Sources of hospital cross-infection and other problems: observations of an inpatient

Elizabeth Tylden

This article gives the patient's viewpoint of a recent stay in hospital. The author highlights a number of issues and discusses the implications of her observations for hospital practice in the UK.

INTRODUCTION

I have worked in hospitals as a doctor since I qualified in 1945. I have served on three Ministry of Health Central Services Health Council sub-committees and two King's Fund committees, as well as various hospital staff committees. In late November 1999, I was admitted to hospital for the first of three admissions, lasting 7 weeks in all. This article gives my observations on various aspects of the hospital practice I saw, with particular reference to cross infection, and suggests some possible solutions to the problems I observed (*Table 1*).

A&E

I was originally admitted through accident and emergency (A&E). I was told a bed had been arranged, but waited 5 hours on a trolley. This department was extremely well run and clean, patients' and their relatives' needs were well considered. However, the staff were clearly run off their feet, with very inadequate back-up from supporting services. There were too few porters, administrative staff, clerical staff and cleaners. Medical and nursing care was excellent.

I was readmitted as an emergency 2 days after my discharge from the second ward, where junior staff had not been interested in my symptoms of acute abdomen. I had to wait 9 hours to be admitted to a ward where only 2 out of 10 beds were occupied when I eventually got there. My third stint in casualty lasted 11 hours being treated for urinary obstruction the evening of my second discharge.

Dr Elizabeth Tylden is a Consultant Psychiatrist retired from University College Hospital and Bromley Hospital

Before being transferred to the wards, patients' clothes were removed and put in plastic bags in the A&E department. These were taken to the ward where they were not checked; mine were shoved under the bed and left there until I had the energy to find somewhere to put them. Had they been as filthy as the clothes of some patients coming in off the street, that dirt would presumably have waited until their discharge.

Presumably the side cubicles provided facilities for washing patients in A&E. The side cubicle I was taken to for a clean procedure would have had to be cleared to get to the sink, and I stayed on my trolley alongside the one in the cubicle which was stacked with clean linen.

IDENTITY

As my spectacles were nearly always lost, following their habitual pattern in my life, I found no means of deciding who did what job, or what people's names were, and very few people introduced themselves. There were so many agency nurses, and so many in leisure wear, that the uniforms were no help.

There was no definition of status indicated by the uniforms, and even if somebody defined themselves as 'Your special nurse Eugenia', they were removed from that role as soon as I had got used to them. In one ward, my 'special nurse' was assigned to other patients after 2 days.

There were numerous people floating about dressed casually and with unkempt hair in two of the wards. These people defined themselves as various grades of student nurses, some were on work experience. Others, however, who had real nursing responsibilities, wore sweaters, tee shirts, tracksuit trousers, or jackets and jeans. They told me that the second year uniforms were expected to be supplied in 2 months time, because the money had run out.

Nobody knew what to call me, and I resented various shortened version of my name, mainly because I am normally addressed as Mother, Nan, Gran or even Doctor. Elizabeth in unfamiliar, and Betty was so common that it got shortened into the very unfamiliar Beth, Bess or Bet. This is apparently supposed to make you feel childlike and relaxed; I found it patronising and I was confused as to whom they were addressing. Added to the lack of definition of staff roles and names, this meant total confusion at times. In my fourth ward, the other patients called me Doc. This was a familiar mode of address with which I was comfortable.

Meanwhile, some direct contact of staff without overalls with patients was inevitable, they made beds, but as far as I could see, merely watched invasive procedures.

Visitors who had patient contact in the hospitals I worked in formerly used to be provided with some sort of white coat or protective cover.

WARD CLEANING

There were too few domestics, paid too little, most of whom could not speak English. There was no deep cleaning, and no taking out of the lockers or beds from the wall to clean at any time in the 7 weeks I was there. The floors were never scrubbed. Windows were hermetically sealed and never cleaned, nor were window ledges or radiators or any surfaces.

Once or twice a week a porter wheeled round a huge vacuum polisher

which did not reach into corners. It was clear that hospitals are still exempt from Health and Safety jurisdiction and the Shops Offices and Building Premises legislation. The cleaning would be illegal under both these Acts. It looked clean afterwards but was probably lethal. There was no sign of what used to be called 'high cleaning'.

There was a great reliance on wet wipes, wielded with rubber-gloved hands on the lockers, roughly once a week. Otherwise nothing was scrubbed, and the lockers were not even wiped out after a patient was discharged.

