Pharmaceutical counter-referencing in the transition care process: experiences of health professionals in a teaching hospital

Contrarreferenciamento farmacoterapêutico: experiências vivenciadas por profissionais de saúde em um hospital de ensino

Contra referencia farmacoterapéutica: experiencias vividas por profesionales de la salud en un hospital universitario

ABSTRACT

Objective: Understanding the perception that professionals about the process of pharmaceutical referencing of patients in the health system. Methodology: Case study based on a qualitative approach. The setting was a general teaching hospital, and the subjects were 14 health professionals. The data collection were done through interviews guided by a semi structured script. Results: The referencing was heterogeneous, taking into account relationships and subjectivities; it caused feelings of fear about readmission, pharmacotherapy unavailability, possible inability for the patient to purchase the drugs, and the fragility of communication. The professionals also pointed out possibilities to improve referencing such as to prepare a patient for discharge well in advance, implement referencing and recognition of patients’ subjectivity mechanisms. Conclusion: Referencing is built from the relationships and experiences of those involved. It is an action that impacts the care process and can be strengthened in the institution chosen for this study.

Descriptors: Hospital Care; Drug Utilization; Continuity of Patient Care; Transition Care; Delivery of Health Care; Health Services Accessibility; Nursing.

RESUMO

Objetivo: Compreender o processo de contrarreferenciamento farmacoterapêutico na rede de cuidados, a partir das experiências de profissionais de saúde. Método: Estudo qualitativo, fundamentado na sociologia compreensiva, desenvolvido em um hospital de ensino, sendo entrevistados 14 profissionais de saúde. A coleta de dados ocorreu, por meio de entrevistas, realizadas a partir de um roteiro semiestruturado. Realizou-se análise de conteúdo e identificação de categorias. Resultados: Identificaram-se as categorias Os "des"caminhos do referenciamento e Em busca de um contrarreferenciamento possíbil, em que o contrarreferenciamento apresenta-se como uma ação frágil, influenciado pelo medo da reinternação, questões de acesso e, principalmente, fragilidade dos processos de comunicação. Quanto às possibilidades de melhoria, têm-se preparação da alta com antecedência, reconhecimento das subjetividades dos pacientes e fortalecimento da comunicação. Considerações finais: O contrarreferenciamento é construído a partir das relações e vivências dos atores sociais, sendo que ocasiona impacto no processo de cuidado, devendo ser fortalecido.

Descritores: Assistência Hospitalar. Uso de Medicamentos; Continuidade da Assistência ao Paciente; Assistência à Saúde; Acesso aos Serviços de Saúde; Enfermagem.

RESUMEN

Objetivo: Comprender el proceso de contrarreferenciamento farmacoterapéutico en la red de asistencia médica Método: Estudio cualitativo, desarrollado en un hospital universitario, con 14 profesionales de la salud. La recopilación de datos se realizó por medio de entrevistas, realizadas con un guión semiestruturado. Resultado: Se identificaron las categorías, los "des"caminos de referencia y en busca de una posible contrarreferencia, donde la contrarreferencia se presenta como una acción frágil, influenciada por el miedo a la readmisión, en asuntos de acceso y en la fragilidad en los procesos de comunicación. En cuanto a las posibilidades de mejora, existe la preparación previa del alta, el reconocimiento de las subjetividades de los pacientes y el fortalecimiento de la comunicación. Consideraciones finales: La contrarreferencia se construye a partir de las relaciones y experiencias de los actores sociales, lo que tiene un impacto en el proceso de atención médica, y debe ser fortalecido.

Descritores: Atención Hospitalaria; Utilización de Medicamentos; Continuidad de la Atención al Paciente; Prestación de Atención de Salud; Accesibilidad a los Servicios de Salud; Enfermería.
INTRODUCTION

When moving through the care network, the patient relates to different people and services, which represent the different health care stations. This process goes through a heterogeneous network, involving different subjectivities among the individuals who seek and offer health care\(^{(3)}\). In this context, we observe the importance and the existing challenges to consolidate the integrality of care, understood as the set of aspects that ensure the right of users' access to the different services offered by the different levels of care\(^{(2)}\).

