the adoption of the new article the Brazilian state of Para, which has 144 municipalities, has just 22 guardianship councils (L Nobre Lamarao, personal communication).

Non-governmental organisations

For many years non-governmental organisations argued that with sufficient support street children could be "rehabilitated." The approach that has been most copied is the Bosconia project which aims at creating a new person through work and teaching values. Four stages (box) are facilitated by volunteer counsellors, educators, and medical and nursing assistants.

Some rehabilitation programmes have been criticised for "batch processing," being paternalistic, and emphasising children's passivity.[2 28] Furthermore, they fail to engage more established street children, and in the 1980s many non-governmental organisations set up outreach programmes. Outreach programmes are sometimes entirely street based, providing food and medical support and, more rarely, educational, psychological, and legal support.[6] Others represent the first stage of a more individualised rehabilitative programme which aims to integrate the child back into the family.[10 19] One such programme in Puebla, Mexico, estimates that 67% of children contacted will have left the street by one year and of those who are placed with their own or a substitute family, 94% will remain with the family after one year.[18 28] This process, however, requires ongoing support for many years, and the cost of returning a child home is estimated at £460. This may seem very little, but it represents a considerable challenge to fundraisers. The success of this programme contradicts the views that the family dynamics of street children are beyond repair and that street children fare better than their siblings who remain at home.[3]

Other non-governmental initiatives are aimed at preventing children from going on to the street and involve building housing, sewerage systems, community centres, and nurseries and introducing work skills into schools' curriculums.[29]

Street children

One of the more positive developments in recent years has been the contribution of street children themselves. Established in 1984, the Brazilian National Movement of Street Children[24] played a large part in securing new legislation. Currently there are 75 local groups, with a total membership of 3000 voluntary educators working in about 400 projects. Media coverage of the organisation gives Brazilian society an opportunity to see street children in a positive light, articulating their concerns and proposals.

Four stages of the Bosconia project[2]

1. An open access walk in centre	Children can wash, play, have a meal, meet other children, and talk to project workers
2. A residential programme	Classroom work, recreational activities, group discussions, and work activities. Counsellors emphasise detoxification, motivation, and the elimination of street ethics
3. Full time school education and specific vocational skills	Work skills such as market gardening and making small goods for sale
4. A self governing community	Support, disciplinary problems, and sanctions dealt with by peers

What is the way forward?

There is no one answer but there are some clear messages. There are many reasons for street children being on the street, most of which are outside the control of children or their families. Epidemiological and health data on street children are scant and more quality research is needed which is informed by street children and their legitimate representatives.

Various interventions are required, although returning children to their families seems to be a viable and appropriate option. The move towards advocacy and social mobilisation is welcome, particularly if it is led by street children. This process needs to be monitored, however, to ensure that street children are not manipulated for the ends of others who may have a personal political agenda and that it is not at the expense of successful non-governmental interventions.

The question remains why in a country like Brazil which now has highly progressive children's rights legislation and a strong movement for street children, there continues to be a tide of violence and human rights abuses against children, with apparent impunity for the aggressors. The public and the media still need convincing of the worth of street children and the contribution they can make to resolving the situation. The

JENNY MATTHEWS/NETWORK

Street children: a sad reflection of an amoral society

more street children are afforded the chance to speak out for themselves, the more people will come to realise that street children are not in fact a moral threat to society, but rather a sad reflection of an amoral society.

The references and further information are available from the Centre for International Child Health (http://ClCH.lCH.UCL.AC.UKJ.)

