



December 2016 - February 2017
Volume 34 Issue 2

AJAN

australian journal of advanced nursing

An international peer reviewed journal of nursing
research and practice

IN THIS ISSUE

RESEARCH PAPERS

When do nurses seek professional support for managing pressure injuries secondary to spinal cord injury?

The Cancer Nurse Coordinator Service in Western Australia: perspectives of specialist cancer nurse coordinators

The transition of overseas qualified nurses and midwives into the Australian healthcare workforce

Being a fellow patient to a critically ill patient leads to feelings of anxiety - an interview study

Male or Nurse what comes first?
Challenges men face on their journey to nurse registration

SCHOLARLY PAPERS

Exploring infant plagiocephaly prevention and management by Maternal Child Health Nurses and Paediatric Physiotherapists

THE AUSTRALIAN JOURNAL OF ADVANCED NURSING

The Australian Journal of Advanced Nursing aims to provide a vehicle for nurses to publish original research and scholarly papers about all areas of nursing. Papers will develop, enhance, or critique nursing knowledge and provide practitioners, scholars and administrators with well-tested debate.

The AJAN will:

- publish original research on all nursing topics
- publish original scholarly articles on all nursing topics
- process manuscripts efficiently
- encourage evidence-based practice with the aim of increasing the quality of nursing care
- provide an environment to help authors to develop their research and writing skills
- provide an environment for nurses to participate in peer review

ISSN 1447-4328

Copyright

This journal is published in Australia and is fully copyrighted. All rights reserved. All material published in the Australian Journal of Advanced Nursing is the property of the Australian Nursing and Midwifery Federation and may not be reproduced, translated for reproduction or otherwise utilised without the permission of the publisher.

Indexing

The AJAN is indexed in the CINAHL (Cumulative Index to Nursing and Allied Health Literature) Database, Current Contents, International Nursing Index, UnCover, University Microfilms, British Nursing Index, Medline, Australasian Medical Index and TOC Premier.

PRODUCTION

Editor

Lee Thomas

Journal Administrator

Anne Willsher

Publisher and Editorial Office

Australian Nursing and Midwifery Federation
PO Box 4239
Kingston ACT, Australia 2604
tel +61 2 6232 6533
fax +61 2 6232 6610
email: ajan@anmf.org.au
<http://www.ajan.com.au>

CONTENTS

RESEARCH PAPERS

- What prompts nurses to seek help from wound care consultant in spinal cord injury management? 6
Julie Bundz, Sarita Schuurs, Melissa Kendall, Delena Amsters
- The Cancer Nurse Coordinator Service in Western Australia: perspectives of specialist cancer nurse coordinators 16
Leanne Monterosso, Violet Platt, Meinir Krishnasamy, Patsy Yates
Caroline Bulsara
- The transition of overseas qualified nurses and midwives into the Australian healthcare workforce 27
Se Ok Ohr, Doreen Holm, Sue Brazil
- Being a fellow patient to a critically ill patient leads to feelings of anxiety - an interview study 37
Jannie Laursen, Trine Bonnevie Lundby, Anne Kjaergaard Danielsen
Jacob Rosenberg
- Male or Nurse what comes first? Challenges men face on their journey to nurse registration 45
Dianne Juliff, Kylie Russel, Caroline Bulsara

SCHOLARLY PAPERS

- Exploring infant deformational or positional plagiocephaly prevention and management by Maternal Child Health Nurses and Paediatric Physiotherapists 53
Elizabeth Williams, Mary Galea

AUSTRALIAN JOURNAL OF ADVANCED NURSING REVIEW PANEL: AUSTRALIA

Tod Adams, Masters Nursing (Nurse Practitioner), Grad. Cert Aged Care, Grad. Cert. Coronary Care, Grad. Cert Health Management, Bachelor health Science (Nursing), NSW Health, SESIAHS, Shoalhaven Hospital, New South Wales

Dr Alan Barnard, RN, BA, MA, PhD, Queensland University of Technology, Brisbane, Queensland

Philip Benjamin, RPN, BEd, Masters candidate (MMSoc)

Claire Boardman, B.App.Sc, Grad Cert IC, MPH, CICP, Queensland Health, Thursday Island, Queensland

Sally Borbasi, RN, Bed (Nsg), MA (Edu: Research), PhD, Griffith University, Meadowbrook, Queensland

Cathy Boyle, the Prince Charles Hospital and Health District, Chermside, Queensland

Carolyn Briggs, RN, RM, Dip. CHN, BA, MA, DN, University of Technology, Sydney, New South Wales

Matiu Bush, MPH, Alfred Health, Melbourne, Victoria

Julie Considine, RN, RM, BN, EmergCert, GDipNursAcuteCare, MNurs, PhD, FRCNA, Deakin University-Northern Health Clinical Partnership, Victoria

Dr Marie Cooke, RN, DAppSc (Nsg & Unit Management), BAppSc (Nsg), MSPD, PhD, Griffith University, Nathan, Queensland

Mary Courtney, RN, BAdmin, MHP, PhD, FRCNA, AFCHSE, Queensland University of Technology, Brisbane, Queensland

Wendy Cross, RN, RPN, BAppSc, Med. PhD MAICD, FRCNA, FACMHN, Monash University, Clayton, Victoria

Trish Davidson, RN, ITC, BA, Med, PhD, Curtin University of Technology, Chippendale, New South Wales

Judith Dean, RN, Midwife, BN MPHTM PhD Candidate, Queensland Health and Griffith University, Meadowbrook, Queensland

Tess Dellagiacoma, RN, BA, MA, LLB, Contractor, NSW

Dr Michelle Digiacomo, BA, MHlthSci (Hons), PhD, Curtin University of Technology, Chippendale, New South Wales

Jim Donnelly, FRCNA, RMN, SRN, NDN, CertApprec. Obst.Care, ICU Cert, BAppScAdvNurs, MBA, Asset Management, Melbourne, Victoria

Trisha Dunning, RN, Med, PhD, FRCNA, Geelong Hospital, Victoria

Dr David Evans, RN, PhD, University of South Australia, Adelaide, South Australia

Jenny Fenwick, RN, PhD, Curtin University, Western Australia

Ritin Fernandez, RN, MN(critical care), PhD Candidate, Sydney South West Area Health Service, Sydney, New South Wales

Joanne Foster, RN, Renal Cert, DipAppSc(NsgEdn), BN, GradDip(CIEdn), MEdTech, MRCNA, QLD University of Technology, Red Hill, Queensland

Karen Francis, RN, PhD, MHLthSc, Nsg.Med, Grad Cert Uni Tech/Learn, BHLth Sc, Nsg, Dip Hlth Sc, Nsg, Monash University, Churchill, Victoria

Deanne Gaskill, BAppSc (Nsg), GrDipHSc (Epi), MAppSc (HEd), Queensland University of Technology, Ash Grove, Queensland

Elizabeth Gillespie, RN, RM, SIC, Peri-op Cert, MPubHlth(Melb), CICP, Nurse Immuniser, DipPM, Southern Health, Clayton, Victoria

Dr Judith Godden, RN, PhD, BA(Hons), DipEd, University of Sydney, New South Wales

Judith Gonda, RN, RM, BAppSci (AdvNursing-Educ), MN, PhD, Australian Catholic University, Brisbane, Queensland

Dr Jennene Greenhill, RN, PhD, MSPD, GradDipAppSc, RPN, BA, Flinders University, Adelaide, South Australia

Marianne Griffin, RN, BArts, PeterMacCallum Cancer Centre, Melbourne, Victoria

Rhonda Griffiths, RN, BEd (Nsg), MSc (Hons), PhD, University of Western Sydney, New South Wales

Ruth Harper, BSc, RGN, MA, Royal Melbourne Hospital, Victoria

Dr Ann Harrington, RN, BEd, MNg, Flinders University, Bedford Park, South Australia

Dr Louise Hickman, RN BN, MPH (UNSW), PhD, A/ Lecturer, University of Sydney, New South Wales

Debra Kerr, RN, BN, MBL, Grad Cert (Research and Research Meth ods), PhD, Senior Lecturer, honours Coordinator, Victoria University, Victoria

Virginia King, RN, MNA, BHA, BA, Southern Cross University, Lismore, New South Wales

Dr David Lee, DrPH, MPH, GradDip (CritCareNsg), BAppSc(Nsg), FRCNA, FCN (NSW), Carlton, Victoria

Geraldine Lee, MPhil, PGDE, BSc (Physiology), RGN, Albert Park, Melbourne

Dr Joy Lyneham, RN, BAppSci, GradCertEN, GradDipCP, MHSc, PhD, FRCNA, Monash University, Victoria

Dr Jeanne Madison, RN, MPH, PhD, University of New England, Armidale, New South Wales

Elizabeth Manias, RN, BPharm, MPharm, MNursStud, PhD, CertCritCare, FRCNA, The University of Melbourne, Carlton, Victoria

Dr Peter Massey, RN, GradCertPublicHlth, DrPH, Hunter New England Health, Tamworth, New South Wales

Jacqueline Mathieson, GradCert(Cancer and Palliative Nsg), GradDip(Cancer and Palliative Nsg) (in progress), PeterMacCallum Cancer Centre, Richmond, Victoria

Dr Jane Mills, RN, PhD, MN, BN, Grad.Cert.Tert. Teaching, Monash University, Churchill, New South Wales

Kathleen Milton-Wildey, RN, BA, DipEd, MA, FCN, University of Technology, Sydney, New South Wales

Anne McMurray, RN, BA (Psych), MEd, PhD, FRCNA, Murdoch University, Mandurah, Western Australia

Wendy Moyle, RN, PhD, MHSc, BN, DipAppSci, Griffith University, Nathan, Queensland

Dr Maria Murphy, RN, PhD, Grad Dip Critical Care, Grad Cert Tertiary Education, BN Science, Lecturer, La Trobe University, Victoria

Dr Jane Neill, RN, BSc, PhD, Flinders University, Bedford Park, South Australia

Jennifer Pilgrim, MNursStudies, BAppSci(AdvNsg), RN, RM, MRCNA, Royal District Nursing Service, Greensborough, Victoria

Marilyn Richardson-Tench, RN, PhD, ORCert, CertClinTeach, MEdSt, BAppSc (AdvNsg), RCNT (UK), Victoria University, Ferntree Gully, Victoria

Dr Yenna Salamonson, RN, PhD, BSc, GradDipNsg(Ed), MA, University of Western Sydney, New South Wales

Nick Santamaria, RN, RPN, BAppSc (AdvNsg), GradDipHlthEd, MEdSt, PhD, Curtin University of Technology, Western Australia

Afshin Shorofi, RN, BSc, MSc, PhD, Flinders University, South Australia

Dr Winsome St John, RN, PhD, MNS, GradDipEd, BAppSc (Nsg), RM, MCHN, FRCNA, Griffith University, Gold Coast, Queensland

Dr Lynnette Stockhausen, RN, DipTeach, Bed, MEdSt, PhD, Charles Sturt University, Bathurst, New South Wales

Julie Sykes, RGN, Bsc(Hons Health Care Studies (Nsg), PGDip(health Service Research and Health Technology Assessment), WA Cancer and Palliative Care Network, Nedlands, Western Australia

Dr Chris Toye, RN, BN (Hons), PhD, GradCert(TertiaryTeaching), Edith Cowan University, Churchlands, Western Australia

Victoria Traynor, PhD, BSc Hons, RGN, University of Wollongong, New South Wales

Thea van de Mortel, RN, BSc (Hons), MHSc, ICUCert, FCN, FRCNA, Southern Cross University, Lismore, New South Wales

Sandra West, RN, CM, IntCareCert, BSc, PhD, University of Sydney, New South Wales

Lesley Wilkes, RN, BSc(Hons), GradDipEd(Nurs), MHPed, PhD, University of Western Sydney and Sydney West Area Health Service, New South Wales

Dianne Wynaden, RN, RMHN, B.AppSC(Nursing Edu), MSc(HSc) PHD, Curtin University of Technology, Western Australia

Patsy Yates, PhD, RN, FRCNA, Queensland University of Technology, Kelvin Grove, Queensland

AUSTRALIAN JOURNAL OF ADVANCED NURSING REVIEW PANEL: INTERNATIONAL

Mahmoud Al-Hussami, RN, DSc, PhD, Assistant Professor & Department Head, Community Nursing, University of Jordan, Amman, Jordan

Yu-Mei (Yu) Chao, RN, PhD, MNEd, BSN, National Taiwan University, Taipei, Taiwan

Petri Collins, MACN, MNsc, Grad Dip Ed, TAECert, TESOL Cert, Healthcare education consultant, the Netherlands

Dr Robert Crouch, OBE, FRCN, Consultant Nurse, Emergency Department, Southampton General Hospital, University of Southampton, United Kingdom

Natasha Hubbard Murdoch, RN, CON(C), BSN, MN(c), Saskatchewan Institute of Applied Science and Technology, Canada

Jennifer Lillibridge, RN, MSN, PhD, MRCNA, Associate Professor, California State University, Chico, California, USA

Katherine Nelson, RN, PhD, Victoria University of Wellington, New Zealand

Davina Porock, RN, BAppSc(Nsg), PGDip(Med-Surg), MSc(Nsg) PhD(Nsg), Professor of Nursing Practice, University of Nottingham, United Kingdom

Michael Pritchard, EN, RGN, Dip(HigherEd), ENB(ITU course), BA(Hons)SpecPrac and ENB Higher award, MAdvClinPrac, ENB TeachAssClinPrac, Clatterbridge Hospital, Wirral, United Kingdom

Vince Ramprogus, PhD, MSc, BA (Hons), RGN, RMN, Pro Vice Chancellor/ Dean of Faculty, Manchester Metropolitan University, Manchester, United Kingdom

Anna Skripnik, RN, BSN, MS(c), DNC, Clinical Nurse, Department of Dermatology, Memorial Sloan Kettering Cancer Center, New York, USA

Colin Torrance, RN, BSc(Hon), PhD, Sport and Science University of Glamorgan Pontypridd, United Kingdom

What prompts nurses to seek help from wound care consultants in spinal cord injury management?

AUTHORS

Julie Bundz

RN, MRehab
CNC, Spinal Outreach Team
Queensland Spinal Cord Injuries Service
Princess Alexandra Hospital
Woolloongabba, Queensland, Australia
julie.bundz@health.qld.gov.au

Sarita Schuurs

BPhty
Research Officer, Spinal Outreach Team
Queensland Spinal Cord Injuries Service
Princess Alexandra Hospital
Woolloongabba, Queensland, Australia
sarita.schuurs@health.qld.gov.au

Melissa Kendall

BSc (Psych), M Human Services, PhD
Associate Professor, School of Human Services & Social Work, Griffith University
Senior Research Officer, Transitional Rehabilitation Program
Queensland Spinal Cord Injuries Service
Princess Alexandra Hospital, Woolloongabba, Queensland, Australia
melissa.kendall@health.qld.gov.au

Delena Amsters

BPhty(Hons), MPhty
Senior Research Officer, Spinal Outreach Team
Queensland Spinal Cord Injuries Service
Princess Alexandra Hospital
Woolloongabba, Queensland, Australia
delena.amsters@health.qld.gov.au

KEY WORDS

help seeking, nurse consultant, pressure injury, community nursing, spinal cord injury

ABSTRACT

Objective

This study aimed to identify clinical scenarios that might prompt nurses to seek advice from a spinal cord injury wound care nurse consultant for pressure injury management. In addition, some attributes of nurses were examined for associations with intention to seek the help of a consultant.

Design

Exploratory quantitative survey.

Setting

Queensland, Australia.

Subjects

Fifty currently practising hospital and community based nurses

Main outcome measure(s)

Two part online survey - part one presented hypothetical clinical case scenarios, in which respondents indicated their likelihood of seeking help; and, part two examined participant attributes and work experience.

Results

Each scenario presented was rated as either of little importance or utmost importance by at least one respondent. Participants identified consultant personality and proximity as more influential on help seeking than timeliness, common sense or knowledge.

Conclusion

The study did not identify a pattern of association between the presence of certain clinical factors and intention to seek help from a spinal cord injury consultant nurse for pressure injury management. What is important and influential for one person may be of less importance for others. Consultants must market their value to nurses in order that they are front of mind during the help seeking process. Further studies are required to examine the decision making process associated with help seeking.

INTRODUCTION

Help seeking, the process of finding and receiving help from others, occurs in many contexts. Literature exists in a variety of domains including health, the workplace and education and pertains to reasons and triggers for seeking help, barriers to help seeking and help seeking outcomes (Wakefield et al 2014; Hammer and Vogel 2013; Geller and Bamberger 2012; Smith 2012; Mueller and Kamdar 2011; Howard-York 2006). Clinical nurses work in complex and challenging situations and may not always have the knowledge and skill set to meet the demands of all care tasks they must undertake. In such instances help seeking from colleagues may be beneficial. In the field of spinal cord injury management (SCI), understanding the help seeking behaviour of community nurses confronted with clients with pressure injuries could be valuable for improving outcomes.

“Help seeking behaviour represents intentional action to solve a problem that challenges personal abilities” (Cornally and Mc Carthy 2011, p286). A variety of factors may influence help seeking behaviour, including individual characteristics of the helper and the recipient, as well as relational and contextual factors (van der Rijt et al 2013; Bamberger 2009; Hoffman et al 2009; Nadler et al 2003). For some people, seeking help is an early response to a challenging problem, whereas for others it will follow a failure to resolve the issue independently. Following problem recognition, the help seeker forms an intentional decision to act, selects and engages a source of assistance, and discloses the problem in return for help (Cornally and McCarthy 2011).

Problem recognition requires the insight to appraise a situation and identify that the problem is worthy of seeking help and beyond personal capability to solve, or optimally influence (Howard-York 2006). Even when an individual is aware of the need for help, help seeking may not eventuate. The decision to seek help is influenced by socio cultural and motivational factors (Cornally and McCarthy 2011; Howard-York 2006). While it is generally accepted that outcomes can be enhanced through receiving help (Geller and Bamberger 2012), some associated costs exist. The potential to be seen as lacking in competence (Mueller and Kamdar 2011), reinforcement of feelings of dependency (Wakefield et al 2014) and the resource cost of expending time and energy in the process of help seeking (Geller and Bamberger 2012) are described as potential barriers to seeking help. Some people view help seeking as a learning opportunity, whilst others may desire a more expedient solution in which the helper solves the problem (Geller and Bamberger 2012; Cornally and McCarthy 2011).

Success in acquiring the knowledge to resolve a problem is linked to the selection of a capable helper. This choice can be influenced by a variety of factors including personality, relationship, economic and societal factors, as well as knowledge and skills (Amsters et al 2013; Cornally and McCarthy 2011). As the goal of help seeking is to resolve or improve a problem, failure to do so may negatively influence the decision to seek help, or choice of a helper in the future.

While much of the health literature related to help seeking pertains to clients seeking assistance from health providers, health professionals may also seek professional support in the workplace, as in the case of community nurses approaching a clinical nurse consultant (CNC) for expert advice or assistance. The role of clinical nurse consultancy for supporting community nurses is well documented (Jannings et al 2010; McSherry et al 2007; Austin et al 2006). As it is not practical for one nurse to know everything about every clinical scenario, seeking help, even at an advanced level of practice, can contribute to quality client care (Howard-York 2006; Jannings and Armitage 2001). In the case of SCI, a specific field which would be rarely encountered by many community nurses, a specialty CNC available for consultation in this area would seem a valuable resource.

The Spinal Outreach Team (SPOT), the community arm of the Queensland Spinal Cord Injuries Service, has provided free community based consultancy services throughout Queensland, Australia since 1996. SPOT

is a multidisciplinary team of nursing and allied health professionals. Clients with SCI can seek help directly from SPOT or health professionals can seek help on their behalf. The service model strongly supports building capacity in other health professionals to manage SCI issues. SPOT maintains a web presence and promotes its consultancy service through regular communications to SCI clients and community services on its comprehensive database.

A significant proportion of the work of SPOT clinical nurses is related to skin integrity and pressure injuries. Anecdotal evidence from SPOT clinical nurses suggested that some community nurses will seek help early whilst others seek help at a late stage of pressure injury. With no apparent pattern to this variability, questions were raised about factors which might influence this phenomenon. Are the factors firmly based on the complexity of the clinical case or is help seeking behaviour influenced by such things as professional expectations, personality and relationships? Understanding these factors has the potential to facilitate earlier referral to consultancy services. Therefore, the purpose of this research was to explore the influences on help seeking by community nurses for pressure injury management in SCI.

METHOD

Subjects

Participants were self-selecting from the pool of hospital and community based registered nurses currently practising in Queensland. All nurses, regardless of current work environment or level of experience, were eligible to participate. A target of 100-150 participants was thought to be achievable based on the number of individuals and services listed on the SPOT database. Recruitment was via direct approach to individual nurses as well as via a general invitation in a health service newsletter. A snowballing technique was envisaged, with participants invited to suggest other potential participants or forward the invitation directly. All completed surveys were included for data analysis. Participation was voluntary and a single reminder was issued to nurses who did not complete the survey. Collection was ceased when no further participant suggestions or survey replies were received.

DATA COLLECTION

Data were collected by means of an anonymous online survey comprising two parts which was accessed by electronic link from the invitation to participate. Part one presented a hypothetical clinical case scenario involving a person with SCI residing in the community, with a subsequent pressure injury (see figure 1). Participants were asked to imagine themselves in the role of a community nurse providing a home visiting service to the person with SCI, even if this was not their current work role. Using a ten point Likert Scale ranging from 'extremely unlikely' to 'extremely likely', participants were asked to indicate their personal likelihood of seeking help from, firstly, a nursing consultant in SCI management and, secondly, from a different peer or colleague.

To ascertain the influence of various factors on the decision to seek help, the basic hypothetical case was then embellished with 29 different scenarios, each of which included one additional factor related to the wound, client attributes, health professional attributes or the environmental context (see figure 1). The scenarios were developed by a researcher based on discussion with the SPOT clinical nurse about factors that may prompt referral to SPOT. The survey was refined following pilot feedback from an experienced community clinical nurse who was not part of the research project.

The electronic survey presented the scenarios one at a time. For each new scenario, participants were asked to rate how this scenario would influence their decision to seek help from the SCI nursing consultant on a 10 point Likert Scale ranging from 'No influence' to 'Strongest possible influence'. It was emphasised that

participants should answer as they thought they really would act. Additionally, they were periodically reminded that each scenario was to be treated as an isolated case and not as part of a single escalating scenario.

Figure 1: Hypothetical case and scenarios

BASIC HYPOTHETICAL CASE

You are working as a community nurse, providing an in home visiting service. You have a 27 year old client called Andrew. He has C6 tetraplegia from a traumatic spinal cord injury sustained 5 years ago. Andrew lives alone in a unit complex but has paid carers to assist him with daily living tasks. Currently Andrew has a pressure injury on his right buttock and is resting in bed. You are aware of a community nurse called Frieda who has extensive experience with spinal cord injury. From time to time you have seen brochures from Frieda which state that she is able to provide a consultancy service in the area of spinal cord injury management, particularly wound care and bladder and bowel management.

