A nursing perspective of interprofessional work in critical care: findings from a secondary analysis

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ABSTRACT

Purpose: This paper presents a secondary analysis of nurse interviews from a two-year comparative ethnographic study exploring cultures of collaboration across intensive care units (ICU). Critically ill patients rely on their interprofessional healthcare team to communicate and problem-solve quickly to give patients the best outcome available. Critical care nurses function at the hub of patient care giving them a distinct perspective of how interprofessional interactions impact collaborative practice.

Materials and Methods: Secondary analysis of a subset of primary qualitative data is appropriate when analysis extends rather than exceeds the primary study aim. Primary ethnographic data included 178 semi-structured interviews of ICU professionals from eight medical-surgical ICUs in North America; purposeful maximum variation sampling was used to accurately represent each profession. Fifteen anonymized ICU nurse interview transcripts were coded iteratively to identify emerging themes impacting interprofessional collaborative practice.

Results: Findings suggest quality of interprofessional collaboration is a product of a multitude of factors occurring at multiple levels within the organization. Managerial and organizational factors related to ICU nurse training and staffing may impede development of nurses' interprofessional skills.

Conclusion: Deliberative development of ICU nurses' interprofessional skills is essential if nursing to move from primary coordinator to active collaborator in patient management.

Keywords: clinical decision making, critical care, interprofessional, interprofessional collaboration, teamwork

Introduction

Collaborative interprofessional interactions, a key factor in critical care team (CCT) performance, influence patient outcomes [1-5]. Critically ill patients are vulnerable both clinically, where small errors in care can produce significant morbidity and mortality [3, 4], as well as psychologically, where patients may experience "voicelessness" due to their life-threatening conditions and power imbalance between the patient and provider relationship [6,7]. Critically ill patients in the intensive care unit (ICU) depend on the collective expertise and skill of the CCT to function cohesively, collaboratively, and effectively to give patients the "greatest chance of high-quality survival" [8, p. 307). While the idea of practicing collaboratively as an interprofessional team appears simple, findings from a growing body of knowledge reveal interprofessional team work is a highly complex, non-linear concept comprised of multiple interrelated factors that are neither easy to teach, practice, nor define [9-11]. Reeves and colleagues [11] posit that health care teams can engage in four types of interprofessional interactions, or work (IP work), depending on level of shared vision across team members, context, clinical problem to be solved and urgency of resolution (Table 1). The four types of IP work are teamwork, collaboration, coordination, and networking with teamwork requiring the greatest cohesiveness of communication and collective action among team members, such as a cardiac arrest code team.

A multitude of team, organizational, and managerial factors can impact patient outcomes in the ICU [4, 12-14]. Models conceptualizing possible interrelationships among these factors have been proposed but not quantified regarding the respective contribution of each factor to defined outcomes [11, 14]. Emerging evidence suggests that of the three types of factors, team factors, particularly those that shape interprofessional interactions (IP interactions) where exchange of crucial information and problem-solving may or may not occur, play a crucial role in ICU patient outcomes [3,4,11]. A high-functioning, collaborative CCT is one where all team members feel respected and empowered to participate; CCTs do not happen by chance but are built deliberatively through ICU physician and nursing leadership and creation of a culture of psychological safety where all team members feel safe to offer their opinions and expertise in caring for the patient [4]. Absence of psychological safety to engage in collaborative problem-solving increases the likelihood of missed information, thereby setting the stage for erroneous decision-making [4]. Organizational and managerial factors such as directives regarding nurse to patient ratios and allocation of hard resources can also impact CCT performance [4, 12]. Reeves and colleagues' [11]conceptual model for understanding interprofessional teamwork [Figure 1] captures the interrelationships between the multitude of team, organizational, and managerial factors that can impact patient outcomes; the factors are organized into four interrelated domains, relational, processual, organizational, and contextual. Evidentiary support for the model is growing [1, 2, 5].

