

Dual agency in critical care nursing: balancing responsibilities towards colleagues and patients

Abstract

Aim. To explore critical care nurses' decisions to seek help from doctors.

Background. Despite their well-documented role in improving critically ill patients' outcomes, research indicates that nurses rarely take decisions about patients' treatment modalities on their own and constantly need to seek advice or authorisation for their clinical decisions, even for protocol-guided actions. However, research around the factors related to, and the actual process of, such referrals is limited.

Design. A grounded theory study, underpinned by a symbolic interactionist perspective.

Methods. Data collection took place in a general intensive care unit between 2010 and 2012 and involved: 20 hours of non-participant and 50 hours of participant observation; ten informal and ten formal interviews; and two focus groups with ten nurses, selected by purposive and theoretical sampling. Data analysis was guided by the dimensional analysis approach to generating grounded theory.

Findings. Nurses' decisions to seek help from doctors involve weighing up several occasionally conflicting motivators. A central consideration is that of balancing their moral obligation to safeguard patients' interests with their duty to respect doctors' authority. Subsequently, nurses end up in a position of dual agency as they need to concurrently act as an agent to medical practitioners and patients.

Conclusion. Nurses' dual agency relationship with patients and doctors may deter their moral obligation of keeping patients' interest as their utmost concern. Nurse leaders and educators should, therefore, enhance nurses' assertiveness, courage and skills to place patients' interest at the forefront of all their actions and interactions.

Summary Statement

Why is this research needed?

- Nurses perform most of the assessment, evaluation and care in intensive care units; subsequently, they have a crucial role in improving critically ill patients' outcomes.
- Nurses often have to seek authorisation from doctors before they can implement changes in critically ill patients' treatment modalities, which makes referral a frequent and important decision.
- There is minimal research on the factors associated with nurses' decisions to seek help from doctors in a critical care setting.

What are the key findings?

- Nurses' decisions to seek help from doctors involve balancing several conflicting motivators, especially their moral obligation to safeguard patients' interests with their duty to respect doctors' authority.
- Nurses' help seeking decisions are conditioned by their relative inferior decision making power to doctors and by their perceptions of doctors' reactions to their referrals.
- Nurses' position of acting as agents to both patients and medical practitioners occasionally hinders their ability to keep their patients' and their relatives' interest as their utmost priority.

How should the findings be used to influence policy / practice / research / education?

- Nurse leadership should foster strategies enabling nurses to place patients' interest at the forefront of their actions and interactions; concurrently, administrators should ensure a psychologically safe environment empowering clinicians to voice patient-related concerns.
- Educators should increase their efforts to enhance nurses' assertiveness, improve their interprofessional communication skills and refine the strategies they adopt to assert their input in treatment modality decisions.
- Further research is required to examine the link between referral and patient outcomes, professional satisfaction and retention.

Keywords: critical care; nurses; referral; decision making; seeking help; grounded theory; dimensional analysis; principal-agent theory; dual agency

INTRODUCTION

Critical care nurses' crucial role in recognising subtle signs of deterioration, identifying patient progression in a timely manner and improving patient outcomes is well documented (Benner *et al.* 1999, Tait 2010, Pantozopoulos *et al.* 2012, Thompson *et al.* 2013). In particular, critical care nurses can help their patients, and indirectly the organisation they work for, by strategic and timely reduction of sedation (Randen & Bjork 2010, Bjork & Hamilton 2011), mechanical ventilatory support (Rose *et al.* 2011a, Lavelle & Dowling 2011) and other treatment modalities which require intensive care (Bucknall 2003). This leads to earlier transfer of patients to less intensive settings which reduces their length of stay with its associated complications and relieves part of the ever increasing demand for critical care beds.

Yet, since these decisions are traditionally within the domain of medicine, nurses often need to refer to, and get some form of authorisation from, a member of the medical profession when implementing such changes (Lavelle & Dowling 2011, Villa *et al.* 2012). Indeed, international research indicates that nurses rarely make decisions on their own on most aspects of care; rather, they constantly seek information and advice from their medical, nursing and other colleagues on how to act when faced with uncertainty and the introduction of protocols and clinical guidelines has not eliminated the need for such referrals (Kydonaki 2010, O'Leary & Mhaolrunaigh 2012, Marshall *et al.* 2013). Subsequently, critical care nurses' decision to seek help from doctors constitutes a particularly important research topic because, while it is evidently a very frequent decision in clinical practice (McCaughan 2002, Thompson *et al.* 2004, McCaughan *et al.* 2005, Aitken *et al.* 2010), little is known about the actual process of seeking help in a critical care setting. The present study sought to address this gap by exploring the factors associated with nurses' decisions to refer to, or seek help from, doctors in the context of a general intensive care unit (ICU) in Malta.

