Nurse liaison: a strategy for counter-referral

**Enfermeira de ligação: uma estratégia para a contrarreferência**

**Enfermera de conexión: una estrategia para la contrarreferencia**

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**ABSTRACT**

Objective: to identify the profile of the counter-referred patients by the “nurse liaison” and to describe the experience of the professionals who participated in the project. Method: intervention research, with twelve nursing nurses from a hospital and an Emergency Care Unit, and 26 nurses from Primary Health Care. Data were obtained through questionnaires and counter-referral forms. Results: Out of 43 counter-referred individuals, 62.8% are over sixty years, 53.5% are men with multi-pathologies. Among the positive aspects, the nurses highlighted the dialogue between health care services, agility in the acquisition of inputs for the continuity of care in primary care, benefiting patients after hospital discharge. The greatest challenge was the lack of time and the deficit of nurses to perform the function. Final considerations: the presence of the “nurse liaison” has proved to be an important strategy to improve integration between services and to promote continuity of care.

Descriptors: Continuity of Patient Care; Integrality in Health; Nursing; Professional Practice; Patient Discharge.
INTRODUCTION

In order to overcome the limitations of the fragmented care model, the Ministry of Health (MS) redirected actions and services through Health Care Networks (RAS), which are characterized by the constitution of horizontal relations between different health care services, due to the centrality in the health needs of a given population and the accountability in continuous care. One of the main objectives of RAS is the search for integral care\(^{1}\), which corresponds to an "articulated and continuous set of actions and preventive and curative services, both individual and collective, which is required for each case at all levels of complexity of the system"\(^{2}\). It is a guiding principle and an organizer of health practices\(^{3}\) according to which the patient, in accordance with their needs, can be attended to at any point in RAS, without treatment interruptions and without getting lost in the care network.

However, there are still weaknesses in the communication between professionals from different health care services, especially between primary and high complexity care, a barrier in the dialogue of professionals with patients, as well as disarticulation of the service network caused by the absence of counter-referral\(^4\)\(^{-}7\), which may impair continuity of care.

From the perspective of the hospitalized patient, continuity of care can be enabled by the practice of responsible discharge, which happens through the orientation of the patient and his/her relatives about the need to proceed with treatment elsewhere, through the articulation between the different points of RAS, especially with Primary Health Care (PHC)\(^8\). Therefore, it is essential for the nurse who assumes the role of coordinator of hospital discharge to be involved in this transition process and, also, to integrate the other members of the care team in favor of joint action and more qualified assistance\(^9\).

Some health services in Canada, Spain and Portugal focus on the role of the “nurse liaison” as a strategy to ensure continuity of care between the hospital and other health care services. Each country adopted a terminology for this professional, such as "nurse liaison", “enlace nurse” and “discharge management nurse”, respectively\(^10\)\(^{-}12\). In this study, we chose to use the first term.

When considering the contribution of the nurse in the articulation between the RAS services, this intervention project was inspired by the role of the “nurse liaison” performed by professionals from a hospital and an Emergency Care Unit (UPA), who assumed this role, identified among the hospitalized patients, those who demanded continuity of care after hospital discharge, and performed the counter-referral of these patients to PHC.

OBJECTIVE

To identify the profile of the patients counter-referred by the “nurse liaison” and describe the experience of the nurses who participated in the project.
other questionnaire was applied to the 26 nurses of the UMS who received the counter-referred patients. In this questionnaire, the nurses talked about the experience of receiving the patients and, mainly, about the counter-referral flow in this research.

The sociodemographic data, the place where the patient was counter-referred from, clinical diagnoses and the care needs after hospital discharge were extracted from the counter-referral forms.

**Stages of the study**

The intervention was conducted between March and July 2015, in three stages: planning; implementation and final evaluation. The services agreed to a period of four months as it was considered sufficient to implement and evaluate the proposal. The counter-referral of 43 patients by the “nurse liaison” was due to the intervention period and the inclusion criteria.

In the planning stage, heads and nurses of the hospitalization units of the hospital, of UPA and PHC were contacted; the counter-referral flow from the hospital or the UPA to the PC (Figure 1) and the counter-referral forms and scheduled discharge, as well as a worksheet with the address and telephone number of all the UMS of Curitiba, with data from their respective headships, were developed. A banner with the map of Curitiba and its health units was also manufactured. The latter and the worksheet were posted in the hospital and UPA units.

At the implementation stage, the 43 patients were counter-referred by the “nurse liaison”. In the final evaluation stage, data collection and analysis were conducted.

**Data analysis**

For the data approach from the questionnaires, the technique of content analysis\(^{(13)}\) was employed in pairs. This procedure corresponds to a set of communication analysis techniques, organized by the following phases: pre-analysis, material exploration, treatment of results and interpretation\(^{(13)}\). It was organized in pairs as the process was performed by three nurses with experience in the technique and the result, which was determined consensually.

