Rationalising Transgression: A Grounded Theory Explaining how Emergency Department Registered Nurses Rationalise Erroneous Behaviour

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Abstract

The aim of this classic grounded theory study was to unearth the main concern of emergency department (ED) registered nurses (RN) when they perform respiratory rate observations to generate a substantive theory that explicates how the identified problem is resolved. Analysis of data collected from 79 registered nurses revealed that health sector forced compliance in recording observations meant that ED RNs are more than likely to record a respiratory rate without actually counting respirations. This erroneous behaviour provokes varying degrees of emotional discomfort as the nurses' actions are often incongruent with their professional values and beliefs. The theory Rationalising Transgression explains how nurses continually resolve this issue by compensating, minimalizing, or trivialising to titrate the level of emotional discomfort associated with erroneous behaviour, consequently facilitating the rationalisation of transgression.

Keywords: nursing, wasting time, trivialising, cutting corners, emotional discomfort, social norms.

Background

It is internationally acknowledged that inconsistent monitoring of vital sign observations and lack of understanding regarding the significance of physiological changes patients experience are two contributing factors of undetected clinical deterioration (Australian Commission on Safety and Quality in Health Care [ACSQHC], 2012; National Institute for Clinical Excellence, 2007; National Patient Safety Agency, 2007). Vital sign observations provide health care clinicians with valuable information regarding each patient's clinical acuity throughout all stages of their emergency department stay. Many hospitals now employ observation charting systems that require nurses to measure and record scores for each vital sign observed, with the combined value of scores referred to as an early warning score (Day & Oxton, 2014; Prytherch, Smith, Schmidt, Featherstone, Stewart, Knight, & Higgins, 2006). The total score from each round of observations is a reliable predictor of clinical deterioration; when the score reaches a certain threshold, a predetermined response is triggered (Ludikhuize, Smorenburg, de Rooij, & de Jonge,

2012; Silcock, Corfield, Gowens, & Rooney, 2015). There are many studies whose authors reported the efficacy of these early warning scores in regards to the timely identification of clinical deterioration of patients in an emergency department setting (Hogan, 2006; Hosking, Considine, & Sands, 2014; Lam, Mak, Siu, Lam, Cheung, & Rainer Lam, 2006; So, Ong, Wong, Chung, & Graham, 2015).

The respiratory rate, one of the vital signs that contribute to the early warning score, is significant in that abnormal respiratory rates alone are widely reported as accurate indicators of clinical deterioration (Considine, 2004; Considine, Charlesworth, & Currey, 2014; Hosking et al., 2014; Jonsson, Jonsdottir, Möller, & Baldursdottir, 2011; Ljunggren, Castrén, Nordberg, & Kurland, 2016; Parkes, 2011). Abnormal respiratory rates herald potentially life-threatening conditions and provide health care clinicians with the opportunity to respond expediently to these episodes of clinical decline. Timely recognition and response to clinical deterioration have the potential to prevent high acuity unit admissions, reduce hospital admission length of stay and significantly improve overall mortality rates (Ljunggren et al., 2016; McBride, Knight, Piper, & Smith, 2005). Accordingly, to achieve optimal patient outcomes, it is integral that respiratory rate observations are collected regularly, obtained correctly, and recorded accurately for every patient. Despite this acknowledged importance of the respiratory rate observation, Ansell, Meyer, and Shona (2014), Cooper, Cant, and Sparkes (2014), Cretikos et al., (2008), Hosking et al., (2014), Odell et al., (2007) and Parkes (2011) revealed this vital sign is often absent or erroneously recorded on emergency department observation charts. While emergent literature confirms this practice occurs, what is not known is why it occurs. One of the main aims of this research is to add insight around this topic.

Method: Why Classic Grounded Theory?

Classic grounded theory was the research methodology chosen to analyse qualitative data collected because it allows researchers to recognize the emergence of a concern as identified by the participant group within the substantive area under examination (Glaser, 1992; Glaser & Strauss, 1967). Classic grounded theory also provides the scaffold required to uncover a resolution (known as the core category) to this concern. Glaser (1992) informed us that while individuals within groups understand events from their own perspective, and respond personally, latent patterns of behaviour occur, and are waiting to be identified. Grounded theory is the perfect medium for this discovery to occur. One of the greatest strengths of classic grounded theory is the method's ability to explicate what is actually going on in the substantive area of interest, rather than just describe what is happening (Glaser, 1978, 1998).

Data Collection

Data were collected solely by the primary researcher and comprised several sources including demographic data, open-ended responses from a questionnaire, detailed responses from semi-structured face to face or telephone interviews, memos, reflective journaling, conceptual models, anecdotal evidence, the use of extant literature (in the final stages), and documents related to the substantive area. As part of the online registration process, participants were offered the opportunity to provide written answers to the following two open-ended questions:

- If you have ever NOT included the respiratory rate when performing a full set of vital sign observations, can you write about the reason(s) why?
- If you have ever recorded a respiratory rate observation as "in the normal range" without actually counting it, can you write about the reason(s) why?

While attempts were made to develop the open-ended questions as non-prescriptive as possible, it is acknowledged that the questions are still fairly specific. This specificity was justified as the researcher believed it was important to provide an opportunity for nurses to respond to these questions in a written format with time to compose their answers. When the response to these questions was so overwhelming (79 participants overall, with 55 detailed written responses), it was decided to introduce data collected from this avenue only after the interviews commenced. The researcher felt that this decision enabled her to remain as open minded as possible to the overall responses from the interviews, and facilitated the emergence of themes, rather than directed their emergence.