SCENARIOS THAT MAY INFLUENCE DECISION TO SEEK CONSULTANT HELP

1. Andrew is unable to pay for nursing services to manage the wound. (Pay for nursing)	2. Underlying structures such as muscle, tendon or bone are visible. (Stage 4 wound)	3. The wound extends down into the subcutaneous fat. (Stage 3 wound)
4. Heavy exudate is coming from the wound. (Wound exudate)	5. Andrew has developed a second wound. (Second wound)	6. Urinary incontinence is hampering progress. (Urinary incontinence)
7. You suspect Andrew is becoming depressed. (Patient depression)	8. The wound has been static for a long time. (Static wound)	9. Andrew says resting in bed is causing him pain. (Patient pain)
10. Andrew has diabetes, is obese and has lower limb oedema. (Patient comorbidity)	11. Andrew has become acutely unwell. (Patient illness)	12. Andrew wants a second opinion. (Second opinion)
13. The wound has been present for more than three months. (Long duration)	14. The dressings being used are not staying in place. (Insecure dressings)	15. You've tried lots of things but nothing seems to be working. (Trial and error)
16. You think the condition of Andrew's wound is deteriorating. (Wound deterioration)	17. There is no active medical involvement in Andrew's wound management. (No medical involvement)	18. Andrew does not have enough care support to meet the wound care requirements. (Insufficient care)
19. You feel you have poor rapport with Andrew. (Rapport with patient)	20. Andrew is sitting up on the wound against your advice. (Sitting against advice)	21. The wound is oozing through the dressing. (Wound oozing)
22. Andrew prefers a different dressing to the one you recommend. (Dressing preference)	23. You think that Andrew's equipment may be causing the skin problem. (Equipment)	24. Andrew can't afford the recommended dressings. (Pay for dressings)
25. Andrew is passive about managing the secondary complications of his spinal cord injury. (Patient passivity)	26. You think some activity Andrew is doing in his day to day life may have caused the skin problem. (Patient activity)	27. Your caseload is very heavy. (Caseload)
28. The wound is malodorous. (Wound malodorous)	29. Andrew is refusing your visits. (Refusing visits)	

The second part of the survey examined a range of consultant and consultee characteristics. Experience and confidence with wound management and experience and confidence with SCI were measured on a 5-point scale ranging from low to high. Years of clinical experience and current age were measured in years. Respondent location was determined by postcode of place of work, with this data subsequently grouped into metropolitan, regional or rural. In relation to consultants, participants were also asked to rate if their previous experience with consultants had been helpful, unhelpful or limited. Similarly they were asked to identify if their organisation supported the use of clinical consultants, did not support clinical consultants or whether they were uncertain about their organisation's approach to consultants. Participants rated the statement 'If I knew and trusted the clinical consultant, this would make me more likely to seek their help' on a 5 point scale ranging from strongly disagree to strongly agree. Consultant factors such as proximity, personality,

knowledge, timeliness and common sense were presented and participants were asked to rank these five factors in terms of their influence in seeking consultant help.

ANALYSIS

Descriptive statistics were used to illustrate the responses for each of the scenarios in relation to the hypothetical case. An exploratory factor analysis using Principal Components Analysis (PCA) with varimax rotation was conducted on scenario responses to determine a factor structure of the domains of influence on seeking help.

The factors that emerged from the factor analysis were saved as variables. Due to the non-parametric and ordinal nature of the data, Spearman's correlations were used to explore relationships between age, experience, confidence and consultant factors as they related to the scenario factors. Independent sample Kruskal Wallis Tests were used to explore differences in the scenario factors across location.

Ethics approval for this project was obtained from Metro South Human Research Ethics Committee and Uniting Care Queensland Human Research Ethics Committee.

FINDINGS

One hundred and twenty-two invitations to participate (and to distribute further) were issued by email. Fifty respondents completed the survey. The demography of this sample is shown in table 1.

Table 1: Demography of respondents

		<i>Frequency n (%)</i>
Age	Under 26	2 (4%)
	26-35	9 (18%)
	36-45	8 (16%)
	46-55	16 (32%)
	Over 55	15 (30%)
Years of clinical experience	Under 5	3 (6%)
	6-10	8 (16%)
	11-15	6 (12%)
	16-20	6 (12%)
	More than 20	27 (54%)
Location	Metropolitan	16 (32%)
	Regional	28 (56%)
	Rural	6 (12%)
Sector	Government	37 (74%)
	Non-government	13(26%)

Of the 50 participants, 42 (84%) identified they had previously had helpful encounters with consultants, 7 (14%) stated they had limited dealings with clinical consultants in the past, while only 1 participant identified negative unhelpful encounters with clinical consultants. Forty participants (80%) stated their organisation was supportive of clinical consultants, 6 (12%) suggested their organisation was not supportive of clinical consultants and 4 (8%) did not know whether their organisation was supportive of clinical consultants. Forty-two participants (84%) either agreed or strongly agreed with the statement that they would be more likely to seek help from a consultant that they knew and trusted. In rank ordering the aspects of consultants in terms of proximity, personality, knowledge, timeliness and common sense, participants identified proximity and personality as the two more important factors influencing their decision to seek help from a consultant, while knowledge was identified as the least influential factor.

For the basic hypothetical case of a client with SCI resting in bed due to a pressure injury, with no additional scenarios, around half the respondents indicated a high likelihood (8-10 on a ten point scale) of seeking help from a peer and slightly more than half from a SCI consultant. Participant responses for each of the 29 scenarios ranged from 1 to 10. This means that each scenario was considered of little importance or utmost importance, as a factor influencing help seeking, by at least one respondent. Table 2 provides means with standard errors and standard deviations for each scenario response. The scenarios most frequently identified as most influential in the decision to seek help from a consultant were unsuccessful trial and error; the patient wants a second opinion; the patient is refusing visits; having a Stage 4 wound; insufficient care; wound deterioration; patient passivity; equipment as the cause of the problem; and, no medical involvement. Those rated least influential included the inability of the patient to pay for nursing services; patient depression; respondent's caseload is heavy; the patient prefers different dressings; and, the wound is oozing.

Table 2: Means, standard error and standard deviation for the 29 help seeking scenarios

<i>Help Seeking Scenario</i>	<i>Mean (SE)</i>	<i>Standard Deviation</i>
Trial and error	8.76 (0.28)	1.99
Second opinion	8.56 (0.35)	2.49
Refusing visits	8.56 (0.36)	2.53
Stage 4 wound	8.42 (0.34)	2.41
Insufficient care	8.40 (0.33)	2.34
Wound deterioration	8.24 (0.35)	2.44
Patient passivity	8.18 (0.29)	2.07
Equipment	8.10 (0.39)	2.73
No medical involvement	8.06 (0.38)	2.68
Sitting against advice	7.92 (0.32)	2.29
Second wound	7.82 (0.37)	2.63
Long duration	7.76 (0.37)	2.62
Static wound	7.68 (0.34)	2.43
Urinary incontinence	7.66 (0.37)	2.58
Wound malodorous	7.66 (0.37)	2.63
Patient comorbidity	7.50 (0.41)	2.91
Stage 3 wound	7.48 (0.37)	2.59
Pay for dressings	7.46 (0.40)	2.83
Wound exudate	7.44 (0.40)	2.80
Patient activity	7.44 (0.38)	2.67
Insecure dressings	7.36 (0.40)	2.86
Patient pain	7.20 (0.37)	2.63
Patient illness	7.12 (0.46)	3.26
Rapport with patient	7.04 (0.38)	2.67
Wound oozing	6.96 (0.40)	2.81
Dressing preference	6.84 (0.39)	2.74
Caseload	6.32 (0.45)	3.15
Patient depression	6.20 (0.42)	2.98
Pay for nursing	5.62 (0.48)	3.41

An exploratory Principal Components Analysis (PCA) was conducted to explore whether there were a clear set of themes across the scenarios that work together to determine help seeking. The Kaiser-Meyer Olkin Measure of Sampling Adequacy (KMO) 0.878 and Bartlett's Test of Sphericity ($\chi^2 = 1742.36$, $p < 0.001$) both indicated the factorability of the correlation matrix for the 29 scenario items. Varimax rotation was used to clarify the emerging factors. Four factors initially emerged with eigenvalues greater than 1 and these four factors accounted for 77.75% of the variance in the rotated factor solution. The fourth factor to emerge,

however, consisted of only one scenario, namely that of respondent caseload. This scenario was removed and the resulting three factor solution accounted for 74.9% of the variance. Table 3 illustrates the scenarios associated with each factor, their eigenvalues, percent of variance explained and descriptive statistics. The first factor to emerge consisted of scenarios that were consistent with wound management, accounting for 42.7% of the variance. There were 19 scenarios that loaded on this factor. The second factor consisted of four scenarios that characterised general health, accounting for 16.9% of the variance. The third factor was characterised by scenarios that reflected relationships and these five scenarios accounted for 15.3% of the variance. These three factors were saved as separate variables for further analysis.

Table 3: Factor structure of help seeking scenarios

<i>Help seeking scenario</i>	<i>Factor 1: Wound</i>	<i>Factor 2: Health</i>	<i>Factor 3: Relationship</i>
Sitting against advice	0.889		
Wound oozing	0.866		
Wound malodorous	0.856		
Stage 3 wound	0.850		
Wound deterioration	0.826		
Insecure dressings	0.822		
Wound exudate	0.820		
Second wound	0.809		
Long duration	0.796		
Stage 4 wound	0.780		
Trial and error	0.752		
Patient activity	0.750		
Dressing preference	0.732		
No medical involvement	0.674		
Static wound	0.671		
Insufficient care	0.655		
Patient pain	0.646		
Equipment	0.623		
Patient passivity	0.612		
Patient illness		0.799	
Patient depression		0.783	
Urinary incontinence		0.724	
Patient comorbidity		0.621	
Refusing visits			0.850
Second opinion			0.829
Pay for dressings			0.771
Pay for nursing			0.608
Rapport with patient			0.424
Eigenvalue	11.96	4.73	4.29
% variance explained	42.71	16.88	15.33
α	0.98	0.86	0.80

Personal attributes including age (using ordinal groupings); experience (using ordinal grouping); experience and confidence in wound management; experience and confidence in SCI management; and location (metropolitan, regional, rural) were explored in relation to identification of each of the three scenario factors. Using $p < 0.01$ significance levels to account for multiple comparisons, the only significant finding to emerge was a positive

relationship between age of respondent and Factor 1, Wound ($\rho = 0.407$, $p=0.003$). Older participants were more likely to identify wound management factors that influenced their decision to seek consultant help. Similarly, those with greater years of experience in nursing identified this factor more commonly ($\rho = 0.408$, $p=0.002$). Obviously, however, these two attributes are closely related ($\rho = 0.697$, $p<0.001$).

DISCUSSION

This exploratory study aimed to identify scenarios that might prompt nurses to seek advice from an SCI wound care consultant for pressure injury management and explore whether consultant or consultee characteristics were related to the reasons that would prompt nurses to seek consultant help.

Results indicate that the majority of participants were positive about engaging consultants and perceived their organisations to be supportive of the use of consultants. There was, however, data to suggest that positivity towards consultants might be enhanced by 'knowing and trusting' that individual through previous engagement. A demonstrated preference in the data for a consultant known and trusted to the help seeker highlights the value of relationship building to facilitate future approaches. This supports the findings of Amsters et al (2013) regarding the contribution of relationships to creating links between consultants and consultees. Similarly, Seright (2011) describes the importance of collaborative relationships to clinical decision making in a group of novice nurses. This study highlighted social rather than evidence based aspects of decision making, with strong reliance on support of co-workers and seniors to validate clinical judgements.

Jannings et al (2010) identified access to expert clinical knowledge via consultants as important to generalist nurses. In the current study, it is interesting that knowledge was identified as the least influential consultant characteristic on the decision to seek help, behind proximity, personality, timeliness and common sense. Proximity and personality were given the highest ratings. Perhaps there is an assumption that all SCI consultants will possess adequate specialty knowledge, and being able to access and engage with the consultant will facilitate problem solving. Perceptions of accessibility and trustworthiness have previously been identified as important influences on help seeking (Hofmann et al 2009). The expansion of telehealth services may be an important development in bridging perceived proximity issues (Moffatt and Eley 2010).

Analysis of the responses to the 29 scenarios indicates that what held utmost importance to one participant may be of no importance to another participant. Every scenario had at least one participant rating of 10 (most likely to be a catalyst for help seeking) and 1 (least likely to be a catalyst for help seeking). To place this in context, for the scenario stating that "you think the condition of the wound is deteriorating", 24 participants rated this as a 10 but two participants rated this as a 1. One of the limitations of a closed question survey is that it is not possible to delve into the thought processes of those participants who did not view deterioration as a red flag for help. The message for the promotion of help seeking behaviour is that what seems important and influential for one nurse may hold little influence for another. It is a complex interplay of factors, including situational factors that may impact on seeking help (Adamson et al 2009). This has implications for education of nurses in the community, particularly where the goal is to facilitate early intervention. Problem recognition is the driving force in the process of seeking help, as engaging a consultant cannot occur without this step. Education must therefore be far reaching to educate nurses about the complex and individual needs of the SCI population and the desirability of early specialist consultation for optimum outcomes.

Factor analysis revealed a three factor solution which accounted for 74.9% of the variance. These factors can broadly be described as wound factors, health factors and relationship factors. Significant associations between these factors and respondent characteristics was limited to wound factors and age of respondent, with older participants more likely to identify wound factors as promoting help seeking behaviour. Further work

is needed to understand the association between these variables but it may perhaps be related to positive experiences of using wound care consultants over time.

Limitations of this highly exploratory research are acknowledged. The sample size was smaller than anticipated due to a low response rate. Relying on participants to suggest other potential participants was not particularly successful and few responses were generated by people passing on the survey to others. Being mindful of busy clinical loads, and not wanting to unduly influence nurses to participate, the researchers did not continue to approach participants after the initial invitation and one follow up reminder. Although participants were asked to answer questions as they thought they would act, rather than should act, a social desirability bias may have influenced responses (Wasylikiw 2007). The nature of the potential bias is uncertain and may be influenced by professional or workplace culture as well as personal factors.

An alternative approach to gauging triggers for help seeking may have been to ask respondents to undertake a ranking or sorting of the factors, thereby forcing comparisons between factors. In addition, complementary qualitative data collection could elucidate the cognitive processes involved in making these choices. Participant sampling processes were not ideal. The sample consisted of nurses from a variety of backgrounds, who were asked to imagine themselves in the role of a community nurse. Surveying only nurses currently working in such a role may have provided different responses, however recruiting with such narrow employment criteria would doubtless prove challenging. Qualitative research exploring actual seeking help instances may be more informative and should be explored.

CONCLUSIONS/RECOMMENDATIONS

It was not possible from this study to identify particular circumstances that would prompt a community nurse to seek assistance from an SCI consultant nurse for pressure injury management. Results revealed that the nurses surveyed had varying reasons for seeking help. Factors related to the wound, client health and the relationship between nurse and client were regarded as being variably influential as catalysts for help seeking across the participant group.

This exploratory research suggests that to facilitate early referral and maximise the use of consultancy services (such as the Spinal Outreach Team), it is important to focus on all aspects of the help seeking process. Education, networking, relationship building, availability, approachability and positive personal attributes must all be viewed as influential factors. While this study has not provided definitive results, further research may identify other environmental or personal determinants as yet unidentified. Such information has potential application across a broad range of consultancy services.

REFERENCES

- Adamson, J., Ben-Shlomo Y., Chaturvedi N. and Donovan J. 2009. Exploring the impact of patient views on 'appropriate' use of services and help seeking: A mixed method study. *British Journal of General Practice*, 59(564):226–33.
- Amsters, D., Kendall, M., Schuur, S., Lindeman, M. and Kuipers, P. 2013. Allied health professionals as consultants: An exploratory study in an Australian context. *The Internet Journal of Allied Health Sciences and Practice*, 11(3):1–10.
- Austin, L., Luker, K. and Martin, R. 2006. Clinical nurse specialists and the practice of community nurses. *Journal of Advanced Nursing*, 54(5):542–552.
- Bamberger, P. 2009. Employee Help-Seeking: Antecedents, Consequences and New Insights for Future Research. *Research in Personnel and Human Resources Management*, 28:49–98.
- Cornally, N. and McCarthy, G. 2011. Help-Seeking behaviour: A concept analysis *International Journal of Nursing Practice*, 17(3):280–288.
- Geller, D. and Bamberger, P. 2012. The Impact of Help Seeking on Individual Task Performance: The Moderating Effect of Help Seekers' Logics of Action. *Journal of Applied Psychology*, 97(2): 487–497.
- Hammer, J. and Vogel, D. 2013. Assessing the Utility of the Willingness/Prototype Model in Predicting Help-Seeking Decisions. *Journal of Counseling Psychology*, 60(1):83–97.

- Hofmann, D.A., Lei, Z. and Grant, A.M. 2009. Seeking Help in the Shadow of Doubt: The Sensemaking Processes Underlying How Nurses Decide Whom to Ask for Advice. *Journal of Applied Psychology* 94(5):1261–1274.
- Howard-York, L. 2006. Nursing Students: What Factors Influence Help Seeking? University of Southern California.
- Jannings, W. and Armitage S. 2001. Informal Education: A Hidden Element of Clinical Nurse Consultant Practice. *The Journal of Continuing Education in Nursing*, 32(2):54–59.
- Jannings, W., Underwood, E., Almer, A. and Luxford, B. 2010. How useful is the expert practitioner role of the clinical nurse consultant to the generalist community nurse? *Australian Journal of Advanced Nursing*, 28(2):33-40.
- McSherry, R., Mudd D. and Campbell, S. 2007. Evaluating the perceived role of the nurse consultant through the lived experience of healthcare professionals. *Journal of Clinical Nursing*, 16(11):2066–2080.
- Moffatt, J. and Eley, D. 2010. The reported benefits of telehealth for rural Australians. *Australian Health Review*, 34(3):276–281.
- Mueller, J. and Kamdar, D. 2011. Why Seeking Help from Teammates Is a Blessing and a Curse: A Theory of Help Seeking and Individual Creativity in Team Contexts. *Journal of Applied Psychology*, 96(2):263–276.
- Nadler, A., Ellis, S. and Bar, I. 2003. To Seek or Not to Seek: The Relationship Between Help Seeking and Job Performance Evaluations as Moderated by Task-Relevant Expertise. *Journal of Applied Social Psychology* 33(1):91–109.
- Seright, T.J. 2011. Clinical decision-making of rural novice nurses. *Rural and Remote Health*, 11(3):1726.
- Smith, C. 2012. Mental health and help-seeking in adolescence. *Australasian Epidemiologist*, 19(1):5-8.
- van der Rijt, J., Van den Bossche, P., van de Wiel, M.W.J., De Maeyer, S., Gijsselaers, W.H. and Segers, M.S.R. 2013. Asking for Help: A Relational Perspective on Help Seeking in the Workplace. *Vocations and Learning*, 6(2):259–279.
- Wakefield, J., Hopkins, N. and Greenwood, R. 2014. Help-Seeking Helps: Help-Seeking and Group Image. *Small Group Research*, 45(1):89–113.
- Wasylikiw, L. 2007. Social Desirability Bias. In *Encyclopedia of Social Psychology*, edited by Baumeister, R and Vohs, K. SAGE: Thousand Oaks, CA. [Online], available from <http://dx.doi.org/10.4135/9781412956253.n527> (accessed 16.03.15).

The Cancer Nurse Coordinator Service in Western Australia: perspectives of specialist cancer nurse coordinators

AUTHORS

Professor Leanne Monterosso

Chair of Clinical Nursing (Joint appointment with St John of God Hospital Murdoch)
School of Nursing and Midwifery
The University of Notre Dame Australia
19 Mouat St, Fremantle, Western Australia
leanne.monterosso@nd.edu.au

Violet Platt

RN, BSc (Hons), MNursing
Co-Director and Director of Nursing -WA Cancer and Palliative Care Network, Ground Floor, C Block, 189 Royal St, East Perth, Western Australia
Violet.Platt@health.wa.gov.au

Professor Meinir Krishnasamy

BA, RGN, Dip N, MSc, PhD
Executive Director of Cancer Nursing and Allied Health, Peter MacCallum Cancer Centre, St Andrews Place, East Melbourne, Victoria, Australia
Meinir.krishnasamy@petermac.org,

Professor Patsy Yates,

Head of School of Nursing and Director, Centre for Palliative Care Research and Education, Queensland Health
Queensland University of Technology
Victoria Park Rd, Kelvin Grove, Queensland, Australia
p.yates@qut.edu.au

Associate Professor Caroline Bulsara

BA, Grad Dip Ed Studies, PhD
Research Coordinator, School of Nursing and Midwifery, 19 Mouat St, Fremantle, Western Australia
caroline.bulsara@nd.edu

KEYWORDS

cancer care coordination, cancer nursing, psychosocial care, specialist cancer nurse, service delivery

ABSTRACT

Objective

In Western Australia the cancer nurse coordinator (CNC) role is unique, state wide and situated in nursing. It requires the domains of clinical expert, resource consultant, educator, change agent, researcher and advocate to facilitate seamless coordination of care for patients across metropolitan, rural and remote geographical areas of Western Australia. This study examined the role, function and impact of CNCs from the perspective of coordinators themselves.

Design

Prospective two-phase mixed method study. This paper reports data from the Self Report Activity Questionnaire in Phase one.

Setting

The state-wide Western Australian Cancer Nurse Coordinator Service.

Subjects

Metropolitan and rural CNCs (n=18) who had worked in the role for at least six months.

Results

Overall, CNCs spent 70% of time in clinical consultation and 41% of CNCs reported having an educational role. Most CNCs (71%) noted that at least half of their patients had complex psychosocial needs at referral. Key role-related activities related to direct nursing care and patient education were performed most frequently on a daily basis. Tasks related to care management planning, patient advocacy and multidisciplinary clinical care were performed weekly. Strategic, team communication and professional development activities were performed less frequently.

Conclusion

Diversity of the CNC role was demonstrated with findings showing that CNCs fulfilled the core components of the specialist cancer nurse. Given the clear need to provide consistent support to cancer patients in an increasingly individualised and integrated manner, we consider the CNC role a fundamental element of quality cancer care.

INTRODUCTION

As a result of significant advances in cancer diagnosis and treatment, the overall 5-year relative survival from cancer has improved from 46% in 1982-1986 to 67% in 2007-2011 (AIHW 2014). The advanced capacity to achieve cure or long term remission has resulted in the delivery of more complex and multimodal treatments to patients over prolonged periods, resulting in multiple care teams and locations of care. Due to therapeutic advances, people previously ineligible for cancer treatment because of advanced disease, side effect burden or confounding comorbidities are now eligible for a new generation of treatments, bringing with them urgency for care coordination and navigation across several treatment teams and centres. This is particularly true for people with more complex needs and those disadvantaged by poor health literacy, rurality, or socioeconomic deprivation (Shen et al 2015; Moorin et al 2011).

