Discursive Practices and Decision-Making in ICUs Phenomenological Research in ICUs

Luigina Mortari
Roberta Silva
University of Verona
Lungadige Porta Vittoria 17
37129 – Verona
Italy

Abstract

An intensive care unit (ICU) is defined by a high level of complexity, where different subjects actively work together to reach a decision: this reveals the crucial role of decision-making (DM) processes in these contexts. This research aims to investigate what kind of discursive practices emerge when a physician's team decides how to deal with a critical issue (infection) and how different discursive acts influence DM processes. In order to reach this goal it was decided to use a phenomenological approach because it is a method, which grasps the essential meaning of the "lived experiences" and practices that are constitutive of healthcare organization. The findings disclose the discursive profiles of the four wards: the analysis if how the deliberative acts are linked to others discursive acts is able to reveal where decisions are reached through a reflective, critical and collaborative evaluation and where an overbearing approach predominates.

Keywords: Phenomenology, discursive practice, coding, decision-making, teamwork, intensive care unit

1. *Old Problems, New Approaches*

In the last ten years, the Italian Group for the Evaluation of interventions in Intensive Care Units (GiViTi) collected epidemiological data through a continuous quantitative survey that involved 250 intensive care units (ICUs). One of the aims of this evaluation was to discover what elements explained the variability between the ICUs, regarding their capability to manage infections. This study had highlighted that a significant proportion of the observed variability between centres was related to not only clinical elements, but also to cultural, relational, organizational, and communicative and management aspects (Bertolini 2014). Consequently, the GiViTi promoted qualitative research with the aim of investigating these features and particularly of discovering what kind of discursive practices emerge when different ICU teams discuss infections and how different discursive practices influence the decision-making (DM) processes regarding the prevention and treatment of infections.

Although the field of health studies is traditionally dominated by quantitative research, nowadays qualitative research is widespread in this field because it advances how qualitative research can shed light on aspects of health issues that remain unclear for quantitative research, mainly helping to highlight new developments (Pope and Mays 1995; Sofaer 1999; Sinuff, Cook and Giacomini 2007). This does not lessen the value of quantitative research, but reveals that in order to understand some problems, qualitative research can be more effective because it provides an opportunity to go deeper into complex issues (Merriam 2002, p. 19). Giacomini and Cook state that "qualitative research questions tend not to ask whether or how much but rather to explore what, how, and why" (Giacomini and Cook 2000, p. 358). This means that qualitative studies may […] explore and describe social phenomena faithfully (including surveying diverse perspectives or by giving voice to those unusually heard), to identify potentially important variables or concepts, to recognize patterns and relationships, and to generate coherent theories and hypotheses. Qualtitative reports do not typically generate answers but rather generate narrative accounts, explanations, typologies of phenomena, conceptual frameworks, and the like (Giacomini and Cook 2000, p. 358).Qualitative research rests on the epistemological principle according to which, to understand experience, you must take the world as an object of meaning, because human beings live in an interpreted world: good qualitative research determines the root of the issue, as it grasps the process of making meaning in people's minds.

Next to the world of things that you see – the visible world – there is the invisible world, or the world of mind, a world made out of thoughts, affections, desires, expectations, fears, beliefs and especially ideas. Nevertheless, the invisible world shapes the visible world, and the invisible world can be revealed better by an approach faithful to the phenomena (Mortari 2013; Mortari2014).In this regard, naturalistic inquiry is a qualitative research paradigm that is particularly suitable for understanding and portraying social action from the point of view of social actors, giving value to their own knowledge and *remaining faithful to the* meaning of their experiences. The faithfulness is gained through a flexible approach that allows the researcher to modify in some way the initial design in order to comply with the unexpected phenomena that emerge from the field and through an inductive analysis of the material that leads to agra dual process of interpretation and systematization of the emerging data (Mortari 2014). The attempt *to be faithful to reality* is also a central element for empirical phenomenological methods. According *to this research philosophy,* the investigator has to take a direct look at the original "givenness", developing heuristic strategies to grasp reality in as much details possible. This means renouncing an anticipatorily defined vision of reality and turning off their cognitive filters. Obviously, "cognitive activity totally free from press-up positions is impossible", but a researcher must develop a reflective thinking that can "activate ways of knowing as much as possible able to perceive the original qualities of the reality"(Mortari2014, pp. 23–25).

Phenomenological research is particularly suitable for investigating healthcare practices because it is able to grasp the essential meaning of the lived experiences that are constitutive of this field. This is essential in order to support the healthcare professionals in improving the awareness of their own actions (Lindseth and Norberg 2004). Besides, the phenomenological approach, which gives clinicians a thematic description of their lived experiences, makes them see their reality from a different point of view, helps them to understand the true impact of their actions, and makes them able, at the same time, to compare their actions with those of others (Starks and Brown Trinidad 2007). Moreover, we can observe that the focus of phenomenology on a singular lived experience is highly congruent with the idea of "uniqueness" fostered by health science. In fact, we can say that phenomenology, like medical science, is conscious of the importance of the singularity of every person, which reveals, through the richness of his or her experience, the ontological and epistemological focus of the individual's enquiry (Edward and Welch 2011).

