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Veröffentlichungsversion / Published Version
Zeitschriftenartikel / journal article

Empfohlene Zitierung / Suggested Citation:
Correia, D. M. d. S., Mesquita, E. T., Singh, M., Puigbonet, M. E., & Rosa, M. L. G. (2016). Challenges for the heart failure care: exploratory research with nurses in Ontario. *Revista de Pesquisa: Cuidado é Fundamental Online*, *8*(4), 5150-5155. https://doi.org/10.9789/2175-5361.2016.v8i4.5150-5155

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https://nbn-resolving.org/urn:nbn:de:0168-ssoar-53691-0

REVISTA ONLINE DE PESQUISA
CUIDADO É FUNDAMENTAL
Universidade Federal do Estado do Rio de Janeiro • Escola de Enfermagem Alfredo Pinto

RESEARCH
DOI: 10.9789/2175-5361.2016.v8i4.5150-5155

Desafios para o cuidado da insuficiência cardíaca: pesquisa exploratória com enfermeiras em Ontario

Challenges for the heart failure care: exploratory research with nurses in Ontario

Desafíos para el cuidado de la insuficiencia cardíaca: investigación exploratoria con las enfermeras en Ontario

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How to quote this article:
Correia DMS; Mesquita ET; Singh M, et al. Challenges for the heart failure care: exploratory research with nurses in Ontario. Rev Fund Care Online. 2016 out/dez; 8(4):5150-5155. DOI: http://dx.doi.org/10.9789/2175-5361.2016.v8i4.5150-5155

ABSTRACT

Objectives: to observe the implementation of Canadian protocols for patients with heart failure, and identify with nurses, health education aspects. **Method:** exploratory research in the period from August to December 2013, where the data collection was carried out by observation during the Shadow Experience and interview of Canadian nurses. For data analysis, we used descriptive statistics. **Results:** 28 patients were observed in the Shadow Experience strategy at different levels of care, and 13 nurses interviewed. In health education, interpersonal contact was the most used strategy (69.23%), treatment was the priority share (76.92%), followed by prevention (30.77%). There are challenges with respect to harmful lifestyle habits, and self-care considered ineffective (38.46%). **Conclusion:** interpersonal interaction, which involved professionals and Canadian individuals at different levels of care, helped to identify in their implementation, basic actions and challenges for heart failure.

Descriptors: nursing; heart failure; primary care; international educational exchange.

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RESUMO

Objetivos: observar a implementação de protocolos canadenses aos pacientes com insuficiência cardíaca, assim como identificar junto às enfermeiras, aspectos de educação em saúde. **Método:** pesquisa exploratória no período de agosto a dezembro de 2013, onde a coleta de dados deu-se por observação durante a *Shadow Experience*, e por entrevista de enfermeiras canadenses. Para análise dos dados, utilizou-se a estatística descritiva. **Resultados:** 28 pacientes foram observados na estratégia *Shadow Experience* em diferentes níveis de atendimento, e 13 enfermeiras entrevistadas. Em Educação em Saúde, o contato interpessoal foi a estratégia mais utilizada (69,23%), o tratamento foi a ação prioritária (76,92%), seguida da prevenção (30,77%). Há desafios com relação aos hábitos de vida prejudiciais, e para o autocuidado considerado pouco eficaz(38,46%). **Conclusão:** A interação interpessoal, a qual envolveu profissionais e indivíduos canadenses em diferentes níveis de atendimento, contribuiu para identificar em sua implementação, ações básicas e desafios para insuficiência cardíaca.

Descritores: enfermagem; insuficiência cardíaca; atenção primária; intercâmbio educacional internacional.

RESUMEN

Objetivos: Observar la implementación de protocolos canadienses para los pacientes con insuficiencia cardíaca, y se identifican con las enfermeras, los aspectos de educación sanitaria. **Método:** investigación exploratoria en el período de agosto a diciembre de 2013, donde la recogida de datos se llevó a cabo mediante la observación durante la experiencia de la sombra y la entrevista de las enfermeras canadienses. Para el análisis de datos se utilizó la estadística descriptiva. **Resultados:** Se observaron 28 pacientes en la estrategia de la experiencia de la sombra a diferentes niveles de atención, y 13 enfermeras entrevistadas. En la educación sanitaria, el contacto interpersonal fue la estrategia más utilizada (69,23%), el tratamiento fue la cuota de prioridad (76,92%), seguido de la prevención (30,77%). Hay desafíos con respecto a los hábitos de vida nocivos, y el autocuidado considerados ineficaces (38,46%). **Conclusión:** la interacción interpersonal, que involucró a profesionales y particulares canadienses en diferentes niveles de atención, ayudó a identificar en su aplicación, las acciones básicas y los desafíos para la insuficiencia cardíaca.

