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## RISKS IN NURSING WORK: INVISIBILITY AND THE NECESSARY DEMANDS FOR RECONFIGURATION

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#### **Summary**

The article aims to demonstrate the work activities of nursing technicians in assisting psychiatric patients in a crisis care unit, revealing the difficulties encountered and the strategies constructed to meet operational needs for the development of assistance actions and discussing the normative role in the analyzed context. The methodological approach used was based on the Ergonomic Work Analysis – AET and Ergological, whose sample was composed of 17 professionals, nursing assistants and technicians, from an emergency department of a public psychiatric hospital. The results revealed that user assistance work is strongly characterized by teamwork, especially in the confrontation of doctors' and technicians' knowledge, often mediated by other professionals such as nurses, social workers, administrative staff and doormen, that is, the The team goes beyond the technical staff and also involves support and outsourced service workers. This construction takes place in everyday work and requires skills for cooperation in addition to the development of collective skills. Hence, the importance of learning from experience, whether in the worker's day-to-day work experience in the analyzed sector, or through exchanges with other team members, promoting a return to experience and strengthening the collective.

Keywords: work, risks, nursing, activity.

### 1 INTRODUCTION

Living necessarily forces us to take risks into account. Protecting yourself from death, illness, storms and bad business success is not a new strategy. According to Maciel & Telles (2000), the practice of avoiding risks has always been associated with the possibility of undesirable events occurring.

However, "risk" is a very recent term and its conceptual definition is far from achieving consensus (GONDIM, 2008; AREOSA, 2008). It is a genuinely modern notion and is involved in the reorientation of the relationships that individuals and communities establish

with the events that may occur, whose central idea is to control the future and appears in opposition to the concept of fatality and destiny, associated with a certain contingency or ambiguity arising from the different dynamics of the social world.

According to Mazet and Guilhermain (1997, p. 23), "... risk characterizes the eventuality of an unwanted (or feared) event (or situation) and its effects or consequences". It is a measure of the level of danger - a qualitative concept that expresses a potentiality, a condition or physical situation with the potential to result in undesired consequences, such as harm to life or bodily injury - due to its probability of occurrence, its severity and its acceptability (GOETSCH, 2007).

The concept of risk therefore has three basic components: 1) its potential for loss and damage; 2) the uncertainty of losses and damages; 3) the relevance of losses and damages. In this way, the risk is equal to the probability of damage multiplied by the magnitude of the consequences over time (GONDIM, 2008). Technological, scientific and production standard advances contributed to this new perception of risk associated with changes in the nature of the resulting risk.

In the context of nursing, work is characterized by the grouping of factors that may represent risks to the health of its workers. Several studies (OLIVEIRA, 2001; MANETTI, 2008; SULZBACHER, 2013) have demonstrated that

exposure to specific mechanical and environmental risk factors (night work, handling chemical products, extensive working hours associated with double shifts, exposure to ionizing radiation, bearing excess weight during patient care and direct contact with material infected) is further aggravated by insufficient and inadequate material resources, which cause unsafe working conditions.

There are also psychosocial factors in nursing work that attract attention as they cause increased rates of absenteeism and illness among workers. According to Manetti (2008), the psychosocial factors present in nursing work are related to changes and innovations in work organization, autonomy, organizational climate, opportunities for professional growth and violence whose consequences cause stress, low levels of job satisfaction, physical exhaustion -mental, suffering, absenteeism and turnover.

According to Schwartz (2014), it is necessary to approach work in a permanent back and forth between objective environmental conditions, which exposes us to foreseeable risks, called by the author "professional risks" and an enigmatic dimension, which in part reconfigures human action. at work and leads to what the author calls "job risks".

This article aims to demonstrate the work activities of nursing technicians in assisting psychiatric patients in a crisis care unit, revealing the difficulties encountered and the strategies constructed to meet operational needs for the development of assistance actions and discussing the normative role in the analyzed context.