2. Decision-Making in ICU Contexts

An ICU is a complex environment both for clinical and social reasons, which coexist in a circle of mutual influence. An ICU is award where there are hospitalized patients with much co morbidity; that is to say, patients that have two or more different pathologies: from a medical point of view, this means that physicians have to face complicated clinical cases that often involve different clinical strategies. This makes necessary therapies and procedures that overlap with each other, involving the need for different professionals to work together. Indeed ICU specialists (intensivists, surgeons, neurologists, physical therapists, speech therapists, psychologists, radiologists, nurses and so on) must actively work together on the same patient and try to reach an agreement on the therapeutic actions to be taken (Pope and Mays 1995; Sofaer1999; Sinuff, Cook andGiacomini2007).

DM refers to the cognitive process that is undergone, starting from a stated problem, to evaluate the components in the field, identify the various strategies of possible action and ultimately decide on whether and how to undertake a decisive act. The DM processes in critical care contexts have been investigated through qualitative methods, but, over the past two decades, the research on this topic has focused on specific aspects of the problem. For example, on the sharing of DM between doctors and family members about the terminally ill or bedridden (Teno et al. 2000; Pochard et al. 2001; Azoulay et al. 2004) or on the DM processes relating to actions that are specific to clinical nursing practice (Baggs et al. 1997; Bucknall 2003; Benbenishty 2006). Only a small number of scholars have focused their attention on the physician's DM processes in the context of critical care, investigating the elements that can influence them (Giacomini, Cook and Deirdre 2009).Often, healthcare *professionals* in ICUs have to make decisions on patient care when they have not yet received all of the information that would be necessary to reach a balanced decision: for this reason, they put into effect what is called the principle of bounded rationality. This term refers to the ability of individuals to make choices based on approximations that take into account the limitations present in complex environments. The physicians operating in the context of critical care use the principle of bounded rationality to support their own clinical experience, and they then become a type of "heuristic device". In this way, they develop a critical and reflective attitude, which is necessary to be able to make decisions in contexts characterized by high levels of uncertainty (Gorry and Scott Morton 1971; Simon 1979; Hall 2002; Abbot 2004).

An element that strongly influences the DM process in ICUs is that in many cases, decisions are communal decisions: this means that the role of teamwork is significantly dominant. In the ICU context, the interdependence between operators who work together is very close and the way in which it takes place inevitably has an impact on DM processes. However, if the cooperation between operators is only formal, this leads to fragmentation that produces a DM hierarchy. Instead, if there is real cooperation among the team members, this generates a shared DM, marked by mutual support and cooperation that is aimed at the patient. Additionally, many scholars have revealed that in ICUs where there is a relationship based on cooperation, the clinical outcomes of the patients improve (Baggs et al. 1999; D 'Amour, Ferrada-Videla, San Martin-Rodriguez and Beaulieu 2005; Sinuff et al. 2007). However, to reach this level of cooperation, it is necessary to face the elements that typify the ICU context (clinical complexity, high turnover, the emotional and psychological weight of clinical work etc.) and that makes these ward environments characterized by a high level of stress and conflict. However, the efforts of the professionals should not be aimed at eliminating the conflict, but at recognizing and managing it. In fact, in these cases, the conflict can lead to a positive confrontation, leading to the development of a broader look at the problem and opening the way to solutions that are less routine and more tailored to the specific needs of the patients. On the other hand, if the conflict is not managed, it can lead to negative outcomes for both patients and for life on the ward, increasing the rate of burnout within the team and causing a considerable amount of energy to be expended by staff (Donchin and Seagull 2002; Van Schijndel, Strack and Burchardi 2007; Piquette, Reeves and Leblanc 2009; Fassier and Azoulay 2010).

An element that affects the team's ability to manage the conflict, transforming it into an open and constructive dialogue, relates to the leadership features that distinguish the group. Leadership that is called negative or "toxic" is characterized by rigidity, a poor attitude to planning, reduced empathy, incoherence, hedonism, an unwillingness to communicate honestly, little confidence in the other team members' potential and autonomy and an inability to tolerate criticism, and this has negative effects on the ward staff. This type of leadership would be dangerous for any type of work context, but in the medical field, this kind of leadership assumes a particular negative value because it can affect the clinical outcomes of patients. On the contrary, leadership which is collaborative, participatory, responsible, attentive to the personal and professional needs of the staff, strongly oriented to communication and able to respond to the needs of the organizational structure generates confidence within the team, improving the climate within the team and the clinical outcomes. This kind of leadership is expressed through the ability of the leader to involve all members of the team, making them perceive the importance of the effort of every individual to achieve a common goal. This is only possible through the development of each employee, in accordance with the feelings and attitudes of each and through the adoption of a participatory approach, and especially not an instrumental approach. Nevertheless, the central element that feeds positive leadership is mutual trust between the leadership and the team: mutual trust is an essential element in a work context characterized by high risk, such as in ICUs. This is the basis of a sharing of responsibilities between operators involved in the achievement of a common goal; in fact, a lack of mutual trust leads to a reduction in the effectiveness of DM processes, with the negative consequences of that having already been highlighted (Curtis et al. 2006; Lemieux and McGuire 2006; Nembhard and Edmondson 2006; Rouse 2008; Reader, Flin and Cuthbertson 2011).