Descriptores: enfermería; insuficiencia cardíaca; atención primaria; intercambio educativo internacional.

INTRODUCTION

In Brazil, amongst cardiovascular disease, heart failure (HF) is responsible for 31% of hospitalizations and approximately for 4% of all hospitalizations in SUS. Represents high hospital mortality rates, ranging between 5.6% and 6%, with an average hospital stay of 5.8 days[1], and an estimated 2 million affected Brazilians.[2] Worldwide, the estimated prevalence of individuals with HF is 23 million, 2 million cases diagnosed each year[2], of these, approximately 50 thousand in Canada[3] and 240,000 new cases in Brazil.[2] Its annual cost in Brazil is estimated in over 200 million reais, while Canada's annual cost of cardiovascular disease is roughly 3 billion dollars.[3]

Heart failure is a systemic character syndrome and cardiac dysfunction, based on a cardiovascular continuum that begins with the presence of multiple risk factors, followed by changes in the heart's structure and function in an asymptomatic way, evolving until the final stage.[4] It is most prevalent beginning at 65 years[5] and is becoming a public health problem, with scarcity of epidemiological, clinical and therapeutic data, resulting in difficulty in the development of strategies to combat the disease.

Canada has a strong tradition in the care of heart failure patients, which covers physical and mental aspects, with important publications from the 1980s[6], constituting a reference country in quality clinical services at primary attention.[7] Canadian Studies have shown that the role of nursing in a multidisciplinary team is critical to patient care with HF[8-9], which was also shown in other countries.[10-11] And that nursing care programs for the management of heart failure can reduce hospitalizations, improve treatment adherence and quality of life of patients.[12]

Among the duties of the nursing care directed at a patient with heart failure in primary care, health education mainly focused on self-care stands out.[13] In 1998, in Canada, the need for learning by the patient about the disease was emphasized as a vital component of nursing care, in order to minimize symptoms, reduce hospitalizations, length of stay of in-patient and improvement of quality of life.[14-15]

From this perspective, the search for international experiences in research centers and assistance through international exchange, supported by the interest of internationalization of graduate courses in Brazil, becomes essential to the deepening, the learning and the experience of care -especially multidisciplinary- of the individual at different stages of HF.

The objectives of this study were to observe the implementation of Canadian protocols for patients with heart failure and identify with the nurses, health education aspects.

METHODS

Descriptive exploratory study of Survey kind conducted from September to December 2013 in the province of Ontario, Canada. And for which we used two strategies for data collection: *Shadow Experience*, which consisted of monitoring a nurse (nurse practitioner) during the care of patients with HF in different locations, with free record of observations; and conducting an interview from a semi-structured questionnaire for the identification of demographic and professional profile of nurses, and aspects of health education, focusing on self-care.

As inclusion criteria for the sample of intentional, not probabilistic kind, 40 nurses of the Ontario Primary Health Care Nurse Practitioner with professional experience regarding patients with HF were invited. However, there was the accession of 05 nurses to the Shadow Experience, 13 nurses to interview.

For this study, the research protocol of Observation and data collection from the primary care provided by nurses in

Canada to subjects bearing the risk of chronic cardiovascular dysfunctions was approved by the Ethics Committee of the York University (Human Participants Review Sub-Committee - HPRSC) under No. 243/13.

RESULTS

During the Shadow Experience, 28 patients were observed and visits were previously scheduled at different levels of care: primary (Walk-in Clinic, Private Clinic with Family doctor and nurse practitioner); ambulatory care (Royal Victoria Hospital and St. Michael's Hospital); hospital care (Memorial Hospital Sunnybrook Health Sciences Centre and Soldier's Memorial Hospital) .

In primary care, the observation of 06 patients occurred in the waiting room, which had prior attendance of the nurse practitioner.

Through monitoring of four consecutive weeks of outpatient care at the Royal Victory Hospital, 16 patients appointments and the implementation of the protocols set out in Canada for the management of patient care with HF were observed. At St Michael's Hospital, four patients with HF and education actions in health and the multidisciplinary interaction amongst professionals were observed.

Finally, in hospital care, the Sunnybrook Health Sciences Centre, made it possible to observe the care of two in-patients and the individualized nursing process, where there was one nurse for each of these patients.

