International Journal of Nursing Studies xxx (2014) xxx–xxx

Contents lists available at ScienceDirect

International Journal of Nursing Studies

journal homepage: www.elsevier.com/ijns

Nursing unit teams matter: Impact of unit-level nurse practice environment, nurse work characteristics, and burnout on nurse reported job outcomes, and quality of care, and patient adverse events—A cross-sectional survey

Peter Van Bogaert [a,b,*], Olaf Timmermans [a,c,1], Susan Mace Weeks [d,2], Danny van Heusden [a,b,1,3], Kristien Wouters [e,4], Erik Franck [a,f,1]

[a] Division of Nursing and Midwifery Sciences, Centre for Research and Innovation in Care (CRIC), Faculty of Medicine and Health Sciences, University of Antwerp, Universiteitsplein 1, B-2610 Wilrijk, Belgium
[b] Department of Nursing, Antwerp University Hospital, Wilrijkstraat 10, B-2650 Edegem, Belgium
[c] HZ University of Applied Sciences, Academia for Welfare and Health, Edisonweg 4, 4382 NW Vlissingen, Netherlands
[d] TCU Center for Evidence-Based Practice & Research: A Collaborating Center of the Joanna Briggs Institute, Texas Christian University, TCU Box 298620, Fort Worth, TX 76129, United States
[e] Department of Scientific Coordination, University Hospital Antwerp, Wilrijkstraat 10, B-2650 Edegem, Belgium
[f] Karel de Grote University College, Department of Health Care, Van Schoonbekestraat 143, B-2018 Antwerp, Belgium

ARTICLE INFO

Article history:
Received 2 August 2013
Received in revised form 16 December 2013
Accepted 21 December 2013

Keywords:
Burnout
Job satisfaction
Nurse retention
Nurse practice environment
Quality of care
Multilevel modelling

ABSTRACT

Aim: To investigate the impact of nurse practice environment factors, nurse work characteristics, and burnout on nurse reported job outcomes, quality of care, and patient adverse events variables at the nursing unit level.
Background: Nurse practice environment studies show growing insights and knowledge about determining factors for nurse workforce stability, quality of care, and patient safety. Until now, international studies have primarily focused on variability at the hospital level; however, insights at the nursing unit level can reveal key factors in the nurse practice environment.
Design: A cross-sectional design with a survey.
Method: In a cross-sectional survey, a sample of 1108 nurses assigned to 96 nursing units completed a structured questionnaire composed of various validated instruments measuring nurse practice environment factors, nurse work characteristics, burnout, nurse reported job outcomes, quality of care, and patient adverse events. Associations between the variables were examined using multilevel modelling techniques.
Results: Various unit-level associations (simple models) were identified between nurse practice environment factors, nurse work characteristics, burnout dimensions, and nurse reported outcome variables. Multiple multilevel models showed various independent variables such as nursing management at the unit level, social capital, emotional exhaustion, and depersonalization as important predictors of nurse reported outcome

* Corresponding author at: Division of Nursing and Midwifery Sciences, Centre for Research and Innovation in Care (CRIC), Faculty of Medicine and Health Sciences, University of Antwerp, Universiteitsplein 1, B-2610 Wilrijk, Belgium. Tel.: +32 3 265 25 04/3 821 47 04.
E-mail addresses: peter.vanbogaert@uantwerpen.be, peter.van.bogaert@uza.be (P. Van Bogaert), olaf.timmermans@uantwerpen.be, olaf.timmermans@hz.nl (O. Timmermans), s.weeks@tcu.edu (S.M. Weeks), danny.vanheusden@uantwerpen.be, danny.vanheusden@uza.be (D. van Heusden), kristien.wouters@uza.be (K. Wouters), erik.franck@uantwerpen.be, erik.franck@kdg.be (E. Franck).
[1] Tel.: +32 3 265 25 04.
[2] Tel.: +1 817 257 7519; fax: +1 817 257 7944.
[3] Tel.: +32 3 821 47 04.
[4] Tel.: +32 3 821 55 94.

0020-7489/$ – see front matter © 2013 Elsevier Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.ijnurstu.2013.12.009

Please cite this article in press as: Van Bogaert, P., et al., Nursing unit teams matter: Impact of unit-level nurse practice environment, nurse work characteristics, and burnout on nurse reported job outcomes, and quality of care, and patient adverse events—A cross-sectional survey. Int. J. Nurs. Stud. (2014), http://dx.doi.org/10.1016/j.ijnurstu.2013.12.009

variables such job satisfaction, turnover intentions, quality of care (at the unit, the last shift, and in the hospital within the last year), patient and family complaints, patient and family verbal abuse, patient falls, nosocomial infections, and medications errors.
Conclusion: Results suggested a stable nurse work force, with the capability to achieve superior quality and patient safety outcomes, is associated with unit-level favourable perceptions of nurse work environment factors, workload, decision latitude, and social capital, as well low levels of burnout. Nurses, physicians, nursing leaders, and executives share responsibility to create an environment supportive of interdisciplinary team development.