3. *Decision-Making and Discursive Practices in ICUs*

To choose to observe ICU DM from the point of view of discursive practices is in line with the idea that "humans act toward things on the basis of the meanings they ascribe to those things", and this means that the discourse is a primary object of inquiry that reveals the significance of human experience (Blumer 1986, pp. 2–4). Consequently, this analysis seems to be particularly suitable for observing the practical experience of the physicians. Discourse practices can be described as "a piece of language in action" (Watson 2000, p. 4) because they do "not just describe things, they do things" (Potter and Wetherell 1987, p. 6), more specifically, a wide range of different communicative acts (Grant et al. 1998). Moreover, discursive practices are social practices through with people produce knowledge and meaning about their social and cultural interactions through language expressions. They are more than "chains of signs" because "they contain bodily patterns, routinized mental activities […] that are linked to each other". Through discursive practices, in fact, people ascribe "certain meanings to certain objects […] in order to do something". Based on this vision, discursive practices do not involve a mere "transferring of meaning from ego to alter", but are a co-constructed process that assumes significance through the interactions (Reckwitz 2002, pp. 254–255).

The field of study that analyses discursive practices is particularly wide, but here it seems appropriate to focus on those who have investigated the link between discursive practices and DM in the critical care context. In this regard, it is necessary to emphasize that very few studies have dealt with this issue and, in most cases, they have focused on the nurses' discursive practices rather than on the physicians' ones; moreover, they are mostly linked to the role of the patient and his family in treatment decisions. The nurses' DM processes are not properly comparable with those of physicians, and neither are their discursive practices: this has reinforced the conviction of the need for empirical research to analyse this theme. However, some studies have provided stimulating insights for this research, particularly those that have investigated the interrelation between physicians and nurses in order to achieve a shared DM. Often the researchers who work on this issue start from the theoretical framework offered by *Foucauldian* studies. According to this vision, "discourses are ways of constituting knowledge that affect what we say and how we think and act", and central in this is the "interrelationship between power and knowledge" (Manias 2001, p. 131). In accordance with this perspective, the investigation of discursive practices through which DM takes shape between physicians and nurses cannot be separated from the analysis of how they are primarily used to emphasize the power dynamics between these two groups of individuals. For example, it was pointed out that nurses' discursive practices often deliver knowledge into the DM processes, while respecting other group members' inputs, while their input is rarely openly acclaimed, thus preventing their participation in clinical DM (Dull 1993; Bucknall and Thomas 1997; Manias 2001; Copnell 2008).

4. PHENICE: Phenomenology of Infections in Intensive Care Units

The PHENICE project is a research study that began by examining the problem underlined by the GiViTi, which is connected to the incapability of determining, through the analysis of the epidemiological data, the elements that explain the variability between the ICU regarding their capability to manage infections. This uncertainty led the GiViTi to assume that the problem would have to be observed from a different perspective and that the root of the problem might lie in the DM processes connected to this theme. The research questions that emerged from this were: what kind of discursive practices emerge when a physician's team decides on how to deal with infections? How do the different discursive acts influence DM processes? The aim of the research is to draw discursive profiles of each ICU involved and develop a method to understand what happens in an ICU conflict regarding DM processes.

4.1 The Empirical Methods

The research involves four wards: these were chosen based on epidemiological data and, more specifically, on the epidemiological data collected by the GiViTi on nosocomial infection sand multi-resistant organisms. The 250 wards involved in the quantitative research were classified into four groups, in terms of the infection pattern: taking on board this division, four ICUs ware randomly selected to participate in the qualitative research project.
Field is award that is representative, by type of patient, length of stay and spread of infections, of many Italian ICUs. Patients admitted to this ward rein most cases chronic, postoperative and with a long hospitalization history behind them. Very often, they have many septic problems before their arrival on the ward and they remain on the ward for a medium-long stay: consequently, the presence of multidrug-resistant bacteria and the level of infections are significant. Field B is an ICU with an open-access policy, and this means that the families of the patients can go onto the ward at any time (24 hrs/day). Moreover, there is a clear prevention policy in order to regulate the contact between the patients and the external consultants because infections from *multidrug-resistant* bacteria are an important problem that the ward has to deal with. Field C is a general ICU set in a hospital where there is also a neurosurgical ICU and a cardiac ICU, managed by a common head physician. The patients on this ward are mainly poly traumatic patients or elective post-surgical patients and their recovery period on this ward is very brief. This has an impact on the presence of multidrug-resistant bacteria and on the level of infections, both of which are very low.

Field D: most of its patients are poly traumatic with a limited *period of previous hospitalization: this means that their* infections are mostly community-acquired infections[1], so the presence of multidrug-resistant bacteria is low. Nevertheless, the SP strongly expresses his adherence to practices that are focused on reducing the *spread of multidrug-resistant* organisms and this means reducing the use of empirical antibiotic therapy to a minimum.

