Communicating nursing care during the patient's total hospital stay is a difficult task to achieve within the context of high patient turnover, a lack of overlap time between shifts, and time constraints. Clear and accurate communication is pivotal to delivering high quality care and should be the gold standard in any clinical setting. Handover is a commonly used communication medium that requires review and critique.

This study was conducted in five acute care settings at a major teaching hospital. Using a grounded theory approach, it explored the use of three types of handover techniques (verbal in the office, tape-recorded, and bedside handovers). Data were obtained from semi-structured interviews with nurses and participant field observations. Textual data were managed using NUVOIST. Transcripts were critically reviewed and major themes identified from the three types of handovers that illustrated their strengths and weaknesses.

The findings of this study revealed that handover is more than just a forum for communicating patient care. It is also used as a place where nurses can debrief, clarify information and update knowledge. Overall, each type of handover had particular strengths and limitations; however, no one type of handover was appraised as being more effective. Achieving the multiple goals of handover presents researchers and clinicians with a challenging task. It is necessary to explore more creative ways of conducting the handover of patient care, so that an important aspect of nursing practice does not get classified as just another ritual. By Bev O'Connell and Wendy Penney.

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incumbent upon all professionals to critique communication strategies that are used and to determine their appropriateness and efficacy. Handover is one communication method that is essential to the continuous provision of quality care.

Work constraints such as reduced shift overlap times and shorter shifts have required nurses to develop new methods of communicating patient care. As a consequence of this, a number of different models of handover have been considered. These different handover models are in need of critical review as the literature reveals anomalies with current handover techniques (Cahill 1998, Miller 1998, Webster 1999). McKenna (1997) highlights a number of problems with the traditional handover, such as the length of time it takes and the lack of quality of the information given. Webster (1999) states that although tape-recorded handover has reduced time, it has limited face to face discussions and is devoid of patient input. In principle, the use of bedside handover facilitates patient involvement; however, the way in which it is implemented can replicate the same problems of the traditional office handover (Timonen & Sihvonen 2000). Timonen & Sihvonen (2000) report that nurses tended to concentrate on the charts and did not involve the patients as expected. Additionally, nurses experienced difficulties involving patients who were acutely ill or unable to participate due to psychosocial reasons. Cahill (1998) further adds that patients felt inadequate contributing to these discussions due to a lack of knowledge about their conditions. Moreover, handing over at the bedside has been problematic due to patient confidentiality issues (Miller 1998, Williams 1998) and from the patient's perspective nurses' use of professional jargon can be frightening and alienating for them (Cahill 1998).

A more comprehensive review of handover techniques is necessary as it is estimated that the handover period costs approximately $33,000 a year for a 20-bed ward (Miller 1998). This figure, multiplied by the number of wards across hospitals, can potentially equate to millions of dollars. Based on data gained from a grounded theory study, this paper will discuss the strengths and limitations of three commonly used handover methods, relate these to the literature, and make recommendations for future research and practice.

Method

Using grounded theory method (Glaser & Strauss 1967, Glaser 1992), the primary study was conducted to discover how nursing care is determined, delivered, and communicated in acute care hospital settings. Data were collected using semi-structured interviews with mainly nurse clinicians, patients, and relatives (n = 27), field observations of handover (5 sites) and informal interviews conducted during observations (n > 40 nurses). Textual data were managed using NUD*IST and the secondary data analysis was performed using constant comparative method identifying the major strengths and limitations of three types of handover techniques. The handover techniques that were reviewed included face to face handovers in the office, tape recorded handovers, and face to face handovers conducted at the bedside. The study commenced after approval had been granted.
The traditional face to face handovers in the office were appraised as being lengthy, time consuming and often containing subjective patient information. However, this type of handover served another purpose as they were used as an avenue to exchange information, debrief, and as a time for social chitchat that was emotionally and socially important for nurses.

Findings

Data revealed that the information handed over varied from nurse to nurse, and that the handover process was influenced by many contextual, patient and nurse factors. Some of the contextual factors were the feeling she didn't really know what was going on.

