“Whatever It Takes”: Nursing Students’ Experiences of Administering Medication in the Clinical Setting

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Abstract
This research was conducted to examine experiences of nursing students in administering medication in the clinical setting. Grounded theory was utilized, involving in-depth interviews with 28 final-year students. In this article, we examine the importance participants attached to conforming to the prevailing culture, and their responses when offered what they considered inadequate supervision. Three main categories emerged: norming for the survival of self, conforming and adapting for benefit of self and others; and performing with absolute conscience. Subsequently, the model of contingent reasoning was developed to explain the actions of students. Contingent reasoning was influenced by the relationship with the registered nurse and individual characteristics of the students. Contingent reasoning was validated by participants and is discussed in relation to Kohlberg’s theory of moral reasoning and other relevant nursing literature. This model has the potential to enhance understanding of how students make decisions, and ultimately to positively influence this process.

Keywords
clinical supervision; medication; nursing, education; nursing, working environment

Professional socialization refers to the process by which the individual learns the culture of a profession. This professional socialization is strongly influenced within the university through classroom teaching, but is more profoundly experienced in the clinical setting (Lincoln, Carmody, & Maloney, 1997; McAllister, 1997). It is within the clinical setting that students tend to acquire the cultural values as they are displayed by the practicing professionals (Randle, 2002; Tiwari et al., 2005). This is particularly the case because students have a strong desire to be accepted, especially by their nursing colleagues (Levett-Jones & Lathlean, 2008; Tiwari et al., 2005).

The suggestion that students experience a desire to fit in has been supported by subsequent research (Calman, Watson, Norman, Redfern, & Murrells, 2002; Tiwari et al., 2005). Students frequently adopt behaviors that enable them to assimilate into the prevailing culture of the clinical setting, even when this behavior conflicts with what they have been taught (Maben, Latter, & Clark, 2006; McKenna, Smith, Poole, & Coverdale, 2003; Randle, 2003). Levett-Jones and Bourgeois (2007) suggested that the desire to be accepted actually reflects fear of negative repercussions. The authors argued that students who report incidents in which they consider the supervision provided to be inadequate run the risk of ridicule, rejection, and social isolation. This is particularly apparent when clinical assessments are completed by registered nurses from the facility rather than by educators employed by the university. Similarly, Randle (2003) reported that when students witnessed behavior they knew was wrong, they experienced emotional turmoil but feared perceived repercussions if they spoke out. Randle (2003) argued that the culture of nursing places students in precarious positions because of their unequal power relationships with registered nurses. Fear of negative evaluations has also been identified as a barrier (McKenna et al., 2003). Indeed, Calman et al. (2002) found this fear to be warranted by identifying a link between how well students blended into the ward and satisfactorily completed clinical assessments.

The literature cited above described research exploring student experiences in a general sense rather than...
focusing on any particular clinical skill. One skill-based example in the literature was that of training in lifting techniques of preregistration nursing students (Swain, Pufahl, & Williamson, 2003). Swain et al. (2003) found that students’ practice generally fell somewhere between the way they observed others performing in the clinical context and what they had been taught. However, from the findings it was suggested that most students acted in accordance with the practices they observed rather than what they remembered learning as the correct technique. Students’ actions were influenced by anxiety about the clinical assessment (Swain et al., 2003).

The area of interest for the current study relates to students learning to administer medication. Only one study was found that pertained specifically to this topic. Wolf, Hicks, and Seremebus (2006) reported 1,305 medication errors by nursing students over a 5-year period. Students anonymously reported the medication errors, which included medications being given to the wrong patient, at the wrong time, and/or via the wrong route. Given the estimated frequency of medication errors in Australian hospitals (Deans, 2005), this paucity of research is of concern.

Administering medications is considered an essential component of student learning in the clinical setting; all states and territories of Australia have legislative requirements for a registered nurse to supervise students when administering medications in acute health care settings (Bullock, Manias, & Galbraith, 2007). In Queensland, the relevant legislation is the Health (Drugs and Poisons) Regulation (1996; Queensland Parliamentary Council, 1996). Accordingly, Australian universities have developed policies to ensure that students receive the required supervision (Levett-Jones & Bourgeois, 2007). The university where the current research was conducted had chosen the facilitator model. Under this model, a registered nurse is employed by or seconded to the clinical agency to provide supervision for a cohort of students.

Although the clinical facilitator aims to provide close supervision for the students, they are generally not able to observe all students at all times. Registered nurses providing direct patient care are therefore often expected to supervise students performing functions such as the administration of medication (Andrews & Roberts, 2003). Given the students’ desire to fit in with the prevailing culture, they might feel pressured to administer medication without supervision, and consequently could be involved in medication errors, with potentially serious consequences for the patient.

