The paradoxes of teamwork at a Pediatric Intensive Unit: exploring the psychosocial joints in health care

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The paper focus on teamwork and was carried out at a Pediatric Intensive Care Unit of a hospital in a city of the metropolitan area of Rio de Janeiro, Brazil. Two lines of analysis were adopted: the organization of care and the cooperation of professionals; the different meanings of care pursued by the teams and the directions for building a common care project. The theoretical approach considered intersubjective nature of teamwork and dialogue with different psychosocial literature. The field work was conducted from September to December 2011, including participant observation and interviews with 24 professionals. The rationalization of practice was associated with subjective contribution of the professionals, wich was expressed as zeal, mutual trust and support by mechanisms of collective mediation. The contrasting images between excellence and precariousness indicate unfavorable conditions for sustaining common values and beliefs.

Keywords: Health care. Quality in care. Subjetivity and management. Teamwork.
Introduction

The care quality issue in hospitals has played an increasing role in the agenda of managers, health professionals, and users. In the last decade, issues such as comprehensive care, care production, teamwork, acceptance, and humanization of health services have been occupying an increasingly prominent position in the sector’s discussions in the country1-4.

The multiprofessionality, as a plural work in their eyes, health knowledge and practices seek to provide a more comprehensive and resolute care to the health needs of users5 and, at the same time, set itself up as an integration and work coordination strategy6-8.

This article centers on teamwork in a hospital organization, having as its research locale a Pediatric Intensive Care Unit and it analyzes part of the results of the research developed within the masters in Public Health9. The study developed two axis of analysis, seeking to examine: (i) the organization, coordination of care, and cooperation among professionals in their work processes; (ii) the directions of work for the team and the ways to build a common care project.

The rationale for the study is based on the then understanding of teamwork as a device that promotes and coordinates the production of care in hospitals and that is part of the challenges of the health care qualification management.

We discuss teamwork articulating the ways of managing and organizing the work involving to a greater or lesser degree the team in its collective work, relational, interactive, and intersubjective nature that characterizes the work in health9.

Were integral to our research authors that propose the reconstruction of the handmade trace in clinical work, the centrality of the subject in health work, and thus the recognition of subjective mobilization of workers, issue central to the quality of health work. This understanding points to the delicate care coordination process in the hospital and to the construction of co-management, being fundamental to the autonomy of workers and their irreducible capacity of production of directions and of creativity2,3,8-11.

The theoretical approach adopted in the research thus sought a dialogue of the Collective Health field, through the literature that recognizes the micro-social aspects and shows the way for the construction of collective management practices, with authors of...
different psychosocial approaches that have in common the support in the psychoanalytical theory and recognition of the role of subjects. Some concepts of the Work Psychodynamics, developed by Christophe Dejours\textsuperscript{12,13} were highlighted for the understanding of care work, especially those of prescribed work and real work, setting and ingenuity of the worker. The French social psychology perspective was central, especially represented by Eugène Enriquez\textsuperscript{14,15}. This focus lays the foundation for understanding the organizational phenomena beyond a rational system of production of goods and services, considering it as a living reality, where the subjects live their affiliation desires\textsuperscript{10,16}. Thus, the role of the subject and the position they occupy in organizations is highlighted, not only on objective and functional basis, but also by the imagination via\textsuperscript{10,16}. The psychosociology is constituted as a clinical research perspective in which is central the issue of production of direction of the subjects and its effects in relation to the work\textsuperscript{10}.

Methodology

To understand the reality of everyday health team practices we investigated the Pediatric Intensive Care Unit of a public general hospital, a reference in care of medium and high complexity, located in the municipality of the Metropolitan Region of the State of Rio de Janeiro.

This study is inserted in the Evaluation of Innovative Experiences in the Scope of Organization and Management of Attention research in SUS Hospitals\textsuperscript{17}. The first stage of the research was based on the active search for experiences in SUS hospitals across the country, with 100 or more beds, via electronic survey, generating a database with 239 hospitals. Thus the selection of the studied hospital resulted from the research database analysis and the election of a hospital unity and a care sector with relevant initiatives in the context of hospital care quality. This study aimed to, through case study and a perspective of in depth qualitative assessment, analyze the singularity of organizational processes turning particularly to the issue of care management and teamwork in hospitals in the SUS.

