

On care and the sensitive experience of caregiver activity in simulation situations: a possible model for encounters between health practitioners and their patients to enhance communication training

Lucie Cuvelier

▶ To cite this version:

Lucie Cuvelier. On care and the sensitive experience of caregiver activity in simulation situations: a possible model for encounters between health practitioners and their patients to enhance communication training. S. Flandin, C. Vidal-Gomel, & R. Becerril Ortega. Simulation Training through the lens of Experience and Activity Analysis - Design improvements for healthcare, victim rescue and population protection, Springer, 2022, 978-3-030-89566-2. hal-03900357

HAL Id: hal-03900357

https://hal.science/hal-03900357

Submitted on 15 Dec 2022

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

On care and the sensitive experience of caregiver activity in simulation situations: a possible model for encounters between health practitioners and their patients to enhance communication training

Ciccone Elodie, Cuvelier Lucie, Bationo-Tillon Anne, Decortis Françoise Université Paris 8 France

TOWARD A GREATER UNDERSTANDING OF CARE PRACTICES IN MEDICINE

Beyond the "cure" mindset

The doctor was previously considered the sole custodian of medical knowledge, a knowledge today built on the foundations of evidence-based medicine (Bizouarn, 2007). Diagnosis in this approach is regarded as the objective and depends solely on patient symptoms, with cures being subsequently prescribed in accordance with a set of standards, or "golden rules," that apply to specific situations. Virtually all medical students today are trained in Evidence-Based Medicine (Greenhalgh, 1999). However, in the face of the crisis of contemporary medicine, whether from the perspective of the physicians, who no longer identify with their work, or of the patients, who have become more involved in healthcare processes and who feel increasingly "neglected," Klein (2014) suggests that a reevaluation of the current and future role of the medical profession is necessary.

On the one hand, patient perspectives on illness have evolved, patient empowerment improving the patients' ability to understand and cope with medical conditions (Breton, 2019). On the other, "a narrative-based model of medicine" has emerged, providing a better understanding of both the carer's role and of caregiver-care receiver interactions. Diagnosis in the current healthcare process is no longer solely established on perceptible clinical symptoms but is likewise based on the respective histories of the patient and the physician. These developments have led to a greater understanding of *care* practices in medicine, in other words "the work carried out in response to the needs of others" (Molinier, 2006 p. 145). Traditionally defined as the application of knowledge to benefit individual patient needs without being limited by or merely complementary to the administering of treatments (cures), care practices in medicine can be regarded as invisible, since the actions carried out are not necessarily tangible (Hesbeen, 2002). Practicing care, in other words, involves treating the patient "as a whole" (Molinier, 2013) by employing such interpersonal means as eye contact, verbalization, touch, and other expressions of feelings and emotion (Hirata & Molinier, 2012; Pernet, 2013).

Ironically, despite the increased recognition of the impact of care on treatment quality and safety (Eyland, 2017; Pernet, 2013), and the multiplication in recent years of studies and theoretical models dealing with interpersonal relationships (patient participation, proper treatment, etc.), it is clear that "the link between the patient and the caregiver has gradually become frayed," with technique today prevailing over care (Eyland & Leblanc, 2019).

Care beyond notions of non-technical skill

With these invisible facets of caregiving generally unaddressed in current medical school curricula, educators are searching for new care transmission methods (Eyland & Jean, 2016). In doing so, they often emphasize so-called "non-technical" skills, such as the improvement of interprofessional and doctor-patient communication capabilities (Bergström, Petersen, & Dahlström, 2008; Fletcher et al., 2003; Goupy et al., 2013). Such initiatives stem from an observation commonly reported in hospital departments: poor communication by healthcare professionals can directly result in negative care-related outcomes (Huet, Rosenstrauch, & Carlier, 2016). In environments where care quality and safety are of constant concern, team leaders commonly make use of "communication facilitating" techniques, such as check lists, clear and concise language, active listening, reformulation, and leadership, in order to ensure "orchestrated" communication, even in emergency situations. In keeping with these methods, caregiver communication programs have been developed to improve carer-patient relations and, consequently, the quality of care. The basic premise here is that communicating with patients and families requires structured instruction, much the way interprofessional communication does.

Unfortunately, training programs like these tend to reduce job-specific competencies to transversal and general healthcare skills. Thus, while the use of simulators to train healthcare staff, especially during the post-simulation debriefing phase, has led to new methods of skills development and communication, simulation-based training is largely driven by technical expertise. Few studies to date have analyzed whether simulated learning programs improve participant learning efficacy, what is more (Pastré, 2005). The gray area is even greater here given the fact that simulation-based training is focused not on medical techniques (cure) and human factors skills (crew resource management), but on healthcare staff communications and relations with patients. These programs have come under fire in recent years (Bourquin & Stiefel, 2017; Flandin, Poizat, & Perinet, 2019; Salmon & Young, 2011), the two main criticisms being:

- 1. standardized communication methods (frameworks, scripts, and other prompts) can be an impediment to individual patient encounters;
- 2. expert recommendations pertain to a fundamentally decontextualized form of communication, casting doubt on the very concept of improving aptitude or ability to communicate through training.