ICU nurses operate at the intersection of team, organizational, and managerial factors due to the dual nature of their role. As a member of the CCT, ICU nurses function at the "hub of patient care" working closely with the interprofessional CCT to provide round-the-clock surveillance, problem-solving, decision-making, and advocacy for their patients [7, 15, p. 12]. As a hospital employee, ICU nurses are subject to organizational policies as well as being the direct recipients of managerial decisions regarding nurse-patient ratios [4, 16]. ICU nurses may be placed in a position of having to continually balance varying interests of their ICU colleagues (especially physicians) as well as patients, families, and administrators [7]. Given ICU nurses' dual role, ICU nurses' lived experience of interprofessional work, as conceptualized by Reeves and colleagues [Table 1], is important for gaining a more in-depth understanding of how underlying interprofessional interactions influence safety and quality care in the ICU. Indeed, this is a topic of interest that spans multiple stakeholder groups including administrators, clinicians, patients, policymakers, and researchers [1, 17-22].

The purpose of this paper is to present a secondary analysis of anonymized nursing semi-structured interview transcripts from a two-year comparative ethnographic study exploring cultures of collaboration across ICUs in North America [16]. The specific aim of this paper is to report on a focused analysis of ICU nurses' perspective of factors that enhance or impede their interprofessional work guided by Reeves and colleagues' interprofessional teamwork model (Figure 1). Secondary analysis uses pre-existing data to explore new or additional research questions [23]. Secondary analysis of qualitative data, specifically, carries its own set of methodological and ethical issues that must be addressed [23]. These issues can be summarized in three related questions: Is there an appropriate fit between the primary data and secondary research questions? Is the analytic technique in the secondary analysis

sufficiently similar to the analytic technique used in the primary study? Are informed consent and confidentiality (ethical considerations) obtained in the primary study appropriately applicable to the secondary analysis or must additional consent be obtained? [23, 24].

Materials and methods

Appropriate Fit

Secondary analysis of a subset of qualitative data is appropriate when the analysis provides a "similar but more focused analysis relative to the primary study" [25, p. 409]. The overall aim of the primary ethnographic study was to develop a deeper understanding of factors that support collaborative team-based and patient family involvement in ICUs in a purposeful sample of eight ICUs, two in Canada and six in the United States [21]. Data collection included 1117 hours of observation and 178 semi-structured interviews of a number of ICU professionals including, but not limited to, nurses, doctors, pharmacists, case managers, social workers, patients, and family members across eight ICUs. Publications from the primary study focused on the collective interprofessional team [1, 5, 26].

This secondary study has focused on the perspective of the ICU nurse through the analysis of a subset of 15, anonymized, ICU nurse semi-structured interviews collected and transcribed in the primary study. In-depth analysis of ICU nurses' lived experience of interprofessional work is warranted given their dual role and pivotal position on the interprofessional team. The secondary research aim aligns well with the primary study aim of understanding factors that shape interprofessional interactions. Focused secondary analysis of a subset of primary data extends, rather than exceeds, the primary research aim [23].

Analytic framework

In the primary study, Reeves et al. [5] employed an ethnographic approach, consisting of a combination of observations, shadowing, formal and informal interviews, to better understand factors that shape collaborative, team-based care and family involvement in the eight ICUs. A conceptual framework with four interrelated domains impacting interprofessional teamwork (relational, organizational, processual, and contextual) informed study design, sensitized data collection, and guided primary analysis [5,11,21] (Figure 1). Ethnographers were sensitized to the conceptual links between culture, team-work, and improved outcomes prior to entering the field [21].

The analytic framework for the secondary study followed the design utilized in the primary study, informed by findings from primary analyses [1, 5]. All15 transcribed interviews (transcripts) were coded iteratively using the domains of interprofessional teamwork (Figure 1) and types of interprofessional work (Table 1). Iteration involves a reflexive process of continually revisiting the data with evolving insights to develop an in-depth understanding of emerging themes and patterns [24].

