Hospital-Based Nurse Dissemination in Peer-Reviewed Nursing Journals: Has the ANCC Magnet® Program Enhanced Hospital RNs to Publish?

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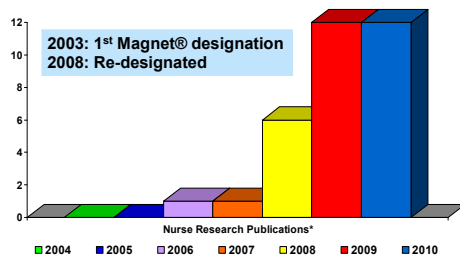[2] Quantitative Health Sciences

Internally Funded by Cleveland Clinic, Cleveland OH

Nursing Professional Practice Model

Cleveland Clinic Dissemination*

2003: 1st Magnet® designation
2008: Re-designated

Nurse Research Publications*
■ 2004 ■ 2005 ■ 2006 ■ 2007 ■ 2008 ■ 2009 ■ 2010

*, Research publications with a Cleveland Clinic RN as FIRST author, in peer-reviewed journals; that correspond to nursing research projects

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INTRODUCTION

Research Question:

Has growth in the ANCC Magnet Recognition Program® led to growth in *research papers* published by hospital-based nurses as first authors over time?

METHODS

Design:

- Retrospective journal review
  - Descriptive
  - Correlational study

- Institutional Review Board approval was not sought since author data was in the public domain

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METHODS: Sample

- Journals using AMA abbreviations, in alphabetical order with nursing organization in parenthesis

Am J Crit Care (AACN); 255	*J Emerg Nurs* (ENA); 152	*J Pediatr Nurs* (PENS); 269
AORN J (AORN) ; 283	*J Hosp Palliat Nurs* (HPNA); 124	*J Vascular Nurs* (SVN); 66
Clin Nurs Spec (NACNS); 131	*J Infusion Nurs* (INS); 155	*Medsurg Nurs* (AMSN); 180
Geriatr Nurs (AALNA, NGNA, & GAPNA); 136	*J Neuroscience Nurs* (AANN); 203	*Nephrol Nurs J* (ANNA); 182
J Am Acad Nurs Pract (AANP); 317	*J Nurs Scholarsh* (STTI); 340	*Plast Surg Nurs* (ASPSN); 91
J Cardiovasc Nurs (AHA, CVN Council and PCNA); 255	*J Perianesthesia Nurs* (ASPAN); 157	*J Wound, Ostomy Continence Nurs* (WOCN); 180

2 journals planned for review but abandoned due to missing electronic past issues	
Clin J Oncology Nurs (ONS)	*J Radiol Nurs* (ARIN)

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METHODS

Sample:
- *Research papers*:
  - Quantitative and qualitative
  - Multiple analysis methodologies
  - Multiple topics/themes
- *Clinical review papers* (non-research)
  - Quality projects
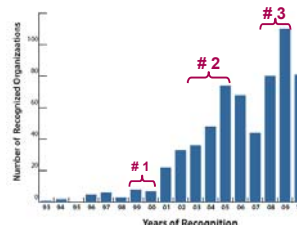 - Systematic reviews
  - Non-systematic reviews

Exclusions:
- Editorials
- Response letters to editors
- Regular features or columns

METHODS: Measurement

- **3 periods that reflected Magnet Recognition Program® growth:**
  - **1999-2000 (***Initial*** Magnet® Program)**
  - **2003-2005 (***Early Growth*** Magnet® Program)**
  - **2008-2009 (***Established*** Magnet® Program)-**
    - **New "model" introduced**

METHODS

Measurement of Outcomes:
- Publication author information:
  - 1st author highest academic degree
  - 1st author certifications, workplace, city, state
  - # authors; # RN authors
  - # hospital-based RN authors
  - # advanced practice RN authors
  - # RN authors with certifications
  - # RN authors with management/ administrative job roles

METHODS

Measurement of Outcomes:
- If Hospital-based RN was first author:
  - Did the hospital have Magnet® designation in year the paper was published (Yes/No)
- If first author was not a hospital-based RN:
  - Were other hospital-based authors from a Magnet® designated hospital during the year the paper was published (Yes/No)

METHODS

Data Collection:
- Journal publications were reviewed by trained BSN RNs
  - Research nurse co-investigator oriented and reviewed RN data collector work and completed quality audits
  - Data entry on an Excel spreadsheet
- 1st page of each paper was printed and filed
  - Multiple pages printed if corresponding author info not on 1st page

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METHODS

Data Collection:
- Magnet® status was assessed via the ANCC Magnet Designation Program® website
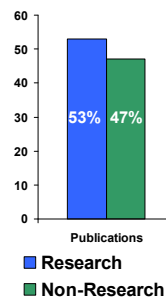
METHODS