We believe that there is more at stake in these courses aimed at improving "communication skills" and, more broadly, "non-technical skills" than the instructors initially believe. "Because simulation training is a suitable framework for authentic, situated, embodied, and embedded experimentations for professionals, it seems to us that this type of training has much to offer." (book introduction) In other words, other aspects of the caregivers' work activity are developed during the sessions, which cannot be reduced to targeted, non-technical skills acquisition. While several authors (Bationo-Tillon & Decortis, 2016; Bonnet, 2020; Cahour, 2010; Decortis, Bationo-Tillon, & Cuvelier, 2016) have demonstrated the complexity of the participants' experience, having revealed the so-called invisible aspects of care practices liable to be exposed, and even debated, in courses designed for communicating with patients, current models do not take these aspects into account. And yet a better understanding

of the real activity that unfolds in such situations could provide leads for enhancing future training sessions.

Training through simulation, a potential space for sensitive expression

Analyzing the simulated activity

There are multiple theoretical models for the design of non-technical skills programs, as described by a good number of authors (Bouchot & Leblanc, 2019; Rudolph, Simon, Rivard, Dufresne, & Raemer, 2007; Sawyer, Eppich, Brett-Fleegler, Grant, & Cheng, 2016) (see introduction). Many of these training programs aim to provoke the development of professional experiences under safe and effective conditions using high fidelity simulation (SHF), as recommended by the Haute Autorité de Santé (HAS, 2012a, 2017) and the Direction Générale des Offres de Soins (DGOS, 2013). However, the representational design of these training programs, focused more on simulator lifelikeness and notions of workplace ecology than on the educational purposes and specific nature of the simulated situations, has been criticized by many schools of thought: simulation will never replace real experience, despite the significant advances of technology today (Béguin & Pastré, 2002; Cuvelier, 2018; Samurçay & Rogalski, 1998).

Thus, while these situations always refer to a real activity, they are first and foremost educational situations, i.e., situations designed, organized, and structured to meet predefined training course objectives (Ciccone, Cuvelier, Baugnon, Orliaguet, & Decortis, 2018; Cuvelier, 2018; Mayen, 2009). This observation led Horcik et al. (2014) to define this specific experience in simulation as "mimetic experience," i.e. an experience characterized by the double (or multiple) intentionality between the simulated work and the targeted work experience: the experience in simulation is both felt as an experience in itself (including the participants' awareness of the simulated situation as an enactment, an assessment, and a shooting) while being guided by "the real and embodied work activity upon which the simulation is based." Horcik's definition thereby emphasizes the importance of taking into account the activity that occurs during the simulated scenarios: as a rule, simulation procedures, and debriefing sessions in particular, are determined by predefined educational criteria (targeting regular work situations) that leave no room for discussions about the participants' lived experience in simulation.

And yet failure to account for the real experience of simulation is tantamount to neglecting experiential learning and potential inter-experience relations, or "resonances" (Rosa, 2018). Supported by research conducted in Cultural-Historical Activity Theory (Clot & Leplat, 2005; Daniellou & Rabardel, 2005; Vermersch, 1994), we propose that the efficacy of simulation sessions for professional development depends on discussions focused on both the work experience being targeted and on the unique nature of the participants' activity in simulation, on the lived experience. Nevertheless, that unique activity of an encounter with a patient (or the patient's relatives) remains poorly understood, and current models for simulation training are founded on curricula that fail to factor in the multiple dimensions of the encounter.

Taking into consideration "all" dimensions of the activity

Ergonomics and educational science have historically focused on the behavioral, physiological, biomechanical and cognitive aspects of activity (Bourgeois & Hubault, 2005; Bourgeois et al., 2006). More recently, the importance of the dimensions of sensitivity inherent to activity have come to light, initially through studies on the role of emotions (Cahour, 2010; Cahour & Lancry, 2011), based, in part, on Damasio's work on how absence of emotion impedes decision making (2010). Conversely, research in sociology-philosophy (Rosa, 2018), psychodynamics (Molinier, 2006) and the sociology of work (Böhle & Milkau, 1998) argue against assimilating sensitive aspects to emotional response. Building on these concepts, we maintain that the sensitive experience of the work activity emerges from physical involvement, i.e., from a concomitant participation of the body's senses and emotions.

Sensitive activity therefore infers a way of being in the world, whereby situations can be perceived using imagination, without being limited by a rational perspective. It can thus be differentiated from analytical activity, whereby the object of an activity is carefully examined, described, broken down, and studied, to be qualified and made categorizable (Bationo-Tillon et al., 2013). This definition, founded on the work of Bationo-Tillon (2013) in the field of cultural mediation, whose MARO activity model offers a heuristic lens for assessing aspects of sensitivity in the activity of a museum visitor, makes it possible to consider the dynamics of the sensitive/analytical relationship while distinguishing the time period to which the experience refers: the present (the here and now), the past (the link to previous experiences), or the future (the forecasting of future experiences). Based on the singular nature of experience within the cultural sector, Tillon's work challenges many of the concepts, methodological arguments, and epistemological bases of ergonomics, and is therefore, we believe, a relevant conceptual tool for assessing the lived experience of activity in simulation situations.