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[1]*Infections acquired out of the hospital* (or other residential health care facilities).

In order to collect the data from each field, several researchers spent about three weeks in every field and they videotaped every meeting in which the patients' conditions were discussed by the team. This rough data was then subjected to an articulated procedure:

1. Firstly, the meetings were transcribed: the transcriptions were made using a very detailed procedure that faithfully reported participants' speech, including repetitions, hesitations, non-lexical expressions, pauses, speech overlap and so on. In addition to spoken exchanges, the transcription reports nonverbal actions (gazes, gestures etc.) that are relevant for the analysis of social actions (Jefferson 2004).

2. Then the research group repeatedly read the transcriptions, with the aim to reach, through a familiarizing process, an "overall vision" of the material necessary for comprehension of the text without pre-established theory interference (Giorgi 1985, p. 10).

3. Afterwards, the researchers decided to adopt, as a provisional tool, a coding discursive act developed from another piece of research that had as its object the discursive actions of other kinds of communities of inquiry. The analysis conducted for this coding revealed that, to be true to the epistemic principle of the faithfulness to the phenomenon, it is necessary to restructure the coding in order to make it able to determine the original profile of the phenomenon (Husserl 1982; Giorgi 1985; Mortari 2008).

4. The construction of the new coding was undertaken through a process in which each discursive act was taken singularly for examination to obtain a descriptive label that identified the specific quality of each act. The analysis revealed the difficulty of finding labels that precisely define the quality of the discursive acts and this meant that a cognitive experience involving deep reflexive and demanding work was required on the part of the researchers.

5. The analysis highlighted how many discursive acts remained uncertain in terms of defining them, thus clarifying the need to involve professionals in the discursive data analysis: through this, a revised coding and refinement of the labels was achieved.

6. The new coding was repeatedly redefined through a recursive process of analysis that started from the discursive interactions to verify the degree of descriptive adequacy of the labels: the aim was to achieve a faithful conceptualization of the different discursive acts, to put more detail to the meaning held by the participant for every verbal expression. This allowed for a coding that covered every discursive act with an adequate, clearly distinguished label, without overlap.

7. The descriptive labels were regrouped into categories that had analogous types of text units and they were then placed into homogeneous sets, producing a list of categories (classified by a colour code), with the aim of helping the identification in terms of characterizing the qualities that mark the different discursive profiles.

The coding obtained through this process is an analytical tool that is able to describe faithfully the quality of discursive practices, with the aim being to grasp the real essence of the discursive phenomenon.

Table 1

Category	Labels
Informative acts	starts an intervention
	describes
	narrates
	asks for data – gives data
	asks for explanation – gives explanation
	reconstructs therapeutic actions
	underlines his own decision
Assertive acts	declares agreement
	declares disagreement
	reiterates
Problematization acts	ask for clarifications
	introduces a doubt
	raises a problem
	questioned
	detects a critical issue
Normative acts	regulates the interaction
	shifts attention
Development acts	highlights a given
	exposes reasons
	makes assumptions
	exposes a thesis
	reformulates a thesis
	completes his own speech
Co—constructing acts	asks for attention
	consults others
	asks for agreement
	tries to intervene
	receives
	modifies
	echoes
	completes other's speech
	asks for operative indications
	takes up a proposal
Judgment acts	takes a positive view on the action of the other
	takes a negative view on the action of the other
	assesses patient's status
	irony
Deliberative acts	suggests
	proposes
	prescribes
Meta-reflective acts	expresses his cognitive acts
	expresses other's cognitive acts
	explicates a group's interpretation
	underlines a his own limitations

All of the categories in which the labels are organized, *according to a principle of saturation, express a specific group of discursive practices*:

• Informative acts: that provide information to the context;
• Assertive acts: that declare the position of the speaker regarding what is affirmed;
• Problematization acts: that have the effect of opening up the discussion to new scenarios;
• Normative acts: that regulate the flow of speech;
• Development acts: that reflect ideas expressed by others to build a common and deeper comprehension of the problem;

- Co-constructing acts: that are intended to build together the scenario analysis in a dialogue structure;
- Judgment acts: that express an evaluation of different elements (ideas, patients, procedures, etc.);
- Deliberative acts: that indicate the DM; and
- Meta-reflexive acts: that identifies the way in which subjects reflect on their own cognitive activity, extending it to the group.

In line with the aim of the research, the researchers focused their attention on the sequences that contained deliberative matter.

4.2 From the fields

Field A is an ICU that is partly merged with cardiac intensive care unit (CICU): the two wards share the same hospitalization area and the number of patients assigned to one or other structure varies depending on the needs of the patients. This organization, relatively recently, brought the maximum number of patients to be hosted by the ward up from 6 to11, but it has not yet seen an adjustment in the team numbers. The group, which is rather stable, has worked together for many years, and after the merger, it has remained unchanged in terms of the number of staff. The team's meeting transcriptions at first glance might seem to be a fragmented development in conversation, but is instead a shared conversational and collaborative framework characterized by a high level of harmony. This involves keeping all professionals within the ward in the loop, both doctors and nurses, and reveals a high level of participation by the nursing staff, which is a sign that this community is not hierarchical.