The field research was conducted from September to December of 2011, including among their strategies: the participant observation of care scenes and meetings; and in-depth interviews. In total 24 interviews were conducted with professionals who have
belonged to the ICU team for at least a year, including industry leadership and nursing coordination, attending physicians, nurses, nursing technicians, physiotherapist, and psychologist. The selection of subjects participating in the interviews followed two criteria: (i) health care workers linked to the service and directly involved in teamwork, which included professionals with top and mid-level training, with the exception of professionals in training; (ii) belonging to the hospital staff for at least a year, seeking greater possibility of reflection and narrative about the daily practices in the service.

It’s important to mention that the study followed the ethical principles and conditions for the conduct of research involving humans as established in the Declaration of Helsinki (1989) and in the Resolution No. 196/96 of the National Health Council.

Results e Discussion

Organization of the Work in Pediatric ICU

The ICU (Intensive Care Unit) emerged in the 1940s in the United States, being established to focus on three components: patients in critical or limit condition, more expensive state-of-the-art technological resources, and highly skilled professionals to offer assistance to these patients and to deal with this specific equipment18.

The studied sector has eleven beds, two of these in isolation. The dynamic work of the Pediatric ICU is centrally organized in 24-hour night shifts. The shift consists of three to four attending physicians, two nurses on duty, five nursing technicians, and a physiotherapist. In the day to day of the unit other professionals make up the sector such as routine doctors, industry leadership, nursing coordinator, RX technicians, and referees, who are medical specialists and other health professionals such as from psychology and speech therapy. About a hundred professionals circulate in the ICU per month.

The organization in shifts structures the work in the industry but, above all, gives meaning to the teamwork experience to the professionals. Thus, each shift a subteam operates in the sector. It was not rare for the phrase “I can speak for the duty today, I do not work on other days of the week” to appear in the report of professionals.
Upon entering the ICU the technological apparatus is something that draws attention. The equipment that performs the medicating (infusion pumps) and monitors vital parameters emits lights and audible alarms 24 hours without stopping. Although the audible alarms are heard over a full day of work, professionals can not naturalize them. In hearing a different or extended sound someone will ask "From where does this sound come? Is someone moving in bed X? ".

If the Pediatric ICU is a place in which the rational and prescribed organization of the work\textsuperscript{12} dominates at the same time the liveliness of work is central, maintaining a constant state of intense attention and concentration on the part of professionals. If to detect a different noise a certain restraint and environmental discretion is necessary, the attention and concentration are states that have not been reached because they are prescribed, but because we are strongly committed to the work.

Beside the equipment, another element that marks the dynamics of teamwork in the sector is performing routines. The morning is the most intense. It may be possible to say that the first routine in the industry is the shift change that happens by professional categories. On weekdays, there is a staff meeting, coordinated by the routine doctor, called round, in which the clinical status of each patient hospitalized is discussed.

The nursing routine begins with the division of labor among nurses. A nurse is responsible for the preparation of the medication prescribed to all patients. This activity requires concentration to manipulate dosages appropriate for the weight and the right medication to each child. The other nurse remains in the "hall" and is responsible for organizing the work of the nursing staff that is made by bed binding. The division of work of these professionals, made by bed, not by activities, following organizational conceptions of work originated in the international literature on improving the quality and safety of patient seeking to increase the accountability of professionals for attention to the patient\textsuperscript{19} and it also responds to proposals of the Extended Humanization Policy Clinic\textsuperscript{1} that seeks the construction of the work process centered on the patient.

At first glance, the routine of nursing technicians stands out for repetitive and methodical work: baths, change of sheets and the bandages, checking vital signs, feeding, medicating at predetermined times, and performing water balance in three in three hours.
Although the routine of the technician expresses the prescribed work dimension\textsuperscript{12,13}, that is, the structural principles of any organization, the liveliness of this work that requires attention in monitoring the clinical picture is far from restricted to the filing of tasks, stating that the subjects always add subjective elements to work practices, conforming the real of the work\textsuperscript{12}. Thus, routines, protocols, and technological apparatus are instruments of assistance, but, at the same time, conform as elements that are fundamental to the work in the sector.