Besides the different subjectivities permeated in health care, we understand that when walking in the care network between the different levels of care, the patients need these levels to guarantee the provision of comprehensive care. Failures can cause aggravations in the patients' health status. The main errors related to health care occur when a patient moves from one health service to another\(^{(4)}\), and the effective referral and counter-referral system is the main element for the integration of health networks.

The referral occurs when a patient is sent from a certain level of care to a more complex one, and the counter-referral is when the patient from a more complex level goes to a less complex one. These processes are defined by the Ministry of Health as one of the main elements of reorganizing health work practices in the Unified Health System (SUS)\(^{(4)}\). Each level of care has specificities that influence the referral and counter-referral processes, especially the tertiary level. This is characterized by intense interventions and the use of hard technologies that normally require intense changes in the care process after hospital discharge\(^{(8)}\).

Due to polypharmacy, the clinical complexity of the patients, and a considerable number of interventions, hospitalization is a situation that can cause important changes in the use of medications by patients, especially with changes in prescriptions after hospital discharge\(^{(2)}\). Health professionals in hospital institutions have an important role in the use of medications during and after hospitalization. They are the ones who make the choice of pharmacotherapy, during the hospitalization period, making the referral of patients after discharge, and responsible for providing information on the medications in use and how to access them.

Medication errors by inappropriate prescriptions, which are common in the hospital environment\(^{(5)}\), may not be identified at the time of discharge prescription and continue to occur within the scope of primary care\(^{(3,6)}\). Thus, hospitalization could be seen as an opportunity to strengthen patient autonomy, so that Primary Health Care professionals in the counter-referral process would participate in the discussion of therapeutic behaviors\(^{(7)}\), something that is not strongly evidenced in the practice.

At the beginning of the research proposal, we observed that Pharmaceutical Assistance in Brazil was composed of different programs that contemplate the supply and encouragement of the rational use of medicines in the Primary, Outpatient, and Hospital area\(^{(8)}\). However, there was no formal existence of a referral-counter-referral process that focused on pharmacotherapy\(^{(5,6,8)}\). Although the literature also shows pharmacotherapeutic care actions, they were reported as isolated actions, without referral/counter-referral of patients in the care network.

In the accessibility and importance of the hospital for maintaining the continuity of drug therapy in the transition of care associated with the scarcity of Brazilian studies that address this theme, this research aims to understand the pharmacotherapeutic counter-referral after hospital discharge, from the experiences of professionals in a teaching hospital.

METHODOLOGY

This is a case study with a qualitative approach that is the study of the universe of lived experience, requiring the analysis and interpretation of the meanings and experiences of people and the phenomena that occurred in a certain group of people.

We used comprehensive sociology as the theoretical and methodological reference. In this theory, we must consider daily empirical knowledge with the valuation of sociality. It is proposed that the imaginary is something that goes beyond the individual and has an influence on the collective. The understanding of the experiences occurs from the perspective of different people in a certain phenomenon called in this study pharmacotherapeutic counter-referencing. The interpretation of each experience considers the complex social relationships, in which each phenomenon analyzed is a symptom of what is experienced in the social sphere\(^{(9)}\).
The research scenario is a general teaching hospital located in the North region of Belo Horizonte, which has 320 beds and computerized management by the electronic medical record. The institution's medical clinic is the object of this study, consisting of 96 beds and a team composed of the following professionals who perform activities directly related to medicines: 16 nurses, 8 pharmacists, 1 pharmacy resident that performed clinical activities, 64 nursing technicians, and 18 doctors.

We used interviews with semi-structured script in the data collection, based on the guiding question we tried to study: "how do health professionals experience pharmacotherapeutic counter-referencing due to their experiences in a teaching hospital? After being immersed in theoretical reading on reference/counter-reference and the founding theory of this study, the responsible researcher developed the script, which was sent to two researchers with experience in the theme that approved it. We asked the health professionals regarding the perception of hospital discharge and the counter-referral of patients in the network.