1 Williams C. Who are "street children"? A hierarchy of street use and appropriate responses. *Child Abuse and Neglect* 1993;17:831-41.
2 Lusk MW. Street children programs in Latin America. *Journal of Sociology and Social Welfare* 1989;16:55-77.
3 Aptekar L. *Street children of Cali.* United States: Duke University Press, 1988.
4 Lucchini R. *The street children of Montevideo and Rio de Janeiro: elements for a differentiation.* Fribourg, Switzerland: Institute for Economic and Social Sciences, University of Fribourg, 1994. (Working paper No 237.)
5 Derexel J. Human rights of street children in Brazil. *Child Psychol* 1994;7:31-4.
6 Scanlon T, Scanlon F, Nobre Lamarao ML. Working with street children. *Development in Practice* 1993;3:16-26.
7 Rizzini I, Rizzini I, Munhoz M, Galeano G. *Childhood and urban poverty in Brazil: street and working children and their families.* Geneva: International Child Development Centre, Unicef, 1992. (Innocenti occasional papers: the urban child series, No 3.)
8 Barker G, Knaul F. *Exploited entrepreneurs: street and working children in developing countries.* New York: Childhope USA. (Childhope working paper No 1.)
9 Ennew J. *The health of school-age children: developing a strategic plan. 5.1 child labour and street children. A review.* London: Partnership for Child Development, 1994.
10 Swift A. Victims of rescue. *New Internationalist* 1989;194:13-15.
11 Wright JD, Witting M, Kaminsky DC. Street children in North and Latin America: Preliminary data from proyecto altemativos in tegucigalpa and some comparisons with the US case. *Studies in Comparative International Development* 1993;28:81-92.
12 Martins SB, Ebrahim GJ. The female street children of Rio de Janeiro: a qualitative study of their backgrounds. *J Trop Paed* 1995;41:43-6.
13 Wright JD, Kaminsky D, Witting MS. Health and social conditions of street children in Honduras. *Am J Dis Child* 1993;147:279-83.
14 Aneci Rosa CS, de Sousa R, Borba Rute E, Ebrahim GJ. The street children of Recife: a study of their background. *J Trop Paed* 1992;38:34-40.
15 Pinto JA, Ruff AJ, Paiva JV, Antunes CM, Adams IK, Halsey NA, Greco DB. HIV risk behaviour and medical status of underprivileged youths in Belo Horizonte, Brazil. *J Adolesc Health* 1994;15:179-85.
16 Cotrim B, Carlini EA. O consumo de solventes e outras drogas em criancas e adolescentes de baixa renda na Grande Sao Paulo. II. Meninos de rue e menores internados. (The use of solvents and other drugs by children and adolescents in Grande Sao Paulo. II. Street children and intern children.) *Revista ABP-ABAL* 1987;9:69-77.
17 Raffaelli M, Campos R, Merritt AP, Siguera E, Antunes CM, Parker R, et al. Sexual practices and attitudes of street children in Belo Horizonte, Brazil. Street Youth Study Group. *Soc Sci Med* 1993;37:661-70.
18 Porto SOB, Cardoso DDP, Queiroz DAO, Rosa H, Andrade ALSS, Zicker F, et al. Prevalence and risk factors for HBV infection among street youth in central Brazil. *J Adolesc Health* 1994;15:577-81.
19 Project meta 2000. *A model for the attention of street children to enable them to leave the street permanently.* Puebla, Mexico: JUCONI Foundation, 1997.
20 De Oliveira W, Balzerman M, Pellet L. Street children in Brazil and their helpers: comparative views on aspirations and the future. *International Social Work* 1992;35:163-76.
21 Dewees A, Klees SJ. Social movements and the transformation of national policy: street and working children in Brazil. *Comp Educ Rev* 1995;39:76-100.
22 Campos R, Raffaelli M, Greco WU, Greco M, Ruff A, Rolf J, et al. Social networks and daily activities of street youth in Belo Horizonte, Brazil. *Child Dev* 1994;65:319-30.
23 Gigenback R. Social practices of juvenile survival and mortality: child care arrangements in Mexico City. *Comm Dev J* 1994;29:380-93.
24 Human Rights Watch. *Final justice: police and death squad homicides of adolescents in Brazil.* New York: HRW, 1994.
25 Movimento Nacional de Meninos e Meninas de Rua, IBASE, and Nucleo de Estudo da Violencia da Universidade de Sao Paulo. *Vidas em risco: assasinatos de criancas e adolescentes no Brasil.* Rio de Janeiro: NEV/USP, 1990.
26 Brazil Network. *Newsletter* January 1997.
27 Brandao C. *The killings escalate in Brazil.* San Francisco: International Child Resource Institute, 1995.
28 Jones GA, Junto con los ninos: street children in Mexico. *Development in Practice* 1997;7:39-49.
29 International Catholic Child Bureau. *Inter-NGO programme on street children and street youth.* Geneva, Switzerland: ICCB, 1989. (Project Profiles Series No 1.)