#### 2 METHODOLOGY

The methodological approach used in this study was based on Ergonomic Work Analysis -

AET (GUÉRIN, 2005) and Ergological Analysis (SCHWARTZ, 2000). It is a qualitative-descriptive method, of ergonomics and ergology action, with relevant methodology and analysis tools to identify the main technical and organizational factors inferring the fields of possibilities for managing health at work in hospital and productive contexts. generate, together with the plaintiffs, proposals for the preventive adequacy of current hospital production systems.

### **2.1** Materials used and procedures

The sample was made up of 17 nursing professionals, assistants and technicians, from an emergency department of a public psychiatric hospital. Equipment was used in this study to collect and record information observed in the field. Recordings were made with each research subject separately, using a digital recorder in order to facilitate the synthesis work. The necessary section for methodological in-depth analysis was carried out at the Crisis Assistance Center (CAC), through observation and self-confrontation interviews with nursing assistants and technicians in this sector.

The methodological procedures of this study were approved by the Research Ethics Committees of the participating institutions and are in accordance with resolution 466/2012.

# 3 THE ROLE OF THE STANDARD AND ITS INSUFFICIENCY: THE NECESSARY RISK ANALYSIS FROM THE SITUATIONAL POINT OF VIEW

Standardization is associated with the general path towards increasing bureaucratization of various social activities and has proven useful, although it has also been criticized for the fact that the bureaucratic paradigm does not always capture evolution and unpredictable conditions at the organizational level. An attempt is made to control, through norms, common procedures, emotion itself - which is rationalized

- from the perspective of imprisoning themselves subject to prescribed procedures. The distance between bureaucratization and the reality of work is also a fact. The central role played by technical rationality in this irresistible and sometimes risky path always combines scientific method and procedures. Therefore, this adopted path of standardization forces us to remain alert and vigilant in search of constant re-engagement with the rules and regulations.

Rules and procedures are fundamental to the functioning of a modern organization, necessary for security management, in an attempt to track, control and anticipate social activities. Standardization captures two sides that are fully incorporated: on the one hand, control and on the other, explanation. It is nothing new that written procedures not only indicate how tasks should be done, but also function as restrictive and controlling mechanisms for workers in relation to what should be done and how it is being done. They also allow the formal expression of work practices to materialize, publicize and open discussion on the "factory floor" between levels of the organization, external partners and regulators, for example.

According to Bourrier (2013), sociologists and ergonomists have long demonstrated that procedures and rules generate restrictions, however, they also reveal their need as an element of safety, control in the face of unsafe practices, insufficient rules and inconsistent management. For the author, the norm can bring comfort to people and reduce anxiety in relation to the new and uncertain.

Most of the time it becomes necessary to go beyond the rules to achieve objectives, and the norm can also serve as a comforting guideline when the course of action has not been previously experienced or at that moment seems controversial. Standardization legitimizes technical rationality (GOESTCH, 2007).

From a localized point of view, the standard has proven to be insufficient to take account of

the unpredictability and variability that exists in the nursing work activity of the analyzed psychiatric hospital. There is an invisibility regarding what is done and how it is done, unknown to system managers and which is essential for building local safety (both for workers and patients served). It is necessary to bring out the individual and collective competencies constructed and valued in the context, through methods that bring out these micro-regulations and that can be captured, with a view to evolving standards and producing security.

#### 4. THE INVISIBILITY OF NURSING TECHNICIANS' WORK

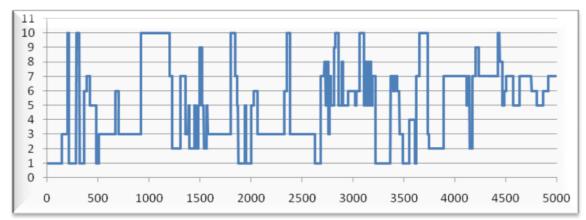
The work of assistance to CAC users is strongly characterized by teamwork, especially when comparing the knowledge of doctors and technicians, often mediated by other professionals such as nurses, social workers, administrative staff and doormen, that is, the team goes beyond the technical staff and also involves support and outsourced service workers.