Although previous research has described the tendency for nursing students to behave in a manner that will enhance their acceptance into the clinical setting, the primary focus has been on the student response itself, with little attention given to characteristics of the clinical environment that might influence that response. For example, previous research did not consider the relationship between the desire to conform and the level or quality of supervision provided by registered nurses (RNs). “Shifts of supervision” emerged as the central category in prior work of the current authors (Reid-Searl, Moxham, Walker, & Happell, 2008), examining undergraduate nursing students’ experiences when administering medication in the clinical setting. Three specific levels of supervision (i.e., being over, being near, and being absent) were identified as falling short of the expected standard of being with. Being over referred to the RN standing over students, resulting in the students feeling under pressure to perform the task quickly. Being near occurred when the RN was close by, but did not directly observe the administration process. Finally, being absent described the scenario when the RN did not provide any supervision. Faced with these three levels of supervision that did not meet student expectations, students responded in particular ways. These responses are the focus of the current article. The aim of this study was to explore the responses of nursing students when administering medication without the level of supervision they expected being provided, and to develop a theoretical explanation on the basis of these data.

Method

Design

This study was conducted using a grounded theory design. Grounded theory is considered a particularly appropriate approach in exploring topics on which little or no previous research has been conducted. This method allows for the exploration of the topic of interest and enhances the development of a theoretical understanding to interpret the study findings (Charmaz, 2006; Furlong & Wuest, 2008; Holtslander & Duggleby, 2009; Strauss & Corbin, 1998; Turris & Johnson, 2008). Grounded theory is distinguished from other qualitative methods because it moves beyond observation and interpretation to develop a theoretical model by way of explanation for the topic of interest.

Sample and Setting

The target group for participation in this study was final-year undergraduate nursing students from a university in Queensland, Australia. The students were soon to finish the undergraduate program and had recently completed their last clinical placement of the program. This was considered important, because during their 3 years of nursing education, the students would have considerable experience in administering medication in the clinical setting and would therefore be able to inform the topic of investigation.
Once ethics approval had been obtained from the university ethics committee, a letter of invitation was sent to all final-year students, inviting them to participate in the study. The letter outlined their rights in relation to participation, and confidentiality was assured. Interested students were asked to sign a consent form and provide some brief demographic details.

Theoretical sampling was used to select participants throughout the entire data collection and analysis period. The objective of using theoretical sampling for this study was to seek rich data that would provide the basis to develop concepts, categories, and ultimately the theory itself (Ching, Martison, & Wong, 2009; Strauss & Corbin, 1998). The steps applied in this study were consistent with those outlined by Strauss and Corbin (1990), namely open sampling, relational and variational sampling, and discriminate sampling. The process involved the selection of participants who could provide the greatest opportunity for discovery (Strauss & Corbin 1990). To achieve this, the demographic data collected from all willing respondents were reviewed. Five participants were selected who portrayed diversity in their demographic data in terms of age, gender, and previous nursing experience to capture input from a wide range of participants. Based on the emerging concepts from the first five interviews, relational and variational sampling then occurred simultaneously with the end stages of open sampling (Strauss & Corbin, 1990). Eighteen participants were selected, and analysis of each of their interviews occurred before the next participant was selected. Selection involved reviewing the demographic data and selecting participants who portrayed dimensional range and variability to the data that had emerged in the open sample in terms of age, gender, and previous experience in nursing or health care. The final selection occurred at the discriminate sampling stage and involved the deliberate selection of 5 participants to maximize or minimize differences (Strauss & Corbin, 1998). Discriminate sampling was necessary to meet with the aim of selective coding. Specific demographic data were used for the selection to maximize opportunities for comparative analysis (Strauss & Corbin, 1998). The majority of participants were women (n = 24) and ranged in age from 20 to 41 years. The majority had some previous nursing experience, including being assistants in nursing (n = 11), enrolled nurses (n = 4), and paid carers (n = 2).

Procedure

Interviews were conducted with the use of open-ended questions. This allowed participants to influence and refine the focus of the research according to their experiences and opinions, which emerged during the data analysis process (Charmaz, 2006; Strauss & Corbin, 1990). The broad information provided in the initial stages of the interviews assisted with providing more direction; for example, responses to the preliminary prompt, “Tell me about your experiences with medication administration as a final-year student when in the clinical setting.” The fact that some participants described the importance of being accepted or fitting in led to asking, “Tell me about what ‘fitting in’ means to you when administering medications as a final-year student?”

Data Analysis

Interview transcripts were analyzed using the constant comparative approach described by Strauss and Corbin (1998), that is open, axial, and selective coding. Open coding involved interview transcripts being examined carefully line by line and concept labels being identified. From the concept labels, early categories were defined through constant comparison. Early categories were grouped together according to similarities. These early categories were not fixed and sometimes were modified with further analysis at the axial level. The open-coding process commenced from the first interview and continued until no further categories could be identified and saturation of categories was achieved.

Axial coding entailed the discovery of relationships between the identified categories and subcategories with respect to the broader context in the occurrence of incidents and events (Strauss & Corbin, 1990). At this stage, categories were related along the lines of their properties and dimensions using a coding paradigm to allow more complete explanations about the phenomenon, and for the connections among categories to be uncovered. Relational statements were then developed which incorporated explanations and diagrams to identify the linking of categories with their subcategories, and to show the visual differentiation between conditions, actions, interactions, and consequences. Validation was achieved by returning to the transcripts to compare incident to incident and look for any new properties, dimensions, and relationships.