Data Analysis
- Categorical variables were summarized using descriptive statistics
- Trends in responses over time were summarized using Mantel-Haenszel chi-square tests
- Analyses were performed using SAS software (version 9.1; Cary, NC)
- P values of < 0.05 were considered statistically significant
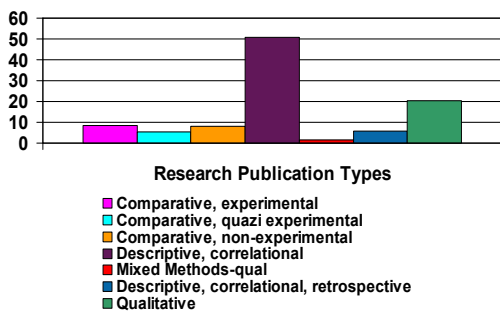

RESULTS

3469 total publications

- 848 (24.4%) *Initial*
  −1999-2000

- 1504 (43.4%) *Early Growth*
  −2003-2005
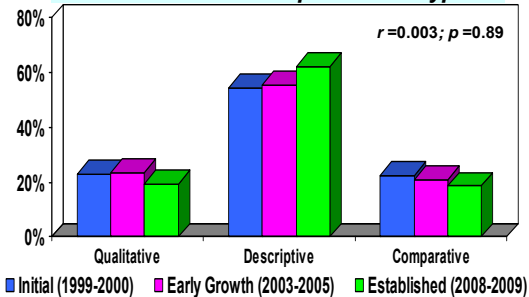
- 1117 (32.2%) *Established*
  −2008-2009

Publications
- Research (53%)
- Non-Research (47%)

RESULTS

- Research publication TYPES:

Research Publication Types
- Comparative, experimental
- Comparative, quazi experimental
- Comparative, non-experimental
- Descriptive, correlational
- Mixed Methods-qual
- Descriptive, correlational, retrospective
- Qualitative

RESULTS: Publication Rates by Magnet® Growth Periods

Research Manuscripts Article Type

$r = 0.003; p = 0.89$

Qualitative, Descriptive, Comparative
- Initial (1999-2000)
- Early Growth (2003-2005)
- Established (2008-2009)

RESULTS: Publication Rates

Hospital-Based RNs as First Authors, by Magnet® Growth Periods

$p=0.18$ $p=0.43$ $p=0.073$

No change

All Manuscripts, Research, Review
- Initial (1999-2000)
- Early Growth (2003-2005)
- Established (2008-2009)
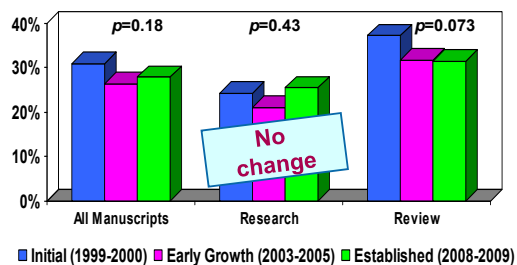
RESULTS: Publication Rates

Non Hospital-Based RNs as First Author and ≥ 1 RN from a Magnet® Hospital

$p<0.001$ $p<0.001$ $p<0.001$

All Manuscripts, Research, Review
- Initial (1999-2000)
- Early Growth (2003-2005)
- Established (2008-2009)
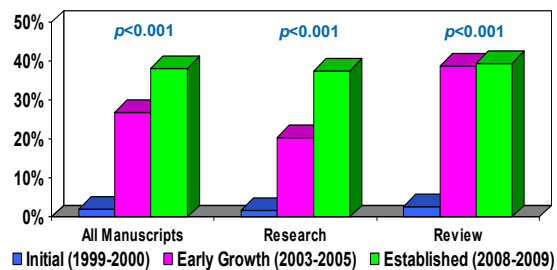
RESULTS

FIRST Author Characteristics	N (%)
Graduate degrees* • Masters / Doctorate	3015 (86.9) (34.3 / 52.6)
Non-graduate degrees* • Bachelors / Associate / Diploma	269 (7.8) (7.6 / 0.12 / 0.06)
Certifications: 0 /1*	(61 / 29)
Work setting: Academic / Hospital**	(57.4 / 28)
Of hospital-based 1st authors; % working in Magnet® Hospitals	(27.3)

*, not reported in 185 (5.3%) of publications
**, unknown in 352 publications (10.2%)

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IMPLICATIONS and CONCLUSIONS

CC grew in research publications over time
- Our research program matches our PPM in regards to conducting and disseminating nursing research

Hospital-based RNs need coaching in:
- Developing strong research studies
- Publishing completed research in peer-reviewed journals

Hospital-based RNs need:
- A hospital-based research and writing mentor
  - APNs need ⇧ training?/ time? in research

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Evidence Matters

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