Interviewees were chosen from the total pool of respondents, with 11 face-to-face, and seven telephone interviews occurring over a three-month time frame. The interviews each began with the same grand tour question:

- Please share with me your experience around collecting respiratory rate observations whilst working in the emergency department.

As the coding process progressed, participants were contacted and/or telephoned for follow up details/information based on theoretical sampling needs. Despite advice from Glaser (1998) to the contrary, the initial six interviews were recorded and transcribed verbatim. This decision was based on several factors. First, as this theory will form an integral component of a Doctor of Philosophy thesis, it is a requirement that the researcher be able to produce transcripts of interviews. Next, being a novice researcher, the primary author doubted her ability to take suitable notes from which to code. Finally, the researcher felt more comfortable when communicating with the participants if she maintained eye contact when they were talking, rather than focus on note taking. After the initial six interviews, however, enough confidence was gained for the researcher to trust her note taking ability. By this stage, journaling nearly always occurred after the interviews; the researcher just made notes of certain body language and other implicit incidents throughout the interviews. These later interview notes proved to be extremely valuable; by this stage, the researcher had become sensitive to the data and instinctively included incidents that later aided in densifying categories.

Substantive Coding

Initially, the data was run open, with the data coded every way imaginable, including with and against all other data (Glaser, 1978). Each datum was analysed, with the focused intent of identifying what concept it indicated. Memoing continued throughout this iterative process to ensure an audit trail developed to explain the relationships between incidents and the coding choices. This classic grounded theory approach facilitated the generation of rich and sensitive dimensions of substantive codes, all intrinsically grounded in the data and therefore capable of extraordinary explanatory power.

Collecting more data as the process continued, conducting more interviews and listening to the participants speak about their experiences added more fodder to the constant comparative nature of the classic grounded theory process. As the researcher continued simultaneously to collect, analyse, code and memo data, the perpetual process of classic grounded theory facilitated the correction and verification of identified categories and their properties, while allowing the researcher to generate new ones. Questions that continued to be referred to included "what is this data a study of; what category or property of a category, or what part of the emerging theory, does this incident indicate; what is actually happening in the data" (Glaser, 1978, p. 57).

It was from this constant comparative process that the core category "rationalising transgression" emerged; it had the most explanatory power and accounted for nearly all the substantive codes and their properties. Memo sorting played an integral role in acknowledging links between categories that were previously unrecognised.

Selective Coding

Selective coding was employed whereby data continued to be collected and analysed but was then delimited to include only variables of the remaining categories with the intent of saturating them as much as possible (Glaser, 1998). As selective coding progressed, three categories and their properties were identified to add much more explanatory power to the theory. Once these categories and their properties were identified and saturated, nearly all variations in behaviour were explained.

Theoretical Coding

Initially, data coding was guided by the process family, as the researcher was convinced that what was emerging, was a process. The researcher acknowledges that she was perpetuating one of the follies that Glaser (1998) warned about: having a preconceived notion and forcing the data to comply. When it became evident that the emerging core category was not a process, the researcher went back to the beginning and re-coded again, using the six C's to organise the data (Glaser, 1978). The headings used included causes, contexts, contingencies, consequences, covariance and conditions to help categorise the data.

This categorisation proved truly enlightening as the first aha moment arrived soon after the coding began again. It became obvious that the main concern originally identified was only half-articulated. Initially, it was found that those participants from the substantive area did not believe that respiratory rate observations were required for all patients. However, the emotional impact on the cohort when they erroneously recorded a respiratory rate to "make the paperwork look right" had not been identified. When the researcher combined this information with an early category conceptualised as "forced compliance", she recognised that varying degrees of emotional discomfort were present. The indicators for this emotional discomfort had not been recognised in the earlier stages of constant comparison; it was not until the coding family of the Six C's was used to guide the coding that it emerged. With this idea in mind, the researcher went back over earlier transcripts and field notes to look for incidents in the data that implicitly or explicitly indicated emotional discomfort. At that point, based on theoretical sampling

needs, the researcher went back to the field and conducted three brief interviews with participants from whom she had previously collected data. This psychological discomfort was completely missed in the first few iterations of coding and proved to be a significant factor of the emergent theory Rationalising Transgression.

Theoretical Sampling

Theoretical sampling guided the researcher during data collection through all stages of analysis, ensuring categories and their properties were densified and saturated. The utilisation of theoretical sampling informed the researcher what data to collect next, and where to look for it. Memos were produced copiously; they guided the researcher in subsequent data collection by generating questions to ask of new participants or indicating comparative groups that were to be re-interviewed using different questioning tactics. As each category became saturated, integrated, and elaborated with the emerging theory, theoretical sampling ceased for that category.

The Theory and The Main Concern

The main concern of emergency department (ED) Registered Nurses (RN) is that they do not believe that counting and recording a respiratory rate is a requirement for all patients at each round of observations. These nurses consider that counting the respiratory rate for all ED patients is a superfluous or redundant job and wastes valuable time. This perspective poses a professional dilemma, however, as at each round of observations, nurses are required to document scores for each of the prescribed vital signs, including the respiratory rate. Registered nurses are held accountable for their professional practice and incomplete documentation could be perceived as professional negligence. Another impact from a missing value for any one vital sign is that the total score given to indicate the patient's clinical acuity at that round of observations will be incorrect due to the incompleteness of scoring for each observation. To avoid the appearance of professional neglect, and to ensure the patient has an early warning score for each round of observations, nurses often record a value for the respiratory rate without counting the respirations.

