Comparison of features of ideal toilet with actual toilets in wards of a teaching hospital

Feature	Ideal	Actual	Comments
Toilet:bed ratio	1:3 to 1:4	1:2.6 to 1:6.8	Standard met only on psychogeriatric ward. Worst ratio on 3 geriatric wards
Signposting	Clear signposting by words and symbols	Only 1 toilet signposted	
Labelling	Large clear labelling on door	10 Had small labels; 7 had none	
Locking	Lever handled door that locks from inside but can be opened from outside in emergency	All could be unlocked from outside in emergency; 13 could be locked from inside	One had curtain instead of door
Door opening	Door opens outwards to ease passage of wheelchair	10 Outward 1 Inward 5 Sliding	
Door width	≥100 cm	70-91 cm	11 Were ≤80 cm wide
Cubicle length	≥2 m	1.6-2.6 m	7 Toilets met standard
Cubicle width	≥1.5 m	0.9-1.82 m	5 Cubicles met standard Irregular shape and inward opening door compromised dimensions of 2 cubicles The 3 toilets meeting standards for both length and width were on geriatric, psychogeriatric, and surgical wards
Toilet seats	≥45 cm from floor level Toilet seat raise should be available	42-47 cm	12 Were <45 cm high
Flush mechanism	Adapted for ease of use	Adapted by means of pushbuttons or long handles in 8 toilets	All were suitable for addition of raised seats
Toilet paper	Plentiful Easily reached from seat Single sheets detachable by person using only one arm	All lavatories equipped with paper In three cases paper could not be reached from seat No paper could be obtained with only one hand	
Washbasin	≤75 cm high Reachable from toilet seat, so wheelchair users can wash hands while seated	75-85 cm Only two basins could be reached from toilet seat	Only one basin was 75 cm high
Taps	Adapted, long handled	Only three had adapted taps	
Rails	Fixed horizontal rail on wall side of cubicle, reachable from toilet seat Horizontal drop down rail on other side of toilet, to enable wheelchair occupant to slide across from chair to toilet seat, rail accessible from toilet seat	14 Toilets had recommended rail; others had no rail or a fixed diagonal or vertical rail Only 3 toilets had recommended rail; one of these could not be reached from seat. 5 Had fixed horizontal rail, 1 had fixed diagonal rail, 1 had fixed vertical rail, 7 had no rails	Only rheumatology and neurology wards fulfilled British Standards for toilet rails
Flooring	Fixed vertical rail above and to side of washbasin Pull rail to rear of door to facilitate closure	Standard met only on rheumatology ward No cubicle had such a rail	
Mirror	Non-slip and non-absorbent Lower edge no higher than 90 cm from floor to be used by wheelchair occupant	Non-slip surface only on rheumatology ward 10 Lavatories had mirrors; only on rheumatology ward was mirror at height recommended	
Safety alarm	String pull, clearly labelled	11 Cubicles had alarms, functioning in only eight	

washbasin rails. The taps were not adapted. There was no alarm and no mirror. This was one of three toilets on a 20 bed ward. Disabled patients were unable to use this toilet, so the nurses were obliged to recommend the use of commodes for these patients.

It is unlikely that this hospital is alone in its inadequate toilet facilities. A study in Edinburgh showed that limitations in the provision of facilities on the ward led to increased dependence by the patients on the nurses.⁶ The haphazard provision of ward toilet rails has been observed elsewhere.⁷ A survey of 140 elderly people at home showed 5% using raised toilet seats, a further 8% needing them, 9% using a fixed toilet rail, and a further 11% needing one.⁸ One survey found that 33% of people over 75 at home used toilet aids and 43% of women over 85 could not get to the toilet without aids or personal assistance.⁹ Such people are disadvantaged when admitted to hospitals where

toilets do not meet the British Standards for access by disabled people.

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(Accepted 13 January 1992)

Perforation of gloves in an accident and emergency department

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There is increased concern regarding the risk of transmission of diseases such as those caused by hepatitis virus and HIV, particularly from high risk groups who attend accident and emergency departments, such as drug addicts. Surgeons sustain needle perforation of their gloves during difficult and prolonged operations,¹ but simple suturing of wounds under local anaesthesia would be expected to present a minimal risk to an accident and emergency doctor. This study defines the extent of the risk and identifies

risk factors to doctors working in accident and emergency departments.

Subjects, methods, and results

We tested for perforations 338 pairs of single use, prepacked, sterilised gloves (Ansell) used consecutively for minor suturing procedures performed under local anaesthesia. The cuff was secured by rubber rings to the end of a specially constructed apparatus that delivered 500 ml (+/- 5%) of water into the glove. Each glove was tested within 24 hours of its use: each finger, the palm, and the dorsum of the glove were examined for leakage when pressure was applied.² Thirty pairs of unused surgical gloves were used as controls. Thirteen senior house officers, two senior registrars, and one consultant (all of whom were right handed) participated in this study. We noted whether perforation of a glove had been suspected and whether the patient was confused or uncooperative because of

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BMJ 1992;304:879-80

the influence of alcohol. (Patients were considered to be uncooperative if they would not remain relatively still during the procedure or if physical restraint was needed.)