Transcript analysis followed a three-step process. All transcripts were first reviewed for pertinent questions and responses related to teamwork in the ICU creating a subset of data. As

an example, "*And in this ICU, what aspects do you think facilitate collaboration and communication among the professions?"* Each transcript within the subset of qualitative data was then coded iteratively using factors identified in the four interprofessional domains (Table 2) and four types of interprofessional work (Table 1) followed by development of emergent themes. Secondary analysis of the transcripts revealed three primary themes: (1) nursing management tends to focus on the budget aspect of care delivery, (2) opportunities for ICU nurses to build clinical expertise through interprofessional bedside learning is decreasing, and (3) the importance of structured interprofessional rounds in facilitating interprofessional collaboration.

The three co-researchers in the secondary study, also researchers in the primary study (SR, SK, JA), reviewed the secondary analysis thereby ensuring appropriate interpretation of primary data. Published findings from the primary study, combined with pertinent literature, informed the secondary analysis acknowledging the primary author's analytic lens of integrating acute care nursing, systems-level thinking, and interprofessional teamwork knowledge. Following good reflexive practice, the theoretical framework for the study has been stated explicitly with the analysis conducted accordingly, mindful of the primary author's lens.

Data collection

Methodological considerations related to the design of this secondary analysis of qualitative ethnographic data are discussed above. In the primary study, one hour semi-structured interviews related to interprofessional collaboration and patient family involvement in the delivery of care were conducted across research sites. All interview participants were informed of the study and consented to participate. A purposeful maximum variation sample [23] was used in order to ensure an accurate representation of the range of nurses based in each ICU. An interview guide was developed based on the literature and modified in an iterative fashion during the course of the primary study. Interviews were audio-recorded and transcribed. The transcriptions were then anonymized by the site researcher and the original recording was erased.

Ethical considerations

Informed consent is not presumed in secondary analysis of qualitative data, rather it is determined after thoughtful assessment of whether reuse of primary data would violate the original participant-primary researcher contract [24, 28]. Two issues need to be considered: the fit between primary and secondary research aims; and any shift in research focus from the intention of the primary research [24]. The fit between the primary and secondary research aims are discussed above. The overall aim of the primary study was to better understand factors that shape the delivery of interprofessional care in the ICU. The pivotal role of the ICU nurse is one of many factors that may shape interprofessional interactions. In-depth analysis of nurse-specific data provided a richer, more nuanced, focus of how an interprofessional team functions. A conceptual framework for interprofessional teamwork [5, 11] (Figure 1) guided secondary analysis informed by the following research questions: 1) Who do ICU nurses identify as being on their team?; 2) What are ICU nurses' patterns of interprofessional work?; and 3) What factors enhance or impede ICU nurses' interprofessional work?

The primary author of the secondary study had no access to any identifying information from the primary study thereby maintaining confidentiality of primary data. The primary author's Institutional Review Board reviewed the secondary analysis proposal.

Results

Nurse participants in the secondary analysis represented eight different medical-surgical ICUs situated in community and urban hospitals located in North America. The ICU nurses' years of experience ranged from less than 5 to more than 20 years. Nurses with 10 years or less of experience were noted with the Roman numeral I and nurses with greater than 10 years of experience with the Roman numeral II. Nursing positions included staff Registered Nurse (RN), specialty nurse, supervisor, and advance practice nurse with many of the staff nurses functioning intermittently in a charge, team lead, preceptor, or educator role.

High stress environment

Analysis of the collective transcripts indicated that ICU nurses reported to perform the unique role of providing round-the-clock care, integrating multiple demands as bedside care giver, problem-solver, care coordinator, workflow manager, advocate, and negotiator. ICU nurses consistently characterized their environment as high stress due to the intensity of caring for critically ill, clinically unstable patients:

> I think the major minus downfall is we are in an environment that is very critical. And to be so high stressed all the time, you have to relieve some of those stressors. … (RN Staff K I)

> Everything has to be done so quickly now. There's not any time to kind of catch yourself. It's just go, go, go, go, go. And, I think that's what stressed out a lot of the newer nurses that have come on is the amount of work. … (RN Staff G I)