The erroneous recording of the respiratory rate triggered by the forced compliance of organisational requirements results in varying degrees of internal conflict. This conflict provokes emotional discomfort due to the disparity between professional and/or personal beliefs and the erroneous behaviour to comply with organisational requirements. The level of distress associated with incongruent behaviour varies between individuals and is evidenced by implicit and explicit incidents such as spoken language, choice of adjectives, the tone of voice, facial expressions, and body language.

The theory rationalising transgression explains how nurses titrate the level of emotional discomfort associated with erroneous behaviour and facilitates the rationalisation of transgression. Rationalising Transgression is done through compensating, minimalizing and trivialising and explains how nurses view, experience, and react to the conflicting issue (organisational requirements versus professional/personal beliefs and/or values) from different perspectives. These varying perspectives impact the level of emotional discomfort that is experienced when erroneous behaviours are employed to meet organisational requirements. The degree of emotional discomfort experienced by each nurse dictates which strategy he or she employs to rationalise his or her erroneous behaviour.

Compensating

By compensating, the value of the conflicting issue is adjusted to take into account perceived benefits or gains as a result of errant behaviour. Nurses believe they are compensating for errant behaviour by enhancing patients' outcomes, subsequently reducing the degree of emotional distress associated with erroneous behaviour. Nurses rationalise transgression in recording methods thus by employing two strategies: valuing time and valuing experience. Social norms specific to this category were also identified and are outlined below.

Valuing time

Valuing time is a strategy that nurses employ to rationalise errant behaviour that occurs when their prioritisation of tasks conflicts with the demands of organisational requirements.

Time is an extremely valuable commodity to nurses and they distribute their time according to the significance of the task to be performed. When nurses believe that certain tasks are of more value to a patient's outcome than other tasks mandated by organisational requirements, they rationalise their errant behaviour by valuing time. Nurses value time when they erroneously report they have completed a task, but have in fact spent that time performing other more seemingly important tasks with a genuine belief they are enhancing patient outcomes. The belief that they are "doing more good" by using their time thus reduces the emotional discomfort associated with errant behaviour.

When this strategy is employed to rationalise erroneous reporting of respiratory rates, the nurses infer that their time is spent more wisely on alternative tasks; as a consequence, the patient benefits from the transgression in behaviour. Nurses who employ this strategy place the importance of counting respiratory rates far down the list of patient priorities and believe they are maximising their time by performing tasks that they have categorised higher thereby enhancing patients' outcomes.

As a commodity, time is expressed in many iterations; it permeates the data with its significance as a resource to spend wisely. Examples of this include spending time, wasting time, running, taking time, restricted by time, and standing around. Thus, time is valuable and wasting it is something to be avoided at all costs. This perspective, coupled with the nurses' belief that in many cases respiratory rates are a superfluous task, facilitate erroneous reporting. Allotted time is critically assessed; under certain

conditions or circumstances, spending it on issues other than counting respiratory rates can be justified.

Social norms

Social norms play a role in nurses' perception of the use of time. For example, nurses voice concerns that they "appeared to be doing nothing" if they just stand around "wasting time" counting respiratory rates. If nurses stand still long enough, other nurses, doctors or even patients would allocate them more work and/or ask them questions that take up more time. This perception, counting for a minute is a waste of time, seems to be perpetuated by nurses stating they feel annoyed when staff appear to "waste time by completing a respiratory rate for **all** patients".

> A minute standing still in the ED seems like it takes forever. I know what it looks like . . . you're in the middle of this perfect storm, no beds, ambulance's ramping, buzzers going off, patients needing medications, dressings, a blanket, a cup of tea . . . and I am standing still apparently doing nothing.

Valuing Experience

Valuing experience is a strategy that nurses employ to rationalise erroneous behaviour occurring when they are required to perform a duty or task they consider superfluous to the patients' needs.

Nurses are valuing experience when they choose to perform more highly skilled tasks than seemingly mundane organisational requirements; they believe they are improving patients' outcomes by doing so. Experience is not always expressed in terms of time, but can mean years of experience a nurse has practiced, specific qualifications gained, historic experience with a patient, experience with a certain ward, or even experience with certain circumstances.

Valuing experience rationalises transgression in recording methods as nurses' believe they enhance patients' outcomes by providing them with the benefit of their experience instead of performing seemingly superfluous tasks such as counting respiratory rates. Nurses consider the value of their experience to be an integral component of their day-to-day professional practice and feel this experience enables them to participate in errant behaviour when they deem other tasks more deserving. Further, nurses feel their professional experience is undervalued if they are **made** to count. The valuing experience strategy reduces the emotional discomfort associated with their errant behaviour by facilitating the belief that the benefit of their experience is more valuable to the patient (when applied to aspects of patient care) than counting a respiratory rate.

Minimalizing

Minimalizing conceptualises how the value of the conflicting issue is adjusted by reducing the importance of the organisational requirement. Minimalizing reduces the emotional discomfort associated with transgression and thus rationalises errant behaviour. The strategy comprising minimalizing reduces the emotional discomfort associated with erroneous recording methods by minimalizing the importance of the task. Organisational requirements dictate that a value is required for the respiratory rate observation; but when nurses consider that little or no consequence would occur if the entry was correct

or wrong, transgression was rationalised. Nurses minimalize the conflicting issue, thereby titrating their emotional discomfort, by employing the strategy labelling the patient.

<u>Labelling the patient</u>

Labelling is a strategy that nurses utilise to rationalise errant behaviour that occurs when they are mandated to perform tasks that they deem have no benefit or value to patients.

