The medical archive work process: new perspectives concerning health care

Abstract Generally, medical archive studies are restricted to the analysis of documents. Its activities achieve little expressiveness beyond the theories of scientific management, hampering the perception that care production may occur during these activities. This study aims to analyze hospital medical archive sector professionals’ work process from the dynamics of micro-policy articulated with institutional analysis. As a descriptive qualitative research theoretically based on micro-policy of the health work process and Institutional Analysis, this study identifies with analyzers daily issues of the medical archive that can disclose strategies developed by health workers and disputes that occur on a daily basis. Therefore, it was possible to recognize in two hospitals that these workers held important knowledge about the dynamics of the health work process. As facilitators of user care process, they establish their own strategies in the dynamics of care that reflect directly on the care dimension of these hospitals. In this perspective, the introduction of new investigations about this work process allows us to diversify the debate about health care and broaden the scope of research referred to public health.

Key words Workflow, Health services, Qualitative research
Introduction

This paper brings to the core of debate issues of the archive's daily work process. Specifically, it investigates how its production process occurs in an environment responsible for the storage of documents in hospital units. However, it does not stop at the risks of the occupation and the workload that are required in this activity, referring to further analysis of the work process that takes place within a hospital medical archive sector, remembering that medical archive workers, as well as their actions underpin and are part of the health universe.

This daily life, in which doing somehow gathers knowledge from the management area and whose genesis carries the tradition of hard methodologies, the so-called scientific administration or General Theories of Administration. Perhaps, therefore, when observing and analyzing the activities developed by the group of workers in this sector, the theoretical and methodological references adopted to address them are often directly associated with the study on issues related to the administration area. This is especially found from information associated with the analysis and/or diagnosis of results found in medical records, through processes, registers, statistical records, among other evidences of this nature.

In addition to all these aspects that involve such references, they are also traversed by epidemiological field issues through statistical and axiological data, among others. Somewhat, since it originates from the same area of knowledge (administration), at first, its activities differ little from what can be found in spaces geared to the archive sector of any establishment; whether in museums and libraries, or in public “offices” or private entities. This is because the archive is par excellence the place of documentary custody. Therefore, this paper does not intend to show the context referring to technological revolutions in the field of health archives, but rather the perspective of care produced by archive workers in the hospital space.

Historian and essayist Arlette Farge elaborated a study on the subject in her book Le goût de l'archive. In this work, she investigated the “life” relationship of consultants researching various subjects in some national and international public institutional archive spaces by having access to various types of documents (letters, manuscripts, novels, official documents, etc.). Throughout the essay, there is no reference to the daily activities of the group of workers who ensure the safekeeping of their collections, although this is not the focus for managers and the public.

However, when it comes to the work process of an archive in the field of health, a hospital, when answering, identifying, locating, separating, distributing ... the workers perform work processes that begin to underpin health care activities and practices, with their own arrangements, integrated to the inherent characteristics of the field. This work process becomes specific in that it drives, regulates and controls the actions in this process, and in intentionality and purpose that satisfy the human needs, we can recognize it as a health work process. This intentionality is found in the microscopic dimension of the daily life of health work and human work dynamics is also reproduced in it.

Thus, the processes of subjectivation in the movement of worker-worker and worker-user encounters mobilize strategies, provoke new meanings for work, innovate in practices, reinforce habits; in short, they move the subjective aspects that make up the action established in the archive working process. In this step, they inaugurate very interesting singular aspects to be investigated, and can provide other and new ways of conducting the work process itself, whether between groups of workers that carry out their work activities, or between them and users that seek to meet their needs.

This study builds on two theoretical references that, to a certain extent, complement each other: one of them is the health work process micro-policy. It analyzes the study of the different establishing forces that compete for projects, build territories and operate in the dynamics of encounters (worker/worker, worker/user). What is observed is that the micro-policy’s dynamics is based on workers’ permanent inventive capacity, operating in the public and collective dimension, which can reverberate new production dynamics, or even open to dimensions not thought of in the production of care; in short, in the micro-policy of the health work process.

