



**2010 National Conference of
EMERGING RESEARCHERS IN AGEING**
“Getting the right skill mix”

ABSTRACTS & PROCEEDINGS



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**PRIORITY RESEARCH CENTRE
GENDER, HEALTH AND AGEING**



 **MONASH University**

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EMERGING RESEARCHERS IN AGEING CONFERENCE

“Getting the right skill mix”

The 9th Emerging Researchers in Ageing conference will take place at the Newcastle City Hall on Thursday 21st and Friday 22nd October, and will be convened by Professor Julie Byles and Associate Professor Lynne Parkinson of the Research Centre for Gender, Health and Ageing at the University of Newcastle.

For the first time in 2010, the conference will be extended over two full days, with three postgraduate workshops held concurrently on the morning of the first day, and the conference starting after lunch on the first day.

The conference is organised around the theme: **“Getting the right skill mix”**. Emerging researchers in ageing come from many disciplines, and gerontology is known as a transdisciplinary field, where the broadest range of skills is needed to equip the new researcher. This conference will provide opportunities to explore the different skills needed for an emerging ageing career, including workshops that offer a choice of methodological and academic approaches.

www.era.edu.au/ERA+2010



INVITATION



The **Research Centre for Gender, Health and Ageing** at The University of Newcastle is delighted to be hosting ERA 2010; the 9th National Conference of Emerging Researchers in Ageing. ERA 2010 will build upon the previously successful ERA conferences held in Queensland, Adelaide, Perth, Sydney and this year will see the conference taking place in Newcastle on 21st and 22nd October.

Ageing is one of the most important changes affecting both individuals and populations, and population ageing is one of the greatest challenges and opportunities for this century. The previous ERA conferences have supported Australian emerging researchers conducting research in this important field. This conference will continue this tradition and bring together PhD, Professional Doctorate, Masters and Honours student researchers from across Australia representing a range of disciplines, together with academics, practitioners and policy makers. This conference will provide a wonderful opportunity for networking for the next generation of researchers, academics, practitioners and policy makers.

It gives us great pleasure to extend this invitation to you to attend ERA 2010 and actively participate in this exciting and important program.

Best wishes,

A handwritten signature in black ink, appearing to read 'J Byles'.

Professor Julie Byles
Director
Research Centre for Gender, Health and Ageing
The University of Newcastle



KEYNOTE SPEAKER



Gita Mishra has recently been appointed as Professor of Life Course Epidemiology at the School of Population Health, University of Queensland. Prior to this she was a programme leader at the Medical Research Council (MRC) Unit Lifelong Health and Ageing, University College London (UCL), where she led the programme on Lifetime lifestyles and social environment in relation to health and ageing outcomes. She is an author of more than 130 peer-reviewed publications as well as 18 book chapters. More recently she co-edited a book that covers both the theory and practice of family based studies, entitled *Family Matters in Life Course Epidemiology* and published by Oxford University Press in April 2009.

Professor Mishra has addressed numerous methodological challenges in analysing data across the life course from the issues of measurement errors and missing data, to the techniques of modelling trajectories. She has also instigated and collaborated on several research projects ranging across many aspects of women's health, from the experience of menopausal transition to the role of socio-economic status on health inequalities. Her longstanding interests include: statistical methodology for longitudinal studies, constructing measures of dietary patterns, life course approach to health, and women's health.

KEYNOTE ADDRESS

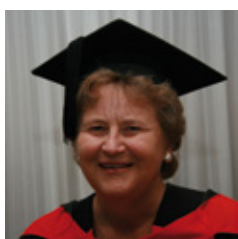
New directions in ageing research: life course epidemiology and cross-cohort comparisons

Ageing is a grand challenge facing society. Life course approach to ageing studies how factors acting across the whole of life affect health and well-being. We shall discuss some of the latest developments in life course epidemiology - from the testing of theoretical models, to the use of family-based studies and cross-cohort comparisons. We shall discuss how comparing relationships within and between different family members can clarify the mechanisms underlying associations in life course studies and help to determine causality. Similarly, the finding of robust associations across cohorts between risk factors and ageing phenotypes can help to establish causality. Examples will be drawn from a range of life course studies.

This session is sponsored by



POSTGRADUATE SPEAKER



Dr Felicity Barr is Chairman of the ANZAC Health and Medical Research Foundation, President of the Australian Association of Gerontology (Hunter Chapter) and Chairman of the Advisory Board of the Research Centre for Gender, Health and Ageing at the University of Newcastle. She also is a council member of the Ageing and Alzheimer's Research Foundation, a member of the Advisory Committee of Chairmen, Australian Association of Medical Research Institutes, an Independent Member of the Audit & Risk Management Committee of the Hunter New England Area Health Service and a member of the NSW State Executive Committee of the Australian Association of Gerontology. Following a career within the Australian Public Service, including

senior executive positions within the Department of Veterans' Affairs, she has undertaken a number of consultancies and board memberships in the not-for-profit sector. Such roles have included non-member Director and Chair of the War Widows' Guild of Australia (NSW), and Chair of the Ministerial Advisory Committee on Ageing for the NSW Government.

Abstract: Even an elephant doesn't gestate this long!

The story begins with a failed love affair, a dose of sibling rivalry and the need to earn a living. It continues in the usual way with love and marriage, war and peace, political intrigue and bureaucratic boredom. After forty years, the denouement comes with the award of a PhD. The next chapter is still being written; who knows how it will end?

Felicity's qualifications are Doctor of Philosophy and Master of Health Science (Gerontology) from the University of Sydney and Bachelor of Arts from LaTrobe University. She is a Fellow and holds the Diploma of the Australian Institute of Company Directors, and a Fellow of the Australian Association of Gerontology.

WORKSHOPS

The 2010 conference will feature three postgraduate student workshops to be held concurrently on the morning of Thursday 21st October 2010:

- | | |
|--|----------------|
| 1. Issues in mixed methods research | Hunter Room |
| 2. Issues in quantitative research | Mulubinba Room |
| 3. Writing and reviewing for publication | Newcastle Room |

Issues in Mixed Methods Research

Dr Pat Bazeley, Centre for Primary Health Care and Equity, University of New South Wales and Director/ Research Consultant, Research Support Pty Limited. An internationally renowned expert on mixed methods research.

'Mixed methods' is used as a generic term to describe research in which more than one approach is taken to answering the question/s asked in a particular study, resulting in the combination of multiple elements of design, types of data, and/or analysis strategies.

Implementation of integrated approaches to social and human services research is currently becoming more accepted, and strategies for implementation are being further developed.

This program is designed to extend researchers' awareness with regard to mixed methods research, and of the possibilities and issues raised by such strategies

This workshop is sponsored by HMRI Public Health Program Capacity Building Group



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THE UNIVERSITY OF
NEWCASTLE
HUNTER NEW ENGLAND
NEWHEALTH

Writing and Reviewing for Publication

A/Prof Lynne Parkinson, Senior Research Fellow, Research Centre for Gender, Health and Ageing, University of Newcastle; Editor in Chief of "Australasian Journal on Ageing" and **Professor Jeni Warburton**, John Richards Chair of Rural Aged Care Research, La Trobe University.

Scholarly writing is an essential academic skill, and can be useful for practitioners and others who want to share achievements in practice or debate change in policy. There are some fairly simple tips that journal editors can provide authors to improve the quality of manuscripts and increase publication chances. This half day workshop will focus on the editorial perspective. Short presentations will include:

- writing for publication (approaches and tips)
- journal manuscript requirements
- the review process
- becoming a journal reviewer

A central feature of the workshop will be brief review of manuscripts in small groups, with support from the facilitators. The workshop will be interactive and include open discussion.

This workshop is sponsored by



Issues in Quantitative Research

Prof Catherine D'Este, Chair in Biostatistics, School of Medicine and Public Health, Faculty of Health, University of Newcastle.

This workshop will be interactive and include open discussion. There will be some short presentations in this half day workshop which will focus on the why, when and how of planning statistical analyses. The workshop will also provide trouble shooting for some of the quantitative issues in your doctoral work, so come along prepared to ask lots of questions and to share your challenges.



PROGRAM

TIME	ROOM	SESSION DETAILS
Thursday 21st October		
8.45 am - 9.30 am	Hunter and Banquet Rooms	Registration (Hunter Room) and Morning tea (Banquet Room)
9.30 am - 12.15 pm	Hunter, Mulubinba and Newcastle Rooms	Pre-conference postgraduate workshops (see previous page for workshop details)
12.15 pm - 1.00 pm	Hunter and Banquet Rooms	Registration (Hunter Room) and Lunch and poster display (Banquet Room)
1.00 pm - 2.10 pm	Hunter Room (Second Floor)	1.00 - 1.10 Welcome to ERA 2010 and Welcome to Country 1.10 - 1.20 Conference Opening and Welcome - Prof. Helen Bartlett, Pro-Vice Chancellor, Monash University Gippsland Campus 1.20 - 1.30 Welcome - Prof. Julie Byles, Director RCGHA, University of Newcastle 1.30 - 2.10 Keynote Speaker - Prof. Gita Mishra, Professor of Life Course Epidemiology, School of Population Health, University of Queensland
2.10 pm - 2.40 pm	Banquet Room (Ground Floor)	Afternoon tea and poster display
2.40 pm - 4.00 pm	Hunter, Mulubinba and Newcastle Rooms	Session 1 Concurrent papers 2.40 - 3.00; 3.00 - 3.20 ; 3.20 - 3.40; 3.40 - 4.00
4.00 pm - 5.20 pm	Hunter, Mulubinba and Newcastle Rooms	Session 2 Concurrent papers 4.00 - 4.20; 4.20 - 4.40; 4.40 - 5.00; 5.00 - 5.20
5.30 pm	Banquet Room (Ground Floor)	Welcome Reception and posters
Friday 22nd October		
8.45 am - 9.00 am	Hunter Room (Second Floor)	Welcome to Day 2
9.00 am - 9.40 am	Hunter Room (Second Floor)	Postgraduate Speaker Dr Felicity Barr
9.40 am - 11.00 am	Hunter, Mulubinba and Newcastle Rooms	Session 3 Concurrent papers 9.40 - 10.00; 10.00 - 10.20; 10.20 - 10.40; 10.40 - 11.00
11.00 am - 11.20 am	Banquet Room (Ground Floor)	Morning tea and poster display
11.20 am - 12.40 pm	Hunter, Mulubinba and Newcastle Rooms	Session 4 Concurrent papers 11.20 - 11.40; 11.40 - 12.00; 12.00 - 12.20; 12.20 - 12.40
12.40 pm - 1.40 pm	Banquet Room (Ground Floor)	Lunch and poster display
1.40 pm - 3.00 pm	Hunter, Mulubinba and Newcastle Rooms	Session 5 Concurrent papers 1.40 - 2.00; 2.00 - 2.20; 2.20 - 2.40; 2.40 - 3.00
3.00 pm - 3.20 pm	Banquet Room (Ground Floor)	Afternoon tea and poster display
3.20 pm - 4.00 pm	Hunter Room (Second Floor)	Prize giving and conference close Prof. Helen Bartlett, Pro-Vice Chancellor, Monash University Gippsland Campus