Labelling is done when nurses use labels to quantify patients' conditions and is usually based on a subjective assessment of their issues. While it is understood that erroneously recording a respiratory rate jeopardises the maintenance of professional standards, rationalising transgression by labelling the patient's condition as unworthy of requiring respiratory rates appears to be an acceptable practice. Once a patient is labelled as not requiring respiratory rate observations, the level of emotional discomfort by not counting respiratory rates is reduced as its importance for this type of patient is reduced. Two examples of labelling include "a sore big toe does not require a respiratory assessment" and

> I might be looking after a DKA *(Diabetic ketoacidosis is a serious medical condition that warrants close clinical attention)* and have to run and do obs [observations] on a migraine, there is no way I'm going to count resp rates for the migraine when I have to get back to the DKA*.*

If patients present with a non-respiratory rate condition, have minor injuries, or a seemingly superfluous issue, their presentation is critically assessed as not benefiting from a respiratory assessment; an erroneous completion of the documentation is rationalised because the impact of conforming is minimalised. Labelling as a strategy is employed to provide reassurance that the patient's health outcomes would not benefit from an accurate respiratory rate observation being performed; however, as the paperwork still requires a value, it is recorded as completed and within normal ranges. The inconsistency is still present, but the significance of the outcome from erroneous recording is reduced, and hence, rationalised.

Trivialising

Trivialising conceptualises how the value of the conflicting issue is adjusted by trivialising errant behaviour and/or the organisational requirement. When nurses sanction negligent behaviour, and/or negate the importance of organisational requirements, they trivialise. When nurses employ these strategies, they adjust the deficit between organisational requirements and personal beliefs or values to virtually nil and reduce the emotional discomfort triggered by erroneous behaviour thereby rationalising transgression. Cutting corners is a strategy nurses employ to trivialise, whereas the other ED is a special place accounts for the social and environmental norms that facilitate trivialising.

<u>Cutting corners</u>

Cutting corners is a strategy that nurses use to rationalise their erroneous behaviour to just "get the job done". Nurses experience little to no guilt or remorse when they cut corners when they participate in errant behaviour to demonstrate the appearance of conformity.

Cutting corners is done when nurses perform allotted duties with a perfunctory attitude and with the minimal amount of effort required. Subsequently, they experience little to no emotional discomfort from doing so. An example of cutting corners occurs when nurses' tick and flick respiratory rate observation paperwork without actually assessing the patient; they experience no sense of guilt or remorse for doing so. When this strategy is employed, nurses trivialise the organisational requirement and sanction negligent behaviour. Utilising this strategy, nurses adjust the deficit between organisational requirements and personal beliefs or values to virtually nil. They reduce any emotional discomfort caused because of erroneous behaviour; therefore, they rationalise the transgression, thus avoiding internal conflict when the erroneous behaviour is employed.

Environmental norms

When nurses speak about the ED as an environment in contrast with other wards within the hospital, it appears that the usual organisational requirements are not an expectation in ED. Some organisational requirements are trivialised by incidents such as the following: "we are too busy saving lives to stand still and count a respiratory rate"; "high pressured situations call for extreme measures"; "this isn't a ward you know . . . things are different down here"; and, "when I worked on the medical ward it was a routine, that's what we did, but now I am in ED, it's different . . . there are way more important things to do than count a respiratory rate".

When an ED is contrasted to other wards where conformity to normal organisational requirements is an expectation, the unique ED environment is used as a method of trivialising organisational requirements. Once trivialised, the degree of emotional discomfort experienced due to non-compliance is removed, and transgression is rationalised.

Social norms

Social norms contribute to this strategy in that nurses compare themselves to others; they rationalise their poor behaviour through comments such as "everybody does it", "this is the way I've always done it", and "I have worked in many EDs and this is how everyone does it". It is by these strategies that erroneous recording methods are trivialised as a commonality among staff in this environment, correspondingly reducing the amount of conflict experienced.

Discussion

The new theory, rationalising transgression, comprises compensating, minimalizing and trivialising and explains how ED nurses rationalise erroneous behaviour by adjusting the value of the conflicting issue of organisational requirements versus professional/personal beliefs. When nurses employ the strategies discussed in this paper to adjust the importance of the organisational requirements in regards to their own professional and/or personal beliefs, they titrate the degree of emotional discomfort associated with erroneous behaviour, consequently facilitating the rationalisation of transgression.

A review of the literature revealed that the emotional discomfort experienced by the cohort involved in this study could be classified as a form of psychological discomfort

termed cognitive dissonance (Festinger & Carlsmith, 1959). Dissonance is a negative state of mind that occurs when an individual has conflicting cognitions: cognitions being beliefs, thoughts, values, and opinions (Taylor & Bentley, 2005). Leon Festinger (1957) discovered the theory of cognitive dissonance, which is based on three fundamental assumptions: (a) people are sensitive to inconsistencies between their beliefs and actions; (b) these inconsistencies trigger dissonance described as psychological discomfort; and, (c) the dissonance can be resolved in one of three ways. The three methods include changing beliefs (a person no longer has a problem doing the task), changing behaviour (a person decides not do the task again), or change how the task is perceived (a person rationalises behaviour so it no longer appears to be inconsistent with his or her beliefs) (Festinger, 1961). Of these methods, Festinger (1957) claimed that behaviour is the most resistant to change and is therefore the most unlikely method of dissonance reduction. He went on to explain that most people are more likely to change how they perceive the task by altering their attitudes, beliefs, and opinions. This idea was corroborated by the participants within the study, who, despite feeling conflicted, continue to perpetuate erroneous behaviour, and rationalise the transgression by changing how they perceive the task.