Table 2

			SP	P1	P2	P3	NUR
258	NUR	[humm::: and why:::]					asks for
259		We don't have the test result yet?					clarifications
260		Well::: he arrived yesterday:					gives data
261		three:: four:::					
262		twenty-four thousand eight hundredwhite cells eh::					
263	P2	Eh::			asks for data		
264		Have we done the procalcitonin test this morning?					
265	SP	Well: well told, have we?	echoes				
266	P2	I don't know: [I'm asking:			gives data		
267	SP	[hem… I don't know::	highlights a given				
268		[I don't see it:::]					
269	NUR	[Maybe we can do it now::]					suggests
270	SP	We do the procalcitonin test, ok?	proposes				
271		And the PCT test tomorrow morning::					

The SP is a physician to whom the head physician assigned the responsibility of running the ward: it is clear from this excerpt (Table 2) that her discursive actions are varied and that she interconnects her speech with discursive practices. For example, in this case, it is very interesting to note that the deliberative act of the SP is linked with the previous deliberative act made by the nurse, revealing the close and collaborative connection that exists between the various professionals within the team.

Table 3

			SP	YP	P1	P2	P3	NUR	C1	C2	NUR 2
73	SP	because::: they didn't found::	exposes reasons								
74		any vascular lesions:::.									
75		they did a C.T. angio during the surgery	narrates								
76		They even called the heart surgeon:::									
77		to put a stent probably,									
78		but actually they didn't found anything… anything									
79	P1	Holy mackerel, you are saying that they don't know where::::			raises a problem						
80		((external noises))									
81	SP	(But it is) this [(synechia)	makes assumptions								

In this second excerpt (table 3), the SP reconstructs the surgeon's actions but, instead of doing it through silent reflection, she chooses to do it aloud. This gave physician 1 (P1) the opportunity to grasp the information to draw conclusions through a problem aviation act.

Table 4

			SP	YP[2]	P1	P2	P3	NUR	C1	C2	NUR 2
82	P2	[E:h,] he had a tabotamp on… it is nice soaked				gives data					
83		This morning I saw it with her:::									
84		[(he is::: is giving tranex by infusion::)]									
85	NUR	[But that seven hundred written on the bag::]						introduces a doubt			
86		it was written five hundred									
87		in saline:::									
88	P2	The tes—yesterday we didn't do the::				highlights a given					
89		the coagulation test.									
90		This morning we have to do it:::				suggests					
91		When he arrived he do only the hemoglobin test				gives data					
92		and the other::									
93		[I didn't made:::.]									
94	SP	[(Ok I will look on it)]	declares agreement								

[2] The columns colored indark gray relate to individuals who are absent from the room in that moment.

This excerpt (Table 4) shows, as did the previous one, the high level of cooperation within the team that involves both the physicians and the nurses: this level of cooperation is proven by the strong interdependence between the discursive acts of all of the members of the team. Moreover, it is also a good example of how not only the leader (SP) but also the other physicians on the team use a large number of discursive acts, with the intention of clarifying what leads them to a decision; thus, socializing it. All of these excerpts show how the SP uses a large number of different discursive practices: here we can see informative acts, development acts, co-constructing acts and assertive acts, but the analysis of all of the transcriptions proves that she also uses a fair number of developmental acts and sometimes some meta-reflective acts. Her capability of expressing her thinking through this variety of discursive acts gives the team the possibility of being able to share in a communal cognitive process. In fact, making intelligible her analysis of the case to every member of the team shows her attempts to involve all of the professionals present at the meeting in the DM process. The team response to her behaviour results in them actively recognizing her leadership and adopting a similar discursive style: this reveals her being able to act as a director within the group, stimulating internal debate: this reinforces the cohesive force within the team and increases the quality of thinking, thus developing their critical and reflective attitudes. In conclusion, in this field, the deliberative acts are expressed both by the leader and by the physicians: when a physician takes this action, often his deliberative act is linked to others discursive acts, expressed by him or by his colleagues, especially problematization, development and co-constructing. The use of these particular discursive acts shows us the characteristics of the DM processes of this team: problematization acts show us how the team is used to sharing uncertainties, reinforcing its critical and reflective attitude. Whereas the use of development and co-constructing acts reveals the attempt to reinforce the team's cohesive force, thus building a shared reflection.

Field B has been renovated relatively recently: it has twelve beds and two isolation boxes, and was designed to support an open-access policy, with a dedicated separate access to each bed, so that every family can reach the bed of its own relative without having any contact with other patients. The patients that are hospitalized on the ward have very different profiles (postoperative, chronic, traumatic etc.) but very often they have come from local hospitals and this means that they are exposed to many multidrug-resistant infections. According to the ward's working schedule, every day the physicians and nurses devote two hours to talking with patients' relatives. The working group is rather young and, for the most part, they have come from a common academic setting. The leader (the head physician – HP) has promoted a division of labour whereby every doctor has a specific field of specialization, with the aim of increasing the professional skills of the whole team and the level of participation of all the physicians.