Another problem with handover was related to the type of information given. For example, some nurses used this time to give an account of the activities they had performed on a shift. This information had little relevance to other nurses who were more interested in the patient's progress and future care.

They don't look at the patient on a continuum, you know, they don't sort of look at what happened maybe yesterday. So they don't give you any of the history of what's happened, or what's going to happen. They tend to focus on the fact that of all the things that they did that day... so this has been a major event of the day, like melanoma, then that's what they'll focus on. Yeah, and they'll forget to tell you the endoscopy happened yesterday.

The findings revealed that regardless of the type of handover that was used there were consistent gaps in information due to a number of reasons.

"New admission, don't know much about him, he's just come up from casualty. I've not done the obs."

"[States his age and medical diagnosis]... he has an alcohol problem, needs a spurtum. We don't know where he is going to be, but the social worker is involved."

"[States his age and medical diagnosis]... sorry, I don't know, he's come from another ward, and the person who looked him in didn't know what operation he was coming in for."

Additionally, the fragmented communication between nurses and doctors added to this problem.

No, you're not going to chase them [referring to the doctors]. Sometimes you find out from the patient, they say 'Oh, I'm going home in the morning' and that's the first time you're actually been told.

There were many instances where nurses' knowledge about the patient remained uncertain. Moreover, nurses' acceptance of uncertainty and "not knowing specifics about patient care" left them vulnerable as it had the potential to lead to undesirable outcomes.

He came in last evening. [States the patient's age and medical diagnosis] He's a NIDDM, fell and fractured his ribs, [gives the medical treatment he had on the previous ward]... so, didn't he have stable, nasogastric tube re-inserted, fed, he'll be coming up, dopamine infusion 20 ml per hour, also IV fluids, his dehydrated once feeds start IV can stop, his urine output is very poor, two hourly measurement, suctioning PRN, he needs heeps and heeps of mouth care his mouth looks very bad. He got very agitated when I passed the nasogastric tube, I don't know he seems confused. Oxygen sats are fine, oxygen continuous with the Hudson mask, CVV readings are ceased. He's not for intubation if he arrests.

[Another nurse asks a question.] "What do we just give him cardiac massage?"

[The shift coordinator answers.] "I expect so."

[The handover continued.]

As a consequence of receiving inadequate handovers, many nurses spent considerable time chasing accurate information from a number of sources. This time-consuming exercise reduced the time available to deliver care. Overall, analyses of the data indicated that each type of handover had particular strengths and limitations, however, no one type of handover was appraised as being more effective.

Face to face handovers in the office

The traditional face to face handovers in the office were appraised as being lengthy, time consuming and often containing subjective patient information. However, this type of handover served another purpose as they were used as an avenue to exchange information, debrief, and as a time for social chitchat that was emotionally and socially important for nurses. New staff, especially new graduates, found this type of handover useful as they used it as an opportunity to confirm information and were often given an impromptu educational session.

Another nurse asks a question 'Does she get up for her showers?' The a.m. co-ordinator answers 'Yes'. Further explains how she is ambulating. Withhold her meals, she is having double meals, she says the family bring her in meals and then she eats our meals as well. Nurse 3 says 'she's very hungry', the a.m. co-ordinator explains why she is hungry because she is on steroids.

Individual nurses also had different approaches to handing over patient information. Some methods were thought to be less helpful and retarded the communication process.

If they use a sheet of paper they usually read down and follow a format and it has same structure. If they don't use a sheet of paper and they're handing over the top of their head, then it seems to wander here, there and everywhere. Quite
frankly, ... when it tends to wander here, there and everywhere I don't seem to be able to remember it [patient details] at all.

This type of handover was important as it provided an avenue for the transference of information within the oral culture. There were many patient care issues that were held in nurses' minds and only handled over verbally. These included either confidential issues or instances of mismanaging care. An excerpt from the field notes illustrates this point.