Selective coding, the final stage, involved a process whereby the categories were integrated and refined around a central explanatory concept (Strauss & Corbin, 1998). The central explanatory concept included the problem experienced by final-year undergraduate nursing students and the process used by them to deal with it. It was important that all other categories related to this central category. In addition, the central category needed to appear frequently in the data and needed to provide a logical and consistent explanation. Finally, the central category had to explain variation as well as the main point made by the data (Strauss & Corbin, 1998). Supervision was identified as the central category.
Findings

Participants’ Responses to Inadequate Supervision

Findings revealed that the participants fell into one of three categories of response when faced with what they considered to be inadequate supervision from RNs for administering medications, particularly in light of university requirements. The three categories of response identified were (a) norming for the survival of self, (b) conforming and adapting to meet expectations of self and others, and (c) performing with absolute conscience (going by the book). Participants’ actions were not exclusive to one level. That is, the same student’s response might have reflected the desire for self-survival in one circumstance and performing with absolute conscience in another. Often this reflected the student’s prior experience in working with a particular RN. Based on prior experience, the student would have expectations of the level of supervision the RN was likely to provide (or not provide). An overview of the three responses is provided and supported by participants’ quotes.

Norming for Survival of Self

This theme reflected participants’ responses as being self-protective when they did not consider the supervision offered to be adequate. Self-protection was used by students to adhere to professional behavior so they could satisfactorily complete the clinical assessment and therefore meet course requirements. This theme included the following interrelated subthemes: (a) whatever the registered nurse asks, (b) fit in at any cost, (c) not rocking the boat, and (d) suck up/shut up/no tell.

“Whatever the registered nurse asks.” Participants described RNs as the people to please and impress, and they expressed the need to comply with whatever the registered nurse wanted. As one participant stated, “[A]ll you’re there for is to impress the RN you’re with really, nobody else.” Getting the marks required to pass outweighed everything else, including the university requirements, as stated: “If it comes to getting marks or following policy [university requirements], we’ll go for the marks pretty much every time.” This meant that participants would accept any amount of supervision from RNs when administering medication, despite the internal conflict they experienced; for example: “If you’re stuck with somebody who can be a right pain . . . and you don’t get the supervision you need, more than likely people [students] will change their tactics to try and make that assessment work.”

“Fit in at any cost.” Fitting in was commonly spoken about as not only doing what was asked, but also complying with expectations even if it meant contravening what the participants knew was right, because the consequences of not doing so were significant. One participant described the importance of fitting in:

Well, if you don’t think you fit in . . . you think that the RN’s just got you there under sufferance and . . . you become hesitant, and start making mistakes and of course that compounds . . . then you get flustered and you keep making the same mistakes.

Many participants described fitting in as going beyond passing the clinical placement to potentially affecting their future employment opportunities:

Administering without supervision . . . it might be contradictory to what you’ve been taught at uni [university] . . . it’s to fit in . . . when I’m going to be working there in the future and I don’t want to be seen as an outsider.

“Not rocking the boat.” Participants described this as not questioning the requests of RNs, including accepting what they considered to be inadequate supervision when administering medication. Participants would tend to go along with whatever was expected in a manner that portrayed harmony so as to avoid unfriendly staff and being awarded a poor grade. For example:

Well, you can’t rock the boat because they’ve [RNs] got your final marks in their hand. . . . I spent my 6 weeks trying to fit in as much as [I] could. . . . You’ve really just got to do whatever they want and please them.

“Suck up/shut up/no tell.” These were terms frequently used by participants to demonstrate that they were pleasant to RNs and would remain silent even when in difficult situations. For example, “You suck it up, you be nice.” This term was used to describe a survival strategy adopted by participants in the study. The words shut up suggested being quiet about whatever they saw or did in relation to supervision and the act of administering medications, to avoid conflict: “I keep my mouth shut . . . because I don’t want to cause conflict, I don’t want to make this process harder than it already is.” Concern about the RN’s assessment and successfully completing the clinical placement also contributed to shutting up and not telling:

[I]f you don’t go along with what they’d [RNs] like you to do, which is give out medications, and they feel that you’re, you’re not competent in giving out those medications, then they’re going to mark you
down...they do like you to just sit down, shut up, and go along with what they've said.

The concept of shutting up was also seen as a protection from failure by the university. Participants would not report to the university if the required levels of supervision were not provided to them, or if they were involved in a medication error, because of fear that they would fail: "I didn’t feel comfortable saying anything to the university, because if I did then they’d be saying, ‘Well, you’ve given out a medication without being supervised.’"

Conforming and Adapting to Meet Expectations of Self and Others

Students in this level would compromise to meet expectations from both the university and the RN. The most common level of supervision under these circumstances was being near. This was considered to meet university requirements to some degree because the RN was within visual range. The benefit to the RN was that this level of supervision allowed her or him to get on with other tasks and the patient could be given medications on time. The following provides an example of compromising when administering medications at a near level. The participant used the busy day as a reason for accepting this level of supervision:

I can say I’ve always being supervised and if not...is like a very busy day...I’ll go get the trolley, bring the trolley to the...room. I’ll get the chart, get the tablets out. Then I’ll take it to the RN and say, “This is what I am giving, that’s the order.” And she’s like, “Yep, can you go give it, without supervision?”