Table 5

			HP	P1	P2	RES
96	HP	[[is sensitive to all]] except for gent:: yes::	highlights a given			
97		It is sensitive to ampicillin:: hemm::				
98		to carbapenem::				
99	P1	But did she (already) take [carbapenem?]		asks for data		
100	HP	[(Teicoplanin:)]	completes his own speech			
101	P1	No she didn't take carbapenem[3]		gives data		
102	HP	No, right, I'm just saying its sensibilities (.)	echoes			
103	P2	I think she takes::			gives data	
104	HP	She had a klebsiella infection sensitive to (lattamics)	asks for data			
105	P2	(Yes to carbapenem and)			gives data	
106		(to lattamics too… it was sensitive to them too)				
107	HP	And moreover::: ehmm:	highlights a given			
108		there is this-				
109		this sensibility to ampicillins:::				
110		so:: seeing that she has no other marker:: eh:	exposes reasons			
111		and if we don't want to use carbapenem::				
112	P2	no no (I think it's better don't use carbapenem)		declares agreement		
113	HP	Well, so there is ampicillin:	proposes			

Also in this field, the team leader (HP) uses a large number of conversational acts, with a strong predominance of development acts, particularly when his actions are linked to deliberative acts: he makes his line of thought intelligible to other members of the team, providing a conversational context and training shape without being intrusive or oppressive.

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[3]She answers his question looking at the documents.

Table 6

			HP	P1	P2	P3	RES1	RES2
225	P2	But if [[the surgeon]] says::			makes assumptions			
226		because they say that						
227		she has been resected more times						
228		anastomosed more times						
229		etcetera etcetera:::						
230		[[the other surgeon]] I can't remember::						
231		I always forget his name:::						
232		he said that this site as soon as you open it						
233		with the adhesions thatit probably has::						
234		the stomach will be perforated on many sides						
235		and he would not be able to						
236		[able to keep it up::]						
237	HP	[well, maybe they are] theyare conservative	gives explanation					
238		because they have [fear::]						
239	P2	[Right::]			declares agreement			
240	HP	that the intervention [would be a disaster::]	exposesr easons					
241	P2	[So if they say:::]			completes his own speech			
242		that even if she is in septic shock						
243		even if she blasts away:: even if the tank is huge::						
244		we will never open her because it is much more dangerous:::						
245		then::: we wrap up			suggests			
246		the surgical option						
247		and we transfer her in the Emergency Medicine Ward						
248		so if they say::: let's seehow it goes						
249		because I think that [(because as intensivists::)]						
250	HP	[(Sure sure::: If it's so:::)]	declares agreement					
251		I agree with you						

As is well exemplified by this excerpt, during the discussion of the clinical cases, very often the HP's speech supports the other team members' analysing process, thus building a foundation that leads to a deliberative act, using development, informative and assertive acts. This instance also shows that, even in this field, the leader's discursive practices, characterized by the use of a large number of discursive acts, have an impact on the other physicians, prompting them to use a variety of discursive acts. Form these excerpts, what emerges with particularly clarity is the figure of the HP: his speech, even when measured for the number of occurrences and strength, is usually very indicative of his desire to improve the reflective attitude of his associates, expressed for example through his massive use of development acts. His discursive practice reveals his efforts to support the capacity of each team member to reach a deliberative decision and to express participative leadership in order to create a working environment marked by collaboration and sharing. Indeed, his way of acting produces an organizational climate characterized by trust and cohesion of the working group, which increases the knowledge about the patient state before moving towards deliberative act.

The HP operates as a kind of a "facilitator" who not only supports his associates on their journey towards acquiring clinician's skills, but also encourages them to develop reflective and interpretive skills, which is also proven by the fact that different members of the team use deliberative acts. In conclusion, the analysis of all the transcriptions reveals that, in this field, both the leader and the physicians use a large number of different discursive acts, with a clear predominance of informative and development acts, but also with a relevant number of problematization acts and also, although to a lesser extent, of meta-reflective acts. The high level of informative acts reveals how it is crucial for the team to increase their knowledge about the patient state as much as possible before proceeding towards a decision. While the significant presence of development and problematization acts highlights how the team gives importance to a reflective, collaborative and shared evaluation. This, in addition to the presence of meta-reflective acts, especially as used by the infection specialist to share her knowledge and reflection with the other members of the group, is revelatory of the team's desire to build a common reflective process, thus increasing the awareness of everyone in the group at the same time.

As previously mentioned, **field C** is part of a bigger ward managed by an HP who has informally delegated the task of supervising the ICU to a small group of SPs. Field C has ten beds organized into two separate rooms and an isolation box, which can accommodate from one to two beds. Many patients remain in the ward for no more than 24 hours and the average stay in the ward is3.7 days, which is far below the average for Italian ICUs. Even if the team members are aware of the issue in terms of infection control, all of the operators on this ICU are determined to maintain the low infection levels through the effective management of infections based on meticulously detailed practices of prophylaxis. The analysis of the transcriptions reveals that on this ward, the SPs work hard at the handovers, particularly to the SPs, in order to involve the other physicians in the assessment of the patients' conditions, thus supplementing each other without duplicating their efforts.