Background

Benner (1984) had emphasised the importance of nurses' recognition and documentation of significant changes in a patient's condition and their presentation of "a firm, convincing case to the physician" (p. 94). White (2003) concurs, arguing that nurses' salient decisions, including those about eliciting cues from patients, reporting them to and discussing them with physicians, and subsequently improving patient outcomes, distinguish nurses from technical or

ancillary staff. There is also increasing evidence about critical care nurses' potential to identify, interrupt and correct medical error (Rothschild *et al.* 2005, Balas *et al.* 2006, Henneman *et al.* 2010). However, concerns have been raised on nurses' ability to promptly and accurately identify signs of physiological deterioration and seek medical help in a timely manner (McQuillan *et al.* 1998, Cioffi 2000, Cooper *et al.* 2010, Scholes *et al.* 2012). The recurring emphasis on "rescuing" patients from the complications of care during hospitalisation (Matthew 2010, Jones *et al.* 2011, Schildmeijer *et al.* 2012, Johnston *et al.* 2014), therefore, underscores the value of researching the process through which critical care nurses make referrals in order to implement timely changes or corrections in treatment modalities. Indeed, patient outcomes partly depend on nurses' decisions on whether, when and how to seek assistance from doctors, which makes referral an important nursing decision in its own right (Gillespie & Paterson 2009).

The recent Mid-Staffordshire inquiry (Francis 2013) and review into the quality of care in English hospital trusts (Keogh 2013) indicate that nurses' referrals to doctors are not exclusively based on their observations about the patient's condition. Conversely, nurses (and other members of staff) are often impeded or disempowered from reporting their concerns about patient outcomes by organisational and hierarchical issues (Keogh 2013). This study contributes insight to this issue by observing actual instances of referral in the real life context of an ICU and exploring the perceptions of nurses who often make such referrals.

THE STUDY

Aims

To explore the factors associated with critical care nurses' decisions to seek help from doctors, and to develop an explanatory substantive theory of the process of nurse to doctor referral in the context of a general ICU in Malta.

Design

Grounded theory methodology was adopted to seek a deeper understanding of the complex and often tacit factors surrounding critical care nurses' decisions to seek help from doctors; explore referral in the real world context of clinical practice and as explicated by people involved in

this social interaction (Glaser 1978, May 1986); and build theory about a process where little or none exists (McCann & Clark 2003a, 2003b).

Dimensional analysis (Bowers & Schatzman 2009), a symbolic interactionist approach to generating grounded theory, was specifically selected. Like ‘traditional’ grounded theory, dimensional analysis aims to generate theory directly from data. However, rather than focusing exclusively on a basic social process (Glaser 1978), dimensional analysis aims to uncover “what ‘all’ is involved” (Schatzman 1991, p. 310), including the context, conditions, processes and consequences of a social phenomenon (Kools *et al.* 1996).

Sample / Participants

This research project took place in a general ICU in Malta. Potential participants included registered first level nurses who had been working at this unit for at least six months.

Participant recruitment proceeded from purposive sampling (to get a general understanding of the phenomenon under study) to theoretical sampling (guided by the emerging theory) until theoretical sufficiency (Coyne 1997, Sutcliffe 2000, Birks & Mills 2011). Initially, nurses were selected from different age groups and with a range of work experience to capture extensive data about the process of decision making around referral. Eventually, more nurses were theoretically sampled in order to clarify, test and consolidate conceptual linkages in the emerging theory (Kools *et al.* 1996, Charmaz 2014).

Data collection

Preliminary non-participant observation

Initially, five non-participant observation sessions geared at seeking general information about the research setting were conducted, giving particular attention to verbal behaviours and interactions, human traffic and people who stand out (Spradley 1980, Mack *et al.* 2005). In the grounded theory tradition, this was invaluable in enhancing theoretical sensitivity (Glaser 1978) by becoming more conscious of the subtleties of the process and timing of referral, and eventually informed the subsequent, more specific, participant observation sessions (Davis 1986).

Participant observation, informal interviews and formal interviews

Each participant was observed for four to five hours while on ICU duty, during which the researcher constantly engaged in conversations (informal interviews) with the participants to seek clarification about their actions or interactions. The data were subjected to preliminary analysis to inform the agenda for an in-depth formal individual interview lasting about one and a half hours with the same participant. The latter focused on the participants' motivations and interpretations of their observed actions and interactions relating to referral. Data were collected by the first author.

Focus groups and theoretical saturation

It is generally agreed that theoretical saturation is reached when “the researcher finds that no new concepts are emerging from the data” (Urquhart 2013, p. 9). In the present study this occurred during the data collection sessions with the ninth and especially the tenth participants.

To avoid premature closure (Charmaz 2006), following an intense period of data analysis during which the findings were organised into an explanatory matrix and a preliminary substantive theory, focus groups were held with the same participants to consolidate existing analytical ideas (Bowen 2008) and gauge whether the emerging theory “made sense to them” (Morse 2007, p. 241). Participants commented positively on the terminology, flow and diagrams of the substantive theory and remarked that the latter was “realistic” and “includes everything”. Such “host verification” (Schatzman & Strauss 1973, p. 134) enhanced the confidence that “enough data [had been collected] to build a comprehensive theory” and that the components of the theory “were clearly articulated and integrated”, which, according to Morse (1995, p. 148) and Strauss & Corbin (1990, p. 99) respectively, constitute the principal determinants of theoretical saturation in a grounded theory study. The entire data collection process took place between Spring, 2010 and Autumn, 2012 and is summarised in Figure 1.