In some cases participants spoke of accepting no supervision at all. Again, they justified their choice, even though they knew it was wrong, because they were relieving the busy RN and were ensuring that patients got their medications on time. For example, one participant described her response to a situation in which the registered nurse was too busy to remain with her:

I actually continued administering the medications. I put them in one of those paper cups and then when my person [RN] came back...I actually showed them and said, you know, “There should be five pills here, I have five pills in there.” Other than standing there waiting them, for them for 20 minutes, that was the next best thing that I could do. But it’s a case of some people have to have their pills.

When making a decision about what type of supervision to accept, this participant was willing to accept being with, being over, and being near, without much hesitation. Being absent was reluctantly accepted on a few occasions when the RN had been called away. Participants stated that they would prefer to wait; however, if they knew the patient needed their medications on time, or that the RN was really busy, they would administer alone. In the following excerpt a participant justified administering alone when the RN had supervised the process before:

I’ve often been given keys...to the drug trolley and told...that they’ve [RNs] supervised me doing this room before and I can go ahead and do it...They’ve left me in charge, I can do this without them watching me.

Performing With Absolute Conscience (Going by the Book)

Performing with absolute conscience occurred when participants would refuse to administer medication unless they were provided with supervision that complied with university requirements and legislation; in other words they would only “go by the book.” This represented patterns of behavior in which the participants’ priority was meeting the university requirements as opposed to meeting the expectations of the RN.

In analyzing the examples of medication episodes reflective of this response, it was revealed that participants would make reference to what they knew was required. Some suggested that administering without supervision was outside of their “scope of practice” and that they were “not covered,” which meant that because they were not RNs it was against the law for them to administer alone; for example:

I prefer them [RNs] to supervise me even though I may be able to do it...Its not within our scope of practice and...I need the supervision...I’m not covered...Basically I’m...not registered so...I shouldn’t be giving medication to someone without supervision in case I make a mistake.

Participants described the risks they would be taking if they deviated from university expectations, the major risk being fear of failure if caught. They equated this to jeopardizing what they had worked for in their previous years at university: “I’m a student...There is no flippin’ way that I am, especially at my age, losing my investment in this by not being supervised.” Those participants who were not prepared to compromise on the level of supervision would not continue to administer if
the RN was called away, again reflecting their unwillingness to risk the potential consequences, as explained by another participant:

I just would wait. I just wasn’t prepared to do anything unsupervised. It just wasn’t worth making an error. . . . Sometimes I’d be waiting ten minutes and I get very frustrated standing there for ten minutes doing nothing . . . but I just thought I cannot afford to muck this up now.

If supervision was not given, these participants would simply refuse to administer medication. The participants described feeling uncomfortable about doing this because they were risking upsetting the RN, their relationship with the RN, and ultimately their clinical assessment. The responses of RNs when they did refuse varied, as the following quote demonstrates:

The RN’s actually going to either respect you in saying no or, it’s going to cause conflict . . . but hopefully you’ve got a good RN that’s going to say, “Oh, yeah, I understand and I know I shouldn’t have asked you to do that.”

When saying “No,” participants described themselves as becoming submissive. They often apologized to the RN in having to refuse the level of supervision offered, and used the university requirements as a justification. This was particularly apparent in light of the RN’s attempts to persuade them:

Quite a few times the RNs have said, “You know what you’re doing, off you go,” and you have to explain to them, “No, sorry, I can’t,” and then they’ll say, “Oh, there’s no one around, no one will know.”

Although some participants were prepared to say no, they were still not willing to inform the university regarding these situations of inadequate supervision. The participants believed that the university could challenge the RNs, creating unrest in the clinical setting. This could then compromise the clinical placement and their clinical assessment.

The Model of Contingent Reasoning

Contingent reasoning emerged as the explanatory theoretical framework in this study. The model of contingent reasoning is presented in Figure 1.

Contingent reasoning involved participants making a decision and taking action when the supervision the RN was offering was in conflict with university requirements. The decisions were essentially about the level of supervision students were prepared to accept when administering medication. As noted earlier in this article, three types of response to this situation were described: norming for the survival of self, conforming and adapting for self and others, and performing with absolute conscience. The reasoning was contingent. This meant that there were conditions influencing the decision being made. These included the relationship with the RN and
the attributes of the student. Recognition of this process
led to the development of the model of contingent reason-
ing, consisting of the three responses described above.

Students were strongly motivated by the desire to “get
through,” to successfully complete their course. To
achieve this they were faced with competing demands.
Participants described giving priority to either the RN
(Level-1 reasoning), the university (Level 3), or both
(Level 2). However, in many instances meeting the
expectations of the RN was given priority even when this
involved engaging in what was considered to be unac-
cceptable practice.

Dealing with the shifting levels of supervision was a
manifestation of the core category supervision, and it
involved a process triggered by internal conflict. The pro-
cess was labeled as contingent reasoning. Contingent
meant that participants made decisions depending on the
conditions at the time of a medication administration epi-
sode. Such conditions could influence the possibility of
their getting through the clinical placement. This took
into account that each episode of medication administra-
tion was different, although it was mostly dependent on
the RN designated to supervise the student.