All 30 pairs of unused gloves were intact. Thirty eight (11%) of the 338 pairs of used gloves had a total of 45 perforations (six gloves had more than one perforation). Fifteen of these perforations were not suspected by the doctor. For procedures in patients who were uncooperative owing to the influence of alcohol the rate of perforation increased from 8% (25/295, 95% confidence interval 3.2 to 11.7) to 23% (7/31, 14.7 to 37.3) ($p<0.01$), and for those in patients who were noted to be confused or uncooperative the rate was increased to 50% (6/12, 29.7 to 78.3) ($p<0.05$). Thirty three (73%) perforations were to the left glove, 17 (38%) to the left index finger, and 13 (29%) to the left thumb (fig). Further analysis showed that senior doctors performed no better than senior house officers and that patients who were children did not represent an increased risk.

Comment

The perforation rate of gloves in general and orthopaedic surgery has been reported as ranging from 2.8%-50%.¹⁻⁵ A rate of 11% in this accident and emergency department is surprisingly high in view of the relatively simple procedures that are performed. In total, 37% of perforations had not been suspected and this compares with 61.1% of unsuspected perforations in surgeons and 57.9% in first assistants reported by Brough *et al.*³

Sufficient staff should be available to restrain confused patients, and postponing the suturing of lacerations in patients who are uncooperative because of the influence of alcohol should be considered. Greater use of alternative wound closure methods, such as Histoacryl glue or plastic adhesive tapes and double gloving may help to reduce the risk of perforation.⁴

Thirty three (73%) perforations were found in the non-dominant index finger and thumb; this would suggest poor technique, with the left hand being used to steady the wound and control the needle. Improved training and supervision may be necessary and greater time set aside to suture, although we found that senior medical staff also sustained perforated gloves. Immunisation against hepatitis B should be provided for all staff. Our results have implications for general practitioners, who are now encouraged to perform suturing of wounds and minor surgery.

We thank the medical physics department, Cardiff Royal Infirmary, for constructing the glove testing apparatus, and the medical staff of the accident and emergency department.

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(Accepted 3 January 1992)

Sex bias in the *BMJ*: an audit

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BMJ 1992;304:880-1

In 1987 an editorial in the *BMJ* stated the journal's policy of neutralising sex biased language in papers accepted for publication.¹ The article listed several examples of sexist writing and particularly criticised the use of "man" and of masculine pronouns to refer to people of either sex. It went on to offer suggestions about how such language might be avoided. The study described here seeks to establish how successful the policy has been in eliminating sex biased writing in the journal.

Method and results

With the exception of the advertisements, obituaries, Memoir Club extracts, and extracts from One Hundred Years Ago, I read the six issues of the *BMJ* from 5 October to 9 November 1991 from cover to cover. Using the examples given in the 1987 editorial as a guide, I noted all instances of sex biased writing. In all, 35 articles contained one or more sexist words or phrases. The table gives the total number of articles read and the numbers containing sexist language, classified by the sections of the journal in which they appeared. A relatively high proportion of articles in the General Practice, Audit in Practice, Education and Debate, News, and Medicopolitical Digest sections contained examples of sexist writing while none of the original articles in the Papers section did so. This seemed to reflect the different topics of the articles in the various sections.

All but one of the instances detected were examples of androcentric writing, implying that the norm of humanity is male.² Thus medical staffing issues were

BMJ articles containing sex biased language, classified by section in which article appeared

Section of <i>BMJ</i>	No of articles read	No (%) of articles containing sex biased language
Editorials	34	2 (6)
News and Medicopolitical Digest	83	12 (14)
Papers	40	0
General Practice and Audit in Practice	10	2 (20)
Middles, Education and Debate	32	7 (22)
Correspondence	205	7 (3)
Medicine and Books	26	2 (8)
Other	39	3 (8)
Total	469	35 (7)

described as issues of medical "manpower." The chairs of many committees were described as "chairmen," even when women; and train drivers, doctors, surgeons, gastroenterologists, inventors, children, and chief executives were all alluded to with masculine pronouns. The average person was "the man in the street," and women were presumably immune to environmental factors "harmful to man." The one exception to an androcentric bias was when nurses were referred to as if all female, thus excluding the many men in the profession.

Comment

Sexist language can be deeply offensive.³ More often it makes a distinction between the sexes that is simply irrelevant to the subject under consideration.⁴ At best this is imprecise, at worst it may confuse. For example, if an employer is seeking "the best man for the job" then is a woman wasting her time to apply? There is also a strongly argued view that the use of sexist language, which excludes women more often than men