EMERGING RESEARCHERS IN AGEING CONFERENCE – FINAL PRESENTERS’ PROGRAM

Thursday 21 October – Afternoon sessions

2.40 pm – 4.00 pm

Session 1 SOCIAL INCLUSION / SOCIAL ISOLATION	Session 2 HEALTH CARE STAFF ATTITUDES AND APPROACHES TO CARE	Session 3 LIFE AND LEARNING
HUNTER ROOM Chair: Helen Bartlett	MULUBINBA ROOM Chair: Felicity Barr	NEWCASTLE ROOM Chair: Julie Byles
1A Kylie Agllias Later-Life family estrangement: Insights into living after an adult child ceases contact	2A Lynne Slater The incongruence between positive and negative attitudes in the care of the older person in acute care: A qualitative perspective for health care staff	3A Jeaninne Liddle Do art and music making activities contribute to health and health-related quality of life in older women?
1B Pamela Coutts Is Ageing a Barrier to using the Internet and Mobile Telephone?	2B Janice Taylor Staff Manual handling and Resident Transfers On and Off Furniture, A systematic review	3B Daniel DeSouza Using exercise to improve functional wellbeing in semi-dependent older adults accessing day respite
1C Sandra Bateman Measuring the social impact of physically demanding labour among older volunteers	2C Michael Preece Knowledge Management: A residential aged care perspective	3C Margaret Simmons Transformations: Transcripts to Poetic Representations
	2D Trevor Hilaire Sustainable residential aged care: the influence of environment on carer work satisfaction and stress – results to date	

4.00 pm – 5.20 pm

Session 4 COGNITIVE DECLINE AND DEMENTIA	Session 5 DEMENTIA AND COMMUNITY CARE	Session 6 AGEING AND CONTEXT
HUNTER ROOM Chair: Jeni Warburton	MULUBINBA ROOM Chair: Lynne Parkinson	NEWCASTLE ROOM Chair: Matthew Carroll
4A Lisa Whitson Variations in strategy contribute to age differences in executive functioning: evidence from behavioural, electrophysiological and cognitive modelling data	5A Sirikul Karuncharernpanit Pilot Study of an Exercise Program for older Adults with Dementia in Thailand	6A Beth Fuller The Active Living Framework – mediating physical activity for older people
4B Chantelle Vonarx Exploring the differential effects of ageing on controlled and automatic inhibitory tasks	5B Dr Nerida Patterson Early Diagnosis of Dementia and Diagnostic Disclosure in Primary Care: A qualitative study into the barriers and enablers	6B Kusrini S. Kadar Promoting and Maintaining Wellness among the Elderly in South Sulawesi, Indonesia
4C Lawrence Lim Structural quality indicators in acute care settings for patients with dementia	5C Joanne Harmon A pilot evaluation study of a prototype pain algorithm for the assessment and management of pain in the older person in the acute care setting	6C Andrea Nathan Retirement Village Design, neighbourhood environment and active living

Friday 22 October

Morning session: 9.40 am – 11.00 am

Session 7 HEALTH LITERACY AND HEALTH MANAGEMENT	Session 8 HEALTH AND WEALTH	Session 9 AGEING AND MEDICAL CARE
HUNTER ROOM Chair:Sonia Allen	MULUBINBA ROOM Chair: Lynne Parkinson	NEWCASTLE ROOM Chair: Helen Stain
7A Eugene Lutton Moving eHealth from Interoperability to an Internet of Patients	8A Martin Snoke Does Being Healthy Lead to Greater Financial Security for Baby Boomers?	9A Mikaela Jorgenson Older Patients and adjuvant therapy for colorectal cancer: Surgeon knowledge, opinions and practice
7B Marie Brand Exploring Health Literacy in older people managing Osteoarthritis	8B Yuvisthi Naidoo The Role of Income in the Living Standards of Older Australians	9B Corinne Mirkazemi Thromboprophylaxis following Arthroplasty Surgery
7C Uwana Evers The need for a community-level social marketing campaign addressing population awareness of asthma in older adults: a review	8C Anna McCarrey “Oops, I lost money gambling again. But I just can’t help myself!” Declining executive functions in older Australian gamblers	9C Linda Schnitker Adverse Outcomes in older persons presenting to the emergency department: A systematic literature review
	8D Robyn Garlick Community aged mental health and its role in physical health monitoring	9D Irene Walker Nurse Stress Associated With the Families of Aged Care Residents

Morning session: 11.20 am – 12.40 pm

Session 10 PARTICIPATION AND NETWORKING	Session 11 RURAL	Session 12 INNOVATIONS IN AGED CARE
HUNTER ROOM Chair:Melissa Harris	MULUBINBA ROOM Chair:Beth Fuller	NEWCASTLE ROOM Chair: Jeaninne Liddle
10A Sjaan Williams Paws & Effect: A phenomenological study of older Australians and their pets	11A Jane Rich Stories from women in Drought: a longitudinal exploration.	12A Joan Ostaszkiwicz Use of accreditation reports and international standards for continence in frail older people to evaluate the quality of continence care in residential aged care
10B Sue Malta Old Dogs, New Tricks? Online Dating and Older Adults	11B Zoe O’Callaghan Men on the Land: the Identities of baby boom farmers in the border country	12B Marina LoMonaco Practical Use of decision-Making Frameworks in Aged Care Nursing
10C Anthony James Brown Cherished places: Retired Men’s Spaces and Places	11C Jacqui Wilson The need for a multidimensional conceptualisation of rural ageing	12C Ron Thompson Exploration of “risk” as a key construct in long life care contexts
	11D Rosemary Bowman Looking forward to retirement: the reality for Rural Women	12D Karen Abbey National Menu Survey – a first for Australia developing new menu standards for residential aged care

Friday 22 October

Afternoon session: 1.40 pm – 3.00 pm

Session 13 EXPERIENCES OF AGED CARE RESIDENTS	Session 14 WORKFORCE	Session 15 PHYSICAL ACTIVITY
HUNTER ROOM Chair:Matthew Carroll	MULUBINBA ROOM Chair: Anthony Brown	NEWCASTLE ROOM Chair: Julie Byles
13A Joanne Mihelcic The Storyline Project: Determining a therapeutic use for the personal archive in aged care and dementia	14A Jacqui Larkin Ageing Academics: What is the role for Universities?	15A Elisabeth Lord Walk and Talk for Well-being
13B Nadine Mesnage How do elders experience being in a residential aged care setting?	14B Wanda Pryor Rethinking the forgotten generation: An exploratory study	15B Elissa Burton Barriers and Motivators to physical activity in older home care clients
13C Leander Mitchell Rehabilitation in Residential Aged Care Facilities	14C Dr Sharyn Hunter Challenging nursing students’ attitudes about older people	15C Paul Gardiner Feasibility of an intervention to reduce sedentary time in non-working older adults
13D Chanel Burke Development and Evaluation of a Person-Centred Environment and Care Assessment Tool and Guidelines for use	14D Fleur Danielle St. Amand The ageing Australian healthcare workforce: Implications and issues	

Prizes

Helen Bartlett Prize for Innovation in Ageing Research

The Helen Bartlett Prize for Innovation will be awarded to the student whose research is considered by the judging panel to be the most original and creative. The prize recognises the outstanding contribution made by Professor Helen Bartlett, ProVice Chancellor Monash Gippsland campus, to the field of ageing research in Australia, particularly as the founder of the ERA initiative. The prize will be sponsored by the ARC/NHMRC Research Network in Ageing Well.

A cash prize valued at \$500 and a certificate will be awarded to the winning student.

AAG Hunter Prize - Best Presentation

AAG Victoria Prize - Best Victorian Presentation

The AAG is Australia's largest multidisciplinary professional association of people who work in, or have an interest in, ageing. The Hunter and Victoria Divisions of AAG play an active role in supporting the development of student and early career researchers. The AAG Hunter prize will be awarded to the best paper presentation by a research higher degree student in ageing as considered by the judging panel. The AAG Victoria prize will be awarded to the best paper presentation by a Victorian student.

Two cash prizes valued at \$250 each and a certificate will be awarded to the winning students.

HMRI Prize - Best Poster Presentation

Established in 1998, the Hunter Medical Research Institute (HMRI) is a unique partnership between Hunter New England Health, the University of Newcastle and the community. It provides a strong voice for health and medical research in our region. This prize will be awarded to the postgraduate student who presents the best poster presentation as considered by the judging panel at ERA 2010

A cash prize valued at \$250 and a certificate will be awarded to the winning student.

Bursaries

ERA, the Centre for Practice Opportunity and Development and the AAG are supporting this event by providing students with twelve bursaries of the value of up to \$500.

- Ten ERA bursaries
- One "Centre for Practice Opportunity and Development (CPOD) Hunter New England Health" bursary for a nursing student from the Hunter region
- One AAG NSW bursary for a student member of AAG



Newcastle City Hall Floor plan

First Floor Plan
(Entrance Floor)



Ground Floor Plan



Upper Floor Plan



ABSTRACTS

SESSION 1

SOCIAL INCLUSION / SOCIAL

ISOLATION

1A

Later-life family estrangement: Insights into living after an adult child ceases contact.

Author: Kylie Agllias

School of Humanities and Social Science, University of Newcastle

Abstract

Family estrangement is the distancing or loss of affection between one or more members of a family. Parties may cease all physical contact or they might have sporadic contact that is viewed as unsatisfactory. This paper will report on findings from a qualitative study with twenty-five participants aged over 60 years, who were estranged from an adult-child. Two in-depth interviews were conducted with each participant in 2009, approximately six months apart.

Three primary themes emerged from the data in relation to the period after the estrangement was realised; the push and pull of estrangement, learning to live with estrangement, and a search for meaning. After the estrangement was realised, participants often felt they had been 'cast out' or pushed away, but the majority of them remained emotionally 'drawn' or pulled towards the child. Many participants experienced extreme grief reactions to the loss, and a number of factors or triggers continued to 'push and pull' their emotions, actions, and lifestyles.

Participants stated the effects of estrangement never fully dissipated, but most had started to accept their inability to change the situation over time. They spoke about a number of strategies that helped them to live a good life and to deal with the absence of their child (and in many cases grandchildren). These included; establishing boundaries, minimising triggers for pain, keeping busy, and nurturing other relationships.

Additionally, estrangement made participants question their lives. Participants spoke about their struggle against the unknown elements of estrangement, particularly in relation to the child's reasons for the estrangement, and the stress of 'not knowing' things about the estranged child as the years passed. While acceptance, decision-making, and learning to live life had often stemmed participants' distress and urgency to find answers to the unknown, the search for meaning continued for the majority of participants.

1B

Is ageing a barrier to using the internet and mobile telephone?