OBJECTIVES AND METHODS

Hypotheses

The aim of the study described in this chapter was to enhance our understanding of the activity of caregivers engaged in a training simulation program designed by teaching physicians in pediatric anesthesia and critical care. The participants were observed over two training sessions. Our findings show that:

- the activity of an encounter between caregivers (doctors or health practitioners) and their patients is defined by therapeutic and medical (cure) concerns, as well as by caregiver response to the needs of the patients and families (care). The activity of a caregiving encounter targets four objects: treatments, patients/families, colleagues, and self (Flageul-Caroly, 2001).
- response to the four aspects of the caregiving encounter can be sensitive and/or analytical (Bationo Tillon, 2013).

The first type of response (the sensitive relationship) is distinguished by the emergence of the caregiver's sensations and impressions during the encounter with the patient. It infers a way of being in the world, whereby individuals and pathologies are perceived through the lens of

imagination and emotions, without being limited by rational perspectives. The second, the so-called analytical relationship, is characterized by the caregiver's taking a rational and analytical approach to the patient and the pathology. In such cases, concrete elements are factored in and carefully described, and the pathology/treatment is broken down and analyzed with the aim of better qualifying it for classification. When the object of the activity is seen through the lens of analysis, "[the patient], instead of being approached, understood, and embraced by the subject [the caregiver], is kept at a distance to be observed like a painting" (Bationo-Tillon, 2013, p.88).

Description of the observed "communication" training simulation

Developed within a pediatric anesthesia and critical care department, the observed communication training simulation was designed to provide caregivers with tools for interacting with patients (children from birth to the age of 18) and patient families. The aim of the simulations is to teach participants to identify and respond to the defense mechanisms of the parents of sick children, such as denial. The team of teaching practitioners who conducted the study were veterans in patient safety training simulation. The earliest simulation-based courses designed by the team were part of a decade-old effort to improve safe practices in healthcare. The simulations in question fall into one of two overarching categories:

- **High fidelity simulation for basic technical skills development.** These sessions were designed for novice physicians to ensure optimal preparation for "first time" field experience and emergency care situations (sessions such as crew resource management).
- Emergency care situation simulation, within the framework of obtaining an interuniversity qualification in traumatology. These emergency care sessions were designed for experienced physicians. This course has since evolved to include a scenario simulating the announcement of news to a patient's parents.

More recently, in keeping with the above-described scenarios, the training simulations have been expanded to include communication situations with the parents of sick children. The program is built around two distinct sessions. The first, which is intended for junior pediatricians, stems from an observation made by caregivers, and reported by teaching physicians over the course of their careers, with regard to certain communication situations: "Situations that involve the announcing of unexpected bad news or care-related complications are extremely difficult and are therefore a source of anxiety for the patients and caregivers alike" (Baugnon et al., 2015). The doctor's intervention in such cases is characterized by its suddenness. As the consequences of a "poorly made" announcement may be felt not just immediately but in the long term, a training simulation was consequently designed to provide inexperienced practitioners with tools for interacting with patient families in the best possible way. The second, more recent simulation session is specifically designed for healthcare staff working in pediatrics. Likewise, it is based on the observation that certain interaction situations between caregivers (nurses, nurses' aides), but excluding doctors, are extremely difficult and are therefore a source of anxiety for patients and caregivers alike. These health workers also frequently report feelings of being insufficiently prepared and trained, especially in skills specific to pediatric care. A training session including experiences in simulation was therefore purposely designed to meet their needs. Since healthcare <u>assistants</u> are not responsible for announcing bad news to families, the cases simulated involve ordinary caregiving situations, but with the parents of the patient present in the room.

The course material for both sessions was designed and taught by a multidisciplinary team of instructors (anesthesiologists and psychologists) and is divided into two main parts:

- a theoretical foundation built on interactive sessions, focusing on specific themes such as structuring interviews, modes of communication, and the defense mechanisms of patients, patient families, and caregivers.
- simulated interactions with the parents of a patient (child). The parents are played by professional clown actors from the association Le Rire Médecin trained to meet the specific needs of vulnerable populations in hospital environments. The simulated scenarios are filmed and last approximately 10 minutes; they are followed up by collective debriefings that last approximately 40 minutes.