Children as consumers

Cleone Hart, Rosemary Chesson

Department of Child and Family Psychiatry, Royal Aberdeen Children's Hospital, Aberdeen AB9 2ZG
Cleone Hart, *senior registrar*

Faculty of Health and Food, Robert Gordon University, Aberdeen AB25 1LD
Rosemary Chesson, *reader in health services research*

Correspondence to: Dr Chesson

BMJ 1998;316:1600–3

Children are important users of health services, accounting for up to a quarter of general practitioner consultations[1] and 30% of the workload in accident and emergency departments.[2] However, their needs are given insufficient priority by policy makers and health service professionals. Last year a report of the British government's health committee stressed that a change in attitude was needed and that it was important to listen to children and to take their views into account.[3]

Although consumers have an important role in reforming health care,[4] the paternalistic attitude still prevailing among health professionals when it comes to consumer involvement in health care and research can make this difficult.[5] Patient passivity begins early in life[6] so we should not be surprised that adult users acquiesce. In this article we discuss why children should be consulted directly, how this is to be achieved, and finally what may be required to bring about change.

Summary points

Children are major users of health services but are rarely consulted as healthcare consumers

Although parents are extensively used as proxies for children, their accounts may not always accurately reflect children's perceptions

Large numbers of children are cared for and treated by staff who have no paediatric training and abilities to communicate cannot be assumed

Children's concepts of hospital care and illness differ greatly from those of adults

Children may be able to express their opinions if they are sought using appropriate methods

Staff need to be trained to enable the child's voice to be heard and may need to consult colleagues in departments of child and family psychiatry and clinical psychology and develop closer contacts with teachers and social workers

Current situation

Parent as proxy

In Britain, although there has been an increasing emphasis on obtaining the views of health service users, children are rarely included. This probably reflects social attitudes and confusion about an appro-

priate approach for children. Some adults may have little interest in what children think, while others regard the need to protect them as paramount. The children's charter on health was essentially a parents' charter and reflects a common belief that children's views may be represented by their parents.[7]

It cannot be assumed, however, that parents' perception of their child's response will accurately reflect the child's feelings and needs, especially as the child becomes more independent. A study of quality of life in young children with asthma argued that reporting by proxy may lead to measurement of the impact of the child's illness on the proxy rather than on the child, as shown in the the case of quality of life in young children with asthma.[8] Jessop et al found a relation between the mother's mental health and her ratings of the degree of disability of the child.[9] Furthermore, mothers and staff have been found to have divergent opinions on a child's likely perceptions. For example, in a recent study only 24% of mothers thought that their young children worried about being in hospital whereas 91% of staff believed this to be the case.[10]

Staff know best

Healthcare staff are often assumed to be able to communicate effectively with children, but it may not be easy for those without paediatric training, even though many will be parents. This is important since large numbers of children are seen outside paediatric settings. Sixteen per cent of children aged 5-15 years are admitted to hospital each year.[11] In 1994 half the children admitted to English hospitals were not cared for by nurses qualified in nursing children. In Wales one quarter were admitted to adult wards.[12]

Staff training in communication lags behind good intentions, and the General Medical Council's report on reforming medical education makes no specific reference to communicating with children.[13] It is also assumed that staff know how children think and feel about treatment and care. A recent study, however, found that most children (75%) could understand the concept of localising their pain yet less than half the staff (41%) thought that young children could do this.[10]

Children's concepts of hospitals and illness

Children differ greatly from adults in their understanding about the cause of illness and its treatment and prevention as well as in their perceptions of hospitals. Preschool children may believe that doctors or nurses deliberately set out to hurt them.[14] Although it is difficult to generalise, children below the age of 7 years often see illness as occurring by contagion as if by magic or as a punishment for bad behaviour.[15] From the ages of 7 to 11 children have a better knowledge and understanding, though their views are not those of an adult. They often see illness as caused by a single factor—often a "germ"—and therefore contagious. They do not correctly infer the reasons for treatment. From 11 years children have a more detailed understanding and become aware that illness can become aggravated by psychological factors. They understand the notion of drug related side effects and the possibility of delay before responding to treatment.[16] Children with chronic illness, contrary to

expectation, may not have a more mature understanding of their illness than those with little experience of hospitals. Especially little is known about children's understanding of mental health.[17] Medical terms may also be misinterpreted by children—for instance, a diagnosis of diabetes may be understood by a child in terms that they will "die of betes" or mention of oedema as a sign equated to a "demon in my belly."[15]

Although research on children's views on hospital care and treatment is sparse, American studies have yielded some unexpected findings. Schoffstall discovered that children in hospital perceived the greatest stressors to be missing their families, being afraid of surgery, pain from their illness, infection, and being touched by people they did not know. They rated "sleeping with someone they didn't know in their room" the eighth most stressful variable.[18] Unless children's perceptions are known, services cannot respond to their needs and improvements to achieve high quality care cannot be instigated.

