ABSTRACT: The analysis of everyday practices includes the understanding of the organisation of power relations and knowledge at a given time and context, and also establishes the relationship of different social, political, and economic devices. Little attention is paid to non-human actors; however, they are part of the social scenarios and, along with the human actors, constitute the everyday practices and power relations. Analyse the effects of non-human actors on the everyday practices of the Mobile Emergency Care Service in Belo Horizonte, Minas Gerais, Brazil. Qualitative Case Study of post-structuralism framework, with discourse analysis. 13 semi-structured interviews carried out with workers performing distinct functions in the service. Documents generated by the SAMU are sources of power and maintenance of the truth discourse, fostering the perpetuation of hegemonic discourses, prescribed work, and work control. Moreover, equipment such as radio and phones work as “eyes” that watch the professionals, as forms of hierarchical surveillance and control. Non-human actors are not neutrally internalised in everyday practices, but are added in different contexts, so that, depending on the situation, they may take more or less control and power over human actors. Non-human actors contribute and produce effects on the relations established in the everyday work performed by the Mobile Emergency Care Service, although further analysis is necessary to outline how the practices by these actors are carried out in the service.


INTRODUCTION

The concept of practices adopted in this study was proposed by Foucault, who considers that practices are the spaces where whatever is said and done (the imposed rules and the allegations, whatever is planned and allowed) meet and interconnect (FOUCAULT, 1991). The practices are established from certain forms of rationality, considering certain codes of knowledge and rules of conduct that outline them and grant them intelligibility and accessibility, while organising principles and strategies that justify them in the scope of a given routine (FOUCAULT, 1991; CERTEAU, 2012). In the case of this research, we refer to the routine of the mobile care service carried out by SAMU in the city of Belo Horizonte.

Unlike the positivist-Cartesian approach, which comprises everyday life as something that concerns regularity, normativity, and repeatability, everyday life is understood herein as the manifestation of a field of rituality that is part of the historical and social contexts (CERTEAU, 2012; CASTORIADIS, 2002; PAIS, 2015). This supports the view that tensions, conflicts, ideological positions, changes and crises become noticeable in the everyday life (PAIS, 2015). According to this logic, everyday life – or the routine – is whatever is shared with and given to us every day, as well as what oppresses us day by day (CERTEAU, 2012).

Therefore, the everyday life is a space where the subjugated may be able to appropriate the symbolic sphere constituted by the dominant and transform it by attributing a new meaning to it, according to their own needs and possibilities (CERTEAU, 2012). This sphere is built through the “bricolage” of several individuals who share everyday practices at the same time and space, so that their discourses and actions are the results of such assembly (CERTEAU, 2012). Hence, the research of practices reveals a polyphony of different subjectivities present in the subjects’ speeches. The diversity of voices in discourse plays the role of attributing “veracity” and credibility to it, as well as persuading others, that is, those who...
listen to and read about our discourse of truth (DUCROT, 1987).

Thus, the analysis of practices requires that one understands the organisation of power and knowledge in each context. Furthermore, to understand that such organisation involves the several social, political and economic devices in question. Its analysis can help us understand how the arrangements are established, admitted and accepted as true at a given time (FOUCAULT, 1991).

In the rush to define how power relations organise individuals and societies, researchers may forget the material elements that are part of such spaces (LATOUR, 1991). These elements, termed by the author as non-human actors, are part of the scenarios and along with human actors, constitute the very social practices (LATOUR, 1991; 2012). According to Latour, a social practice is defined as a practice performed by peers that bond to each other, a concept which confirms what has been advocated by Certeau and Foucault (FOUCAULT, 1991; CERTEAU, 2012).

It should be considered that the separation between human and non-human actors reduces our way of observing and understanding the networks of relationships involved in the formation of daily practices in SAMU. In this study, we focus on analysing the role of non-human actors, while linking their existence and producing effects on the role played by the human ones.

The modern world is subtly constructed by ubiquitous devices and technologies, which cannot be significantly separated from what is human and what is not human (LATOUR, 2012; LAW, 1992). Latour (LATOUR, 1991; 2012) draws attention to the role of non-human actors such as documents, forms, rules, routines, and technological instruments in social relationships, for these elements act significantly on the construction of the routine and in the case of this study, the routine of a medical care service.