Table 7

			SP1	SP2	P2	P3	H NUR	NUR
157	SP1	He has not a fever, hasn't he?	asks for data					
158	Sp2	Yesterday he has not.		gives data				
159		(.)						
160	P2	no no				echoes		
161		(.)						
162	SP1	I::: I think he is [not well at all::]	makes assumptions					
163	P3	[well:: eh:: C.::::]				asks for data		
164		Has he got a fever this morning?						
165	NUR	no, he has 36. 8						gives data
[…]								
169	SP1	[I think:: m he is fair bad:::]	exposes a thesis					
170		after:: a: good period						
171		last week::						
172		I think that in the last three days::						
173	P3	[he is worsened]				completes other's speech		
174	SP1	[thing are] going	completes his own speech					
175		really bad.						
176		It is that I can not understand (.)	expresses his cognitive acts					
177		if it is just an :: (.)						
178		hepatic problem::						
179		an hepatic problem::: and what it follows,						
180		or: If there is an infective problem::						
181		This is not clear::: it is not clear for anyone::	raises a problem					
182		and:: [and also this:: It is not clear:::]						
183	P2	[But why…. Is bilirubin rising]?			asks for explanation			
184	P3	[Well:: thirty-eight thousand white cells::]				highlights a given		
185	Sp1	[Yes::: but everything is worsening:::]	gives explanation					
186		Yesterday I checked examinations						
187		everything is worsening::						
188		(…)						
189	P3	Well thirty-eight [thousand white cells:::]				echoes		
190	SP	[platelets are the same:]	highlights a given					
191		but thirty-eight thousand white cells are really many::						
192	P3	[Eh.]				receives		
193		(.)						
194	SP	Can we have a culture from	prescribes					
195		the ascites, today, please?						
196	NUR	Ok						receives

In this excerpt, one of the SPs, who collected the data, involves the youngest physician in a discussion through the use of development acts, problematization acts and also meta-reflective acts.

Therefore, this clarifies that, also in this field; the leaders reveal to all of the meeting's participants their reflective process, involving them in a common analysis of the patient's status. This discursive behaviour shows not only the formative intentions of the leaders, but also their complete confidence within this team in which they feel free to make explicit their own thoughts.

Table 8

			P3	HP	P4	H NUR	NUR
37	HP	(.) And now another thing		raises a problem			
38		she is doing::: for Heaven's sake					
39		I know it's frightening but::					
40		meropenem and tigecycline					
41		one of them is is enough:::		exposes a thesis			
42		I think that we can take meropenem off:: ( )		proposes			
43		(.) [or do you prefer that we wait?]		asks for agreement			
44	P4	[It is for the pseudomonas that we:::]:=			highlights a given		
45	HP	eh		receives			
46	P4	for the pseudomonas pseudomonas ( )			echoes		
47		(.)					
48	HP	do you prefer that we wait:		echoes			
49		she did:: she did a swab::		exposes			
50		(.) but this swab:::		reasons			
51		staphylococcus is growing::					
52	P4	ah [yes… you are right]			declares agreement		
53		[((the telephone rings))]					
54		(.)					
55		tigecycline it's enough					

When the HP is at the meeting, his efforts to involve the youngest physician are even more evident: he uses development acts, but also problematization acts and meta-reflective acts to introduce, explain and support their deliberative acts, and furthermore uses co-constructing acts with the aim of involving the other physicians in the DM process. The analysis of all the transcriptions shows that, in this field, even if the deliberative acts are mainly, but not exclusively, used by the SPs, they connect their decisions with a fair number of development, problematization, co-constructing and meta-reflective acts. As in the previous fields, the use of problematization acts shows the attempt to reinforce the team's critical and reflecting attitude, whereas the development acts reveal their desire to involve the team in a common analysis of the patient's status. However, the high level of use of meta-reflective acts reveals the attempts of the SPs to transform the team into a thinking community through their making intelligible their line of thought to every member of the team. Field D, similar to what we saw in field B, was renovated quite recently: it has eleven beds, four of them in separated boxes (two single ones and a double one) which are reserved for patients without mechanical ventilator. Field D is a trauma centre, a ward that provides critical care for different forms of traumatic injury. The HP, who is also responsible for other wards, has delegated the role of leader within the team to an SP. He is strongly convinced that the antibiotic therapy should start following the arrival of laboratory reports in order to better target the therapy and for him to adhere to this position is a *conditio sine qua non* to be part of his team and this issue is central to the affiliation agreement between him and his associates. From the analysis of the team's meeting transcriptions, the figure of the leader (SP) and his discursive practices emerge clearly.

