Fourteen acute hospital wards in five different hospitals were observed for three days. Observers recorded the number and type of non ward-based personnel coming onto the ward, the nature of their visit, the length of time they stayed and whether or not they contacted a member of staff. Wide differences between the wards were found, but the overall results indicate that the volume of visits to the wards was greater than even the ward sisters recognised. The author suggests that a clearer definition of the role of the ward clerk – and an upgrading of the role to prepare clerks for dealing with non nursing-related enquiries – could be of great assistance to sisters and would be a cost-effective investment.

As part of our research into nursing staff mix in Wales (1), we studied 14 acute hospital wards in five different hospitals. These were six medical wards, four surgical, three gynaecology and one care of the elderly ward. Each ward was observed for three days, covering eight nursing shifts during 35.5 hours of observations. On Days 1 and 3, each ward was observed for approximately 11 consecutive hours, and on Day 2 observations commenced before the start of the early shift and continued until after the end of the late shift.

Over all 14 wards, this gave us data on observations covering nearly 500 hours of ward activity.

Observers recorded the number and type of non ward-based personnel coming onto the ward, the nature of their visit, the length of time they stayed and whether or not they contacted a member of the ward staff. To our knowledge, these visitors to hospital wards have not been consistently monitored by any previous study, and we wished to explore their effect on the daily running of the wards.

Wide differences were found between the 14 wards. The main difference was in the overall number of non ward-based personnel coming on to the wards. Figure 1 illustrates the number of extraneous personnel visiting each ward during the three-day study period. An example of extremes is the comparison of Ward 1 and Ward 13, which are two adjacent medical wards in the same hospital under the same senior nurse. Interestingly, Ward 1 was described to us as an example of 'good management'. It was represented as having a particularly efficient ward sister. Ward 13 had a reputation throughout the hospital as being the most difficult ward to work on.

As Figure 1 illustrates, Ward 1 received 253 visits from non ward-based personnel during the study period, whereas Ward 13 received 422, the highest number of visits of all 14 wards. These figures equate to a daily average of 141 visits to the ward by other hospital staff for Ward 13, compared to an average of 84 for Ward 1. These findings led us to suspect that concepts of 'well' or 'poorly' organised wards are related to extraneous pressures, and that a ward which looks calm and quiet is more likely to be perceived as being well organised than a ward which is subjected to constant visits from other hospital staff.

The average daily figure over all wards during the study

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periods (which omitted the busy 0830-1000 period on Day 1) was 101. When visits from relatives and friends of patients are also considered, this daily total of visitors is nearer 180. The sheer volume of numbers of visiting personnel increases the nursing workload, may interrupt the flow of nursing work, and takes nurses away from their patients to answer queries or requests.

**How many visits do they make?**

The clinical staff most frequently visiting the wards and spending most time on them were medical staff, nursing staff, and therapy staff (particularly physiotherapists).

Figure 2 shows the number of visits each ward received from these groups of staff. There were quite wide variations between the wards; Ward 8, a male surgical ward, received 139 visits from medical staff during the three study days, but only 14 visits from nursing staff; Ward 11, a mixed medical ward, received 71 visits from medical staff and 86 visits from nursing staff during the period. Ward 13, the ‘difficult’ medical ward, received many visits from all three groups – 106 from medical staff, 88 from nursing staff and 42 from therapy staff (more therapy staff than all of the other wards as there were several stroke patients on this ward). Averaged over all 14 wards, medical staff made 79.3 visits, nursing staff 49.6, and therapy staff 12.9 visits.

There were no significant differences in the number of visits from medical and nursing staff between medical, surgical or gynaecology wards, but there were more visits from therapy staff to the medical wards. The number of patients on the ward did not make any systematic difference to the number of visits.

On some wards, the large number of visits from medical staff also represented a large number of different medical staff. On Ward 13, the 106 visits were made by 28 different doctors and a medical student – all in three days!