As a second reference, we opted for Institutional Analysis. As a theoretical approach, it emerged in France in the 1960s and 1970s and was elaborated by French sociologist René Lourau (1933-2000) and other scholars. His questions arose from the perception of the atmosphere, as it traversed French society itself, from the effervescence of precursor and triggering events of the “May 68” movements and their reverberations throughout Europe. The “institution” and “analyzer” concepts were vital and
responded as beacons in the research process. According to L’Abbate, the institution concept is based on the articulation between three moments:

The moment of universality or the established, by which the institution is recognized and named; the particularity or instituting moment, which never ceases to deny the previous moment; and the moment of singularity, the result of the dialectical relationship between the two previous moments, which is institutionalization, through which the institution is stressed and is updated in the action of the subjects that constitute it.

From these references, the parameters for qualitative research were established, whose focus was not restricted to the analysis of epidemiological or statistical documentary bias, commonly used in studies that take archive for investigation. Thus, we aim to analyze the work process of the employees of the hospital medical archive from the dynamics of micro-policy in coordination with institutional analysis.

Methods

Research has developed as a descriptive qualitative research, whose theoretical foundation, in addition to revealing social processes that are still not well known in relation to particular groups, propitiates the construction of new approaches, review and establishment of new concepts and categories during research. Thus, the empirical material consisted of trips to the field of research, where observations, field journal records and interviews made up the necessary tools for research. In addition, recognizing ourselves as participants and producers of knowledge was fundamental to the research about the daily actions of the subjects in their workplaces, and contributed to the overcoming of the discourse of neutrality and scientific objectivity as essential to the proof and validation of a work of research.

The immersion in the field was supported by ongoing discussion and reflection with the research group “Management and Work in Health Studies and Research Center” (NUGPES), facilitating the process of recognizing the implications of the researcher with the object of study, implication such as Lourau understands it, as everything that is in place and traverses us, such as politics, social issues, etc., and which are also part of the object. Thus, being in constant movement of reflection on the implications increased the possibilities of analysis of the material, surpassing the discourse of neutrality in research and consolidated the condition of subjects implied in the saying of Merhy, placing us as researchers and researched in charge of this production of knowledge.

Thus, we are instrumental in elements that lead us to think and produce, in an act, tool concepts as we move forward in schemes that activate change in the production of care, to develop research about the work process in the medical archive in two hospitals.

The fields of observation are education / research / extension institutes of the federal network of the Unified Health System (SUS) in the municipality of Rio de Janeiro, performing hospital / school activities.

Comprising a hospital medical complex from a federal university, in addition to developing education, research and extension, Hospital 1 is renowned as a reference center in pediatrics in Brazil. It provides several pediatric specialties at all levels of care and houses the Pediatrics Department of the Faculty of Medicine. It has emergency services, nursing wards, Intensive Care Units and is a Reference Center for the Ministry of Health in several pediatric specialties. It is a reference both for cases of toxoplasmosis in pregnant women and those of newborns exposed to toxoplasmosis, in addition to attending and monitoring cases of congenital syphilis.

In this establishment, the work process developed by the group of workers in the medical archive sector is responsible for documentary custody (medical records, laboratorial and radiological examinations, etc.), ensuring access to the collection to the different services of the hospital from Monday through Friday, from 7 a.m. to 5 p.m.

The second establishment, in addition to providing care to various pediatric services and specialties, Hospital 2 works as maternity ward-school. It develops, coordinates and evaluates integrated actions geared to woman and child health at the national level. It is responsible for innumerable strategic projects aimed at woman and child health care and the on-demand or referral-related care to users from the primary health care network of the City of Rio de Janeiro. This a 24/7 basis service facility.

Due to the nature of this hospital, its medical archive sector performs multiple functions: from custody and distribution of medical records, tests and reports and everything that derives thereof (“opening” and checking medical records documents), production of the SUS Card, providing...
tests’ results and reports to users, to the release of material for study to researchers, residents, students and various categories of professionals, among other activities. Part of its staff are day-laborers, from Monday to Friday, from 7:00 am to 5:00 pm; part, on-callers, on 12h/36h or 24h/72h shifts, Monday through Monday, performing the same tasks as day-laborers.