Author: Ms Pam Coutts
University of Adelaide

Abstract

Is ageing a barrier to using the Internet or the mobile phone? Gross national statistics from the ABS would suggest it is. In 2006 only 18% of Australians age 65 years and over accessed the Internet compared with 70% in the rest of the population. Adoption rates for mobile phone use in this age demographic are somewhat higher but still far below the rates for the remainder of the population. Yet we know anecdotally there are people in their seventies and eighties using the Internet and mobile phones and as reported by the author last year they in the census data when Internet access is examined at a micro data scale. So what makes the difference?

This presentation, which is part of a doctoral research project, attempts to shed some light on this phenomena using results from a statistically representative survey of 550 people age 55 years and over living in western metropolitan Adelaide. The survey enquired into motivations for adoption or non-adoption; the nature of the communications technology used; and preferred alternatives; positive and negative impacts as well as motivators or de-motivators for future adoption. Responses were analysed using correlation and regression analysis and contrasted with respondents' self reported social economic, cultural linguistic and disability status. The results of the analysis will be used to inform several key research questions. Is low use in older Australian populations related to experiences associated with ageing? Is it a generational phenomenon? Or, as with the rest of the population, is differential communications technology adoption related to structural factors or personal attributes like attitude, skills, perception of value, as Roger's theorises (Rogers 2003)

1C

Measuring the social impact of physically demanding labour among older volunteers

Author: Sandra Bateman
Charles Sturt University, Bathurst, NSW

Abstract

Aim:

When we look to existing literature to discover trends and predictions concerning volunteering among older people, we find that extant literature does not mention physically demanding labour as a component of the volunteer activity among older adults. This research identifies a group of older people who regularly perform physically demanding volunteer activity and investigates the social impact of the activity on these volunteers.

Method:

Semi-structured were conducted with eighteen volunteers, aged between 70 and 91 years, whose volunteer activity at a Sydney-based maritime museum appears to be outside the norm for their age group. The interviews were transcribed and the data were analysed using a grounded theory approach. The raw data were reduced to concepts through open coding and logical groups of concepts were classified as categories.

Results:

The participants in this study were aged from 70 to 91 years. At the time of this study, the duration of their voluntary contribution to the maritime museum was between 6 and 39 continuous years. Analysis of the concepts expressed in the participants' interviews allowed examination of the social impact of their volunteer experience on these older volunteers.

Conclusion:

Using their own words, this research demonstrates the impact of their volunteer activity on the lives of the participants in this study. Post retirement, these volunteers identified social needs that could no longer be satisfied by their paid employment. Each participant selected a physically demanding volunteer activity that has allowed them to retain the self-esteem, the social interaction and the feelings of generativity and alignment that were lost with their retirement from the workforce.

ABSTRACTS

SESSION 2

HEALTH CARE STAFF ATTITUDES

AND APPROACHES TO CARE

2A

The incongruence between positive and negative attitudes in the care of the older person in acute care: A qualitative perspective for health care staff.

Author: Mrs. Lynne Slater,
School of Nursing and Midwifery, University of Newcastle.

Abstract

The majority of previous research into attitudes towards older people in acute care hospitals has been based on the use of assessment tools that measured the presence of positive or negative attitudes. These tools have been used to determine attitudes of undergraduate health care students including medical and nursing students. They have also explored attitudes of a range of allied health care staff, and attitudes in response to various education interventions. However, the results have often been inconclusive.

To raise awareness of why particular attitudes occur a qualitative method was used to explore what thoughts and feelings were behind the attitudes of health care staff in an acute care area of a tertiary hospital. Attitudes are affective, cognitive and behavioural and these can be explored in their intensity. To do this, interviews were held with nurses, doctors, allied health workers, patients and carers to investigate those attitudes. The research was to explore not just whether negative or positive attitudes were present but how the attitudes develop, how they present in behaviours and how staff and patients reflect on those attitudes.

Consequently, three discourses were acknowledged as conveying meaning to the participants own attitudes and how others experienced those attitudes. These were 1. Discourses in ageing; 2. Discourses in caring for older people and 3. Rationalisation (of attitudes). Although the health care staff felt that they had positive attitudes towards older people these covertly changed when the older person became a patient. As well, staff felt that their caring attitudes were compromised by workloads, bureaucratic policies and their own ability to cope.

These findings resonate with the changing health workforce, the need to ensure that members of the increasingly ageing population are recognised as having specific needs and the government's own recognition of ageing as a priority in health care.

2B

Staff manual handling and resident transfers on and off furniture; a systematic review

Authors: Janice Taylor¹, Dr Jane Sims², Assoc Prof Terrence P Haines³
Monash University^{1, 2, 3}

Abstract

Introduction

The benefit of safe manual handling practice on staff injury is well documented. The aim of this review was to investigate the impact of staff manual handling practices on the ability of residents in nursing homes to transfer on and off furniture.

Background

The mobility of older people in residential care is diverse and variable. Carers often assist residents to transfer. Staff competency in safely assisting residents whilst optimizing the resident's mobility is an important aspect of quality care provision. Systematic review and synthesis of evidence was required in this field.

Method

The literature was searched and reviewed systematically. Inclusion criteria were set. Studies needed to investigate physical activity or manual handling interventions. The primary outcome measure of concern was a resident's ability to transfer on and off chairs. Secondary measures were staff manual handling competencies, sustainability of improved manual handling practice and costs of interventions.

Results

Over two hundred papers were found. Due to the small number of relevant quantitative studies identified, quasi-experimental studies were included in this review. Ten studies met the inclusion criteria. Two studies were systematic reviews, five studies examined the effect of physical activity interventions and three studies examined the effect of manual handling interventions. The physical activity studies substantiated that functional activity benefits residents. One study, examining the effect of a safe manual handling program on resident quality care outcomes, demonstrated improved resident transfers. Results regarding secondary measures were inconclusive.

Conclusions

The evidence demonstrating the benefits of safe manual handling practices by staff on resident transfer ability is weak. Further research is required into the nature and impact of the assistive relationship between care staff and residents during resident transfers. Development and diffusion of innovative and sustainable approaches to safe manual handling that promote resident mobility are needed.

2C

Knowledge Management: A Residential Aged Care Perspective

Author: Michael Preece
Curtin University - Graduate School of Business

Abstract

This research explores perceptions of Knowledge Management processes held by direct care staff and managers in Residential Aged Care organisations. The research is based on a model that encompasses Industry Context and explores Absorptive Capacity and its subsequent impact on Effective Knowledge Management. The term, Absorptive Capacity, refers to four capabilities (Acquisition, Assimilation, Transformation and Exploitation), all providing insight into how external knowledge is recognised, imported and integrated into the organisation effectively, as well as developed internally. The study tests the relationships between Absorptive Capacity and Effective Knowledge Management through analysis of quantitative data drawn from direct care employers and managers in Residential Aged Care organisations in Western Australia. The data were collected through the use of self-administered questionnaires developed from the literature, and represent a 41% return rate. The responses were analysed by Partial Least Square based Structural Equation Modeling. The results contribute to existing theory, and provide a direction for future research and practice in the Residential Aged Care industry. The purpose of this paper is to present the findings from the doctoral research study. The responses are representative of the industry. All items in the measurement model are reliable and internal consistency is adequate with reliability coefficients (Cronbach's alpha) ranging from .861 to .955. Discriminant validity revealed that the lower order construct Acquisition is not significantly different and was removed. The remaining four path coefficients are significant and the model explains 56% of the total variability of the higher order latent variable (Effective Knowledge Management). The four remaining hypotheses were supported and the four moderating variables were not found to be significant. A review of the means provide a clear indication that the five lowest and five highest scoring organisations sit at the extremes of how the managers and care staff perceive them.

2D

Sustainable residential aged care: the influence of environment on carer work satisfaction and stress – results to date

Author: Trevor Hilaire

School of Architecture and the Built Environment, The University of Newcastle

Abstract

People caring for our elderly in residential aged care (RAC) face stress that is unique to their area of work on a daily basis. In particular circumstances members of the care team can also experience job satisfaction that is unique to their industry. Both work place stress and satisfaction have been shown to have an effect on quality of care which has been associated with quality of life (QoL) for all stakeholders in RAC.

The population of Australia and many parts of the developed world is ageing which some consider will increase future demand for RAC including dementia specific care. In addition to ageing, populations are moving towards urban areas, a combination which has implications for environmental and social sustainability.

Evidence is increasing that the physical environment can affect both job performance and job satisfaction through the introduction of potential stressors or aspects/stimuli used to assist work outcomes. Therefore if workplace stress/satisfaction can be affected by the physical environment and workplace stress/satisfaction can also affect the level of care which is associated with QoL then RAC facilities could find it advantageous to consider the insulation of workers from stressors or the promotion of spaces that stimulate satisfaction.

A range of candidates with the potential to impact upon carer job satisfaction and stress has been gathered from academic literature to form the basis of a model of design attributes for sustainable RAC facilities. A preliminary study has sought confirmation from members of the care team in RAC facilities to confirm/extend this model.

Initial responses to the study have confirmed some design candidates but have cast doubt over the influence others may have on workplace stress or satisfaction. Currently as the study is expanded to include more participants the dependencies and relationships between the candidates will be further investigated.

ABSTRACTS

SESSION 3

LIFE AND LEARNING

3A

Do art and music making activities contribute to health and health-related quality of life in older women?

Authors: Jeannine Liddle^{1,2}, Lynne Parkinson², David Sibbritt^{2,3}

¹ The University of Newcastle.

² Research Centre for Gender, Health and Ageing, The University of Newcastle

³ Centre for Clinical Epidemiology and Biostatistics, The University of Newcastle

Abstract

Introduction: The World Health Organization described 'active ageing' as the 'process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age'. In understanding how to optimise health, researchers have focused on changing behaviours relating to illness such as smoking, poor nutrition or inadequate physical activity. Less research attention has been given to behaviours that may contribute directly to health and quality of life as we age; behaviours such as participating in art or music making activities. Existing research suggests these types of activities may contribute to physical, cognitive and mental health.

Objective: to describe the associations between art and music participation and health and health-related quality of life among older Australia women.

Methods: cross sectional analysis of the 2005 survey of the Australian Longitudinal Study on Women's Health for women born in 1921-1926. Women who painted pictures or played a musical instrument were compared with women who did not participate in these activities for selected socio-demographic, social and health characteristics, and health-related quality of life.

Results: Data was available for analysis from 6,973 women, mean age of 81.2 years. Compared with non-participants, women who painted pictures or played a musical instrument were more likely to live in a rural or remote area ($p=0.002$), live alone ($p=0.0001$), have a higher level of education ($p<0.0001$), be more socially active ($p<0.0001$), have fewer illness symptoms ($p=0.0001$), have better functioning in terms of instrumental activities of daily living ($p<0.0001$), and better health-related quality of life based on MOS SF-36 scores ($p<0.0001$).

Conclusions: Participating in art and music making activities appears to be associated with better health and health-related quality of life among a cohort of older women. Analysis of longitudinal data would assist in clarifying if a causal relationship exists.