Non-human actors can be understood as part of the technologies used in health care. The meaning of technology is not restricted to the set of material instruments involved in the execution of tasks but expands to knowledge and its material and non-material developments in the execution of health services (MENDES-GONÇALVES, 1994). This way, technologies carry the expression of relations among individuals and among the objects which they work with.

Non-human actors make up the practices carried out by health services professionals, both as mediators and sometimes as central elements of a given activity, generating it and/or changing it permanently. We cannot imagine an emergency service without an ambulance or telephone and radio sets, as much as haemodialysis service cannot be provided without a haemodialysis machine. Discussions on how the relationship between human and non-human actors are configured in SAMU are relevant, as they can operate as tools to analyse the operation and organisation of the service, while giving visibility to relations that constitute their everyday practices in the scope of the health care network in question.

This article aimed to analyse the effects of non-human actors for the maintenance of the everyday practices carried out by the Mobile Emergency Care Service (SAMU) of Belo Horizonte, Minas Gerais, Brazil.

MATERIAL AND METHODS

This was a qualitative study based on the post-structuralist theoretical-philosophical framework. This choice is associated with the fact that such approach allows one to question reality – how it is constituted, who the individuals that shape it are, how these individuals have built their own subjectivities, and what social relations are established in a given scenario (CARVALHO; GASTALDO, 2008; CARRIERI et al, 2005; WILLIANS, 2014). From a post-structuralist perspective, the realities and truths of each moment are social constructions deriving from the tension between dominant and emerging discourses that seek to maintain or modify the established social practices (CARRIERI et al, 2005; WILLIANS, 2014).

The setting of this research was the Mobile Emergency Care Service (SAMU), in the city of Belo Horizonte, Minas Gerais, Brazil. This emergency service carries out rescue and urgent care operations and is part of the medium complexity services list of the Unified Health System in Brazil. This service has an objective part consisting of its human resources, its laws and its physical structure, and a subjective part, consisting of the discourses socially constructed by workers and users. These create and produce effects on daily practices (VELOSO et al, 2012).

The research subjects were thirteen (13) professionals, randomly chosen, comprising a representative of each function in the service – an administrative coordinator, a medical coordinator, a nurse coordinator, a call and dispatch supervisor, a nurse, a physician, a basic support ambulance nursing technician, an advanced support ambulance...
nursing technician, a basic support ambulance driver, an advanced support ambulance driver, a warehouse technician, a call operator, and a dispatcher.

Data were collected through semi-structured interviews carried out in February 2012. The results and discussion were developed from the analysis of the discourses gathered from the interviews. The term discourse is traditionally understood as a dialogue or a form of communication between two or more people or groups. However, for Foucault, discourse is understood more widely as a textual form of expression. That is, the institutionalised ways of speaking, where speeches are systematic and structure/are structured by the discussions on the alleged practised truths (RUDGE et al, 2011). This analysis puts into practice the principle of reversal: the attempt to encircle forms of exclusion, limitation, and appropriation. In addition, it also shows how they have been formed, what needs they respond to, how they have been modified and shifted in space, what forces they have effectively exercised, and what measures have been circumvented (VELOSO et al, 2012; RUDGE et al, 2011; FOUCAULT, 2002).

The project has been approved by the Ethics Committee of the Federal University of Minas Gerais, located in Belo Horizonte, MG, Brazil, under the No. 147/2011 (BRASIL, 2012a). All study participants voluntarily signed the Statement of Free and Informed Consent.

RESULTS

The work routine of the Mobile Emergency Care Service highlights the strong presence of discipline among workers, when complying with their various roles. Discipline can be understood herein as a specific power technique that regards individuals both as objects and as tools for the exercise of power. The disciplinary power has the major function of ‘training’ professionals to achieve their best performance (FOUCAULT, 1995). Three disciplinary power devices are considered: the hierarchical surveillance, the standardisation, and the examination. The presence of such disciplinary devices becomes concrete due to the presence of certain non-human actors, while it outlines the practices of professionals, according to the work they perform and the position they occupy in the hierarchical structure of the service. The concern with discipline and control can be observed in the following speeches:

[...] everything is minuted, signed, and documented. [...] everything that comes in or out has a seen for authentication and we keep a filed copy of everything [...] we send away, (E20).

