

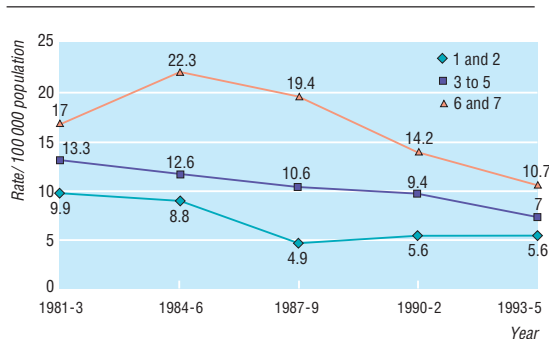
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Mortality from injury per 100 000 children by category of deprivation, 1981-95

There was no evidence that this had changed over the study period ($P = 0.56$).

Conclusions

Despite overall improvements in childhood mortality from injury in England and Wales, children in the lower socioeconomic groups seem to be experiencing progressively increasing relative risks of injury in comparison with those in higher socioeconomic groups,² possibly as a result of a differential impact of health education efforts. Our data suggest that this may not be the case in Scotland. The reason for this difference north and south of the border is unclear. One hypothesis is that, unlike in England and Wales, measures to prevent injury in children are exerting an equal effect on all socioeconomic groups in Scotland. An alternative explanation is that the decline has occurred independently of specific preventive efforts.

We cannot rule out the possibility that the cross border differences are due to the way socioeconomic

status is measured. The Carstairs' deprivation scores adopted in Scotland and the social class definitions used in the analysis of England and Wales data are not necessarily directly comparable. The Carstairs system adopts a measure of "area" deprivation, whereas the measure of social class used in England and Wales categorises the population into five classes based on individual occupational status. This may be important as there is some evidence that the characteristics of communities, as well as those of individuals, exert an impact on the health of the population.⁵ Further investigation of the apparently divergent socioeconomic patterns of mortality from injury in children within the United Kingdom is necessary.

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Routine screening of children returning home from the tropics: retrospective study

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Parents who move to the tropics with their children often worry about tropical diseases. Most of the data available on screening children returning home from living in the tropics are from 1952-63 from American children.¹ More recent findings in asymptomatic people returning to the United Kingdom have been reported.² We aimed to determine whether it is worthwhile to routinely screen children without symptoms returning home from the tropics.

Subjects, methods, and results

During 1987-95 all children visiting our hospital for a medical check up after a stay in the tropics were studied. This check up was obligatory under their parents' terms of employment. Our protocol included a questionnaire (completed by the parents), physical examination of the child, and additional investigations. These investigations included a full blood cell count;

eosinophil count; liver function tests; urea and creatinine concentrations; hepatitis A and B serology; thick smear; schistosoma and filaria serology (if the child had stayed in endemic areas); urine analysis; stool culture; analysis of three stool samples for ova and cysts; tuberculin skin test; and a chest x ray if indicated. The same specialist (JJMT) performed all consultations. Data were analysed with EpiInfo version 5.0.

Results

A total of 216 children (103 girls) were seen during 282 check ups (some children had lived in the tropics more than once) (table). In 175 (62%) cases (check ups), children had lived in sub-Saharan Africa. Ninety three children (43%) were born in the tropics. The length of stay overseas ranged from 3 months to 13 years; in 150 (53%) cases the stay was 1-3 years. Age at first check up ranged from 3 months to 16 years (mean 4.75, median

3.6). In 29 (10%) cases children were seen early, mainly because they had one or more complaints: abdominal pain (13 children), diarrhoea (9), or fever (8). These cases were classed as symptomatic. In the 253 asymptomatic cases of disease—that is, among children seen at their scheduled appointment—parents reported that 40 had abdominal pain and 31 had diarrhoea. On physical examination, few abnormalities associated with tropical diseases were detected in children with symptoms: hepatosplenomegaly (in three children) and cutaneous larva migrans (one child).

Most conditions were diagnosed by laboratory investigation. Twelve of 58 (21%) asymptomatic cases of giardiasis were associated with abdominal complaints. Results of tuberculin skin tests were available for 187 children, of whom 149 had been vaccinated with BCG. In 47 (25%), induration was less than 10 mm, and two children had indurations of 12 mm and 15 mm with normal physical findings and normal chest x rays. A total of 112 (75%) of the children vaccinated with BCG did not respond to the tuberculin test. Tropical diseases were diagnosed in 99/253 (39%) asymptomatic and 15/29 (52%) symptomatic cases. All children with parasitic infections received appropriate treatment as outpatients. Only one child needed admission; this was for treatment of relapsing fever.