Care coordination is recognised as an essential feature of high quality person-centred cancer care and critical to ensure optimal patient outcomes (COSA 2015; Shejila et al 2015). Whilst there is variation in the scope and practice of cancer care coordination, the key attributes include assessment and screening of clinical and supportive care needs; delivery of care consistent with established evidence based guidelines; timely and appropriate referral to multidisciplinary care and services; timely and consistent evidence-based education and information to patients and families (COSA 2015). These characteristics enable continuity of care, another critical element of the cancer care coordinator role (Walsh et al 2011; Aiello Bowles et al 2008).

Some studies have shown the benefit to patients and health service efficiency when nurse care coordinators or 'navigators' are involved in peoples' care (Wagner et al 2014). The study by Wagner et al (2014) highlighted the importance of the four elements of care coordination model as regular communication updates, facilitation of access to medical care, development of individualised care plans and conduct and consistently review care plans. These four elements facilitate the provision of optimal care and outcomes for patients outside of the hospital system.

Nonetheless, results from empirical studies have been equivocal, with limited robust evaluation of where or how nurse care coordinators contribute to improved patient outcomes (Young et al 2014). This has been due in part to a lack of robust measures to evaluate the impact of nurse care coordinators on patient outcomes. Walsh et al (2011), using correlational analyses, attempted to capture the essential features of care coordination and develop a reliable and valid measure to assess the impact of care coordination roles on patient outcomes, but more work is needed to further refine our ability to tailor and target Cancer Nurse Coordinator (CNC) interventions and evaluate the impact of such interventions.

A qualitative study by Baker et al (2013) of breast, lung and prostate cancer patients during 18 months post diagnosis demonstrated the impact of poorly coordinated care and lack of a single point of contact on patient experience and emotional wellbeing as well as routine assessment. Potentially, even within the best case scenario following diagnosis, coordination of cancer care and effective ongoing communication between all parties can be compromised. Furthermore, the trajectory of the disease spans a considerably greater timeframe than the active treatment phase alone. During this time, patients can find themselves in a state of confusion over a number of issues around the management of their condition leading to maladjustment. If positive adjustment is not identified and dealt with early following diagnosis then anxiety and depression can worsen as the person enters the 'survivorship' phase (Schumacher et al 2013).

The status of Cancer Care Coordination in Australia

The Optimising Cancer Care in Australia report (COSA 2003) highlighted the complexity of the management of individuals with cancer given the need for multiple care providers across different care settings and over a considerable time frame. With limited process and systems to deliver coordinated care, the capacity to

construct health care around the needs and preferences of patients, although increasingly recognised as the gold standard for cancer care (Kvåle and Bondevik 2008), in reality is often extremely difficult to achieve. Some studies have shown this requires a fine balance in terms of managing individual preferences in relation to the coordination of their care given the involvement of many health professionals across the illness trajectory through to survivorship phases of cancer (Thorne et al 2013; Brown et al 2012; Campbell 2006; Arora 2003).

To address these concerns, the Optimising Cancer Care in Australia (COSA 2003) report advocated for the need to provide integrated multidisciplinary care and proposed that optimal cancer treatment for all individuals would lead to improved survival, quality of life and smooth transition through the cancer journey. In response, the CNC role was introduced in many states of Australia but with considerable variation in scope, level of practice and function.

The context for this study

In Western Australia achieving care coordination for cancer patients is particularly challenging. The state spans 2,500,000 square kilometres and accounts for 30% of Australia's land mass with 38% of the population located in rural and remote areas (Australian Government 2007). Although 38% of the population are located in rural and remote areas, multimodal cancer treatments are only delivered in metropolitan Perth, and Bunbury in the south western corner of Western Australia. The disparity in availability of multimodal cancer treatments impacts access to and cost of care and treatment, potentially resulting in suboptimal outcomes for sectors of the population, for example, those residing in rural Australia, the older sectors of the population along with those from Aboriginal and Torres Strait Islander backgrounds.

A state-wide service utilising CNCs was implemented in 2006 as a key element of the Western Australian Cancer and Palliative Care Network. The CNC service was established to ensure, every person with complex care coordination requirements benefitted from a one-on-one relationship with a CNC; to facilitate navigation of the cancer care system for patients and their families; ensure timely access to multidisciplinary care teams and treatment decision making; and to provide a central point for consistent information and support across the cancer treatment pathway. The point of difference between a CNC and a nurse aligned with a ward, unit or clinic is that the CNC 'travels' with the patient, assessing symptoms/needs and managing care by modifying and adapting the patient's road map in line with current needs and preferences. No other role currently exists within the cancer environment with similar functions and accountabilities. By embedding CNCs across the state, the role functions could be tailored to the needs of differing patient groups depending on their level of health literacy, diagnosis and location (metropolitan or rural). The metropolitan CNC (mCNC) roles were developed to provide tumour stream specific support and advocacy for patients and families, while the rural CNC (rCNC) roles were introduced to provide broad cancer support and advocacy to patients in their regions. For rural patients requiring treatment in metropolitan Perth the CNCs functioned to provide coordination of care through partnership with Perth based tumour specific mCNCs. All of the mCNCs were and continue to be employed by the WA Cancer and Palliative Care Network. The rCNCs are employed in partnership with WA Country Health Services and are region-specific; they provide care to patients with all cancer types, interact with the rural and the metropolitan health care system and are exclusively used by rural patients. The rCNC positions are funded by the WA Cancer and Palliative Care Network with CNCs employed by and operationally responsible to the WA Country Health Service. Uniquely, CNCs were not located within a clinical environment allowing them the opportunity to interface with both patients and multidisciplinary professionals in a diversity of clinical and health environments.

Study aims

A study was undertaken to explore the contribution of both the mCNC and the rCNC roles to meeting the goal

of the WA Health (Cancer) Services Framework (2005) in delivering a coordinated and streamlined approach to cancer care coordination for patients across the state. The objectives of the study and subsequent paper were as follows:

- to describe the CNC perception of the impact of their role;
- to examine roles and functions for the CNC role; and
- to explore factors that influenced the implementation of their role either positively or adversely.

Data were gathered from CNCs and the patients they cared for, patient informal carers and multidisciplinary colleagues between 2008 and 2010. This paper only reports findings from the first phase of this study which evaluated the role using survey methodology from the perspective of rural and metropolitan CNCs. Data from patients, carers, health professionals and the qualitative CNC component will be reported in subsequent manuscripts.

Ethical approval for the study was obtained from participating hospitals across Western Australia.

METHODOLOGY

The study adopted a prospective two-phase, exploratory design applying sequential mixed methods that used quantitative (survey) and qualitative (semi-structured interview) approaches to data collection. As previously noted, this manuscript will focus on the extensive survey findings from the CNC perspective. Data were transcribed into SPSS and analysed by an independent statistician to ensure independence of researchers to the analysis process.

Data collection

Prior to embarking on the first phase of the study, the clarity, internal consistency and content validity of an adapted version of the 99-item Evercare Nurse Practitioner Role and Activity Scale (ENPRAS) (Abdallah et al 2005) was undertaken. The ENPRAS was chosen for relevance and suitability in the Australian context. Six CNCs were invited to review the ENPRAS questionnaire and provide feedback regarding any missing items or requirement for clarification of wording. This process resulted in the addition of 66 items, resulting in a 165 item questionnaire, renamed the Self Report Activity Questionnaire (SRAQ). Details of the process undertaken to establish internal consistency, based on the works of (Imle and Atwood 1988; Lynn 1986; Aamodt 1983) are available from the authors.

The 165 items made up 11 subscales covering: direct nursing care; clinical care management; patient education in the clinical context; care management plan; patient advocacy in the clinical context; multidisciplinary clinical care; multidisciplinary team meetings; education services; strategic tasks; professional development; and team communications

Following a rigorous process to establish internal consistency of the adapted questionnaire, the SRAQ was found to have a high degree of internal consistency with an overall Cronbach's alpha coefficient of 0.976, and individual subscale Cronbach alpha coefficients ranging from 0.421 to 0.957. The original ENPRAS had a content validity index of ≥ 0.78 for all items and internal consistency reliability Cronbach's alpha scores ranging from 0.76 – 0.96 for subscales (Abdallah et al 2005).

Phase 1: Administration of the Self Activity Report Questionnaire (SARQ)

Sample population

All CNCs with at least six months experience working in the role were eligible and invited to participate in the study. At the time of the study, 20 CNCs were employed in the service, 18 of whom were eligible to participate and were invited to complete the SARQ.

Recruitment and data collection

Following education sessions regarding the purpose and scope of the study, CNCs were sent an information sheet providing details about the rationale and requirements of participation in the study and a copy of the study questionnaire. Where nurses completed and returned a questionnaire, consent was implied as is the standard process with survey distribution. Implied consent for survey data was approved by the HREC committees and was considered usual practice when sufficient information about the survey purpose and content has been given (Alessi and Martin, 2010)

Data analysis

Due to the small number of participants, descriptive statistics were applied to the majority of the data. Non-parametric tests (Mann-Whitney) were used to determine if there were any significant differences between metropolitan and rural CNC grouped data and continuous responses. Analyses were performed by an external statistician to ensure independence of analytical procedures and findings. A random sample of 10 percent of returned questionnaires were checked for data entry errors and no systematic errors were noted.

FINDINGS

Eighteen surveys were returned by the CNC participants (100% response rate). Given that there were two groups of CNCs by location (metropolitan and rural) this study explored the functional aspects of the CNC role, but also whether there were any trends between the two groups. Hence, while there were some differences in responses provided by metropolitan and rural CNCs it was not possible to reliably assess for significant differences across the groups.

Demographic characteristics

The average length of time the participants had been nursing was 18.6 years $\pm$ 7.0 fulltime and 8.0 years $\pm$ 6.6 part-time. CNC respondents had been working with cancer patients for an average of 9.5 years $\pm$ 5.9 and the average length of time in the CNC role was almost two years ($M=1.9$; range: 0.4 – 2.4). Qualifications included Graduate Certificates ($n=12$), one Master of Nursing and one Nurse Practitioner (Masters qualification).

Functions of the CNC role and patient caseload.

The mean patient caseload per CNC over the six month period preceding the data collection was 88.5 $\pm$ 39.7 patient referrals, approximately 15 new referrals per month. The mean number of interventions performed per CNC was 437.8 $\pm$ 240.7 approximately 78 per month. Interventions delivered by the CNCs were categorised from level 1-5 according to the duration of time taken to deliver each intervention whereby time was used as a proxy for complexity (table 1).

Time spent on clinical consultation and non-clinical tasks

The average number of rostered hours per week spent on clinical consultation was 26 hours with 11 hours spent on clinical administrative tasks. Clinical administrative tasks which are core to optimal patient care and included input of written information for patient records and communication with other health professionals to arrange patient transportation/appointments/tests. There was an observed difference in overtime hours between metro and rural CNCs with metro CNCs reporting an average of five hours of overtime and rural CNCs reporting double that with 11 hours average overtime.

Sources of referral

CNCs were asked to provide a percentage of patient referrals from a number of sources. CNCs estimated that the majority of referrals originated from medical clinicians (19%), other CNCs (17%) along with MDT meetings (14%), and other hospital medical staff (12%). Interestingly, rural CNCs received more referrals from GPs (7%) compared with none (0%) amongst metro CNCs.

Table 1: Number and complexity of new patient referrals to CNCs during the first six months of role commencement

CNCs n=18	Metro (n=11)	Rural (n=6)	Total (n=17)	Mann-Whitney	
				z	p
No. new patient referrals	89.6 (37.2)	86.5 (47.8)	88.5 (39.7)	-0.201	0.841
No. patient interventions:					
Level 1	111.0 (114.7)	139.2 (32.6)	120.9 (93.6)	-1.508	0.131
Level 2	153.0 (112.9)	215.3 (142.1)	175.0 (123.4)	-1.006	0.315
Level 3	87.6 (41.3)	111.3 (53.7)	96.0 (45.9)	-1.359	0.174
Level 4	30.5 (30.0)	47.7 (19.7)	36.6 (27.5)	-1.711	0.087
Level 5	8.5 (11.9)	14.2 (6.6)	10.5 (10.5)	-1.715	0.086
Total number of interventions	388.7 (263.8)	527.7 (176.6)	437.8 (240.7)	-1.608	0.108

[Level 1 = 5-10 mins provision of information; Level 2= 10-30 minutes signposting to other services; Level 3 = 30 mins – 1 hour new patient assessment of psychosocial and physical needs; Level 4 = 1-2 hours patient and family support; Level 5 = 2 hours or more complex ongoing intervention as per individual needs]

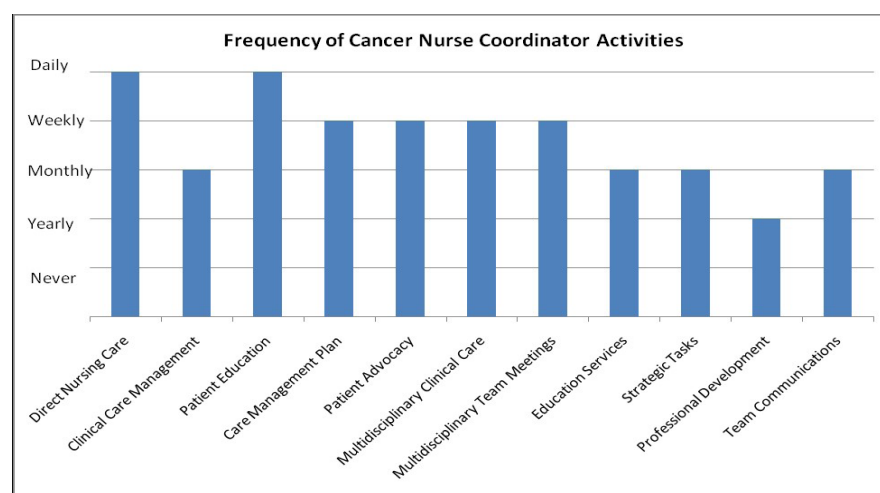
Table 2: Tasks performed frequently by CNCs

Task frequently performed by CNCs		
	No. respondents (n=17)	% respondents
5 top tasks performed daily by CNC		
Phone / email correspondence with families	14	82.4
Manage clinical caseload activity	13	76.5
Provide patient / families with my contact details	12	70.6
Conduct psychosocial assessment of patients	10	58.8
5 top tasks completed weekly by CNC		
Responsible for continuity of patient care	12	70.6
Care management plan which is patient focussed	11	64.7
Provide strategies for families to ask questions of health professionals	11	64.7
Review of assess a patient at health care team request	11	64.7
Advise or suggest other treatments to patients	11	64.7
5 top tasks performed monthly by CNCs		
Communicate with palliative care services for transfer of patients	11	64.7
Communicate with pharmacists on behalf of patients	11	64.7
Encourage nursing staff to enhance ability to recognise changes in patients	11	64.7
Meet with key stakeholders to build / promote the CNC role	11	64.7
Write reports (activity, annual reports etc)	11	64.7
5 top tasks performed yearly by CNCs		
Attend professional development	17	100.0
Attend regional meetings	15	88.2
Present at regional meetings	15	88.2
Communicate / arrange relevant staff regarding handover cover	15	88.2
Deliver community education talk	14	82.4

Role related CNC activity

CNCs reported eleven key role-related activities. Namely, direct nursing care; clinical care management; patient education; care management plan; patient advocacy; multidisciplinary care; multidisciplinary team meetings; education services; strategic tasks; professional development; team communications. Tasks were analysed as either (i) daily (ii) weekly (iii) monthly or (iv) yearly and comparisons made between metro and rural CNC respondents. Table 2 shows top five tasks per daily / weekly / monthly or yearly frequency. The graph below shows an overall representation of the frequency of CNC activities.

Figure 1: Frequency of Cancer Nurse Coordinator Activities



Direct nursing care

In terms of direct nursing care a majority of CNCs conducted daily symptom management (59%), psychosocial (53%), needs assessments (53%) and physical assessments (47%) of patients. In addition, twenty-four percent of CNCs use an evidence based screening tool to conduct a physical assessment of patients while 18% used an evidence based screening tool when conducting psychosocial or symptom management assessments of patients. In terms of differences between rural and metro CNCs, rural CNCs conducted some direct nursing care related tasks more frequently such as assessment of patients for mild behaviour changes at a daily frequency (50%) compared to weekly for metro CNCs (36%), and meeting with patients in their home at a yearly frequency (67%) compare to never for metro CNCs (82%)

Clinical care management

Daily clinical care management tasks included: discuss queries or health status changes with patient (53%) and family members (47%) and support them as they deal with changes. Tasks performed weekly most often included the identification/assessment and monitoring and follow-up patients with ongoing complex needs (53%).

Fifty nine percent of CNCs conducted bereavement follow-up with families. In terms of differences between metro and rural CNCs, rural CNCs conducted a number of *clinical care management* tasks more frequently than metro CNCs.

Patient education in a clinical context

All patient education in the clinical context tasks are performed by CNCs such as education of the patient (53%) and family (47%) about patient disease state and/or progression on at least a weekly basis. When compared to rural CNCs, metro CNCs more frequently conducted all patient education in the clinical context tasks, including education of the patient about patient disease state and/or progression, at a daily frequency (metro CNCs 73% and rural CNCs 83%).

Care management plan

In terms of care management planning most CNCs communicated the patient's care management plan daily with relevant health care professionals and educated patients about care management plans and its importance (35%). Metro CNCs more frequently conducted the care management plan tasks when compared with rural CNCs. Rural CNCs revised care management plans for patients more often at a weekly frequency (50%) than metro CNCs who performed this task at a monthly frequency (36%).

Patient advocacy in a clinical context

A large proportion (41%) of CNCs interpreted communication to a patient, or family member, by medical staff from culturally and linguistically diverse backgrounds on a daily basis. In addition, the majority of CNCs provided patients and families with strategies to ask questions, or raised issues, during a consultation with a health care professional (59%) and acted as the person responsible for continuity of care for patients (65%) on a weekly basis. In terms of rural and metro differences, although fifty five percent of metro CNC's interpreted or elaborated upon communication to a patient, or family member, by medical staff from culturally and linguistically diverse backgrounds on a daily basis, 50% of rural CNC's performed this task only yearly.

Multidisciplinary clinical care and team meetings

CNCs provide input to the patient care management team (47%) on a weekly basis. When compared to rural CNCs, metro CNCs more frequently consulted with appropriate discipline specialists about patient's condition changes with metro CNCs conducting this task at a weekly frequency (64%) compared with rural CNCs who conducted this task at a monthly frequency (50%).

Education services

Forty one percent of CNCs acted as a resource to support nursing or other staff on a weekly basis. Most education services were provided by CNCs on a monthly basis. Education services included educating individuals/groups of nursing, or other staff through informal (41%) and formal education (47%), and encouraging nursing or other staff to seek specific teaching opportunities with the CNCs (65%).

Metro CNCs more frequently conducted a number of professional education services when compared with rural CNCs. However, rural CNCs more frequently acted as a resource and/or support nursing, or other staff at a weekly frequency (67%) compared with monthly by metro CNCs (46%) and supported nursing staff who care for patients with unique needs (e.g. religious or cultural, non-compliance, stress/grief and loss reactions) at a weekly frequency (33%) compared with monthly by metro CNCs (36%).

Strategic tasks

Strategic tasks were directed towards service improvement or delivery for the cancer patient population and were less frequently conducted by CNCs compared with other tasks, with many tasks performed on a monthly or yearly basis. Strategic tasks performed by CNCs most frequently on a monthly basis included: meeting with key health providers/organisations to build and promote the CNC role (65%) and communicating or meet with various organisations in order to establish CNC service provision/referral process (47%) and communicating with Clinical Service Directors/Department Heads to discuss issues that impact on patient care (47%).

Professional development

Most professional development tasks were completed on a yearly basis although a majority of CNCs (59%) maintained continuing education and engaging with the latest research related to patient care issues within their clinical stream. The majority of CNCs never prepared papers for publication in peer reviewed journals (58%) or sat on a panel discussion at a regional meeting, state, national or international conference/symposia (65%). When compared to rural CNCs, metro CNCs more frequently: prepared abstracts, papers, or posters for conference presentation at a yearly frequency (64%) compared with never by rural CNCs (83%).

Team communications

Seventy-seven percent of CNCs documented and managed clinical caseload activity data relevant to their role (such as number and level of interventions performed on patients) on a daily basis. When compared with rural CNCs, metro CNCs more frequently: communicated/visited with another CNC in order to learn about their role at a monthly frequency (46%) compared with yearly by rural CNCs (67%) and attended CNC team meetings at a weekly frequency (54%) compared with monthly by rural CNCs (100%). Whereas rural CNCs provided mentoring or orientation to other CNCs or other nurses at a weekly frequency (33%), compared with metro CNCs who conducted this task monthly (54%).

Patient caseload

A majority of CNCs (71%) perceived that at least half of their patients had complex psychosocial care needs at the time of referral. Complexity was defined as those requiring further intervention such as 'significant psychological distress', 'significant physical impairment' and 'severe physical symptoms' (Clinical Oncological Society of Australia, The Cancer Council Australia, and National Cancer Control Initiative, 2003) all of which (combined or alone) can benefit from specialised interventions (e.g. counselling, psychotherapy, physiotherapy, speech pathology, occupational therapy, fertility services).

At time of referral, the majority of CNCs (71%) reported that approximately 50% of patients had complex psychosocial needs along with a moderate level of functional status which limited their ability to perform normal activity as measured by the Australia-modified Karnofsky Performance Scale (Abernethy et al 2005).

DISCUSSION

Navigation of the cancer care system can be confusing and stressful for patients and their families (Greer et al 2008; Wells et al 2008; Burgess et al 2005; Jefford and Tattersall 2002) given the plethora of treatments and services that a cancer patient interfaces with during their treatment phase. Data from this study show that CNCs role is key to improving patient experience through helping patients and family members manage the multiple and complex systems and processes involved in cancer service delivery, often over prolonged periods of time. The CNC study allowed the CNCs to identify through a systematic and focused process, factors that enable or hamper them in the implementation and delivery of what has been described by patients as a critically important coordinating function (Crane-Okada 2013). Although the CNCs in this study did not overtly refer to the level of cancer expertise required to be effective in the role, nonetheless, the 'silence' of nursing's articulation of its skill has been powerfully articulated by Buresh and Gordon (2006). Addressing the silence around the articulation of the CNC role and giving a nurses a voice to illustrate where the CNC role value adds to patient experience, may make a valuable impact on the way in which the role is understood, accepted and protected from health cost savings in the future.

