The effectiveness of a team nursing model compared with a total patient care model on staff wellbeing when organizing nursing work in acute care wards

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Date: July 2016
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Declaration

I, Allana King, certify that this work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution, and to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

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Allana King

Dated: 31/7/2016
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Abstract

Background

The organization of the work of nurses, according to recognized models of care, can have a significant impact on the wellbeing and performance of nurses and nursing teams. This thesis focuses on two models of nursing care delivery, namely, team and total patient care, and their effect on nurses’ wellbeing.

Objectives

To examine the effectiveness of a team nursing model compared with a total patient care model on staff wellbeing when organizing nursing work in acute care wards.

Inclusion criteria

Types of participants
Participants were nurses working on wards in acute care hospitals.

Types of intervention
The intervention was the use of a team nursing model when organizing nursing work. The comparator was the use of a total patient care model.

Types of studies
This review considered quantitative study designs for inclusion in the review.

Types of outcomes
The outcome of interest was staff wellbeing which was measured by staff outcomes in relation to job satisfaction, turnover, absenteeism, stress levels and burnout.

Search strategy
The search strategy aimed to find both published and unpublished studies from 1995 to April 21, 2014.

Methodological quality
Quantitative papers selected for retrieval were assessed by two independent reviewers for methodological validity prior to inclusion in the review using standardized critical appraisal instruments from the Joanna Briggs Institute.

Data collection
Data was extracted from papers included in the review using the standardized data extraction tool from the Joanna Briggs Institute. The data extracted included specific details about the interventions, populations, study methods and outcomes of significance to the review question and its specific objectives.

**Data synthesis**
Due to the heterogeneity of the included quantitative studies, meta-analysis was not possible thus results have been presented in a narrative form.

**Results**
The database search returned 10,067 records. Forty-three full text titles were assessed, and of these 40 were excluded, resulting in three studies being included in the review. Two of the studies were quasi experimental designs and the other was considered an uncontrolled before and after experimental study. There were no statistically significant differences observed in any study in the overall job satisfaction of nurses using a team nursing model compared with a total patient care model. Some differences in job satisfaction were however observed within different subgroups of nurses. There were no statistically significant differences in either stress or job tension. Within the selected studies, the specific outcomes of absenteeism and burnout were not addressed.

**Conclusions**
Due to the limited number of quantitative studies identified for inclusion it was not possible to determine whether organizing nursing work in a team nursing model or a total patient care model is more effective in terms of staff wellbeing. Neither a team nursing model or a total patient care model had a significant influence on nurses’ overall job satisfaction, stress levels or staff turnover. There is an inability to ascertain if the type of model of care affects absenteeism or burnout as these outcomes were not addressed in any of the identified studies.

**Implications for practice**
Caution should be taken when evaluating which model of care is appropriate and the decision needs to incorporate staff experience levels and staff skill mix. There needs to be clear definition of nursing roles.

**Implications for research**
There is a need for further quantitative studies that are well designed with sufficient sample sizes to allow for attrition of participants, and that explore the impact each model has on nurse’s wellbeing, in particular, studies that address burnout and absenteeism. Consistent terminology is required to enable future comparison and research to occur at an international level. Future studies on models of care should
include economic analysis to fully inform policy and practice.

**Keywords**
Total patient care, patient allocation, team nursing, nursing model, nursing care delivery system, patient care delivery system, job satisfaction, absenteeism, wellbeing, turnover, stress, burnout, sick leave, nursing staff hospital, nurses, general ward and units.
I would like to thank and acknowledge a number of significant people who without their support completion of this thesis would not have been possible.

Firstly, I would like to thank my supervisors Associate Professor Lesley Long, my primary supervisor and Dr Karolina Lisy, my secondary supervisor for their patience, advice, understanding, editing and encouragement. I could not have completed this without you two and I am extremely grateful to you both. I would also like to take this opportunity to thank all the staff and fellow students at the Joanna Briggs Institute for all of their encouragement and assistance. Thank you to Maureen Bell, research librarian with the Barr Smith Library, University of Adelaide, for her advice on searching databases.

My partner, Chip, you are one of a kind. I love you and I am so grateful that we have each other. To my cat, Sox, thank you for sitting up with me into the early hours of the morning and giving me a purr and cuddle when needed. To my sister, Rae and her children, Claudia and Hamish, thanks for all the love and diversions when needed and my friend’s thank you for all of your support and understanding, what a journey it has been.

To my employer, direct line manager, Su thank you for providing flexibility and allowing me to undertake this study. To my work colleagues and staff that I manage you have all inspired me to continue to question what we do to ensure that we are providing the best evidence based care for our clients and patients.

Finally, I would like to dedicate this thesis to my dear mum, Marilyn who unfortunately passed away soon after I commenced this study. Mum you encouraged me to always strive and achieve and was so supportive in my nursing career and study, thank you for always being my guiding light, love and miss you.
List of Abbreviations

AHRQ……………………Agency for Healthcare Research and Quality
AIN……………………Assistant in Nursing
ANOVA………………….Analysis of Variance
CBA…………………..Cost Benefit Analysis
CEA……………………Cost Effective Analysis
CI …………………..Confidence Interval
CMA…………………..Cost Minimisation Analysis
CReMS………………Comprehensive Review Management System
CUA……………………Cost Utility Analysis
EBM……………………Evidence-based Medicine
EN……………………Enrolled Nurse
EBP……………………Evidence-based Practice
FTE…………………..Full Time Equivalent
JBI………………….Joanna Briggs Institute
JDI…………………Job Descriptive Index
JIG……………………Job in General
IPA……………………Individual Patient Allocation
IWS…………………..Index of Work Satisfaction
PA……………………Patient Allocation
SUMARI………………System for the Unified Management, Assessment and Review of Information
MASIARI……………Meta-Analysis of Statistics Assessment and Review Instrument
NICE………………….National Institute for Healthcare Excellence
NWSQ………………Nursing Workplace Satisfaction Questionnaire
QALY……………………Quality Adjusted Life Years
RCT……………………Randomized Controlled Trial
RN……………………Registered Nurse
ROS……………………Range of Scores
SALSA………………Search, Appraisal, Synthesis and Analysis
SCN…………………Shared Care in Nursing
SD……………………Standard Deviation
SIG......................Stress in General
TN........................Team Nursing
TPC........................Total Patient Care