**The Round**

In the reflections on the organizations and the work in health authors of the collective health field give relevance to the regular team meetings to discuss cases, agree on intervention lines and establish the common care projects\textsuperscript{20,21}. These regular meetings are organizational arrangements that come from recognizing that health actions do not link by themselves, spontaneously, simply because workers share the same work situation and the same clientele, but understanding that for an integrated team, in which there is the articulation of professionals, it is necessary to highlight the connections between interventions realized\textsuperscript{5}; recognize and respect the differences and specificities of knowledge and practices of each professional\textsuperscript{6}; or consider the inter-subjective dimension present in healthcare organizations\textsuperscript{10,16} and its effects on the recognition of the other as a member and speaker in the teamwork.

In the studied Pediatric ICU the meetings for the discussion of attended cases are called round. During this meeting doctors exchange information on clinical data collected from surveys, build diagnostic hypotheses, discuss what type of procedure should be done, if there is a need for expert testimony, they develop, under the medical viewpoint, an individualized treatment plan, and, sometimes, discuss how much the team will invest in each case. That is, the round is the decision-making moment that has implications for the future of patients. All decisions made are recorded in a book that is filled by the routine doctor.
In addition to attending and routine physicians, industry leadership, the physiotherapist, and, sometimes, a medical expert, and, more pointedly, nurses participated in the meeting.

Although the round is regular and is open to the participation of professionals, the moments that professionals in other categories intervened spontaneously were rare. Although the meetings are characterized more specifically by medical clinic discussions, we found no questioning by non-medical professionals about the round: "Everything is agreed in the round then they call us and already go distributing the procedures that will have to be made, if you have any examination, there will be a discharge because there's already another child to enter (nurse)".

The round seems to be configured as an industry routine whose primary function is to coordinate the work of doctors, as one of them notes:

"The meeting is for this: to give guidelines. We as attending physicians trying to see if it fits in that path, if a shortcut will have to be taken (because) things will not stay the way they planned. Their function (management and routine doctor) is practically to give us a plan. Sometimes, we feel quite lost without planning".

Anyway, if the preparation of the treatment plan involves a subteam, the doctors’, the implementation and enforcement of health care activities is a task that includes the set of professionals who make up the team. The possibility of introducing changes in the therapeutic project is dependent on some actions periodically carried out by nurses and nursing technicians, since they monitor vital signs and clinical status in general, signalling to doctors information for decision making.

The model of organization and management of the daily work adopted in the Pediatric ICU approaches coordination mechanisms that rely on professional categories. This logic engenders devices of coordination of teamwork from the articulation of the various specialized work performed by each subteam, the medical, the nursing, and physiotherapeutic. With this, it will become apparent that the technical work in the Pediatric ICU is vertically hierarchical and that, although there is some interdependence of specialized
work, there is also a fragmentation in teamwork, approaching the Peduzzi description of "staff grouping"\(^6\).

Even if the round does not show itself as a space that favors an interdisciplinary dynamic integration of the ICU staff, on the other hand, it is not just an instrumental moment in which the therapeutic management of patients attended are established.

The report of another doctor gives us clues about the role of the therapeutic plan in the round: "[...] the round goes to space in two or three hours (if) the child develops badly. [...] The vast majority are like this, child in serious case does not respect planning." In fact, the severity of care cases and the unpredictability of the clinical course of patients give a fleeting setting to the round and to the individualized therapeutic plan. In this sense, a paradoxical movement was identified by us: although the transience of the individualized therapeutic plan established in the round is recognized, the discussions and exchanges established are relevant and make themselves necessary to professionals by just exercising a subjective and unconscious function of continence and metabolism to their members\(^22\) and therefore of psychosocial support to the complex care work. The discussions in the round are essential primarily to physicians, due to the support in the decision making in daily work in the Pediatric ICU, but they also provide security to other professionals who share the care established in the decision taken.

We understand the round and individualized therapeutic plan not only as an expression of the technical potential of the doctors, but as an intersubjective mediation space, of exercising an intermediary function\(^23\) and of connecting the professional to the organization and work. We can assume then that in this protected space not only a therapeutic approach is constructed collectively, but from the social psychological reading of the organizations\(^14,15\), we understand such a device provides, above all, the psychological and imaginary investments\(^15,16,24\) that support the adherence of professionals to the work and its subjective ties with the industry.