Ethical considerations

Ethical approval was obtained from the university Research Ethics Committee. Participants consented to take part after being given detailed verbal and written information about their participation. Consent cited limits to confidentiality in the case of unethical and unsafe

behaviour, in which case clinical governance procedures would have been invoked (Currey 2003, Johnson 2004). Verbal consent was obtained from conscious patients or other persons who were indirectly observed while interacting with the participants; this is considered sufficient if the risks are minimal (Carnevale *et al.* 2008, Griffiths 2008). Pseudonyms were used to conceal the participants' identity. In accordance with the principle of respect for the community (Mack *et al.* 2005), there were rare instances in which data collection was suspended when the workload of the unit was deemed excessive.

Data analysis

Dimensional analysis is a method of generating grounded theory which aims to derive meaning through the interpretation or analysis of the component parts of a phenomenon or situation (Schatzman 1991). Data analysis involved three overlapping and iterative phases, namely dimensionalising, differentiation and integration (Kools *et al.* 1996, Bowers & Schatzman 2009). These are summarised in Table 1. Data analysis influenced subsequent data collection and participant selection by purposive and then theoretical sampling.

The process was characterised by the researcher's interaction with the data and the constant comparison of different data elements (Glaser & Strauss 1967) through a series of inductive-deductive cycles. Abstract concepts (dimensions and properties) were used to explain and interpret segments of data (inductive thinking), while deductive reasoning focused from abstract concepts to specific instances in the data. Working hypotheses were used to interrogate the data by looking for positive and negative evidence for the inductively derived labels (Schatzman & Strauss 1973).

Subsequently, concepts were relabelled with an increasing level of abstraction, which was facilitated by the continuing development of theoretical sensitivity. The analytical process started concurrently, and occurred iteratively, with data collection, which allowed simultaneous "checking" or "testing" of emerging ideas (Schatzman & Strauss 1973, p.110). The nature and source of subsequent data collection was determined by theoretical sampling and continued until theoretical saturation. Diagrams and memos were used throughout the entire process to document and facilitate reflexivity, analytical thoughts, theoretical sampling and other methodological decisions (Schatzman & Strauss 1973, Holton 2007, Charmaz 2014).

Rigour

Criteria for evaluating grounded theory research include ensuring that the generated theory is both structurally relevant and pertinent to the data (Glaser & Strauss 1967), and therefore that the emergent theory has fit, is modifiable, is relevant and works (Glaser 1978).

A substantive theory was generated from diverse data by constantly comparing newly emerging concepts with previously analysed data collected from theoretically sampled participants (constant comparative analysis); it was thus assured that the generated theory *fits* the data. *Modifiability* was enhanced by concurrently collecting and analysing data, which allowed the engagement of the developing theory with new data and their subsequent modification in a more conceptual direction.

Relevance was ascertained by interacting with the participants and other ICU nurses to gauge their reaction to the substantive theory. Furthermore, the theory *works* because its constituents reflect the participants' main concerns about their decisions to seek help from their medical colleagues, and reveal their attempts to resolve these concerns, thereby helping to explain critical care nurses' decisions around referral.

FINDINGS

The substantive theory that follows emerged from the observation, interview and focus group data generated by the ten participants (seven female, three male; range of ICU work experience: 1-12 years).

Acting as the medical practitioner's agent

A recurrent motivator for nurses' referral to doctors is their need to seek clarification and verification from doctors with regards to decisions about a patient's treatment modalities, which is particularly important when apparently contradictory instructions are given by different doctors. Additionally, nurses often refer to doctors specifically to obtain the latter's *authorisation*, either before or after they implement certain treatment modality changes, even when such changes are guided by a protocol:

We do have protocols. We can actually adjust the sedation level ourselves, for example, but it's always nice to ask the doctor first.

- Susan, Formal Interview

Indeed, it appears that nurses often consult doctors not due to a lack of awareness about what actions should be taken but because:

There's a social aspect as well...As a culture, we consider that the consultant always holds the biggest decision. So how can I, an ICU nurse, break all this culture in one day? If the culture dictates that we have to abide by what the consultants say, we have to seek their authorisation.

- Judith, Formal Interview

Nurses' relationship with medical practitioners, especially consultants, was therefore characterised by power asymmetry, about which nurses were constantly mindful, and which compelled them to involve doctors in their clinical decisions. Consultants' positional authority also made it particularly difficult for nurses to contest their decisions:

If the consultant tells you something, it's useless trying to object. I would accept his decision and would certainly not tell him: 'I don't agree'. I might tell a more approachable doctor or one with whom I feel more comfortable: 'Listen, let's wait for another hour before extubating the patient'. But I would definitely not say that to a consultant.

- Simon, Formal Interview

Subsequently, the relationship between doctors (especially consultants) and nurses was guided by an implicit, but nonetheless significant, agreement about what constitutes the responsibilities of each professional group. It was generally understood that the consultant had the overall responsibility to *decide, mandate and plan* treatment modalities for critically ill patients. However, it was usually nurses who:

- (1) *Implemented* most aspects of this plan;
- (2) *Held more contextual information* about individual patients, mainly due to their position of working closely with individual patients in contrast to doctors' need to divide their attention between all the patients in the unit;
- (3) *Informed and updated* the consultant (or another doctor) about the patient's condition;
- (4) *Proposed changes* in the patient's treatment modalities.