Survey findings demonstrated that CNCs who participated in this study expressed diversity within their roles such as: being an advocate, psychosocial support person and services liaison coordinator amongst other clinical functions of the role. However, most importantly the findings demonstrate the diverse elements of their role were drawn together as a package of care relevant to the needs and circumstances of each patient. Furthermore, the purpose and function of the CNC role is to be the single point of contact, the constant in a complex, frightening and unfamiliar context for patients, irrespective of their context or culture. For colleagues, their role and function is to be the point of contact for orientation and communication of the treatment trajectory for individuals within their case load.

The challenge now for CNCs is to undertake robust research that captures and makes visible the impact of this role on patient experience but critically on patient outcomes.

LIMITATIONS

At the time of evaluation, the CNC service had been in progress for several months. While this limited the level of enquiry to a descriptive study, this study was able to evaluate the CNC role from the perspective of patients, carers, healthcare professionals and CNCs themselves. Publication of data from patients, carers and multidisciplinary health professionals is currently in train.

CONCLUSION

Cancer nurse coordinators are critically important roles in an ever increasingly complex cancer context given the need to provide consistent support to patients. As cancer therapies become ever more personalised, prolonging survival through increasing demand for prescription of life-long therapies, support will become a fundamental element of quality cancer care. Health care providers who traverse care boundaries and communicate across multiple health care teams will be invaluable resources to patients and professionals in this era. The challenge for nursing is to deliver empirical data to demonstrate the patient and system outcome benefits of having experienced cancer nurses in these roles and, equally importantly, when care pathway coordination can be achieved for patients through other members of the health care team. In reality, this will differ from context to context and the challenge for health services considering implementing care coordination roles is to understand the needs of their community in order to ensure that the skills and expertise of CNC resources are appropriately placed to deliver optimal experience and outcomes for people affected by cancer.

RECOMMENDATIONS

Further research is required to truly articulate the contribution of cancer nurse coordination. The art of cancer nursing developed over years of clinical experience combined with the science of contemporary nursing care and health system knowledge needs to be explored to demonstrate the benefits to patients with complex needs, their families and the health system as a whole; from an optimal health care and financial outcome.

REFERENCES

- Australian Institute of Health and Welfare 2014. Cancer in Australia: an overview. 2014. Cancer series no. 78. Cat. No. CAN 75. Canberra: AIHW.
- Aamodt, A. 1983. Problems in doing nursing research: Developing a criteria for evaluating qualitative research. *Western Journal of Nursing Research*, 5(4):398-402.
- Abdallah, I., Fawcett, J., Kane, R.L., Dick, K. and Chen, J. 2005. Development and psychometric testing of the EverCare Nurse Practitioner Role and Activity Scale (ENPRAS). *Journal of the American Academy of Nurse Practitioners*, 17(1):21-26.
- Abernethy, A.P., Shelby-James, T., Fazekas, B.S., Woods, D. and Currow, D.C. 2005. The Australia-modified Karnofsky Performance Status (AKPS) scale: a revised scale for contemporary palliative care clinical practice [ISRCTN81117481]. *BMC Palliative Care*, 4(7).
- Aiello Bowles, E.J., Tuzzio, L., Wiese, C.J., Birlin, B., Greene, S.M., Clauser, S.B. and Wagner, E.H. 2008. Understanding high-quality cancer care: a summary of expert perspectives. *Cancer*, 112(4):934-942.
- Alessi, E. and Martin, J. 2010. Conducting an Internet-based survey: benefits, pitfalls and lessons learned. *Spical work research*, 34(2):122-128.
- Arora, N.K. 2003. Interacting with cancer patients: the significance of physicians' communication behavior. *Social Science and Medicine*, 57:791-806.
- Australian Government. 2007. Economic Roundup Spring. 2007 (T. Treasury, Trans.) (Vol. 2008). Canberra: Australian Government.
- Baker, P., Beesley, H., Dinwoodie, R., Fletcher, I., Ablett, J., Holcombe, C. and Salmon, P. 2013. You're putting thoughts into my head': A qualitative study of the readiness of patients with breast, lung or prostate cancer to address emotional needs through the first 18 months after diagnosis. *Psycho-Oncology*, 22(6):1402-1410.
- Brown, R., Butow, P., Wilson-Genderson, M., Bernhard, J., Ribi, K. and Juraskova, I. 2012. Meeting the decision-making preferences of patients with breast cancer in oncology consultations: impact on decision-related outcomes. *Journal of Clinical Oncology*, 30(8):857-862.
- Buresh, B. and Gordon, S. 2006. *From Silence to Voice: What Nurses Know and Must Communicate to the Public*. Sage House, USA: Cornell University Press.

- Burgess, C., Cornelius, V., Love, S., Graham, J., Richards, M. and Ramirez, A. 2005. Depression and anxiety in women with early breast cancer: five year observational cohort study. *British Medical Journal*, 330(7493).
- Campbell, K. 2006. Methods of meeting patients' cancer information needs. *Nursing Times*, 102(14):28-30.
- Clinical Oncology Society of Australia, 2015. Cancer Care Coordinator Position Statement. November 2015.
- Clinical Oncological Society of Australia, The Cancer Council Australia, and National Cancer Control Initiative. 2003. Optimising Cancer care in Australia (pp1-122). Melbourne, Victoria.
- Crane-Okada, R. 2013. Evaluation and outcome measures in patient navigation. *Seminars in Oncology Nursing*, 29(2):128-140.
- Greer, J.A., Pirl, W.F., Park, E.R., Lynch, T.J. and Temel, J.S. 2008. Behavioral and psychological predictors of chemotherapy adherence in patients with advanced non-small cell lung cancer. *Journal of Psychosomatic Research*, 65(6):549-552.
- Imle, M. and Atwood, J. 1988. Retaining qualitative validity while gaining quantitative reliability and validity: Development of the transition to parenthood concerns scale. *Advances in Nursing Practice*, 11(1):61-75.
- Jefford, M. and Tattersall, M.H. 2002. Informing and involving cancer patients in their own care. *The Lancet Oncology*, 3(10):629-637.
- Kvåle, K. and Bondevik, M. 2008. What is important for patient centred care? A qualitative study about the perceptions of patients with cancer. *Scandinavian Journal of Caring Sciences*, 22(4):582-589.
- Lynn, M.R. 1986. Determination and quantification of content validity. *Nursing Research*, 35(6):382-385.
- Moorin, R., Gibson, D., Bulsara, C. and Holman, C.D.J. 2011. Challenging the perceptions of cancer service provision for the disadvantaged: evaluating utilisation of cancer support services in Western Australia. *Supportive Cancer Care*, 20(8):1687-1697.
- Schumacher, J.R., Palta, M., Loconte, N.K., Trentham-Dietz, A., Witt, W.P., Heidrich, S.M. and Smith, M.A. 2013. Characterizing the psychological distress response before and after a cancer diagnosis. *Journal of Behavioral Medicine*, 36(6):591-600.
- Shejila, C.H., Pai, M.S. and Fernandes, D.J. 2015. Oncology Nurse Navigator Programme a Narrative Review. *Nitte University Journal of Health Science*, 5(1):103-107.
- Shen, M.J., Binz-Scharf, M., D'Agostino, T., Blakeney, N., Weiss, E., Michaels, M. and Bylund, C.L. 2015. A mixed-methods examination of communication between oncologists and primary care providers among primary care physicians in underserved communities. *Cancer*, 121(6):908-915.
- Thorne, S., Oliffe, J.L. and Stajduhar, K.I. 2013. Communicating shared decision-making: Cancer patient perspectives. *Patient Education and Counseling*, 90(3):291-296.
- Wagner, E.H., Sandhu, N., Coleman, K., Phillips, K.E. and Sugarman, J.R. 2014. Improving Care Coordination in Primary Care. *Medical Care*, 52(11 Suppl 4):S33-S38.
- Walsh, J., Young, J.M., Harrison, J.D., Butow, P.N., Solomon, M.J., Masya, L. and White, K. 2011. What is important in cancer care coordination? A Qualitative Investigation. *European Journal of Cancer Care*, 20(2):220-227.
- Wells, K.J., Battaglia, T.A., Dudley, D.J., Garcia, R., Greene, A., Calhoun, E. and Raich, P.C. 2008. Patient navigation: state of the art or is it science? *Cancer*, 113(8):1999-2010.
- WA Health (Cancer) Services Framework, WA Health Cancer Services Taskforce. 2005. WA Department of Health.
- Young, J.M., Masya, L.M., Solomon, M.J. and Shepherd, H.L. 2014. Identifying indicators of colorectal cancer care coordination: a Delphi study. *Colorectal Disease*, 16(1):17-25.

The transition of overseas qualified nurses and midwives into the Australian healthcare workforce

AUTHORS

Se Ok Ohr

RN, BNSc, MHlthMgt, MACN
Nurse Manager, Nursing and Midwifery Services,
Hunter New England Local Health District
PO Box 1743 Newcastle, New South Wales, Australia
seok.ohr@hnehealth.nsw.gov.au

Sue Brazil

RN, RM, MN(Research), BN, MACN
Nurse Manager, Nursing and Midwifery Services
PO Box 1743, Newcastle, New South Wales, Australia
susan.brazil@hnehealth.nsw.gov.au

Doreen Holm

RN, RM, GradCertIR, MHRM
Nurse Manager, Nursing and Midwifery Services,
Hunter New England Local Health District
PO Box 1743 Newcastle, New South Wales, Australia
Doreen.Holm@hnehealth.nsw.gov.au

KEY WORDS

Overseas qualified nurses, transition, Australian healthcare, support, nursing practice

ABSTRACT

Objective

The purpose of this paper is to discuss the key elements to consider when developing and implementing strategies to enhance the transition of overseas qualified nurses and midwives (OQNMs) into the Australian healthcare clinical practice environment.

Setting

A local health district with a major metropolitan centre and a mix of large regional centres which provide a range of public health services, to a population of approximately 850,000 people located in New South Wales, Australia.

Subjects

Newly recruited overseas qualified nurses and midwives. Many of these nurses and midwives are from culturally and linguistically diverse backgrounds and different countries.

Primary argument

Within the Australian nursing and midwifery practice environment the recruitment of overseas qualified nurses has gradually increased. While transitioning into the practice environment requires a range of support strategies, there is limited information on how to support them.

Conclusion

The culturally constructed support program and its strategies assisted in minimising the impact of the challenges and difficulties faced by OQNMs in their transition into the Australian nursing workforce. The program was instrumental in improving their well-being and it provided a strategic framework to facilitate a smoother transition. Risks to patient safety were mitigated by providing opportunities for education so the provision of safe quality care was enhanced. This was also seen as a factor that enhanced the recruitment and retention of nurses in the workforce.

INTRODUCTION

The international recruitment of nurses into Australia has for some time been used as a strategy to fill gaps between supply and demand in the nursing workforce (Negin et al 2013; Health Workforce Australia 2012). According to an analysis of census data for overseas born health care workers, 66.8% of the 239,924 Australian midwives and nurses were born in Australia, with the next largest groups being born in the United Kingdom and Ireland and in Southeast Asia (Negin et al 2013). The census data also revealed a trend change in workforce diversity as indicated by an increase of 250%, or 5,956 of nurses and midwives born in South Asia. In particular, there has been an increase in the number of nurses and midwives from India, Nepal, Indonesia and the Philippines from 2006 to 2011. Migration of OQNMs into Australia is expected to continue as the shortage of nurses in Australian nursing and midwifery practice increases (Health Workforce Australia 2012).

Nurse and midwife migration provides an adequate supply of qualified practitioners into the health workforce in response to the demand for staff. The needs of the culturally and linguistically diverse Australian population are better able to be met by the introduction of OQNMs who provide culturally competent care by using their own cultural knowledge and language skills, which can influence direct patient care and up skill other nurses (Jeon and Chenoweth 2007; Omeri and Atkins 2002). However, nurse migration also brings a number of concerns.

Firstly, there has been growing international ethical concern about the recruitment of nurses from their country of origin, especially from developing countries already experiencing a shortage of skilled nurses (International Centre on Nurses Migration 2007; Sparacio 2005). This is often referred to as 'brain and skills drain' (Kingma 2009; Sparacio 2005). These concerns have led to investigations about migration flows, factors for migration and development of strategies for appropriate recruitment, as well as development of a variety of policies and guidelines (Dywili et al 2013; Kingma 2006; Zurn et al 2005).

The second concern relates to issues of safety and the quality of care provided by OQNMs in Australia. The Australian Health Professional Regulation Agency (AHPRA) reviews and assesses applications to gain registration in Australia on behalf of the Nursing and Midwifery Board of Australia (AHPRA 2016). The Australian Nursing and Midwifery Accreditation Council assesses the skills of nurses and midwives who want to migrate to Australia under the Australian Government's General Skilled Migration program (ANMAC 2016). This process is comparable to other countries such as United States of America (USA), Canada, New Zealand (NZ), and the United Kingdom (UK) (Xiao et al 2014). Generally, OQNMs need to meet five registration standards; Identity assessment, fit to practice, English requirement, competency-based nursing assessment and recency of practice.

Further, a number of studies call for researchers, policy makers, industry and academic leaders to investigate the impacts of globalisation on the nursing and health workforce (Jones and Sherwood 2014; Ohr et al 2011). They include transition of OQNMs into nursing practice and the safety and experiences of OQNMs in that nursing environment. The literature discussed both the contributions, its diversity and the concerns surrounding the migration of nurses and midwives, as well as the complexities involved (Newton et al 2012; O'Brien and Ackroyd 2012; Zhou et al 2011; Humphries et al 2008; Alexis et al 2007; Xu 2007).

Transition into both a new society and nursing practice arena is challenging for OQNMs and their families, as well as the organisations recruiting them. These challenges are closely linked to differences such as culture, language and clinical practice methods. For example, the differences between their country of origin and the host society's cultural norms and ways of carrying out nursing practice can impact on their transition (Ohr et al 2014; Deegan and Simkin 2010; Takeno 2010; Konno 2006). Further, even though cultural norms and practice can be similar there is still an impact on their transition, as it is in a different cultural context (Brunero et al 2008). Lessening the impact of change is required for a smooth transition, and the need for

cultural and professional support at a workplace level, is critical to increasing the individuals' capability to adjust to, and provide quality nursing care in the Australian clinical practice environment.

The existing literature emphasises the need for support strategies for the OQNMs entering a new nursing practice environment (Ohr et al 2014;NSWNMA 2012; Deegan and Simkin 2010; Zizzo and Xu 2009; Garling 2008; Sherman and Eggenberger 2008). The key support strategies identified by the authors are education programs which include an orientation program, a mentoring program, a logistics support and acculturation program, including language and communication training (Ohr et al 2014; Timilsina Bhandari et al 2014; Allan 2010; Boylston and Burnett 2010; Robinson 2009; Zizzo and Xu 2009; Sherman and Eggenberger 2008; Davis 2003; Ryan 2003). Some of the authors also indicate that the managers and local nurses require support strategies, such as how to deal with cultural challenges and supportive leadership within the diverse workforce (Ohr et al 2014; Pacquiao 2008; Sherman and Eggenberger 2008). However, a systematic review on the post hire transitional program for OQNMs indicated there was lack of evidence of the efficacy of the support strategies (Zizzo and Xu 2009). Contrary to the previous finding about the uncertainty of support strategies an international study tour report indicated that those support strategies were effective for the OQNMs' successful transition into the workplaces (Ohr et al 2014; Pacquiao 2008). Given the difference in opinions regarding what is required for OQNMs, there is scope to gain further insight into the effectiveness and use of support strategies.

This paper presents a discussion of the development and implementation of support strategies using an exemplar of a support program at an Australian Health organisation.

SUPPORT PROGRAM – AT A GLANCE

The exemplar is from a Local Health District located in New South Wales, Australia, (hereafter District) with a major metropolitan centre and a mix of several large regional centres which provide a range of public health services to a population of approximately 850,000 people. The District employs 15,500 staff including 8,300 fulltime equivalent nurses and midwives. With increased recruitment of OQNMs into the District, the Nursing and Midwifery Services (N&MS) identified that a support program was crucial in supporting a large cohort of OQNMs who were recruited during 2011-2012. Most of the recruits came from culturally and linguistically diverse backgrounds and were from more than 25 different countries. Although there was an increased number of OQNMs at the District during past decades, previous support was undertaken in an ad hoc manner, and was usually reactive, problem focused as opposed to being proactive and finding "solutions" to the challenges. Support provided lacked cultural sensitivity and coordination. In 2010 with active recruitment of OQNMs to the District, an Overseas Staff Support Program (OSSP) with different support strategies was developed and piloted. It was made available across the entire District in 2011 (see table 1).

In 2013, with an approval from the District's Research Ethics Committee for this quality assurance project, a cross-sectional study using a survey was conducted to evaluate the effectiveness of the support strategies. A total of 65 OQNs completed the survey. Ninety one per cent of the respondents were employed as a registered nurse or a registered midwife at 16 different facilities. At the time of survey, 82% of them were aged between 20 and 39 years, and 82% of were female. The countries where their first nursing qualifications were achieved were India (62%), UK (8%), and 10 other countries. The majority of respondents (69%) have had at least two years of experience prior to their arrival in Australia, and 65% of them had been in Australia for less than 24 months.

Table 1: Description of Overseas Staff Support Program

The Overseas Staff Support Program aims to improve the experience of the overseas qualified staff, and to provide advice and guidance to the managers and staff to support the overseas staff during their transition into the workplaces. The following support are available to new overseas recruits:

Prior to arrival:

- Assist visa applications
- Provide an Arrival Manual and information on the place they are going to work
- Connect with support people (the coordinator of the OSSP and a support person recruited through an Adopt-A-Nurse program)
- Provide Overseas Staff Orientation Manual to acclimatise with the Australian nursing practice

On arrival and on commencement of their work:

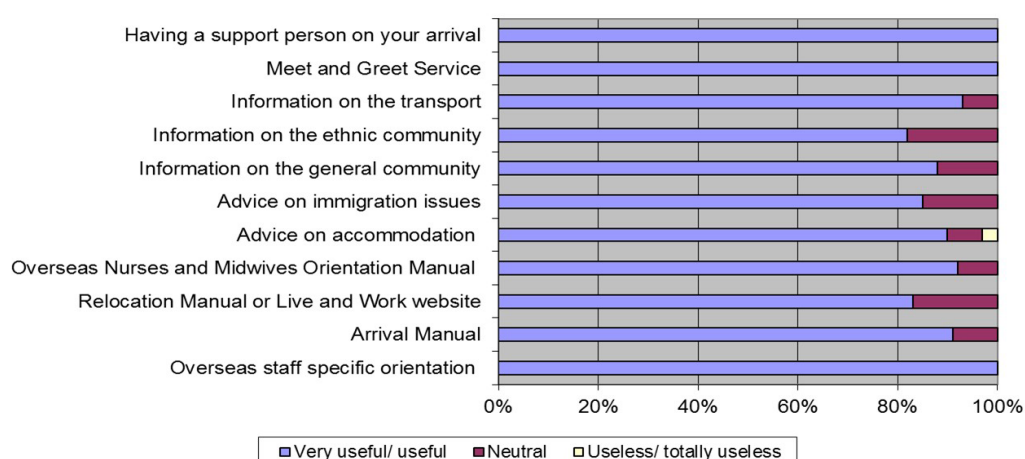
- Meet with the Nursing and Midwifery Services and/or volunteers to support transition into the society
- Provide a two days corporate orientation program for new staff
- Provide a day facility specific induction program to the workplace
- Support by a Clinical Nursing/ Midwife Educator (CNME) and a preceptor or a mentor
- Provide additional three days of specific education on working in the Australian Health Care system, including education about working within a different culture, medications and documentation.
- Provide a period of one to five days supernumerary days

During their work at the District

- Conduct performance review by the manager or CNME to discuss their transitional needs at work
- Support from the coordinator of OSSP
- Provide cultural competency training called "Working within a diverse workforce" is being made accessible to OQNs and District staff
- Provide a fact sheet on immigration procedure and workshops
- Provide managers with a Guidance for Overseas Qualified Nurse and Midwife Recruitment: Manager's manual
- Annual overseas staff professional development day

OSSP coordinator was available as a support person through their transition period

The findings of the study indicated that more than 90% of the respondents found the support strategies useful for their transition. Table 2 indicates the most useful strategies were personal support and a welcoming atmosphere on arrival, and an orientation specifically designed for OQNMs to acclimatise into the Australian culture and nursing workforce.

Table 2: Program usefulness**Usefulness of the support received**

Excerpts of qualitative data indicate satisfaction for the support they received on commencement of work. Comments revealed a sense of appreciation for the support received prior to and upon arrival in Australia.

“...Gave me very good support in all aspects of settling in from the day of arrival and continued it for few weeks. Excellent job” OQNM 1

“It is a great pleasure to know that somebody is there to look after you if you have no family and friends around you” OQNM 2

“I felt I was really supported well when I started my job in the medical unit by co-workers and my nursing unit manager. I am really grateful.” OQNM 3

“All the support which I received was excellent. I had an excellent support from nurse manager, overseas staff support program to settle as a family and to settle in to the job. It will be very helpful if you continue that.” OQNM 4

Other respondents expressed the need to be informed of all available support strategies and a need to have further support. In fact, 66% of them were aware of the Overseas Staff Support Program.

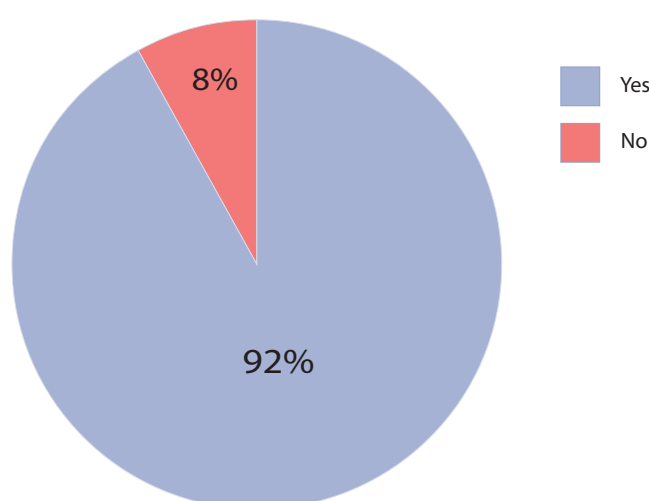
“I would have liked someone special to turn to regarding questions or assistance.” OQNM 5

“Some simple things like library cards and where to move and where not to live (safe and unsafe areas) would have been helpful.” OQNM 6

“Could have done with more supernumerary days?” OQNM 7

Further, anecdotal evidence collected suggested that Nurse Managers and Clinical Nurse Educators believed the support strategies were useful. Currently, all of OQNM who were supported by the program remain employed in the District, and there have been a decreased number of referrals to the OSSP program manager to address issues of concern once work had commenced. In addition, ninety two per cent (92%) of respondents stated they would recommend, or have recommended the District as a potential employer (figure 1).

