Comment

This leaflet did not seem to reduce the incidence of severe sunburn. Passengers were not asked if they had seen or read the leaflet as this might have influenced their response to the questionnaire. Therefore it is not possible to determine if the intervention failed because subjects had not read the leaflet, they had ignored its messages, or the messages were inappropriate. However, unsolicited distribution of leaflets is a common practice.

Randomised controlled trials provide the most compelling evidence of effectiveness. We have found no other randomised controlled trials of the effectiveness of health education leaflets in the prevention of sunburn and few trials of health education leaflets in other settings.⁷ Although leaflets are perceived as low cost and unlikely to cause harm, there are substantial opportunity costs associated with promoting strategies

of unproved effectiveness. We commend the more extensive use of randomised controlled trials in the evaluation of primary prevention programmes.

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Conflict of interest: None.

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Prevalence of urinary and faecal incontinence in hospitals and residential and nursing homes for older people

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Studies of older people in long term care have shown that urinary and faecal incontinence are more prevalent in this group than among older people in the community.¹⁻³ However, data describing the size of the problem in all types of long term care are lacking. We determined the prevalence of incontinence to assess the use of aids among older people in long term care.

Subjects, methods, and results

In November 1990 a census of all people aged 65 years and over in long term care was carried out in Leicestershire.⁴ Data were collected on health, dependency, and the use of continence aids. Residents experiencing at least one incontinent episode weekly were defined as being incontinent of urine or faeces. Physical dependency was determined by a modified dependency measure used previously in Leicestershire.⁵ An additive score was derived from ratings of mobility (four point scale of 0-3), washing/dressing

(three point scale of 0-2), and feeding (three point scale of 0-2), with higher scores indicating greater dependency. Our measure of physical dependency excluded ratings for urinary and faecal incontinence since these were the variables of interest for comparison. A score of 4 and over was taken to indicate high dependency in line with our modification to the measure devised by Clarke *et al.*⁵

There were 6079 residents in 241 residential or nursing homes and hospitals whose mean age was 82.7 years (SD 7.8; range 65-109 years), and 79% of whom were women. Data for incontinence were recorded for 95% of residents (5758). Forty four per cent were incontinent of urine or faeces, or both (table). The remainder were continent, of whom 7% required prompting and 1% wore a continence pad as a precaution. Incontinence was associated with physical dependency in each type of home (Kruskal-Wallis test, $P < 0.001$). For example, 67% of the incontinent in all homes had high physical dependency compared with only 18% of the fully continent. Forty nine per cent of incontinent people used continence pads or pants, 15% were catheterised, and 36% used no continence pads or pants (table). The use of continence aids among incontinent residents differed significantly between home type (χ^2 , $P < 0.001$).

Comment

The census showed a higher prevalence of urinary incontinence in residents of homes than among older

Prevalence of incontinence and high dependency and use of continence aids in residential and nursing homes and hospitals in Leicestershire in 1990. Values are percentages

	Type of establishment (population and size)								Total (n=5758)
	NHS acute (n=627)	NHS geriatric (n=446)	NHS psychogeriatric (n=397)	Local authority (n=1704)	Private residential (n=1244)	Private nursing (n=946)	Voluntary sector (n=192)	Other hospitals and hostels (n=202)	
Percentage of all patients or residents									
Incontinent of urine	20.7	30.9	28.2	21.3	19.1	29.7	6.3	15.3	22.7
Not catheterised	9.3	22.9	27.0	19.4	16.4	23.5	5.2	11.4	18.4
Catheterised	11.5	8.1	1.3	1.9	2.7	6.2	1.0	4.0	4.3
Incontinent of faeces	4.2	2.7	1.8	2.9	2.9	4.3	0.5	4.5	3.1
Doubly incontinent	9.4	26.5	36.5	13.9	10.2	32.6	4.2	7.9	17.7
Not catheterised	3.7	17.3	34.3	12.8	8.9	25.4	3.1	6.9	14.3
Catheterised	5.7	9.2	2.3	1.1	1.3	7.2	1.0	1.0	3.4
Continent or remains dry with prompting	65.7	39.9	33.5	61.9	67.8	33.4	89.1	72.3	56.5
High dependency	34.7	60.9	47.2	26.3	31.9	70.2	17.0	23.6	39.3
Percentage of incontinent patients or residents									
Use of continence aids:									
Any aid (including catheter)	61.1	74.3	72.5	52.3	64.9	69.4	63.6	58.9	64.1
Pants or pads	17.4	48.7	67.7	45.5	55.6	52.5	51.5	45.2	49.3
Catheter*	43.7	25.7	4.8	6.8	9.4	16.9	12.2	13.7	14.8