The simulation scenarios for both sessions were inspired by existing cases (realistic situations) and were developed to explore the defense mechanisms of patient parent(s). In other words, to provoke the development of the healthcare participants' non-technical skills in communication, the simulations address the interactional processes at work in the predefined defense mechanism(s) ascribed to the professional actors (denial, anger...). One specific aspect of this training program is the emphasis it places on mimetic experience, in that the group as a whole is invited to take part in the subsequent debriefing session (the participants and instructors, but also the actors who played the role(s) of the parent). The instructors, at the time of our initial meeting, had several years' experience in communication training simulation and were presently interested in assessing the relevance of the program. While steps including post-simulation questionnaires had been taken to evaluate the relevance of the training course, a more detailed analysis of the participants' experience inside the simulated scenarios and a better understanding of the skills potentially developed could provide leads for enhancing future training sessions.

Methods

An initial observation of the simulation center introduced us to the general principles of simulation-based education and to the specifics of the training course. This enabled us to situate the verbalizations and actions of the caregivers (anesthetists) and to establish the above-described hypotheses.

From this initial encounter, we also observed that, although the instructors were all trained in simulation debriefing, their methodology remains inchoate, i.e., it is based on the unfolding simulated procedure and not on an evaluation grid or checklist... At the start of the debriefing sessions, the instructors ask the participants to comment on the simulation experience: how they felt, the parts that most impressed them, the difficulties encountered. The exchanges are focused on what the participants consider the most relevant aspects of the simulated situation. The analysis of verbalization data, recorded during the debriefing phase and then fully transcribed, is thus a key to understanding the participants' perspective and experience during the simulated activity. It makes it possible to frame the results from the participants' perspective (Daniellou & Rabardel, 2005).

Systematic observations: data collection

A total of 4 days of training were observed, corresponding to 4 different groups. The groups of physicians in training were comprised of personnel who were not used to working together. The debriefing phase in this case was an exchange forum between colleagues who do not constitute a team. The caregiver groups were comprised of personnel from two departments who were used to working together. The debriefing phase in this case was seen as an exchange forum between colleagues who could potentially constitute a team (Caroly & Clot, 2004). Levels of seniority also differentiated the two groups, with the caregivers having 3 to 15 years of field experience and the doctors in training at the start of their careers.

Each of the 4 days of training was dedicated to 4 simulation situations. For each, we received copies of the recordings of the simulated activity (filmed by the instructors, as stipulated in the program); the debriefing sessions were filmed by us. Table 1 (below) provides an overview of the composition of the groups and the length of the recordings.

Instructors / occupation	Group composition	Scenario number	Description of announced medical condition	Scripted parent defense mechanism (actor's role)	Perceived level of difficulty	Length of simulation / debriefing sessions (in minutes)
4 teaching physicians	Groupe 1: 10 doctors in	M1C2	Case 2: polytrauma	Anger	Difficult	11/53
2 psychologists	training	M1C3	Case 3: bronchiolitis	Shock	Easy	11/47
3 teaching physicians	Group 2:	M2C1	Case 1: bronchiolitis	Shock	Easy	6/33
3 psychologists	8 internes	M2C4	Case 4: polytrauma:	Anger	Difficult	11/31
3 nurses 2 teaching physicians practitioners 3 psychologists	Group 3: 1 childcare assistant 10 nurses	P1C4	Case 2: a new cannula needs to be inserted	Parents in need of information	Easy	12/24
4 nurses 1 teaching	Group 4: 2 childcare	P2C1	Case 1: bronchiolitis	Parents are affectionate	Easy	8/26
physicians practitioner 3 psychologists	assistants 6 nurses 1 assistant nurse	P2C2	Cas 2: a new cannula needs to be inserted	Parents in need of information	Easy	12/38

Table 1: Systematic overview of the simulated situations: group composition, situation description, length of recordings

Data analysis

Our findings are based on the analysis of the audio-video recordings of the simulated situations and the subsequent simulation debriefings.

First, the a posteriori analysis of the films of the simulation situations enabled us to examine the behaviors of the participants (carers in training and actors) during the simulations. Next, by coupling our observations with the data from the debriefing sessions, we identified the objects of the participants' activity during the simulated situations, as well as the way they responded to the activity's goals. A similar classification was chronologically conducted for each of the simulated situations. A log was generated from the findings, as shown in the summary table below for the scenario M1C3.

Figure 1: Report on the activity of an encounter with a un patient – scenario M1C3

Length	The steps defined for making the announcement	simulation	Data from the debriefing recordings (films)	Object of	Type of situation	Strategies (How)	Relationship to the identified object
		"Do you understand what they were doing in the emergency room?"	/	Treatment	Identifying what the parents know	Ask questions	
3'20"	Preparing the right listening conditions	Wait until the father arrives	"the mother, feeling of helplessness, we are there to give her the news, but we can't do it [] we wanted to tell her 'it's going to be alright'"	Parents	Making sure you are being listened to	Wait	Sensitive