The professionals were included according to the following criteria: to have an institutional bond for more than three months, to carry out activities in the institution's Medical Clinic sector, and to participate directly in the pharmacological care of elderly patients previously monitored in the Basic Health Unit of reference and who received hospital discharge with a prescription. The choice of the three-month institutional bond period was because of the fulfillment of the period of employment experience, a time that suggests a minimum of necessary contact with the functions to be performed and with the hospital environment. The Medical Clinic sector was chosen because it is a reference in the care of patients with impaired chronic health problems, who need to use health services frequently.

Computerized management reports referring to the Medical Clinic sector identified the patients who were discharged from the hospital one month before the beginning of data collection. Thus, the electronic medical record identified records of prior follow-up by Primary Care, prescription of medications at the time of hospital discharge, and recommendation of outpatient return at the institution's anticoagulation clinic.

In one month of analysis, 20 patients who met the inclusion criteria were discharged. Based on this identification, we made a second report containing the names of all professionals who exercised direct medication care to these patients, during hospitalization, considered medical professionals, nurses, nursing technicians, and pharmacists.

At first, we selected a professional from each category to participate in the research, and for each category, we identified the professional with the longest time at the hospital. If the professional refused to participate in the research, the professional with the second-longest time was invited to participate in the study.

At the end of the interviews with a representative of each professional category, a new cycle of attracting professionals and interviews began, until the occurrence of data saturation. After defining the professionals to be interviewed, we invited everyone on the same day, with the availability of each professional's schedule being the criterion for defining the order of the interviews.

We invited the professionals to participate in the research in their respective work sectors, and we conducted the interviews during rest hours or after hours, subject to the availability of each professional and in a place that guaranteed privacy.

After recording each interview, the file received an encoding corresponding to the participant and then saved in a computer program. In the codification process, each respondent received the initials of their professional category, generating randomization in the excel program for the numerical choice of each respondent. Thus, the coding consisted of initials in the category, followed by a random number. The first interviews were transcribed, right after performing them to facilitate the identification of saturation, considering the empirical limits of the analyzed object and the sensitivity and deepening of the researcher in the researched theme. Saturation occurred when we identified three consecutive interviews in which no new elements were identified from the reports previously carried out and analyzed.

After completing the data collection process and transcribing all the interviews, we submitted the data to content analysis. We followed these steps: 1) ordering the data by the exhaustive readings of the reports to establish meaning to the set of propositions; 2) systematic readings to find similarities or contradictions in the reports,
organizing the findings in “units of meaning”; 3) organization of meaning units in themes to deepen the content of the messages; 4) interpretation of the themes and discussion with the existing literature; 5) preparation of a final report with the interpretation performed, knowing that “the final product is always provisional”[10].

Each interview lasted an average of 40 minutes and the data collection lasted one month, with the results incorporated into the master’s project entitled “access to drug therapy from the perspective of patients and health professionals”, from the School of Nursing from UFMG. The participants validated the data so that the result was presented to them before publication. Their feeling represented in the reports when reading the speeches and respective interpretations were considered a validation.

The participants received information about the research and in this process, the free and informed consent form (ICF) was presented, which specified the guarantee of anonymity, and the need to record the interviews. Those who consented to participate were asked to sign the informed consent form. A previously trained researcher carried out the research, who worked at the institution but did not exercise direct care for patients.

This study was submitted to the evaluation of the Teaching and Research Center (NEP, Núcleo de Ensino e Pesquisa) of the Hospital under study and the Research Ethics Committee (COEP) of UFMG, receiving opinion number 00330203000-11.

RESULTS AND DISCUSSION

After saturation, we included 14 professionals, three nurses, three pharmacists, one pharmacy resident, four doctors, and three nursing technicians, as shown in Table 1.

