

# Managing the list: OR nurses' dual role of coordinator and negotiator

**Brigid M Gillespie** • RN BHSc (Hons) PhD

Lecturer, Research Centre for Clinical & Community Practice Innovation, Griffith University, Gold Coast Campus, QLD

**Wendy Chaboyer** • RN BSc MN PhD

Professor & Director, Research Centre for Clinical & Community Practice Innovation, Griffith University, Gold Coast Campus, QLD

**Marianne Wallis** • RN BSc (Hons) PhD

Professor, Clinical Nursing Research, Research Centre for Clinical & Community Practice Innovation & Gold Coast Health Service District, Griffith University, Gold Coast Campus, QLD

**Hsiao Yun Annie Chang** • RN MN PhD

Research Fellow, Research Centre for Clinical & Community Practice Innovation, Griffith University, Gold Coast Campus, QLD

**Helen Werder** • RN MN (Periop.)

Assistant Director of Nursing, Surgical & Perioperative Services, Princess Alexandra Hospital, Woolloongabba, QLD

## Abstract

This paper reports the findings of a qualitative study in which the aim was to explore nurses' perceptions of competence in the unique context of the operating room (OR). Three focus groups were conducted with 27 OR nurses from three large metropolitan hospitals in southeast Queensland. Analysis of textual data identified the category 'managing and coordinating the flow of the list'. Within this overarching category, four sub-categories – 'coordinating and negotiating competing priorities', 'leading', 'adapting and being flexible' and 'using the big picture perspective' – were important aspects of clinical competence. Findings indicated that coordinating human and material resources, and negotiating the flow of the operating list were not confined to the OR manager; rather, OR nurses at all levels of practice need to develop competence in these areas. These findings validate the importance of the role of the OR nurses who coordinate patient care within the theatre itself. Therefore, mentorship and education of less experienced OR nurses in relation to managing patient flow, problem solving, prioritising and managing intradisciplinary conflicts is essential if nurses are to develop these aspects of competence.

## Introduction

The literature is replete with definitions of competence, which is described as the ability to perform a task with desirable outcomes<sup>1</sup>, the interplay of interpersonal skills with critical thinking<sup>2</sup>, and as something that a person should be able to do<sup>3</sup>. Competence is broadly defined by the International Council of Nurses (ICN) as "... a level of knowledge and skill in a particular aspect of nursing which is greater than that acquired during the course of basic nursing education"<sup>4</sup>.

Competence, when applied in the behavioural sense, refers to the functional adequacy and capacity to integrate knowledge and skills to attitudes and values in a specific contextual situation of practice<sup>5</sup>. Researchers have considered competence in the operating room (OR) in relation to technical knowledge and expertise in the context of providing safe care<sup>6-8</sup>, role performance<sup>9</sup> and specialist knowledge<sup>10</sup>. This paper describes the coordination dimension of competence, which to date has been an understated role activity of nurses in the OR.

The importance of the coordinating role in the OR is slowly being recognised in the literature as an area in which OR nurses need to develop their skills<sup>11, 12</sup>. The primary goal of OR coordination is to ensure the timely flow and safe care of intra-operative patients through the perioperative department<sup>13</sup>. Fundamental to this is the ability of the OR coordinator or team leader to ensure that patients, multidisciplinary staff, and equipment come together seamlessly to move patients through the surgical process. The role of coordinator

encompasses patient-focused clinical responsibilities that are driven by budgetary constraints, equipment procurement issues, skill mix, and staff shortages which constitute an enormous challenge. OR nurses working in the coordinating role must manage and direct patient flow, case and room assignment, allocation and preparation of equipment, and scheduling of surgery<sup>11, 13</sup>.

However, the coordinating role in the OR has been discussed exclusively in the literature from a nurse manager perspective<sup>11, 14</sup>, with little consideration that the role may be performed by OR nurses who are not nominally designated as nurse managers, thus, without the manager's power and span of control. To date, there has been little research that acknowledges the importance of coordination as a function of OR nurses' clinical competence.