Other frequent visitors to all wards were porters. In this category, we have grouped porters of patients and porters of supplies and equipment. Visits to the medical wards varied in number from 46 (Ward 6) to 104 (Ward 13), but most wards involving surgical intervention received around 105 visits over the three days, with gynaecology wards receiving the most – indicative of the rapid surgical ‘turnover’ of these wards.

One category of visiting staff which we did not anticipate was maintenance staff. Every one of the 14 wards studied received visits from maintenance workers. In this category, we grouped those ancillary staff whose work ranged from checking taps, putting up shelves and testing and repairing equipment, through to major ward refurbishment. Quite often, ward staff, including sisters, did not know maintenance personnel were coming, or why. As every ward had visits from these staff during the three
days our observers were present, we must assume that these often lengthy and noisy visits constitute part of everyday ward life.

On Ward 8, a busy male surgical ward, the hours spent testing and repairing patient buzzers caused the nursing staff consternation as they frequently rushed to answer a patient's buzzer only to find a maintenance worker testing it. On Ward 9, a surgical ward containing a high dependency care unit, major refurbishment/construction work meant that the ward was a cold, draughty and extremely noisy place throughout the study period, making life uncomfortable for staff, patients and observers. On this and other wards, an almost constant banging of hammers impaired communication between nursing staff and made use of the telephone difficult, raising the possibility of misheard results or information.

How many non ward-based personnel contact ward staff?

The number of non ward-based personnel observed contacting ward staff ranged from 61 to 150 over the 14 wards we studied (Figure 3). The average number of contacts over all the study wards was 109.5, which means that a member of ward staff had to stop what he or she was doing to speak to one of the visiting staff over 36 times a day. This initial contact may then be followed by interactions with other ward staff.

On average, 36 per cent of visiting extraneous personnel were seen to speak with ward staff. The most contact made with ward staff was on Ward 14, a gynaecology ward, involving over half the visiting staff – 54.2 per cent. The actual number of contacts is likely to be greater than those observed as visiting staff could not be monitored throughout their stay on the ward; the average number of staff making contact with ward staff is probably close to 50 per cent.

During the feedback interviews with each ward sister, we found that the number of visiting staff making contact seemed to be related to the personality of the sister. The sisters of most wards with high numbers of contacts said that they would usually speak to anyone coming on to their ward because they liked to know who was on the ward and why.

Some sisters expressed concern that over half the visiting staff apparently did not speak to ward staff. On average, however, 28.5 per cent of all visits were from porters whose mean length of stay was 1.6 minutes. Many of these were porters from the central sterile supplies department or pathology department, who tended to deliver or collect items without cause to speak, and were on and off the ward in seconds.

Such responses from sisters suggest that contacts between ward staff and non ward-based staff cannot be seen simply as a source of interruptions, but that some contacts are initiated by ward staff.

Whom do they contact?

When the ward sister is present, most non ward-based personnel will contact her, usually to ask the whereabouts of a patient, the condition of a patient or for answers to administrative queries. The highest number of contacts with a sister was 48 over the three days on Ward 3, a general medical ward. When the ward sister is not on duty, or is off the ward, most visiting staff contact the nurse in charge. The majority of contacts (76.7 per cent) with ward staff were with trained staff. Only rarely was the ward clerk contacted; over all 14 wards, only 2.5 per cent of the visiting hospital staff contacted the ward clerk. This is illustrated in Figure 4.

The most queries a ward clerk dealt with over the three study days was 16 on Ward 14, one of the gynaecology wards. Although most ward clerks work part-time (usually mornings only), there would appear to be scope for their greater involvement in fielding general queries from other hospital personnel, such as answering questions about the whereabouts of patients or equipment.
Why do they come, what do they do?

During the course of a day, many hospital personnel will need to visit every ward. A large number will be directly involved with patients: for example, clinical staff, porters on escort duty and occasionally the hospital chaplain.

Various staff who are less directly involved with patients will also need to visit the ward: for example, porters delivering supplies and equipment, and collecting samples, pharmacy staff to check drug levels and expiry dates, medical secretaries regarding patient notes and records, and catering staff to bring food trolleys, extra meals or to replace incorrectly-delivered meals.