3B

Using exercise to improve functional wellbeing in semi-dependent older adults accessing day respite

Authors: Daniel F. de Souza and Tim Henwood
University of Queensland and Blue Care, Research and Practice Development
Centre, Brisbane, Australia

Abstract

Weight bearing exercise increases functional capacity in older adults; however the number of studies focusing on those with dependent care needs is limited. The aim of this project is to evaluate the benefits of a weight bearing exercises program among semi-dependent older adults.

Twenty one participants with some level of dependent care needs (age 78.0 +/- 7.5 years, females; n = 17) enrolled in the program. Participants were either existing members of the day respite centre or living independently in a retirement village.

Participants entered an intervention period that incorporated a pre-existing low-intensity exercises and five new moderate- intensity weight-bearing activities undertaking 3 sets of 10 repetitions. All participants will complete 16 sessions, in a period of 8 to 16 weeks, and train in a progressive nature.

Assessment consists of a battery of six functional performance tests and two self-assessed questionnaires. Means for Body Mass Index (BMI), Habitual Walking Speed, Time UP and GO (TUG) and FICSIT 4 balance were 30.2 +/- 6.9 kg/m², 0.80 +/- 0.20 m/s, 12.7 +/- 4.5 s and 16.0 +/- 5.0 points, respectively.

At baseline no differences between day respite and independently living individuals emerged, except for the 30 second (s) Chair Rise to Standing task (n = 0.004), however Person correlation showed significant relationships between BMI and Habitual Walking speed, TUG and FICSIT 4 balance (r = - 0.605 – 0.618, p ≤ 0.012).

This data shows a higher BMI in semi-dependent older adults is associated to a lower functional ability; however previous research and testimonials from participants after initial sessions lead us to expect improvements in functional ability.

3C

The Active Living Framework – mediating physical activity for older people

Author: Beth Fuller
The University of Newcastle

Presenter' profile: Beth completed her PhD in 2009 (University of Newcastle) investigating the role that physical activity plays with older people with COPD. With a background in physiotherapy, and wide experience working in the health and community sectors Beth brings a perspective informed by the systems of care and people and communities.

Abstract:

Health and social benefits of participation in physical activity for older adults have been widely reported, with regular physical activity now a central strategy for older people with chronic conditions. Less though is known of the factors that operate to maintain that physical activity long-term. This paper reports on an application of the Active Living Framework (ALF) in order to understand the factors that mediate physical activity and promote healthy ageing. The paper draws on a mixed methods approach to gather information from a number of sources, to assess the ability of a home-based maintenance intervention to promote physical activity, increase self-management skills and encourage social connection.

The paper will discuss the implications of the findings for the promotion of physical activity within home-based settings. Conclusions are drawn regarding the application of the ALF to the population of interest, and more broadly as a framework to guide planning and service delivery.

3D

Transformations: Transcripts to Poetic Representations

Author: Dr Margaret Simmons
Monash University Gippsland

Abstract

When faced with pages and pages of interview transcripts, the beginning researcher is entitled to feel both excited and daunted. Excited by the potentialities of the data but dismayed because the process of transforming that data into something 'readable' and interpretable can seem challenging, if not overwhelming. This paper shows how I transformed my interview transcripts into poetic representations which helped in my understanding of a group of older women's stories of leaving home. Analysis of the data begins with the transformative act itself because this mode of representing the stories highlights salient points, showing up repetitions, hesitations and emphases. This mode of representation is attractive in and of itself, providing a particularly pleasing aesthetic structure as it pares the work down, removing extraneous words and clunky phrasing that inhibits flow. With the vagaries of spoken conversations, qualifiers such as 'uhms', 'ahs' and 'you know' litter the transcripts and while they might reflect how we 'really' talk, do not translate well to text. While much of the narrative literature suggests the usefulness of poetic representation as a tool of analysis, there is little which attends to the process of this transformation. I devised my own techniques and 'rules' and this paper shows how I produced the poetic representations and how this enabled me to commence the analytical process. I take a piece of transcript and show how it became a poem. I found this activity a joy to perform; it was creative, enlightening and powerful. Undertaking the construction of poems to analyse one's data might also appeal to other qualitative researchers on ageing who are feeling overwhelmed with the weight of their data or who might simply be seeking an attractive and alternative method of data representation.

ABSTRACTS

SESSION 4

COGNITIVE DECLINE AND

DEMENTIA

4A

Variations in strategy contribute to age differences in executive functioning: evidence from behavioural, electrophysiological and cognitive modelling data.

Authors: Whitson, L.R, Karayanidis, F, Michie, P.T. & Heathcote, A.H.
Functional Neuroimaging Laboratory, The University of Newcastle, Australia
Hunter Medical Research Institute, Newcastle, Australia
Centre for Brain and Mental Health, The University of Newcastle, Australia

Abstract

Task-switching has been used to examine age-related decline in cognitive control. Participants alternate between single and mixed task blocks. Mixing cost [(repeats in switch blocks)–(single task trials)] reflects working memory load, and switch cost [(switch–repeat trials)] reflects task-set reconfiguration processes. Behavioural and ERPs were recorded from well-practiced participants (18-80 years). Mixing cost was larger for the Older group, but reduced for all groups across practice days and with increased preparation time. Middle and Older adults took longer to develop a strategy for reducing switch costs than younger adults. While mixing costs continued to be larger for Older adults, switch cost differences were eliminated by the final test. Mixing and switch positivities in cue-locked waveforms were prolonged and broadly distributed for Older adults. This pattern for mixing positivities emerged at 30 years, despite no behavioural evidence for increased mixing cost. Behavioural results suggest Older adults have difficulty with working memory, however, have intact reconfiguration abilities. ERPs suggest strategic differences emerging early in adulthood. These include less efficient preparation and greater activation of post-stimulus processing resources to handle the task at a similar level to that of younger adults. These results are complimented by modelling behavioural data according to EZY diffusion parameters. Parameters suggest older adults need more time for processes of cue/stimulus encoding and response selection and execution, need more evidence to reach response threshold, and have a more conservative threshold than younger adults. Correlations between model parameters and ERP positivities were examine. They suggest that prolonged positivity observed in those over 30y is associated with response conservativeness in the cue-locked period. Correlations between these variables in the stimulus locked period reflect optimal processing and recovery in younger adults that was not present in older adults. Findings are discussed in the context of cognitive ageing theories.

4B

Exploring the differential effects of aging on controlled and automatic inhibitory tasks

Authors: Chantelle Vonarx, Karen Drysdale & Pat Michie
Centre for Brain and Mental Health Research
School of Psychology
University of Newcastle

Abstract

One of the dominant theories of cognitive aging has proposed that age-related declines in cognition are the result of declines in inhibitory processes (Hasher & Zacks, 1988). However, research over the last two decades has found inconsistent patterns of inhibitory decline with age. The current study aimed to reconcile these contradictory findings by directly exploring the relationship between aging and inhibition in line with Nigg's (2000) inhibition taxonomy which distinguishes between controlled and automatic forms of inhibition. Sixty younger adults (18-35) and sixty older adults (60-79) completed a series of inhibitory tasks which required various levels of executive control. It was found that older adults performed at the same level as younger adults on the automatic inhibitory measures of the Inhibition of Return effect and the Negative Priming effect but that older adults demonstrated declining levels of performance on the controlled inhibitory measures of the Stop Signal Task and the Stroop Interference effect. These results provide evidence for a differential effect of aging on controlled and automatic inhibitory tasks. The researchers propose that the incorporation of this controlled/automatic distinction into Hasher and Zacks (1988) Inhibitory Deficit Hypothesis can help resolve many of the inconsistencies that are currently present in the cognitive aging literature. These results also have important implication for the selection of inhibitory measures when investigating inhibitory deficits in aging or clinical populations.

4C

Examining Perceptions of Memory in Relation to Cultural Age Stereotypes in Non-Clinical Older Australians and those with Mild Cognitive Impairment.

Authors: Jasmin Grigg ¹, Deborah Graham¹, Sarah Russell ²

¹James Cook University

²Tablelands Aged Care Services

Abstract

Research suggests there is a link between cultural stereotypes of ageing and performance in the stereotyped domain. A number of studies, most of which have utilised samples from the United States, have demonstrated that activation of ageist stereotypes can have a negative effect on the memory performance of older adults, while deactivating ageist beliefs can lead to memory improvements. However, recent research has found that the salience and experience of ageist stereotypes can vary substantially among cultures that are considered to be alike (i.e. 'Western'), which may in turn moderate the stereotype phenomenon when utilising samples from varying cultures. Thus, semi-structured interviews were conducted and three questionnaires were administered to 18 older Australians (1 with Mild Cognitive Impairment – MCI) to further explore perceptions of age stereotypes and memory expectations, specific to Australian culture. The findings, which are implicated in conducting age stereotype-performance research that is of value to older Australian samples, are discussed.

4D

Structural quality indicators in acute care settings for patients with dementia

Author: Lawrence Lim, Centre for Research in Geriatrics Medicine
School of Medicine. University of Queensland

Abstract

Aims

The number of frameworks supporting quality health care delivery has been developed in Australia and overseas mainly by governmental agencies with emphasis on the significance of patient safety and care outcomes; however, there is a lack of a quality framework for the care of patients with dementia, less a structural quality framework.

The primary aim of the research is to identify and test a suite of structural quality indicators in acute care settings for patients with dementia. Questions to be addressed include whether acute care settings (primarily hospitals) are designed physically to accommodate patients with dementia, whether policies and procedures are in place to optimise good practice and minimise hospitalisation risks, and whether there is an organisational structure and culture within the hospitals to ensure the sustainability of governance of good practices related to structural elements. This research is built on Donabedian's structure-process-outcome quality of health framework.

Methods

A comprehensive review of the literature to identify existing quality indicators was conducted.

Indicators were identified, defined and a means of measurement was noted. A panel of 10

geriatricians, general physicians, nurses, and allied health experts were invited to participate in an expert panel to review (and refine) the indicators. A draft set of indicators was established which included the 'expert panel' derived definition, form of measurement, and source of data.

Future Work

The capacity to collect the data will be tested by interviewing hospital administrators and following the hospital episode of 650 patients aged 70 and over in nine Australian hospitals. The development of the structural quality audit tool is currently being finalised and is expected to complete by July/August 2010. The site visits are scheduled to commence August 2010.

Email: uqlim7@uq.edu.au

Investigation Team: Lawrence Lim, Dr. Melinda Martin-Khan, Professor Len Gray

ABSTRACTS

SESSION 5

DEMENTIA AND COMMUNITY CARE

5A

Pilot study of an exercise program for older adults with dementia in Thailand

Authors: Sirikul Karuncharernpanit¹, Joyce Hendricks¹, Daniel A Galvão², Christine Toye³, Robert U Newton⁴, Orapitchaya Krairit⁵

¹. School of Nursing, Midwifery and Postgraduate Medicine, Edith Cowan University

². Vario Health Institute, School of Exercise, Biomedical and Health Sciences, Edith Cowan University

³. Older Persons' Health Care, School of Nursing and Midwifery, Curtin University of Technology

⁴. School of Exercise, Biomedical and Health Sciences, Edith Cowan University

⁵. Faculty of Medicine Ramathibodi Hospital, Mahidol University, Thailand

Abstract

Purpose: Prior to conducting a randomised controlled trial, a pilot study tested the feasibility of measurement tools and a 4 week exercise program developed for older people with dementia in Thailand.