Pallak and Pittman (1972) agreed with Festinger's theory, but extended it by purporting that, depending on the level of dissonance experienced, some individuals can never reconcile conforming. Elliot and Devine (1994) supported previous theories that dissonance is a form of emotional discomfort. However, these researchers stated there was no empirical evidence that specific reduction strategies alleviate dissonance. These authors claimed that future research should aim at gaining a comprehensive understanding of the overall dissonance state to understand better not only what induces this form of emotional discomfort, but also strive to understand strategies that reduce its impact. The theory of rationalising transgression relates to cognitive dissonance theory in that it was identified that nurses experience psychological discomfort by doing something that conflicts with their professional beliefs, and then choose to change how they perceive the task to rationalise this transgression. This new theory conceptualises how those people rationalise transgression by adjusting the value of the organisational requirement or the professional/personal belief they held about the task. This new theory explains how the participants resolved their dissonance through the application of the three categories minimalizing, compensating or trivialising. The theory of rationalising transgression extends the theory of cognitive dissonance in that it provides a deeper understanding of the strategies certain cohorts employ to overcome dissonance and thus rationalise transgression.

The emotional discomfort experienced by the nurses in this study can also be contrasted with moral distress, which has been written about in nursing literature, and describes the pain or anguish one experiences when confronted with moral conflict or constraint (Fourie, 2015; Oh & Gastmans, 2015; Woods, Rodgers, Towers, & La Grow, 2015). When developing an explanatory grounded theory of moral distress and its consequences, Nathanial (2004) identified that little was published regarding the psychological implications triggered by moral distress. Nathanial (2004) subsequently addressed this dearth by generating the theory of moral reckoning, which explains the basic social psychological process nurses' move through when they reflect emotionally and critically on their physical and emotional responses to challenging patient care circumstances. Nathanial's (2004) explanation of a situational bind, a facet of the theory of moral reckoning, resonates with aspects of rationalising transgression, in that a

situational bind concerns circumstances comprised of varying degrees of complexity and context that trigger diverse emotional responses among nurses. A specific example of a situational bind discussed in the Nathanial (2004) theory occurs when nurses' core values conflict with professional or institutional norms. This conflict aligns with the theory of rationalising transgression in that nurses' are found to experience emotional discomfort as a result of internal conflict when their erroneous behaviour is incongruent with their professional or personal beliefs or values. On the contrary, the two theories deviate when discussing how nurses' resolve the pain caused by their emotional conflict. Moral reckoning presents the stage of resolution as the process employed and explains that nurses make one of two choices to resolve internal conflict: making a stand or giving up. Rationalising transgression on the other hand, discusses three strategies (comprised of five properties) that nurses utilise (depending on their level of internal conflict), to neutralise the emotional discomfort they experience associated with erroneous behaviour.

The Main Concern of the Participants

The main concern of the registered nurses identified in this study who currently practice in emergency departments in Australia was that they did not want to collect respiratory rates on "seemingly" clinically stable patients. This hypothesis is corroborated by findings from a recent study involving 81 emergency nurses; the authors reported three quarters of those interviewed believed that clinically stable patients did not require regular vital sign observations (Burchill & Polomano, 2016). The link between higher clinical acuity and more frequently recorded vital sign observations was also reported within a study by Johnson, Winkelman, Burant, Dolansky, and Totten (2014). They reviewed 202 patient charts spanning ten months and found that a lower triage score, or an increased clinical acuity, reduced time between observations. Further, a retrospective cohort study that reviewed the triage observation documentation during a 12-month time frame reported that more than 60% of the 2081 patient charts reviewed did not have a respiratory rate recorded in their initial set of vital observations (Gravel, Opatrny, & Gouin, 2006). Gravel et al. (2006) attributed this high rate of omission to the nurses' perception of the patients' level of clinical acuity did not warrant recording the vital sign. This information presents a paradox. How do nurses gain a truly accurate clinical picture of a patient's health status without collecting objective and subjective data? Published best practice guidelines regarding respiratory rate collection methods confirm that health professionals gain a much more accurate overview of a patient's clinical acuity when data are gathered via a comprehensive health assessment (Jarvis, 2008; Long Khanh Dao Le, 2016; Walsh, Erb, & Kozier, 2010; Weber & Kelley, 2009).

A facet of this study that is under-explored and requires future focus is the question of the accuracy of the guesstimates the nurses make when they record a respiratory rate without actually counting respirations. The topic surrounding nurses using only subjective data to identify and thus report clinical deterioration has been acknowledged by Andrews, (2004), Ansell et al., (2014), and Cretikos et al. (2008). It is certainly not unusual to hear reports of nurses who claim they recognise deterioration instinctively, and just know when something is wrong with a patient preceding clinical decline (Brier et al., 2015; Odell, 2015). In fact, some activation criteria actually include nurse concern as an option for escalating care (Hodgetts et al., 2002). Despite this knowledge, there is a paucity of evidence to support the efficacy of intuition-based

clinical assessments. Andrews and Waterman (2005) discussed the need for nurses to take a more structured approach to clinical assessments, and suggested that nurses employ frameworks such as early warning score tools in order to arrive at a substantiated overview of the patient's clinical acuity at any given time. Andrews and Waterman (2005) also suggested that the value of nurses' subjective assessment not be downplayed; often, this form of evidence provides valuable context around the specific clinical situation. The need for a structured approach when collecting vital signs is substantiated by recent research that revealed the significance of just a subtle shift in the respiratory rate of patients in acute care settings (Bleyer et al., 2011; Ljunggren et al., 2016). These authors purported that only four breaths on either side of the normal range for adults (normal range for a healthy adult is 12 to 20 breaths per minute) could be indicative of ominous underlying conditions and must not be ignored by clinicians. Once this evidence is considered, it is hard to put faith in the ability of anyone to identify four breaths out of range over one minute using only subjective measures to gauge the patient.

