

Research Review

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Citation

Fuenzalida, C., Hernández, G., Ferro, I., Siches, C., Ambrós, À., & Coll-Vinent, B. (2017). Long-term benefits of education by emergency care nurses at discharge of patients with atrial fibrillation. *International Emergency Nursing*, 35, 7–12. <https://doi.org/10.1016/j.ienj.2017.03.006>

Background

As patients are discharged from the emergency department the teaching information they receive may not be consistent or understood well enough to prevent complications.

Purpose of the study

The purpose of this study was to examine the effectiveness of an education intervention for preventing complications with patients diagnosed with atrial fibrillation (AF) and discharged from the emergency department.

Research approach and methods

The researchers used a prospective randomized study design. The control group received no intervention. The treatment group was given education specific to their disease process. Clinical records were reviewed for both groups during a one year follow-up with the primary variable being AF or treatment related complications and the secondary variable being emergency department (ED) visits.

Setting and sample

The study looked at patients over the age of 18 who presented to their emergency department in Barcelona, Spain that were diagnosed with atrial fibrillation (AF) and discharged from the ER, patients with cognitive impairment were excluded. The study began with both control and intervention groups being interviewed using closed-ended questions focused on demographic information, clinical variables, and the patient / caregiver knowledge about atrial fibrillation at the time of presentation. Both groups also got standardized discharge teaching from the responsible physician. The intervention group also received education from a select group of nurses who provided information about the dysrhythmia, complications, precautions to consider, how to do a self-assessment of pulse and when to return to either their physician or the emergency department. This was summarized with personalized written documents. Follow-up was conducted one year post-intervention for both groups with a review of medical records looking for complications of AF.

Findings

The study included 240 patients with approximately even distribution between the control and intervention groups. Participants in the intervention group had lower rates of heart failure, the most common complication in both groups, at three, six, and twelve month follow-up.

References

Alberti, T., & Nannini, A. (2013). Patient comprehension of discharge instructions from the emergency department: A literature review. *Journal of the American Academy of Nurse Practitioners*, 25(4), 186–194. <https://doi.org/10.1111/j.1745-7599.2012.00767.x>

National Emergency Nurses Association. (2014). Emergency Nursing Core Competencies [Position statement]. Retrieved from <http://nena.ca/emergency-department-core-competencies/>

The difference between the control and intervention group when looking at ED visits, death, or other primary and secondary complications did not reach statistical significance.

The researchers noted that some follow-up care might not have been captured if the patients presented to a private facility or in a different part of the country where their records would not have been available.

Commentary

Although this study recognizes that discharge teaching is typically the role of the emergency physician, not the emergency nurse in this department, the importance of patient education following a visit to the emergency department is recognized as a core competency by NENA (NENA, 2014). Canadian ED nurses are expected to provide discharge teaching so the findings of this study should be of interest to Canadian ED nurses.

This study protocol cannot be exactly replicated in Canadian ED's because the study institution is not in the practice of nurses doing discharge teaching and because they don't articulate the cognitive impairment exclusion criteria. Additionally, the study failed to describe how patient literacy levels were assessed and how comprehension of the information was evaluated. Ensuring that patients understand and can comply with instructions is an important component of effective discharge teaching (Riar, Carrasco, Olibrice & Ayinla, 2016).

Despite the mentioned weakness, this is an important study because of the care taken to validate, standardize, and share their foundational discharge teaching materials, as well as to provide education and ongoing support to the nurses who would be providing the discharge teaching. The provision of written instructions to reinforce verbal instructions have been demonstrated to improve both comprehension and retention of discharge teaching information (Taylor & Cameron, 2000; Alberti & Nannini, 2013), and this study offers a concrete example of the difference in outcome teaching can have.

Key messages

- Discharge teaching for new diagnosis atrial fibrillation may reduce morbidity.
- Nurse directed discharge teaching is a core competency for ED nurses, and is important for patient compliance with instruction and reduction of complications.
- Written materials reinforce verbal discharge teaching and aids with retention and compliance.
- Use of expert resources to support emergency nurses can lead to more consistent teaching that is maintained over time.

Riar, R., Carrasco, L., Olibrice, M., & Ayinla, R. (2016). Patient education with inhaler technique to prevent readmissions and emergency room (ER) visits in asthma and COPD: A quality improvement project at an inner-city hospital. *Chest*, 150(4), 632A–632A. <https://doi.org/10.1016/j.chest.2016.08.724>

Taylor, D., & Cameron, P. (2000). Discharge instructions for emergency department patients: what should we provide? *Journal of Accident & Emergency Medicine*, 17(2), 86–90. <https://doi.org/10.1136/emj.17.2.86>