Table 2 illustrates these aspects of the consultant-nurse relationship through data excerpts.

Thus, the relationship between consultants and nurses bore a considerable resemblance to that between a principal and an agent. A principal-agent relationship normally refers to a set of interactions between two parties whereby the *principal* authorises and scrutinises an *agent* to work under his/her control and on his/her behalf; the agent, however, typically holds more information about the task at hand which enables him/her to inform, update and propose ideas to the principal (Abdalla 2008, Nguyen 2011). In the context of this critical care unit, the role of the consultant was comparable to that of a principal, while nurses often acted as their agents.

Acting as the patient's agent

Concurrently, nurses feel strongly compelled to safeguard critically ill patients – whom they consider as being entrusted to their care – and to act on their behalf, thereby moderating patients' deferential power in relation to medical practitioners. To quote one participant:

We [nurses] are mediators between the doctor and the patient.

- Sephora, Formal Interview

In fact, several referrals to doctors are motivated by what nurses determine as their patients' best interests through their assessment and close work with patients and communication with their relatives and with the patients themselves if conscious. Indeed, some nurses actually asked conscious patients whether they wanted them to say anything to the consultant on their behalf, as captured in the following field note:

At 8.25am the nurse asks her patient whether he is 'all right'. She then informs the patient that the consultant is approaching and asks him: 'Is there anything which you want me to tell the consultant? Would you like me to ask him anything?'

- Field Notes, Observation Session 1

Seeking authorisation for actions which nurses deemed most beneficial to their patients was another important motivator for referring, notably where power asymmetry hindered nurses' ability of taking such actions independently:

I asked one of the doctors: 'Do you think she should wear anti-embolic stockings?' And he told me: 'Yes, she should'. So yes, it's our role to speak up for the patient...and to bring certain things concerning the patient to the consultant's attention.

- Susan, Formal Interview

Thus, for several nurses, *acting and speaking up on behalf of the patient* is a moral duty, a central role of their profession and a source of professional satisfaction. This creates another principal-agent relationship, this time with the patient as the principal and the nurse as the agent.

Acting as a dual agent

The critical care nurse, therefore, simultaneously acted as an agent to two different principals – namely, the medical practitioner and the patient – placing nurses in a position of dual agency. Yet, according to the participants,

Our [doctors' and nurses'] priorities are very different.

- Sally, Formal Interview

Indeed, medical consultants' preferences for patient management, such as the speed of weaning and sedation management, occasionally appear to be incongruent with what nurses perceive as the patients' and their relatives' interests. Subsequently, nurses are sometimes limited in the extent to which they can act as their patient's agent:

I didn't feel the patient was ready for extubation, but the consultant said 'Do it!' in an aggressive way. So I said: 'It's his responsibility' and I extubated the patient.

- Judith, Formal Interview

Thus, concurrent loyalty to medical practitioners and patients may lead to distressing situations with nurses having to respect the authority of the former while safeguarding the interests of the latter. In other words, their patient advocacy role is constantly conditioned by organisationally imposed and culturally reinforced constraints, particularly their inferior decision making power with respect to medical practitioners.

Weighing up decisions about referral

Nurses' position of concurrently acting as an agent to critically ill patients and to consultants was accompanied by a balance between several opposing considerations associated with their decisions about referral. First, several nurses expressed a desire to implement at least some aspects of patient management on their own, without needing to refer to, or be scrutinised by, doctors or other nurses. Yet, this aspiration for independent practice was tempered by risk aversion. By seeking the help of, and verification from, medical colleagues, nurses were able to share, or indeed transfer, the risk associated with their decisions and actions:

I have no doubt that I could have set the portable ventilator properly. However, had any problem cropped up I wouldn't want the consultant to say: 'Who set up the ventilator?' In order to cover myself and do things as should be, I prefer not to set it up on my own.

- Simon, Formal Interview

Second, one of the reasons encouraging nurses to seek help from another nurse rather than from a doctor was the feeling of collective esteem acquired by managing to solve certain clinical problems without the need to refer them to a member of another profession. Indeed, when seeking help from a member of his/her professional group, an *individual* nurse might not be acting autonomously but nurses, *collectively*, would be:

First, we try to solve things between us. We are here to use our brains and try to solve problems ourselves [rather than...] immediately asking the doctor.

- Sally, Formal Interview

However, nurses' attempts at enhancing collective esteem were weighed against a constant mindfulness of the culturally entrenched power asymmetry between the medical and nursing professions, which is particularly conspicuous in areas in which nurses felt competent, but which still require medical authorisation prior to their implementation.

Third, decisions about referral were partly based on the need for preventing *personal* risk. Indeed, nurses often anticipated doctors' reactions to their referrals and this conditioned their decisions about who to seek help from and the extent to which they attempted to influence patients' treatment modalities:

I think a lot about what my colleagues would say, what the consultants would say, what the doctors would say. It's from everywhere, you know? You often feel stupid, especially when they tell you 'Can't you take a decision? Don't ask me stupid questions?' We all have this risk.