<table>
<thead>
<tr>
<th>Nº of professional</th>
<th>Profession</th>
<th>Working time at the Hospital</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nurse</td>
<td>5 years</td>
<td>Male</td>
</tr>
<tr>
<td>2</td>
<td>Pharmaceutical</td>
<td>1 year</td>
<td>Female</td>
</tr>
<tr>
<td>3</td>
<td>Nurse</td>
<td>1 year</td>
<td>Female</td>
</tr>
<tr>
<td>4</td>
<td>Pharmacy Resident</td>
<td>7 months</td>
<td>Female</td>
</tr>
<tr>
<td>5</td>
<td>Nursing Technician</td>
<td>years</td>
<td>Male</td>
</tr>
<tr>
<td>6</td>
<td>Nurse</td>
<td>2 years</td>
<td>Female</td>
</tr>
<tr>
<td>7</td>
<td>Pharmaceutical</td>
<td>1,5 year</td>
<td>Female</td>
</tr>
<tr>
<td>8</td>
<td>Pharmaceutical</td>
<td>1 year</td>
<td>Female</td>
</tr>
<tr>
<td>9</td>
<td>Nursing Technician</td>
<td>8 months</td>
<td>Female</td>
</tr>
<tr>
<td>10</td>
<td>Doctor</td>
<td>5 years</td>
<td>Male</td>
</tr>
<tr>
<td>11</td>
<td>Doctor</td>
<td>5 years</td>
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<tr>
<td>12</td>
<td>Doctor</td>
<td>5 years</td>
<td>Male</td>
</tr>
<tr>
<td>13</td>
<td>Doctor</td>
<td>5 years</td>
<td>Female</td>
</tr>
<tr>
<td>14</td>
<td>Nursing Technician</td>
<td>5 years</td>
<td>Female</td>
</tr>
</tbody>
</table>

Source: The authors, 2016.

After the analysis of the interviews, we identified two categories: The deviations/paths of counter-referencing” and “Searching for a possible counter-referencing”. Details of the findings can be found below.

Category 1: The deviation/paths of counter-referencing”

In this category, the interviewees presented the process of pharmacotherapeutic counter-referencing in their daily work, and the paths in
which counter-referencing occurs, the “deviation” that contribute to fragmentation.

During hospitalization, any professional who comes into contact with patients is responsible for collecting information about pharmacotherapy - such as type of medication, schedule, possible effects, if there is a need for change or new adaptation. There is even a continuous work with nurses in an informed practice about the actions developed with the patient: “in the discharge today, all patients who are discharged are informed by the clinical staff of all medications they are going to use the hospital discharge onwards. Guidance is provided for all patients (N01)”. However, professionals also recognize that this action does not occur continuously: “When there is a demand and there is a question about the medication, we take it and inform what will be taken because we are using this or that medication. Now, when the patient is not interested in asking what it is, it turns out that, if he is interested in knowing, you have to talk to him” (D10).

When affirming that the provision of information about pharmacotherapy in the hospital environment occurs through questioning the patients, the professionals assume that this is not a constant practice. Although they recognize that most patients use medications without knowing why the act of informing them is not intrinsic to everyday actions. A subject patient is identified, without his own stories, values, and perceptions, even contradicting the idea that patients can be better informed about the effective use of medicines by health professionals(11). This also shows that empowerment practices are not inherent in professional activities(12): “I think that here at the hospital he is more passive, he doesn’t care so much [...] there are several professionals taking care of him so I think the concern compared to the medicine is less!” (PHA04).

In some cases, patients receive guidance only on the drugs prescribed at discharge. But the lack of information and the adherence of the medical professional to the drugs available in the Municipal Drug List (REMUME) of the municipality to which the patient belongs, are also considered barriers:

“It depends on the doctor. I think some are aware of what they have on the network, what they will give to the patient. Some doctors will not change and that he [patient] will leave here with a prescription that he will not make it! (PHA02) If you don’t have it at the health center, then the family has to buy the medication, which is what is difficult!” (N06).

At the time of discharge, by not prescribing the medicines provided by the municipalities, the doctor ends up placing barriers that could compromise access. Even with government investments in programs to improve access to medicines, such as “Aqui tem Farmácia Popular” and “Farmácia popular do Brasil”(13), this is still a challenge(14-15). Greater appropriation at the hospital level of the drugs available on the network and of the patient’s possibilities to acquire them would be necessary so that the prescription is accessible.