As to the second strategy, the analysis of questionnaires, it was observed that the interviewed nurses (n = 13), all female, distributed evenly by age groups 46 (15%) had up to five years of professional experience with HF patients 84 (62%) were bachelors; and the Shadow Experience was developed with four nurses with over 11 years of experience (Table 1).

Table 1 - Sociodemographic characteristics of the sample. Ontario-CAN, 2013.

Sociodemographic profile	n (%)
Age Group	
<30 years-old	4 (30,77)
30-39 years-old	2 (15,38)
40-49 years old	3 (23,08)
> 50 years-old	4 (30,77)
Educational Level	
Undergraduate student	11 (84,62)
Masters degree	2 (15,38)
Time of professional experience with heart failure patients	
1-5 years	6 (46,15)
6-10 years	3 (23,08)
11-16 years	3 (23,08)
>20 years	1 (7,69)

For the Health Education theme, the strategy most commonly used by nurses was direct conversation (69.23%), while the internet was little used (7.69%). The use of films and telephone covered 38.46% and 23.08% of answers, respectively. Health education main objective was considered treatment (76.92%), followed by prevention (30.77%), family involvement (23.08%) and intervention (15.38%). (Table 2)

Table 2 – Education in health and self-care: nursing actions for patients with heart failure (HF). Ontario-CA, 2013.

Education in Health	N (%)
Strategy Used	
Direct conversation	9 (69,23)
Telephone monitorization	3 (23,08)
Movies and other media	5 (38,46)
Internet	1 (7,69)
Others	2 (15,38)
Objective	
Prevention	4 (30,77)
Treatment	10 (76,92)
Family envolvment	3 (23,08)
Intervention	2 (15,38)
Problems in preventing HF	
Low educational level	4 (30,77)
Harmful lifestyles habits	7 (53,85)
Adhesion of the individual and its family to the treatment	3 (23,08)
Lack of access to resources	1 (7,69)
Others	
Classification of ES results in the acting region	
Excellent	1 (7,69)
Good	6 (46,15)
Bad	6 (46,15)
Classification of self-care efficacy	
Highly effective	1 (7,69)
Sufficiently effective	3 (23,08)
Little effective	5 (38,46)
Not effective	2 (15,38)

This question highlighted harmful lifestyle habits, lack of access to resources, low educational level and low adhesion of the individual and its family to the treatment. For the results obtained with health education, nurses indicated to be good (46.15%). And for self-care the nurses considered little effective (38.46%), sufficiently effective (23.08%), ineffective (15.38%), and highly effective (7.69 %). (Table 2).

DISCUSSION

The Shadow Experience was a great opportunity to interact with Canadian nurses, which provided a direct observation of protocol application to patients and their

families, as well as the work of the multidisciplinary team. In addition, the registration of actions during the consultations, review of protocols, and post-consultation discussion, concerning related issues enabled the update and identification of challenges faced.

The main points of this interaction were directed to the information contained in the patient's guide, adherence to drug therapy, the patient's report of its side effects, difficulties to control the body weight, presence and involvement of the family in the treatment and self-care.

In the interview, interpersonal contact was pointed out as the predominant approach in health education activities. This conduct was assessed by Fredericks et al.[16], when conducting systematic review involving 1,865 participants in 64 studies, and concluded that care is more effective when it is individualized. Concerning interpersonal contact, it is essential that there is an effective and suitable nurse-patient interaction/approach, sustained by various skills developed by the health professional, able to facilitate the planning of activities based on the needs and expectations of the individual.[17]

For other strategies, such as the use of movies, its use was low, as well as telephone contact, which has shown efficacy in reducing hospitalizations for heart failure.[18-19] Internet use was considered very low, which as a strategy for health education, has been facing barriers to patient adherence[20], but is considered a promising tool for the future.[21]

The nurses identified the prevention of heart failure and its decompensation as a major challenge, which constitutes important purposes of health education. However, treatment through education was prioritized by 75% of nurses, followed by prevention and family involvement in treatment.