In this type of analysis, the categorization can be done by “boxes”, where the category system is previously provided, or by “archives”, where the category system derives from the analog and progressive classification of the elements\(^{(13)}\). In order to evaluate the data from the counter-referral forms, the “boxes” categorization was used, and the pre-defined categories were: age, sex, origin and clinical diagnosis of counter-referred patients; counter-referred patients with diabetes and systemic arterial hypertension and in need of care in PHC. For the analysis of the questionnaires applied to “nurse liaisons”, the archives procedure was adopted.

**RESULTS**

**Characterization of the “nurse liaisons” and the nurses of the Municipal Health Units**

Out of all the professionals who answered the questions, all of them female, one (3.3%) was 24 years; fourteen (46.7%) were between 32 and 38 years; ten (33.3%) were 40 to 49 years; and five (16.7%), aged 50 to 58 years. Seven (21.2%) obtained their degrees less than ten years ago; nineteen (57.6%), between ten and nineteen years ago, and seven (21.2%) more than twenty years ago. Regarding professional qualification, fourteen (36.9%) had a specialization; ten (26.3%) had two specializations; and seven (18.4%), three or more specializations.

The results are presented in two stages: the first presents the profile of the patients counter-referred by the “nurse liaison” (Table 1); the second presents the pilot project of the “nurse liaison” from the perspective of those who participated in the intervention.

**First stage: Profile of patients counter-referred by “nurse liaison”**

<table>
<thead>
<tr>
<th>Categories</th>
<th>n (43)</th>
<th>F%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than sixty years</td>
<td>16</td>
<td>37.2</td>
</tr>
<tr>
<td>More than sixty years</td>
<td>27</td>
<td>62.8</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>46.5</td>
</tr>
<tr>
<td>Male</td>
<td>23</td>
<td>53.5</td>
</tr>
</tbody>
</table>

To be continued
Nurse liaison: a strategy for counter-referral

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Table 1 (concluded)

<table>
<thead>
<tr>
<th>Categories</th>
<th>n (43)</th>
<th>F%</th>
</tr>
</thead>
</table>

Counter-referred patient origin
- Clinical Neurology 15 34.9
- Male and female medical clinic 13 30.2
- UPA* 8 18.6
- Orthopedics 1 2.3
- General and digestive surgery 5 11.6
- Semi-intensive therapy center 1 2.3
- Urology - -

Clinical diagnoses of counter-referred patients
- Systemic arterial hypertension 28 65.1
- Diabetes mellitus 19 44.2
- Stroke 19 44.2
- Chronic Kidney Insufficiency 6 14.0
- Other cardiovascular diseases (congestive heart failure, deep vein thrombosis, insufficiency, atrial fibrillation, angioplasty (stent), and basilar artery stenosis) 6 14.0
- Hypothyroidism 5 11.6
- Dyslipidemia 5 11.6
- Chronic Respiratory Diseases (Asthma and Chronic Obstructive Pulmonary Disease) 4 9.3
- Chronic alcoholism 4 9.3
- Rheumatoid arthritis 3 7.0
- Depression 3 7.0
- Smoking 3 7.0
- Other (lupus, Parkinson’s, Alzheimer’s, allergies and anxiety) 5 11.6

Need for care in PHC**
- Control of chronic non-communicable diseases 32 74.4
- Special care in complex wounds 14 32.6
- Motor dependence 13 30.2
- Device care 10 23.1
- Other cares 9 20.9

Note: *Emergency Care Unit; **Primary Health Care

Second stage: The pilot project of the “nurse liaison”, from the perspective of the participants of the intervention

Based on data from the questionnaires answered by the nurses of the hospital, the UPA and the UMS, four categories emerged: the insertion of the function of “nurse liaison” in the work process of the hospital nurses and the UPA; benefits to patients counter-referred by the “nurse liaison”; the flow of counter-referral; and the work process of the PHC nurses.

Category 1: The insertion of the role of “liaison nurse” in the work process of hospital nurses and the Emergency Care Unit
The role of the “nurse liaisons” promoted the contact between nurses from different points of RAS, for, when counter-referring the patients, they needed to discuss, by telephone, the needs of each patient after hospital discharge and the resources available in PHC, as reported:

- Greater contact with the basic health care network. (E8)
- It was very good [...] to get in touch with the nurses of the health units. (E13)

In addition, the dialogue between the professionals gave a greater understanding of the functioning of RAS, which is fundamental to promote the continuity of care to patients with quality and safety:

- Knowing how the system works, it is easier to access the system. (E6)

On the other hand, the “nurse liaisons” pointed to some difficulties, such as the lack of time and the reduced number of nurses, for the mentioned function was another activity inserted in the routine of the professionals:

- One problem is our lack of time to do this work, the demand here is great [...] we are prioritizing the work and putting out the fire. (E7)

One of them draws attention to:

- [...] Lack of time and staff. (E13)

Category 2: The benefits to patients counter-referred by the “nurse liaison”
With the “nurse liaison” at the front of the counter-referral process, there was more agility in the acquisition of necessary inputs for the continuity of the care to patients in PHC, as one participant reported:

- Greater agility in ordering materials, equipment for patients. (E6)

The patients were referred from the hospital and the UPA to the PHC in a systematized manner, which reduced the return to the UPA, at least:

- ... does not return to UPA for the same reason. (E12)

The contribution of the “nurse liaison” is also noteworthy:

- Continuity and follow-up of the patient by the health unit. (E7)

So that patients continue to be treated, monitored and oriented in PHC, since care often does not end with hospital discharge, especially when it comes to elderly patients with chronic NCDs.

Category 3: The flow of counter-referral and the work process of Primary Health Care nurses
The communication between the nurses of the hospital, UPA and UMS was mentioned as favorable by PHC professionals, who started to have more information about the patients of their
region, especially those who were hospitalized. In this sense, the program:

- It promotes communication between UPAS or hospitals and health units. (E21)
- It facilitates the maintenance of the radar by the health unit, since most of the time we do not receive the counter-referral. (E20)

For most of the PHC nurses, contacting by telephone, chosen in this research, was positive, and defined as:

- Practical, resolutive. (E3)
- Insightful and objective. (E16)

Other nurses felt that telephone contact is limited as:

- Since we’re always in the office, we’re not available to answer the phone. (E22)

And sometimes it raises doubts, since:

- In this form of contact, communication problems are inevitable, such as: lack of explanation, details, inaccuracies and misinterpretations. (E1)

In order to improve the flow of the counter-referral and to reduce the problems in the communication between the professionals, the PHC nurses provided several suggestions, such as the scheduling of the consultation in the PHC by the hospital, via an integrated computerized system:

- Hospitals could have access to nurses’ schedules and perform the scheduling process. (E4)

However, there is still no computerized system that integrates the hospital and the UMS. Another suggestion to improve the flow of counter-referral was to inform the UMS nurse by e-mail:

- I believe it to be the best option to contact the nurse and pass on the information. (E4)

The participants also suggested reserving time in the PHC schedule for post-discharge hospital consultation:

- We can include Nursing consultations focused on the evaluation of the post-discharge patients as routine, in the unit or in a home visit. (E20)

In addition to operational suggestions, to qualify the flow of counter-referrals, the nurses of the PHC were reminded of the need to raise the awareness of the professionals about the relevance of integration among the various care levels.

- The importance and benefits of integrity between the different dimensions and the health team. (E17)

**DISCUSSION**

Out of the 43 counter-referred patients, 27 (62.8%) were over sixty years, with no significant differences between the genders. Fourteen (30.2%) had diabetes and systemic arterial hypertension, which is one of the current problems in the health field in our country, the increasing number of elderly people with chronic NCDs. According to statistical projections, in 2025 the number of elderly should reach 32 million, and Brazil will occupy the sixth place in the order of countries with this population contingent.

Worldwide, chronic diseases account for 59% of all deaths, and it is estimated that this number should rise further due to the aging of the population, combining physiological weaknesses, unhealthy lifestyle, reduced fertility, accelerated urbanization and social stress, which reinforces the need for strategies in the field of nursing that positively impact this important global problem.

Regarding the place where the patient was counter-referred to, only the urology unit of the hospital did not refer anyone. Regarding the others, clinical neurology was highlighted, which counter-referred fifteen patients (34.9%), followed by the male and female medical clinic, which counter-referred thirteen (30.2%), which is justified by the patients’ clinical diagnoses: 28 (65.1%) had systemic arterial hypertension. Out of these, nineteen (44.2%) had suffered a stroke and the same amount was diagnosed with Diabetes mellitus.

In addition to the need to monitor chronic NCDs after hospital discharge in PHC, fourteen patients (32.6%) demanded care with complex wounds, thirteen (30.2%) had some type of motor problem dependence; and ten (23.1%) were in need of care with devices such as nasoenteric or nasogastric catheters, hemodialysis catheters, indwelling urinary catheters, and gastrostomy catheters. The results on the profile of the patients did not present changes, since they agree with a previous study, conducted in 2010 in the same institution, which aimed to identify the demand and the performance of the “nurse liaison”. This study demonstrated that patients had pluripathologies such as systemic arterial hypertension, Diabetes mellitus, cancer and gastrointestinal diseases and that the thematized function facilitated the approach of the different health care services, contributing to reach the integrity of care.

Communication between nurses working in different services was a positive point of this intervention, which is significant, since communication is a fundamental element in care. Qualifying it is an essential strategy so that the patient can be assisted effectively and with greater efficiency, without patients and/or their relatives having to go to different health services in search of a response to their needs.