## The study

### Study aim and design

The overall aim of this two-phased study was to develop a scale that could be used as a self-report measure to ascertain OR nurses' perceived competence. This first phase of the study was based on a qualitative design using focus groups. Focus groups were useful in exploring the perspectives of the collective in order to gain clarification and agreement on a subject with which participants were familiar<sup>15</sup>. During focus groups discussions, group interactions were emphasised as a means of gaining information not obtainable using other methods, such as individual interviews.

### Participants and data collection

Participants were purposively selected to ensure that nurses from each perioperative specialty (i.e. scrub, scout, anaesthetics and post-anaesthetic recovery unit [PARU]) were represented. In total, 27 OR nurses across three hospital sites in southeast Queensland participated, and included a mix of full-time and part-time registered nurses who belonged to the same nursing staff category. To ensure inclusion of staff categories, two group interviews were conducted with nurses who practised in the preoperative areas, theatres and PARU, while the third focus group interview was conducted with nurses who held management and education roles. Having participants who belonged to the same staff category in each of the focus groups reduced the likelihood of potential status differentials, ensuring that participants were less likely to be constrained in contributing to group discussions<sup>15</sup>.

Demographic data were collected and included age, years of OR experience, primary role (instrument, circulation, anaesthetics or recovery room), and nursing category (i.e. clinical nurse or manager/educator). Participants were aged from 21-62 years with an average of 38.6 years (SD=11.0). Their years of experience averaged 11.6 (SD=10.0).

Focus group interviews were audiotaped and transcribed, and field notes written during interviews. The number of participants in each focus group ranged from four to 15. An interview guide was developed based on the competence literature and was used to elicit relevant information. For example, focus group participants were asked "what personal strengths are important to the OR nurse?" and "how would you describe the characteristics of a competent OT nurse?" The first named author moderated the focus group interviews, which lasted from 1-2 hours, until the topic had been covered to the satisfaction of the participants or until data saturation was achieved<sup>16</sup>. During focus groups, field notes were taken by the research assistant. Focus group interviews were conducted in a quiet location that was both private and convenient for participants.

Ethics approval for the study was granted by ethics committees of the university and the three participating hospitals. Participants were given an invitational letter containing information regarding the study's aims, procedures, risks and benefits. If they demonstrated a willingness to become involved, they were required to complete a signed consent and complete a brief demographic profile.

### Data analysis and rigour

Data analysis used a grounded theory approach to inform the development of sub-categories and categories<sup>17</sup>. In-depth familiarisation with the data entailed taking part in the interview process and reading the transcripts and field notes. For this study, the process of analysis involved open coding<sup>17</sup> and categorising so that the data could be grouped according to similarities and differences in relation to contextual events and interactions<sup>18</sup>. Analysis of the three transcripts and field notes was conducted to identify key concepts related to competence, and each transcript was analysed in the same way.

Two members of the research team listened to the audiotapes, checked the transcriptions for accuracy, and identified initial codes and categories. Regular discussions were held with the other members of the research team to reconsider and further refine emerging sub-categories and categories as well as decisions made by consensus. Codes were developed based on participants' statements and the topics they discussed, and were then categorised according to their similarities and differences<sup>18, 19</sup>. Emergent sub-categories were

re-examined for regularities, with the aim of exemplifying the essence of the experiences and behaviours across multiple situations as abstracted higher order categories<sup>19</sup>. In this study, the category 'managing the flow of the list' illustrated recurrent processes and events drawn from the data, that is, from the analysis of verbatim and field notes taken during focus group interviews.