Nurses spend many years striving to obtain the professional standards of practice required to achieve and maintain their nursing registration status. Forcing them to comply with seemingly superfluous or redundant tasks could be considered demeaning, and a waste of their valuable time. However, several items of interest must be highlighted here; patients who are in the emergency department long enough to have their vital signs measured more than once, are generally very unwell; seemingly benign health conditions have the ability to turn into medical emergencies within minutes; deterioration in patients is being missed; an abnormal respiratory rate is an early, accurate indicator that something is wrong; early detection of deterioration saves lives; and finally, it only takes 30 seconds to one minute to accurately assess the respiratory rate.

Methodological Considerations: Quality of the Theory

This new grounded theory, rationalising transgression, will now be evaluated for quality by testing its fit, work, relevance, and modifiability (Glaser (1978, 1992). The theory fits the substantive area of interest as the conceptualised codes, categories and ultimately, the theory itself, efficaciously express the patterns identified in the behaviour that participants continually used to resolve their main concern. Just as this theory fits by identifying and aptly grouping latent patterns of behaviour analogous with the substantive area, the theory also works in that the identified three categories and their properties, clearly explain how the participants continually resolve their main concern by adjusting the value of the conflicting issue. The relevance of this theory is evident when the significance of the respiratory rate as a physiological benchmark is considered. It has been categorically established that abnormal respiratory rates herald clinical decline, and are known to precede life-threatening events such as cardiac or respiratory arrest. If optimal patient outcomes are to be achieved, it is therefore essential that the respiratory rate be collected regularly and recorded accurately. Contrary to this knowledge, Ansell, Meyer, and Shona, (2014), Cooper, Cant, and Sparkes, (2014), Cretikos et al., (2008), Hosking et al., (2014), Odell et al., (2007), and Parkes, (2011) all concur that this vital sign is often inaccurate or missing; further, there is a scarcity of research explaining why this erroneous behaviour occurs. The relevancy of this theory is that it provides explanations from those people actually working in the substantive area, thus, the

theory is grounded in data. This theory explains why nurses do not always collect and record an accurate respiratory rate, and even more illuminating, explains the reasons they use to rationalise this transgression. Finally, this theory is modifiable in that if more latent patterns of behaviours are identified by this cohort in order to resolve continually this identified concern, then the theory can be modified to accept these new behaviours. It is not a finite theory; it is malleable and modifiable to accommodate new data as and when it is identified as having relevance to this substantive area. The generalizability of the theory generated from this research to areas other than nursing becomes obvious if you consider that conflicting issues such as organisational requirements versus professional/personal beliefs occurs in many professions; this conflict often results in errant behaviour. Consequently, the conceptualised categories generated from this study, explaining how transgression is rationalised, have the potential to be conceptually generalised.

Limitations

The main limitation identified was that participants were passively recruited; this recruitment could be seen as a limitation in that only those willing to share their experiences were included. And, as such, these participants comprised a like-minded cohort. Potentially limiting inclusion from a more diverse cohort exists in this study.

Implications: Impact on Current Clinical Practice

This grounded theory identified two significant factors that impact current practice:

1. Registered nurses in emergency departments report suboptimal practice occurring in regards to respiratory rate collection methods.
2. This poor practice occurs in part because nurses believe that respiratory rate observations are not required for every patient; organisational requirements mandate that a value for this vital sign be given at each observation round are superfluous and redundant.

Each of these revelations, on their own, carries significant weight when considering patient health and safety standards, ethical considerations, and professional practice, particularly if optimal patient outcomes are to be achieved and maintained. Despite a plethora of published research confirming the efficacy of abnormal respiratory rates as accurate indicators of clinical decline, poor practice continues vis-à-vis the collection and recording methods employed. Clearly, there is a deficit between researched best evidence and current practice employed by registered nurses working in emergency departments. This discrepancy must be addressed expeditiously. Obviously, new methods of transferring knowledge are required to do so. Contributions, such as this new theory that provides meaning to the strategies nurses employ in order to rationalise erroneous behaviour is beneficial from an educational point of view. In the field of healthcare specifically, if clinical educators can recognise and understand the justifications behind suboptimal healthcare practices, then they are better armed to address the issue.

Contribution to the Extant Body of Knowledge

While there is abundant literature regarding the value of this vital sign when monitoring the physiological status of patients as well as literature confirming that the respiratory rate is often missing or erroneously recorded on patient charts, there is a paucity of research reporting why this occurs. Hence, this theory lends weight to the increasing data bank surrounding respiratory rate collection methods, and adds valuable insight to the clinical practice of the cohort responsible for collecting and recording this vital sign. This theory also adds to the body of knowledge regarding cognitive dissonance in that this new theory provides insight regarding the strategies employed by certain cohorts when overcoming cognitive dissonance.

Further Research

What has become glaringly obvious throughout the analysis of data collected for this project is that current methods of knowledge transfer are not working. For registered nurses from such a broad demographic to comment repeatedly that they are more likely to erroneously record a respiratory rate than to count and record it accurately, important information is lost somewhere. It is, therefore, evident that further research around the implementation of evidence-based practice must occur judiciously. Efficacious methods of knowledge transferral must be earnestly pursued if best evidence is to be successfully transferred to best practice. Successful implementation of evidence into practice in regards to the topic area in this study will translate into the improved accuracy of early warning scores for emergency department patients. Accurate early warning scores facilitate early recognition of deterioration of emergency department patients, which, in turn, activates potentially lifesaving intervention expediently thereby improving patient outcomes.