The interprofessional team

Similar to findings in the primary study [1, 5], ICU nurses defined *team* comprehensively, encompassing most professions with whom they interacted in caring for their patients. Nurses described *team* in terms of three characteristics: professional role, level of trust and respect, and willingness to help:

> Well, I think the [ICU] team … is all the people that are involved in the patient care, and that goes from people that clean the room, like housekeeping, to the biomed people that come up and fix our machines … doctors don't look down on the nurses, the nurses don't look down on housekeeping or case management … And, no matter whom it is … they'll help. (RN Staff D II)

In addition to willingness to help, level of trust and respect provided the foundation for positive interprofessional interactions. This was felt to hold true across types of interactions, whether between two nurses, nurse and physician, nurse and management, or nurse and family. Trust, as it was reported, related to clinician's knowledge, experience, and behavior whereas respect tended to be hierarchical in nature:

> I think it's because they're [physicians] around, and I think that here they put more trust in what the nurses say. … on the floor … they kind just ignore what we say. Here I find they listen to everything all the time … you're kind of the one 24/7 with the patient. … you go to them with things that are actually important. … You have to build that rapport with them. You can't go to them with stupid things, otherwise they're going to kind of dismiss you. (RN Staff K I)

> And she [manager] doesn't work with us. She is more … she only works with management and that's where it stays. And nursing is one of those professions where we don't look to be acknowledged or recognized. But we look to be respected. And sometimes, it just feels like you're not being respected at all. (RN Staff K I)

Patterns of interprofessional work

Of the four types of interprofessional (IP) work (Table 1), coordination with physicians and other ICU professionals was the type most commonly described in the transcripts. Alexanian and colleagues [1] noted a similar pattern in analysis of two participant ICUs from the primary study. The focus on coordination, rather than collaboration, appeared to be related to profession-specific tasks:

> But as far as other departments, they usually come up to the nurse. If it's social service, she'll ask us a bunch of questions. If it's a case manager … Dieticians … We don't really leave the ICU too often, just for short breaks. (RN Staff A II)

IP teamwork (Figure 1), as evidenced by a shared vision among team members, was not discussed explicitly but eluded to contextually in describing code situations, a pattern noted in primary study field observations [1, 5]. One ICU nurse reported:

> When your patient crashes and codes … you're not the one that is going to be able to figure out what is going on… My team members will come in behind me and they'll be like, do this … It's like, yes, I can't even see that right now. And that is where, I think, we are very successful in what we do in saving people's lives because we're always constantly talking. (RN Staff K I)

A finding specific to ICU nurses was how their interactions with physicians shifted gradually from being a reporter of information to a trusted and respected team member with clinical credibility. The transformation, highly-nurse dependent, occurred as the nurse gained knowledge, experience, and confidence in learning how to persuasively argue a clinical point:

> … if I question the intensivist, and I do, I will question … just tell me why I'm doing this, so I have an understanding of it. .. since we have covering intensivists, if they tried something on daylight that didn't work for that patient, then the RN might say, you know what? We tried this on daylight and it really didn't work. And, I know you want me to try that, do you still want me to try that? And, they might go back and rethink that. … residents, again, they're covering. And, so that's why it's so important for the nurses to know what to expect as far as a patient treatment. My patient has a temperature, we know give them Tylenol. But, if the patient themselves is in frank liver failure, they need to say, well, you know this patient is in frank liver failure. It's not just they have … their liver enzymes are a little ... but they're in frank liver failure. Do you still want to give them Tylenol? Those kinds of things, I hope they would question. That's what they're taught. (RN Staff D II)

Factors that enhance or impede interprofessional work

Reeves and colleagues' teamwork model (Figure 1) provided the conceptual framework for understanding how domain-specific factors may interact to influence interprofessional work. While ICU nurses identified factors in all four domains (Table 2), it is the interaction between factors within the different domains that appear to enhance or impede nurses' interprofessional work. As an example, the interaction between (1) quality of interprofessional relationships, e.g., trust and respect (team-based factor), (2) nurses' reported experience of nursing management's focus on budget, e.g., staffing, decreased opportunity for building clinical expertise (management and organizational factors), and (3) level of nurse engagement in interprofessional rounds (team and managerial factors) shaped interprofesssional interactions either towards coordination, with the different professions working in parallel, or towards collaboration, with the professions sharing decision-making:

> The role of … has gone … it's a way of downsizing … But, we're not overseeing or teaching anymore, I'm not going room to room and quizzing the nurses and saying, do you know what you're doing today? What are your plans? What are your goals? … (RN Staff F II)

> When they [intensivist] came, they did a lot of bedside teaching with the nurses, but … unit is busier than it used to be, we have more beds … The teaching aspect of the medical teaching to the nurses has pretty well disappeared. … (RN Staff F II)

> … my orientation was extremely self-directed … there's no formal ongoing nurse educator … it was challenging, but I'm a very self-motivated learner … (RN Staff I I)

Level of management support for ICU nurses influenced both unit culture and quality of interprofessional interactions:

> … there is an inbred conflict between the staff nurse that is giving the care to the patients and the manager who is trying to manage the budget … And there is an inbred conflict in regards to questioning … not necessarily questioning, but for staffing of the unit. I think many newer nurses, and myself included, at times, I'm feeling like I'm being second-guessed by the manager in regards to what the decision was that is needed for the care of the patient. They're not there on a moment-by-moment basis to have the feel of the unit and to know where things are going. (RN Staff C II).

> Like our supervisor, she kind of lets us run it. .. she doesn't try to micromanage us as much. I find that here you have a lot of flexibility. You have autonomy. You can kind of do your work. You don't kind of get stepped on as much. In other hospitals the doctors take over a lot of the stuff, the management takes over a lot of the stuff, but here I find we're really well self-run (RN Staff G I)

ICU nurses consistently cited structured interprofessional rounds as a positive factor in fostering interprofessional collaboration with use of standardized rounding checklists facilitating interprofessional participation. However, teamwork relational factors (Figure 1; Table 2) such as level of nurse experience, professional power, and hierarchy, impacted quality and efficiency of interprofessional rounds:

> It is a coordinated effort … Whether it's physician driven or nursing driven is often based on the nurses' experience level and knowledge level. A new nurse will stand back and just kind of answer the questions,

> but not necessarily put the complete picture together, where the more experienced nurses know what the key things are that they're looking for and they start, let me tell you about my patient. … compared to a younger nurse that kind of just says, ok. (RN Staff F II)

The majority of ICU nurses perceived rounds as an opportunity to engage in interprofessional dialogue regarding the plan of care as well as learn important clinical knowledge not obtained elsewhere [1, 5]:

> I think education … in rounds, I always try to make sure … the nurses need to be there because of their input, because the residents don't always have the most accurate and up-to-date information … when the intensivist …starts to educate the residents as to why we're doing things, that is a huge place where I got a lot of my education. It wasn't out of books, and it wasn't out of videos and all this kind of stuff. It was literally from the physicians educating the residents. (RN Staff D II)

Discussion

This secondary analysis of ICU nurse transcripts from a two year comparative ethnographic study exploring cultures of collaboration in eight ICUs built on key findings from the primary study [1, 5]. The analysis produced a more nuanced understanding of ICU nurses' perspective of how team, managerial, and organizational factors interact to either foster, or impede, quality improfessional interactions that underpin collaborative practice, and ultimately, patient outcomes. Four key findings from the primary study, based on observations and interviews, informed the secondary analysis: (1) profession-specific groups worked in parallel, characterized as "colocation in a shared clinical space" [1, p. 1882); (2) inclusion on a team depended on willingness to help colleagues; (3) traditional medical hierarchy shaped formal interprofessional rounds and decision-making with ICU nurses and other non-physician providers functioning in a reporting capacity; and (4) level of trust and respect influenced quality of interprofessional interactions [1, 5].