Rigour in qualitative research is described in terms of trustworthiness, auditability and transferability<sup>20</sup>. In this study, all members of the research team were involved in data analysis to establish trustworthiness. Preliminary findings were taken back to participants to clarify and confirm (i.e. member-checking), thereby adding to trustworthiness. Memos linked codes to pieces of verbatim supporting the categories that emerged, thus demonstrating an audit trail in the decision making process. Participants were selected based on their expertise in the OR context; therefore there may be transference of findings to other similar OR settings on a conceptual level as nurses working in other similar settings may identify similarities.

### Findings

Three main categories emerged from the focus group data:

- Coalescence of different types of knowledge within a technocratic environment.
- The importance of highly developed communication skills among teams of divergent personalities and situations.
- Managing and coordinating the flow of the list.

An overview of these interlinked categories is presented elsewhere<sup>21</sup>. This paper provides an in-depth description of the third category, 'managing and coordinating the flow of the list', as there has been little description of this important aspect of OR nurse competence to date. This category enveloped OR nurses' ability to choreograph, balance and negotiate competing clinical priorities based on the limited availability of human and material resources. Within this category, four sub-categories are discussed—'coordinating and negotiating competing priorities', 'leading', 'adapting and being flexible' and 'using the big picture perspective'—with exemplars from the interviews to illustrate these sub-categories. Table 1 details the sub-categories and codes that were related to this category. Where appropriate, participants' verbatim quotes are used as code labels.

#### Coordinating and negotiating competing priorities

The sub-category, 'coordinating and negotiating competing priorities' described the struggles OR nurses experienced in tenuously balancing the needs of the particular situation and coordinating the multidisciplinary team members involved. For participants, coordination encompassed planning around the needs of the list, managing conflict and problem-solving. Participants highlighted that skills in coordination were developmental in nature, and nurses' skills increased when they worked in individual theatres.

*Coordinating is crucial but it doesn't just start from someone coordinating the whole floor of 20 theatres. It starts within the theatre in that you have to gather all these resources together to get to this outcome at the end. At the end of the day a large part of the responsibility falls on the nurse working in the room, but they will coordinate all those different things, patients coming in at the right time, the operation, the ward they are going to – all of this involves coordination [Group 2: N8].*

Being able to coordinate patient flow was not just about moving patients in and out of individual theatres, it was a multi-faceted process that involved the timely interactions of various aspects of care. For example, when working in the emergency list, it was necessary to contact the appropriate personnel in order to coordinate surgeries and, in some instances, reschedule surgery times when delays occurred.

The importance of being able to negotiate interdisciplinary conflict was identified by the majority of focus group participants as crucial. Conflicts between staff occurred as a result of increased stress levels that were associated with conflicting contextual needs. Participants described conflicts that arose as a result of inadequate skill mix, staffing and equipment. Additionally, there were occasions when the nurse coordinating the shift deliberately stepped back from conversations that occurred between the surgeons and anaesthetists in relation to which procedures should take clinical priority. Some participants believed that medical staff expected them to adjudicate in these circumstances as a means of buffering potential conflict amongst themselves.

Conflict resolution among nurses working on the floor was also problematic, and it was the responsibility of OR nurses who were perceived as leaders to resolve disagreements among nursing staff. Group 2 discussion:

*It is all about conflict – conflict is everywhere, but people won't address conflict with each other, so they use someone else to address the conflict. It is really common [Group 2: N8].*

*We are traditionally quite often stuck in the middle of that, but it is not only between the medical staff, it is nursing staff too. We have our staff come to us about other nursing staff [Group 2: N11].*

### Leading

The sub-category 'leading' was described in terms of supporting others' learning, providing guidance, being a good role model, and being an