Methods of consultation

Research methods for use with children are still unrefined. Although it has been suggested that children may need to be over the age of 8 to provide their views, children as young as 5 with emotional and behavioural problems were able to express their opinions on being in hospital.[17] Alderson contends that rigidly controlled methods are seldom helpful.[19] Thus validated measures, such as the metro assessment of child satisfaction (MACS), which can be used with children from the age

JOHN COLE/IMPACT

Research methods need refining

of 6,[20] may be of limited value. Clearly even basic tools such as questionnaires need modification for children, and activity booklets have been recommended. Questions can be incorporated with games and space provided for pictures to be drawn relating to experience.[2]

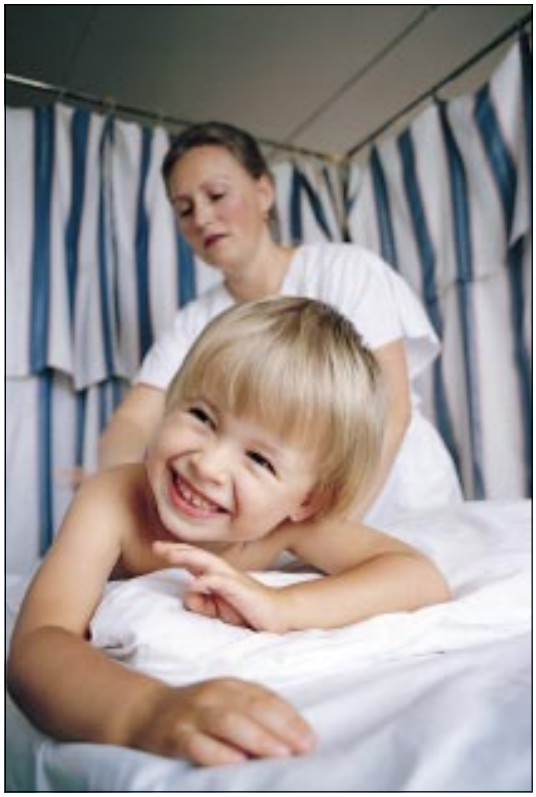
King maintains that using "talking pictures" to elicit opinions is a safer, easier, less threatening and less confusing method for children while also being more enjoyable for them.[21] He believes that the type of information he obtained from drawings would probably not have been obtained by any other method. Martin contends that emotions repressed from children's conscious minds are often expressed in their drawings in a non-threatening way; interpretation is not wild, mystical speculation but a rational way of gaining insight based on firm research.[22] Bach's work with spontaneous drawings by severely ill children often informed her of the somatic as well as the psychological condition of the patient.[23] Where children may have difficulties drawing or communicating their views directly—for example, those with learning disabilities—photographs may be helpful.[24] Account has to be taken of the child's understanding together with his or her age and stage of emotional and cognitive development.[17] A major difficulty with direct interviews, however, is that children's responses to healthcare staff may reflect what the child thinks the professional wants to hear rather than the child's true feelings.[25] The gratitude barrier may be as prevalent in children as adults.

In recent years several indirect methods of consulting children have developed, particularly in the context of trauma. Dent-Read communicated with children in hospital by eliciting metaphors for body functioning and symptoms.[26] Many of the methods used to help children describe distressing events and express their feelings, such as puppet play in the case of abused children,[27] may also be appropriate and valuable means of learning what children are thinking.

How is change to be brought about?

In 1959 a government report recommended that children should be treated as children and not "mini adults" in hospital and emphasised the need for staff training in paediatrics. Thirty years later the Department of Health advocated that health needs must be met by those specifically qualified in child health and that staff training in the developmental and emotional needs of children is essential to a high quality service.[28] These recommendations have yet to be implemented. Targets need to be set with timescales for meeting them if progress is to be made.

Communication skills with children need to be specifically included in the undergraduate curriculums of doctors and nurses. Health professionals could also benefit from closer liaison with those who possess expertise in child development and communication. For instance, greater use could be made of colleagues in departments of child and family psychiatry and clinical psychology. Specialist knowledge and experience could be exploited. Contact also needs to be extended with other non-health professionals such as teachers and social workers, who also work closely with children, as recommended by the report of the National Commission of Inquiry into the Prevention of Child Abuse.[29] The report highlights the general practitioner's role in identifying children at risk from abuse,[30] for which doctors must be able to help children to express themselves.