Methods: A quasi experimental design was used. Ten dyads of people with dementia and their family carers were recruited, in Thailand, and assigned to an intervention or a control group. A four week home based exercise program was applied and an exercise package distributed to the intervention group. Differences were compared over time.

Measurement and tools: Nine measurement tools were used to test participants' cognition, physical function, psychological health and quality of life.

Results: Four dyads completed the exercise program in the intervention group, with one dyad withdrawing after baseline assessment. Four dyads remained in the control group, with one dyad withdrawing because of family issues.

Feasibility of the intervention and measurement tools was reviewed. Most exercise testing protocols were appropriate and feasible. However, exercise adherence was low because of carer issues, attitudes towards exercise and level of encouragement methods. Therefore, the program was refined by screening carers and emphasising health education on these issues. Measures of muscle strength using a machine, the backward walk, and the stair climb were found to be inappropriate and removed. The cognition, physical function, psychological health and quality of life measures were found to be appropriate.

Conclusion: The exercise program and measures were found to need refinement to facilitate a feasible but rigorous trial of the intervention.

Implication: A pilot phase was essential to ensure the feasibility of testing this innovative intervention for people with dementia in Thailand prior to launching a randomised controlled trial.

5B

Early diagnosis of dementia and diagnostic disclosure in primary care : A qualitative study into the barriers and enablers

Authors: Dr Nerida Paterson¹, Ms Jill Phillips², Prof Dimity Pond²

¹ Discipline of General Practice University of Newcastle

² University of Newcastle

Abstract

Background

Increasing evidence suggests that early diagnosis of dementia and timely intervention is beneficial, both for patients and their carers. GPs report that the most difficult problem with the management of dementia is the communication and disclosure of the diagnosis. Previous research indicates the barriers to early diagnosis and disclosure in primary care include:

- Negative attitudes to dementia care/therapeutic nihilism,
- Stigma,
- Paucity of dementia services, especially in rural areas,
- GPs' lack of confidence or training, and
- Lack of a recognised and the time-efficient screening tool.

Methods

A qualitative study, using individual, semi-structured interviews, has been conducted across four Australian research sites. 45 GP participants have been interviewed. The interviews were audio taped and transcribed. Data was then coded and subjected to thematic analysis.

Results

A number of themes have emerged. Enablers to diagnosis and disclosure include: 1) Support from relatives/carers. 2) Access to services 3) the belief in the patient's right to know 4) Confidence in the diagnosis, including specialist support, and 5) the desire of GPs to be honest and open with their patients. Barriers to disclosure/diagnosis include the lack of the aforementioned enablers and also: 1) the stigma attached to lay conceptions of dementia 2) lack of time 3) the reactive nature of general practice 4) the fear of damaging the doctor-patient relationship, and 5) the masking of memory loss by patients or their perception of memory loss as part of normal aging.

Interestingly, even GPs who believed strongly in disclosure, preferred to use the term "memory problems" rather than the term "dementia".

Conclusions

Compelling evidence suggests that there are several structural and ideological obstacles that GPs encounter when attempting to diagnose dementia. However, there is also evidence of factors which encourage diagnosis and disclosure. Future educational supports for GPs need to concentrate on both of these areas.

5C

A pilot evaluation study of a prototype pain algorithm for the assessment and management of pain in the older person in the acute care setting

Author: Joanne R Harmon

School of Nursing and Midwifery, Faculty of Health. University of Newcastle

Abstract

Introduction

The purpose of this presentation is to present the preliminary findings of a small study, conducted as part of a Bachelor of Nursing Honours program that was designed to evaluate the adequacy of an algorithm for the assessment and management of pain in older hospitalised patients. The problem of unrelieved pain in older people is well documented. Pain in the older hospitalised patient is often overlooked and inadequately assessed despite the context of care as a setting for the treatment of pain and suffering amongst its main objectives. A critical review of the literature in relation to pain and older people found no pre-existing clinical practice guideline for the assessment and management of pain in older people in the acute care setting.

The research question for the study is, 'How close to practice is an algorithm for the assessment and management of pain in older people with the clinical practice of registered nurses (RN's) on an acute medical/surgical ward in a large tertiary referral hospital in NSW, Australia.'?

Design and Method

An ethnographic approach was used to answer the research question. Methods included participant observation and semi-structured interview with x Registered Nurses with more than 2 years current clinical experience.

Findings

Preliminary findings show that the practice of nurses is not aligned to the pain algorithm on many levels. Pain assessment largely relied on a demonstration of the functional ability of the patient to complete ad hoc tasks set by RN's and not the use of standardised assessment tools. Management of pain comprised of comfort measures and a reliance on oral medication. Standardised contemporaneous documentation only resulted from compliance with a PCA policy.

ABSTRACTS

SESSION 6

AGEING AND CONTEXT

6A

Graceful ageing in the Philippine context: an Asian perspective

Author: Edmund Ramon Talob

Faculty of Health Sciences, The University of Sydney

Abstract

While a sample of senior Australians in Sydney's eastern suburbs defines graceful ageing as considering retirement options, staying safe and having meaning in life, this study explores this concept further from an Asian perspective. Using a multiphasic mixed-methods survey design, variables associated with the graceful ageing experience were investigated. The first phase involved a study of 152 senior Australians and the second phase surveyed 168 senior Filipinos who volunteered to complete a questionnaire consisting of a graceful ageing scale (0=not at all, 6=very much), the Comprehensive Quality of Life Scale yielding objective wellbeing and life satisfaction scores, and the Meaning in Life Questionnaire measuring meaning in life. Respondents had a mean age of 67.60 (SD=6.25), comprised 41.1% males, and had an average annual income of less than 150,000 pesos (equivalent to AUD 3750 at a conversion rate of AUD 1 = PHP 40). Thirty-three percent rated ageing gracefully 'quite a lot' or 'very much' while 12% 'not at all' or 'not much'. Unlike the Australian sample, there was no significant difference in the mean ratings on the graceful ageing scale between female and male respondents ($t[166] = -.894, p < .01$). Correlations revealed significant relationships between graceful ageing and intimacy, safety and emotional wellbeing. Regression analysis suggested that two components of objective wellbeing, safety and emotional wellbeing, contributed to variances on ratings on the graceful ageing scale and were found to be predictors of graceful ageing in this sample. In conclusion, senior Filipinos in this sample group are ageing gracefully. Graceful ageing as a concept reaffirms the Philippine's family system as a basic ageing infrastructure. Results have policy and service delivery implications for seniors advocacy groups, service providers and government.

6B

Promoting and maintaining wellness among the elderly in South Sulawesi, Indonesia.

Authors: Ms. Kusrini S. Kadar¹, Prof. Karen Francis², Dr. Ken Sellick³

¹.School of Nursing and Midwifery at Monash University /Academic Staff at School of Nursing, Medicine Faculty, Hasanuddin University, South Sulawesi, Indonesia

^{2,3} School of Nursing and Midwifery, Monash University

Abstract

Meeting the health needs of the elderly has become a major challenge for most countries globally as the proportion of elderly within the population rises. This phenomena is not restricted to developed nations, developing nations such as Indonesia are experiencing the similar demographic profile changes. Until recently, providing aged care services has not been a high priority for the Indonesian Health Department. Elderly persons living in rural areas of Indonesia have been notably neglected by Department of Health initiatives.

This paper reports on a survey conducted as the first phase of an action research study designed to explore the health needs of the elderly living in a rural municipality of South Sulawesi, Indonesia, with the view to developing strategies to promote wellness and quality of life among the elderly. The purpose of the survey was to identify services and programs currently offered to the elderly in the region.

Methods: Two data collection methods were use: firstly interviews were undertaken with key staff from the three health organizations responsible for age care services in the area. Secondly a self-report questionnaire was distributed to health professionals working in local community health centres, independent health practitioners, and volunteers. The questionnaire was designed to obtain demographic details and information on the programs and services offered to the elderly.

Findings: Interviews were conducted with three staff from the District Health Office, two staff from the local hospital, and managers of 23 community health centers. A total of 18 questionnaires were completed by health professionals. The results from the survey found that majority of the health professionals still do more curative rather than promotive and preventive work for elderly in the community. Lack of budget and multitasks at the community centers seems to be the main barriers and continuity training related to elderly and more facilities are two main needs for the health professionals in providing services for elders in the community. Information obtained from this survey will be considered by the action research team to design, implement and evaluate supporting programs to meet the health needs of the elderly in rural South Sulawesi, Indonesia.

6C

Strategies for enjoyable healthy eating habits in elderly persons

Author: Rina K.Kusumaratna¹

¹Community Medicine, Faculty of Medicine, Trisakti University

Abstract

Introduction: The diet of the elderly in developing countries is frequently inadequate and even when adequate, is commonly lacking in variety, making it important to examine the contribution of various food groups to nutritional adequacy of the diet of the elderly in a given geographical area.

Methods: A cross-sectional study to ascertain the need for specific food guidelines among community-dwelling elderly at Mampang Prapatan district, South Jakarta, to improve food diversity and implement healthy eating habits. Food intake of 297 elderly was assessed by 3-day non-consecutive SF-FFQ and dietary diversity by food variety score and diet diversity score.

Results: Overall, intakes of energy, carbohydrate, protein, zinc, β -carotene and vitamin C were lower than Indonesian RDA (IRDA) values based on Widya Karya 2004 for persons aged ≥ 60 years. Mean energy intake was 1118.11 ± 394.84 Kcal/day or 4673.7 ± 1650.43 KJ (78.8% of IRDA), carbohydrate 162.58 ± 61.17 g/day, protein 35.32 g/day and fat 37.22 ± 17.8 g/day. Iron, zinc, vitamin C and β -carotene intakes were 14.77 mg/day, 4.19 ± 1.63 mg/day, 39.04 mg/day, and 13.08 mg/day, respectively. Total energy intake was generally lower (78%) than the minimal requirement (80%). The percentage of carbohydrate intake from energy was 58%, protein 16.6%, and fat intake 30% below IRDA. Most macronutrient intakes were lower than IRDA, whilst micronutrient intakes, e.g. iron, zinc, vitamin C, and vitamin E, were very much below IRDA. The average Individual Dietary Diversity Score (IDDS) was six out of 12.

Conclusions: Dietary diversity is useful as an indicator of nutrient adequacy. However, there is a lack of promotion on healthy eating information, particularly on socialisation methods for national food guidelines among older persons.

