Liaison Nurse Role Development: Intensive Care Unit discharged patients follow up during the first year of an acute care facility

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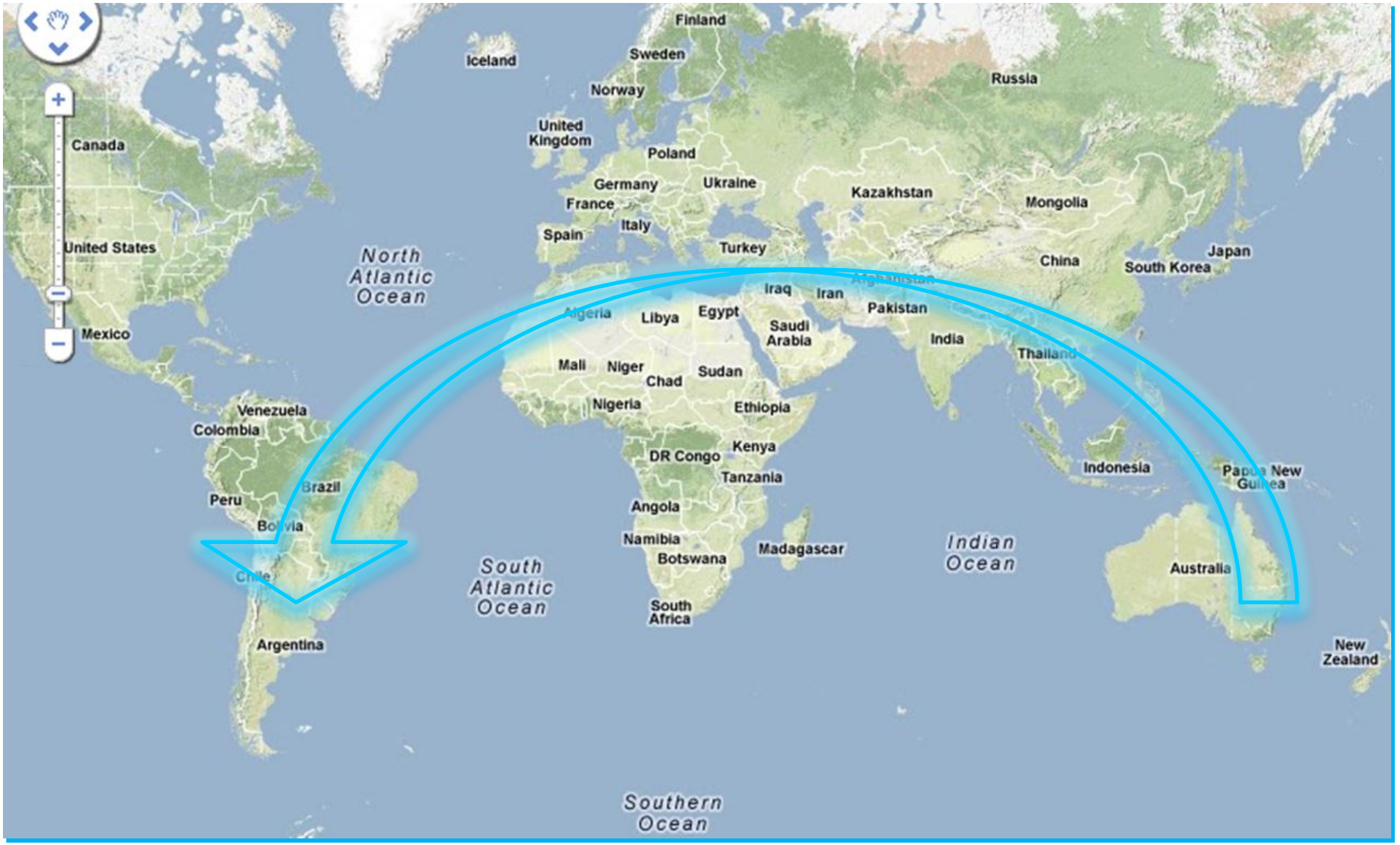
This is where I come from…



This is my country

Introduction

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- The Intensive Care Unit (ICU) Liaison Nurse (LN) was first developed in Australia and UK.

- The LN role was included when organizing and structuring nursing services of a 207 beds new acute care facility in Buenos Aires. 328 acute care nurses, had to be hired in a context of nursing shortage.

- The LN role was planned to preserve patient safety.

- This work summarizes collected data from July 2010 – June 2011. The research is currently ongoing.

Objectives

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- To describe LN clinical interventions of care provided to ICU discharged patients, and ward patients needing complex care,

- To identify LN education interventions delivered to ward nursing staff that was caring for ICU discharged patients and ward patients needing complex care.

Method (1)

- Two frameworks of intervention determined: as follow up, *direct care* and w*ard staff assistance and education*.