Figure 1: Respondents' recommendation of the District as a potential employer



DISCUSSION

In an attempt to change the cultural landscape across the organisation the principles of change management were used to provide a systematic, holistic framework that guided the development and implementation of the program (Neilson et al 2004). The change process was also embodied in open but targeted communication with frontline staff and managers. From an organisational perspective there was greater engagement and a progressive commitment to the program, which allowed the recruits and existing staff to be empowered to manage personal and professional changes. Seven key themes were identified as crucial to the success of the support strategies used across the District.

1. Leadership

Strategic leadership was identified as important in providing a vision for change and was the impetus for linking the program objectives to the District's strategic priorities. For example, the program aimed to be a mechanism to create better alignment to the priority area of "our staff and workplace culture (supporting and encouraging our staff)" (Hunter New England Local Health District 2013) and redress the imbalance.

Presentation of the program to, and endorsement by all nursing and midwifery managers at the District Nursing and Midwifery Senior Managers Forum enabled commitment to the change process to grow. With this commitment a Nurse Manager position was recruited to lead and oversee the development and implementation of a support program. Involving managers in the planning, implementation and evaluation phases developed a united sense of ownership and commitment to the program and its support strategies, at both the strategic and operational levels. Further on in its development the program became known as the Overseas Staff Support Program, and it was evident that the strong and united leadership of nursing and midwifery managers was a major factor in the success of the program.

2. Consultation

An extensive consultative process occurred in the planning and implementation phases (see table 3). Key stakeholders included Nursing and Midwifery Services, Human Resources, clinical staff, OQNMs, volunteers, and community cultural groups. The consultative team approach increased cohesion and synergy between key groups and assisted in the development of the program and its support strategies. This process involved several steps in identifying staff needs and in developing a model of support which was based on best practice principles, so that all members of the consultation group were included in various stages. This was instrumental in ensuring participants clearly understood what was expected as they communicated openly with each other.

Table 3: Measures taken to inform program development

An extensive review of literature
A review of support programs in other health services across Australia
Consultation with OQNMs already employed in the District and other District stakeholders
Survey of OQNMs to identify needs and a survey of nurse managers and clinical nurse educators
A study tour of the UK and USA by the nurse manager of the overseas staff support program
Review of evaluation feedback from the overseas staff professional day where 50 OQNMs and international allied health professionals participated
Ongoing case reviews within the Local Health District

3. Embedding the support strategies as normal practice

Embedding the practice of providing support into routine practice became essential. For example, including information about support strategies in the District's generic online education program called "Recruit, Select and Orientate new Employees," enhanced the dissemination of information to all staff which increased their awareness on how to support new OQNMs. Another example was to better inform managers through the development and circulation of a factsheet stating the steps involved in processing visa nominations and visa applications. This normalisation of providing support empowered the direct line managers, human resource personnel, as well as the OQNMs themselves to change the cultural landscape and embed the support strategies. In addition, the development of a standardised process and the associated policy compliance procedure about the recognition of prior experience for OQNMs was a positive outcome that emulated out of embedding the strategies.

4. Tailored support strategies

Different support strategies were used to meet the specific needs of the OQNMs, such as providing resources to assist clinical transition and community settlement. It was initially evident that basic needs such as accommodation, schools for children, community adjustment, and religious needs were as important as being able to meet the required Australian nursing competencies. Resources were developed and strategies aimed at providing support and delivery information about: 1) clinical transition into the Australian workforce; 2) settlement into the community; and 3) personal support was provided. Additional strategies included the provision of the Overseas Qualified Nurses and Midwives Orientation Program in both a face to face and online modality, and a hard copy of the Orientation Manual was specifically designed for OQNMs. Orientation included education about working in the Australian health care system, working within a different culture, and clinical information relating to specific policies and procedures about medications, their safe administration and clinical practice. The online orientation/education program was effective in supporting the dissemination of important information to OQNMs across a large diverse geographical area. An identified need for current clinical information was met by providing subject content on a USB stick or through emails. This information included the District's policies and procedures related to medications such as Nurse Initiated Medications, management of S8 and S4 drugs, information about insulin, warfarin, and high risk medications. It also included information about the minimum standards of patient care, rights and responsibilities, and professional nursing portfolio management. Beside these support strategies for clinical transition, the OQNMs were encouraged to access many resources from the NSW Ministry of Health online service and the DVDs such as "Nursing and Midwifery: No two days are the same" and "Ways of Working in Nursing" proved useful in increasing their understanding of Australian nursing practice.

To support them with community settlement, a number of resources were provided. For example, an Arrival Manual was given to them prior to their arrival in Australia. This gave access to basic information and an overview of the District to assist with work readiness, salary packaging for relocation expenses and settlement issues such as information about school choices, transport, and accommodation. Another example was the provision of a community information booklet that included information about the places they would live or work in. For immigration issues, Nursing and Midwifery services in conjunction with the Department of Immigration and Border Protection provided an information sheet and seminars on immigration matters.

Personal support on an individual basis was pivotal to their transition. A buddy program called, the Adopt-A-Nurse Program was introduced to provide each new recruit with a contact person who gave them individualised support. Those that gave the support were volunteers, and they were recruited by placing an advertisement within the District for all staff to see. The roles and boundaries of both the OQNMs and the support persons were clearly defined and managed by the overseas staff support program coordinator. The volunteer met and

welcomed the family group into the community, and assisted them to find appropriate places for shopping and accommodation if required. Social networking occurred through invitations being extended to BBQs or afternoon tea. Some of the volunteers and the OQNMs developed long term friendships.

5. Support for the existing staff

To support cohesive team work and to increase staff capacity to work with OQNMs at the operational level resources about working with people from different cultures and education was made available to existing staff (both clinical and management). As line managers needed to work with the OQNMs from recruitment to work placement, a Manager's Guideline document was developed that included information about immigration matters, communication strategies, nursing competencies and other useful ways to provide support. Through the involvement of managers, co-workers and volunteers a supportive working environment developed.

6. Timely access to support

Depending on the needs of the individuals timely access to support was essential. For example, before arrival in Australia the overseas recruits were given access to the resource materials and if requested a volunteer was provided to support them during their preparation for relocation. Upon arrival they were provided with an orientation program and other support strategies. They were also provided with various seminars and professional development programs such as the "Overseas Staff Professional Day". This provided an opportunity for them to meet and share their experiences so they could create an internal support network which was aimed at improving their capacity to transit into the workforce.

7. Program leader

A designated person was appointed to lead the program and this was pivotal in ensuring that the program was well coordinated and each aspect was evaluated. The program leader was situated at the N&MS so support and guidance was available to the program manager particularly during the development, implementation and evaluation of the support strategies. The role was also instrumental in providing support to the managers and it was located in the N&MS as one of the primary functions of that team was to support managers to recruit and retain skilled staff.

CONCLUSION

The findings of the evaluation affirmed that the culturally constructed support program and its strategies assisted in minimising the impact of the challenges and difficulties faced by OQNMs in their transition into the Australian nursing workforce. The program established a strategic framework to facilitate a smoother transition and at the same time proved to be instrumental in improving the well-being of individual OQNMs. It also assisted with mitigating risks to patient safety by providing educational opportunities for OSNMs to enhance their capacity to provide safe quality care. All of these outcomes have enhanced the recruitment and retention of nurses into the District's workforce.

RECOMMENDATIONS

The support for the transition of overseas qualified staff into the Australian health care system continues to change, but it remains important to maintain support mechanisms and strategies to build the capacity and capability of the health workforce (Health Workforce Australia, 2012; NSW Health 2012) so they can provide safe quality patient care. With the health landscape constantly changing and the prediction of continued recruitment of OQNMs, supporting their transition into the workforce and into the Australian community will better equip the Australian health workforce to prepare for future challenges. It is envisaged that the lessons learnt by the District through the implementation of this program may provide insights to other

health organisations that are likely to recruit OQNMs irrespective of location and discipline. Finally, further investigation of the relationship between support programs and the retention of OQNMs through a longitudinal study may be considered as an area for further exploration.

REFERENCES

- Australian Health Practitioner Regulation Agency (AHPRA). 2015. Registration standards, <http://www.ahpra.gov.au/Registration/Registration-Standards> (accessed 18.07.15).
- Australian Nursing and Midwifery Accreditation Council (ANMAC) 2016. Skilled Migration Services, available at <http://anmac.org.au/skilled-migration-services> (accessed 21.10.16).
- Alexis, O., Vydelingum, V. and Robbins, I. 2007. Engaging with a new reality: experiences of overseas minority ethnic nurses in the NHS. *Journal of Clinical Nursing*, 16(12):2221-2228.
- Allan, H. 2010. Mentoring overseas nurses: barriers to effective and non-discriminatory mentoring practices. *Nursing Ethics*, 17(5):603-613.
- Boylston, M. and Burnett, I. 2010. Education, adaptation, and orientation of Korean nurses in a U.S. healthcare system. *Journal for Nurses in Staff Development*, 26(1):23-27.
- Brunero, S., Smith, J. and Bates, E. 2008. Expectations and experiences of recently recruited overseas qualified nurses in Australia [Paper in special issue: Advances in Contemporary Transcultural Nursing, 2nd ed. Omeri, Akram and McFarland, Marilyn (eds)]. *Contemporary Nurse*, 28(1-2):101-110.
- Davis, C. 2003. Helping international nurses adjust. *Nursing & Health Sciences*, 33(6):86-88.
- Deegan, J. and Simkin, K. 2010. Expert to novice: experiences of professional adaptation reported by Non-English speaking nurses in Australia. *Australian Journal of Advanced Nursing*, 27(3):31-37.
- Dywili, S., Bonner, A. and O'Brien, L. 2013. Why do nurses migrate? - a review of recent literature. *Journal of Nursing Management*, 21(3):511-520.
- Garling, P. 2008. *Final Report of the Special Commission of Inquiry: Acute Care Services in NSW Public Hospitals Sydney*. NSW Government.
- Health Workforce Australia. 2012. Health Workforce 2025 - Doctors, Nurses and Midwives. <https://www.hwa.gov.au/our-work/health-workforce-planning/health-workforce-2025-doctors-nurses-and-midwives> (accessed 12.10.15).
- Humphries, N., Brugha, R. and McGee, H. 2008. Overseas nurse recruitment: Ireland as an illustration of the dynamic nature of nurse migration. *Health policy*, 87(2):264-272.
- International Centre on Nurses Migration. 2007. International Nurse Migration & Remittances: Fact Sheet. Geneva: International Council of Nurses.
- Jeon, Y. and Chenoweth, L. 2007. Working with a culturally and linguistically diverse (CALD) group of nurses. *Collegian*, 14(1):16-22.
- Jones, C.B. and Sherwood, G. 2014. The globalization of the nursing workforce: Pulling the pieces together. *Nursing Outlook*, 62(1):59-63.
- Kingma, M. 2006. *Nurses on the Move: Migration and the Global Health Care Economy*. Cornell University Press: New York.
- Kingma, M. 2009. The international workplace: Challenges and solutions. *International Journal of Nursing Studies*, 46(7):879-883.
- Konno, R. 2006. Support for overseas qualified nurses in adjusting to Australian nursing practice: a systematic review. *International Journal of Evidence-Based Healthcare*, 4(2):83-100.
- Negin, J., Rozea, A., Cloyd, B., and Martiniuk, A.L.C. 2013. Foreign-born health workers in Australia: an analysis of census data. *Human Resources for Health*, 11(1):1-16.
- Neilson, G., Tipping, A., Aguirre, D., Lee, R., Jones, J., Hyde, P., Schirra, W., Krings, J., Staub, C. and Hamilton, B. 2004. An Overall Approach to Change Management, available at <http://www.strategyand.pwc.com/media/uploads/AnOverallApproachtoChangeManagement.pdf> (accessed 21.10.16).
- NSW Health (2012) Health Professionals Workforce Plan 2012-2022 RIGHT PEOPLE, RIGHT SKILLS, RIGHT PLACE, available at <http://www.health.nsw.gov.au/pubs/2012/pdf/hprofworkforceplan201222.pdf> (accessed 01.04.13).
- New South Wales Nurses and Midwives Association (NSWNMA). 2012. Smoothing the journey for migrant nurses. *The Lamp*, 69(10):28-29.
- Newton, S., Pillay, J. and Higginbottom, G. 2012. The migration and transitioning experiences of internationally educated nurses: a global perspective. *Journal of Nursing Management*, 20(4):534-550.
- O'Brien, T. and Ackroyd, S. 2012. Understanding the recruitment and retention of overseas nurses: realist case study research in National Health Service Hospitals in the UK. *Nursing Inquiry*, 19(1):39-50.
- Ohr, S.O., Jeong, S., Parker, V. and McMillan, M. 2014. Organizational support in the recruitment and transition of overseas-qualified nurses: Lessons learnt from a study tour. *Nursing & Health Sciences*, 16(2):255-261.
- Ohr, S.O., Parker, V., Jeong, S. and Joyce, T. 2011. Migration of nurses: why and where? *Australian Journal of Primary Health*, 16(1):17-24.
- Omeri, A. and Atkins, K. 2002. Lived experiences of immigrant nurses in New South Wales, Australia: Searching for Meaning. *International Journal of Nursing Studies*, 39(5):495-505.

- Pacquiao, D. (2008). Nursing care of vulnerable populations using a framework of cultural competence, social justice and human rights. *Contemporary Nurse*, 28(1-2), 189-197.
- Robinson, J. 2009. 10 suggestions for orientation foreign-educated nurses: an integrative review *Journal for Nurses in Staff Development*, 25(2):77-83.
- Ryan, M. (2003). A Buddy program for international nurses *Journal of Nursing Administration*, 33(6):350-352.
- Sherman, R.O. and Eggenberger, T. 2008. Transitioning internationally recruited nurses into clinical settings. *Journal of Continuing Education in Nursing*, 39(12):535-544.
- Sparacio, C. 2005. Winged Migration:International Nurse Recruitment- Friend or Foe to the Nursing Crisis. *Journal of Nursing Law*, 10(2):97-114.
- Takeno, Y. 2010. Facilitating the transition of Asian nurses to work in Australia *Journal of Nursing Management*, 18(2):215-224.
- Timilsina Bhandari, K.K., Xiao, L.D. and Belan, I. 2014. Job satisfaction of overseas-qualified nurses working in Australian hospitals. *International Nursing Review*, 62(1):64-74.
- Xiao, L.D., Willis, E. and Jeffers, L. 2014. Factors affecting the integration of immigrant nurses into the nursing workforce: A double hermeneutic study. *International Journal of Nursing Studies*, 51(4):640-653.
- Xu, Y. 2007. Strangers in strange lands: a meta-synthesis of lived experiences of immigrant Asian nurses working in Western countries. *Advances in Nursing Science*, 30(3):246-265.
- Zhou, Y., Windsor, C., Theobald, K. and Coyer, F. 2011. The concept of differences of China-educated nurses working in Australia: A symbolic interactionist exploration. *International Journal of Nursing Studies*, 48(11):1420-1428.
- Zizzo, K.A. and Xu, Y. 2009. Post-hire transitional programs for international nurses: a systematic review. *Journal of Continuing Education in Nursing*, 40(2):57-66.
- Zurn, P., Dolea, C. and Stilwell, B. 2005. *Nurse retention and recruitment:developing a motivated workforce*. <http://www.icn.ch/global/Issue4Retention.pdf> (accessed 12.10.15).

Being a fellow patient to a critically ill patient leads to feelings of anxiety – an interview study

AUTHORS

Jannie Laursen

RN, Ma, PhD
Department of Surgery, Herlev Hospital, University of Copenhagen, Herlev Ringvej 75,
DK-2730 Herlev, Denmark
jala@ucc.dk

Trine Bonnevie Lundby

Nursing Head of Unit, RN,
Department of Surgery, Herlev Hospital, University of Copenhagen, Herlev Ringvej 75
DK-2730 Herlev, Denmark
Trine.bonnevie.Lundbye@regionh.dk

Anne Kjaergaard Danielsen

Research Nurse, PhD, RN, Ma(ed), MaCIN
Department of Surgery, University of Copenhagen Herlev Ringvej 75,
DK-2730 Herlev, Denmark
Anne.kjaergaard.Danielsen@regionh.dk

Jacob Rosenberg

Professor, MD, DMSc.
Department of Surgery, University of Copenhagen Herlev Ringvej 75
DK-2730 Herlev, Denmark
Jacob.Rosenberg@regionh.dk

Conflicts of interest: The authors have no conflicts of interest regarding the present study.

Funding statement: This paper received no specific grant from any funding agency in the public, commercial or non-for-profit sectors.

KEYWORDS

Qualitative study, fellow patients, anxiety, patient interaction and professional support

ABSTRACT

Objectives

To explore in-patients' experiences being a fellow patient to patients who become critically ill.

Design

The study was designed as a qualitative phenomenological study.

Setting

The study was conducted in a surgical ward of a hospital in Denmark.

Subjects

Fifteen fellow patients to patients, who became critically ill.

Results

Three key themes emerged from the analysis of the data: patients' interaction, anxiety, and professional support. These findings demonstrated the importance of understanding how patients experienced being a fellow patient to patients, who become critically ill, their views on interacting with such a patient, how the patients who become critically ill influenced them, and what kind of support they needed from the health professionals.

Conclusion

The findings highlighted the different emotions and feelings experienced by fellow patients. It showed how the impact of the situation can lead to anxiety, a feeling of being forced into patient inter-action and the lack of professional support. Health professionals should have a central role in supporting the fellow patients and communicating with them about their experiences and this does not seem to be fulfilled sufficiently in daily clinical practice.

INTRODUCTION

During the last decade hospital interactions have been studied in various settings (Birklund and Larsen 2013). Often the interaction has been between different support groups, patient schools, special surgical techniques or a specific illness (Birklund and Larsen 2013). Most studies investigated the patient/nurse interaction or the doctor/patient relationship (Birklund and Larsen 2013; Larsen et al 2013). The perspective has changed during the last years from a focus on the health professionals to a focus on the patients' view (Larsen et al 2013). Still today, little research has focused on the patient-to-patient interaction. A recent study on the relationship between fellow patients stated, that 90% of patient interaction in the ward was with fellow patients and only 10% was with health professionals (Larsen et al 2013). The study found, that interactions between patients were ambiguous, meaning the negative experiences were interconnected to the positive experiences, and the interaction was linked to the strength of the fellow patient (Larsen et al 2013). These numbers underline that more studies are needed to be able to understand the relationship between patients. A study on roommates' stress stated, that being with similar fellow patients reduced anxiety (Kulik et al 1993). Thus patients who were preoperatively assigned with a postoperative patient experienced less anxiety before an operation. The argument was the fellow patient could see that the other patients had a positive recovery (Kulik et al 1993).

The patients' perspectives of quality of care often differed from, how the hospitals structured their resources (Brooks 1999). Patients often had a more individual human perspective on quality of care and often the impression was that the quality of care was linked to personal and individual care (Armstrong et al 2003; Brooks 1999). Critically ill patients had an impact on the general ward staffing resources, and often the less dependent patients were affected. The critically ill patient demanded constant professional attention, which challenged the ward resources. The less dependent patient had to put their needs for care on hold, until the critically ill patient regained stability (Armstrong et al 2003; Steiner et al 2001).

Historically, hospitals were designed to focus on resources which lead to patients having to share rooms regardless of how sick they may be; a situation that could result in stress and insecurity for the fellow patients (Kulik et al 1993). Therefore, this study wanted to explore not only the patients' preferences, but focus on the feelings and the perspectives of fellow patients to patients, who become acutely ill (Rukstele and Gagnon 2013). The aim of this study was to investigate in-patients' experiences of being a fellow patient to patients, who become critically ill.

METHODOLOGY

Design

The approach in this study was to understand how in-patients' meanings and emotions were created through their experiences as fellow patients. The design was a qualitative study using individual interviews with a phenomenological approach to reach a deeper understanding of the fellow patients' experiences. When doing phenomenological research it obliges the researcher to hold back pre-understandings and assumptions to let new approaches and meanings emerge. To do so, two of the authors strove to set aside their pre-understandings of the phenomenon by letting the second author interview the first author about prior knowledge of the phenomenon. By doing so they were able to let new and deeper understandings become apparent (Finlay 2009 ; Fontanna 1994).

Participants

Patients were recruited from a Danish university hospital. Patients had to be gastroenterological surgical in-patients, be mentally and physically able to take part in an interview session and be willing to give informed

consent. The nurse-patient ratio for this gastroenterological ward was one nurse to four patients. The participants had to meet the criteria of being a fellow patient to a surgical in-patient, whose physical status deteriorated severely within the previous 24 hours with either a transfer to ICU or who was not expected to survive and therefore was transferred to a single-bed patient room. Patients that met these criteria were invited to participate in a semi-structured individual interview.

Data collection

Individual semi-structured interviews were used to explore their experiences, feelings and meanings by being a fellow patient to an acutely ill patient. The semi-structured interview guide was prepared and tested in a pilot test involving three participants. This was to confirm its suitability to the subsequent interviews (Shenton 2004). The semi-structured interview guide was developed through these three interviews. All interviews were performed while the fellow patients were still hospitalised. All interviews were recorded and transcribed into full text. Data saturation was reached when no new approaches or new meanings came up during the interviews.

Ethical considerations

The study was reported to the Danish Data Protection Agency and was, according to Danish law, exempt from ethical approval from The Ethical Committee of The Capital Region of Denmark (H-2-2013-FSP56). The fellow patients were informed they could withdraw from the study at any time and it would not influence their treatment or care. Before each interview the participants were reassured of the confidentiality of the interview data, both orally and in writing, and all gave both written and oral consent to participation.

Data analysis

The interviews were transcribed into full text and a qualitative content analysis was used for analysing the data (Graneheim and Lundman 2004) (table 1), which involves the following steps: dividing the data into condensed meaning units, codes and then into themes. The two researchers performed the analysis in parallel processes; disagreement was discussed and resolved within the research group. The analysis of the interviews was an ongoing process within the first and second author. The analysis began with repeated and thorough readings of all text, to understand each part of the data as a whole and in its parts. When a theme emerged, the analysis focused on rereading the text to focus on the meaning units. These meaning units were clustered into patterns of understanding the phenomenon (Armstrong et al 2003; Steiner et al 2001).

Table 1: Illustration/sample of the analytical process

Interview data	Meaning unit/ condensed meaning unit	Code	Sub-Theme	Theme
Interviewer: How could the health professionals have helped you in this situation Fellow patient: Yes-they didn't move the critical ill patient and I don't know why. But maybe because they were low on staff members or because they were very busy. Because it all happened so fast...	They were low on staff members or because they were very busy. It happened so fast	Low staff, busy, happened so fast	Understanding/ acceptance	Lack of support

RESULTS

Twenty six patients were screened and of these three were excluded due to mental illness, four due to linguistic difficulties, and four did not wish to participate. Thus, fifteen patients were interviewed. The median age of the fellow patients was 70.5 years ranging from 57 to 88 years, ten were male and five were female (table 2). All the participants were Danes. The interviews lasted up to 20 minutes. Three key themes emerged from the interviews: patients' interaction, anxiety and professional support. Table 3 shows statements taken from the interview data that were representative for the emerging themes.