**Table 1. Categories and descriptor codes for the category, 'managing and coordinating the flow of the list'.**

Sub-categories	Descriptor codes
Coordinating and negotiating competing priorities	<ul style="list-style-type: none"> <li>• Planning and organising</li> <li>• Managing the list</li> <li>• Managing conflict</li> <li>• Coordinating</li> <li>• Problem solving</li> </ul>
Leading	<ul style="list-style-type: none"> <li>• Role modelling</li> <li>• Providing guidance</li> <li>• Being knowledgeable</li> <li>• Creating learning opportunities</li> <li>• Being a resource person</li> </ul>
Adapting and being flexible	<ul style="list-style-type: none"> <li>• Offering flexibility</li> <li>• Going that extra mile</li> <li>• Having self-awareness</li> </ul>
Using the big picture perspective	<ul style="list-style-type: none"> <li>• Seeing the bigger picture</li> <li>• Being already two jumps ahead</li> <li>• Planning and organising</li> <li>• Being pre-emptive</li> <li>• Having anticipatory knowledge</li> </ul>

effective communicator. The notion of a leader as a role model who provides guidance is evidenced in the discussion of Group 2:

*Leading is a very positive thing, it is not a forced thing, it is, "I will show you a way, you need to lead the way as opposed to you will all go my way", that is dictating. That is not a leader [Group 2: N6].*

*Spend time with nursing staff, get to know them. Understand them [Group 2: N8].*

*You have to have your own self confidence, your own plan, you need to know yourself what you expect, how you would like to present, or how you would like to be seen and then doing what you have to be that, so things like doing the conflict management when it comes your way. Even if you hate it, you still have to go and do it. So it's doing the hard yards and putting that role modelling stuff out there [Group 2: N11].*

Nonetheless, some team members who were recognised as 'leaders' were occasionally considered to have a negative influence on others. Those individuals were not necessarily nominally designated or held a title that denoted their leadership role; however, because they possessed other strengths, such as clinical knowledge and psychomotor dexterity, others were drawn to them, and were seemingly influenced by them. Some of the more senior group participants stated that in such situations, it was important to "harness their skills and strengths". In this way, the impact of the negative influence of their perceived leadership on other members of staff was less significant.

### Adapting and being flexible

The sub-category 'adapting and being flexible' encompassed coping with the demands of constantly changing workloads (i.e. list and room allocation changes, availability of equipment etc) and nursing staff skill mix. The majority of participants across the three focus groups stated that flexibility was characterised by the ability to "think on your feet and stay calm". The Group 2 discussion emphasised some of these points:

*Flexibility is a big thing. I don't think it used to be as crucial. Nowadays in this tertiary institution there is a great need for everyone to be flexible, doctors, nurses everyone. Things change quickly, change often. You have prepared yourself mentally and physically, you walk in the theatre and it is all changed and some just don't cope with that as well, you have to be very flexible. You have a complete change over, it might be a completely different surgeon who comes in the door, someone you don't particularly like, but you still need to be able to work with that person. The person who is going to walk through that door is going to work with you [Group 2: N8].*

*... so they have to be very adaptable [Group 2: N5].*

*... and cope with that stressful change [Group 2: N10].*

However, flexibility was also based on self-awareness. It appeared that nurses who were cognisant of their personal limitations and were able to alter their frame of reference according to the situation were less likely to experience stress when changes occurred without notice. For instance, OR nurses who were able to dissociate and rationalise in situations in which the surgeon vented his/her anger towards other team members when the surgery was not progressing well were less likely to construe this as a personal affront. OR nurses who demonstrated competence in this sense were more likely to cope better with adverse situations.

### Using the big picture perspective

The sub-category 'using the big picture perspective' was discussed using two viewpoints; the first in relation to the nurses running the ORs and the second from the position of the team leader coordinating the floor. Participants who were involved in coordinating the theatre list in the room described the importance of prioritising the processing of surgical supplies and equipment for the afternoon list. The Group 1 discussion illustrates the importance of coordinating staff based on the daily surgical activities of the OR department:

*A team leader has to be organised, you have to look at the whole day, not just a particular case that you might be doing, because you have to keep things running for the day. You have to start on time and finish on time and all these people have got somewhere else to be. You must communicate with everybody and organise meal breaks. You still have to run the room, plan your next move and that is where you have to think above just doing the case for the day [Group 1: N1].*

*Yes, and even if you are doing a morning session, you might be in theatre 10 in the morning but in the afternoon you have to work out where all the other staff are going and which theatres they are needed. You are not just organising one patient after another and getting your list done, you are also making sure that elsewhere is staffed... [Group 1: N2].*

It appeared that successful coordination at the floor level also depended on the capacity of the nurses who were working in the individual theatres to plan and organise their lists in relation to sending for patients and having the equipment needed. Participants highlighted that their ability to coordinate the list at room and/or floor level was influenced by their level of clinical experience.