© 2013 Elsevier Ltd. All rights reserved.

What is already known about the topic?

- Nursing unit variation of the perceived nurse practice environment (e.g. nurse–physician relationship, nurse management at the unit level and hospital management and organizational support) and feelings of burnout predicts job outcomes such as job satisfaction and turnover intentions and nurse reported quality of care variables.

What this paper adds

- Besides nurse practice environment, perceived unit variation of nurse work characteristics such as workload, decision latitude and social capital predicted job satisfaction and turnover intensions and nurse reported quality of care.
- Unit variation of perceived nurse practice work environment and feelings of burnout predicted also adverse patient events such as patient and family complaints, patient and family verbal abuse, patient falls, nosocomial infections, and medications errors.
- Social capital is relevant for patient falls and medications errors, workload is relevant for patient and family verbal abuse and both social capital and decision latitude is relevant for patient and family complaints.
- Nurse management at the unit level, emotional exhaustion as well as depersonalisation seems to be important predictors of various studied outcome variables.
- To achieve excellent quality of care and patient safety outcomes nursing unit teams matter through involvement of leaders, physicians, nurse managers as well as staff nurses.

1. Introduction

For almost three decades studies have carefully built a body of knowledge about the relevance of the nurse practice environment for nurse outcomes such as job dissatisfaction, turnover intentions, quality of care, and patient safety outcomes such as mortality, complications, failure to rescue, and patient satisfaction. Primarily conducted in United States (U.S.) and Canada (Aiken et al., 2008; Friese et al., 2008), these studies were also introduced in Europe by initiatives like the Nurses Early Exit (NEXT) and RN4CAST (Aiken et al., 2012; Estryn-Béhar et al., 2007; van der Heijden et al., 2010). Notwithstanding country-specific factors, aspects such as hospital work environments, quality of teamwork, social support of peers and supervisors, and feelings of burnout were predictors for poor nurse and patient outcomes in both of these European studies.

An abundance of research has demonstrated the negative impact work-related aspects can have on nurses' mental health (Mark and Smith, 2012; Schulz et al., 2011; Su et al., 2009). Nurses seem especially vulnerable to stress and burnout because they often work in particularly stressful and burdensome environments. Although burnout is generally conceptualized as an individual syndrome consisting of emotional exhaustion, depersonalisation, and personal accomplishment (Maslach et al., 1996), literature suggests that burnout might also occur at the level of nursing unit teams. Garman et al. (2002) confirmed the existence of a meaningful unit-level burnout construct. Moreover, their multilevel analyses showed that a significant proportion of the variance in client satisfaction data could be attributed to unit-level effects, particularly the emotional exhaustion component of burnout. This is in line with studies that considered a relationship between stress and burnout among nurses and patient outcomes.

Previous studies at the unit level found emotional exhaustion and depersonalisation to be inversely related to patient satisfaction, while personal accomplishment was positively related to patient satisfaction (Leiter et al., 1998; Vahey et al., 2004). A recent paper within the RN4CAST research that studied 11 countries, 352 hospitals, more than 2000 nursing units, and almost 23,500 nurses showed associations between unfavourable nurse perceived work environment and nurses' burnout experiences at both the nursing unit and the hospital level (Li et al., 2013). The authors suggested both hospital-wide and unit-specific interventions to achieve better work environments.

Our previous research results showed associations between the nurse practice environment factors of nurse–physician relations, nursing management, and hospital management with burnout dimensions, job outcomes, and quality of care variables studying both hypothetic models (e.g. structural equation modelling) and unit-level analyses (e.g. multilevel modelling). These study approaches were developed based on international insights and empirical studies about nurse practice environments (Choi et al., 2004; Estabrooks et al., 2002; Gunnarsdóttir et al., 2007; Li et al., 2007; Rafferty et al., 2001; Schubert et al., 2009; Vahey et al., 2004), psychosocial work environments (Kowalski et al., 2010; Leiter and Maslach, 2009), and quality and patient safety (Aiken et al., 2008; Friese et al., 2008; Laschinger and Leiter, 2006; Tourangeau et al., 2005). Structural equation models confirmed associations between favourable nurse practice environment factors and favourable job outcomes and

Please cite this article in press as: Van Bogaert, P., et al., Nursing unit teams matter: Impact of unit-level nurse practice environment, nurse work characteristics, and burnout on nurse reported job outcomes, and quality of care, and patient adverse events—A cross-sectional survey. Int. J. Nurs. Stud. (2014), http://dx.doi.org/10.1016/j.ijnurstu.2013.12.009

Download English Version:

https://daneshyari.com/en/article/7515946

Download Persian Version:

https://daneshyari.com/article/7515946

Daneshyari.com