The Possible Cooperation in the loopholes of the prescribed work
The challenge in discussing the mechanisms of coordination of the Pediatric ICU team work is not limited to the ways the industry structures its routines and operating dynamics. On the limits of "prescribed work"\textsuperscript{12,13}, it's possible to notice other elements that make up the work process of the Pediatric ICU staff.

The agreements and adjustments are mechanisms present in the team's everyday. Even though they seem to be a simple thing since they're part of the professional everyday life, they're mechanisms that promote the exchange between team members and the articulation of the specialized work done by each one. So that the adjustments are elements accepted and shared by the team they should be based on the establishment of trust. Trust is of the sensible order and of the primitive and unconscious field of experience and is established from a condition that is subjective and internalized by individuals, based on their own normative capacity and sharing of an experience with each other\textsuperscript{12,25}.

A nursing technician highlights the creation of a "scale" that, although simple, ensures safety in the proper administration of nebulizations. This scale shows the ingenuity and zeal that the professional has in assisting sector patients\textsuperscript{12}. "A child was prescribed alternating nebulizations [...] then I make a piece of paper, my scale. [...] Sometimes I can not do it, then the physiotherapist says, 'I have already done and checked it'. It will not fail to be done".

What Dejours\textsuperscript{12} understands as ingenuity and adjustments concerns the actual work and the employee's possibilities to discover, create, and innovate ways of working in the work organization\textsuperscript{13} from interpretations made from what is prescribed at work, but also from experimentations on the job. In the same vein, Barros and Barros\textsuperscript{26} argue that the real health team work takes place as a co-engendering plan, where workers and the producing process constitute themselves in/by meetings realized and operated in everyday service situations. According to the authors, the experience of working is, for each worker, an expression of what he lives in a unique way and, at the same time, of what the worker collectively in the management of work processes. Here it is important to highlight the resonance between the plan of the subject and of the collective and, thus, the psychosocial articulations\textsuperscript{10,16}. 
We recognize in the work dynamics of the Pediatric ICU team again here, the establishment of paradoxes, understood from the psychoanalytical reading of Donald Winnicott, as coexistence, of subjective functions and thoughts, apparently distinct or contradictory. In the study of the ICU the rationalization and prescription of the work process, while necessary and important, does not cease to demand nor dispense the subjective contribution and creative character of the action of the worker. What caught our attention in the case of the scale created by the nursing technician, was that the ingenuity, the singular investment of the worker led to a new normative instrument, or we might say, to a new element of work standardization, with the establishment of a new mechanism of control of the work process that favored its practice and that of other colleagues. Thus, we can assume that it is necessary to cross polarities in explaining the care processes and to follow with a more complex look in which instrumental rationality and intersubjectivity intertwine.

In reading Dejours and Barros and Barros we can see the emphasis of these authors to the theme of creativity in health work. Miranda in considering creativity in the context of health organizations relies on the understanding of Winnicott and highlights the role of trust as a condition for professionals to share, experiment, and express work in a more creative, spontaneous, and unique way. For the author, the confidence in the organizational dynamics and teams can favor the experience of transitionality – the transit between the inner world of the subject, marked by their desires and fantasies, and external reality, with the organizational objectives and purposes – and, in this way, it may come to favor the construction of open spaces to accommodate the deadlocks and the unexpected, as well as the development projects for their creative coping.

In the Pediatric ICU studied, the times of aggravation or emergency readjust teamwork in order to engender more cooperative work processes among professionals. A common expression among professionals is "when things get rough everyone has to get along". These moments seem to set themselves in unforeseen or delicate situations that point to the capacity for common work and collective coping.

A doctor reports a situation that occurred on duty at night, when three children went into cardio-respiratory arrest, but there were only two attending physicians. For the
third child support was given by nursing professionals under the supervision of doctors: "At one point three kids arrested at the same time. One of the doctors was in one, I in another, and the other arresting. I spoke (to the nurses), 'Guys, do this, do that'. (doctor)

The incident seems to indicate that the foundations of cooperative work are in the trust established among professionals. Security to rely on the other, though essential in teamwork, requires constant construction.