Keywords: elderly, food diversity, healthy eating, community

6D

Retirement village design, neighbourhood environment and active living

Authors: Andrea Nathan^{a*}, Lisa Wood^a and Billie Giles-Corti^a

^a Centre for the Built Environment and Health, The University of Western Australia

Abstract

Leading a physically active lifestyle, including in later life, has a number of well established health benefits. Therefore, encouraging adults to remain active as they age is important for both physical and mental health. How neighbourhood design influences active living has received increasing attention in recent years. However, findings specific to older adults are limited. Retirement villages are one form of housing available to older adults. Yet, the extent to which village design and the surrounding neighbourhood impacts residents' physical activity is relatively unexplored. Thus, a mixed methods study was designed to examine built and social environment influences on active living in residents of retirement villages.

This paper reports findings from the study's initial qualitative phase. Six focus groups were held with residents from six retirement villages in Perth, Western Australia (n=51). These aimed to identify how residents interpreted 'active living', and to explore environmental barriers and facilitators to active living.

Thematic analysis revealed that residents viewed active living to be more than just physical activity, and included social activity and keeping the mind active also. Moreover, it involved leaving the village and participating in the wider community. Environmental barriers to active living included the presence of hills, lack of accessibility and distance to neighbourhood destinations, and the presence of traffic hazards. Conversely, a positive social environment in the village, having neighbourhood services and facilities present, and pedestrian and traffic infrastructure, facilitated an active lifestyle.

The findings confirmed residents' understanding of active living and highlighted environmental characteristics that facilitated or discouraged active living. To quantify the importance of these characteristics, these insights will be incorporated into a quantitative survey instrument that will further examine factors that influence active living in retirement villages.

ABSTRACTS

SESSION 7

HEALTH LITERACY AND HEALTH

MANAGEMENT

7A

Moving eHealth from Interoperability to an Internet of Patients

Authors: Eugene Lutton, Brian Regan and Geoff Skinner

The University of Newcastle, Design Communications and Information Technology

Abstract

Ever changing and unpredictable events are to be anticipated in a healthcare environment. It is important to supply efficient health services while maintaining the critical care of the patient. Similarly with the supply chain, efficiencies can be found from the utilisation of new identification and sensor network technologies. Our novel proposition for one such efficiency is modelling the interaction and transition of patients in a health care environment, drawing on the current research in supply chain management and “The Internet of Things”. To a computer, a human is an object that may necessitate the observations or recording of its attributes. These attributes can be coupled to other attributes from many other objects. This may include objects such as health professionals, medical equipment, transport services, building infrastructure, treatments and administrative services. It is important that the correct treatment is provided in a timely manner to a health care patient, and this includes the ability to access and record pertinent information. The challenges for a pervasive connected system are the plethora of standards, efficient governance, cost control, privacy and security of data and people, and the technologies required. This paper outlines a framework and future research directions that are necessary to be able to implement such a system.

7B

Exploring health literacy in older people managing osteoarthritis

Authors: Marie Brand, Hal Kendig, David Le Couteur
University of Sydney

Abstract

Health literacy is a person's ability to find, understand and use health information and services. While the role of basic literacy (reading, writing and numeracy) has been widely investigated, a number of other factors are also believed to contribute to health literacy. To date, few studies have investigated the possible influence of these factors.

This research explores the factors affecting health literacy in older people with osteoarthritis. This chronic condition predominantly affects older adults. It is responsible for significant pain and disability in individuals, and costs to health systems. Understanding health literacy in this population is important both because health literacy is poor among older adults, and because low health literacy contributes to adverse health outcomes in chronic conditions.

A review of the literature related to osteoarthritis and older people revealed widespread misconceptions about the condition and its management. Older people often believed that osteoarthritis was a normal part of ageing. Many used complementary medicines with little understanding of whether they were of benefit. There was also evidence that people did not know how to manage pain effectively, did not understand the risks associated with prescribed medicines, and were confused about the use of exercise as a treatment.

The next phase of this research involves in-depth, semi-structured interviews and focus groups with older people with osteoarthritis to discuss their experiences of being diagnosed with osteoarthritis and managing it on a daily basis. By better understanding when and where older people with osteoarthritis seek health information and how they use that information, it may be possible to address existing misconceptions and provide more useful information to improve their care.

7C

The need for a community level social marketing campaign addressing population awareness of asthma in older adults: a review

Authors: Uwana Evers, Sandra C. Jones & Peter Caputi
Centre for Health Initiatives, University of Wollongong

Abstract

This paper outlines a narrative literature review of research on asthma in adults aged 55 years and older, and highlights the need for heightened asthma awareness in this population. More than one in ten older Australians currently has asthma, and there is evidence that the risk of dying from this chronic disease increases with age. Despite this prevalence and morbidity in older people, previous asthma information campaigns have been largely focused on young children and their parents. In addition, there is evidence of under diagnosis, misdiagnosis, and under treatment of asthma in the older adult population. As individuals get older, they often experience a range of symptoms that are typical of multiple health problems; thus doctors commonly find it difficult to isolate the specific respiratory disorder when older patients present with symptoms typical of multiple conditions. Recent studies have demonstrated low levels of asthma knowledge and inaccurate perceptions about asthma held by older individuals in the general community. These misconceptions must be addressed in order to reduce asthma morbidity, increase diagnosis among those with asthma, and improve health-related quality of life for those living with this chronic disease. This paper argues that older Australians would benefit from an asthma awareness campaign. The application of social marketing techniques would lead to a targeted promotion tailored specifically to the needs of older Australians. Product, price, place and promotion preferences would be identified and built into the asthma awareness campaign. The campaign would aim to increase asthma knowledge in the general community and to encourage older adults to visit their doctor if they have any concerns about their respiratory health.

7D

Maintaining Well-being within Chronic pain

Author: Ladawan Panpanit

Victoria University, Melbourne

Abstract

Background: Chronic pain is a common problem among elderly people. Proper management of chronic pain is crucial to promote the general well-being; however, the elderly people who live in Thai rural communities encounter limited resources for their management.

Aim: The study aims to understand the ways the elderly people manage chronic pain and to identify factors that influence their management.

Target group: Participants were 32 males and females aged 60 years or over who had suffered pain for at least six months at the time of commencing the study in July 2008.

Setting: The setting was villages in three different provinces in the Northeastern region of Thailand.

Methodology: A grounded theory approach was utilised for the study with a triangulation for data collection: questionnaires, in-depth interviews, and participant observations. Fifty-eight interviews and eight observations were carried out at the participants' residences at mutually convenient times.

Preliminary Results: The process of self-management that the elderly people utilised to deal with their chronic pain comprised three main phases: (1) making sense of pain, (2) seeking the most suitable approaches, and (3) integrating the approaches into life. Factors influences how the elderly people manage their chronic pain included accessibility to pain relief treatments, accessibility to pain related information, availability of support, and participant-provider-service circumstances.

Conclusion: Chronic pain had a high impact on the daily life of the elderly participants. They experienced challenges to deal with the pain and meet requirement of their daily life, simultaneously. The process to manage the pain was to maintain well-being within chronic pain by modifying the pain to a tolerable degree.

ABSTRACTS

SESSION 8

HEALTH AND WEALTH

8A

Does Being Healthier Lead To Greater Financial Security For Baby Boomers?

Author: Martin Snoke

Ageing, Health and Work Research Unit. University of Sydney

Abstract

As the baby boom cohort (those born between 1946 and 1965) approach traditional retirement age, a number of questions have been raised about their financial preparedness for retirement. The recent global financial crisis has led to many boomers re-evaluating their financial security. An important determinant of higher levels of financial security is an absence of long term illness or disability.

This study aims to examine the relationship between levels of financial security and the presence of ill health. It analyses data on individuals aged 51 to 61 (older boomers) and 41 to 51 (younger boomers) from the 2006 wave of the Household Income and Labour Dynamics in Australia (HILDA) survey. A negative correlation (Pearson $r=-0.255$; $n=225$; $p<0.005$) was found between self reported health and overall financial security of older boomers. A similar relationship was found for younger boomers (Pearson $r=-0.183$; $n=262$; $p<0.05$). The presence of a long term health condition or disability was also found to be related to lower levels of financial security (Older boomers: Pearson $r=-0.228$; $n=225$; $p<0.005$; Younger boomers: Pearson $r=-0.162$, $n=262$; $p<0.05$).

The presence of a long term illness or lower self perceived health status predicted a lower level of financial security prior to retirement. This relationship between health and financial security requires further examination. Will those with health conditions need increased support in retirement? Is it possible to provide financial assistance prior to retirement to boost superannuation? The ability of those with poor health to increase their financial security will have an impact upon their lifestyle and quality of life in retirement.

8B

The Role of Income in the Living Standards of Older Australians

Author: Yuvisthi Naidoo

Social Policy Research Centre, University of New South Wales

Abstract

The 2010 Intergenerational Report predicts that by 2050, over 20 per cent of the Australian population will be aged 65 and over, compared to 13.4 per cent in 2010. The living standards of older Australians will become increasingly dependent on a declining proportion of working age people (18-64) as the ratio of working age people required to support every older person is projected to fall from 5 in 2010 to 2.7 in 2050. These large demographic changes will not only place enormous pressure on the nature and delivery of health, aged care, age-related pensions, and the superannuation system, but will also affect the living standards of older Australians. Within the economics literature, most approaches to assessing the living standards of older people use the income metric as the defining indicator and a benchmark to determine poverty status. This paper discusses the conceptual and methodological limitations of the income metric that are particularly pertinent to old age. Among the limitations are problems with the technical complexity of income measurement, the failure of income to account for assets and the arbitrary nature of income poverty thresholds. Conceptually, the income unit is unable to capture the complexity of ageing as it relates to health, access to savings, social relations, and overall well-being. It is argued that a focus on economic resources is an important but not a sufficient measure of standard of living, in way that elucidates the actual living conditions of older people, and as a guide to informing ageing and social policy. This paper explores conceptual frameworks from sociological traditions that seek to give meaning to the multi-dimensional nature of the living standards of older people.

8C

“Oops, I lost money gambling again. But I just can’t help myself!” Declining executive functions in older Australian gamblers.

Authors: Anna McCarrey, JD Henry
School of Psychology, University of New South Wales, Sydney

Abstract

It has been well documented that older adults experience a decline in executive functions as measured by laboratory based experiments. These include verbal fluency and controlled inhibition tasks (Phillips & Henry, 2007). However, older adults function well in real-life situations taxing executive functions such as shopping errands and many household tasks. In the first of its kind, this study aimed to explore the relationship between executive functioning in older Australians and the popular social pastime of gambling. Younger and older adults played an electronic gaming machine programmed to only lose. With intact executive control, players should terminate play as soon as possible. Results showed that older adults played significantly longer, and lost significantly more money than the young adults. Further, this sample of older adults demonstrated significant impairment in several cognitive and executive functioning tasks relative to the younger adults. Implications for executive impairment contributing to maladaptive gambling behaviours in older Australians are discussed.