Every day when I arrive, I get the logbook to see what happened (E21).

One can also note that the phrases “everything” and “every day” are used in the above fragments, suggesting the idea of wholeness and typicality. There is a certain discipline that the involved subjects must keep for the development of work. The everyday discipline even enables the development of a checklist of logged events that will later allow the examination of behaviours and events. This, in turn, strengthens hierarchical supervision.

The reference to non-human actors also draws attention, such as papers, minutes and written records produced to be a real picture of the facts. These documents are responsible for ensuring the veracity of the events.

The signature on the documents gives them integrity and strength over reality, as well as compliance and acceptance from those who have signed them, or given their consent, entitling them to reinforce the fact that the relations established therein would be not of domination, but of power over the existence of such consent – whether consciously or not. Non-human actors act in two ways: producing and maintaining the discourse of truth, and controlling the actions and the behaviour of professionals (LATOUR, 2012; LAW, 1992). The minutes of meetings and work routine logs, for example, are used to maintain and spread facts and discourses regarded as true.

Everything is logged in minutes, all meetings (E20)

[...] if there is any non-conformity report [...] I collect it and arrange a visit with the employer, for orientation, see and listen to his defence, find out what really happened (E21).

The memos, minutes, and reports are intended to ensure the veracity of the facts, but also serve as an important means of demonstration of the amount and profile of the care service provided, which ensures the transfer of funds for the service (BRASIL, 2012b).

The records enable the calls to be classified by an overall number of incidents over the period; minimum, average and maximum response time; identification of the reasons for calls; medical guidelines; peak service hours; and the number of patients referred to other services.

However, the speech by E21 denotes that the written truth of the facts in the reports is not fully consolidated as given, since it confronts the written discourses to the spoken discourses of those...
involved in the facts. This occurs because of reports on conflicts among different service units, as well as frequent clashes among workers from different sectors.

Still concerning non-human actors at SAMU, considerations should be made on the minutes, reports, and the checklists. While the first two have a role in defining what is true, the checklist prescribes a certain working routine. The checklist produces effects on the “tone” of the work assigned, or promotes some control over the practices of professionals and their bodies. It controls time and motion, since it also allows data conference after the completion of the assistance service and feeds the documents that will ensure the achievement of indicators.

We are in charge of checking the ambulance materials and organization. So, we have the checklist to fill in, we have to test the whole equipment, check the materials, if they're complete, clean, if they need replacement, then we fill in the checklist, open the report and stand by for calls. (E17)

We have to check the shifts, the number of workers, write a report with the names of all team members (...). And a checklist of the units, in the ambulances, to see if there's anything broken. We call this “clearance”, it is to report about it and pass on to the person in charge” (E26).

From these speeches, we can understand how non-human actors determine the work routine of professionals and are described as a symbiotic part of the work process. Latour points out that in order to comprehend how the forms of domination are performed, these cannot simply be helped by the “explanation” of the existence of non-human actors, but instead by their description within a given scenario. However, if this does not appear in the description, it is not complete (LATOUR, 2012). Thus, if it is possible to explain the causes and effects in a relationship among human and non-human actors, this happens because there is already a network of stable players operating in this space (LAW, 1992).

Yet, Latour points out that the understanding of the relationship between practice and technology is much more sophisticated, for non-human actors are mobilized for social relations in such a way that the practice should be understood as having “been translated, but not understood” (LATOUR, 2012). That is, we argue that we do not incorporate non-human actors and add them into situations in a neutral way, because at times they give us a higher or lower degree of control and “power”. Therefore, we cannot ignore them or discard them when they are no longer needed, for they are already part of reality. The introduction or withdrawal of a non-human actor in everyday relations gives some modification to the practices, depending on their level of suitability to reality. In the work process and the organization of the assistance in the Mobile Emergency Service, some non-human actors work as mediating elements, which “transform, translate, distort, and modify the meaning or the elements they are supposed to carry” (LATOUR, 2012, p.34). Telephones and radio sets are examples of this; for although they are used for information and trivial communication, they also transmit the decisions taken by the teams at all times. The telephone, in addition to ensuring the communication among professionals, is also the point of contact between the users and the service because it is the means through which calls are received. The radio, in the domestic context of the service, is the primary communication device between the Medical Regulation Centre and the ambulances.