The work process in establishments 1 and 2 is responsible for the custody of the collection of documents (medical records, laboratorial and radiological tests, etc.), which preserves life histories and pathologies of young patients and their escorts, mothers and their babies, workers, etc. The importance of these documents is shown by the fact that, in addition to serving as a basis for the daily attendance of users, they are also an indispensable material for follow-up in medical consultations, research material, rich in epidemiological, nosological, demographic, statistical data, etc. They also provide information necessary to the development of education/research to teachers/researchers, students, residents, doctors, nurses, managers and related postgraduate courses.

Research was submitted and approved by the main and co-participating Ethics and Research Committees (ERC), and was developed from the monitoring and observation of the work process in the medical archive sector of these two hospitals for approximately eight months, from August 2013 to April 2014. Throughout this period, these observations have become sources from two powerful tools for Institutional Analysis (IA): the scrapbook and the thematic interviews on the “work process”.

In the scrapbook, we had to record daily issues observed in the field that deserved prominence and revealed some peculiarities of the work process of those archives in both hospitals.

In total, 21 workers are part of the two medical archive sectors, and each sector has its own setup. The medical archive of Hospital 1 has 07 workers, 04 men and 03 women with varying levels of schooling: one with complete higher education; two with incomplete higher education; three with secondary school level; and one with elementary school level. Of these, five are public servants and the rest are outsourced. As the dynamics of this medical archive sector is different from that of Hospital 1, given its specificity as a maternity ward-school, three workers take turns in servicing the public (making the SUS card, releasing documents for reproduction, opening records, etc.), one is in charge of the daily movement (agenda and controlling the return of medical records) and the others are responsible for routine work (taking medical records from the shelf per station, checking the agenda, retrieving folders, etc.), alternating their duties due to their status of day-laborers and/or on-callers. In this archive, two members are people with disabilities (hearing impairment).

In order to carry out research activities, we established some criteria for the selection of participations at the time of the interview of workers of the two hospitals: length of stay in the archive (minimum of 05 years) and age limit (from 21 years). Of those members of the sector who met these criteria, only five in Hospital 1 and four in Hospital 2 participated in the study. These nine workers participated following authorization and signature of the Informed Consent Form (ICF).

For the analysis of the participants’ statements, we elaborated some artifacts according to the established in the ICF, assuring through total anonymity the preservation of their identities. The excerpts of the statements were incorporated into the research body, as follows: F1 to F5 designated participants of one medical archive; F6 to F9, the other. Other resources were created to preserve the identity of all who were in some way present in the narratives of the participants: colleague1, colleague2, and so forth, for the other members of the group who were not willing to be interviewed; one messenger, with an establishment with only one assistant; messenger1, messenger2, and so forth, for the situations with more than one assistant or receptionist; D1, D2, and so forth, for doctors; and CH1, CH2, and so forth,
for all managers. Then, all the recorded interviews were transcribed and provided to the respondents so that they could verify whether they were in line with their statements. Upon their release, we started to analyze the material. Thus, work began on the material provided by the participants, always interacting with the narratives of the scrapbook, as well as own production of the researchers involved.

The possibility of recognizing ourselves as implied researchers favored our perception of the material at hand (scrapbook and statements from the sources). Its analysis was based on the Institutional Analysis benchmark. After reading and re-reading it, we saw our importance as a necessary tool for the construction of new approaches, review and creation of new concepts and categories during the investigation\(^\text{11}\), when this qualitative research was conducted.

**Presentation and analysis of the material**

From the perspective of IA, we considered the concept of analyzer as central to research, because, as an element that *leads us to think and produce, in an act\(^\text{14}\)*, it allows us to reveal different situations experienced by the Institutions in their daily struggles. In addition, some issues in the health work process became evident because of their specificity, insofar as their activities were to some extent invisible to the production of care.