We included the voluntary sector in our non ward-based personnel as they provide a valuable addition to the work done by salaried hospital staff. WRVS workers often come onto the wards to sell sweets and snacks, or to bring the library trolley round. On one medical ward, WRVS workers spent over an hour sorting and arranging patients' flowers - a job usually performed by the nursing auxiliary. Occasionally, other volunteers visited some wards. On Ward 9, a retired nurse spent a couple of hours on the ward every week performing non patient-based duties.

After medical staff and porters, the third largest group of visiting non ward-based personnel were nursing staff. This broad group included specialist nurses such as diabetic liaison nurses, stoma care nurses and community psychiatric nurses, but the vast majority of staff in this category were nurses and student nurses from other wards. Many came to borrow supplies or equipment or, occasionally, to ask for the return of items borrowed earlier by staff from the study ward. Some wards seemed to be particularly plagued by staff from other wards coming to 'borrow' frequently-used supplies such as bedpans and dressings, or to borrow equipment – usually a sphygmomanometer or occasionally a monitor.

This problem was highlighted at the feedback sessions with the sisters of these wards. They were aware of the problem, but did not quite appreciate its extent. Several sisters were concerned by the number of nursing staff coming on to their ward and the number of borrowers. Two sisters said their wards were known to be well-stocked and that staff from other wards frequently came to borrow supplies, but attempts were now being made to improve the situation. One senior staff nurse was planning to computerise the hospital's ward-ordering system so that each ward could be re-stocked before it ran out of supplies to avoid the need for 'staff wasting time trotting around the hospital looking for items'.

Ward clerks from other wards were frequent visitors on the group of four wards in one hospital. This hospital used the computerised patient administration system (PAS), but did not have sufficient working computer terminals for every ward to have its own. Consequently, the ward clerks appeared to spend quite a lot of their time on other wards. On one gynaecology ward the ward clerk was full-time, but she was rarely seen by the observers as she was often away using another ward's computer terminal. This under-capitalisation clearly has a trade-off; when ward clerks are frequently away from their own wards like this, it makes it difficult for them to act as ward receptionist and answer queries from non ward-based personnel.

When did they come?

Many of the personnel coming on to the wards work regular hours, usually between the hours of 09.00 and 17.00. Consequently, averaged over all 14 wards, 80.8 per cent of all visits from non ward-based personnel occurred...
between those hours. This general pattern was consistent throughout all of the wards with the number of visits between these times ranging from 75 per cent to 84.7 per cent.

Unfortunately, there is not an even spread of visits during the day. Many wards have peak periods when very large numbers of hospital staff visit, and the peak time varies from ward to ward. When the figures for all wards are averaged, most visits occur between 11.00 and 12.00 when a mean of 41.7 staff visited each ward, equating to 13.8 per cent of all visits.

When each ward is looked at individually, different time periods emerge as particularly busy, even within the same unit and the same hospital. We tried to find patterns in the peak periods by comparing wards in the same hospital or similar wards from different hospitals, but few similarities were found. For example, of two medical wards in one hospital, one had a very pronounced peak of visits between 09.01 and 10.00, whereas the other had a surge of visits between 11.01 and 12.00.

The number of staff visiting Wards 1 and 13, the adjacent medical wards, at different times of the day are shown in Figure 5. It might be expected that similar neighbouring wards in the same hospital would have a similar pattern of visits, but this is not true of these wards. Ward 1 had a fairly steady stream of visiting staff, apart from a large drop in numbers between 12.01 and 13.00 – presumably lunch-time – with a maximum number of 32 visits per hour. Ward 13, however, had a large number of visiting staff from 08.00 onwards, reaching a peak of 68 visits between 11.01 and 12.00. A total of 159 visits were made in the three-hour period between 09.01 and 12.00 alone. In fact, ward staff could only really call the ward their own between 07.00 and 08.00, and after 21.00.

How long did they stay?