In environments such as the Pediatric ICU, we observe another paradoxical condition when we consider the issue of cooperation among professionals. If the basis of cooperation is trust between professionals, an essential inter-subjective element, however, this is always a precarious condition, and in our study we saw that it supports itself on and requires a construction that is made both in sharing pre-established and repeated routines and protocols, as well as in the team's ability to give impromptu answers "when things get rough". The possibility of developing a more collaborative work happens then in the sharing of a common work history, written by individual experience and collective articulation of technical elements of structuring and inventiveness and spontaneity that allow confidence to emerge among the team members.

Anyway, we saw that the adjustments, agreements, and ingenuity are present in the work of the Pediatric ICU and foster cooperation among professionals and coordination of specialized work. If in the previous section we saw that the teamwork care scenario was structured based on the business logic and the prioritization of the technical work, although these are important elements in the work organization in the industry, are not the only ones. In fact, at times we saw that the "team is grouping", in others it is a "team integration"; sometimes the fragmentation and the logic of the professional categories organize the sector's teamwork, and sometimes the team is capable of engendering cooperative processes, adjustments, internal agreements. The teamwork in the studied sector is complex and leads us to recognize the paradoxical and contradictory elements that structure the work process in the sector and also how this dynamic affects the way the subjects are able to assist and care.

The Common Project and the Imaginary Dimension in the Pediatric ICU
Another path of analysis of the teamwork in the industry was to ask ourselves about their group dynamics. According to the understanding of french social psychology\textsuperscript{14} it is the existence of a common project that constitutes the group. The joint project supposes a system of internalized values shared by the members of the group, having to be based on some collective representation or on the common social imaginary. The social imaginary would be “a certain way to represent to us what we are, what we want to be, what we want to do in what kind of society and organization in which we wish to intervene or exist”\textsuperscript{14} (p.57). But it is essential that such representations be not only intellectually thought, but also affectively felt\textsuperscript{14}. The social or organizational imaginary would function as a system of interpretation, production of direction that arises in the interaction between subjects\textsuperscript{24}.

We ask ourselves to what extent the Pediatric ICU was based on the establishment of a common project among the professionals. In fact, to consider the existence of a joint project in the industry is to examine whether they are constituted and shared representations and images that favor identifications and construction of direction for care practices.

The history of the Pediatric ICU is marked not only by the numerous difficulties in having professionals, equipment, and materials suitable to care, but the service itself arises as a result of the desire and struggle of some professionals to develop this type of care in a relatively new hospital.

Later, from 2007 on, the hospital starts to invest in processes of improvement of care practices following the perspective of the Hospital Accreditation\textsuperscript{4} and, topics such as patient safety, standardization of processes, and the quality of care are being emphasized. This approach to quality meets then the anchoring in the Pediatric ICU and comes to support itself on the sector we call quality and excellence imaginary.

Potent images arise: “The Pediatric ICU works. If you get a serious patient everybody will be on it, whatever the time. [...] This place makes a difference, we intervene and can have another outcome. And much because of the team”. The satisfaction with the quality and results achieved provides the excellence imaginary indicating that the experience of working in the Pediatric ICU makes sense for professionals:
"I love it here, it’s a riot. I was in another place, [...] I came back 2 years ago. [...] I am here because I really like it. If I was out of here I would be earning a lot of money. [...] Academically, this place gives an absurd return that nowhere else will give you in terms of human material. There are 11 beds, a diverse range of diseases that you will not find anywhere, besides the work environment being wonderful".

(doctor)

We worked with hypothesis that the Pediatric ICU’s quality and excellence imaginary is supported by professionals in a kind of narcissistic contract \(^{23}\). For Kaës the notion of narcissistic contract is based on the statements of Freud regarding narcissism, particularly, in the recognition of a double status of the individual. On the one hand, narcissism ensures the continuity of the individual’s investments on himself. On the other hand, each individual occupies a place in the group and therefore is invested narcissistically as bearer of the continuity of the social set. Thus, we understand that there is a double function in the ICU’s excellence imagination – it ensures the professional their value and, at the same time, strengthens the existing capacities in the group. The narcissistic contract is to ensure the transmission of the values, ideals, and beliefs that founded the Pediatric ICU as a joint project. In this way, the quality and excellence imaginary strengthens the bond of professionals with the service and the work, meets their desires of potency and of recognition of their capabilities.