8D

Community aged mental health and its role in physical health monitoring

Author: Robyn Garlick

Senior Nurse, NorthWestern Aged Persons Mental Health Program (NorthWestern Mental Health – Melbourne Health), SUNSHINE, VIC

Abstract

Australia has an aging population. The highest rate of growth in our population is in the over eighty-five (85) year olds. This is the age group that has the highest disability rates and the highest suicide rate in Australia. This is of concern. At the same time this change is occurring, we will have to consider a change in our economic framework, with more people retired and less in the workforce. This paper will present a study for the Masters of Philosophy. The study is of an exploratory nature in regard to what is occurring in aged mental health physical health monitoring. This study has two stages. This includes a medical file audit of recorded documentation in case managed elderly and a survey of clinicians working in those teams. The study will be undertaken at NorthWestern Mental Health which covers the metropolitan, northern and western regions of Victoria. It has three community teams covering six geographical catchment areas. This paper will impart information from the literature review on the topic. It will also communicate the beginnings of results from the medical file audit and survey. There is a great deal of emerging literature on mental health consumers and their physical health. There is little literature about aged mental health consumers. There are significant associations between mental illness and increased rates of cardiovascular disease, arthritis, diabetes, smoking and substance misuse. In the elderly these conditions are also on the increase. This combined with the increasing research on the association between suicide and poor physical health is of concern. Does this have meaning for the manner in which we deliver case management of older mental health consumers? Do we need to closer monitor physical health? What is the role of the team and its members?

ABSTRACTS

SESSION 9

AGEING AND MEDICAL CARE

9A

Older patients and adjuvant therapy for colorectal cancer: Surgeon knowledge, opinions and practice

Authors: Mikaela Jorgensen¹, Jane Young¹, Michael Solomon¹

¹Surgical Outcomes Research Centre (SOuRCe), Royal Prince Alfred Hospital and the University of Sydney, NSW

Abstract

Background: More than half of all colorectal cancer cases occur in those over 70 years of age, however older patients appear to be at risk of receiving suboptimal care. Increasing patient age independently predicts non-concordance with national clinical practice guidelines for the referral of colorectal cancer patients for adjuvant therapy. Little is known about the factors affecting surgeons' decisions to refer older patients.

Methods: A self-administered survey was sent to all Australian and New Zealand colorectal surgeons (n=146). The survey consisted of three sections: (i) knowledge of research evidence, (ii) opinions on evidence and adjuvant therapy in older patients, and (iii) self-reported practice, or likelihood of patient referral in a range of scenarios. Demographic information was also obtained.

Results: 70% of colorectal surgeons responded. Surgeons were significantly less likely to refer older patients than younger patients for adjuvant therapy in self-reported practice questions ($p < .001$ for all scenarios). The difference in referral recommendations was greatest if patients were from a rural/remote area, followed by patients with little social support or poor general health status. Large variation in referral recommendations was evident, particularly for older patients. Younger surgeons, surgeons with greater knowledge of research evidence, and surgeons with more positive opinions towards older patients, were significantly more likely to refer older patients for adjuvant therapy.

Conclusion: The findings demonstrate that sociodemographic factors are important determinants of evidence-based care of older patients. The lack of consensus among surgeons, and predictors of surgeons' responses, suggests that increasing awareness and research into adjuvant therapy in older patients may improve this aspect of patient care.

9B

Thromboprophylaxis following Arthroplasty Surgery

Authors: Mirkazemi C., Bereznicki L., Peterson G.

Unit for Medication Outcomes Research and Education (UMORE), School of Pharmacy, University of Tasmania, Hobart, Australia

Abstract

Objectives

The primary objective was to determine the appropriateness of inpatient and post-discharge thromboprophylaxis prescribed for total hip and knee replacement (THR/TKR) patients at a southern Tasmanian hospital. A secondary objective was to assess the incidence of symptomatic VTE.

Methods

A retrospective review was performed over a 2 year period (2007-09) at the Royal Hobart Hospital. Patient demographics, thromboprophylaxis details, the prevalence of symptomatic VTE and bleeds up to 90 days post-surgery were recorded for each patient. Comparisons were made between prescribed thromboprophylaxis and the Australian and New Zealand Working Party (ANZWP) Guidelines for the Prevention of VTE (2007).

Results

300 patients' records (150 THR, 150 TKR) were reviewed. There were 57% females and the mean age was 69 years (SD 10). The average length-of-stay was 7 days (SD 4).

There were no patients with contraindications to thromboprophylaxis. Only 11% of TKR and 17% of THR patients received mechanical thromboprophylaxis. Although most patients (n=296, 98.7%) received inpatient pharmacological thromboprophylaxis, more than 80% did not receive any on discharge (Figure 1).

Only 53% of TKR patients and 1.5% of THR patients received the recommended pharmacological agent, dose and course duration for their surgery type (Figure 2). The remaining 47% of TKR patients and 98.5% of THR received either no thromboprophylaxis or at an inappropriate dose \pm duration.

The in-hospital VTE incidence was 0.7% (n=2) and occurred at a mean of 4.5 days post-surgery. The out-of-hospital VTE incidence was 2% (n=6) and the mean time to out-of-hospital VTE was 14 days (7 to 31 days).

Conclusion

Over 70% of patients (not on an anticoagulant agent pre-surgery) did not receive recommended thromboprophylaxis after their surgery; predominantly due to a shortfall in the duration of therapy prescribed. Contrary to the ANZWP Guideline recommendations, over 85% of patients did not receive mechanical thromboprophylaxis.

9C

Adverse outcomes in older persons presenting to the emergency department: A systematic literature review

Authors: Linda Schnitker¹, Melinda Martin–Khan¹, Elizabeth Beattie², Len Gray¹.

¹ Centre for Research in Geriatric Medicine, The University of Queensland.

² School of Nursing, Queensland University of Technology

Abstract

Introduction

Older persons are particularly vulnerable in the Emergency Department (ED) due to a decreased restorative physical capacity and a diagnostic process which may be complicated by co-morbidities, atypical presentations of common diseases, and frequent polypharmacy issues. The aim of this review is to identify adverse health outcomes which may be ameliorated by clinical actions in ED.

Methods

Electronic databases were searched for appropriate references (CINAHL, Medline, PubMed). Search terms included: 'older person', 'emergency department' and 'adverse outcome'. Relevant systematic reviews from the Cochrane library, which were not detected by the search in the other databases, were added to the results. A hand search of reference lists was carried out. Two authors independently reviewed the selected papers at exclusion levels by title and full text. Any discrepancies were decided by consensus discussion.

Results

After removal of duplicates, 2193 papers were reviewed in a culling process (by title, abstract and finally full text). Thirty-seven papers were considered relevant to this review which focused on adverse health outcomes in the older ED population.

Conclusion

Common adverse health outcomes in the older ED population are functional decline, ED readmission, institutionalisation, and death. Examples of adverse events leading to these outcomes included under triage of illness severity, medication errors, lack of recognition of cognitive impairment or poor discharge planning.

Advanced research

Based on the findings a chart audit of patient records following an ED episode (n=250) has been planned to identify the feasibility of data collection and reliability of data on geriatric emergency care processes, relevant to these key adverse outcomes. Previously published, but untested, process quality indicators (QIs) will guide this process.

This project will inform a more comprehensive PhD program of work, focused on QIs for patients with cognitive impairment presenting to the ED.

9D

Nurse Stress Associated With the Families of Aged Care Residents

Author: Irene Walker

Faculty: Nursing, Midwifery and Health, UT

Abstract

Attracting and retaining an aged care workforce to meet the needs and demands of an ageing population is an increasingly critical issue for Governments and employers of health care organizations. Whilst a number of factors, including those associated with nurse stress have been identified as influencing a nurses' decision to work or remain working in an aged care environment, little attention has been given to any additional stress that may occur when providing support to distressed families of residential aged care residents. Thus, nurses who are experiencing varying levels of work related stress may also experience additional stress when interacting and providing support to distressed residents' family.

The aims of this exploratory descriptive study are to identify factors that potentially create stress in aged care nurses when dealing with families of residents; to determine the impact of this stress; and to identify a strategy based on the findings that will address nurses' stress and reduce nurses' job dissatisfaction related to dealing with the residents' families.

An analysis of survey data and written responses obtained from a convenience sample of aged care nurse respondents (n = 163; response = 81.5%) located in twenty Metropolitan High Care Residential Aged Care Facilities provide evidence of the existence of varying levels of self reported stress, burnout and self-efficacy among study respondents.

Whilst this study provides a useful insight into the current mental health status of aged care nurses, a further understanding of the influences of distressed families impacting on the health and well-being of aged care nurses may assist in the development of suitable alleviating intervention strategies for both aged care nurses and families.

ABSTRACTS

SESSION 10

PARTICIPATION AND NETWORKING

10A

Paws & Effect: A phenomenological study of older Australians and their pets.

Author: Sjaan Williams
Southern Cross University.

Abstract

Rapid change in the fabric of society in Australia has created circumstances of social isolation for many of our elderly population. Concurrently, the situation of domestic pets has altered and particularly with the dog who has been liberated from being tethered to a kennel in the backyard to freedom of the yard, entry to the home and often into the owners' bed.

Many of our elderly offset their social isolation through pet ownership – predominantly with dogs and to a lesser degree, cats followed by birds then other creatures.

The dog, enjoys a premier position in the companion animal ranks, is frequently regarded as a surrogate person and deemed a member of the family. The dogs' propensity to demonstrate unconditional love, joy and welcome after an absence and faithfulness to its owner are attributes that provide substantial benefit to humans. Benefits identified in the 2006 report of the Australian Companion Animal Council are considered to delay the human aging process by increasing levels of physical activity, improving social status and having a positive effect on mental health.

Despite the positives of pet ownership, it is becoming more difficult to be an elderly owner of a companion animal. Environmental concerns, new government legislations, council restraints, retirement village policy are creating situations where pet keeping is curtailed. In extremis it may be necessary to forfeit pet ownership.

A paradox emerges –

Pets are good for your longevity, health and happiness - Versus - NO PETS ALLOWED.

This qualitative study seeks to understand the perspective of the elderly person as it relates to the identified paradox. Narrative and storytelling will be the primary method of generating data. Thematic analysis based on the work of Dowling & van Manen will be applied to the transcribed narrative allowing interpretation of essential themes and explication of the lived experience.

10B

Old Dogs, New Tricks? Online Dating and Older Adults

Authors: Sue Malta, Karen Farquharson
Humanities, Arts and Social Sciences, Faculty of Life & Social Sciences,
Swinburne University, Hawthorn, Victoria

Abstract

This paper reports the findings of semi-structured qualitative interviews with 30 older adults (aged 60 – 76 years), all of whom used online dating websites to find new romantic partnerships. The interviews were conducted using four different interview methods: (1) face-to-face and (2) telephone interviews and (3) email and (4) instant messaging, and have been described previously (see Malta 2009). Most studies of online romantic relationships use younger sample populations making it difficult to generalize to older adults (see for instance, Donn & Sherman 2002) and are usually situated within the psychological literature (for example, Whitty & Gavin 2001). This study describes the phenomenon amongst seniors and positions it within a sociological framework. We chart the progression of older adult romantic relationships, describing the participants' reasons and motivations for going online to look for romantic partners, followed by the way these romances unfold and how the online environment structures their development through various predetermined stages: the posting of personal profiles, the initial contact ("kisses" and "winks"), emails, phone contact, face-to-face meeting, and finally sex. The majority of these online-initiated relationships followed this very structured pattern of progression, with only minor variations. We argue that online dating affords older adults the opportunity to shop around for their perfect match – discarding those who do not suit – simply because of the large number of possible partners available online; a possibility not available through offline means. We further argue that using an online dating website provides a particular structure that fosters the development of a new romance and causes it to unfold through a standardized process that is difficult to circumvent.