Over the three study days, the amount of time non ward-based personnel stayed on each ward varied widely from a minimum of 33 hours 52 minutes (Ward 6, medical), to a maximum of 99 hours 47.5 minutes (Ward 8, surgical) – very nearly 100 hours were spent on this ward by non-ward staff over three days.

Visiting personnel tended to stay longest on surgical wards, but Ward 13, the medical ward receiving most visits (422), had the third highest total length of stay of 76 hours 37 minutes. The mean length of stay per member of visiting staff ranged from 8.1 minutes over 274 visits on Ward 13, medical, to 10.2 minutes (over 24 visits). One medical ward had 86 visits from nurses, each staying an average of 6.5 minutes, giving a total stay of 9 hours 22.4 minutes. Physiotherapists were another significant group of visiting staff. Their visits ranged from short and frequent to long and infrequent. Ward 13 had the highest total length of stay – nearly seven hours – with 39 visits averaging 10.7 minutes each.

What did the sisters think?

We provided feedback to the sisters on the number, length and type of visits from non ward-based personnel. Most were amazed at the volume of traffic through their ward in the course of three days.

They also felt that if patients' relatives were counted, they could number many more visitors each day. Relatives could raise the potential total number of visits to a ward to almost 200 a day.

The results were also shown to the director of nursing services (or deputy) at each hospital, and again the observed numbers far exceeded expectations.

On average, a little over half the visiting staff did not contact ward staff, but the member of ward staff contacted was most likely to be a trained nurse and only very rarely the ward clerk, about whose role sisters had mixed views.
One sister felt that her ward clerk was employed for clerical work and not for answering general ward queries. Conversely, another sister said that 'a lot of questions could be answered by clerical staff', adding that 'people come to the sister for the most trivial things. Often they answer their own question in the asking'.

**Can anything be done?**

The monitoring of visits to 14 wards by non ward-based staff has identified an extra dimension to the running of a hospital ward. Nurses have always known that frequent visits are made by other hospital staff, but none of the sisters we spoke to realised just how many visits are made.

Large numbers of staff tend to visit the wards during certain peak periods. Many wards had an influx of visiting staff between 09.00 and 10.00, when ward staff are usually busy with patient hygiene, producing a hectic atmosphere in the wards during this period. Some wards showed a very distinct pattern of peaks and troughs, but often they differed with each ward. Even within the same ward, peak times were not always constant over the three study days and therefore are of limited value in predicting busy periods. The nature of hospital work is such that many visits are unplanned and occur in response to the changing situation on the ward, such as new patients being admitted or changes in patients' conditions.

Visits by non ward-based personnel give an example of the unpredictability of the nursing workload. Clearly not all visits represent a 'disruption', nor does the unheralded presence of a visitor constitute a threat to the sister's grip on ward activities. Porters, for example, have a role which could be considered as being delegated from the sister.

Nurses, however, are often obliged to stop what they are doing to speak to or assist visiting staff. There may be a role for the ward clerk as a filter of enquiries from visiting staff, yet on all the 14 wards studied, ward clerks answered few queries. Several were tucked away in offices, out of sight of visiting personnel, mainly to enable them to complete their filing and clerical work unhindered. Only two of the 14 ward clerks were employed full-time, and even then they were expected to help on other wards in the afternoon, giving them limited opportunity for a receptionist's role.

A possible solution could be to upgrade the ward clerk's role to that of a full-time sister's assistant, as identified in an earlier study by members of the research team (2). There, the sister's assistant role was filled by an experienced ex-nursing auxiliary who could competently answer many ward-based queries and act as a filter for enquiries from visiting staff and relatives. Such a person would also be able to keep the nurse-in-charge informed of who was on the ward.

With over 180 visitors (staff and relatives) a day to monitor, such a person could certainly assist the sister. A balance must be found whereby the sister or nurse-in-charge is aware of, and attends to, visiting staff when appropriate, but without wasting time when it is unnecessary. She must, therefore, trust her assistant. This is another example – beyond those areas identified by Robinson et al (2) – whereby the small increase in expenditure necessary to employ better qualified clerical assistance would almost certainly be effective in terms of the overall use of resources.

**References**