The appeal was broadcast on 29 and 30 November

Fig. 1 Average daily attendances of minor complaints based on weekly totals.

of these results being due to chance is 0.00135 or 750:1 against (unpaired *t*-test). There was no compensatory increase in numbers in succeeding weeks and this suggests that wherever the 14% went for help they received adequate treatment.

These findings indicate that at least 14% of the minor complaints seen in casualty do not need hospital attention. If this group could be dissuaded on a permanent basis this would have beneficial consequences for many hard-pressed casualty departments.

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How common is accidental hypothermia?

Sir

The Accident and Emergency Department of the Hope Hospital, Salford, and the Medical Research Council Trauma Unit have been studying accidental hypothermia since 1977. An increase was expected in the number of elderly hypothermics presenting during the cold weather in January and February 1985 but the number admitted, 12, was similar to that in previous, milder winters. Our observations on the numbers brought in dead (BID) suggest an explanation of this unexpected finding.

The numbers of BID, excluding RTAs, for January and February 1983-5 and May and June 1983-4, are shown in Table 1. They are close to the total numbers of unexpected deaths in Salford, most of whom are brought in to the accident and emergency department for certification.

Minimum and mean daily temperatures for the Manchester area were obtained for these months from the local Meteorological Office.

There were no significant differences in the BID rates for January-February May-June of 1983-4. In the period January-February 1985, however, there was a highly significant increase, which was substantially confined to the over-65s (*chi-squared* tests), the number of whom doubled.

Table 1 Numbers BID for summer and winter periods. 1983–5

Month	May–June 1983	May–June 1984	January–February 1983	January–February 1984	January–February 1985
Total	19 + 29 48	17 + 20 37	23 + 26 49	13 + 24 37	32 + 37 69 P < 0.01
Over-65s	11 + 18 29	8 + 9 17	11 + 18 29	8 + 16 24 chi-squared test	21 + 29 50 p < 0.001

In 1985 there were two spells of 7 days in February and one of 7 days in January during which every day the minimum and mean temperatures were lower than during any day in the corresponding month of either of the preceding 2 years.

Cold weather is known to increase mortality of the elderly from cardiac, cerebrovascular and respiratory causes by 17–20% over that in the summer (Bull & Morton, 1978; Hansard, 1982; Collins, 1983). Our observations on the elderly for 1983–4 are not inconsistent with such an increase, although the numbers are too small for any positive conclusion to be reached. The rise in 1985, however, remains significant ($p < 0.001$, *chi-squared* test) when the test is carried out assuming that rates in winter are 20% higher than those in spring. It therefore seems to us that hypothermia contributed to the excess mortality in Salford.

There is, at present, no proof of this view, but it is difficult to see any other explanation. By a few hours after death there are no signs distinctive of hypothermia, which is unlikely, therefore, to feature on a death certificate. Post-mortem may well reveal a cardiac, cerebrovascular or respiratory ‘cause of death’. This would not, however, rule out hypothermia as a contributory factor, either resulting from or precipitating the medical condition. An episode that would not normally be fatal may easily become so if it immobilizes the victim in a cold room.

In view of our observations, a lack of increase in the number of hypothermic patients during cold spells is poor evidence that they do not increase mortality from hypothermia.

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