They also reported that failures in the counter-referencing process compromise the continuity of care and, consequently, pharmacotherapy: “Yes [...] we don’t have this issue of referencing and counter-referencing, so it’s a long shot! Because we know that access is sometimes difficult!” (D11).

These factors can contribute to the readmission being a probable event: “He is going back to the hospital! (D12). When the medicine ends, there is no way to buy it and he runs out. Then he loses control! Well, he’s gone for a week without a diuretic, that’s it! Then he'll be hospitalized here. Then he’ll stay another 10, 15 days in the hospital” (D14).

Besides guaranteeing access, it is necessary to guarantee access in full, and the defense of equal access, in a universal health system, takes the form of defending access to all levels of care by the same patient. The existence of safe articulation and counter-referencing is also dependent on the knowledge of broad accessibility, considering the needs of the patient and the accessible technologies that should be used on a case-by-case basis. Counter-referencing, without knowledge of the whole, is incomplete and fragile and may not achieve the proposed objectives.

Due to the need to maintain the provision of specific care in the process of transition between levels of care, professionals recognize at hospital discharge a moment of unpredictability: “I think they are very lost. I usually talk to girls and my colleagues that, when I discharge the patient, I have the impression that it is a bird leaving the nest for the first time! [...] He will even receive a dose when he leaves here enough to maintain the treatment, but then will he get it?” (D12). “Imagine a patient who is not in the health area, who does not understand, who does not know” (N01).
The discontinuity of pharmacotherapy is also characterized by the difficulty in acquiring the prescribed drugs provided by SUS and by the users' lack of understanding of how to use them. For the interviewees, it is as if the patient felt “lost” in the network, in the paths to be taken, in the scope of pharmaceutical assistance, and the prescription and dispensation must involve information that many times, go beyond the prescribed and need educational actions and continuous monitoring. In this context, there is a cyclical process, in which the post-discharge period can trigger future readmissions, which makes it a “post-pre (re) hospitalization” process: “... if you don't have it at the health center, then the family has to buy the medication, which is what is difficult! Because most of our patients are needy, so most are not able to buy them” (N06).

A study that evaluates hospital readmissions identified that adherence problem was among the main preventable causes of hospital readmission. This reinforces that in addition to availability, it is necessary that the dose is adequate for the patient and that he understands, wants, and can use the medications. Incomplete or inaccurate information during the hospitalization period can contribute to deficiencies in the decision-making process at other levels of care. Also, the problems of counter-referencing, considered “external” by the interviewees, end up reflecting the “internal” limitations of counter-referencing, based on the difficulty of hospital professionals to build a unique view on the patient-individual and the pharmacotherapy.

**Category 2: Searching for possible counter-referencing.**

In the possible counter-referencing category, the interviewees also highlight the possible strategies to facilitate the referencing and counter-referencing process in health care.

Previous preparation of hospital discharge and strengthening of the communication process are some of the proposals indicated: “So we see that the pharmacy does everything very well, like this: “you will take this at 10, this at noon, this at this time”, everything very explained!” (N03).

The previous preparation of discharge, identification of specificities of patients and family members in the use of medicines, technical training of professionals, are presented as actions to strengthen information, understood in this study more broadly, that is, in the sense of knowledge, participation, communication. There is a thought of a verticalized care network when professionals recommend the use of drugs not available by primary care.

In case of the need to use medications not available by SUS, understanding the patients' socioeconomic limitations influences a prescription that can be accessible, through negotiations with family members: “For him to be informed, throughout the process and even throughout even when he leaves. Don't just deliver, okay, “there's captopril for you, great!” No! There has to be a follow-up on the network, at the information desk, a follow-up from him outside” (PHA02).

Continuous information would provide actions that await leaving the paper to become a daily practice: “I have referred all patients to check at the health clinic to see if this problem of [...] (D10) decreases. So, I think that maybe I could improve the discharge guidance for some groups! But I think that here we have to walk for that!” (D11).