			Wait until the father asks to hear more	"The father, he was looking at his wife, so I couldn't tell if he was listening to me too"	Support	Making sure you are being listened to	Wait	
			"They put an oxygen mask on him in the emergency room to help him breathe"	/	Support	Explaining what has been done so far	Describe the situation, provide information	
		"It's an infection caused by a virus, his airways are congested" "he is fine"	/	Support	Explaining the current condition of the child	Describe the situation, provide information		
3%	40"	Announcing the news	"It's a common respiratory tract infection, children make a full recovery after having bronchiolitis"	"I think that most bronchiolitis patients suffering from pauses in breathing, once they are stabilized, they are fine [] here, the doctor and the mother are not on the same page"	Parents	Reassuring the parents	Keep them at a distance, provide information	Analytical

		"He is breathing on his own, but with the help of a machine to prevent anymore pauses in breathing"	/	Parents		situation, provide information	
		"Right, before				Describe,	
3'30"	Preparing the parents to see the child	Catheter in his arm	she enters the room and we haven't explained it all to her, and she sees her baby with all of those	Parents	giving the	Explain that the child is instrumented	Sensitive, then analytical
		"The nurses are taking care of him right now."	/	Parents	Reassuring the parents	Describe the situation, provide information	

RESULTS

1. The activity of encountering patients, an activity targeting four objects

The a posteriori observation of the training simulation videos in conjunction with the analysis of the debriefings enabled us to generate an activity log describing the encounters between the carers and the parents (actors). For each simulated case, the recurrent (prescribed) phases of the activity along with its associated objects were identified. The results showed 4 families of activities, classified according to the targeted objects:

- The first type, the "cure," refers to the technical and rational dimension of the caregiving activity (Lalau, 2021). The object here is patient treatment, which may be technical, therapeutic, or procedural.
- The second is related to care, i.e., the activities carried out "in response to the needs of others" consisting in "anticipating the difficulties and needs of others" (Molinier, 2006, p.145). In this case, the object of the caregiving activity is the patient and his or her families; in pediatric care situations, it is very often the parents to whom the caregiver refers.
- The object of the activity of the third type is the carers themselves. This type of activity is related to actions of self-protection and personal development. The object is not to provide care, because other people are not the object here, but it is tied to the idea of taking care. In this case, it concerns notions of taking care of self, i.e., of the carers' integrating their own activities, resources (physical, cognitive, psychic, and emotional), and experiences into decision-making and analytical processes.
- The last family of activity pertains to the activity's collective dimensions. In this case, the object of the activity is the caregivers' colleagues, including their professional associates and all other staff members involved in the care process.

These findings substantiate our hypothesis drawn on the works of Caroly (Caroly & Weill-Fassina, 2004a, 2004b; Flageul-Caroly, 2001). They enabled us to establish a model for the activity of encountering patients, with care and cure constituting two of the four objects involved in the activity of communication between caregivers and their patients. (see Figure 1).

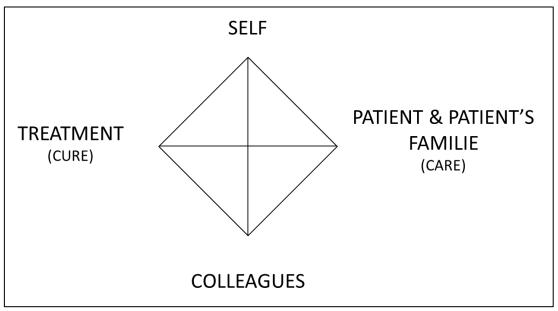


Figure 1. A model of caregiver activity during encounters with patients. Based on Caroly's quadripolar model (Caroly & Weill-Fassina, 2004b; Flageul-Caroly, 2001)

2. A sensitive or analytical relationship to the objects

The findings, and the data from the debriefing sessions in particular, show two types of response to these objects, as well: sensitive and analytical (Bationo-Tillon, 2013). Sensitive relationships to the object of the activity are distinguished by the emergence of the caregiver's sensations and impressions during the encounter with the patient.

The first type of response (the sensitive relationship) is distinguished by the emergence of the caregiver's sensations and impressions during the encounter with the patient. It infers a way of being in the world, whereby patients, families, and pathologies, and, more generally, the care situation involving the team, can be perceived through the lens of imagination and emotions without being limited by rational perspectives. This sensitive relationship to the object shows that the encounter with the patient cannot be reduced to the mere compilation and subsequent analysis of clinical symptoms and data from the different areas of work activity. On the contrary, the encounter activates the ability to "feel," activating, therefore, not just the caregiver's memories of previous experiences of relationships to the object but an overall physical and emotional response (Böhle & Milkau, 1998). The second response, the so-called analytic relationship, is characterized by the caregiver's taking a rational and analytical approach to the patient and the pathology. In such cases, concrete elements are factored in and carefully described, and the pathology/treatment is broken down and analyzed with the aim of better qualifying it for classification. When the object of the activity is seen through the lens of analysis, "[the patient], instead of being approached, understood, and embraced by the subject [the caregiver], is kept at a distance to be observed like a painting." (Bationo-Tillon, 2013, p.88).