- Jacqueline, Focus Group 2

However, these considerations for protecting oneself were weighed against, and frequently superseded by, the even stronger motivator of preventing the *professional* risk associated with poor patient outcomes:

If I'm stuck with an unapproachable person, I would never avoid asking something crucial for my patient because I don't feel comfortable with that person. If I think it is important for the patient I'm going to ask it anyway.

- Jessica, Formal Interview

Evidence from the study also suggests that several individual and organisational factors, such as experience, assertiveness, readiness to take risks, and the availability of peer and managerial support have an impact on the frequency, timing and nature of referrals. As depicted in Figure 2, these characteristics have an influential effect in the resolution of the dualities highlighted above. Dual agency, which involves nurses balancing their concurrent roles of acting an agent for both consultants and patients, emerged as the overarching duality.

DISCUSSION

The dual agency role emerging from the findings suggests that while nurses felt morally obliged to act as their patient's agent, several other factors impinge on their actions, because the patient was not their only, or indeed their utmost, concern. To use Edwards and Chalmers' (2002) words, "these other interests have the potential to influence, or at least to be perceived as influencing, the caregiver's professional judgement regarding the primary interest of patient well-being" (p. 132). Subsequently, dual agency may divert their focus from keeping patients' interest as their highest priority. This is significant when considering the unfavourable consequences on patient safety and on the public's trust in the health system when patients' welfare is relegated below other competing interests, as persuasively portrayed in the Keogh (2013) and Francis (2013) inquiries into the delivery of care in certain areas of the UK.

Several participants expressed their dissatisfaction about being restricted from autonomously implementing certain interventions for patient benefit before obtaining medical authorisation. Subsequently, having to act as an agent to both doctors and patients frequently exposes nurses to stressful situations, particularly when the preferences of the former appear to conflict with the interests of the latter. Although they do not explicitly use the term *dual agency*, Lutzen & Schreiber (1998) sum up this potentially conflicting priority as “a conflict between the nursing value of respecting the patient’s integrity within the framework of a good, trusting relationship and the demands made by other professionals” (p.308). The nurses observed in Varcoe and Rodney’s (2002) Canadian study were similarly “caught in conflicts between institutional and medical rules...and their own beliefs about what patients needed” (p. 116).

In the present study, this may partly be explained by the professional relationship between medicine and nursing in Malta, which is somewhat characterised by the historically rooted prestige of the former and the traditionally subservient role of the latter (Cassar 1964, Savona Ventura 1999). Several people within and outside healthcare organisations view doctors – particularly those in a consultant grade – as more knowledgeable and powerful than other professions. These perceived and actual differences were only partly reduced by the move of nurse education to a university setting in the late 1980s. Additionally, the high frequency of referral despite their own professional competence may be related to individual participants’ insecurity and dependency which may, in turn, be related to historical-cultural elements, including colonialism, and small island-state features. This may have been accentuated by the fact that all participants were public sector employees, where opportunity for referral is more likely to be available than in the private arena. Research addressing these tentative explanations is indicated.

Nonetheless, this finding does not appear to be limited to the local setting with various European and North American studies reporting less than desirable input by critical care nurses in ward rounds (Parissopoulos *et al.* 2013) and in decisions about patient discharge from high dependence areas (Brand 2006), weaning from mechanical ventilation (Hancock & Easen, 2006), pain management (Subramanian *et al.* 2011), end of life care (Carnevale *et al.* 2011, Piers *et al.* 2011, Festic *et al.* 2012) and treatment modality changes in general (Coombs & Ersser 2004). Conversely, recent Australian, Scandinavian, British and Irish studies reported a significant and highly influential role of nurses in decisions about sedation assessment and management (Aitken *et al.* 2008, Randen & Bjork 2010, Bjork & Hamilton 2011) and weaning

from mechanical ventilation (Kydonaki 2010; Rose *et al.* 2011b, Lavelle & Dowling 2011, Haugdahl & Storil 2011), with experience, confidence, education and knowledge being particularly valuable in facilitating participation in treatment modality decisions.

The finding that the anticipated reaction of doctors to nurses' referrals determine whether, when and from whom they seek help, and occasionally stops them from referring, mirrors various studies, conducted internationally, indicating that several clinicians are reluctant to directly confront senior colleagues about their concerns, partly due to fear of retaliation (Kelly 1998, Peter *et al.* 2004, McDonald *et al.* 2005). In such situations, nurses' desire to act as the patient's agent is limited by the need to protect themselves from anxiety (Pask 2001, McCarthy & Deady 2008), which resonates the "culture of fear in which staff did not feel able to report concerns" described by the Francis inquiry (2013, p.10). This resonates with earlier work suggesting that nurses' involvement in decisions is frequently affected by the attitude of physicians and nurse managers (Hancock & Easen 2006, Rose *et al.* 2008) and several hierarchical factors, particularly the perceived or actual power differences between nurses and doctors (Hagbaghery *et al.* 2004, Leonard *et al.* 2004, Villa *et al.* 2012).