Conclusion

Rationalising transgression is a new substantive theory to explain how nurses titrate the level of emotional discomfort associated with erroneous behaviour and consequently facilitate the rationalisation of transgression. Rationalising transgression is done through compensating, minimalizing and trivialising, and explains how nurses view, experience, and react to the conflicting issue (organisational requirements versus professional/personal beliefs and/or values) from different perspectives. These varying perspectives impact the level of emotional discomfort that is experienced when erroneous behaviours are employed to meet organisational requirements. The degree of emotional discomfort experienced by the nurses dictates which of these strategies they employ to rationalise their erroneous behaviour.

References

Andrews, T. (2004). Making credible: A grounded theory of how nurses detect and report physiological deterioration in acutely ill patients (Doctoral dissertation), University of Manchester, Manchester.

Andrews, T., & Waterman, H. (2005). Packaging: A grounded theory of how to report physiological deterioration effectively. *Journal of Advanced Nursing, 52*(5), 473-481. doi:10.1111/j.1365-2648.2005.03615.x

Ansell, H., Meyer, A., & Shona, T. (2014). Why don't nurses consistently take patient respiratory rates? *British Journal of Nursing, 23*(8), 414-418.

Australian Commission on Safety and Quality in Health Care [ACSQHC]. (2012). Recognising and Responding to Clinical Deterioration in Acute Health Care. Sydney, Australia. Retrieved from https://www.safetyandquality.gov.au/

Bleyer, A. J., Vidya, S., Russell, G. B., Jones, C. M., Sujata, L., Daeihagh, P., & Hire, D. (2011). Longitudinal analysis of one million vital signs in patients in an academic medical center. *Resuscitation, 82*(11), 1387-1392. http://dx.doi.org/10.1016/j.resuscitation.2011.06.033

Brier, J., Carolyn, M., Haverly, M., Januario, M. E., Padula, C., Tal, A., & Triosh, H. (2015). Knowing 'something is not right' is beyond intuition: Development of a clinical algorithm to enhance surveillance and assist nurses to organise and communicate clinical findings. *Journal of Clinical Nursing, 24*(5-6), 832-843. doi:10.1111/jocn.12670

Burchill, C. N., & Polomano, R. (2016). Certification in emergency nursing associated with vital signs attitudes and practices. *International Emergency Nursing, 27,* 17-23. doi:10.1016/j.ienj.2015.12.003

Considine, J. (2004). The role of nurses in preventing adverse events related to respiratory dysfunction: literature review.pdf. *Journal of Advanced Nursing, 49*(6), 624-633.

Considine, J., Charlesworth, D., & Currey, J. (2014). Characteristics and outcomes of patients requiring rapid response system activation within hours of emergency admission. *Crit Care Resusc, 16*(3), 184-189.

Cooper, S., Cant, R., & Sparkes, L. (2014). Respiratory rate records: The repeated rate? *Journal of Clinical Nursing, 23*(9/10), 1236-1238. doi:10.1111/jocn.12234

Cretikos, M., Bellomo, R., Hillman, K., Chen, J., Finfer, S., & Flabouris, A. (2008). Respiratory rate: The neglected vital sign. *Medical Journal of Australia, 188*(11), 657-659.

Day, T., & Oxton, J. (2014). The national early warning score in practice: A reflection. *British Journal of Nursing, 23*(19), 1036-1040. doi:10.12968/bjon.2014.23.19.1036

Elliot, A. J., & Devine, P. G. (1994). On the motivational nature of cognitive dissonance: Dissonance as psychological discomfort. *Journal of Personality and Social Psychology, 67*(3), 382-394. doi:10.1037/0022-3514.67.3.382

Festinger, L. (1957). *A theory of cognitive dissonance.* Palo Alto, CA: Stanford University Press.

Festinger, L. (1961). The psychological effects of insufficient rewards. *American Psychologist, 16*(1), 1-11. doi:10.1037/h0045112

Festinger, L., & Carlsmith, J. (1959). Cognitive consequences of forced compliance. *The Journal of Abnormal and Social Psychology, 58*(2), 203-210. doi:10.1037/h0041593

Fourie, C. (2015). Moral distress and moral conflict in clinical ethics. *Bioethics, 29*(2), 91-97. doi:10.1111/bioe.12064

Glaser, B. (1978). *Theoretical sensitivity : Advances in the methodology of grounded theory.* Mill Valley, CA: Sociology Press.

Glaser, B. (1992). *Basics of grounded theory analysis: Emergence vs forcing*. Mill Valley, CA: Sociology Press.

Glaser, B. (1998). *Doing grounded theory: Issues and discussions.* Mill Valley, CA: Sociology Press.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.

Gravel, J., Opatrny, L., & Gouin, S. (2006). High rate of missing vital signs data at triage in a paediatric emergency department. *Paediatrics & Child Health, 11*(4), 211-215.

Hodgetts, T. J., Kenward, G., Vlackonikolis, I., Payne, S., Castle, N., Crouch, R., . . . Shaikh, L. (2002). Incidence, location and reasons for avoidable in-hospital cardiac arrest in a district general hospital. *Resuscitation, 54*(2), 115-123. http://dx.doi.org/10.1016/S0300-9572(02)00098-9

Hogan, J. (2006). Respiratory assessment. Why don't nurses monitor the respiratory rate of patients? *British Journal of Nursing, 15*(9), 489-492.