Postoperative patients had the whole family, often up to six people, crowded behind the curtains. Good for morale, and plenty of external pathogens to add to the other debris in the curtains. Each patient had cotton curtains around the bed. Every time they were drawn they gave off the dust of infected bronchial secretions and nasal infections. The curtains were never changed or sent to the laundry during my stay of an average of 2 weeks on each ward.

The flu epidemic spread extremely well in my ward, and I caught it, having a patient in the next bed noisily exhaling from her intubated and infected bronchi. She remained unconscious and sterterous throughout a 10-day stay, walling me off from the rest of the ward. Four patients died while I was in the ward, with a noisy dusty drawing of patients' curtains around every bed. The bed linen was changed, but the beds were not stripped, nor were the plastic pillow and mattress cases ever sponged.

WASHING FACILITIES

There was no evidence of any attempt to monitor cleanliness in patients, or offer them sufficient facility for washing once they had been put to bed.

There were ample supplies of clean hospital night-gowns handed over without any demur. Sheets were changed every day, and ample and adequate provision was made for incontinence. However, I was supposed to be nursed sitting up, and only obtained a third pillow in the third admission to a different hospital.

There appeared to be one wash basin to 20 beds actually in the ward, and in three of the wards the bathrooms were used as stores. In one ward there was no shower.

I failed to see any attempt to offer any patients the opportunity to wash their hands after using commodes. Presumably the same was true of urinals. I once asked, and was offered a wet wipe. As in other hospitals there were too few toilets, with inevitable morning queues. The toilets and wash basins were clean, and there were ample paper towels. In the 1970s and 1980s, this had not always been the case.

I was told three times to try and pass urine in the bath. In each case, the bathroom indicated had mattresses and other equipment stored in the bath. Was I expected to clear the bath first, on my own? In a usable bathroom, there was nothing to stand on and no handles to help you get in and out of a high-sided bath. I was never offered a wash basin, so used the one in one of the toilets. On one occasion the paper dispenser fell on my head: I was told I must have tugged it too hard. There was an accident report and a visit from A&E.

The hospital gave us face flannels to use at Christmas. Bed-ridden patients appeared to have one face flannel used indiscriminately on various body areas.

On the plus side, at no time was anybody reproved for asking for a bedpan, which was common when I was in hospital previously. (In the 1980s when my husband was an inpatient he had been made to feel desperately ashamed about this.)

GLOVES

All the staff, other than the doctors, wore rubber gloves. One of their functions appeared to be to differentiate themselves from patients, or possibly to protect staff from viruses and HIV infection. Another function appeared to be to save the budget from needing to provide proper and adequate washing facilities. In my view they are vestigial remnants of the obsolete practice of scrubbing up. Nobody, other than doctors and nurses scrubbing up, was seen to wash their hands. There were ample paper towels.

Rubber gloves do not offer a satisfactory substitute to scrubbing up. These ones lived in boxes just inside the door, and were quite unsterile. Some people changed their rubber gloves frequently, rummaging in the box to get a new pair, and thus distrib-

TABLE 1.
Suggestions for changing practice

A&E	Better liaison and more porters are needed
Identity	Better communication between staff and patients will ensure better and smoother hospital care.
	There is a need to respect privacy and decency through a better use of treatment rooms, where patients can wash their hands after dirty procedures
Ward cleaning	Cleaners need better pay, an increase in their numbers, and an understanding of the nature of their job and its importance to patient care. Massive industrial cleaning equipment does not get infectious agents out of corners, so is not an alternative to providing enough skilled staff
Washing facilities	Extra washing facilities need to be provided in hospital wards, even on a temporary basis. Ward washrooms should not be used as dirty linen stores. Huge empty circulation areas could be reclaimed for storage space. Modern studies in circulation control should be applied
Gloves	Teach people the correct use of rubber gloves. These do not obviate hand washing between tasks
Porters	More porters and messengers are needed, with better pay and conditions of service than at present
Food	Review catering contracts. Estimate the cost of wastage of inappropriate food. Allow dieticians and nurses to supervise and control what patients get to eat. Food is cheaper than dietary supplements and relapsing patients. Re-open the diet kitchen, this would be more economical than wholesale waste of food and would enable people to learn to manage a diet in hospital
Early discharge	Revise league table so that patients are not sacrificed to turnover. Most patients have no help at home on discharge

uting the bacteria as they rummaged. These people included cleaners and handlers of food.

Doctors and senior nurses washed before they put on the gloves, and took them off after use, often washing again. Some then put on another pair of unsterile gloves. Most nurses and all the cleaners and catering staff wore them all the time.