- Experienced adult critical care nurses, with strong communication and education skills were appointed as ICU LN.

- LNs were asked to:
  a) assess ward patients transferred from ICU once per shift,
  b) deliver patients and family support and
  c) provide education to ward nurses when they expressed concern related to patient care.

Method (2)

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- There was available one LN, 24 hours a day, 7 days a week.
- LNs registered every intervention they performed with patients and ward nursing staff that was caring for patients under follow up.
- Documented liaison nursing interventions were then grouped in categories and subcategories according to both intervention frameworks previously determined.
- The LNs ended follow up based on their clinical criteria, patient autonomy and ward nurses' confidence on care.

Results (1)

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Table 1. Patients, ICU stay, follow up days (n: 387)

	Frequency (%)	ICU length of stay (days) Md (IQR) n = 369	LN follow up (days) Md (IQR) n = 387
Surgery	183 (47.3)	2.0 (3.0)	3.0 (3.0)
Neurological conditions	48 (12.4)	4.0 (8.0)	3.0 (4.0)
Trauma	30 (7.8)	6.5 (9.0)	5.0 (5.0)
Sepsis	23 (5.9)	6.0 (14.0)	4.0 (3.0)
Respiratory conditions	22 (5.7)	4.0 (5.0)	4.0 (8.0)
Renal, metabolic and electrolyte alterations	14 (3.6)	4.0 (3.0)	3.0 (6.0)
Cancer	13 (3.4)	4.0 (17.0)	2.5 (5.0)
Cardiovascular & thromboembolic disease	12 (3.1)	4.5 (7.0)	2.5 (7.0)
Diagnosis and endovascular treatments	8 (2.1)	1.5 (1.0)	2.0 (1.0)
Gastrointestinal bleeding	8 (2.1)	2.0 (3.0)	2.0 (2.0)
Neuromuscular disease	5 (1.3)	5.0 (5.0)	4.0 (13.0)
Others	21 (5.4)	3.5 (10.0)	3.0 (2.0)

Results (2)

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Table 2. Patients readmitted to ICU (n = 34)

Cause	ICU Readmission n (%)
Planned surgery	12 (35.3)
Sepsis	7 (20.6)
Cardiovascular alterations	3 (8.8)
Urgent surgery	3 (8.8)
Bleeding	3 (8.8)
Seizure	2 (5.9)
Respiratory failure	2 (5.9)
Exacerbation of previous desease	1 (2.9)
Brain edema	1 (2.9)

Results (3)

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Table 3. Direct care interventions provided by LNs

Patient Care Activity	**n (%)**
Patient assessment	5,152 (86.2)
Patient and family education and support	215 (3.6)
Patient safety (skin care, infection and fall prevention)	159 (2.7)
Airway management	154 (2.6)
Others	293 (4.9)
Total	**5,973 (99.9)**

Results (4)

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Table 4: Educational Interventions provided by the LNs

Staff Education	**n (%)**
Patient safety (skin care, infection and fall prevention)	558 (32.7)
Nursing assessment	348 (20.3)
Airway management	284 (16.6)
Drainage and tubes management	101 (5.9)
Wound care	70 (4.1)
Vascular devices management	67 (3.9)
Fluid control	55 (3.2)
Care planning	49 (2.8)
Patient and family education and support	27 (1.6)
Others	150 (8.8)
Total	**1709 (99.9)**

Discussion (1)

- Nursing assessment was the most frequent intervention of LNs.
  - 24 hour, 7 days a week. International experience didn't cover the night shift.

    Green & Edmonds 2004, ICCN,20:133-143

    Endacott et al. 2010, Resuscitation, 81, 198-201
  - Increasing the number of assessments, we may likely to identify signs of clinical deterioration earlier.

- Transfer stresses patients and families.

  Cutler & Garner 1995, ICCN, 11, 333-335.

  Mitchell et al. 2003, Nurs Health Sci, 5, 207-217.

- Provision of patient and family support.

Discussion (2)

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- Education is imperative to empower ward staff managing complex patients.

Mcgaughey et al. 2007. Cochrane Database Syst Rev 3.
Baker-Mcclearn & Carmel 2008 J Health Serv Res Policy, 13:152-7.

- 10% of patients discharged from ICU are readmitted at some point of the same hospitalization.

ESICM 2011. Systematic Review Group.

- 3% of our admissions were due to planned surgery (elective admissions).

Elliott 2006. Aust Critic Care, 19, 96-104.

- 6% is our actual readmission rate.

Limitations

- LNs collected the data. Variation in LNs practice.
- The instrument for collecting data was revised, some categories might have been missed.

Conclusion

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- Patient assessment may help to identify sings of deteriorations.
- Education empower ward nurses.
- More studies are necessary to determine if:
  - LNs influence ICU readmission, early transfer to a higher level of care in our local population.
  - LN role and scope of practice can be improved based on the perception of health care staff.

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