In addition, we borrowed from IA the “institution” concept as another important component in the processing of the material and its analysis. At first, in order to recognize and differentiate the work dynamics of different groups of workers involved in the act of caring. From this understanding, it could perceive how relationships, arrangements and strategies were established among such groups in the conduct of their routines in formulating their own agreements, rules, norms and, especially, their own truths in the exercise of daily actions, thus ensuring the condition of Institution.

On the other hand, as we worked on the micro-policy of the health work process, we could establish how settings of disputes that permeated the relationships between the groups of workers in the different Institutions were configured.

The collected material enabled us to explore how different groups of workers conducted their routines in the work process. In formulating their agreements, rules, norms and, above all, their own truths in the exercise of daily actions, restricting to their peers the mastery of these formulations, they were structured internally by establishing their own arrangements and strategies to perform their activities, setting themselves as Institutions. In this movement, we could recognize and differentiate in both hospitals the work process dynamics of the medical archive, nursing, medicine, management, among other sectors; and especially to take them as Institutions, which was fundamental for the continuation of the analysis of the material produced during the investigation.

In addition to the conceptual tools mentioned above, the use of these concepts (Institution and Analyzer) favored the conduct of the work and facilitated the analysis of the empirical material to allow a necessary exercise in causing the recognition of issues relevant to the work process, which generally achieve a poor visibility.

As the three sources (the condition of “researcher involved”, the scrapbook records and the statements provided by the participants in the thematic interviews) were cross-referenced, we could identify, among the elements, that analyzing tool concept that revealed processes of dispute between the Institutions: lost document; that is, when used in the analysis, it could evidence the imbricated relationship established by the institutions that traverse the work process in the archives of the two hospitals studied. This evidence was interesting insofar as it enabled a certain statement or explanation of how, in the daily life of actions, one working process is vulnerable to another, showing contradictions that arise through the clash between “truths” and the questioning of these truths; also by jeopardizing the relationships between the institutions within the hospital work process.

With the “document lost” analyzer, we could capture aspects that demonstrated the existing rumors in the medical archive Institution itself and, especially, those found in its relationship with the medical institution, evidencing institutional tensions, where the hegemonic medical action could be confronted. This analyzer revealed the so-called “truths” that supported this action of the medical Institution and, paradoxically, showed their contradictions from their relationships with other institutions.

When confronting in the interviews several statements provided by the group of workers of the Institution medical archive of hospitals 1 and 2, in which the “certainties” and secular truths established by the medical institution were configured, the analyzer fulfilled the purpose to which it was intended in research as machines of making
see and say® the statements by pointing questions in the health work process that could have gone unnoticed throughout the investigations.

In addition, the subject condition itself implied in the research process also favored the recognition of the analyzer “lost document” as a tool-concept. Through this condition, by experiencing processes of subjectivation, to a certain extent, “we (re) invent ourselves”, and when we dealt with the materials of the investigation (scrapbooks and statements of the sources), such issues between the Institutions could be triggered, orienting our analyses on this set of materials.

In several respondents’ reports, the issue related to the time invested in the search for lost or even misplaced documents (medical records, reports and requests for tests, records of attendance, etc.), leading to continuous processes of wear due to collections and accountability attributed to them.

[...] [Medical records] are stuck in the clinics, in the closet, in the drawer: it’s complicated. And who is to blame? Their view [managers] is negative towards us because of that, because medical records are lost. It may be filed wrong, it happens! However, it is often in the drawer, in the closet or at a doctor’s residence. Who’s to blame? The medical archive; we are criticized for that! (Statement – F7)

In countless statements, part of the recurring problems in daily routine was the search for documents (medical records, tests, reports, etc.) necessary to attend to different consultations and surgical interventions of any nature previously scheduled. From the orientation of the Medical Archive Institution, or even from the dynamic operation of hospital establishments 1 and 2, all documents under the custody of the industry should be returned to their proper filing after use, according to scheduling specifications, replacing their respective “documents under loan”.