Hosking, J., Considine, J., & Sands, N. (2014). Recognising clinical deterioration in emergency department patients. *Australasian Emergency Nursing Journal, 17*(2), 59-67. doi:10.1016/j.aenj.2014.03.001

Jarvis, C. (2008). *Physical examination & health assessment* (5th ed.). St. Louis, MO: Saunders/Elsevier.

Johnson, K. D., Winkelman, C., Burant, C. J., Dolansky, M., & Totten, V. (2014). The factors that affect the frequency of vital sign monitoring in the emergency department. *Journal of Emergency Nursing, 40*(1), 27-35. doi:10.1016/j.jen.2012.07.023

Jonsson, T., Jonsdottir, H., Möller, A. D., & Baldursdottir, L. (2011). Nursing documentation prior to emergency admissions to the intensive care unit. *Nursing in Critical Care, 16*(4), 164-169. doi:10.1111/j.1478-5153.2011.00427.x

Lam, T., Mak, P., Siu, W., Lam, M., Cheung, T., & Rainer, T. (2006). Validation of a modified early warning score (MEWS) in emergency department observation ward patients. *Hong Kong Journal of Emergency Medicine, 13*(1), 24-30.

Ljunggren, M., Castrén, M., Nordberg, M., & Kurland, L. (2016). The association between vital signs and mortality in a retrospective cohort study of an unselected emergency department population. *Scandinavian Journal Of Trauma, Resuscitation And Emergency Medicine, 24*(1), 21-21. doi:10.1186/s13049-016-0213-8

Long Khanh Dao Le. (2016). Vital Signs [Evidence Summary]. Retrieved from http://joannabriggslibrary.org/

Ludikhuize, J., Smorenburg, S. M., de Rooij, S. E., & de Jonge, E. (2012). Identification of deteriorating patients on general wards; measurement of vital parameters and potential effectiveness of the modified early warning score. *Journal Of Critical Care, 27*(4), 424 e427-413. doi:10.1016/j.jcrc.2012.01.003

McBride, J., Knight, D., Piper, J., & Smith, G. B. (2005). Long-term effect of introducing an early warning score on respiratory rate charting on general wards. *Resuscitation, 65*(1), 41-44. doi:10.1016/j.resuscitation.2004.10.015

Nathanial, A. K. (2004). A grounded theory of moral reckoning in nursing. *Grounded Theory Review, 4*(1).

National Institute for Clinical Excellence. (2007). Acutely ill patients in hospital: recognition of and response to acute illness in adults in hospital. NICE, Guidance/Clinical Guidelines CG50.

National Patient Safety Agency. (2007). *Recognising and responding appropriately to early signs of deterioration in hospitalised patients:* National Patient Safety Agency.

Odell, M. (2015). Detection and management of the deteriorating ward patient: An evaluation of nursing practice. *Journal of Clinical Nursing, 24*(1-2), 173-182. doi:10.1111/jocn.12655

Odell, M., Rechner, I. J., Kapila, A., Even, T., Oliver, D., Davies, C. W., . . . Rudman, K. (2007). The effect of a critical care outreach service and an early warning scoring system on respiratory rate recording on the general wards. *Resuscitation, 74*(3), 470-475. doi:10.1016/j.resuscitation.2007.01.035

Oh, Y., & Gastmans, C. (2015). Moral distress experienced by nurses: A quantitative literature review. *Nursing Ethics, 22*(1), 15-31. doi:10.1177/0969733013502803

Pallak, M. S., & Pittman, T. S. (1972). General motivational effects of dissonance arousal. *Journal of Personality & Social Psychology, 21*(3), 349-358.

Parkes, R. (2011). Rate of respiration: The forgotten vital sign. *Emergency Nurse, 19*(2), 12-18.

Prytherch, D. R., Smith, G. B., Schmidt, P., Featherstone, P. I., Stewart, K., Knight, D., & Higgins, B. (2006). Calculating early warning scores--a classroom comparison of pen and paper and hand-held computer methods. *Resuscitation, 70*(2), 173-178. doi:10.1016/j.resuscitation.2005.12.002

Silcock, D. J., Corfield, A. R., Gowens, P. A., & Rooney, K. D. (2015). Validation of the national early warning score in the prehospital setting. *Resuscitation, 89*, 31-35. doi:10.1016/j.resuscitation.2014.12.029

So, S. N., Ong, C. W., Wong, L. Y., Chung, J. Y., & Graham, C. A. (2015). Is the modified early warning score able to enhance clinical observation to detect deteriorating patients earlier in an Accident & Emergency Department? *Australasian Emergency Nursing Journal, 18*(1), 24-32. doi:10.1016/j.aenj.2014.12.001

Taylor, M. F., & Bentley, K. J. (2005). Professional dissonance: Colliding values and job tasks in mental health practice. *Community Mental Health Journal, 41*(4), 469-480. doi:10.1007/s10597-005-5084-9

Walsh, M., Erb, G., & Kozier, B. (2010). *Fundamentals of nursing* (Vol. 2): Frenchs Forest, New South Wales, Australia: Pearson Education.

Weber, J., & Kelley, J. (2009). *Health assessment in nursing* (4 ed.). Philadelphia, PA: Lippincott Williams & Wilkins.

Woods, M., Rodgers, V., Towers, A., & La Grow, S. (2015). Researching moral distress among New Zealand nurses: A national survey. *Nursing Ethics, 22*(1), 117-130. doi:10.1177/0969733014542679