Table 2: Baseline characteristic of the interviewed fellow patients

Informers	Sex	Age, years	Diagnose	Type of operation	ASA score
1	Female	78	Ileus	Explorative laparotomy	2
2	Female	78	Colon cancer	Hemicolectomy	2
3	Female	71	Lung cancer	Gastroscopy	2
4	Female	88	Diverticulosis	Colonoscopy	2
5	Female	78	Constipation	–	3
6	Male	81	Colon cancer	Colostomy	3
7	Male	66	Cholecystitis	–	2
8	Male	60	Pancreatic cancer	–	3
9	Male	57	Parastomal hernia	Laparoscopic herniotomy	2
10	Male	65	Cholecystitis	Laparoscopic cholecystectomy	3
11	Male	77	Peptic ulcer	Gastroscopy	3
12	Male	72	Hepatocellular carcinoma	–	3
13	Male	63	Pancreatic cancer	Gastroscopy	3
14	Male	67	Rectal cancer	–	3
15	Male	57	Strangulated inguinal hernia	Explorative laparotomy	1

Patients' interaction

Fellow patients described the emotional involvement they had in the critically ill patient. It was particularly difficult to handle the feelings of inability to help, and was often combined with a strong feeling of sympathy and wanting to care for the patient. The fellow patients felt a need and a responsibility to act as a substitute caregiver. However, they knew they could not offer much help, in spite of a strong desire to do so. A paradoxical feeling arose, as fellow patients felt they were forced into the interaction and at the same time were unable to leave the room and the situation.

Anxiety

Often fellow patients felt pacified in the interaction with the critically ill patient, they felt torn between a need to stay and a wish to leave the situation. The situation seemed forced on the fellow-patients and left them with an existential awareness of their own illness. These experiences were stressful and unpleasant for the fellow patients and left them with a feeling of anxiety. The anxiety was connected to their illness being reflected in the critically ill patients' severe and acute deterioration. The fellow patients often felt responsible for the critically ill patient. Many of the interviewed fellow patients felt a loss of control over the situation and they could not predict what was going to happen. Their loss of control in the situation often led to feeling paralyzed and unable to think rationally. A way to cope with the situation could be to ignore the severity of the critically ill patient or try to be in control of the situation by constantly trying to hold on to facts or seeking information.

Many experienced trouble sleeping and were more sensitive to noise, voices and technical equipment.

Professional support

A key issue for the fellow patients was the lack of information from the health professionals. They felt unsupported and left on their own. The situation with the critically ill patient left them with a need to talk about what had happened, they had many thoughts and their emotions were a balance between hope and despair. The experience left them with a feeling of anxiety over their own illness, and they described a wish to talk to the health professionals as an opportunity to manage their own feelings. Often the fellow patients were not asked to leave the room or there was not enough shielding from the critically ill patient and the fellow patient felt they were as much present in the situation as the critically ill patient and the health professionals were not helping the fellow patient out of the room or put shielding up.

Table 3: Study findings: Patient interaction, anxiety and professional support

Themes	Fellow patients' narratives across the interviews
Patient interaction	- I wanted to ask, if there was anything I could do for him, but I was very tired myself, and I didn't feel it was my help he needed, what could I do, get him a glass of water! So I didn't do anything. - Suddenly his breathing changed, it was different, I thought about calling for help, but fortunately there were two health professionals outside the room, and they came and helped. - I haven't slept all night- Wanted to help, asked if there was anything I could do, if I could help out, I would have, we must help each other, but I couldn't. - I was sorry that they put the shielding up, actually, because then I couldn't keep an eye on her.
Anxiety	- No one dreamt that it would last for 4 hours and I was not offered any assistants. I just lay there. - I was glad that I could watch TV- the thoughts could then wander, the TV made it possible for me to get different pictures and sounds in my head, it was like I could push negative thoughts away. - I felt very bad that she was screaming. I didn't know if I should call for help. I didn't do anything, didn't know what I should do. It felt chaotic, and I was in it all, but couldn't offer any help - I was not aware that I could leave the room, not on my own. Perhaps the health professionals could have assisted me. - I was reminded that we all have to say goodbye and die - it made me nervous, it is not very pleasant to see a man fight for his life. - The situation has put a pressure on me. It made me think about my situation, I want to function better. - I was anxious, in the end I could hardly continue with anything. - I tossed and turned, I have not been able to sleep.
Professional support	- The health professionals were very busy so they asked me to leave the room, after a while they came back and talked to me, but they were only talking about breakfast and nothing about what had happened. - Sooner or later the health professionals will come, but it can take up to 45 min. It was very hard to get in contact with them. - It would have been nice if one of the nurses would have come up to me and said something about the incident, I have never experienced anything like this before. - It would have been nice if they had moved me to the hall, I did not feel there was any opening for this. - If I should have left the room, I didn't know?- There was no one who said anything, or put any shielding up. I would have appreciated some help. - Who is worse than the other- Yes perhaps he was sick ill, but suddenly he was acutely ill - but possibly he was not more ill than me.

DISCUSSION

These findings demonstrated the importance of understanding how patients experience being a fellow patient to a patient who becomes critically ill, their perspectives on interacting with other patients, how the critically ill patient affected them, and their need for professional support.

Patient interaction

A Danish study argued that positive interaction between fellow patients was more common than negative (Larsen et al 2013), but the interaction was often ambiguous. The negative experiences of insecurity and devaluation in the Danish study were similar to the findings found in this study. Here the interactions between patients were ambiguous and the negative experiences were interconnected to the positive experiences and the interaction was linked to the strength of the fellow patient. The study argued that the strength was connected to patients' ability to withdraw themselves from the interaction (Larsen et al 2013). Fellow patients felt responsible for the critically ill patient and often did not feel they could leave the room, which often meant they began to reflect on their own illness and situation. This could be connected to a feeling of being forced into the acute situation and not have the possibility to withdraw themselves (Larsen et al 2013). This study pinpointed that patients felt a natural obligation to try to help the critically ill patient. The urge to care for others is fundamental to most humans, regardless of own illness, and is a basic condition (Birklund and Larsen 2013). Here the study presents an understanding of the emotional effect on the fellow patient; the stress and the anxiousness followed by attending an acute and critical situation with a very ill patient.

Anxiety

Fellow patients tried to cope with the situation by ignoring the severity of the critically ill patient. They felt stressed or left with a feeling of not being able to separate themselves from the incident. A previous study on fellow patients' anxiety stated that sharing a room with a surgical patient, well over his own operation, seemed calming and reassuring (Kulik and Mahler 1987). This study showed that almost all the fellow patients had a negative reaction towards the critically ill patient, regardless of the patients' prior status. These differences could be a result of patients sharing rooms not being equally ill or due to the fact that the situation changed so rapidly. At the same time it was important to remember that even if the fellow patients were less dependent in the situation, they were still ill and some in a critical state. Many were already balancing between emotions, and trying not to be overwhelmed by possible worst-case-scenarios. They needed hope and a feeling of control. A study on patients' coping strategies going through a gastric diagnosis found four coping patterns: 1) rational awaiting patterns where the focus was kept on facts; 2) denial, overlooking signs of danger; 3) painful control where they tried to avoid imagining; and 4) acceptance, where the patient openly seeks information (Giske and Gjengedal 2007). In this study there were similarities to these patients in their coping strategies. Often fellow patients tried to accept the situation or denied it if the outcome of the critically ill patient was severe. They were already balancing different emotions and being a fellow patient to a critically ill patient only made them more anxious. Regardless of which coping strategy they used many of them felt stressed or overwhelmed by the situation.

Professional support

A study on patients' experiences of self-care argued that patients need support to make sense and adapt to a new situation and they use health professionals, families and fellow patients to obtain this support (Kidd et al 2008). To prepare themselves for what was in store or needed to be faced, patients often used fellow patients to preserve their identity (Kidd et al 2008). The participants were fellow patients to critically ill patients who may have caused the participants to feel they could not use them for support, but instead the presence of the acutely ill patient had a negative effect on them. The room situation or atmosphere changed when the other

patient in the room became critically ill, and the fellow patient and the acutely ill patient were no longer equal in their path, which may be the reason why the fellow patient was left feeling more anxious (Kidd et al 2008).

This anxiety often left the fellow patients with a need to talk about the incident with the health professionals but often their request for help was not met. This support by talking about the incident had such an importance for the fellow patients, that health professionals should not ignore it.

Strengths and limitations

The method used was aiming to uncovering themes, patterns, concepts, insights, and understandings (Malterud 2001). Interviews were the only method and it could be argued, that if we also had included systematic observations of fellow patients, it would have provided a deeper understanding of their experiences. Furthermore, the study took place in only one setting, so it is likely that all possible angles of fellow patients' experiences were not covered. However, the study aimed for descriptions of patients' experiences of being a fellow patient to patients who become critically ill and by including 15 patients and making the analysis process as open and specific, the data found in this study were sufficient to hypothesize three different themes (Delmar 2010).

CONCLUSION

Understanding the experiences and feelings of a fellow patient to an acute and critically ill patient is clinically important for health professionals. The findings highlight the values of the different emotions and feelings a fellow patient goes through and the impact it has on their situation, often leading to anxiety, a feeling of being forced into a patient interaction, and the lack of professional support they felt was needed. Health professionals should play a central role in supporting the fellow patients. Health professionals can use these results, in forming their understanding of the fellow patients and tailoring their practice for more individual support in the care of the patients.

RECOMMENDATIONS

Fellow patients, who had experienced a patient become critically ill, needed support from health professionals. The fellow patients felt anxious and forced into the situation. Health professionals therefore most use these experiences in considering care models that address the needed support, so they can tailor their practice to a more individualised care resulting in an increase in patient satisfaction. Consideration needs to be given to models, that address these patient's needs, including exploring the potential to offer single rooms to all patients or the ability to separate the critically ill patients from the less dependent patients in the hospitals. The nurse-patient ratio was not discussed in this paper, but this angle is an important issue that should be explored in future studies.

REFERENCES

- Armstrong, K., Young, J., Hayburn, A., Irish, B. and Nikoletti, S. 2003. Evaluating the impact of a new high dependency unit. *International Journal of Nursing Practice*, 9(5):285–293.
- Birkelund, R. and Larsen, L.S. 2013. Patient-patient interaction-caring and sharing. *Scandinavian Journal of Caring Sciences*, 27(3):608–615.
- Brooks, N. 1999. Patients' perspective of quality of care in a high-dependency unit. *Intensive and Critical Care Nursing*, 15(6):324–337.
- Delmar, C. 2010. Generalizability as Recognition: Reflections on a Foundational Problem in Qualitative Research. *Qualitative Studies*, 1(2):115–128.
- Finlay, L. 2009. Debating phenomenological research methods. *Phenomenology and Practice*, 3(1):6–25.
- Fontana, A. and Frey, J.H. 1994. Interviewing the art of science. *Handbook of qualitative research*. Sage Publications. pp. 361–76.
- Giske, T. and Gjengeda, I.E. 2007. Preparative waiting and coping theory with patients going through gastric diagnosis. *Journal of Advanced Nursing*, 57(1):87–94.

- Graneheim, U.H. and Lundman, B. 2004. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2):105–112.
- Kidd, L., Kearney, N., O'Carroll, R. and Hubbard, G. 2008. Experiences of self-care in patients with colorectal cancer: a longitudinal study. *Journal of Advanced Nursing*, 64(5):469–477.
- Kulik, J.A., Moore, P.J. and Mahler, H.I.M. 1993. Stress and affiliation hospital roommate effects on preoperative anxiety and social interaction. *Health Psychology*, 12(2):118-124.
- Kulik, J.A. and Mahler, H.I.M. 1987. Effect of preoperative roommate. *Health Psychology*, 6(6):525–543.
- Larsen, L.S., Larsen, B.H. and Birkelund, R. 2013. An ambiguous relationship -a qualitative meta-synthesis of hospitalized somatic patients' experience of interaction with fellow patients. *Scandinavian Journal of Caring Sciences*, 27(3):495–505.
- Larsen, L.S., Larsen, B.H. and Birkelund, R. 2013. A companionship between strangers - the hospital environment as a challenge in patient-patient interaction in oncology wards. *Journal of Advanced Nursing*, 70(2):395–404.
- Malterud, K. 2001. Qualitative research: standards, challenges, and guidelines. *Lancet*, 358(9280):483-488.
- Rukstele, C.D and Gagnon, M.M. 2013. Making strides in preventing ICU-acquired weakness: involving family in early progressive mobility. *Critical Care Nursing Quarterly*, 36(1):141–147.
- Shenton, A.K. 2004. Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22:63–75.
- Steiner, A., Walsh, B., Pickering, R.M., Wiles, R., Ward, J. and Brooking, J.I. 2001. Therapeutic nursing or unblocking beds. A randomised controlled trial of a post-acute intermediate care unit. *British Medical Journal*, 322(7284):453–460.

Male or Nurse what comes first? Challenges men face on their journey to nurse registration

AUTHORS

Dianne Juliff

Doctor of Philosophy Candidate, RN, RM, MSc(Nursing)
Student and Sessional Lecturer/Tutor, School of
Nursing and Midwifery
The University of Notre Dame, Australia,
19 Mouat St, Fremantle, Western Australia.
Juliff_di@hotmail.com

Doctor Kylie Russell

Doctor of Philosophy, RN, MHlthSc(Education)
Acting Associate Dean, Post Graduate Coordinator,
School of Nursing and Midwifery
The University of Notre Dame, Australia,
19 Mouat St, Fremantle, Western Australia.
kylie.russell@nd.edu.au

Associate Professor Caroline Bulsara

Doctor of Philosophy (Primary Health Care), BA
(Hons) English and American, Grad Dip Education
Research Coordinator, School of Nursing and
Midwifery
The University of Notre Dame, Australia,
19 Mouat St, Fremantle, Western Australia.
caroline.bulsara@nd.edu.au

KEYWORDS

male nurse, intimate touch, nurse image, marginalisation, role misconceptions

ABSTRACT

Objective –

This paper aims to provide an account of the first phase of a qualitative longitudinal study that explored the initial challenges men in nursing face to become registered. What is known is that men, a minority group within nursing, face the usual challenges of all new nurses in their quest to register as nurses. In addition, they have added pressures that hinder their quest due to being male.

Primary Argument

An Australian nursing shortage is looming due to nurses retiring from this female-dominate profession. Hence, the retention of men in nursing is an area requiring attention in order to support a sustainable workforce.

Subjects and Setting

Nine newly graduated male registered nurses participated. These nurses had recently commenced employment in the Western Australian metropolitan health region.

Findings

Individual face-to-face interviews produced the theme of role misconception with a major focus on male or nurse what comes first. This theme was derived from the categories of gender stereotyping and marginalisation.

Conclusion

This study suggests the need for a gender-neutral image when promoting nursing within and outside the professional environment. Furthermore, consideration for a professional title mutually accepted by both women and men in nursing, with the gender-neutral 'nurse' title preferred by the men in this study. Moreover to acknowledge that men in nursing will augment a technical savvy workforce that will complement emergent complex nursing practices, and enhance a more comprehensive Australian nursing workforce that will assist with meeting the health care needs of a diverse population.

INTRODUCTION

Within Australian health workforce management, an emphasis is placed on the retention of newly graduated registered nurses and the recruitment of males to generate a sustainable nursing workforce to replace those retiring and leaving the nursing profession (HWA 2013; AIHW 2012). However, there remains a consistent and a slow increase in men entering nursing due to nursing still being regarded as a female-predominant profession (Moore and Dienemann 2014). Of concern is that men employed in female-dominated workplaces leave at a greater rate than women (Bygren 2010). Furthermore, some areas are still resistant, from both staff and patients, to men in nursing where high intimate nursing care is required, (Inoue et al 2006). Gender-based role strain and issues around intimate touch nursing care have been suggested as a reason why men in nursing migrate more towards the technical, rapid assessment areas of emergency and intensive care (MacWilliams et al 2013; Harding et al 2008). Although, the reasons for the higher percentage of nurses who are male in these areas are not really known, “these areas may be perceived as more acceptable or masculine” and have “a preference for male employee in these areas” (HWA 2013, p15). Men who enter nursing have usually ‘thought long and hard’ about their decision to undertake this career path and are aware of the nuances such as the female image and stereotyping in nursing (Moore and Dienemann 2014).

METHOD

The aim of this component of a qualitative longitudinal study was to explore initial challenges men in nursing face in the attainment of their registered nurse qualification. The study utilised a phenomenological approach in order to explore the lived experiences of the men. Personal perspectives on their journey, via each participant’s own words, was gained through the use of face-to-face in-depth semi-structured interviews with open-ended questions. This interviewing style was employed to “facilitate rapport and empathy, and permit great flexibility...to produce rich and interesting data” (Smith et al 2009, p66).

Research question and sample

The research question that informed this first phase was “how has your journey as a male nurse been so far?” Nine newly qualified registered nurses who were male were recruited via purposeful sampling using snowballing technique.

Ethics

This study was conducted in accordance with the National Health and Medical Research Council’s (2007) Australian code for the responsible conduct of research. Prior to commencement of the study, ethical approval was gained from the University of Notre Dame Australia, Human Research Ethics Committee.

Procedure

Once recruited, participants were invited to select a location for their interview to take place, along with the nominated time and day that suited individual participants. To protect the confidentiality of those recruited they were referred to as participants or men in this study, and their data was de-identified. Verbal consent was gained prior to the commencement of each audio-recorded interview to confirm the prior written consent. The research question was asked to elicit their experience in a non-threatening manner. Probing questions were then used to explore more in-depth experiences they volunteered. The participants’ responses were audio-recorded by the first author. The interviews varied in length, lasting for approximately 45 minutes. After each interview, the first author transcribed verbatim the participants’ responses. The data analysis was concurrent with data collection and involved the coding of the transcripts through the comparison between codes and categories to produce the theme. The analysis process via the iterative stages fashioned the categories that revealed the theme of role misconception as a major challenge they faced.

Trustworthiness

Trustworthiness was derived from Lincoln and Guba's (1985) credibility, dependability, confirmability and transferability criteria. This was met by the use of member checks for accuracy of transcription; peer assessments of interview transcripts, data process and analysis; direct participant quotes to support findings; and an audit trail evidence of the analytic decisions through the use of the researcher's diary (Houghton et al 2013).

FINDINGS

When the men in this study were asked, "how has your journey as a male nurse been so far?" the majority of them responded by indicating that they had enjoyed the study and learning aspect of their journey. Comments included *"loved the whole experience of nursing so far"*, *"loved the study and clinical practice"* and *"the whole identity of being a nurse"*. Although two felt their nursing education was female orientated, and at times this gender orientation was off putting, thereby leading to the identification of a key theme of role misconception.

Role misconception was extracted from the issues of gender stereotyping and marginalisation that the participants experienced on their journey to registration. Gender stereotyping within the health setting for most of the men in this study was being mistaken for a medical student and even a doctor. Furthermore, some of them verbalised that often patients were surprised that they were doing nursing, comments included *"what's a guy doing nursing"*, *"didn't you want to be a doctor?"* Another participant stated, *"I think society has a skewed view of what nurses do and how males fit into the nurse role"*.

A common theme emerged that participants did not want to be seen as unique or different. All the participants respected and supported the title of nurse. Of note, they felt that the image of nurses was female fixated, with two of them vocalising their disdain for the title of 'sister'. One of the men narrated *"I wasn't expecting to be so identifiable as a male nurse"*. The major issue for most of the men was centred more on being called a male nurse. Three of the men revealed that on occasions they have stated, *"I am not a male nurse, I am a nurse"*, finding the male and female differential "distasteful and unnecessary". One declared he does not like the reference to 'how good it is seeing more males in nursing' and verbalised *"I am just a nurse"*. Another retorted with *"being a nurse as opposed to being a male nurse at the end of the day we're all nurses and we all have to do the same job"*. Other exemplars included a nursing academic referred to *"having a boy look"* when a student could not find a reference he needed; another with *"academics alluding to males not being able to express themselves when reflecting on how they feel with their experiences isn't right"*.

A consequence of the stereotyping impact for some of the men in this study meant that when going out socially and asked what they do, many would give responses such as *"I work in health"*, *"I'm a public servant"*, leaving the enquirer to interpret what they actually do. Reason for their avoidance in providing their actual job title was due to previously experiencing the looks of surprise or being teased about their career choice or being asked about their sexual orientation. Similar comments like *"my friends outside nursing joked and teased me about nursing and that I might turn gay"* were also reported.

Marginalisation consisted of two main areas, the feeling of being the outsider within and when providing nursing care. The provision of nursing care covered both issues of intimate touch and patient allocation. The majority of the men in this study initially feel overwhelmed with feelings of being the 'outsider within'. Comments included *"initially coming into the large student group was daunting"*, *"sometimes you feel a bit on the periphery"*. Hence there was a gravitation towards self-formed male groups in an attempt to nullify the outsider within feeling. One of the men commented *"the boys tended to hang out a bit...I think because most were mature age... you just tend to relate a bit better and I guess it's the male thing also"*. Another with *"it was the same in the practice environment where I would engage more easily with the males working on the ward who were of similar age and background"*. However, two participants revealed that although of

the same gender they had nothing really in common with the male groups and aligned more with those who had previously worked in the health field as they had.

The ‘outsider within’ from a practice environmental aspect was an expression some participants mentioned to highlight the feeling of being isolated, and a minority within nursing, with comments from female colleagues such as *“it’s good you’re standing up and being different from the norm”*. One participant expanded this with *“through my pracs (clinical placements) I felt like an outsider most of the time”*. Another participant shared an instance in a mother and baby unit where both the mothers and the female nursing staff questioned his presence. He stated *“felt a kind of hostility towards me for being a guy; this was actually hanging over me while I was there”*.

Providing nursing care marginalisation related to intimate touch in varying degrees for the men in this study, with most of them just taking it as a given barrier in the career they had chosen. Most stated that as student nurses they were always supervised when performing intimate touch nursing care. So they felt it was not a real issue for them as yet. It was seen as more of an issue for the nurses who allocated patient loads with participant comments of *“coordinator will avoid assigning a guy to a specific patient”*. However, they were aware of the potential for accusations of inappropriate behaviour and innuendoes of sexual deviance or homosexuality. Furthermore, acknowledged that intimate care by a nurse who is male can be an issue generally in instances when the patient is female, due to cultural beliefs and in gender sensitive ages such as the adolescent patient. Similar comments of *“she allowed me to do obs and medications but she didn’t want me to doing the catheters and toileting and the more intimate stuff... I can see where she was coming from”* were elicited during the interviews. Two of the men stated that on occasions it happened in the reverse where a patient has a preference for a nurse who is male. One commented,

“when faced with age and gender issues I give the patient a choice. I don’t get upset nor discouraged when the patient prefers care from a nurse who is female as at times the reverse has occurred where a patient has had the preference for a nurse who is male”.