PHC nurses contributed in a meaningful way, through several suggestions, to improve the communication proposed by the counter-referral flow, reinforcing once again the lack of articulation between the levels of complexity. In Brazil, there is still deficiency and fragility in the communication between the different health services. Eventual articulation is more related to the care teams’ decision than to the existence of a structured and systematized process, among the health care services.

In this sense, the existence of initiatives by some physicians who, preoccupied with the continuity of care of patients with...
chronic NCD, scheduled return visits after hospital discharge, without going through the regulation system. Another action involved a group of patients with a specific chronic disease and their relatives, in which some of them were chosen to play the role of intermediaries between the patients and the specialized team.20

Midwives who participated in a survey on the transition from hospital care to maternity care and other services recommended the deployment of an electronic system in order to facilitate sharing of information21. It is believed that the ideal is the implementation of an integrated computerized system, which includes clear and precise information on the different levels of care, and also that the communication between the nurses should be done by telephone or e-mail, in order to favor the discussion of patient needs, the exchange of experiences and the co-responsibility of patient care.

Integration between services is essential so that care actions have continuity, which needs to be understood and coordinated by the health team and enabled through the implementation of policies22. Although logistics systems, which are components of the RAS’s operational structure, appear as a solution to integrate services23, favoring the continuity of care, it is still necessary to study alternatives based on public policies that favor the articulation between services and are centered on the patient.

In performing the counter-referral, the “nurse liaisons” realized the importance of such activity, verified in the agility in organizing the inputs to promote the continuity of care to the patient in PHC.

The patient’s transition from one service to another consists of a breaking point. Therefore, the authors defend the importance of a discharge plan made by the care team. Among the professionals in the team, the nurse liaison has been responsible for developing this planning, due to his greater knowledge about non-hospital care and the process of integration between different health scenarios24.

The lack of time and staff was the difficulty raised by the nurse liaisons, which reinforces the importance of having an exclusive nurse to perform this job, since the actions carried out by these professionals have caused positive impacts.

An intervention project focused on the role of hospital nurse liaison and a referral board had the objective of implanting a health model integrated to patients with multimorbidities, based on the communication between hospital and primary care. Compared to a conventional model, simulation results pointed to a reduction in costs by 89% for the group of patients of less than eighty years and with three or more morbidities25.

In addition to acting as a connection between the hospital and PHC, the nurse liaison can contribute to other settings, such as discharge from ICU patients to hospital units, as well as the transmission of up-to-date information between nurse in the surgical center and family members25-26, which may improve the articulation between the units of the same health institution, strengthen communication and the bond between professionals and family members.

Regarding the nurses’ suggestion on the need to raise awareness about services, the authors believe that this is a slow but possible process through the redirection of the care model that guides the professionals’ practices, placing the patient at the center of the actions, respecting his particularities, inserting the family in the care process27 and keeping in mind that the achievement of better health conditions occurs from joint actions of promotion, prevention and cure.

**Study limitations**

As a study limitation, the number of intervention sites stands out, a hospital and a UPA, with the participation of 23 UMS from PHC, as it is important to develop this research agenda in other scenarios. In addition, the perception of counter-referred patients during the intervention was not included, which could bring more elements to evaluate this project.

**Contributions to the areas of nursing, health or public policy**

This study is considered extremely important because it reiterates the use of the nurse’s expertise to create and contribute strategies that favor continuity of care, optimizing resources, improving the patients’ quality of life, reducing readmissions and qualifying the workforce through systematic and joint actions between professionals and services.

**FINAL CONSIDERATIONS**

The information obtained about the profile of counter-referred patients reaffirms the need for strategies that promote continuity of care after hospital discharge, so that patients have their demands met and are not penalized by the fragmentation of the health system. Actions to promote, prevent and rehabilitate health must go hand in hand, so that people, especially the elderly with chronic diseases, do not suffer the consequences of the complications and risks they are exposed to.

In order to seek new strategies that favor continuity of care, this research focused on the work of the “nurse liaison” as a possibility, which has brought significant benefits, among them, the promotion of communication between the different levels of care, an essential element in this context. It also brought the reflection of the PHC nurses on ways to improve this communication, which shows that the nurses have an interest in qualifying the process of counter-referral.

It has been shown that nurses represent a category capable of taking on this strategy due to the position they occupy and the responsibilities they assume and develop. However, it is important to create a position for the “nurse liaison”, considering the difficulties presented by nurses when this function is added to the others attributed to them.

With regard to patients who require continuity of care after hospital discharge, the role of the “nurse liaison” can represent the starting point for accessing the health unit, facilitating the knowledge of PHC professionals about the real needs of the patients and it can, also, diminish the return to services of greater care complexity.
REFERENCES