Three important findings emerged from secondary analysis. The first and second findings are interrelated. Quality of interprofessional collaboration reported by ICU nurses is a product of multiple factors that occur at multiple levels within the organization and includes, but is not limited to, an ICU nurse's (1) level of expertise, (2) willingness to engage in shared decision-making, and (3) workplace opportunities for building skills that support clinical expertise and credibility. As noted in the excerpts above, the currency of collaboration is demonstrated expertise whether nurse, resident, or attending. The foundation for collaboration is trust established through expertise and experience in working with the team over time; Manthous and Hollingshead [4] identified this team feature as Transactive Memory, the division and coordination of responsibilities across team members based on their respective expertise and demonstrated knowledge. In the secondary analysis, the majority of ICU nurses reported participating in interprofessional rounds but deliberative development of nurses' clinical and interprofessional skills appeared to be more ad hoc and self-directed.

The call to better prepare ICU nurses to fully participate in shared decision-making regarding patient management is not new to the literature [26, 29, 30]. Learning how to efficiently and

persuasively communicate a clinically significant point in a medically-driven environment takes mentored practice whether a nurse or a resident. Findings from this analysis suggest ongoing interprofessional development needs of ICU nurses are being subrogated to the economic demands of the organizations as evidenced by staffing decisions and decreased opportunities for both intra and interprofessional bedside learning. While the economic concerns are real, the trade-off between deliberative development of nurses' interprofessional skills and patient safety is of concern, especially in the ICU setting where, in the words of Dietz and colleagues [3], "The margin of error is thin, and the consequences of error are profound" (p. 912).

The third finding relates to the importance of structured interprofessional rounds as an important tool needed to facilitate development of interprofessional teamwork. ICU nurses in this dataset stressed the importance of rounds as a dedicated forum for interprofessional dialogue where all in attendance heard the same discussion. While formal interprofessional rounding is a first step, it does not guarantee effective interprofessional dialogue. In a recent quantitative study of 49 ICUs in the United States, Costa, Wallace, and Kahn [20] found no significant association between mortality of mechanically ventilated patients and high-intensity daytime physician staffing, interprofessional rounds, or clinical protocols. Based on findings in this secondary analysis, ICU nurse engagement in rounds depended on perceived expertise and confidence that, in turn, related directly to deliberative development of the nurse's clinical credibility and interprofessional skills. Mixed methods studies that integrate quantitative outcomes data with in-depth qualitative data that captures nuances of interprofessional teamwork [3, 11] combined with multilevel modeling are needed to better understand the complex relationship between team, organizational, and managerial factors that impact interprofessional work in the ICU.

Study limitations

The primary limitation associated with this secondary analysis was use of perception-based data. Use of field observation data associated with the primary study [5] would have overcome the limitation but data were not available for the secondary analysis. Three of the four authors of the secondary analysis were researchers in the primary ethnographic study thereby mitigating the limitation of using only perception-based data [5]. Other limitations include possible bias due to the unique lens each author brought to their respective interpretation of the qualitative data. The primary author's analytic lens was discussed previously; additionally, the three co-authors critiqued the analysis as well as contributed their expertise.

Conclusion

Secondary analysis of 15 ICU nurse semi-structured interviews related to collaborative interprofessional interactions in eight ICUs in North America provide a glimpse of how team, managerial, and organizational factors interact to either facilitate or inhibit the building of high-functioning collaborative interprofessional teams required for safe, quality care. While ICUs demonstrate elements of interprofessional teamwork they tend to follow the traditional medical hierarchical model [5]; however, ICU cultures and structures vary significantly [4].

ICU nurses, who function at the hub of patient care, offer a unique lens regarding interprofessional collaboration in the ICU. Findings from this analysis suggest that managerial and organizational factors can reinforce or inhibit ICU nurses' development of the clinical expertise and interprofessional skills needed to fully participate in collaborative team-based practice. As articulated by Manthous and Hollingshead [4, 8], high-functioning CCTs do not arise by spontaneous generation but are carefully and deliberatively built over time. Theoretically-informed toolkits, such as *Enhancing Inteprofessional Collaboration in the Intensive Care Unit* [31,] can provide evidence-based roadmaps for strategic development of interprofessional teamwork in the ICU.