VIK/AIMPACT

Children's views matter, too

To suggest that service providers should consult children does not mean that parents' views should be ignored. Parents need to have the opportunity to express their expectations, which are likely to differ from children and will be based on many years' experience of health services. Parents' knowledge may be vital to understanding how best their child may be approached to avoid causing unnecessary distress. But parents have to recognise that children need to develop responsibility for their own health and health care. Children are not possessions but individuals with rights and developing responsibilities.[29] Parents may need to be encouraged to stand back and enable children's voices to be heard.

Conclusions

Healthcare professionals will not be able to allay children's fears and respond to their needs unless they are prepared to develop effective means by which children can communicate with them. Seeking children's views appropriately is important not only for the individual child and his or her family but also for the future of the NHS. Consumer participation is a prerequisite in bargaining assertively for quality health care.

1 Palmer KT. *Notes for the MRCGP.* Oxford: Blackwell Scientific, 1988.
2 McIver S. *Obtaining the views of users of health services.* London: King's Fund, 1991.
3 House of Commons Health Committee. *The specific health needs of children and young people.* Vol 1. London: Stationery Office, 1997.

4 Donabedian A. Quality assurance in health care: the consumer's role. *Quality in Health Care* 1992;1:247-51.
5 Liberati A. Consumer participation in research and health care. *BMJ* 1997;315:499.
6 Pittman KP. Awakening child consumerism in health care. *Paediatr Nurs* 1992;18:132-6.
7 Department of Health. *The patient's charter: services for children and young people*. London: HMSO, 1996.
8 Osman L, Silverman M. Measuring quality of life for young children with asthma and their families. *Eur Resp J* 1996;9 (suppl 21):35-41s.
9 Jessop DJ, Reissman CK, Stein RE. Chronic childhood illness and maternal mental health. *J Dev Behav Pediatrics* 1988;9:147-56.
10 Gillies ML, Parry-Jones WL, Smith LN. Postoperative pain in children under five years. *Health Bull* 1994;52:193-5.
11 Department of Health. *Health and personal social services statistics for England*. London: HMSO, 1993.
12 Lansdown R. *Children in hospital*. Oxford: Oxford University Publications, 1996.
13 General Medical Council. *Tomorrow's doctors: recommendations on undergraduate medical education*. London: Kiek and Read, 1993.
14 Brewster AB. Chronically ill hospitalized children's concepts of their illness. *Pediatrics* 1982;69:355-62.
15 Perrin EC, Gerrity PS. There's a demon in your belly: children's understanding of illness. *Pediatrics* 1980;67:841-9.
16 Bibace R, Walsh M. *Children's conceptions of health, illness and bodily functions*. San Francisco, CA: Jossey-Bass, 1981.
17 Chesson R, Harding L, Hart C, O'Loughlin V. Do parents and children have common perceptions of admission, treatment and outcome in a child psychiatric unit? *Clin Child Psychol Psychiatry* 1997;2:251-70.
18 Schoffstall MC. Children's perceptions of hospital stressors. *Nursing Times* 1988;84:60.
19 Alderson P. *Children's consent to surgery*. Oxford: Oxford University Press, 1993.
20 Simonion S, Tarnowski K, Park A, Bekeny P. Child, parent and physician perceived satisfaction with paediatric out-patient visits. *Dev Behav Paediatrics* 1993;14:8-12.
21 King P. *Talking pictures: triggered pictures to help children talk about themselves*. London: British Association for Adoption and Fostership, 1992.
22 Martin J. A channel from the subconscious. Understanding drawing interpretation. *Professional Nurse* 1994;10:14-9.
23 Bach S. *Life paints its own span: on the significance of spontaneous pictures by severely ill children*. Zurich: Daimon Verlq, 1991.
24 Joy D, Harvais V, Young A, Chesson R. The use of photographs in surveying children with learning disabilities views of occupational therapy. *Br J Occup Therapy* 1998;61:116-120.
25 Parish L. Communicating with hospitalised children. *Canadian Nurse* 1986;82:21-4.
26 Dent-Read CH. *Communicating with hospitalized children by eliciting metaphors for body functioning and symptoms*. Chicago: Midwestern Psychological Association, 1991.
27 Geldard K, Geldard D. *Counselling children: a practical introduction*. London: Sage, 1997.
28 Department of Health. *The welfare of children and young people in hospital*. London: HMSO, 1991.
29 *Childhood matters—the report of the National Commission of Inquiry into the Prevention of Child Abuse*. Vols 1 and 2. London: Stationery Office, 1996.
30 Hobbs CJ, Heywood PL. Childhood matters. *BMJ* 1997;314:622.