This distinction between two types of relationships to the object allows us to analyze and evaluate the sensitive experience in communication training. Current research and prospective future studies should look at the different ways these relationships can be developed and

combined according to certain characteristics, such as the objects targeted, the caregiver's function (doctor or healthcare assistant), and seniority. Our ongoing cross analysis seems to indicate that sensitive relationships to the objects of the work activity were more prevalent among the nurses and care assistants observed during the simulations. Obviously, before making such a distinction, we need to bear in mind that in real situations, these two types of relationships are not mutually exclusive and are often consecutive, and even simultaneous. It could even be suggested that the mutability of these two relationships makes it possible for the activity of encountering patients to unfold. In terms of training, this facet can be mobilized as a resource for understanding the way that the analytical and sensitive elements of an activity interact, with the purpose of verifying that each of the components can be developed without gaining ascendancy over the other and thus hindering the actors' ability to act.

CONCLUSION

The findings of our study seem to indicate new avenues in communication training. By considering all types of activity (care, patient and family, self, and others) and the way they interact in work situations, it is possible to ensure that critical dimensions of the activity are not overlooked.

Indeed, while providing care is the primary and most visible goal of the work activity (what caregivers are asked to do), other types of activity associated with caregiving are also part of the caregiving experience. In other words, the activity of the caregivers does not only consist in doing what they are asked to do; it is also a question of negotiating different work goals. One way to improve simulation training resources is to focus therefore on the ways in which this balance is achieved. In short, we believe that taking into consideration the care professionals' relationship to the work activity makes it possible to gain a better understanding of how they negotiate different goals. In this study, the participants' sensitive relationship to work activity objects consists in letting themselves be affected by them, in letting their feelings emerge when interacting with them.

This sensitive relationship does not only pertain to the objects related to "caring," but also to those more rational objects associated with "curing." Thus, the more ways subjects are able to relate to the object of their work activity, the more opportunities they have for developing their capacity for action. In other words, the twofold development of the analytical and sensitive dimensions of the work activity goes hand in hand with the development of the participants' power to act. Though the sensitive experience of the work activity seemed to be more common among the nurses who took part in the training sessions, we believe these dimensions of sensitivity are just as prevalent among the junior doctors who participated. They are simply less verbalized and, therefore, less visible. A debriefing session integrating the verbalization of the work activity in all of these areas is therefore a promising avenue for helping the participants develop a greater sense of agency at the workplace.

- Bationo-Tillon, A., & Decortis, F. (2016). Understanding museum activity to contribute to the design of tools for cultural mediation: new dimensions of activity? *Le travail humain*, *1*(76), 53-70. doi: 10.3917/th.791.0053.
- Bationo-Tillon, A., Lahoual, D., Alexandre, D., Mateev, C., Tichadou, C., & Decortis, F. (2013). Les activités muséales et les médiations culturelles: de nouveaux terrains d'études et de nouvelles collaborations pour l'ergonomie. *Article soumis au 48e Congrès de la Self 2013*.
- Bationo Tillon, A. (2013). Ergonomie et domaine muséal. *Activités*, *10*(2), 82-108, http://www.activites.org/v110n102/v110n102.pdf.
- Baugnon, T., Duracher, C., Jacquelet, E., Le Ficher, G., Perié, A. C., & Orliaguet, G. (2015). Communication et simulation en anesthésie-réanimation pédiatrique: retour d'une expérience pilote. *Anesthésie & Réanimation*, 1, A129. doi:https://doi.org/10.1016/j.anrea.2015.07.199
- Béguin, P., & Pastré, P. (2002). Working, learning and designing through simulation. In S. Bagnara, S. Pozzi, A. Rizzo, & R. Wright (Eds.), 11th European Conference on Cognitive Ergonomics: cognition, culture and design, (pp. 5-13). Catania, Italy.
- Bergström, J., Petersen, K., & Dahlström, N. (2008). Securing Organizational Resilience in Escalating Situations. Development of skills for crisis and disaster management. In E. Hollnagel, F. Pieri, & E. Rigaud (Eds.), *3rd International Symposium on Resilience Engineering* (pp. 11-17). October 28 30, Antibes Juan-les-Pins, France.
- Bizouarn, P. (2007). Evidence-based medicine: méthodes et critiques. *Annales Françaises d'Anesthésie et de Réanimation*, 26(4), 334-343.
- Böhle, F., & Milkau, B. (1998). De la manivelle à l'écran. L'évolution de l'expérience sensible des ouvriers lors des changements technologiques. Paris: Eyrolles.
- Bonnet, T. (2020). La régulation sociale du risque émotionnel au travail: Octarès Editions.
- Bouchot, H., & Leblanc, S. (2019). Observer ses pairs lors de séances de simulation haute-fidélité: une activité de nature ludique portée par des en-jeux sérieux. *Activités*(16-2).
- Bourgeois, F., & Hubault, F. (2005). Prévenir les TMS. De la biomécanique à la revalorisation du travail, l'analyse du geste dans toutes ses dimensions. @ctivités, 2(1), 19-36, http://www.activites.org/v12n11/bourgeois.pdf.
- Bourgeois, F., Lemarchand, C., Hubault, F., Brun, C., Polin, A., Faucheux, J.-M., . . . Albert, E. (2006). *Troubles musculosquelettiques et travail: Quand la santé interroge l'organisation*. Lyon: Editions de l'ANACT.
- Bourgeois, E., Albarello, L., Barbier, Jean-Marie, & Durand, M. (2013). Expérience, activité et apprentissage-Contribution. In L. Albarello, J.-M. Barbier, E. Bourgeois, & M. Durand, *Expérience, activité, apprentissage*. Presses Universitaires de France "Formation et pratiques professionnelles." p.1-12.
- Bourquin, C., & Stiefel, F. (2017). Formation à la communication clinique: malaise dans la médecine [Training in communication: medicine and its discontents]. *Revue médicale suisse*, *13*(549), 350-352.
- Breton, H. (2019). La reconnaissance des savoirs expérientiels du patient : Repenser les capacités narratives en éducation thérapeutique. Reconnaissance, validation et certification des acquis de l'expérience au Portugal, France, Belgique et Italie, 2019.
- Cahour, B. (2010). Émotions, affects et confort comme nouveaux déterminants de l'activité et de l'usage. In G. Valléry, M.-C. Le Port, & M. Zouinar (Eds.), *Ergonomie, conception de produits et services médiatisés* (pp. 273-305). Paris: Presses Universitaires de France.
- Cahour, B., & Lancry, A. (2011). Émotions et activités professionnelles et quotidiennes. *Le Travail Humain*, 74(2), 97. https://doi.org/10.3917/th.742.0097