Another aspect of coordination was nurses' ability to be pre-emptive and use anticipatory knowledge to plan and organise their workloads from room level through to the nurse coordinating the floor. Participants from all groups gave exemplars in relation to anticipating the arrival of the next patient to the suite during surgery, prioritising instruments and equipment that had been used in the morning list that would again be required for the afternoon's list, through to the ability to foresee that other areas (e.g. PARU) needed to additional staffing assistance for after-hours meal relief because of lists over-running. Again, participants emphasised that having increased clinical exposure to different situations enabled them to better identify and anticipate the needs of patients and other team members.

### Discussion

In relation to 'managing the flow of the list', competence epitomised 'coordinating and negotiating competing priorities', 'leading', 'adapting and being flexible', and 'using the big picture perspective'. Coordination has previously been described in terms of choreographing and directing patient flow, case and room assignment, and scheduling of surgery<sup>11,13</sup>. However, these studies have examined coordination within the remit of the OR manager and have not emphasised the value of coordination at the room level. Demonstrated competence in managing the workload at this level may help to avoid patient delays and cancellations because of an unforeseen lack of availability of material resources required for the list<sup>22</sup>. Therefore, it may be necessary to revise the order of the list based on the availability of equipment and instrumentation. Delays in surgery may impact on the workload in other areas of the department, and be evidenced in overtime and even result in cancellation of surgery.

While previous research has illustrated the significance of the role of the nurse manager in the OR<sup>11,12</sup>, our findings have extended the notion of coordination at all levels as a function of competence and suggest that these skills are equally important for nurses who coordinate a theatre list.

In the current study, OR nurses, as negotiators, were often expected to resolve conflicts between members of the multidisciplinary team members before they escalated. OR nurses' ability to do this effectively is crucial if patients are to receive optimal care. Conflict, while recognised as an inevitable feature of any work environment, is especially prominent in the context of multidisciplinary teams<sup>23</sup>. Some have suggested that health professionals' propensity to cling to their professional identities, based on a particular body of knowledge and professional autonomy, contributes to multidisciplinary conflict<sup>24</sup>. Our findings juxtapose that part of the role of negotiator was also having to step back from a potential conflict in order to avoid being unnecessarily embroiled in intra-disciplinary conflicts (i.e. between surgeons and anaesthetists).

Conversely, there were occasions when the coordinator was compelled to intervene and resolve conflicts between nurses, albeit that this was at times uncomfortable and difficult. Thus, there appears to be a tenuous balance between these two aspects of conflict management. Coordinating activities with other members of the multidisciplinary team who have different role foci necessitates that OR nurses develop skills in negotiation<sup>12</sup>. In a constantly changing environment, conflicts often arise as a consequence of scheduling of patients, lists over-running, and the availability of staff and equipment<sup>23</sup>. Our findings reinforce the need for OR nurses to be educated and supported in developing skills in conflict management, particularly in consideration of the disparate perceptions and expectations team members often have of each others' roles; this is a view supported elsewhere<sup>23,24</sup>. In many instances, OR nurses are the conduits of communication, and foster the greatest rapport and cooperation between members of the multidisciplinary team<sup>13</sup>. Clearly, effective communication underpins nurses' ability to negotiate and manage conflict situations.