Reasoning was the intellectual activity that resulted
in participants making a decision about the level of
supervision they were prepared to accept to proceed
with the actual act of administering the medication to
the patient. The decision about what level of supervi-
sion to accept resulted in a pattern of behavior involving
actions. The ultimate intention of these actions was for
the student to get through their clinical placement. This
decision-making process, as identified from the partici-
pants’ stories, involved two different phases, as
represented in Figure 1.

Conditions Influencing Contingent Reasoning

The relationship with the registered nurse. Relationships
with RNs emerged as a strong influence in participants’
decision making when confronted with inadequate sup-
ervision. This was particularly apparent for those whose
actions were consistent with Levels 1 and 2 of contingent
reasoning. The relationship with the RN was perceived as
important for successfully completing the clinical place-
ment. In particular, participants spoke about their trust
and confidence in the relationship, and the role of the RN
as the assessor.

When participants believed the RN had trust and confi-
dence in them, they found it difficult to insist on direct
supervision at the risk of violating trust and impacting on
the relationship, as the following quote suggests: “They
wouldn’t trust you as much . . . maybe they don’t see you as
confident as what you could be and, also they’d get frus-
trated and cranky.” For some participants this could mean
the RN might judge them as incompetent; for example:

They might think that . . . you’re not competent. . . .
You have to be brave enough to say it and that might
affect your relationship with them. . . . If you say to
them, “No, I’ve got to be supervised,” they’ll be like,
“Oh, you don’t,” and you might feel, “Oh, well I do,
but I don’t want her to think that I can’t do it.”

Trust and confidence were also influenced by the timing
of the clinical placement. The longer the time they spent
on placement, the more likely participants were to feel
trusted because they were closer to completing the
program, and it became more difficult to insist on direct
supervision:

[T]hey also say to you . . . “But it’s only five more
shifts and you’ll be out giving them out by your-
self. Go on, run along and give it,” and they trust
you and you trust them. . . . It’s very hard . . . to ask
for a bit more support because . . . when you say . . .
“I don’t feel comfortable,” they take it as you being
unconfident [sic].

Participants were reluctant to give up the trust and
confidence they had earned. However, some participants
were reliant on the RN to provide the correct levels of
supervision which would allow them to perform with
absolute conscience (Level 3 of contingent reasoning).
When direct, close, and supportive levels of supervision
were not provided, participants faced a dilemma. They
would often have to make decisions placing them back at
Level 1 or 2 of contingent reasoning.

As previously discussed, getting through was the cen-
tral motivating factor for participants’ decisions and
actions at each level of contingent reasoning. In light of
this, participants continually referred to the RN as the
assessor. As the following participant quote illustrates,
the relationship with the RN could dictate the outcome
of their assessment:

If you get on really well with the nurse . . . you’re
going to get a pretty good assessment . . . but if . . .
you’ve gone in and, and said, “Look no, I can’t do
that” . . . and question every practice that the nurse
does . . . you’re going to get her back up and it’s
going to be reflected [in the assessment], definitely.

Some participants described the power the RNs had over
them:
You’re relying on them to pass you so you’re not going to do anything to jeopardize . . . they have the upper hand, it’s a power thing, basically. . . . Staff on that ward have power over you as a student ‘cause they are what’s going to make sure you pass at the end of the day.

The power differential within the relationship meant that some participants, especially at Level 1 of contingent reasoning, would do whatever was required:

If you start saying things that they don’t like or they don’t agree with or whatever, you are risking having them all not like you, all give you the worst possible mark. . . . You don’t want to risk that.

The relationship with the RN was a strong influence over the participants’ decisions about what level of supervision to accept when administering medication. Participants were eager to maintain an effective relationship with the RN so their placements were not compromised.

Individual attributes. Some participants, particularly those who spoke of medication episodes consistent with Levels 2 and 3 of contingent reasoning, described attributes of both themselves and what they saw in other students as reasons for responding in different ways to unsatisfactory levels of supervision. The most dominant attributes spoken of included being confident, their age, and communications skills.

Participants described confidence as a factor that enabled them to say no, or to reach a compromise when asked to administer medication without the appropriate level of supervision available. Conversely, lack of confidence was a reason for complying with RN expectations. Hence, confidence appeared to influence decisions at all levels of contingent reasoning, as the following examples demonstrate:

As a student, you can actually step back and say, “No, I don’t want to do that.” . . . It’s important that . . . nursing students have confidence to say, “No, I’m not comfortable about doing that.”

I’ll just say no . . . “Oh, I can’t do that,” . . . I think, if you’re a timid student and . . . if a nurse said to you, “Can you go do that?” and you sort of thought, “Oh shit, it’s not in my scope of practice,” and you’d still go and do it . . . I’m comfortable in saying, “No.” I stay to my scope of practice.

Age was raised by participants as a factor that influenced their decisions. In particular, older students described unsafe medication practices being undertaken by younger students; for example:

[A] lot of the young ones . . . they are pushed into doing things that they know they shouldn’t be doing. . . . They’ll do whatever . . . anyone tells them to do. They’re kids. . . . They’ve just come straight out of a high-school situation where everyone’s telling them what to do and how to do it. . . . I mean, I’ll argue. . . . I’ve got the experience behind me. They don’t have that.