Other images about the Pediatric ICU also gain prominence on account of professionals’ reports. In particular in the view of nursing professionals, the lack of professionals coupled with the intensive turnover of patients and the workload increases constitute images of "hard", "difficult work". For a nursing technician: "The work here in the ICU is good but could be better in terms of assistance [...] The Pediatric ICU patient has a lot of detail and, for having few people (nurses), it is a lot of work, it gets hard, difficult."

From images like this we consider the constitution of another imaginary in the ICU, the one of contingency, that expresses a certain fragility of imaginary identifications of potency and quality of the institution.

The difficulties of the professionals in being able to contribute in a unique way seem to weaken the work, functioning as a barrier to go beyond the prescribed.
"And the humanization? You can not humanize with 11 beds and 3 technicians. Sometimes I go out of here and do not know the name of the child for whom I cared. I only know that I gave the medication, changed the bandages, took all precautions. [...] The most important thing of our work was to get to know the mother, the child, ask what happened, because sometimes they tell us things they do not tell the doctors. Tell us things that, suddenly, are important in the diagnosis of the child, but there is no time for this (nurse)."

On the other hand, if the overflowing of workload becomes commonplace, it can act as a barrier to the psychological investment in the work, conforming experiences marked by operability. In this context of time compression, should the professionals only be able to focus on the immediate present, negative effects may be produced on their future capabilities of subjective investment and belief.

The images imprinted on the ICU indicate the presence of representations that contrast the quality/excellence imaginary and the contingency imaginary. These images besides indicating that the significances of the sector are not shared by the various groups of professionals that make up the service, suggest that this situation is a source of suffering, particularly for nurses. The contingency imaginary is based on the precariousness, the failures, and the difficulties of the work in the sector and, above all, it is an expression of the difficulties of the sector and of the hospital to answer the anxieties that are presented to nursing professionals.

The presence of polar images on the sector indicates a tension unfavorable to the team experience and also expresses that the Pediatric ICU, while an 'ordinary' project capable of sustaining values, ideals, and beliefs to be shared by the group, does not reach all of the team, but, perhaps more significantly only a subteam, the one of doctors.

Making a balance, we can assume, that the examples of ingenuity, zeal, responsibility in care work, and of concern with quality that is presented in the process of care production are elements that give us clues to think that there are imaginary investments that support, even with flaws, an adherence of professionals to the work in the ICU.

Final Considerations
In beginning this article we pointed out that the intensive unit originates in order to save the life of severely ill patients and, before this demand, the service is organized to intervene and assist. In the study, we saw that the Pediatric ICU structures itself in elements of the technical and prescriptive work – routines, protocols, technologies, among others. However, "being organized" to meet this demand is not limited to having or not material, technological, and personnel conditions, although their importance is unquestionable to produce care. In the investigation we were able to consider inter-subjective elements and their effects on the way the Pediatric ICU team "organizes" to coordinate work processes, share images (and affections) on the work done in the sector as well as on the possibilities of cooperation and solidarity among professionals.

In this context we saw that the experience of the team was structured at times based on the logic of the professional categories and under the control of a fragmentation of the work process, and at times being capable of engendering cooperative processes, agreements, and adjustments. The value of the round and of the individualized therapeutic plan are apart from objectively coordinating the work, but they indicate that it is in the sharing of work experiences that a collective construction of the ICU is made possible.

Beyond the routines and pre-established protocols, cooperation is based on trust and the sharing of a common work story written by the individual and collective experience of articulation of technical elements to spontaneity and inventiveness. In this sense, we understand as a challenge for care management the constitution of regular meetings (or moments) as a base that the group can dream a future together, collectively recreate the belief of excellence and quality of service.

Collaborators

Juliana Cristina Backes and Creuza da Silva Azevedo were responsible for the conception of the research, discussion of the results, drafting, and revision of the article. Juliana Cristina Backes made the empirical research that generated their masters dissertation.
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