[...] [the test] no, it was filed, it was in the blue folder [guide outside]; when medical records return to us, we open the medical records and put [tests] inside. Until medical records comes back [the guide stays outside] with the answer, that answer with the request: - It went to “X”; the date and the rest, all right; it left that day for a certain doctor and never came back. [...] On the same day, she [the doctor] came down here, the D1, [to] find out why tests were not in the medical records file. But she [was] holding the medical records file. (Statement – F1)

However, every now and then, they disappeared, they did not return, and the group of archive workers had to go to the field in search of their whereabouts. Some were found in the offices of the clinics for which they were intended, but for some reason were “forgotten” by those who used them; some were redirected between offices without this being previously informed to the archive; others were inadvertently “taken” by one professional to meet his/her specific needs, without making the proper request to the sector to evaluate this possibility, as well as other situations.

[...] today, lost medical records is a big hassle. Some doctors take the medical records home ... So, the archive sector is to blame, unfortunately!

Medical records leave a sector, from there, they go to another sector, nobody reports that they went from W to Y, no one informs. Then you go to W to look for the medical records, it is not there, and the doctor says: “I returned it, it is no longer with me, and you can have look here!” However, it is no longer there because they took it to Y and did not communicate it to the medical archive. That is why we came up with this flyer, because when the secretary takes medical records to W, a schedule, it is fifty, a hundred medical records, so she has the list and checks it one by one in the list; that which is not there is marked with an M on the side, and we know... (Statement - F8)

In the scrapbook of 12/08/2013315, we recorded some remarkable events, in which the analyzer “lost document” left explicit frequent rumors in the relationships between the medical archive Institution and its interlocutor Institutions. Among these, we witnessed the recovery by an assistant / messenger of medical records that had been “lost” since April 2013 and were found in sector X.

On this occasion, the archive Institution workers said almost in unison “that’s why the document was missing”. It also warned that this fact was “common”, that is, sector X was “famous” for retaining medical records for research without communicating to the archive staff, or to the outpatient clinic where the patient had been in his last consultation, since the computer system program did not contain any records regarding its return or any other movement.

Doctor D2 took the medical records, he did not return them. From there, he lends them to another doctor. Thus, you go after him and say: “Doctor, there is an exit record on that date with your name on regarding these medical records.” “But I returned the file.” “How is that so, if it’s not there?” “You must have filed it wrong.” So the system does not work, we are signing a certificate of stupidity
because, unfortunately, nobody believes the control we have, so it’s all the fault of the medical archive. Then, after the boss caught the doctor putting back the medical records - because it has become something so normal now, so to speak, because from here we have seen a doctor putting medical records in the purse... The other day, the boss saw the doctor doing just that and followed her right at the parking lot: “Look, I want to get those medical records that are in your purse.” “Oh! No! I’m not taking them home, I just came to leave my coat in the car.” “Ok, that’s fine, you take the medical records and return them to the archive.” Then she went back to the hospital and came back with her coat, and he said, “Hey! Weren’t you going to leave your coat, why did you come back with it?” Thus, she was going to take the files home, and it is now forbidden to take the research to another sector, you have to look inside the archive, so it was banned. (Statement – F8)

Fragments of the respondents’ narratives show how they develop their strategies for retrieving documents. In the case of the “disappearance” of the document from the previous episode:

[...]

when we sometimes suspect something, we send NE1 somewhere, because he does not speak or listen, but he understands everything; and no one speaks [to NE1], because he already knows what he is like, no one complains about him. (Statement - F6)

In this case, the powerful dimension, as a tool, which the “lost document” analyzer has shown to have by passing on one of the strategies that was used to establish procedures adequate and necessary to the progress of the daily work process of the medical archive Institution was evident.

Certainly, this strategy was employed by workers because, to a certain extent, relationships in the health field are still based on hierarchical and stratified forms directly supported by sustained practices in health work processes from the dimension of hegemonic medical action. Somehow, these reproduced and passed on as regimes of truths, norms and rules, responsible for representing the medical Institution, establishing daily conducts and practices, which subtly came to be explained by us researchers through the revealing exercise of the “document lost” analyzer. This exercise was many times made explicit in reports about the search for lost medical records:

[...]