Our findings have accentuated the importance of adapting and being flexible in a constantly changing clinical environment; however, the imperative to maintain control in unpredictable situations is paramount<sup>10</sup>. This acknowledges the fragile balance between the need to maintain control and yet, simultaneously, being able to adapt to changes that occur, a notion previously supported<sup>7</sup>. Our findings have also identified the need for flexibility and adaptation with regards to working with different personalities, particularly when surgery momentarily becomes difficult for the surgeon (e.g. access, bleeding). Demonstrating flexibility in these situations was reflected in nurses' ability to make clear distinctions between whether it was a personal attack or merely a symptom of stress caused by the difficult surgery. Other research has described similar types of scenarios in relation to managing stress<sup>10</sup>. In our study, OR nurses regarded flexibility and adaptation as a function of competence. Conceivably, continued clinical exposure in the OR may also assist OR nurses to develop flexibility and adapt in the midst of contextual unpredictability, and consequently contribute to building their competence.

### Limitations

Whilst focus groups were useful in delineating and conceptually clarifying components of competence as it applies to nurses' practice in the OR, this study has several limitations that must be acknowledged.

First, the geographical location may have been a limitation as the nurses working in the OR departments of the three hospitals selected may have been in some way atypical. However, a variety of hospitals were used, thus ensuring a wide cross-section of participants. The fact that only three focus groups were conducted may have also been a limitation. Despite this, there was some representation of the different clinical streams in each group, and in-depth understanding emerged.

Nevertheless, using focus groups had some advantages. They allowed free discussion by reducing the possibility for potential power differentials that may be constraints if individual interviews were conducted. Additionally, the focus groups were homogenous as participants were from the same clinical streams, therefore further reducing the potential for power imbalances among participants<sup>16</sup>.

### Recommendation for practice and education

For nurses to be able to develop competence in coordination, they need the appropriate educational and clinical support from their nurse managers and senior colleagues. Research conducted in similar clinical settings has emphasised the need for lesser experienced nurses to be mentored by their more senior colleagues in relation to prioritising clinical needs and problem solving<sup>7</sup>. For instance, senior nurses modelling coordination behaviours in relation to patient flow, equipment prioritisation, and negotiating the priority of cases at the room level with less experienced OR nurses will assist them to develop these skills. Additionally, these aspects of coordination could be introduced and discussed more formally as part of unit in-service programmes.

The ability to negotiate and manage conflict requires nurses to develop and use effective communication skills<sup>13</sup>. As part of their roles as coordinators, OR nurses are the interface between the various medical specialties, and thus need to be supported in developing skills in negotiation and conflict management<sup>25</sup>. Hospital in-service education programmes that emphasise assertive communication, teamwork, and conflict resolution will give nurses the appropriate skills needed to manage situations where there is over-running of surgical lists, equipment shortages, and conflicting clinical needs.

### Conclusion

Whilst competence in the OR encompasses technical knowledge, skills and expertise, it also includes other dimensions. Our findings confirm the importance of the role of OR nurses who coordinate patient care within the theatre itself. Coordination at this level is essential for the smooth running of the suite of theatres, as delays in one theatre may well impact on the team's workload in other theatres. Indeed, to develop a 'big picture' perspective, OR nurses first need to have an appreciation of aspects of coordination that occur at the micro level, that is, beginning with the individual theatre in which they are assigned. The provision of high quality care in the OR is linked to nurses' ability to competently coordinate at all levels to ensure the safe and efficient passage of patients through the perioperative department.

### Acknowledgements

Particular thanks go to the study participants. The authors also gratefully acknowledge the financial support of the Queensland Nursing Council (grant number RAN 0711).