Transforming a population with different backgrounds and different life stories and realities into a cohesive team is not a quick and easy process. This construction takes place in everyday work and requires skills for cooperation in addition to the development of collective skills. Hence, the importance of learning from experience, whether in the worker's day-to-day work experience at the CAC, or through exchanges with other team members, promoting a return to experience and strengthening the collective.

When observing the activities of CAC nursing technicians, the various interactions necessary to exchange information emerged, traveling in search of medicines and taking patients to the wards, collecting data from systems and room sheets and the various moments of interruption , such as answering the phone or assisting a more urgent patient who arrives and demands more immediate action: this interrupts, even if momentarily, an ongoing action. The interactions are recurrent, which allows us to affirm that the work activity goes beyond the functionalist view of the task and allows the management of the flow of information in the service.

The figure below is the result of observing the work of an experienced CAC nursing technician (30 years of work at the institution), for 84 minutes and reveals the various activities carried out that are not known by the organizational structure - for local managers these strategies of regulation are "invisible".

Around 51% of the time measured was used to discuss cases with the work group (doctors, nursing team – nurses and other technicians, social worker and administrative staff – entrance desk). The rest of the time was spent traveling between sectors, caring for patients, consulting data and writing down tasks, organizing medical records and requesting resources from other sectors. There are also 12% of activities that were allocated as 'other' due to the diversity of actions carried out, such as: answering the phone, requesting vacancies over the phone, checking the vacancy sheet, waiting, reflecting, writing it down on a hand sheet, etc. It is also worth highlighting that 44% of the total time measured was spent interacting with nurses and doctors – comparing knowledge from experience, the patient's day-to-day life in the ward – evolution, drug interactions and risks, with the specialist knowledge of nurses. and doctors.



ACTIVITIES CARRIED OUT	Tanalysed (SEC)	min)	%
Discussion of the case with medical staff, (EM).	680	11,33	13,6
2. Discussion of the case with staff of the entrance desk, (EG).	346	5,77	6,92
Discussion of the case with nursing staff, (EE).	1513	25,22	30,27
4. Discuss case with Social worker, (AS).	54	0,9	1,08
5. Displacement between sectors, (DS).	537	8,95	10,7
6. Patient care, (AP).	376	6,27	7,52
7. Data Query and annotation of tasks, (CA). (Each of	736	12,27	14,72
nursing, SIGH system, and bed management sheet).			3.0
Organization of medical records, (OP).	94	1,57	1,88
9. Solicitation of resources from other sectors, (SR).	70	1,17	1,4
10.Others, (O).	593	9,88	11,86
Total:	4999	83,33	100

The graphic aims to demonstrate the continuous activity of the nursing technician, in his daily routine of anticipations, displacements and exchange of information to manage his own activity and that of others, in a permanent search for efficiency at work. The collection of this information, shown in the graph, took place in the morning, at a peak time, whose momentary intention was to manage the number of beds, in which the collective came together to discuss possible discharges, hospitalizations, new procedures and referrals, anticipating the necessary entries that would take place in the afternoon. Failure to release beds for the possible entry of patients in the afternoon would cause great embarrassment to the team and would further increase the risk at the entrance due to the possibility of patients being refused.

It can be seen in the graph that most of the time "spent" on work activity was spent with the necessary advances to manage some expected dysfunctions. Those unforeseen, as soon as they emerged, were also addressed and, from then on, the collective was established to reprocess the values, like a cauldron of dynamics of the use of oneself, in an attempt to produce effects. A good part of the time was spent discussing cases with the nursing team, taking data notes and sharing information in systems and sheets, discussing cases and exchanging information with the medical team, in addition to others such as answering the phone, mainly. This management proved necessary to regulate the context and reduce both individual and collective workload by expanding the fields of possibilities for action and regulation, which can be seen in the excerpt below:

... The Regina technician reveals to Raul that she did not observe the patient's blood glucose measurements in the medical record, after checking the SIGH system. They note in the nursing notes that the patient's blood pressure (BP) is 160x100 mmHg. The doctor returns to the nursing station and the technicians discuss the patient's blood pressure

with her. They reveal the need to take medication if the pressure remains as high as it is. Technician Raul speaks to the doctor: "medicate and write a report for the replacement service. They are the ones who must lead the process. If you are hypertensive and are coming from there, you should already be medicated." The doctor listens and decides to medicate the patient.