This patient was an alcoholic and they were assessing him for withdrawal. He was prescribed valium if he was displaying certain withdrawal signs. The nurse handed over that this patient called a 1st year RN that night and said that "he had heard an explosion" the nurse instantly gave him sings of Valium as she thought that he was withdrawing and hallucinating. Apparently, there was an explosion at a nearby mine and the patient was not hallucinating at all. Several days later the nurses continued to hand this over and have a little chuckle at the same time. Besides signing the medication chart this episode was not documented.

A summary of the strengths and weaknesses of verbal office handovers is listed in Table 1.

Tape recorded handovers

Due to the rostering system and lack of shift overlap time, tape-recorded handovers were introduced to communicate patient information. While this type of handover had practical benefits, no face to face contact is required, it also hindered communication, as its use tended to modify and alter the efficacy of the handover process. More specifically, nurses found that they tended to handover information in a more impersonal way, focusing on tasks rather than on patient progress. This type of handover tended to be brief and did not reveal fully the patient's overall condition. Additionally, some nurses used abbreviations that were not understood by other staff. Due to the time lapse between recording the information and listening to the handover some patient information was out of date. A nurse's account of the effectiveness of handover provides an example of the problem.

They do it on tape [referring to the handover] and the limitation I suppose, especially if you are coming on an afternoon shift, that's taped at 11.30-12.00 o'clock and I find the main things are really happening around 1.00 o'clock, after lunch, so that doesn't get handed over on the tape and if they don't see you - verbally you don't get it at all, and it's usually by trial and error that you find it out. I know myself, it's such a rush "Oh, I've got to handover on the tape", whereas it would be better to do it verbally, I think you remember more when you're not so rushed.

On some occasions, nurses would have to replay the tape in order to determine what was said. However, if the message was not clear it was difficult to confirm or deny information, as the person handing over may not have been accessible. The following taped handover is an example of an unclear message.

**PATIENT C3** [states the patients name, age, medical diagnosis] borderline sleep apnoea, ambulant, self-care, IV bungled, if he is unstable fast him from 12.00 midnight and call the team.

Within this context, it was difficult to determine with certainty what "unwell meant", and the nursing response that was expected if the patient was unwell after 12.00 midnight. In addition, as these handovers did not provide an opportunity for nurses to clarify patient details or fill in the gaps in information, some knowledge about patient care got lost. This occurred more frequently with agency nurses as they often did not return to the ward.

The other frustrating thing linked to that [the tape-recorded handover] is sometimes the staff member isn't there any more to find out what's gone on, so you're sometimes lost and have to spend a lot of time finding out that information that's lost that wasn't on the tape ... but often information is just lost.

For a summary of the strengths and limitations of the tape recorded handovers see Table 1.

**Face to face handover at the bedside**

Face to face handovers at the bedside were introduced in many wards to try to overcome the weaknesses of the traditional office and tape-recorded handovers. This type of handover seemed useful, as nurses were able to check documentation and clarify information with the patients and each other.

As this handover is conducted at the bedside, the patients listen in on the handovers. Quite often the nurse asks the patient what has happened. For example, have you had your X-ray today? Has the doctor seen you? What did he say... Once again there is emphasis on the medication chart which is reviewed, and drugs that are not signed off are looked at and the nurse looking after the patient, if she is still on duty, is asked to clarify whether she has given the drug or not.

While handovers that were conducted at the bedside involved the patient in discussing their care, it also posed specific problems, as it was difficult for nurses to handover personal and confidential information in front of them.

The nurses qualify things with each other, it does he call you when he needs a bottle or does he want himself. This nurse had been on days off and the patient was quite sick at the time. Because the handovers are conducted at the bedside if there is any private and awkward information to handover the nurse points to her written notes on her handover sheet for the other

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**TABLE 1: STRENGTHS AND LIMITATIONS OF THE THREE TYPES OF HANDOVER**