Building ICU nurse capacity to fully engage and drive interprofessional collaboration will require purposively designed practice-based initiatives that assist ICU nurses in concurrently building clinical expertise as well as providing opportunities for practicing those skills in mentored, interprofessional forums. Deliberative development of interprofessional skills in new critical care nurses is essential if nursing is to move from primary coordinator to active collaborator in interprofessional clinical decision-making in the ICU.

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Table 1.
Interprofessional Work [5]

Interprofessional Teamwork (shared team identity and responsibility, integrated, interdependent work)
Interprofessional Collaboration (no shared team identity but shared decision-making and problem-solving)
Interprofessional Coordination (no shared team identity; work in parallel but meet to discuss shared work)
Networking (no shared team identity; individuals communicate as expertise or skill needed within network)

Figure 1
A framework for understanding interprofessional teamwork [5] (reprinted with permission)

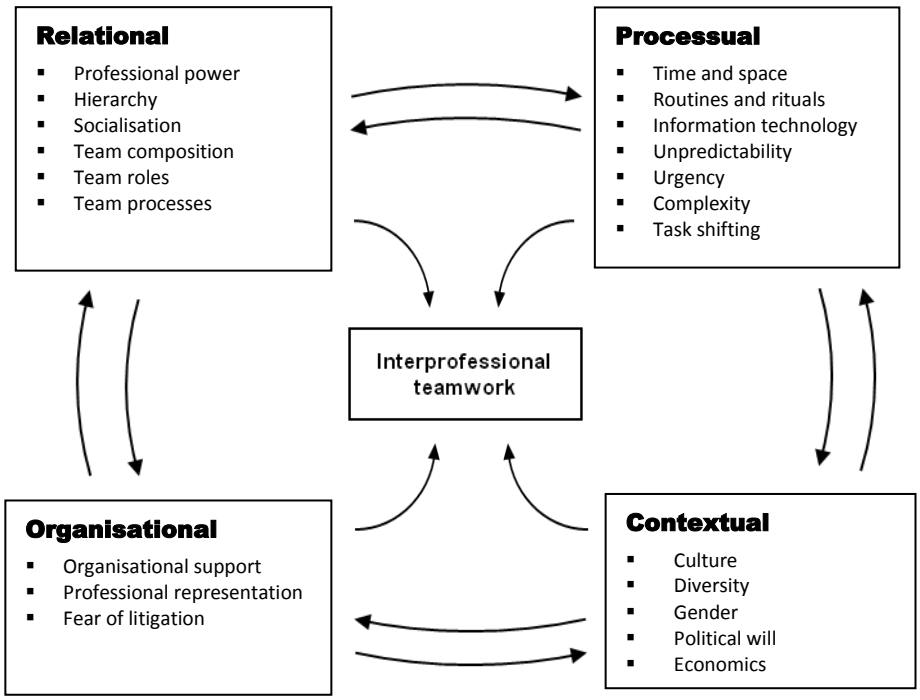

Table 2
Factors identified as impacting interprofessional work in the secondary analysis

Domain	Specific Examples
RELATIONAL	
Professonal Power	physicians
Hierarchy	management
Socialisation	
Team Composition	knowledge/experience
Team Roles	
Team Processes	communication, trust and respect (related to knowledge/experience), humor, conflict, team stability (physician rotation/nurse turnover), individual willingness
PROCESSUAL	
Time and Space	physician presence on unit/size of unit
Routine and Rituals	structured interprofessional rounds
Information Technology	
Urgency	
ORAGANIZATIONAL	
Organizational Support	respect by management (nurses' assessment of staffing needs), ICU staffing models that promote ongoing development of skills that promote interprofessional teamwork
CONTEXTUAL	
Culture	perceived value of interprofessional teamwork
Political Will	comittment to engage in strategic actions that foster and facilitate development of interprofessional teamwork
Economics	declining hospital resources