individuals to try to ensure suitable housing for anything of importance—*before* it is discarded as rubbish or crumbles to dust.

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Changing pattern of poisoning in children

SIR,—In relation to the correspondence on the changing pattern of poisoning in children (17 September, p 833) some data from Ireland, where there are no regulations on the use of child resistant containers or packaging, may be relevant.

The table shows our experience in 1975 and 1980 in dealing with accidental ingestions at a busy children's casualty department.

Comparison of accidental ingestions seen in a children's casualty department in 1975 and in 1980

	1975	1980	% change
Total seen	501	409	−18
No of drug ingestions	322	237	−26
No of non-medicinal ingestions	179	172	− 4
No admitted	330	86	−74
No of deaths	0	0	
Total casualty attendances	42 000	63 000	+50

Some 95% of ingestions were in children under 5 years. In the period studied there was a 49% fall in attendance after ingestion of salicylates, but a 50% increase in ingestion of paracetamol. This presumably reflects a change in analgesic prescribing and purchasing practice. The 18% overall fall in ingestion of analgesics over five years compares unfavourably with the 60-70% reduction recorded in one year after the introduction of child resistant packaging in the United Kingdom.[1]

Dr A D Greig is wrong to conclude that hospital admission gives a true reflection of incidence of ingestion. The 74% reduction in hospital admissions we recorded is due to the active use of syrup of ipecacuanha, to the recognition of the triviality of many childhood poisoning events, and to the use of an observation ward in the casualty department.

I would join with Dr R H Jackson and others in suggesting that the use of child resistant containers be extended to cover other potentially toxic drugs such as barbiturates, tricyclic antidepressants, Lomotil (diphenoxylate and atropine), and iron preparations.

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[1] Sibert JR, Craft AW, Jackson RH. Child resistant packaging and accidental child poisoning. *Lancet* 1977;ii:289-90.

SIR,—In his letter (17 September, p 833) Dr A D Greig commented on the paper written by some of us (2 July, p 15) and published a figure apparently derived from the *Hospital In-Patient Enquiry* to support his argument that the introduction in 1976 of child resistant containers was not a factor in the reduction in the numbers of hospital admissions of children aged 0 to 4 years from accidental poisoning by medicinal agents. His figure showed a reduction beginning in 1974, two years before child resistant containers were introduced.

We have examined the sources for the data of Dr Greig's figure and are unable to confirm his graphs: it would appear that of his 10 figures of admissions, five show the total number of admissions (1970, '71, '72, '73, and '79), four show the admissions "due to other and unspecified accidents" (1974, '76, '77, and '78), and one (1975) shows admissions due to home accidents. These are represented by the dotted line in fig 1, in which we show: (*a*) the estimated total deaths and discharges, (*b*) those due to other and unspecified accidental poisonings, and (*c*) those due to poisonings as home accidents. This shows that the total number of admissions fell first in 1976 after child resistant containers had been introduced at the beginning of that year. This fall occurred in both subcategories as well as in the total, and these falls continued in 1977 and 1978, though there was a slight rise in 1979, as Dr Greig points out. That these falls have been mainly due to the fall in the number of admissions from analgesic and antipyretic poisoning is shown in fig 2: these were constant at about 7000 a year until 1976, since when the number has fallen by over 5000. The introduction in 1979 of the Ninth Revision of the International Classification of Diseases has led to incompatibility between the codes used in that year for poisoning by specified drugs and the codes used in previous years; fig 2 therefore does not contain this information for 1979.

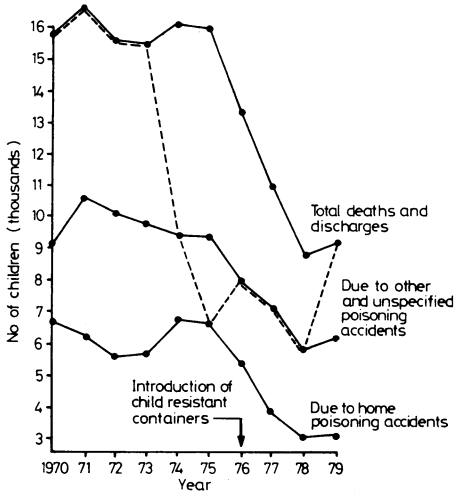

FIG 1—Estimated number of deaths and discharges after accidental poisoning with medicinal agents in children aged 0-4 years in England and Wales from 1970 to 1979. (Source: DHSS, Office of Population Censuses and Surveys, and Welsh Office. *Hospital In-Patient Enquiry*. 1970, tables 5 and 20 (ii); 1971-8, tables 20 (ii) and 21 (ii); 1979, table 29. Diagnostic codes N 960-979, N 965, N 967, N 970, N 977.)

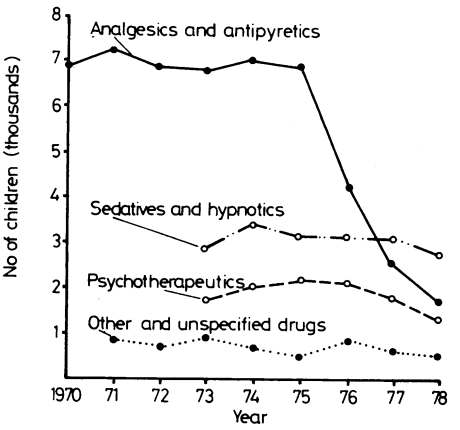

FIG 2—Estimated number of deaths and discharges after accidental poisoning with specific drugs in children aged 0-4 years in England and Wales from 1970 to 1978. (Source as for fig 1.)

It should be mentioned that the admission rate per 10 000 related population per year is a more exact estimate of the incidence of poisoning than is the total number of admissions per year as it takes into account the fall in the birth rate. This rate was calculated by McLean[1] and updated by Jackson[2]: again the fall in the admission rate began in 1976 and continued over the next two years.

We believe therefore that Dr Greig's figures and the conclusion he draws from them are wrong, and that our contention is correct that the fall in admissions from poisoning is associated with, and probably mainly due to, the introduction of child resistant containers for aspirin and paracetamol in 1976.

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[1] McLean W. Child poisoning in England and Wales: some statistics on admissions to hospital, 1964-76. *Health Trends* 1980;**12**:9-12.
[2] Jackson RH. Childhood poisoning: perspectives and problems. *Human Toxicol* 1983;**2**:285-93.

**We sent a copy of this letter to Dr Greig, who replies below.—ED, *BMJ*.

SIR,—Dr Jackson's statement that he could not confirm my data led me to retrace my footsteps and recheck my figures and data.

My data, from which the graphs were drawn, come from *Hospital In-Patient Enquiry*. The data for 1974 to 1978 inclusive I had in my possession. These were from table 21 (ii). This table gives the estimated total discharges and deaths due to other and unspecified accidents by nature of injury, sex, and age group. The specific information is coded: N 960-979 Adverse effects of medicinal agents; N 965 adverse effects of analgesics and antipyretics; N 967 adverse effects of sedatives and hypnotics; N 970 adverse effects of psychotherapeutics; and N 977 adverse effects of other and unspecified drugs. Taking the same code number for each year gives comparable data, and this can be shown graphically.

As I was missing the information for 1975 I contacted the medical statistics division of the Office of Population Censuses and Surveys. This office produces the data for *Hospital In-Patient Enquiry* and has all the records. Although I took at face value the information I was given for 1975 it had been erroneously copied from another table and was hence not valid. This was spotted by Dr Jackson. It therefore makes my graph unreliable.

As table 21 (ii) was not produced before