If it's through the phone, it's recorded, phone calls are recorded, but the HT (radio) calls are not. So, when we want to forward a case that must be recorded, we use the phone. Because we can be sure that if anything happens, it's going to be all recorded, you know? (E12)

All events are recorded in audio format and can be redeemed whenever necessary to clarify a fact, or verify the truth of events. In addition, all ambulances are equipped with the radio system, which allows the dialogues to be heard by all professionals, both at the Regulation Centre as well as in the other ambulances. This mechanism helps all peers to keep surveillance over one another, which automates the exercise of power and reminds us of the concept of the panopticon. The disciplinary power would be a set of techniques and institutions meant to control and correct what is regarded as abnormal, by resorting to “disciplinary measures” necessary to achieve this purpose. The panopticon would be a device that allows the use of a technical discipline of power or the hierarchical supervision. This, in turn, enables peers to constantly monitor one another (FOUCAULT, 1995).

[...] we see things... I mean, we hear some situations on the radio and realize that the USB [Basic Support Unit] makes a request and the regulation centre is not always listening or in accordance with what they think(E17).

[...] all calls are recorded through 192. Only the manager and the medical coordinator can access it, and they only do it when they have problems, a
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complaint by a user, by the entrance doors, or by the population (E20)

Surveillance in all institutional structures, whether explicitly or implicitly, allows the dissemination of disciplinary power. It operates by making explicit the glance over those who are observed and through “the multiple and intersecting surveillance techniques, from the eyes that must see without being seen” (FOUCAULT, 1995). The surveillance is a totally indiscreet disciplinary power device, for it is omnipresent and always alert. In principle, the surveillance reaches everyone, even those who command. It works continuously and silently, though its effect is clearly visible for those who live under its vigilance (FOUCAULT, 1995). However, the hierarchical supervision, within the concept of the panopticon, is placed as a sort of surveillance on one’s observation and in SAMU such monitoring occurs through the sense of hearing.

The previous speeches refer to the role of telephones and radios inside a SAMU ambulance. They allow the unobtrusive monitoring of actions and paths followed during the entire itinerary, as well as the questionings by the professionals regarding their own work process. Therefore, the surveillance over SAMU, which is established through the hearing, can contribute to the emergence of even more conflicts and complications involving human relationships. This happens because the discourse, as it is moved from its temporal-spatial context, can be interpreted freely, without necessarily matching reality. The constraints are “audible” by all, which makes them likely to be judged by the teams. They also bring about the questioning of behavior and of corrective measures or punishment that are placed differently to different professionals.

[…] they are rude when they speak in the network, everybody can hear them, then they ask for the phone contact to rat on them, yell at them, you name it. (E12)

The technologies are incorporated when the situations of domination are translated into context and since they are not neutral, they bring along certain effects. According to Latour, these effects are the transformation or modification of behavior, so that the removal of a non-human agent is not enough to solve a certain problem. On the contrary, the incorporation or rejection of a non-human actor simply introduces another translation of the relationship between the human and non-human actors that participated in a given event (LATOUR, 2012).

DISCUSSION

The society, the organizations, the agents, and the machines all derive from the effects in the social networks where they are inserted and shaped by several elements beyond those that are simply human (LAW, 1992). Documents and records permeating daily practices in SAMU carry power relations that rest on a singular design to control the individuals, as well as their desires, actions, and discourses (FOUCAULT, 1995). At the same time, such documents create a scriptural economy, because the act of writing (and of signing) consists of creating a text on paper that has power over the externality from which it had been isolated. Furthermore, writing is a way to normalize things and place them in an established order (CERTEAU, 2012). These non-human actors make discourses work in favor of domination relations within the Mobile Emergency Service, while structuring and maintaining such dominance.

However, as we have come to realize in this research, there is resistance and what is written is not always fully accepted as truth by all. This can be observed in some of the speeches, when respondents mentioned the need to check what has really happened. When opening the previous verification of the facts, it creates ambivalence between what is declared as truth and the questioning of such truth.