Ambulatory and child surgery, and from there they go to the nursing ward, because the doctor wants to have a look at and study them [medical records]. They leave the outpatient clinic and go to a nursing ward: [sector] X?... There are many records there. [...] [Sector] X, there are many files there, indeed! A lot of medical records there, a lot! (Statement – F6)

The “lost document” somehow allowed revealing how these practices pointed out in previous paragraphs compromised the daily activities, but, paradoxically, at the same time, they were care production measures in the making. The disturbances produced by the interlocutor Institutions had repercussions on the work process dynamics, traversing relationships between subjects of other Institutions. From the handling of the documents under custody of the Institution medical archive that would have to follow certain procedures established by a set of norms and rules, to disorders caused to the attendance to the user Institution, we can recognize the analytical ability of this analyzer. This fact was also evident when a respondent stated that:

There is something new to learn every day in this [work process], because there are always new things that we know show up; also regarding doctors, who are always holding on to records, always safe. [...] They stay with them! For research, work, study. They teach with these medical records. There are several doctors there, several specialties, they have medical records there since 2010, 2009. [...] sure, it is a hassle... sure! [...] (Statement – F2)

At various times, statements such as this called us to investigate the fact that other problems were caused due to the loss or momentary “removal” of medical records, directly affecting the user Institution. Other statements revealed what the proper procedures and their consequences would be:

The right thing is that [the medical records] must go downstairs every day; a consultation occurred, they have to go downstairs, but in this case, they hold on to them, and that messes things up a lot. Sometimes the child has a consultation with another doctor, another specialty, and the medical records are there with another doctor, in another specialty. (Statement - F2)

Knowledge about the daily work dynamics of the medical archive group is perceived through the health work process micro-policy. By following the routine of all the schedules published in the daily care agendas of the different Institutions in the two hospitals, workers showed that they possess an important knowledge and were able to identify and establish what would be the problems caused by mishandling and the loss of documents.
Final considerations

By following the daily medical archive in Hospitals 1 and 2, the statement of some “known” sources allowed us to speculate that the medical archive Institution is invisible vis-à-vis its interlocutors, only existing in the interstices, as a strategy so that its capacity to promote health care is not admitted.

In carrying out their activities, even with little or no visibility, they did so with the prospect of sustaining the actions of other institutions and the hospitals themselves in the production of health care. This process can be observed insofar as the medical archive institution, when traversed by different institutions, represents a cross-sectional vector of the institutions that underpin the health work process. Therefore, we can recognize the participation of this group of workers in the context and in the production of care insofar as their activities as a depository of documents, information and data support several other forms of care. In addition, they seek to solve difficult situations through micro-political productions of health work in progress, performing their functions in creative, quiet, patient and observant fashion.

However, even if such traversing provide momentary visibilities from the different management, arrangements and strategies elaborated in handling frequent “lost documents” problems, medical archive workers – and their actions – become present through invisibility.

This invisibility, through the medical archive Institution, helped us somehow demystify and question some consecrated “truths” about the production of care in the field of health, where routine practices and actions were sustained by these “truths”, especially those supported by the hegemonic medical action.

The structuring of actions in the health work process was vertically constructed in the Medical Institution, supported by truths from the conception of the disease elaborated in the seventeenth century, when disease was the core of medicine and needed to be tackled. In that movement, the subject was sidelined. The latter, strong and buoyant, supported a practice that was unaware of the need for other elements of the work process, such as medical archive workers. The group of archive workers, as a booster of the user care process, faces at some point in life limitations of their daily autonomy and triggers overcoming mechanisms, showing that the medical archive establishes a proper care movement that affects directly care in the institutions studied.

Finally, we consider that this work could envision another and new perspective in the production of the health care act, broadening the spectrum of research focused on the themes of both collective and public health. Similarly, we think that, with this introductory debate about the degree of opacity of a powerful Institution, such as the medical archive, it is possible to recognize that its health work process produces life and care.
Collaborations

MA Costa participated in the project design, carried out field research work, data review and wrote the final version of the paper. AL Abrahão participated in the project design, guided the research and its analysis, reviewed and guided the writing of the final version of the paper.

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