Here, competent action is revealed as a management strategy at work. There was an appropriation of the antecedent norms associated with the history and singularity of the situated action based on scalable and non-scalable values. This management, reflected here as individual, but implemented collectively in the ECRP, measures bed management (patient entry and exit dynamics), quality of care and clinic to be established, in addition to health and safety management.

Certain numbers of ingredients must then be articulated in acting in competence. At the source of effectiveness at work are these collectives with variable contours, relatively pertinent and essential. It is a local creation of the different protagonists of the situation, of a certain way of "living", of building a life at work.

When one glimpses the variability, the accidents and all the necessary management, even if some solutions fail, one can understand that it is not enough to just be located at the CAC (Crisis Assistance Center) to manage dysfunctions. To take advantage of the environment and act competently, it is necessary to leave the place where you are located, seek and compare information, make telephone calls, go to the entrance counter, share practical and technical knowledge with other nurses and the medical team, raise system information and note sheets. These anticipations are necessary to manage the activity. Management observed in the chronicle section below:

... Coach Raul picks up the phone and calls the CMT. He asks if the ambulance has come to pick up the patients from there yet. At the same time, he puts the phone on the phone and talks to the doctor about the need to open up vacancies at the CAC because, according to the technician, more patients will be coming in soon. As said: "I went outside and saw several people agitated and demanding to come in." He looks at the sheet, talking to the technicians (two who were in the sector) and the doctor. And he continues: "The vacancies in the wards are all already reserved by the director" (spaces reserved by court order). He turns to the phone, speaks, takes notes and responds to the other technician that the ambulance is coming and that he can take the patient to the CMT. He hangs up the phone, looks for medical records and organizes them in a sequence chosen by him and hands them to the doctor who returns to the department. After the doctor leaves, he says: "there are patients who are expected to be discharged, but as we cannot decide on that, we have already put the medical records in order according to those who we think can leave. Thus, these patients are evaluated first and vacancies are released. faster. It's the only way to handle this sector. If that's not the case, imagine if the discharged patient's medical record was the last one? Soon people will start to come in without going through the CAC. Experience makes us build the paths. ...."

The origin of dysfunctions (delay of the ambulance to transfer patients, arrival of several new cases, etc.) and all other types of difficulties may be due to something very distant in time and space. According to Schwartz and Durrive (2010, p. 158), "a collective entity is also like this: one can never circumscribe, in advance, in space and time, what is pertinent as a zone of exchange, of communication, to conduct a action at your own pace in almost correct conditions." These actions carried out collectively in the context of the CAC are a permanent reinvention. It's a true symphony without a conductor, that is, everyone here plays their own score (they know what they have to do), but, at the same time, it is necessary for the score to

be synchronous, so it has markings so that you know when each one enters the score, since there is no conductor (SCHWARTZ AND DURRIVE, 2010, p. 161).

The graph and chronicle fragments presented above typically demonstrate the specific, unpredictable and imprescriptible work of a relatively pertinent collective entity (ECRP). If the collective is not harmonious, whether due to absences and/or worker turnover, and there is 'desynchronization', failures and risks in the work will appear and the hospital, workers and patients will pay the cost of this. Building skills and updating them is a fundamental need for risk management in this context.