We can also observe how a radio, as a non-human actor, enables the surveillance of both the peers and the centre during the service hours, for this device has wider and more generic application. The same applies to telephones, which can be used to punish and question the procedures adopted and the work process, by logging events and bearing the “truthfulness” of the facts. The surveillance in this service is also established through the hearing, which could further contribute to the emergence of conflicts and setbacks in everyday relationships. Coercion is “audible” to everyone, which makes room for value judgement among teams, as well as for questioning the behavior and the corrective or punitive measures taken differently against different workers.

When discourses are displaced from their temporal-spatial contexts, as it is the case of the service in question, they may be interpreted in a way that does not necessarily match the reality of events. This process of decontextualization reinforces the existing practices of power and domination even more.

In order to develop a new comprehension of the relationship between technology and practice, Latour proposes to perceive the changing of
technology as something that occurs through the dimensions of association and substitution. Non-human actors are contracted by human beings to achieve domination and their declarations on the practice are translated into context, but not transmitted in relationships (LATOUR, 2012).

On the other hand, technology changes the care routine previously proposed by the management protocol, hence modifying the initial idea of the service which is namely to carry out the rapid transportation of users and leaving the care service scene as soon as the patient reaches a stable condition. Besides, it may cause conflict between the physician who is treating the patient in loco and the physician at the centre, among other problems. Meanwhile, the Regulation Centre wins an ally that helps to ensure control over the actions of the professionals at the scene, in situations such as whether a patient should or should not be referred to treatment, as well as whether the orientations were followed. Reducing the “power” of workers in head positions fosters a control system to solve the problem “of the masses”, in this case, the professionals, who are potentially uncontrollable and unmanageable. The solution is obvious – the improvement of control forms (RUDGE et al, 2011; FOUCAULT, 2002), especially those invisible and misunderstood by those subjected to them.

CONCLUSIONS

It was observed that the documents generated from this work routine help maintain power relations and discourses of truth, conferred by the actors’ signatures.

Equipment such as radios and telephones act as the system’s “eyes” on the professionals. However, they may sometimes end up not fulfilling its aid function, disrupting the work and the medical care service, and materialising as a means of hierarchical surveillance and control through auditory surveillance of peers and audio recording. For a greater understanding of the relationships and social practices involved in this emergency service, it is still necessary to carry out further research analysing the relationship between actors and how these connect in the work routine.

RESUMO: A análise das práticas cotidianas inclui a compreensão da organização das relações de poder e do conhecimento em um determinado momento e contexto, bem como estabelece uma relação de diferentes dispositivos sociais, políticos e econômicos. Os atores não-humanos recebem pouca atenção; entretanto, fazem parte dos cenários sociais e, juntamente com os atores humanos, são a prática cotidiana e as relações de poder. Analisar os efeitos dos atores não-humanos nas práticas cotidianas do Serviço de Atendimento Móvel de Urgência de Belo Horizonte, Minas Gerais, Brasil. Estudo de Caso Qualitativo de referencial teórico-filosófico pós-estruturalista. Os sujeitos foram treze profissionais do serviço e os dados, coletados por meio de entrevista semi-estruturadas, foram submetidos à análise de discurso. Os documentos, como atores não humanos, gerados pelo Serviço de Atendimento Móvel de Urgência, são fontes de poder e manutenção dos discursos de verdade, auxiliando na perpetuação dos discursos hegemônicos e do trabalho prescrito, e no controle desse trabalho. Os outros atores não humanos, equipamentos como rádio e telefones, funcionam como “olhos” sobre os profissionais, realizando a vigilância hierárquica e o controle. Os atores não-humanos são introduzidos nas práticas cotidianas de forma neutra, mas são adicionados nos diferentes contextos, de forma que, conforme a situação, em alguns momentos assume maior ou menor controle e poder em relação aos atores humanos. Os atores não-humanos contribuem e influenciam nas relações estabelecidas no trabalho cotidiano do Serviço de Atendimento Móvel de Urgência, embora outra análise se torne necessária para delinear como as práticas desses atores ocorrem nesse serviço.


REFERENCES


Non-human actors…