*Includes some incontinent residents who also use pants or pads.

people in the community.³ About two thirds of people in psychogeriatric or geriatric wards and private nursing homes were incontinent of urine, which concurred with earlier findings.² Around one third of residents in local authority and private residential homes were incontinent of urine, which also agreed with earlier work.¹

These findings, which covered the whole range of long term care settings, showed a substantial overlap of incontinence and physical dependency between nursing and residential care. More acute and geriatric patients were catheterised which, although in some cases would have been for the management of an acute illness, could also indicate some inappropriate usage.

In conclusion, the high prevalence of urinary, faecal, and double incontinence and the widely divergent use of aids in different settings indicates the need for

greater specialist attention for these problems and their management.

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Contamination with blood during management of epistaxis

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The management of medical emergencies is known to expose medical staff to the risks of blood contamination,¹ including infection with HIV and hepatitis B virus.² Epistaxis is one of the commonest otolaryngological emergencies, requiring treatment that may range from simple chemical cautery to major arterial ligation. We assessed the risk of blood contamination to junior medical staff during the treatment of acute epistaxis and determined patient opinion regarding the junior doctors' use of protective clothing.

Patients, methods, and results

Fifty consecutive cases of acute epistaxis treated by two junior medical staff were prospectively studied. Clean protective theatre clothing with gloves, mask, full face visor, hat, and apron was worn during the treatment of all 50 cases. After treatment, all items of clothing were examined thoroughly for visible blood contamination. Patients were invited to fill in a confidential questionnaire asking whether they felt each specific item of protective clothing their doctor had worn was both appropriate and acceptable to them.

One patient stopped bleeding with manual pressure and required no further treatment. Contamination occurred in 69% (34/49) of actively treated cases. In 27 cases clothing in addition to the gloves was contaminated (55% of all cases). Aprons were soiled in 25 cases, gowns in 22, visors in seven, and masks in six. Contamination varied according to the treatment required (table). If patients were treated with chemical or electrical cautery, contamination extended beyond

the gloves in 38%, compared with 74% if a nasal pack was required.

Forty nine questionnaires were returned (98%). Forty eight patients found it acceptable and appropriate for doctors to wear protective theatre dress and 46 recognised the need for a protective mask/visor; 15 felt it would be inappropriate for staff to treat them while wearing smart work clothes.

Comment

We have shown that a high incidence of blood contamination occurs during the treatment of epistaxis, especially if a pack is required. A considerable proportion of blood splashes occurred in the facial area, implying a very real risk of viral transfer through the conjunctivae or buccal mucosa if no facial protection is worn. Although the management of epistaxis is an emergency classified by the Department of Health as a category A(i) procedure,² in many departments in the United Kingdom the minimum of protective clothing is worn.³ Perhaps this is because junior staff underestimate the incidence of blood splashes⁴ and because cases are usually managed in treatment rooms adjacent to the ward or outpatient clinic, along with other ward or clinic work for which medical staff traditionally wear smart attire. In some accident and emergency departments, after the discovery of high contamination rates,¹ staff now wear protective clothing when treating all patients and have found such garments to be adequate for skin protection³ and perfectly acceptable to the public, providing they are clean, tidy, and professional.⁵ We have shown that in today's infection conscious climate, most patients find the routine wearing of protective dress acceptable during the treatment of epistaxis. There is now a strong case for extending the use of protective clothing to include other medical staff engaged in emergency care.³

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Conflict of interest: None.

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Incidence of blood contamination in 50 cases of acute epistaxis according to treatment. Values are numbers (percentages)

Treatment	No contamination (n=15)	Contamination	
		Gloves alone (n=7)	Beyond gloves (n=27)
Cautery (n=26)	13 (50)	3 (12)	10 (37)
Nasal packing (n=23)	2 (9)	4 (17)	17 (74)