#### **5 FINAL CONSIDERATIONS**

he risk approach verified in the analyzed context was restricted to professional risks. The relationship between risk and human activity does not allow us to restrict ourselves to an approach that targets risk. There is an enigmatic dimension to the work. Risks at work are local risks actually taken, related to people's and collective negotiations with "working conditions", always more or less reworked.

In the CAC and, consequently, in the hospital analyzed, it was observed, on the one hand, a hypertrophy of standards, including safety standards defined before the activity and, on the other, know-how constructed and instituted almost clandestinely during the activities: the infraction It was placed there as a necessary condition for the production of prudent know-how, useful for efficiency and health at work.

The instrumentality used in the dimensions of care, established in the CAC, reinforces the approach used in the face of potential risk. The expansion of the fields of possibility for risk management depends on the organizational conditions for updating the skills of the collective where nursing technicians occupy a fundamental role. To this end, valuing the work of these technicians, which involves the adequacy of the workforce, the stability of the relationships, the equity of working hours and the remuneration of all technicians are essential procedures.

#### REFERENCES

AMALBERTI, R. Le modele de compétence. In: LEPLAT, J.; MONTMOLLIN, M. (orgs). Les compétences en ergonomie (pp 89-94). Toulouse, France: Octarès Éditions, 2001.

AREOSA, J. *O risco no âmbito da teoria social*. Anais do VI Congresso Português de Sociologia. Universidade Nova de Lisboa. Lisboa, 2008.

BOURRIER, M.; BIEDER, C. *Trapping Safety into Rules*. How Desirable or Avoidable is Proceduralization? Ashgate Publishing Limited, Farnhan, 302p, 2013.

GOETSCH, D. Occupational Safety and Health for Technologists, Engineers, and Managers. Prentice Hall, 2007.

GONDIM, G. *Do Conceito de Risco ao da Precaução:* entre determinismos e incertezas. In: O território e o processo saúde-doença. Educação Profissional e Docência em Saúde. A formação e o trabalho do Agente Comunitário de Saúde. Fiocruz, 2008.

GUÉRIN, FRANÇOIS et. al. Compreender o trabalho para transformá-lo: a prática da ergonomia. São Paulo: USP, Fundação Vanzolini, Edgard Blücher, 2005.

MACIEL, E.; TELLES, F. Ensaio sobre a relação epistemológica entre probabilidade e método científico. Cadernos de Saúde Pública, 16 (2): 487-497, 2000.

MANETTI, M. L.; MARZIALE, M.H.P.; ROBAZZI, M. L. Revisando os fatores psicossociais do trabalho de enfermagem. *Revista da Rede de Enfermagem do Nordeste*. Fortaleza, v.9, n.1. p.111-119, jan./mar., 2008.

MAZET, C.; GUILLERMAIN, H. Concepts de base. In: AMALBERTI, R.; MOSNERON-DUPIN, F. Facteurs humains et fiabilité. Toulose: Octares, 1997.

OLIVEIRA, B.R.G.de; MUROFUSE, N.T. Acidentes de trabalho e doença ocupacional: estudo sobre o conhecimento do trabalhador hospitalar dos riscos à saúde de seu trabalho. *Rev. latino-am. enfermagem.* Ribeirão Preto - v. 9 - n. 1 - p. 109-115 - janeiro, 2001.

SCHWARTZ, Y. A comunidade científica ampliada e o regime de produção de saberes. *Revista Trabalho e Educação*, jul-dez, n.7, p. 38-46, 2000.

SCHWARTZ, Y.; DURRIVE, L. Trabalho e Ergologia: conversas sobre atividade humana.1.ed. Niterói: *EdUFF*, 2010.

SCHWARTZ, Y. *O enigma do trabalho:* riscos ocupacionais e riscos do trabalho. (mimeo), 2014.

SULZBACHER, E.; FONTANA, R. T. Concepções da equipe de enfermagem sobre a exposição a riscos físicos e químicos no ambiente hospitalar. *Revista Brasileira de Enfermagem.* Brasília, v.66, n.1., jan./feb., 2013.