This is not to say that male patient intimate touch was not as an issue for them, with some of men in this study concerned not to been seen as ‘gay’. One of the men stated *“there’s a little bit of stereotype, every now and then, a comment or someone asked me if I was gay...I think my wife would be disappointed with this suggestion”*.

Intimate touch issues did not seem to be what enticed the men in this study to a more low touch technical area of nursing. They provided comments of,

“the intimate stuff is not an issue for wanting to go to emergency”, “just love the excitement and the never knowing what is coming through the ED door”, I loved my mental health prac...I really did think that’s what scored it for me”.

Most of men in this study, as they entered the practice environment, gave their preferences toward mental health and the technical specialty areas such as critical care, operating theatres and emergency departments with comments such as *I’m always interested in the technical elements of nursing, the drips, all that stuff”, “get to use my critical thinking in a pressured environment”*. They believed these environments would constantly change and would challenge them, and resonated with *“can’t wait to be challenged”, “it’s great having that theory and actually seeing it in practice”, “in emergency it’s triaging, critical thinking skills and prioritising... at the forefront...making a difference”*.

Patient allocation marginalisation occurred when the participants were predominantly allocated male patients instead of female patients. Thus excluding them from gaining experience in nursing duties relevant

to their learning needs at the time. One reported, “I kept being allocated menial tasks in a female ward”, and felt the opportunity for learning was not provided nor encouraged by a clinical nurse. He felt he was treated differently because he was a male student nurse. Another added that being both older and a male “have different expectation of you...you are the exact same level as fellow nursing students (they) assume you bring something different to the table that’s not necessarily the case”.

DISCUSSIONS

The gender orientation findings of this study add support to previous research where the male nurse’s role in care provision is often negated due to gender bias (Ierardi et al 2010; Duffin 2006), and the feminised nursing curriculum (Christensen and Knight 2014). The men in this study, similar to a recent study (Koch et al 2014), felt men in nursing were more acceptable these days. Although, they also agreed with others that barriers still exist (Stott 2007; O’Lynn 2004). These men lend weight to previous findings that gender discrimination and gender stereotypes still occurs within the nursing profession (Kouta and Kaite 2011). Most of them articulated with other studies in that nursing is still seen as a ‘woman’s job’ (Snyder 2011; Wingfield 2009). They also supported the notion that to improve society’s acceptance of men in nursing required the nursing profession to de-feminise by enhancement of the image of nurses who are male through portraying them in their caring roles (Colby 2012).

This study reinforced previous research where there was expressed surprise that men were doing nursing (Wingfield 2009). Furthermore it concurred with other studies that gender stereotypes are constructed by society and influenced by the media (Weaver et al. 2014; O’Brien et al 2008). Reported elsewhere (Rajacich et al 2013; Herakova 2012) and claimed by the men in this study, the male nurse title reinforced their minority status and add to the gender-bias and stereotyping, both within and outside nursing. Moreover, they reiterated the need for a gender-neutral title for men in nursing and concurred with previous studies that recommended ‘nurse’ as opposed to ‘male nurse’ be used (Rajacich et al 2013; LaRocco 2007).

Being teased about their career choice or being asked ‘if they are gay’ resonated with this stereotype as a unique conflict for men in nursing previously reported (Stott 2007). Furthermore, reluctance at revealing they were nurses when asked about what they do to avoid being viewed as feminine has been reported recently (Zamanzadeh et al 2013).

The finding related to feeling overwhelmed initially and of being the outsider within on entry into the female-dominant nursing profession has been reported elsewhere (Christensen and Knight 2014). The reported marginalisation of the outsider within and gravitation towards male groups due to being in a female-dominated profession is consistent with other studies (Christensen and Knight 2014, Stott 2007). Most of the men in this study supported strategies that promoted networking with other men in nursing (Moore and Dienemann 2014) and the presence of male role models in nursing education (Stott 2007).

They all agreed with previous studies that female intimate care provision nursing can lead to them being uncomfortable about fulfilling role obligations (MacWilliams et al 2013) and feeling vulnerable (Harding et al 2008). However, it was not seen as a major issue for them. Similar to a finding by Harding et al (2008) the men in this study respected the fact that patients have rights and were not perturbed when they were met with refusal of their care from patients. The ‘not too been seen as gay’ theme was congruent with a previous study that revealed intimate touch in clinical practice in relation to both male and female patients is a concern for men in nursing (Harding et al 2008).

Although initially interested in the clinical setting, men often find themselves being drawn to more low-touch technical specialty areas (MacWilliams et al 2013). This was the case for the majority of men in this study

as they entered the practice environment insomuch as their desire for technical specialty areas. Their desire to work in the emergency department was predominantly due to an inter-professional team environment this area provided. Moreover, they dispelled the assumption that intimate touch was also a reason for their decisions of careers in mental health or the more technical areas.

Patient allocation marginalisation by being treated differently during clinical placement has been reported previously (Wingfield 2009; Keogh and O'Lynn 2007). Some of the participants supported previous research in relation to the limiting of their full participation in some nursing specialty areas (Evans 2004), and of feeling isolated in clinical practice at times in the female-dominant workplace (Wilson 2005). Another participant added that being both older and a male he was given more responsibility and inclusiveness in complex care than others on clinical practice at the same student level. This finding concurs with a recent study (Koch et al 2014) where staff delegated more responsibility to older students and treated them as qualified nurses.

LIMITATIONS

Inherent limitations were the qualitative nature of this study. It does not meet the underlying principle of replication nor generalisability due to the small sample size of the voluntary participants. However, it does provide an insight into the dialogue between the first author and the study participants in relation to their lived experience in their journey to qualification as registered nurses.

CONCLUSION

What this study adds reinforces the concerns of men entering the nursing profession. As they journey towards nurse registration, concerns are commonplace in relation to their professional identity, gender stereotyping and marginalisation that has been reported over the last two decades and still remains today. The men in this study emphasised that the image of a nurse, from within and outside the nursing profession, requires attention to enhance a more cultural and societal normalisation of nursing as a gender-neutral profession. Moreover, supporting the belief that a gender-neutral nurse image will encourage more men into nursing.

RECOMMENDATIONS

Retention of men in nursing will assist in meeting the increasing health service demands as the population ages. The study's findings may foster discussions on ways to improve their journey in the quest to obtain registered nurse qualification. Improvement recommendations include:

- Nurse educators and nursing curriculum developers' enhancement and promotion of a gender-neutral stance in nursing practice that reduces men in nursing being seen as unique.
- Nursing curriculum to include effectively protective strategies for nurse-patient relationships in relation to touch. Furthermore to include this education for both male and female nursing students due to increased population diversity requiring patient centered cultural sensitive nursing care provisions.
- Consideration for a professional title that is mutually accepted by both women and men in nursing that may lead to reducing men as a gender minority.
- A model of inclusivity with the establishment of male support groups to aid in a more seamless transition of men into the nursing profession.
- Consideration in the nursing faculty gender mix to expose both male and female nursing students to male faculty members, supporting the "importance of regular male role model contact" (Stott 2007, p330). Thus to demonstrate how men apply their nursing knowledge and skills to the art of nursing, especially in complementing the complex technical nursing practices that are emergent.

All of the above is recommended, ultimately to increase the recruitment and retention rates of men in nursing. Thus to enhance a gender neutral Australian nursing workforce that will assist with meeting the health care needs of the rapidly growing diverse population.

REFERENCES

- Australian Institute of Health and Welfare (AIHW). 2012. Nursing and midwifery workforce 2011. National health workforce series no. 2. Cat. No. HWL 48. Canberra: AIHW. <http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx%3Fid%3D60129545314> (accessed 20.12.15).
- Bygren, M. 2010. The gender composition of workplaces and men's and women's Turnover. *European Sociological Review*, 26(2):193-202.
- Christensen, M. and Knight, J. 2014. 'Nursing is no place for men - A thematic analysis of male nursing students experiences of undergraduate nursing education. *Journal of Nursing Education and Practice*, 4(12):95-104.
- Colby, N. 2012. Caring from the male perspective: A gender neutral concept. *International Journal for Human Caring*, 16(4):36-41.
- Duffin, C. 2006. Lack of training in intimate care adds to male nurses' isolation. *Nursing Standard*, 20(52):10.
- Evans, J. 2004. Bodies Matter: Men, Masculinity, and the Gendered Division of Labour in Nursing. *Journal of Occupational Science*, 11(1):14-22.
- Harding, T., North, N., and Perkins, R. 2008. Sexualizing men's touch: male nurses and the use of intimate touch in clinical practice. *Research & Theory for Nursing Practice*, 22(2):88-102.
- Health Workforce Australia (HWA). 2013. *Australia's Health Workforce series – Nurses in Focus*. Health Workforce Australia: Adelaide. <http://www.hwa.gov.au/sites/uploads/Nurses-in-Focus-FINAL.pdf> (accessed 10.02.16).
- Herakova, L. 2012. Nursing masculinity: Male nurses' experiences through a co-cultural lens. *Howard Journal of Communications*, 23(4):332-350.
- Houghton, C., Casey, D., Shaw, D. and Murphy, K. 2013. Rigour in qualitative case-study research. *Nurse Researcher*, 20(4):12-17.
- Ilerardi, J.A., Fitzgerald, D.A. and Holland, D.T. 2010. Exploring male students' educational experiences in an associate degree nursing program. *The Journal of Nursing Education*, 49(4):215-218.
- Inoue, M., Chapman, R. and Wynaden, D. 2006. Male nurses' experiences of providing intimate care for women clients. *Journal of Advanced Nursing*, 55(5):559-567.
- Keogh, B. and O'Lynn, C. 2007. Male Nurses' Experiences of Gender Barriers: Irish and American Perspectives. *Nurse Educator*, 32(6):256-259.
- Koch, J., Everett, B., Phillips, J. and Davidson, P.M. 2014. Diversity characteristics and the experiences of nursing students during clinical placements: A qualitative study of student, faculty and supervisors' views. *Contemporary Nurse*, 49(1):15-26.
- Kouta, C. and Kaite, C.P. 2011. Gender Discrimination and Nursing: Literature Review. *Journal of Professional Nursing*, 27(1):59-63.
- LaRocco, S. 2007. A Grounded Theory Study of Socializing Men into Nursing. *The Journal of Men's Studies*, 15(2):120-129.
- Lincoln, Y.S. and Guba, E.G. 1985. *Naturalistic inquiry*. Sage Publications: Beverly Hills, California.
- MacWilliams, B.R., Schmidt, B. and Bleich, M.R. 2013. Men in nursing. *The American Journal of Nursing*, 113(1):38-44.
- Moore, G.A. and Dienemann, J.A. 2014. Job satisfaction and career development of men in nursing. *Journal of Nursing Education and Practice*, 4(3):86-93.
- National Health and Medical Research Council (NHMRC). 2007. *Australian code for the responsible conduct of research*. Canberra, ACT: Australian Government. <http://www.nhmrc.gov.au/index.htm> (accessed 20.12.15).
- O'Brien, F., Mooney, M. and Glacken, M. 2008. Impressions of nursing before exposure to the field. *Journal of Clinical Nursing*, 17(14):1843-1850.
- O'Lynn, C.E. 2004. Gender-based barriers for male students in nursing education programs: Prevalence and perceived importance. *Journal of Nursing Education*, 43(5):229-236.
- Rajacich, D., Kane, D., Williston, C. and Cameron, S. 2013. If They Do Call You a Nurse, It Is Always a Male Nurse: Experiences of Men in the Nursing Profession. *Nursing Forum*, 48(1):71-80.
- Stott, A. 2007. Exploring factors affecting attrition of male students from an undergraduate nursing course: A qualitative study. *Nurse Education Today*, 27(4):325-332.
- Smith, J.A., Larkin, M., & Flowers, P. (2009). *Interpretative phenomenological analysis: Theory, method and research*. London: SAGE.
- Snyder, K.A. 2011. Insider knowledge and male nurses: How men become registered nurses. *Research in Society and Health Care*, 29:21-41.
- Weaver, R., Ferguson, C., Wilbourn, M. and Salamonson, Y. 2014. Men in nursing on television: exposing and reinforcing stereotypes. *Journal of Advanced Nursing*, 70(4):833-842.
- Wilson, G. 2005. The experience of males entering nursing: a phenomenological analysis of professionally enhancing factors and barriers. *Contemporary Nurse*, 20(2):221-233.

- Wingfield, A.H. 2009. Racilizing the glass escalator: Reconsidering Men's Experiences with Women's Work. *Gender and Society*, 23(1):5-26.
- Zamanzadeh, V., Azadi, A., Valizadeh, L., Keogh, B., Monadi, M. and. Negarandeh, R. 2013. Choosing and remaining in nursing: Iranian male nurses' perspectives. *Contemporary Nurse*, 45(2):220-227.

Exploring infant deformational or positional plagiocephaly prevention and management by Maternal Child Health Nurses and Paediatric Physiotherapists

AUTHORS

Elizabeth N. Williams

MPhysio, PhD Candidate
Department of Medicine (Royal Melbourne Hospital)
The University of Melbourne
Parkville, Victoria, Australia
e.williams@unimelb.edu.au

Professor Mary P. Galea PhD

Professorial Fellow
Department of Medicine (Royal Melbourne Hospital)
The University of Melbourne
Parkville, Victoria, Australia
m.galea@unimelb.edu.au

Acknowledgements: We gratefully acknowledge the support from the Victorian Government Department of Education and Early Childhood Development, Maternal and Child Health Nurses in Victoria and Physiotherapists at the Royal Children's Hospital Melbourne and in private practice.

Funding: Elizabeth Williams is supported by an NHMRC Australian Postgraduate Award.

KEY WORDS

Plagiocephaly, infant, maternal child health nurse, paediatric physiotherapist

ABSTRACT

Objectives

To explore Maternal Child Health (MCH) nurses' and Paediatric Physiotherapists' (Physiotherapists) experience with infant deformational or positional plagiocephaly (plagiocephaly).

Design

Cross-sectional online survey.

Setting

Community health setting in Victoria, Australia.

Subjects

MCH nurses and Paediatric Physiotherapists in Victoria were invited to participate.

Main outcome measures

Survey results were collated and analysed descriptively.

Results

Surveys were completed by 183/961(19%) MCH nurses and a sample of 16 Physiotherapists, from a cross section of metropolitan (62%), regional (18%) and rural/remote (24%) Victoria. All MCH nurses and Physiotherapists reported seeing infants with plagiocephaly in the previous 12 months. Responses indicated MCH nurses saw between 11-50 infants with plagiocephaly (n=110). These were first diagnosed by MCH nurses at one to three months. Infants first presented to Physiotherapists on average at four to six months. All MCH nurses and Physiotherapists implemented prevention strategies and both groups thought it was effective subject to parents' implementing the advice. Strategies for prevention and management of plagiocephaly included early prone play (tummy-time) and counter positioning. Physiotherapists also included gross motor exercises, stretches if torticollis was present and, if appropriate, referral for helmet therapy. Referrals of infants with plagiocephaly by MCH nurses were made to Physiotherapists, General Practitioners, Chiropractors and Osteopaths.

Conclusions

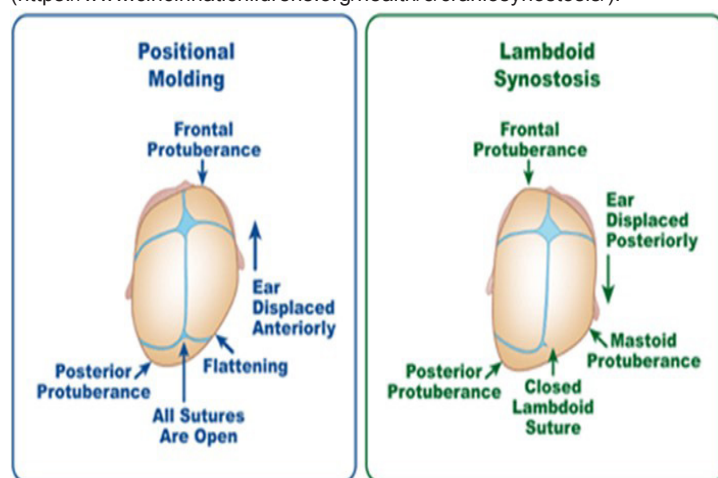
All MCH nurses and Physiotherapist respondents see infants with plagiocephaly, MCH nurses earlier than Physiotherapists. The effectiveness of plagiocephaly prevention advice can be called into question because of the high numbers of infants presenting and subsequent referrals to different health professionals. Recommendations from respondents included a review of past initiatives including extensive education for Maternal Child Health Nurses, Pamphlets in their Home visiting pack and video for demonstration at first time mothers group and the provision of clearer early prevention advice in the Government Key Ages and Stages (KAS) Framework for MCH nurses.

INTRODUCTION

The term plagiocephaly is nonspecific and used 'to denote an asymmetrical head shape' (Inverso et al 2015, p348). In this report plagiocephaly is referring to non-synostotic, positional, or deformational plagiocephaly, colloquially, a flat head. Differential diagnosis between plagiocephaly and posterior craniosynostosis (premature closure of cranial suture) is critical (Kluba2013 et al 2014; Saeed et al 2008; Kabbani and Raghuvver 2004). In true lambdoid craniosynostosis, the ear on the affected side is displaced posteriorly. In positional or deformational plagiocephaly the ear is displaced anteriorly and the frontal protuberance is ipsilateral (Kabbani and Raghuvver 2004) (figure 1).

Figure 1: Positional or deformational plagiocephaly (left) and lambdoid craniosynostosis (right)

(<https://www.cincinnatichildrens.org/health/c/craniosynostosis/>).



Plagiocephaly is an unexpected outcome of the successful strategy to prevent Sudden Infant Death Syndrome (SIDS) which was endorsed by the American Academy of Pediatrics (AAP) introduced in 1992. It recommends that babies sleep in supine, the 'Back to Sleep' campaign (AAP 2005; 1992). Concurrently, the incidence of plagiocephaly has risen from 5% in the early 1990s to an estimated 46.6% in 7 to 12 week old infants in 2013 (Mawji et al 2013; Kane et al 1996). Research attention is now being directed to the financial cost of management (Inverso et al 2015) as well as to plagiocephaly prevention (Aarnivala et al 2015; Cavalier et al 2011).

The 'Back to Sleep' campaign has saved lives, and there is no reason to question it. However, there is controversy about how plagiocephaly should be managed, the effectiveness of current guidelines such as helmet therapy (van Wijk et al 2014; Graham et al 2005), whether it causes developmental delay (Collett et al 2013; Darrah and Bartlett 2013) or is an indication of prior risk of delayed development (Branch et al 2015; Knight et al 2013; Shweikeh et al 2013; Bialocerkowski et al 2008; Biggs 2004; Persing et al 2003).

Recommendations for prevention and management of plagiocephaly include early introduction of counter-positioning of the infant's head and cot location, with supervised play in prone or 'tummy-time' when the infant is awake, adding physiotherapy referral if there torticollis (Mawji et al 2013; Saeed et al 2008; Persing et al 2003; Davis et al 1998).

While both the nursing (Flannery et al 2012; Looman and Flannery 2012;) and physiotherapy (Kenndey et al 2009; Darrah and Bartlett 2013) professions have expressed concern about the high incidence of plagiocephaly and its effect on motor development, there is no published information about the experience of MCH nurses and physiotherapists with infant plagiocephaly in their clinical practice.

The aim of this study was to survey Victorian MCH nurses and Physiotherapists to explore:

- their experience with plagiocephaly;
- plagiocephaly prevention strategies used; and
- how they managed plagiocephaly.

METHOD

Setting

The Maternal and Child Health Service in Victoria is a free service which supports a child's health and development from birth until school age. The service is funded by local and state governments and all parents are eligible to attend with their infant. MCH nurses are registered nurses with midwifery qualifications and postgraduate training in maternal and child health nursing (Kruske and Grant 2012). Physiotherapists for this study were registered health professionals who specialise in paediatrics (working with infants and children less than 18 years of age) and form a small percentage of the physiotherapy profession. Physiotherapists in this speciality area work in the tertiary health sector such as the Royal Children's Hospital, in community health and in private practice.

Participants

Participants were MCH nurses practising in MCH centres or other primary care settings, and physiotherapists from the Plagiocephaly Clinic at the Royal Children's Hospital (RCH) Melbourne, community health or in private practice.

Data source

A survey instrument with both fixed choice and open ended questions was developed in collaboration with key stakeholders in MCH and RCH. The 24 item survey was divided into three sections: 1) background of health professionals and experience with plagiocephaly, 2) prevention of plagiocephaly and 3) management of plagiocephaly. Some questions allowed open-ended responses.

Procedure

The survey was hosted online from 1 December 2014 to 1 February 2015. An emailed invitation to participate and providing an online survey link was sent to local government representatives, who then emailed MCH co-ordinators. Co-ordinators forwarded this email to MCH nurses. The email to physiotherapists was sent to the Director of Physiotherapy at RCH and to publicly available private physiotherapy websites from where it was forwarded to clinicians.

Ethics approvals

This project was approved by the University of Melbourne Human Research Ethics Committee (No: 1442919.1) and by the Victorian Government Department of Early Childhood Development (No: 2014_002570).

Data analysis

Data from fixed choice questions were analysed using descriptive statistics. Responses to open-ended questions and comments were sorted into themes, which were summarised. Concept maps were generated using Mindjet Mind Manager Software (Mindjet 2016) to illustrate the relative frequencies of responses within themes (figures 2-4). The sizes of the 'bubble' and font reflect the number of responses representing each theme relative to the number of responses in other themes.

RESULTS

Professions surveyed

One hundred and eighty-seven of 961 MCH nurses responded to the survey (19% of 174 fulltime and 787 part-time MCH nurses, with 26 reporting midwifery qualifications). Four surveys were incomplete, so the final total was 183 responses from MCH nurses. Sixteen physiotherapist respondents completed surveys, 15 were paediatric physiotherapists and one was a general physiotherapist. At the time of the survey the total number of physiotherapists in paediatric practice was not known, but a sample of 16 were invited to participate and 100% responded.

Geographical distribution

The overall geographical spread was metropolitan 62%, regional 18% and rural/remote 24%. There were proportionately fewer MCH nurses than physiotherapists from metropolitan areas, a similar proportion of MCH nurses and physiotherapists working in regional areas, but more MCH nurses employed in rural or remote areas.

Workplace and experience of respondents

Results are summarised in table 1. MCH nurses worked predominantly in Maternal Child Health Centres, but they also worked in other settings such as emergency or midwifery departments. Half reported that they had higher degrees, including Masters in Nursing or Child and Family Health or Postgraduate Diplomas, and also worked as lactation consultants.