### References

1. Nagelsmith L (1995). Competence: an evolving concept. *Journal of Continuing Education*, Vol.26, No.6, p.245-8.
2. While A (1994). Competence versus performance: which is more important? *Journal of Advanced Nursing*, Vol.20, p.525-31.
3. Mansfield B & Mitchell L (1996). *Towards a Competent Workforce*. Gower: Aldershot Hants.
4. International Council of Nurses (1987). *Specialisation in Nursing: A Discussion Paper*. ICN, Geneva, p.5.
5. Benner P (1984). *From Novice to Expert: Excellence and Power in Clinical Nursing Practice*. Menlo-Park, Addison-Wesley.
6. Bull R & FitzGerald M (2006). Nursing in a technological environment: nursing care in the operating room. *International Journal of Nursing Practice*, Vol.12, p.3-7.
7. Prowse M & Lyne P (2000). Clinical effectiveness in the post-anaesthesia care unit: how nursing knowledge contributes to achieving intended patient outcomes. *Journal of Advanced Nursing*, Vol.31, No.5, p.1115-24.
8. Chard R (2000). A phenomenologic study of how perioperative nurses perceive their work world. *AORN Journal*, Vol.72, p.878-89.
9. Meretoja R, Lieno-Kilpi H & Kaira A (2004). Comparison of nurse competence in different hospital work environments. *Journal of Nursing Management*, Vol.12, p.329-36.
10. Gillespie BM, Wallis M & Chaboyer W (2008). Operating room culture – implications for nurse retention. *Western Journal of Nursing Research*, Vol.30, No.2, p.259-77.
11. Kondrat B (2001). Operating room nurse managers – competence and beyond. *AORN Journal*, Vol.73, No.6, p.1116-30.
12. Moss J & Xiao Y (2004). Improving operating room coordination: communication pattern assessment. *JONA*, Vol.34, No.2, p.93-100.
13. Moss J, Xiao Y & Zubaidah S (2002). The operating room charge nurse: coordinator and communicator. *Journal of American Medicine Information Association*, S70-S4.
14. Mathias J (2002). Leaders find ways to tackle staff shortages. *OR Manager*, Vol.18, No.9, p.20-6.
15. Krueger R (1997). *Focus Groups*. Chichester, Sage.
16. Klueger R (1994). *Focus Groups: A Practical Guide for Applied Research*. Thousand Oaks, CA, Sage.
17. Strauss A & Corbin J (1990). *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Newbury Park, Sage.
18. Patton M (2002). *Qualitative Research Evaluation Methods* (3rd ed). California, Sage.
19. Wolcott H (1994). *Transforming Qualitative Data: Description, Analysis and Interpretation*. Thousand Oaks, Sage.
20. Guba E & Lincoln Y (1994). Competing paradigms in qualitative research. In: Denzin N & Lincoln Y (Eds). *Handbook of Qualitative Research*. Thousand Oaks, Sage, p.105-17.
21. Gillespie BM, Chaboyer W, Wallis M, Chang H & Werder H (under review 2008). Operating theatre nurses' perceptions of competence: a focus group study. *Journal of Advanced Nursing*.
22. Lingard L, Reznick R, Epsin S, Regehr G & DeVito I (2002). Team communications in the operating room: talk patterns, sites of tension, and implications for novices. *Academic Medicine*, Vol.77, No.3, p.223-237.
23. Riley R & Manias E (2006). Governance in operating room nursing: nurses' knowledge of individual surgeons. *Social Science and Medicine*, Vol.62, p.1541-51.
24. Clavering E & McLaughlin J (2007). Crossing multidisciplinary divides: exploring professional hierarchies and boundaries in focus groups. *Qualitative Health Research*, Vol.17, No.3, p.400-10.
25. Coe R & Gould D (2007). Disagreement and aggression in the operating theatre. *Journal of Advanced Nursing*, Vol.61, No.6, p.609-18.

**Copyright of Full Text rests with the original copyright owner and, except as permitted under the Copyright Act 1968, copying this copyright material is prohibited without the permission of the owner or its exclusive licensee or agent or by way of a license from Copyright Agency Limited. For information about such licences contact Copyright Agency Limited on (02) 93947600 (ph) or (02) 93947601 (fax)**