<table>
<thead>
<tr>
<th>Verbal Office Handovers</th>
<th>Strengths</th>
<th>Limitations</th>
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<tr>
<td></td>
<td>• Collective narrative (less gaps in information)</td>
<td>• More story like (prone to being subjective and judgmental)</td>
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<td></td>
<td>• Opportunity for staff to debrief</td>
<td>• Time consuming</td>
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<td></td>
<td>• Opportunity to clarify information (learning opportunity especially for new staff)</td>
<td>• Some information is superfluous</td>
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<td></td>
<td>• Does not require shift overlap</td>
<td>• Some nurses switch off – especially when the information is subjective</td>
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<td></td>
<td>• Less time consuming</td>
<td>• Information can be out of date</td>
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<td></td>
<td>• It is more factual</td>
<td>• Difficult to clarify information</td>
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<td></td>
<td>• Some nurses like this matter-of-fact approach</td>
<td>• Cannot check patient and/or documentation</td>
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<td>• No teaching opportunity</td>
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<td></td>
<td></td>
<td>• Acts as a filter (some nurses are awkward and are cautious tape recording information)</td>
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<td></td>
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<td>• Some information is not handed over and is not processed formally or informally</td>
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<tr>
<td>Face to Face Bedside Handovers</td>
<td></td>
<td>• Public forum - difficult to discuss personal patient issues</td>
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<td></td>
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<td>• Confidential information is sometimes revealed</td>
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nurse to read. For example, this patient was a manic depressive and needed a lot of encouragement and the nurse did not want to say that out aloud.

Additionally, nurses were constantly interrupted during the handover. This made these types of handovers very lengthy.

The findings of this study revealed that handover is more than just a forum for communicating patient care. It is also used as a place where nurses can debrief, clarify information and update knowledge.

**Discussion**

To answer the question of which is the most appropriate type of handover, one must first reflect on the handover's purpose. In this study, handovers were used as forums to communicate patient information, to provide staff with avenues to informally debrief, clarify and exchange patient information. New staff including graduates found these informal educational sessions very helpful. This finding is supported by Parker, Gardner and Wiltshire (1992) who state that talking to other nurses and debriefing is an important aspect of nursing practice. This finding is supported by Parker, Gardner and Wiltshire (1992) who state that talking to other nurses and debriefing is an important aspect of nursing practice. Achieving the multiple goals of handover presents researchers with a challenging task.

It must be recognised that communicating patient care over the patient's total hospital stay is a complex phenomenon, as this information is constantly changing and held in a collective memory 'with the patient, their carers and the health care team'. Handover is only one component of the overall communication process. The study findings have revealed some anomalies with this process and hence a need to review the process.

Based on the findings of this study and current literature, the following recommendations are made to:

- review the contextual factors that impact on handover and try to minimise or alleviate them. For example, increase consistency in assigning nurses to the same patients over a number of shifts including casual or part time nurses;
- implement streamlined verbal handovers preferably at the bedside so there is face to face contact with the patients and nurses. This bedside handover should be combined with a short verbal office handover to enable the communication of sensitive and confidential information;
- develop ward specific pro forma to structure handovers focusing on patient progress rather than on tasks;
- use tape-recorded handovers as a last resort and then only as an adjunct to other verbal communication methods,
- include doctors in the handover process for a brief period, this will enhance communication and accuracy of patient care information,
- think creatively and combine the strengths from the different styles of handover to develop a communication strategy that meets the needs of individual patients and ward situations.

The findings of this study revealed that handover is more than just a forum for communicating patient care. It is also used as a place where nurses can debrief, clarify information and update knowledge. Given the pressure cooker conditions under which nurses work these supportive and debriefing forums are necessary and need to be scheduled as part of a ward routine. They are important for quality patient care and nurses' well being. Achieving the multiple goals of handover presents researchers and clinicians with a challenging task. It is necessary to explore and evaluate more creative ways of conducting handover, so that an important aspect of nursing practice does not get classified as just another ritual.

**References**


Clancy B & Strauss A 1967 The discovery of grounded theory. Aldine, Chicago

Creswell J W 1999 *Basic of grounded theory analysis*. The Sociology Press, California


McKenna L 1997 Improving the nursing handover process. *Nurse Education Today* 2: 37-45