- Caroly, S., & Clot, Y. (2004). Du travail collectif au collectif de travail. Des conditions de développement des stratégies d'expérience. *Formation et Emploi*, 88, 43-55.
- Caroly, S., & Weill-Fassina, A. (2004a). Développement des compétences professionnelles et collectif de travail aux guichets de la Poste. *Bulletin de psychologie, Tome 57*(1, 469), 49-53.
- Caroly, S., & Weill-Fassina, A. (2004b). Evolutions des régulations de situations critiques au cours de la vie professionnelle dans des activités de relations de service. *Le Travail Humain*, 67(4), 304-327.
- Ciccone, E., Cuvelier, L., Baugnon, T., Orliaguet, G., & Decortis, F. (2018). Qu'apprenonsnous du travail à travers la formation: étude exploratoire sur une situation de communication difficile en pédiatrie. *TransFormations-Recherche en Education et Formation des Adultes*, (18).Clot, Y., & Leplat, J. (2005). La méthode clinique en ergonomie et en psychologie du travail *Le Travail Humain*, 68(4), 289-316. doi:10.3917/th.684.0289
- Cuvelier, L. (2018). "Never the first time on a patient:" the stakes of high-fidelity simulation for safety training. *Development and Learning in Organizations: An International Journal*, 32(5), 23-25. doi:https://doi.org/10.1108/DLO-09-2018-131
- Damasio, A. R. (2010). L'erreur de Descartes : La raison des émotions (M. Blanc, Trad.). Odile Jacob.
- Daniellou, F., & Rabardel, P. (2005). Activity-oriented approaches to ergonomics: Some traditions and communities. *Theoretical Issues in Ergonomics Science*, 6 (5), 353-357.
- Daniellou, F. (2008). Développement des TMS: désordre dans les organisations et fictions managériales. 2ème congrès francophone sur les troubles musculo-squelettiques: de la recherche à l'action.
- Davous, D., Seigneur, E., Auvrignon, A., Kerjosse, B., Asselain, B., Brugières, L., Cerny, C., Corroyez, F., Desdouits, F., & Heard, M. (2010). L'alliance parents-enfant-soignants à l'épreuve de l'erreur médicale. *Archives de pédiatrie*, *17*(12), 1696–1708.
- Decortis, F., Bationo-Tillon, A., & Cuvelier, L. (2016). Penser et concevoir pour le développement du sujet tout au long de la vie: de l'enfant dans sa vie quotidienne à l'adulte en situation de travail. *Activités*, *13*(2), mis en ligne le 15 octobre 2016, consulté le 2018 octobre 2016. doi:10.4000/activites.2909
- Eyland, I. (2017). Les savoirs professionnels liés au care chez les infirmiers libéraux: construction d'un outil d'analyse des gestes professionnels liés au care dans des situations de soins. Université Montpellier.
- Eyland, I., & Jean, A. (2016). Exercice et apprentissage du métier d'infirmier: à la recherche du Care. Éducation et socialisation. Les Cahiers du CERFEE(40).
- Eyland, I., & Leblanc, S. (2019). Comprendre l'activité des infirmiers libéraux: légitimation de gestes professionnels liés au care dans une visée formative. *Activités*(16-1).
- Flageul-Caroly, S. (2001). Régulations individuelles et collectives des situations critiques dans un secteur des services: le guichet de la Poste. Thèse de doctorat en ergonomie, EPHE- LEPC, Paris.
- Flandin, S., Poizat, G., & Perinet, R. (2019). Contribuer à la sécurité industrielle "par le facteur humain." Un regard pour aider à (re) penser la formation: Regard, Foncsi.
- Fletcher, G., Flin, R., McGeorge, P., Glavin, R., Maran, N., & Patey, R. (2003). Anaesthetists' Non-Technical Skills (ANTS): evaluation of a behavioural marker system. *British Journal of Anaesthesia*, 90(5), 580-588. doi:10.1093/bja/aeg112
- Fournier, C., & Kerzanet, S. (2007). Communication médecin-malade et éducation du patient, des notions à rapprocher: Apports croisés de la littérature, Summary. *Santé Publique*, 19(5), 413-425. https://doi.org/10.3917/spub.075.0413