They need teamwork, which should be understood as a set of individual practices, actions, and relationships between levels of care, which requires longitudinal health care, in a two-way line that cuts across primary care towards the tertiary sector and so it returns.

The systematic practice of evaluating referencing to the health center could improve the qualification of referencing and promote more rational use of specialized resources. They should have efforts in the need to ensure informational continuity, a requirement for the coordination of care by Primary Health Care.

Therefore to think about possible accessibility, it is necessary to recognize the need to adapt our offers to the specific context of the situation in which the individual meets the health team. International experiences of implementing services with this focus have shown contributions to the prevention of medication errors, clinical complications, and readmissions.

However, the strengthening of communication should not be only between professional-patient-units, but also among the professionals of the institution: “We go to the nurse, who goes to the doctor and tries to know if it's right if the dose is right. when we don't know, we ask the nurse to let us know what it is, what the medicine is for, so if he doesn't know, he goes to the doctor” (NT05).
The strengthening of communication should not only be between patient professionals but should also occur between professionals so that there is a better understanding of where and to whom the patient is referring, who was under their care until discharge\(^{(25)}\). Guidance should be given at any time, at any level and by any professional, to avoid failures in the different health work processes.

Information is reaffirmed as a fundamental strategy for access. It should also be networked and continuous, which will certainly facilitate the patient’s walk, and there is a need to increase efforts to ensure that effective exchanges of information, in the process of care transition, are pointed out by the literature\(^{(31)}\).

Due to the need to strengthen interprofessional communication, knowledge, and standardization of work processes and monitoring the high turnover of professionals, training and/or qualification is considered as one of the possible strategies that could contribute to maintaining access during hospitalization: “Some of us have very wide knowledge, but there are still some that we have difficulty in serving, what is the function if it can be associated with other medications ”(NT05). “So, I think that in the past we used to have these courses [on medication], but then it stopped” (NT13).

The professionals reported that investing in internal training in medication administration is one of the strategies to alleviate the difficulties of nursing technicians in medications, avoiding possible errors. Regarding the need for training of health professionals, the transition of care should be directed to professionals from different areas: from undergraduate to graduate\(^{(36)}\).

These actions would generate more accessible prescriptions and discharge reports better guided by the continuity of care, more consistent with the reality of the patients’ daily life, which would bring contributions to the patients.

**CONCLUSION**

The pharmacotherapeutic counter-referencing is made up of weaknesses and should be better strengthened in the institution under study.

The inexistence of an unconsolidated communication process between health professionals and between professionals and patients contributes to the weakening of isolated actions regarding the identification of drugs used in the pre-hospitalization period, the provision of information during hospitalization and, for the counter-referencing process of patients in the network, which leads to flaws in the pharmacotherapeutic care process.

Although existing, the actions that contribute to a better-referencing process are carried out based on individual initiatives, and the implementation of an institutional policy could contribute to the strengthening of this process.

Thus, we highlight the need for referencing and counter-referencing to become a communication and integration strategy between professionals-patients and professionals-health services, in the search for improvements.

We believe that the findings may contribute to the improvement and systematization of nursing practices related to referencing and counter-referencing of patients in the care network. Also, the characteristics and experiences of professionals in the pharmacotherapeutic counter-referencing point to the multi-professional need to conduct this process, which is permeated by different knowledge. The elaboration of a multi-professional counter-referencing form, in which the medications used during hospitalization and prescribed at discharge were specified, subjective information from patients that reflected their medication experiences, and the access information could contribute to the strengthening of counter-referencing with consequent improvement in comprehensive care.

This study has the limitation of reflecting the experience of professionals linked to a health institution, and another reality can occur in different contexts.

We hope that the strategies presented among others can be considered, facilitating access to pharmacotherapy with continuity of care in a longitudinal way in the care network.

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Nota: This article is a product of the master's thesis entitled "Access to drug therapy from the perspective of patients and health professionals" defended at the UFMG School of Nursing.

Recebido em: 03/08/2020
Aprovado em: 01/12/2020

Revista de Enfermagem do Centro-Oeste Mineiro/RECOM - 2021; 11/3942
www.ufsj.edu.br/recom