I thought they were sort of hand condoms, and decided that although nursing officers who wore them all the time were setting a good example, other senior staff who did so had HIV phobia. Trust me, I'm a psychiatrist!

PORTERS

Apart from the fact that there were too few of them, porters were well organized and efficient, with fascinating running commentary from the intercom. They seemed literally run off their feet with apparent staffing problems, however, like the A&E staff they seemed in good heart, and exhibited solidarity. This seems like a traditional pattern not only in my recent admission but also in hospitals I inspected, worked in, or read accounts of during committee work in the past. As always in my previous contacts they were sympathetic and concerned with patient welfare. I did not have the opportunity to see the porters' changing facilities, but these were horrific in hospitals I visited in the past (HMSO, 1968).

Both the A&E and the wards I was in depended heavily on agency nurses. They were always spick and span, unlike the un-uniformed student nurses. In A&E they seemed to become part of the well run machine far better than they did on the wards. I wondered about their changing facilities. These had been abysmal for part-time staff in hospitals up and down the country right up until I left the NHS in the late 1980s.

FOOD

This was ample, and of good quality — it was unsuitable for ill patients. The wastage must be astronomical, as most of the food and the size of the portions were more suitable for manual workers than for ill people. Neither nursing staff nor the dieticians had any idea whether or not patients were eating the food, or were even able to eat it. Special diets were theoretically selected from the main menu.

At weekends even my gluten-free diet from the only gluten-free item on the menu was not provided. I was offered brown bread sandwiches (containing gluten) as the only available diet during all weekends, and at all meals except one, over the Christmas and New Year holidays. I was told that special diets were unavailable at these time, but was not able to warn visitors. The hospital shop was closed anyhow. At various times I could not eat solid food, on these occasions I was offered a curry which I still couldn't swallow. Meals were often served when they had been in the hot cupboard for long periods. Salads and sandwiches were left uncovered for up to 2 days. There was no refrigerated cupboard as required by hygiene regulations for catering establishments.

I was first admitted on a Thursday and saw a dietician on the following Tuesday. She took a history and gave good advice, but said they were not able to provide the diet I required. Until I saw her I lived on cheese and rice crackers. Nursing staff had no facilities to provide alternatives, and in the end the dietician provided Fortisip, a liquid food to take four times a day. They sent some up to the ward but didn't tell anyone where it had been put. I found it in the ward refrigerator the day I was discharged. I developed electrolyte imbalance which became so acute that it was a positive relief to be put on a drip.

The rice pudding was good, but became boring during a 7-week stay. During the first 2 weeks the diet kitchen forgot to send me bread, and a nurse borrowed a loaf from the children's ward, where presumably the diet was provided. Some catering staff refused to toast this at breakfast time, saying 'it's not my job'.

The prime waste seemed to be the meats. These were the most expensive ingredients and are a good yardstick of cost. Second to the meats were frozen and undercooked vegetables and potatoes, discarded on many plates. Salads were good quality but too harsh to bite or swallow for some patients, and were often not eaten. The costs of this need calculating.

I have followed up food costs in a catering establishment for years. The weight of food wasted should be known and the percentage of meat within that wastage should be established. A nurse or dietician might save his/her wages by handing out exact portions of food estimated from patients' tastes and needs. Patients might like it too.

I know there is a shortage of nurses, but nutrition of the patient used to be a major aspect of nursing (Nightingale, 1860), and is still very important.

EARLY DISCHARGE

The costs of admission of an acute case ought to be known, and how much it costs to admit a cold case. Patients like myself were being discharged and then readmitted through A&E 2 days later. I would like to compare the relative costs of my two readmissions against those of 2 days' extra stay. I paid for my own transport, but many other patients came back by ambulance at a high extra cost.

When I was on committees, the separation of services made such costs hard to extract. In the past, the ways things were calculated differed between the then GP service, the Public Health network and hospitals. It is probably worse now, because different authorities and providers have different computer setups and systems of accountancy.

CONCLUSIONS

More grass-roots listening, and exchanges between all health service grades would build and foster mutual respect, and more efficiency. I don't think high patient turnover saves money. It certainly increases patient suffering and drives the GP up the wall, and puts an impossible strain on primary care services.

How can doctors and nurses stay clean in an environment which is not technically clean and which they can't control? **HM**

HMSO (1968) *Health and Welfare of Hospital Staff.* HMSO, London
Nightingale F (1860) *Nursing Notes.* Macmillan, London