- Goupy, F., Abgrall-Barbry, G., Aslangul, E., Chahwakilian, A., Delaitre, D., Girard, T., Lassaunière, J.-M., Roche, N., Szwebel, T.-A., Dantchev, N., Triadou, P., & Le Jeunne, C. (2013). L'enseignement de la médecine narrative peut-il être une réponse à l'attente de formation des étudiants à la relation médecin–malade? *La Presse Médicale*, 42(1), e1-e8. https://doi.org/10.1016/j.lpm.2012.09.012
- Greenhalgh, T. (1999). Narrative based medicine: Narrative based medicine in an evidence based world. *BMJ*, *318*(7179), 323-325. https://doi.org/10.1136/bmj.318.7179.323
- Hesbeen, W. (2002). Care strategy. Care knowledge, between art and science. *Soins; la revue de reference infirmiere*, (666), 49-52.
- Hirata, H., & Molinier, P. (2012). Les ambiguïtés du care. Travailler, (2), 9-13.
- Horcik, Z. (2014). Former des professionnels via la simulation: Confrontation des principes pédagogiques issus de la littérature et des pratiques de terrain. *Activités*, 11(2). https://doi.org/10.4000/activites.963
- Horcik, Z., Savoldelli, G., Poizat, G., & Durand, M. (2014). A Phenomenological Approach to Novice Nurse Anesthetists' Experience During Simulation-Based Training Sessions: Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare, 9(2), 94-101. https://doi.org/10.1097/SIH.0000000000000021
- Huet, D. G., Rosenstrauch, C., & Carlier, D. (2016). Communication avec les soignants et les familles.
- Klein, A. (2014). La figure du bon médecin : Du rôle des mythes épistémologiques dans le processus de professionnalisation de la médecine française. *Recherche & formation*, 76, 61-78. https://doi.org/10.4000/rechercheformation.2236
- Lalau, J.-D. (2021). Le cure et le care. Médecine des Maladies Métaboliques, 15(1), 99-103.
- Lecorguillé, M., Thébaud, V., & Sizun, J. (2016). Visite médicale centrée sur la famille en pédiatrie hospitalière. *Archives de Pédiatrie*, 23(4), 405–410.
- Mayen, P. (2009). Activité et individualisation. Savoirs, (3), 53-64.
- Molinier, P. (2006). Les enjeux psychiques du travail. Introduction à la psychodynamique du travail. Paris: Petite Bibliothèque Payot.
- Molinier, P. (2013). Le travail du care. Dispute (La).
- Ollagnier-Beldame, M., & Coupé, C. (2019). Meeting You for the First Time: Descriptive Categories of an Intersubjective Experience. *Constructivist Foundations*, 14(2), 167-180.
- Pastré, P. (2005). Apprendre par la simulation: de l'analyse du travail aux apprentissages professionnels. Octarès éditions.
- Pernet, A. (2013). Coproduire un soin sûr et efficace: le développement des capabilités des patients en radiothérapie. Paris, CNAM.
- Ricoeur, P. (1983). Temps et Récit—Tome 1: L'intrigue et le récit historique.
- Rosa, H. (2018). Résonance: Une sociologie de la relation au monde. La Découverte.
- Rudolph, J. W., Simon, R., Rivard, P., Dufresne, R. L., & Raemer, D. B. (2007). Debriefing with Good Judgment: Combining Rigorous Feedback with Genuine Inquiry. *Anesthesiology clinics*, 25(2), 361-376.
- Salmon, P., & Young, B. (2011). Creativity in clinical communication: from communication skills to skilled communication. *Medical education*, 45(3), 217-226.
- Samurçay, R., & Rogalski, J. (1998). Exploitation didactique des situations de simulation. *Le Travail Humain*, *61*(4), 333-359.
- Sawyer, T., Eppich, W., Brett-Fleegler, M., Grant, V., & Cheng, A. (2016). More than one way to debrief: a critical review of healthcare simulation debriefing methods. *Simulation in Healthcare*, 11(3), 209-217.
- Vermersch, P. (1994). L'entretien d'explicitation. 7ème édition (2011) Paris: ESF.