Concerns about using and interpreting covert video surveillance

Colin Morley

University of Cambridge, Department of Paediatrics, Box 226, Addenbrooke's Hospital, Cambridge CB2 2QQ
Colin Morley, *consultant paediatrician*

Correspondence to: Dr C Morley, Neonatal Intensive Care Unit, Royal Women's Hospital, 132 Grattan Street, Carlton, 3053, Melbourne, Australia
morleyc@cryptic.rch.unimelb.edu.au

BMJ 1998;316:1603–5

I have been an expert witness in seven cases in which covert video surveillance has been used. Using such surveillance and interpreting the videos are associated with problems that may not be apparent to those considering referring patients or setting up such surveillance.

Covert video surveillance is an infringement of the liberty of the parent and child and should be undertaken only as a last resort—when a group of people has assessed the case and no other way exists to diagnose the child's problem.

Surveillance is undertaken when healthcare professionals strongly suspect that a parent is harming a child.[1] The parent and child are admitted to a cubicle equipped with secret video cameras and observed closely, often over several days. The monitors are viewed secretly and continuously by observers trained to be suspicious of the parent's actions. If they think the child is being harmed they sound an alarm and someone intervenes.

Summary points

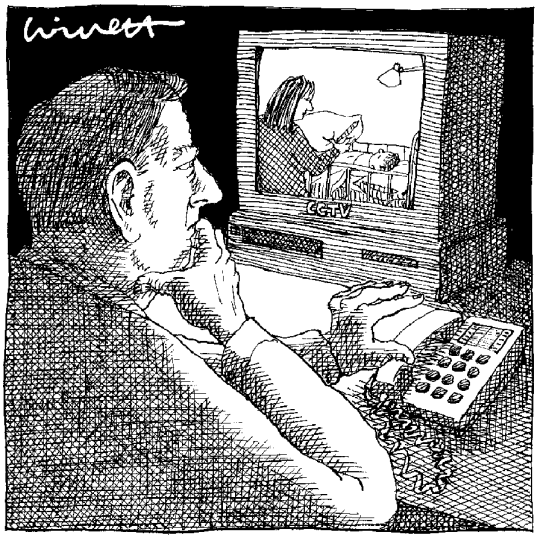
- Covert video surveillance can be difficult to interpret; innocent actions taken out of context may be interpreted as harmful
- The child and parent may be anxious and not behave normally in the circumstances; this may be interpreted as poor parenting
- The technique of covert video surveillance lacks objective and independent scientific evaluation
- If videos are used in court the whole recording should be exhibited to show the parents' action over time, and not just the "bad bits"
- A parent falsely accused may find it difficult to defend himself or herself

Interpretation of videos

The observers cannot allow the child to be harmed. If they see something that may lead to an assault they wait only about 25 seconds before intervening. They do this on the assumption that if the action continued, the child would be harmed. This is open to interpretation and speculation. Actions that appeared to me to be innocent were interpreted as attempts to harm the child: a mother cuddling a fussing child into her breast; playing with the child by putting a hand over his face; brushing the teeth of an irritable child; or smacking a fractious child. Denial that she is harming the child is considered "typical" of Munchausen's syndrome by proxy. This makes it difficult for the parent to defend himself or herself.

If covert video surveillance is used only when a parent is strongly suspected of trying to harm a child, then it is being used specifically to catch or entrap the parent harming the child. If the suspicions are correct this puts the child in danger. This has resulted in a child being injured.

To keep the child in view of the cameras he is "confined" to (or very near to) a bed by 1.5 m leads attached to a physiological recorder. As the child should have been fully investigated before covert video surveillance, such recordings should not be needed. The restraint



required to record for many hours is uncomfortable and restrictive and may make the child fractious. Moreover, if the doctors believe that the child is well they are deceiving the parent.

Reactions of parent and child in these conditions

As the purpose of the surveillance is to watch how the parent handles and cares for the child he or she has to stay with the child. In my experience the parent is constrained to stay in the cubicle with the child on the grounds that the physiological recorder may sound an alarm and may not be heard by the nurses.