Comment

These findings can be considered representative for all children returning home, especially those returning from sub-Saharan Africa. Children should be seen early if they have any symptoms but children without apparent symptoms also may have abdominal complaints. We found a higher incidence of tropical diseases in asymptomatic children than Carroll et al² (39% v 25%), probably because of our higher incidence of giardiasis (23% v 4%). Most cases of giardiasis in our study were asymptomatic. The incidence of unexplained eosinophilia in 24 (10%) of 253 asymptomatic cases is similar to that found by others.²⁻⁴ A lack of response to tuberculin skin testing among 75% of the children who had been vaccinated with BCG could be explained by inadequate testing technique, failure of the vaccination to produce tuberculin sensitivity, or diminishing sensitivity occurring over time.⁵

Routine screening of children without symptoms returning home after living in the tropics is worth while. Laboratory testing will identify most cases of tropical

Number (percentage) of diagnoses of tropical disease found during 282 check ups in 216 children in the Netherlands, 1987-1995

Diagnosis	Cases		
	Asymptomatic disease (n=253)	Symptomatic disease (n=29)	Total (n=282)
Giardiasis	58 (23)	3 (10)	61 (22)
Unexplained eosinophilia	24 (10)	3 (10)	27 (10)
Schistosomiasis	19 (8)	2 (7)	21 (7)*
Trichuriasis	7 (3)	2 (7)	9 (3)
Ascariasis	5 (2)	1 (3)	6 (2)
Hepatitis A infection	4 (2)	2 (7)	6 (2)†
<i>Campylobacter jejuni</i> infection	3 (1)	2 (7)	5 (2)
<i>Entamoeba histolytica</i> or <i>Entamoeba dispar</i> infection	3 (1)	2 (7)	5 (2)
Ancylostomiasis	4 (2)	—	4 (1)
Filariasis	2 (0.8)	1 (3)	3 (1)‡
Relapsing fever	—	1 (3)	1 (0.4)
Hepatitis B infection	1 (0.4)	—	1 (0.4)
Malaria	—	1 (3)	1 (0.4)
Other	2 (0.8)¶	4 (14)§	6 (2)
Total diagnoses	132	24	156
No of cases with one or more diagnosis	99 (39)	15 (52)	114 (40)

*All positive on serological testing and three children also positive for ova.

†All tested positive for anti-hepatitis A IgM.

‡All positive on serological testing and one child also positive on thick smear.

¶One case of strongyloidiasis and one case of salmonellosis.

§One case each of borreliosis, rickettsiosis, larva migrans, relapsing fever.

disease. Screening can be carried out by well informed general practitioners using a standard protocol.

We thank the nursing and administrative staff of the paediatric clinic for their contribution in carrying out the protocol.

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Competing interests: None declared.

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One hundred years ago

The bicycle and diseases of women

Few persons deny that moderate exercise with the bicycle is excellent for healthy young women, but in the case of women suffering from pelvic disease the case is different. The matter has recently been discussed at a medical congress at Marseilles. Dr. Leriche, of Nice, succeeded in curing a case of habitual menorrhagia by enforcing bicycle exercise. That malady, however, is really but a symptom, so that it would be interesting to have more precise clinical evidence about such a case. We are not surprised to hear that Dr. Leriche finds that as a rule cycling does harm to those subject to haemorrhages from uterine and ovarian inflammation. On the other hand the researches of Regnault and Bianchi have

shown that this kind of exercise does not depress the abdominal viscera; indeed, it actually raises the organs. Hence the fear of "displacements" is exaggerated; but patients with flexions and versions are often neurotic, and expect that cycling will make them worse; the hyperaesthesia, indeed, will certainly cause them to feel uneasy during this exercise, nor are such persons strong enough to bear a long run on the wheel. The cycle is quite contraindicated when the appendages are inflamed. The effect on the intestinal functions seems remarkably beneficial: constipation, as might be expected, is usually relieved; on the other hand, cycling is said by Leriche to check chronic looseness of the bowels. (*BMJ* 1899;i:38)