MCH nurses mostly saw infants aged 0-1 year and were experienced, with many working with infants for over 10 years. Only three respondents had worked less than one year and eight had been working 25 - >40 years. The majority of MCH nurses had each seen over 50 infants in the previous year, others responded that they had seen 'hundreds' and '250-350 approximately' and '50 babies per week for 11 months of the year'.

Physiotherapists worked in the hospital outpatient setting, private practice or early childhood or community services (table 1). They saw infants and children aged 1-10 years, but also youth 11-18 years. Twelve had been in practice with infants for over 10 years and had seen 10-25 infants in the previous year, five had seen over 50 and one had seen over 350 in a specialist clinic.

Table 1: Workplace, experience and number of infants seen in previous year

	Workplace				Experience (years)		Age of infants seen (years)			No. of infants seen in previous year			
	MCHC	CC	OP	PP	1-5	>10	0-1	1-10	11-18	<5	10-25	26-50	>50
MCHN	182	12	0	0	24	126	140	96	1	0	4	17	149
PT	1	6	12	7	4	12	11	13	8	2	12	1	6

MCHN=Maternal Child Health nurse, PT=Physiotherapist, MCHC = MCH Centre CC=Community Centre, OP=Outpatients, PP=Private Practice

Age and number of infants with plagiocephaly seen in previous year

All MCH nurses and physiotherapists reported that infants with plagiocephaly attended their clinic and results are summarised in table 2.

MCH nurses reported seeing an average of 11-25 infants with plagiocephaly in a year, many responding 26-50 infants (n=47) and over 50 in 28 responses. The average age at which infants were first seen by MCH nurses was 5 - 8 weeks (one to two months).

Physiotherapists saw fewer infants with plagiocephaly than MCH nurses, although one reported reviewing over 350 infants in the previous year in a specialist clinic. The age at which infants first presented to physiotherapists with plagiocephaly averaged 3 - 6 months.

Table 2: Plagiocephaly: numbers seen in previous year and age of first attendance at clinic

	No of infants seen with plagiocephaly					Age of infants when first seen with plagiocephaly					
	<4	5-10	11-25	26-50	>50	0-4w	5-8w	9-12w	4-6m	7-10m	>11m
MCHN	0	34	63	47	28	99	127	109	77	41	29
PT	5	3	5	0	2	2	8	13	13	6	1

MCHN=Maternal Child Health nurse, PT=Physiotherapist, w=weeks, m=months

Prevention strategies and effectiveness

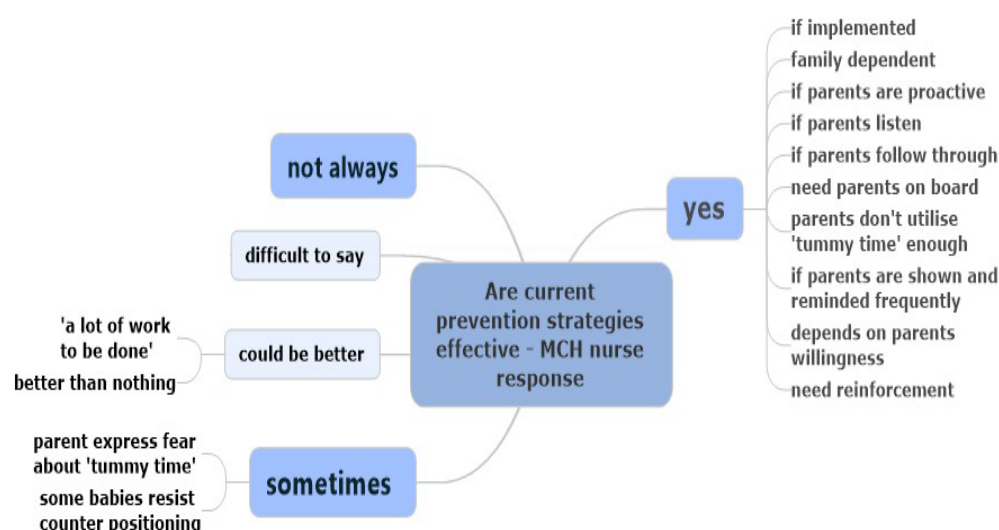
The majority of MCH nurses implemented prevention strategies with only three stating they did not. The results are summarised in table 3. Strategies used in practice were parent education, positioning including 'tummy-time', information brochure or video, with some recommending equipment such as a modified pillow. MCH nurses reported using early tummy time and counter positioning. The majority of MCH nurses believed that the prevention strategies were effective.

Table 3: Prevention strategies and responses to open-ended

	Prevention strategies implemented			Type of strategy	Effectiveness of strategies	
	Yes	No	PE	Positioning with TT'	Yes	No
MCHN	169	0	155	180	121	13
PT	15	0	13	14	9	2

MCHN=Maternal Child Health nurse, PT=Physiotherapist, PE=Parent Education, TT=Tummy-time

Themes from responses to the open-ended question "Do you believe current prevention strategies are effective?" are summarised in figure 2. It is noted that many of the 'Yes' responses were conditional on parents willingness to implement advice.

Figure 2: Themes emerging from MCH nurse comments (n=46) to 'Do you believe current prevention strategies are effective?' Font size indicates frequency of response.

All Physiotherapists implemented prevention strategies with one responding that prevention of plagiocephaly was discussed even if the infant was being seen for other issues. Responses by Physiotherapists also believed that the parents' role was key, e.g. 'if implemented - many parents I see are hesitant to position babies in prone regularly' and 'parents still express a lot of fear about tummy time'.

Interventions recommended for plagiocephaly

The common interventions recommended by both MCH nurses and physiotherapists for the infant with plagiocephaly were counter positioning, 'tummy time', and referral to other health professionals. Recommendations for intervention are summarised in table 4.

Table 4: Interventions recommended for plagiocephaly, and evidence for them

	Interventions recommended			Number of infants referred			Evidence for intervention		
	Positioning	TT	Referral on	<5	5-10	>10	Yes	No	Not sure
MCHN	174	182	160	77	47	53	117	8	51
PT	16	16	5	10	2	1	5	4	5

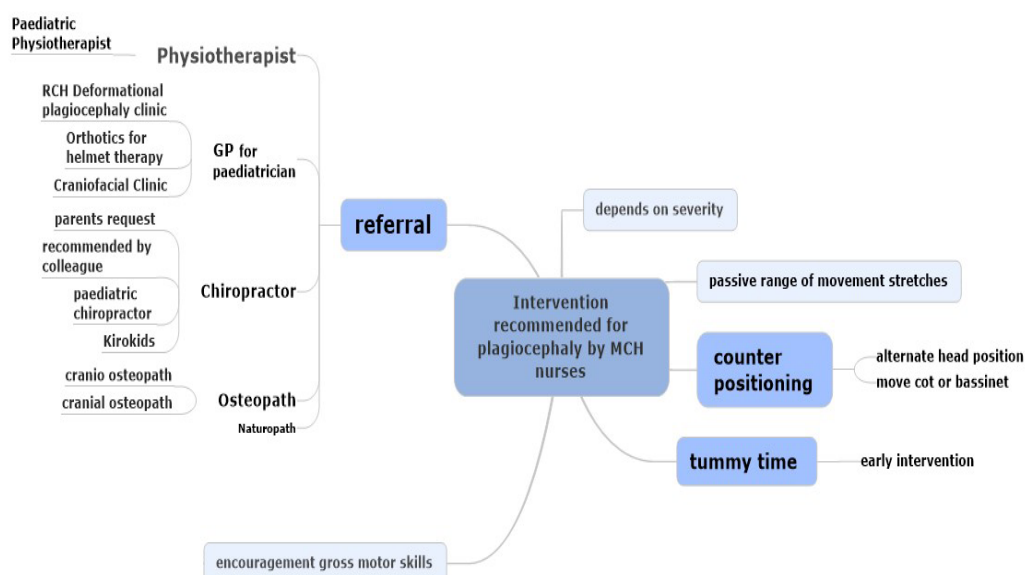
MCHN=Maternal Child Health nurse, PT=Physiotherapist, TT=Tummy-time

MCH nurses indicated referrals for plagiocephaly management were to physiotherapists, general practitioner (for referral to Royal Children's Hospital or a paediatrician), chiropractor or osteopath (figure 3).

Most MCH nurses believed the interventions were evidence-based, but 51 were not sure and seven doubted that the interventions were evidence-based.

Physiotherapists reported using counter positioning and tummy time, included gross motor exercises, stretches if torticollis was present with ten referring to orthotists for helmet therapy or to community physiotherapists. In response to the question as to whether there was an evidence base for interventions, seven physiotherapists responded 'yes', with one providing a reference, four responded 'no', and five 'not sure'. The reference cited was Flannery et al (2012).

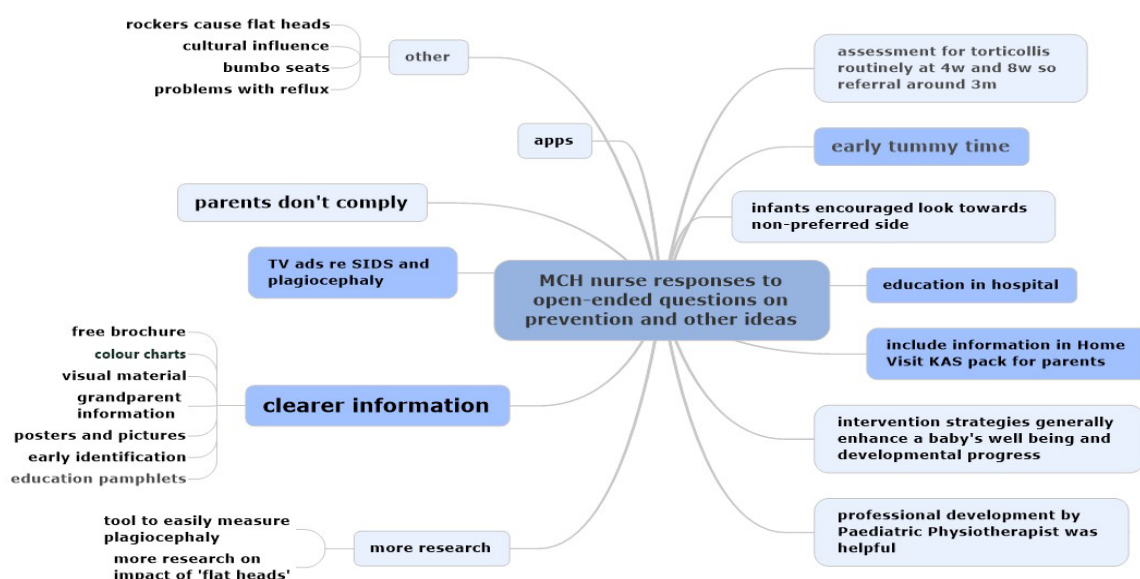
Figure 3: Themes emerging from MCH nurse responses (n=122) to 'What intervention do you recommend for plagiocephaly?' Font size indicates frequency of response



Responses requesting ideas about plagiocephaly that could be useful for parents and health professionals

Additional responses were elicited as to what information could be provided which would be useful to parents or health professionals. Forty-two MCH nurses responded to this question and the themes for these responses are illustrated in figure 4. The most common themes were: clearer information, early tummy time, education in hospital and TV advertisements on SIDS and plagiocephaly.

Figure 4: Themes emerging from MCH nurse responses to 'Do you have any additional comments you would like to share about ideas you think would be useful to parents or health professionals?' KAS = MCH nurse Key Ages and Stages Framework. Font size indicates frequency of response.



DISCUSSION

The results of this survey suggest that plagiocephaly is a common occurrence in Victorian infants and supports other studies reporting a similar increase in incidence in other countries (Branch et al 2015; Mawji et al 2013). Responses indicated that prone play or 'tummy time' and counter positioning are accepted as both prevention and management strategies. Plagiocephaly is frequently observed in infants by both MCH nurses and physiotherapists, although the physiotherapists see infants with plagiocephaly at a later age than MCH nurses. Many infants are referred for further management by MCH nurses although concern was expressed about lack of access to physiotherapists, delays in appointments.

The reported effectiveness of current prevention and management strategies can be called into question by the large number of young infants with plagiocephaly referred for further management by both MCH nurses and physiotherapists. Respondents suggested the reasons that current prevention strategies are not effective are parental non-compliance with advice or reluctance to do tummy time.

Although many infants were referred to other health professionals by MCH nurses for management, there was inconsistency in referral patterns, with MCH nurses responding they referred to physiotherapists (80%), to general practitioners (GPs, 32%) for further referral to a paediatrician or RCH, and often at parents' request, to chiropractors (20%) and osteopaths (20%) (figure 2).

Physiotherapists referred infants with severe plagiocephaly to orthotists for helmet therapy. The management of plagiocephaly with helmet therapy is controversial. A randomised controlled trial of helmet therapy compared to conservative management concluded that there was equal effectiveness of helmet therapy and skull

deformation following its natural course. Moreover, because of the high prevalence of side effects, and high costs associated with helmet therapy, the authors discouraged the use of a helmet as a standard treatment for healthy infants with moderate to severe skull deformation (van Wijk et al 2014).

Referral to chiropractors or osteopaths is also controversial in the literature. Uncertainty was expressed by respondents about the appropriateness of referral of infants for chiropractic management and some referrals were made at the parent's request or if they had a regular chiropractor. A Cochrane Systematic Review (Brand et al 2005) concluded that manual therapy, chiropractic, and osteopathy should not be used in infants. The authors used the term 'Kinetic Imbalance due to Sub occipital Strain (KISS)' Syndrome in infants with positional preference, plagiocephaly, and colic. This syndrome is not recognised in the medical literature. .

Early intervention was universally recommended by respondents. This strategy has been confirmed by a recent randomised controlled trial in Finland, which showed that an early educational intervention in the maternity ward reduced the prevalence and severity of DP at three months (Aarnivala et al 2015).

Forty-two MCH nurses provided ideas that could be useful to parents and health professionals. They highlighted the need for clearer information for prevention and management of plagiocephaly. Suggested ideas were free brochures or pamphlets, more visual representation of ideas for tummy time, colour charts, easy to read information, TV advertisements and Apps. The MCH nurses reported that tummy time, if implemented, is an effective prevention measure. Counter positioning is important and infants need to be encouraged to look towards the non-preferred side. MCH nurses expressed the need for better professional development on plagiocephaly. Other suggestions included more research, a tool to easily measure the degree of plagiocephaly, and investigation of 'bumbo' seats and pillows. There is a clinical measure for plagiocephaly 'the Severity Assessment' (Ohman 2012), but this tool appears not to be widely known.

A randomised controlled trial for management of plagiocephaly comparing physiotherapy stretching exercises and use of bedding/pillow concluded that both resulted in improvement (Wilbrand et al 2013). It is important to note that the Sudden Infant Death Syndrome (SIDS) Foundation recommends that pillows, doonas, soft toys, cot bumpers or lambswools should not be used when preparing a baby's cot (SIDS and Kids 2016).

The responses to this survey confirm that the experience of plagiocephaly by MCH nurses and Physiotherapists in Victoria is similar to that documented in other countries and is sufficiently significant to warrant further investigation of the implementation of the advice on plagiocephaly prevention.

CONCLUSIONS

The MCH nurses and physiotherapists who responded to this survey routinely saw infants with plagiocephaly in their clinical practice, and expressed concern about the high number of these infants. The common themes among respondents regarding prevention and management of plagiocephaly were counter positioning and tummy time. However, respondents also expressed the need for clearer, illustrated prevention material, preferably delivered in the Victorian Government (2006) Key Ages and Stages (KAS) Framework at the first visit.

RECOMMENDATIONS

1. Review past initiatives in regard to plagiocephaly; including extensive education for Maternal Child Health Nurses, pamphlets in their home visiting pack and video for demonstration at first time mothers groups.
2. Clearer advice for early prevention and management of infant plagiocephaly is indicated. Since MCH nurses see infants at the earliest age, they are best placed to deliver clear advice if the busy maternity ward is not appropriate.

3. The KAS Framework (Victorian Government 2006) given to parents when they come home with a new baby should be revised, in consultation with the Department and MCH nurses, to include clear advice on prevention of infant plagiocephaly.

REFERENCES

- AAP (American Academy of Pediatrics). 1992. Positioning and SIDS. Task force on infant positioning and Sudden Infant Death Syndrome (SIDS). *Pediatrics*, 89(6):1120-1126.
- AAP (American Academy of Pediatrics). 2005. Task Force on Sudden Infant Death Syndrome. The Changing Concept of Sudden Infant Death Syndrome: Diagnostic Coding Shifts, Controversies Regarding the Sleeping Environment, and New Variables to Consider in Reducing Risk. *Pediatrics*, 116:1.
- Aarnivala, H., Vuollo, V., Harila, V., Heikkinen, T., Pirttiniemi, P. and Valkama, A.M. 2015. Preventing deformational plagiocephaly through parent guidance: a randomized, controlled trial. *European Journal of Pediatrics*, 174(9):1197-1208.
- Bialocerkowski, A.E., Vladusic, S.L. and Wei Ng, C. 2008. Prevalence, risk factors, and natural history of positional plagiocephaly: a systematic review. *Developmental Medicine & Child Neurology*, 50(8):577-586.
- Biggs, W.S. 2004. The 'Epidemic' of Deformational Plagiocephaly and the American Academy of Pediatrics Response. *Journal of Prosthetics and Orthotics*, 16(4):S5-S8.
- Branch, L.G., Kesty, K., Krebs, E., Wright, L., Leger, S. and David, L.R. 2015. Deformational Plagiocephaly and Craniosynostosis: Trends in Diagnosis and Treatment after the "Back to Sleep" Campaign. *Journal of Craniofacial Surgery*, 26(1):147-150.
- Brand P.L., Engelbert R.H., Helden P.J. and Offringa, M. 2005. Systematic review of the effects of therapy in infants with the KISS-syndrome (kinetic imbalance due to suboccipital strain). *Netherlands Journal of Medicine*, 149(13):703-707.
- Cavalier, A., Picot, M.C., Artiaga, C., Mazurier, E., Amilhou, M.O., Froye, E. and Picaud, J.C. 2011. Prevention of deformational plagiocephaly in neonates. *Early Human Development*, 87(8):537-543.
- Collett, B., Gray, K., Starr, J., Heike, C., Cunningham, M. and Speltz, M. 2013. Development at age 36 months in children with deformational plagiocephaly. *Pediatrics*, 131:e109.
- Darrah, J. and Bartlett, D. 2013. Infant rolling abilities – the same or different 20 years after the back to sleep campaign. *Early Human Development*, 89:311-314.
- Davis, B.E., Moon, R.Y., Sachs, H.C. and Ottolini, M.C. 1998. Effects of sleep position on infant motor development. *Pediatrics*, 102(5):1135-1140.
- Flannery, A.B., Looman, W.S. and Kemper, K. 2012. Evidence-based care of the child with deformational plagiocephaly, part II: management. *Journal of Pediatric Health Care*, 26(5):320-331.
- Graham, J.M., Gomez, M., Halberg, A., Earl, D., Kreutzman, J.T., Cui, J. and Guo, X. 2005. Management of deformational plagiocephaly: repositioning versus orthotic therapy. *Journal of Pediatrics*, 146(2):258-262.
- Inverso, G., Lappi, M.D., Flath-Sporn, S.J., Heald, R., Kim, D.C. and Meara, J.G. 2015. Increasing value in plagiocephaly care: a time-driven activity-based costing pilot study. *Annals of Plastic Surgery*, 74(6):672-676.
- Kabbani, H. and Raghuveer, T.S. 2004. Craniosynostosis. *American Family Physician*, 69(12):2863-2870.
- Kane, A., Mitchell, L. and Craven, K. 1996. Observations on a recent increase in plagiocephaly without synostosis. *Pediatrics*, 97:877-885.
- Kennedy, E., Majnemer, A., Farmer, J.P., Barr, R.G. and Platt, R.W. 2009. Motor development of infants with positional plagiocephaly. *Physical & Occupational Therapy in Pediatrics*, 29(3):222-235.
- Kluba, S., Lypke, J., Kraut, W., Krimmel, M., Haas-Lude, K. and Reinert, S. 2014. Preclinical pathways to treatment in infants with positional cranial deformity. *International Journal of Oral Maxillofacial Surgery*, 43(10):1171-1175.
- Knight, S.J., Anderson, V.A., Meara, J.G. and DaCosta, A.C. 2013. Early Neurodevelopment in infants with plagiocephaly. *Journal of Craniofacial Surgery*, 24:1225-1228.
- Kruske, S. and Grant, J. 2012. Educational preparation for maternal, child and family health nurses in Australia. *International Nursing Review*, 59(2):200-207.
- Looman, W.S. and Flannery, A.B. 2012. Evidence-Based Care of the Child with Deformational Plagiocephaly, Part I: Assessment and Diagnosis. *Journal of Pediatric Health Care*, 26: 242-250.
- Mawji, A., Robinson Vollman, A., Hatfield, J. and McNeil D.A. 2013. The Incidence of Positional Plagiocephaly: A Cohort Study. *Pediatrics*, 132:298-304.
- Öhman, A. 2012. The inter-rater and intra-rater reliability of a modified 'severity scale for assessment of plagiocephaly' among physical therapists. *Physiotherapy Theory and Practice*, 28(5):402-406.
- Persing, J., James, H., Swanson, J. and Kattwinkel, J. 2003. Prevention and management of positional skull deformities in infants. *Pediatrics*, 112(1):199-202.
- Saeed, N.R., Wall, S.A. and Dhariwal, D.K. 2008 Management of positional plagiocephaly. *Archives of Disability in Childhood*, 93(1):82-84.

Shweikeh, F., Nuno, M., Danielpour, M., Krieger, M.D. and Drazin, D. 2013. Positional plagiocephaly: an analysis of the literature on the effectiveness of current guidelines. *Neurosurgery Focus*, 35(4):E1.

SIDs and Kids. 2016. http://www.sidsandkids.org/wp-content/uploads/SIDS066-N_SafeSleeping_MakingUpCot_A3web.pdf (accessed 09.03.16).

van Wijk, R.M., van Vlimmeren, L.A., Groothuis-Oudshoorn, C.G., Van der Ploeg, C.P., Ijzerman, M.J. and Boere-Boonekamp, M.M. 2014. Helmet therapy in infants with positional skull deformation: randomised controlled trial. *British Medical Journal*, 348:g2741.

Victorian Government. 2006. Maternal and Child Health Service: Key Ages and Stages Framework. <http://www.education.vic.gov.au/Documents/childhood/professionals/health/mchkasframework.pdf> Melbourne (accessed 07.03.16).

Wilbrand, J.F., Seidl, M., Wilbrand, M., Streckbein, P., Bottger, S., Pons-Kuehnemann, J. and Howaldt, H. P. 2013. A prospective randomized trial on preventative methods for positional head deformity: physiotherapy versus a positioning pillow. *Journal of Pediatrics*, 162(6):1216-1221.