Some participants referred to the use of communications skills as a strategy to secure adequate supervision:

I think if you talk to people the right way, they’ll listen, and if your personalities don’t meet, you can always just keep trying until they do—meaning you, you’ve got a gruff person that doesn’t want to listen to what you want to do—you . . . find a way around, find her an interest, you can talk about common interests, and then come back to what you need.

By employing effective communication skills they could establish a positive relationship and ultimately joke with the RN. This was considered important, particularly when having to make a decision about levels of supervision. The following excerpt describes the outcome of a positive relationship when having to wait for supervision:

[B]ecause we had such a great relationship, a really good rapport. . . . I was teasing her [RN] about it. I’m just like, “Oh my god, I’ve been waiting here for 45 minutes, I could have had this done and that done,” so I was really able to, to just turn it into a joke with her.

In terms of communication skills, some participants spoke of nonverbal skills such as smiling and appearing happy. The following represents a fairly extreme example of this:

You really have to be overly nice, to the point where you come home in the afternoon exhausted and your face hurts from smiling, just because if you don’t come over as a really nice, competent sort of a person, they’ll dismiss you in a way.

Validating the Theory of Contingent Reasoning

Validation of these findings was achieved through the process of member checking. Participants were reinterviewed and the central explanatory concept of “contingent reasoning relating to shifting levels of supervision” was presented to them in diagrammatic form. Following a full
discussion of the model, participants were asked if the concept reflected a true representation of what influenced medication administration experiences for them, and to determine if anything was missing or incorrect. Participants reaffirmed that the concept was an accurate representation of what influenced their medication administration experiences. Additionally, they said that the central explanatory concept was clear. For example: “That’s it . . . you have hit the nail on the head.” Similarly: “It’s very logical . . . it’s very true . . . . I agree with it completely.” Some participants described relating to the findings at a person level; for example: “I can see myself and I can see others whom I have worked with.” One participant also clarified how the level of his or her response could vary: “I can see myself at all levels depending upon which registered nurse I am working with.”

Overall, participants did not consider that any important points had been omitted from the model and believed they had been given the opportunity to contribute in an open and honest manner. One participant endorsed the importance of the work in light of the ongoing nature of this problem and the need to have it addressed:

> It’s still the same—this happens now with the third-year students. . . . I feel very privileged to have been able to contribute because it is so important—students need to be supervised with medication administration. . . . What you have got here is so true. . . . I felt that . . . I was able to be totally honest.

**Discussion**

**Responding to Inadequate Supervision**

The findings from this research emphasize the importance many participants attached to being accepted within the clinical environment by conforming to the expectations of the RNs. Participants who described actions consistent with norming for survival of self were primarily motivated by the need to pass their clinical assessment. In many instances, the participants would do what was expected by the RN to gain a sense of belonging. They would, in essence, be obedient, conform to the norms of the clinical setting, and not question the registered nurse.

The terms *fitting in* and *not rocking the boat* as strategies adopted by nursing students are not uncommon in the literature (Chapman & Orb, 2001; Gray & Smith, 2000; Maben et al., 2006; McKenna et al., 2003; Melia, 1984; Randle, 2002). Essentially, these terms referred to becoming what the nursing staff wanted them to be so as to feel a sense of belonging. The participants’ responses in this study lend further strength to this existing work. The tendency for participants to choose fitting in and not rocking the boat is of concern for safe medication administration. Despite the potentially serious consequences of medication errors (Deans, 2005), this has not been previously described in the literature. Unsafe practices adopted at this stage might well continue when the student becomes an RN. Furthermore, as argued by Maben et al. (2006), if students adopt this behavior as preregistration students they might be less likely as registered nurses to role model safe medication administration with future undergraduate students. It is essential, therefore, that learning to administer medications safely becomes inherent in all undergraduate nursing programs to protect patients both at the time of administration involving a student and through their future careers as RNs.

Closely linked to fitting in and not rocking the boat were *no tell* or *shutting up*. These strategies are essentially about gaining some degree of acceptance in the ward and doing what is required despite participants’ own sense that their actions were not the correct ones. In particular, *suck up/shut up/no tell* has significant implications for the relationship between students and the university. Students were dissuaded from reporting unsafe practice for the fear of failure and the potential consequence of disruption within the clinical setting. Participants were concerned that if university staff were aware of unsafe practices they might formally complain, with the student ultimately bearing the brunt of that confrontation. Maintaining silence in this manner could potentially further impact on patient safety. Fear of these consequences might well have deterred students from reporting medication errors they had made or been closely involved in. Ultimately, serious injury or even death could result when students so strongly feel the need to remain silent.

The need for acceptance is not a new phenomenon. Studies that date back to the 1950s confirm that individuals will often adapt their judgments and beliefs to fit with the people around them (Asch, 1951). People will conform to gain acceptance, and as Aronson (1999) asserted, conformity becomes even more likely when the group is important to the target person.
The findings of this study have revealed that students will, at times, conform to the norms and fit into the important group, namely the registered nurses, to gain acceptance, even if it means compromising patient safety and even the law. The registered nurse was clearly influential in the student feeling accepted. The significance of the registered nurse in helping students to feel accepted was also identified in a recent study by Levett-Jones and Lathlean (2008) of nursing students in two Australian universities and one in the United Kingdom. However, students operating according to the categories conforming to meet expectations of self and others and performing with absolute conscience still acknowledged the pressure to conform being exerted by RNs, but described the manner in which they either compromised or refused to acquiesce to this pressure. These categories of response have not been previously reported in the literature. Levett-Jones and Bourgeois (2007) suggested that students should refuse to engage in practices beyond their scope without guilt or excuse. Although nurse educators are likely to agree with this principle, in light of the findings of the current study, it appears somewhat naive and simplistic. Encouraging students to operate within their scope of practice requires an accurate understanding of the pressure imposed on them to do otherwise. Although students fear the consequences of nonconformity for the successful completion of clinical assessments (Percival, 2001; Poroch & McIntosh, 1995; Timmins & McCabe, 2005), simply informing them that they must work within their scope of practice is unlikely to be effective.