The parent is often told that the child has to be investigated for a serious problem—for example "acute life threatening events" or "low oxygen levels" or "apnoeic attacks." This worries the parent, who may think that the child is seriously ill and at risk of dying. The parent's reaction to this anxiety and to the stress of being in a cubicle with the child all day adds further stress to the parent-child interaction. The artificial nature of the conditions in the cubicle create extra stress. Normal behaviour by the child or parent cannot be expected in these circumstances. Covert video recordings of the parent's behaviour are unlikely to represent how she behaves at other times.

Covert video surveillance lacks objective and independent statistical validation. There are no studies in which recordings of alleged cases and controls, in the same environment, have been evaluated blind to any history.

A letter in the *BMJ* stated that 32 of 34 children subjected to covert video surveillance were taken into care.[2] This is despite the fact that several parents did not harm the child under video surveillance. If investigators decide to use covert video surveillance they should consider what they will do if they do not observe abuse. If the answer is that the child will still be taken into care then surveillance should be unnecessary.

Videos are recorded to obtain evidence that may be used in court. The whole recording should be exhibited to show how the parent cares for the child during the entire time, and suspicious episodes should not be shown out of context. Video material that does not show "abuse" should not be erased.[3] Erasure could bias the evidence against the parent.

The paramount concern must be the welfare of the child, but those involved should carefully examine the practical and ethical problems of undertaking and interpreting covert video surveillance before they use it as part of their diagnostic armamentarium. Hopefully they will realise that it does not "provide certainty over the diagnosis." [4]

1 Samuels MP, McClaughlin W, Jacobsen RR, Poets CF, Southall DP. Fourteen cases of imposed upper airway obstruction. *Arch Dis Child* 1992;67:162-70.
2 Samuels MP, Southall DP. Welfare of the child must come first. *BMJ* 1994;308:1101-2.
3 Working Party of the British Paediatrics Association. *Evaluation of suspected imposed upper airway obstruction.* London: BPA, 1994:24.
4 Samuels MP, Southall D. Video surveillance in diagnosis of intentional suffocation [letter]. *Lancet* 1994;344:414.

(Accepted 23 April 1998)

Commentary: Covert video surveillance is acceptable—but only with a rigorous protocol

Neela Shabde, Alan W Craft

Health Department, North Tyneside Health Care (NHS)Trust, North Shields NE29 0HG

Neela Shabde, *consultant paediatrician*

continued over

Most paediatricians involved in the investigation and management of children with possible induced illness syndrome (signficant harm that is caused by the actions of a carer who deliberately fabricates or induces symptoms in a child) will share the concerns expressed by Colin Morley. These very concerns prompted the Northern Region's paediatric subcommittee to commission a report on the role of covert video surveillance in the management of the induced illness syndrome. The report concluded that such surveillance was both ethical and legal but needed to be used within very clearly defined multiagency guidelines to safeguard all concerned, both the child and his or her family as well as the professionals.[1]

Covert video surveillance may be perceived by some as an infringement of civil liberty of the parent, but any infringement is no greater than the massive amount of video surveillance to which the public in general is subjected in an attempt to prevent crime. The needs of the child are paramount and covert video surveillance is intended to be used only to safeguard the safety of children and their siblings. It is certainly not an infringement of the civil liberty of the child. The addendum to *Working Together—Under the Children Act 1989* gives guidance to doctors, stating that *(a)* the welfare of the child must be of first importance and *(b)* the overriding principle is to secure the best outcome for the child.[2] It would also certainly be in the best interests

of the parent to prevent them killing or seriously harming their child.

Interpretation of the surveillance evidence may be conclusive and show a parent, usually the mother, definitely harming the child. In addition, the interaction between parent and child can be revealing, but we agree that this needs to be interpreted with caution. The parent and child are in an artificial situation, which may make the child fractious or the parent irritable.

"Double effect" and care orders

Covert video surveillance should be used only with a minority of young children presenting with apparent life threatening events where the parent is strongly suspected of trying to harm the child. It is used to "entrap" the parent. It is recognised that this may potentially pose a risk of harm to the child, but it is a situation in which the principle of "double effect" applies—that is, when an act definable as good in terms of its object can achieve a good effect only at the risk or expense of causing incidental but unavoidable harm. Morley argues that if the child is going to be taken into care even if covert video surveillance does not prove abuse, then such surveillance is unnecessary. This oversimplifies the problem. The history itself may well be sufficient to obtain an emergency and often definitive care order. However, it should be recognised that although there may be enough grounds for legal proceedings, courts may decide to make only a supervision order or no order at all, unless an appreciable level of risk is shown and the child may be returned to his parents to face the same risk. Covert video surveillance can therefore provide valuable evidence for both care proceedings and criminal proceedings.