Heart Failure is a disease of difficult prevention, for it combines several diseases and risk factors, requiring a set of actions and strategies for its prevention. Moreover, in its asymptomatic version, there is great danger by the presence of risk factors such as diabetes, hypertension, smoking and coronary heart disease. In Brazil, the difficulties are similar, however, dealing with chronic non-transmissible diseases (CNTDs), taking in account both old and new measures, determine the challenge, since CNTDs accounted for 71% of all deaths in the country in 2011.[23]

Thus, regarding cardiovascular diseases which belong to the CNTDs group, prevention or health promotion, low education and low adhesion, especially to pharmacological treatment, appointed by nurses to patients with HF, have an impact on the evolution of the disease.[24-25]

Brazilian studies concur with this result, especially concerning the aspect of low adherence to drug treatment, for it is a major cause of re-hospitalization.[26-28] Therefore, regarding the monitoring of heart failure patients the need for effective interventions able to improve adherence and self-care prevails. Due to the high occurrence of the disease in adults over 65 the presence of a caregiver often becomes necessary for greater treatment efficacy[3], besides family involvement.

As for self-care for patients with HF or at risk of developing it, it is an essential topic in health education. The effectiveness of self-care developed through the treatment of HF can be mesured[29], so that actions are improved. Importantly, the presence of other diseases influences self-care. According to Hwang et al.[29], who identified in 612 patients with heart failure, that the treatment of depression and anxiety improved adherence to self-care.

In fact, the care management of chronic disease is extensive. Canadian protocols gather information on its key elements: resources and policies for the community, health service organization, support for self-care, multidisciplinary team and integrated information[3], providing far-reaching planning.

In Brazil, the existence of specific protocols in the literature for HF assistance at different levels of health care with implementation throughout the national territory is not evident. Currently, there are public services specialized in secondary level, located in universities, such as: Heart Failure Clinic at Porto Alegre's Clinical Hospital (UFRGS), Heart Failure Clinic at the Heart Institute (USP), Braveheart Heart Failure Clinic at Antonio Pedro's University Hospital (UFF), Heart Failure Clinic at Pedro Ernesto's University Hospital (UERJ), in which the role of nurses and their activities as members of a multidisciplinary team, is mainly seeking as a result, the improvement in quality life of the individual, proposed by the Brazilian guideline.[4]

In primary care, there are no studies that give visibility to the nurse's performance with the multidisciplinary team regarding the treatment of individuals diagnosed with HF, because here the work is focused on risk factors, obviously as important as causalities for its development. However, there are weaknesses in the narrowing of different levels, able to keep the individual in their demands .

The observation of the line of service at different levels, developed in Canada, highlights the process of management, in which the individual is referred to specialized centers, accompanied during the hospital stay and continues treatment on his return home.

Currently, the world is facing a chronic disease that is becoming increasingly restrictive of the quality of life[30], which now requires and incorporates more palliative patient care.[31] And it becomes vital that research is developed and implemented to improve, especially, quality of life of patients

STUDY LIMITATIONS

The sample is small compared to the number of nurses in the Canadian health system, because for some nurses, the justification for participation would require the approval of the Ethics Committee of the respective institutions. Such a requirement, became unviable due to the time for the search.

However, the implementation of specific protocols makes it possible to infer that the way they are implemented,

patients with heart failure may be receiving quality treatment n Ontario and in the other provinces of Canada.

CONCLUSION

Interpersonal and professional interaction with nurses in Ontario allowed the observation of care and the review of protocols. Such an opportunity, which involved professionals and Canadian individuals at different levels of care, helped to identify in their implementation, basic actions and challenges for heart failure.

Acknowledgment

To the Higher Education Personnel Improvement Coordination (CAPES), the grant given by the Institutional Program for Doctoral Sandwich Scholarship Abroad (PSDE).

To the Dean of Research and Innovation (PROP) of the Fluminense Federal University by the institutional support.

To Prof. Dr. Mina Singh by the study opportunity at York University.

To the support of the professionals of Sadlon the Center for Health and Wellness at Georgian College, Sunnybrook Health Sciences Centre, Soldier's Memorial Hospital and St. Michael's Hospital involved in the study.

POTENTIAL CONFLICT OF INTEREST

No potential conflict of interest relevant.

Funding sources

This study was funded by the Higher Education Personnel Improvement Coordination (CAPES), through the Institutional Program for Doctoral Sandwich Scholarship Abroad (PSDE) under No. BEX: 5933 / 13-7.

Vinculação Acadêmica

Este artigo representa parte do período sanduíche do Doutorado de Dayse Mary da Silva Correia em Ciências Cardiovasculares da Universidade Federal Fluminense.

Study Association

This article represents part of Dayse Mary da Silva Correia's Sandwich Doctorate period in Cardiovascular Sciences of the Fluminense Federal University .

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Received on: 18/06/2016
Reviews required: No
Approved on: 22/06/2016
Published on: 01/10/2016

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