Even those students who refused to administer medication without the required supervision appeared to be more influenced by the perceived implications of not doing the right thing than a strong concern for patient safety. Furthermore, they did not always maintain this stance over time, and it was less apparent toward the end of their placement. This suggests that the relationship with the RN might have changed over the duration of the placement, and when confidence and trust was apparent they did not want to jeopardize the relationship by saying no to the RN. Identifying these categories of response was instrumental in developing the model of contingent reasoning.

**Developing the Model of Contingent Reasoning**

The existing literature clearly tells us that nursing students are frequently influenced by the pressure to conform to the prevailing clinical culture, and that they frequently succumb to this pressure (Chapman & Orb, 2001; Gray & Smith, 2000; Kane & Parahoo, 1994; Kneafsey, 2000; Maben et al., 2006; McKenna et al., 2003; Melia, 1984; Randle, 2002; Swain et al., 2003). However, the current study goes beyond recognition of the problem in two main respects. First, it emphasizes supervision as a paramount consideration for students, but one that is not always available in the clinical field to the extent that students consider necessary. Second, these findings provided the basis to identify and articulate the process that students went through to arrive at the decision. This study identified a process termed contingent reasoning, which enhances understanding of the decision making of students when confronted with shifting levels of supervision.

As Figure 1 illustrates, when participants were confronted with supervision that was less than that expected, they tended to experience internal conflict, representing the differing and sometimes opposing expectations of the university and the clinical setting. When faced with this situation students generally considered or weighed the possible courses of action. At this stage, they were strongly influenced by the importance of getting through and successfully completing the placement. Ultimately, a decision was made and resulted in a particular course of action: norming for the survival of self, conforming and adapting for the benefit of self and others, or performing with absolute conscience.

**Factors Influencing the Model of Contingent Reasoning**

The specific course of action students took cannot be fully explained by contingent reasoning without considering the broader influencing factors: the relationship with the RN and individual attributes. That is, not all students responded in the same way, and indeed the same student might have responded differently under changing circumstances.

A number of researchers have reported on the significance of the relationship between the student and the RN who assumes the role of preceptor, mentor, supervisor, or clinical teacher. Woo-Sook, Cholowski, and Williams (2002) identified this relationship as the most valued characteristic rated by both Australian nursing students and clinical educators. Indeed, some study findings suggest that good interpersonal relationships in the clinical setting might be more valuable that professional competence (Hart & Rotem, 1994). Johansson, Holm, Lindqvist, and Severinsson (2006) argued that students need support from the person in the supervisor/teacher role to assist with the integration of theory and practice.

Important dimensions of the interpersonal relationship have been noted as respect and responsibility from the supervisors’ ethical stance (Agelii, Kennergren, Severinsson, & Berthold, 2000), and rapport, empathy, genuineness, and a respect for learners (Dunn & Hansford, 1997). Some researchers have argued that the teacher–student relationship is similar to the caring one...
that occurs between the nurse and the patient (Holm, Lantz, & Severinsson, 1998). Johansson et al. (2006) found that trust and acceptance by the RN were highly valued.

For many participants in this study, trust and confidence were the two important elements in the relationship. Both were strongly sought after, and once the RN granted this to students they were reluctant to give it up. As a result, participants would respond to the RN in the way that they believed the RN wanted them to. Frequently this included accepting whatever level of supervision the RN was prepared to offer.

The findings of this study present the issue of trust and confidence in a different light. Although trust and confidence make an important contribution to the quality of clinical experience, they can also have negative consequences if the RN does not adhere to what are expected standards of practice. Participants in this study described the importance of earning trust and not wanting to lose it. As they gained confidence they were more likely to be trusted, making it more difficult to insist on administering medication only in accordance with the correct procedures. This is not to suggest that the development of trust and confidence should be discouraged, but their potential negative consequences require further consideration.

Participants referred to individual attributes influencing the level of supervision students were prepared to accept. A review of the literature identified studies that have reported on the relationship between personal attributes and the promotion of student learning in the clinical setting (Cross 1995; O’Shea & Parsons, 1979). These studies are now quite dated, and did not specifically consider these factors in relation to the administration of medication. The current study findings suggest that level of confidence, age, and communication skills influenced how students responded to the level of supervision provided.