One of the principles of the Children Act is that where possible children should be brought up by their parents.[3] This may be totally inappropriate if one parent is the perpetrator of the induced illness syndrome. However, if the parent has not been convicted of a criminal offence relating to the induced illness syndrome, or no conclusive evidence exists of the cause of harm to the child, then it may be very difficult to argue that the child should not be returned to his or her parents even though they may be strongly suspected of perpetrating child abuse. The needs of siblings and any future children are easier to deal with when there has been conclusive evidence or conviction through care or criminal proceedings, or both of these.

Morley describes a child being "confined" to the bed by attachment to a physiological monitor. In practice covert video surveillance is usually undertaken on babies, who spend much of their time anyway in bed. With appropriate technology, including wide angle cameras, considerable "freedom to roam" can be allowed. In the only reported large series of covert video surveillance, recordings lasted from 15 minutes to 15 days (median 29 hours).[4] Morley also states that parents are told that the child has to be investigated for a "serious" problem and that this worries them. Innocent parents are already unbelievably worried, and we are indeed investigating a serious problem which has both a high mortality and significant morbidity. He also argues that there are no "control" recordings. It would be both unethical and probably unlawful to try to obtain such evidence on normal children and parents.

The pioneering work of Southall and his colleagues has been pivotal in raising both professional and some public awareness of the profound difficulties in this area.[4] It has been argued that there is now a great deal more understanding, and indeed belief, that parents can and do try to obstruct their child's airway and that because of this the judiciary may be more willing to agree to make care orders on the basis of a suggestive history. However, criminal proceedings are much less likely to be successful in the absence of such evidence. We believe that in many circumstances the long term protection of the child requires the added support of criminal proceedings and conviction.

Inappropriate and "maverick" use of covert video surveillance must be avoided by using an agreed and rigorous protocol. Here again, *Working Together—Under the Children Act 1989* is important.[2] Early involvement of the police and social services in strategy and planning meetings is essential if children are to be protected. A rigorous protocol for covert video surveillance must be owned by all agencies involved.

Children have the right to protection from abuse and ill treatment. Covert video surveillance is an important tool to help professionals make the correct decision on behalf of children.

Department of Child Health University of Newcastle upon Tyne, Newcastle upon Tyne NE2 2HH

Alan W Craft, *Sir James Spence professor of child health*

Correspondence to: Professor Craft a.w.craft@ncl.ac.uk

1 Working Group of the Specialist Advisory Committee in Paediatrics (Northern). *The role of covert video surveillance in the management of induced illness syndrome.* Newcastle upon Tyne: SACP (Northern), 1997.
2 Department of Health. *Working Together—Under the Children Act 1989.* London: HMSO, 1995. (Addendum: Child protection—medical responsibilities.)
3 *Children Act 1989.* London: HMSO, 1989.
4 Southall D, Plunkett MCB, Banks MW, Falkov AF, Samuels MP. Covert video recordings of life threatening child abuse: lessons for child protection. *Paediatrics* 1997;100:735-60.

Corrections

Obituaries
Some editorial errors have occurred in recent obituaries. In Dr John England's obituary (7 February, p 478) we wrongly said that he died in 1997; he died in 1996. In Dr David Rice's obituary (7 March, p 783) we wrongly said that he had a Guillain-Barré attack in 1947; the attack was in 1974.

Systematic review of dietary intervention trials to lower blood total cholesterol in free-living subjects
Poor layout of the authors' addresses in this paper by J L Tang and colleagues (18 April 1998, pp 1213-20) may have caused some confusion. Dr J M Armitage (the corresponding author) is at the Clinical Trial Service Unit and Epidemiological Studies Unit, Radcliffe Infirmary, Oxford OX2 6HE, and Professor C A Silagy is at Flinders University of South Australia School of Medicine, Adelaide.

Single dose vitamin A treatment in acute shigellosis in Bangladeshi children: randomised double blind controlled trial
In the abstract of this paper by Shahadat Hossain and colleagues (7 February, pp 422-6) two digits were wrongly reversed: in the second sentence of the results, 8/14 (20%) should have read 8/41 (20%).