Consequently, hospital managers should promote collegial, rather than hierarchical, attitudes, thereby affording all health providers the "psychological safety" (Larson 2011, p. 2) to voice their concerns about patient outcomes, which echoes recommendations in the often cited *To Err Is Human* document by the Commission on Quality of Health Care in America (Kohn *et al.* 2000); in the Institute of Medicine's *Keeping Patients Safe* document (Page 2004); and, more recently, in the NHS inquiries by Keogh (2013) and Francis (2013). It is, however, particularly significant to note that in the present study this recommendation is grounded on nurses' claims that their effectiveness at, and readiness to, participate in decisions affecting patients were significantly influenced by doctors' reaction to their contribution, which is of concern given their well-documented responsibility to "rescue" patients from the complications of care during hospitalisation. Opportunities for organisational and peer support should also be made increasingly available for all ICU healthcare providers. Holding regular forums in which physicians and nurses can share experiences associated with poor collaboration (Tang *et al.* 2013) could be helpful in this regard.

Nurse educators should endeavour to enhance not only the intellectual, but also the moral development of nurses and nursing students by instilling, with even greater intensity, the

importance of putting patients' interests before their own (Francis 2013). This concurs with the Chief Nursing Officer's current vision and strategy document identifying courage as one of the essential values in fostering a culture of compassionate care (NHS Commissioning Board 2012). Educational programmes on making referrals, both to seek doctors' help and to convincingly advise them to authorise changes in patients' treatment modalities, should also be planned with a particular focus on equipping nurses with the assertiveness and skills required to communicate effectively with colleagues who are considered higher in the interdisciplinary team hierarchy.

The existence of a dual agency relationship between nurses, physicians and patients and its potentially distressing effects on nurses unleashes a new dilemma. Should educators and managers seek to contain, change or decrease the impact of this dual agency? Or should they view it as an inevitable element of nursing practice, and therefore focus their attention on developing structures which support nurses in facing this reality? While addressing this question is beyond the scope of the present paper, we feel that this issue should have a place on the agenda for contemporary scholarly debate and research and will be the subject of a forthcoming publication. Further research should also attempt to portray a more complete picture of referring in the critical care context by studying other types of referral involving nurses (e.g. nurses' referrals to physiotherapists, medical technicians, and pharmacists); referrals in which nurses are not directly involved (such as referrals between junior doctors and consultants and those between ICU consultants and medical practitioners from another specialty); and the link between such referrals and patients outcomes, professional satisfaction and nurse retention.

Limitations

The study was exposed to a number of potential shortcomings, including the limitations of human observation in capturing all relevant events, especially in an ICU where multiple actions and interactions occur simultaneously (Happ & Kagan 2001, Caldwell & Atwal 2005). The generated substantive theory is based on the perspectives of a relatively limited number of critical care nurses in one setting, making it difficult to generalise the findings beyond the context in which the data were elicited. Nonetheless, feedback from critical care nurses attending local and international conferences to which the findings were presented was overwhelmingly in agreement.

CONCLUSION

Although medico-cultural differences demand caution in extrapolating its findings to other settings and countries, this study should be relevant to nurse clinicians, educators, managers and researchers in various areas because they shed light on the patient-nurse-doctor triad which characterises healthcare service provision in most settings. The concept of critical care nurses acting as dual agents proposed in this paper contributes to the current debate about the factors which occasionally keep nurses from fulfilling what they consider to be the essence of their professional values – namely, protecting the patient. Nurse leaders should, therefore, strive to foster nurses' courage to place patients' interest at the forefront of their actions and interactions, particularly by recognising the value of affirming their views about what is in the best interest of the patient. Concurrently, educators should increase their efforts in improving nurses' interprofessional communication skills, with particular attention to the manner in which they share their unique knowledge about the patient with other members of the healthcare team and the strategies they adopt to assert their input in treatment modality decisions. Researchers should continue exploring the process of referring in critical care and other settings and its effects on patient outcomes.

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Table 1 Steps in data analysis (Schatzman & Strauss 1973, Schatzman 1991, Kools *et al.* 1996, Bowers & Schatzman 2009)

Phase	Details
Dimensionalising	<ul style="list-style-type: none"> • Data about referring in critical care were broken down into a variety of concepts known as “dimensions”. Dimensions typically consist of larger chunks of data than the initial coding used in ‘mainstream’ grounded theory (Endacott <i>et al.</i> 2010). • The properties of each dimension were identified.
Differentiation	<ul style="list-style-type: none"> • The relationship between different dimensions was explored and the dimensions were organised into an explanatory matrix which meaningfully described the phenomenon and aligned the dimensions according to their salience. • The central organising dimension (“acting as a dual agent”) was determined after checking which of several dimensions offered the most fruitful explanation, on the basis of evidence from the data. • The explanatory matrix was refined through more focused data collection and reassessing previously analysed data on the basis of new theoretical insights.
Integration	<ul style="list-style-type: none"> • The position of the dimensions and properties within the explanatory matrix was refined and a substantive theoretical account was created.