The Relationship of Contingent Reasoning to Other Models

From the findings of this study, contingent reasoning was identified as an explanatory model for student behavior when required to administer medications in the clinical setting. A review of the literature was subsequently conducted to identify whether any existing theories supported or contradicted this model. Some similarities were noted with Kohlberg’s (1987) theory on moral reasoning. Kohlberg developed a theory of moral reasoning influenced by Piaget’s theory of cognitive development, and described a sequence of fixed stages that reflect different ways individuals think about moral development (Kail & Cavanaugh, 2000).

The model of contingent reasoning draws parallels with Kohlberg’s theory. Level 1 is associated with the preconventional level, Level 2 with the conventional level, and Level 3 with the postconventional level (Kail & Cavanaugh, 2000). This relationship is presented in Table 1.

Even though Kohlberg examined the rules that people use to make moral decisions rather than the decisions themselves (Kail & Cavanaugh, 2000), his system of classifying stages helped to confirm those developed in this study with contingent reasoning. At the preconventional level the theory described a rather egoistic view of moral behavior. This fits with the student at Level 1 of contingent reasoning who seeks to avoid failure at all costs by seeking the approval of the RN by doing what is required or expected.

At the conventional level of Kohlberg’s theory, decisions made by the individual are based on adhering to the conventions of the immediate group, or society as a whole (Falkenberg, 2004). Similarly, students at Level 2 of contingent reasoning conform to what is expected in the process of trying to meet competing demands. When challenges arise, they adapt by compromising to meet these demands as far as possible. At the postconventional level of Kohlberg’s theory, the individual becomes more autonomous, making decisions based on a set of universal moral principles and following these because it is right to do so. Similarly, students at Level 3 of contingent reasoning choose a path of action that they believe is the right action.

The findings from this study reveal that the relationship between these two models was not as strong at the third level. The participants described performing with absolute conscience; however, their primary means for doing so was as a means to avoid failure. Although the best interests of the patients were mentioned, this was not as common as concerns about their progress through the course, suggesting that the avoidance of punishment remained a strong motivating factor for insisting on direct supervision by RNs. Furthermore, they were reluctant to report their concerns to the university for fear of repercussions. For this reason, the term going by the book was frequently used in association with performing with absolute conscience.

There is a paucity of literature addressing ways in which nursing students approach moral or ethical decision making (Baxter & Boblin, 2007, 2008; Numminen & Leino-Kilpi, 2007). Furthermore, authors of the existing literature have tended to adopt Kohlberg’s theory of moral reasoning as an explanatory framework (Baxter & Boblin, 2007; Kim, Park, Son, & Han, 2004).

Numminen and Leino-Kilpi (2007) conducted a review of the literature pertaining to the ethical decision making of nursing students. Their findings suggest that most nursing students operate according to Kohlberg’s conventional or preconventional levels. In the early
stages of the program, students were more likely to be influenced by bureaucratic and organizational influences, whereas in the later stages moral reasoning proved more influential. These findings appear to directly contradict the current study findings and the model of contingent reasoning. However, it is important to acknowledge that the literature reviewed covered a broad range of methodological designs, and was conducted over diverse settings internationally. In the more recent studies that sought to measure nurses’ levels of moral reasoning, researchers tended to use self-rating questionnaires with participants responding to statements about specific ethical issues (Auvinen, Suominen, Leino-Kilpi, & Helkama, 2004; Juujarvi, 2006; Kim et al., 2004). This contrasts with the use of grounded theory in the current study, thus providing students with more scope to articulate their decision-making processes rather than responding to a predetermined set of questions. For example, the Defining Issues Test (Rest, 1979) is an instrument commonly used to measure moral or ethical reasoning. This test presents participants with a series of scenarios and asks them to rank the impact of various factors that might influence a decision.

A further explanation for the apparent contradiction with the findings and the study by Numminen and Leino-Kilpi (2007) might come from the way in which students view the concept of ethical issues, and whether the administration of medication fits within this realm. Administering medication might be seen by students as a skill to be learned and practiced in the clinical setting. If this is the case, it might be less likely for students to consider administration of medication without supervision as an ethical issue. The participants in the current study were asked to describe their experiences in a broad sense, from which the issue of supervision and their responses to its shifting levels emerged. Had the participants been specifically asked to discuss the ethical issues related to administering medication, the findings might have been quite different.

**Conclusions**

The findings of this study suggest that nursing students are strongly influenced by the need to conform to the requests of RNs when in the clinical environment. However, unlike previous work, this research focused specifically on the consequences of this trend for the administration of medication by students, particularly in light of the degree of supervision provided by RNs. These findings are especially significant given the safety implications associated with medication administration.

Identifying the importance of the hospital culture in shaping student behavior is not unique to this study. However, this phenomenon has not been considered specifically in relation to the administration of medication. Because few procedures undertaken by students are likely to have the same impact on patient safety, it is hoped that these findings will highlight the consequences
that might occur when nursing students are pressured to conform to prevailing practices even when legal, ethical, and professional standards are contravened.

This study extends previous research by exploring the importance of supervision for the quality and integrity of clinical education. Consequently, there is a pressing need for universities and clinical facilities to evaluate the processes that exist within their own organizations. The power RNs hold in the clinical field by virtue of their capacity to fail a student’s clinical assessment is an area where particular attention is necessary. Universities should also consider implementing mechanisms to ensure that students are able to report unsafe practices in full confidence that they will not be subject to negative repercussions for doing so.

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