Table 9

			SP	P1	P2	P3	P4	NUR
59	P1	He is not really		describes				
60		filled::		s				
61	SP	We keep him dry?	asks for explanation					
62		((He turns to P1))						
63	P1	No, not really dry:: [But the PiCCO monitor:::]		gives explanation				
64	P2	[(there is a kind of rigidity::)]			gives explanation			
65		[(that keep::)]						
66	P1	[No:: it's that] we try to expand:::		gives explanation				
67		[he went beneath one hundred::]						
68	P2	[the bowel loops::]			gives explanation			
69		are inflat[ing:::]						
70	SP	[A::h]	regulates the interaction					
71		(.)						
72		I see::: now::: well::						
73		(.) ((He turns to P1))						
74		[well:: now we =						
75	P1	[But it is not that::]:		introduces a doubt				
76	SP	=have to abandon these fears	prescribes					
77		and do our normal routine]						
78	P1	[No no.]		declares agreement				
79		It's our normal routine, I think:::						

This excerpt makes clear how in this field, the leader uses normative acts much more so than was done in the other fields, and that sometimes (as in this example) they were connected to deliberative acts. It is also very interesting to note that he not only prescribes an action, but also an attitude that every member of the team must have. The regulative intention of the SP is clear to his collaborators, in fact P1, who was introducing a doubt, immediately stops his speech and expresses an affiliation with the leader. This dynamic is very revealing because, unlike what happens in the other fields, the problematization act is not linked to development act, but instead is instantly blocked by deliberate act by the leaders who make a decision without taking into account the doubt expressed.

Table 10

			SP	P2	P3	P4	P5	NUR (C.M.) 4
155	P2	So he has a PiCCO:: The endings show a patient::		describes				
156		show a patient essentially (.)						
157		empty:: with a high cardiac index and::						
158		low resistances:: was taking dobutamine						
159		that progressively was reduced, maybe also because						
160		the propofol was reduced, so this leads						
161		to a progressive increase of blood pressure						
162		(.)						
163		And:: I said that diuresis was a bit decreased:::						
164	P2	and::: inverted electrolytes:::						
165		I did a little 'filling::: then none:::						
166		and then I had no problem (.)						
167		Now::: when this morning they were washing						
168		he was still complaining of pain:::						
169	NUR	mmm						receipts
170	P2	"the stitches are pulling" he said		describes				
171	NUR	The wound hurts, the [abdomen hurts.]						completes others speech
172	P2	[See I don't know] if now:: we can imbricate:::		makes assumptions				
173		that is that remifentanil::: I don't know if maybe you want:						
174	SP	Give him four vials of morphine	prescribes					
175	NUR	Four [vials of morphine::]						echoes
176	SP	[Let's do a direct] chest x-ray please	prescribes					
177	P2	mhmh						receipts

Even in this excerpt, the leader refuses to connect his deliberative acts with the other physician's discursive act, revealing clearly the leadership style that characterizes this team. The sub ordinate role assumed by the employees is underlined by the fact that the only physician who speaks is the one that has the task of reporting the state of the patient to the team. The only other member of the team involved in the discussion is the nurse, who simply expresses affiliation through co-constructing acts. The analysis reveals that field D has a discursive profile that is significantly different from the other fields. First, the deliberative acts are mainly expressed by a single person: the leader.

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4 Nurse case manager.

Moreover, he states his decisions *ex abrupto*, not introducing them with some other discursive acts or connecting it with others' discursive acts. In this way, the leader does not present his deliberative act as the final point of a reflection that the team can follow and this dynamic weakens the bond between the leader and his collaborators. This is confirmed by the fact that the leader uses normative acts much more so than was done in other fields, and that sometimes these were connected to deliberative acts: the SP thus expresses an overbearing and regulative discursive profile in a top-down approach.

8. Conclusions

The main findings of the research are split into two subsequent sections: from *a methodological point of view, the construction of an analytical tool that is able to c*apture *the richness of such a complex and elusive phenomenon as the DM processes in ICUs is key*. The approach we used to build a system of analysis (describing labels, conceptual labels) that was able to capture the discursive actions in a faithful way owes much to naturalistic inquiry, because the strategy utilized to reshape the research design occurs in the midst of the process in order to make it coherent in terms of the data emerging from the fields. The use of a rigorous qualitative method was essential in order to face the epistemological challenge: a continuous reflective approach allows us to overcome the risk of using a less precise method (Mortari 2014).

From a content point of view, the research *permitted* the formulation of descriptive theories of the DM processes that emerged during the meetings. The findings reveal a common framework that identifies the elements that shape the DM processes in an ICU and how the discursive practices affect them. First, the presence of a relevant number of development and problematization acts is related to a team in which the deliberative acts are expressed by more than one person and the DM is shared. The presence of meta-reflective acts is related to a group in which there is a gradient of knowledge between the team's members and the will to fill any gaps, revealing formative intentions and the desire to raise the reflective capacity of the team. These elements prove that the high levels of cooperation existing within these teams leads to a real co-constructed DM approach. On the contrary, where a single person expresses the deliberative power, we have observed the presence of a significant number of normative acts, identifying this as a tell-tale sign of a direct and top-down approach and a low level of team participation in the DM processes. The comparison between the different descriptive theories reveals the profile of different ICUs concerning their DM strategies. The richness and the diversification of discursive acts are connected to the capability of the leader (the head physician and SP) to be supportive and respectful of his or her associates, and to build a shared critical and reflexive thought process. When this did happen, we saw a distribution of the deliberative power and a sharing of the DM. Both of these features transmit the importance to every team member of involving every professional in the clinical action guided by mutual support that was cooperatively aimed at the patient.

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