Table 2 Summary of the roles of consultants and nurses with examples from the data

Characteristics of consultants' and nurses' roles	Data excerpts
Consultants...	
<ul style="list-style-type: none"> • Exhibited significant <i>positional authority</i> 	<p><i>Consultants are the king of the castle...it's what they say that goes.</i></p> <p>- Susan, Focus Group 2</p>
<ul style="list-style-type: none"> • <i>Scrutinised</i> nurses' actions 	<p><i>Certain consultants would not like us to reduce the ventilator settings unless they're informed. If you change <u>any</u> setting they would tell you: 'Who told you to do so?'</i></p> <p>- Jeremy, Formal Interview</p>
<ul style="list-style-type: none"> • <i>Authorised</i> nurses' actions 	<p><i>It's better to have the go-ahead of the consultant or the doctor to decrease or increase the rate [of inotropic infusions] ...because as a nurse I cannot just start or authorise something; I need the permission of the doctor.</i></p> <p>-Judith, Formal Interview</p>
<ul style="list-style-type: none"> • Assumed overall responsibility for <i>deciding and directing</i> treatment modalities 	<p><i>It's not just us; even other doctors depend on his go ahead. The consultant controls their actions as well; they phone him all the time, because he [or she] has the final say on several decisions.</i></p> <p>-Judith, Focus Group 1</p>
Nurses...	
<ul style="list-style-type: none"> • Acted on and <i>implemented</i> a consultant's plan 	<p><i>When consultants tell us to do something, we do it. I would never ignore what the consultant is saying.</i></p> <p>- Judith, Formal Interview</p>
<ul style="list-style-type: none"> • Held <i>additional and updated contextual information</i> about the patient 	<p><i>Ultimately, you [the nurse] are with the patient practically all the time and they [doctors] wouldn't know the details. Even when you ask them for help, they have to come near you to check things with you because they don't know the specific details.</i></p> <p>- Jacqueline, Formal Interview</p>
<ul style="list-style-type: none"> • <i>Informed and updated</i> medical practitioners 	<p><i>Doctors rely on us [nurses] for information about the patient. They ask us lots of things, for example... 'Has the chest X-ray been done?' 'Has this particular blood test been taken today?' Or 'was he given anything for the pain today?'</i></p> <p>- Sephora, Formal Interview</p>
<ul style="list-style-type: none"> • <i>Proposed changes</i> to treatment modalities 	<p><i>There are certain things which we are more aware about. Take the ward round, for example. If consultants need to decide something for the next 12 hours, I am sure that I can have a lot of influence on what they [doctors] are going to decide because I can tell them: 'Listen, this is what happened'. So they can partly base their plan on my contribution; I may have a significant influence on what they're trying to plan.</i></p> <p>- Jessica, Formal Interview</p>

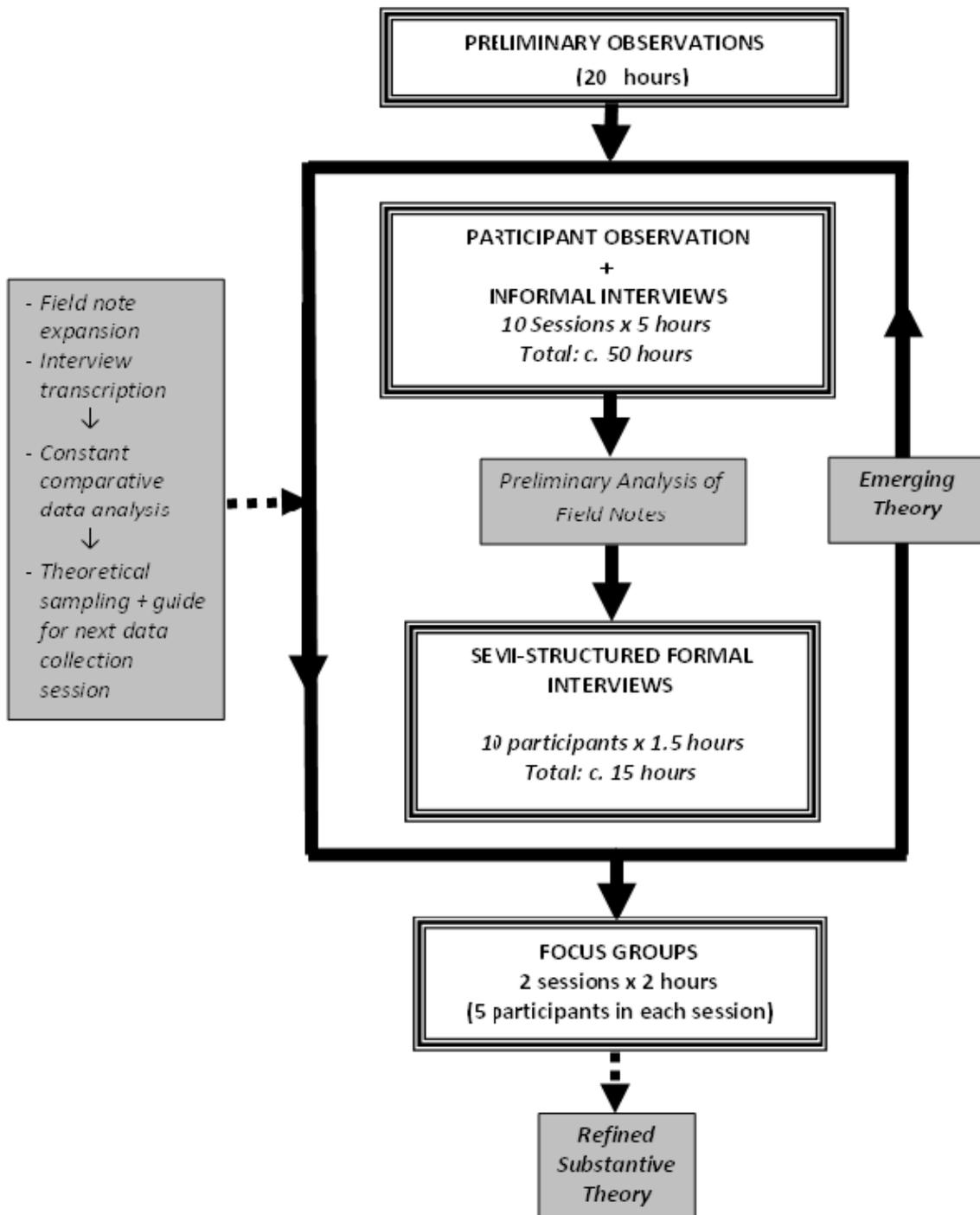


Figure 1 - Summary of the data collection process

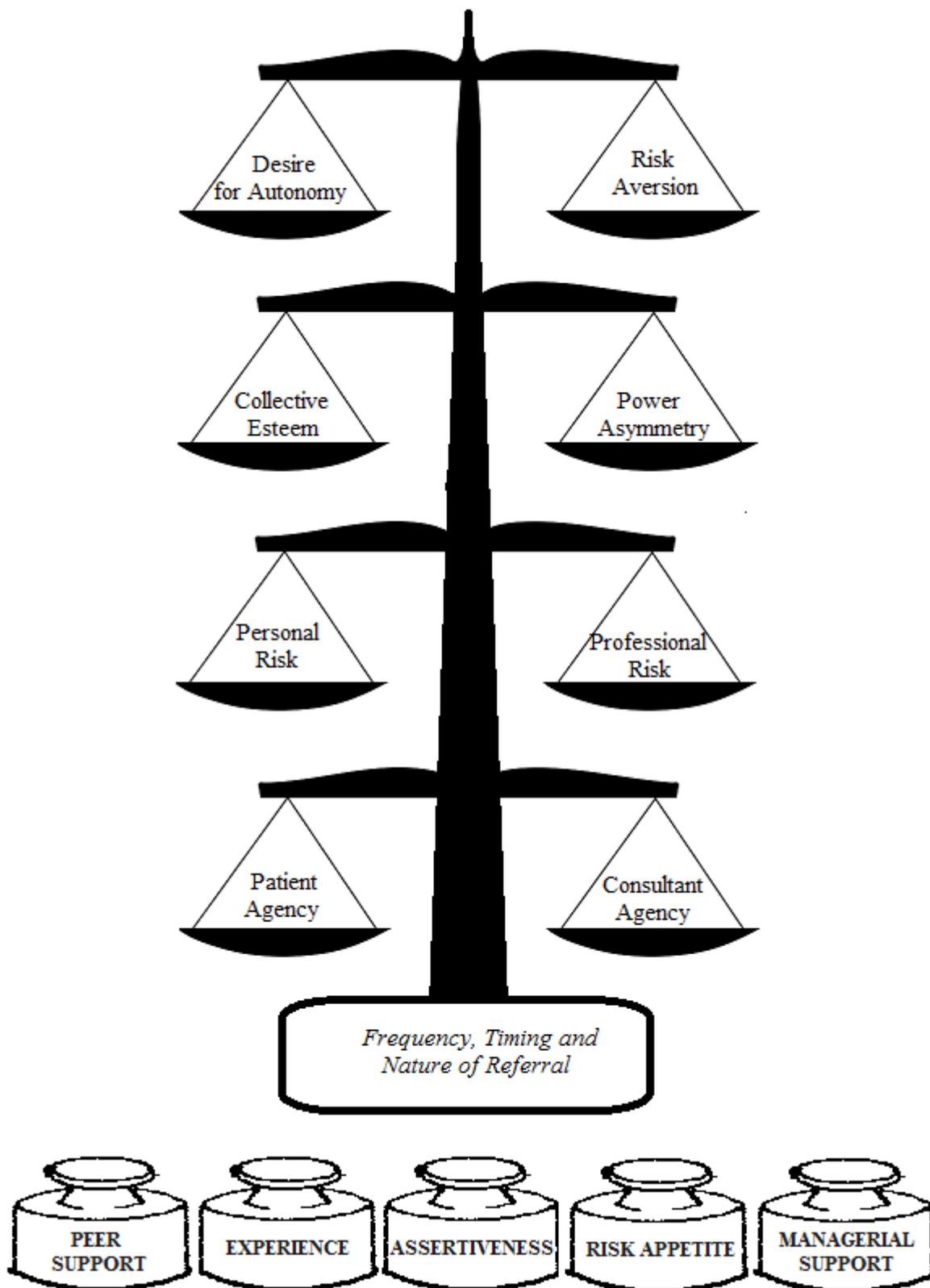


Figure 2 - Dualities surrounding nurses' decisions' to seek help from doctors