10C

Cherished places: retired men's spaces and places

Author: Anthony James BROWN
University of Western Sydney, Sydney, NSW

Abstract

This research is part of a wider PhD investigation into the meaning retired men construct of their current involvement in community activities. One of the unexpected emerging themes of this research is the importance retired men place on certain places and spaces.

Interviews are being conducted with retired men who are members of hobby or enthusiast groups, during the interviews men were asked about their current involvement with these groups, as well as being asked about their previous experiences of paid work. The transcripts of these interviews were subjected to narrative and thematic analyses, narrative analysis being identified as a methodology particularly suited to investigations into personal meaning.

As expected, when asked, retired men related narratives about their working life, current community engagement and the transition to retirement. Although no specific questions were asked about the importance of places most of the men interviewed also identified specific locations that were important to them. Some of these were places that had been important in their childhood or working life; while others were locations currently visited, such as the club house, shed or site of their current community involvement. Nature or bush settings were also identified by some men.

Constructions of personal meaning are multi-faceted, complex and ever changing. Identification with specific places appears to be important to older men as it permeates other narratives about work and retirement.

ABSTRACTS

SESSION 11

RURAL

11A

Narratives from women in drought

Author: Jane Rich
University of Newcastle

Abstract

This research explores women's experiences of living with drought. Drought has always been a part of the Australian landscape, yet as climate change occurs, projections indicate that droughts will increase in frequency and intensity. Despite the significance of drought in Australia, little research has examined the psychological consequences of drought.

This project, which is being conducted as part of my PhD, aimed to understand the diverse ways that drought is perceived, communicated, and responded to, and to investigate the mental and emotional well-being of women living with drought in the context of ageing. The study explores longitudinal qualitative data collected by the ALSWH. Free text comments (N=217), collected at five time points (1996, 1998, 2001, 2004, and 2007) from the same 77 women, were subjected to a narrative analysis. These 77 women self-identified as living with drought and its consequences at least once during the 11 year study period.

Findings indicated that drought is a heavy burden for women and is at the forefront of their lives. The drought burden has influence over a woman's identity, which was challenged by drought. However, the pressure of drought was found to draw out strength and resilience. Parts of Australia have been in drought for over a decade. As such, issues involving ageing also arose in the data. Results emphasised that the experience of drought can not be disentangled from the realities of gender and ageing. Findings will contribute to the improvement and development of policy and practice for those affected by drought.

11B

Men on the land: The identities of baby boom farmers in the border country A narrative study investigating how male farmers within the first wave of baby boomers see themselves as they age.

Author: Zoe Ellen O'Callaghan

John Richards Initiative. Faculty Health Sciences, La Trobe University

Abstract

Over the past decade rural Australia has experienced social, economic and climatic change. Challenges at the farm gate have resulted from economic downturn, prolonged drought, population decline, increasing social disadvantage, service decline, increasing levels of male suicide and mental health issues, and rural ageing. This changing environment presents many challenges to farmers particularly as they age. It impacts on the way they make sense of and manage a changing identity. For ageing farmers, the construction of a farming identity is influenced by prevailing cultural scripts on farming and rurality, inclusive of symbolic images of harsh landscapes, poetic connections to the land, and legends of past pioneers. These archetypal images are called into question as baby boom farmers negotiate the challenges of living on the land, being a 'good' productive farmer who is ageing successfully while trying to hold onto a self that is made meaningful. The broader discourses around ageing focus on the burden that this growing cohort will place on the social security system, and the inability of this system to support them in retirement and old age. Farmers' experiences and voices however are often absent or lost within the bigger debate. The presentation of a singular rural discourse overshadows the differences between farmer's experiences. Most policy-driven/government research is based on quantitative research, particularly trend analysis. My research will provide insight into the personal experiences, struggles and coping strategies of those personally affected. The identities of masculine Australian farmers are familiar to us as symbols of the spirit of the bush - hard working, stoic and resilient, tough, independent, proud and strong. These characteristics provide discursive (cultural) materials for identity construction however are problematic when experiencing an ageing self. This paper reports on the early findings from my research into how farmers construct and manage their ageing male identity amid the tensions of contemporary rural life.

11C

The need for a multidimensional conceptualisation of rural ageing

Authors: J M Wilson, H J Stain

University of Newcastle, Centre for Rural and Remote Mental Health, Orange, NSW , Australia

Abstract

Positive ageing agendas have become the central focus of governments' policy and research globally. However research examining healthy ageing in rural contexts is sparse, and subsequently policy and practice tend to be urban centric. The translation of such policies into rural communities ignores the unique challenges faced by many older rural people in maintaining their independence and health. Population ageing presents significant social and economic challenges at both the societal and individual level. These challenges can only be amplified when combined with the population decline that is taking place across many rural and remote communities. Ageing in a rural community is not a homogeneous experience. Rural communities, even those within short distance of each other, may differ widely in their geographical, social, and/or cultural characteristics. The structural change occurring in communities also differs widely, with some experiencing growth whilst others are in decline. There are, however, commonalities in the challenges of maintaining health and wellbeing, which stem from living in areas of low population density distant to goods, services, and social opportunities. This paper will bring together international research conducted in rural and remote regions to address the multidimensional context of rural ageing.

11D

Looking forward to retirement: the reality for Rural Women.

Author: Rosemary Bowman.

Social Justice Social Change Research Centre, School of Social Sciences,
University of Western Sydney.

Abstract

The research explores the lives of a sample of midlife and older rural women to examine their plans for retirement. In drawing on the lifecourse, semi-structured, in-depth qualitative two hour audio recorded life review interviews the study will compare strategies for financial security for retirement in three cohorts.

The participants are 41 NSW rural women aged from 40 to 65 in three cohorts; 40-45, 50-55, 60-65. The cohorts contain 11, 17, 13 respectively. The women identify of Anglo/Australian background that are or have been married and have children. The participants did not go beyond year 10 (Intermediate) level of schooling. Various rural locations in NSW from townships under 10,000 population and surrounding rural areas were targeted in 2008/2009 with participants from north western NSW, central and mid western NSW and northern NSW.

This investigation of the socio-economic position for post paid work retirement of this sample of rural women incorporates the macro context of their work history, superannuation policy combined with marital status to influence the older life experiences for this sample. The micro context of family and the care work of immediate family i.e. children, adult children, grandchildren and husband/partner and extended family, often with illness as a factor, is examined in relation to economic planning for the financial security for post work retirement. Differences were found in the strategies and engagement with plans for the future between the cohorts.

Research so far suggests that the limited superannuation provided by part-time work, divorce, widowhood and limited superannuation of their husband/partner determined the women's ability for effective financial future planning. This exposes women in this position to the risk of marginalisation and social exclusion with the possible advent of poverty after age 65. In addition to this the study has identified positive aspects to ageing in a rural setting such as close social networks and strong community involvement.

ABSTRACTS

SESSION 12

INNOVATIONS IN AGED CARE

12A

Use of accreditation reports and international standards for continence in frail older people to evaluate the quality of continence care in residential aged care facilities

Authors: Ms Joan Ostaszkievicz¹, Professor Beverly O'Connell², Professor Trisha Dunning³

¹ Deakin University-Southern Health

² Chair in Nursing. Deakin University-Southern Health

³ Sigma Theta Tau. Chair in Nursing. Deakin University – Barwon Health

Abstract

Introduction

Incontinence and its management in residential aged care facilities (RACF) is a significant issue that consumes one third of the residential aged care subsidy [1]. Urinary incontinence affects more than 50% residents and between 10% and 30% experience faecal incontinence [2]. Despite these factors, little is known about the quality of continence care residents receive. The aim of the current study was to describe the quality of continence care in RACF.

Methods

A matrix of standards for continence care in RACF was developed based on recommendations for managing incontinence in frail older adults from the International Consultation on Incontinence (ICI) (3). The ICI recommends:

- an assessment that focuses on potentially treatable conditions and on factors that may cause or worsen UI, contribute to its burden and impact management decisions
- a medical assessment to determine the type and causes of incontinence and nocturia and the appropriateness of pharmacological, behavioural or surgical therapy [3].

Eighty-seven accreditation reports from RACFs in New South Wales were randomly selected and reviewed for the presence or absence of documentation concerning these two ICI recommendations.

Findings

All reports documented that a continence assessment process or system in place, however there was little information about factors that were considered in the assessment process and limited evidence of medical involvement. No reports documented the type of incontinence or possible causes, the causes of nocturia and the appropriateness of pharmacological, behavioural or surgical therapy.

Conclusion

Although all RACF conducted continence assessments, there was insufficient documentation in accreditation reports about the nature and outcome of these assessments to determine if ICI standards were met. This finding indicates a need for guidelines to assist accreditors to evaluate continence care in RACF based on ICI standards.

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12B

Practical use of decision-making frameworks in aged care nursing

Authors: Marina LoMonaco, Tracey McDonald, Thomas Harding
Australian Catholic University (ACU)

Abstract

Background: Nurses who practise within various aged care contexts invariably work without direct contact with nursing peers while at the same time, directing the nursing work undertaken by care staff teams. Decision-making processes used by nurses in such situations are relatively unknown to other than the practitioners themselves, yet the quality and safety of care pivots on the knowledge and ability of these nurses.

Aim and Method: To understand the uptake by registered nurses in aged care of decision-making frameworks and the relevance of these frameworks to aged care nursing practice. This study combines insights gained through a review of the literature and seven years of aged care nursing experience in Australia to establish a basis for a grounded theory study into this area of nursing practice.

Results: Emergent themes: (1) Clinical decision-making defined; (2) Critical reflection in aged care practice; (3) Nurse competence in clinical decision-making; (4) Typical features of clinical decision-making in aged care; (5) Social factors and communication issues in clinical decision-making; (6) Translation of clinical decision-making frameworks to aged care workplaces.

Conclusions: While research around clinical decision-making processes used by aged care nurses is sparse, there is consistent support for the premise that safe and effective decisions require nursing knowledge and skill in certain areas. These include (i) knowledge of nursing and understanding of problems faced by older people in maintaining or regaining health and function; (ii) skills in assessment, diagnosis and intervention geared to older people with a range of health and functional challenges; (iii) development and application of informed interventions; and (iv) ability to apply research to care contexts in ways that safely guide the actions of the care team.

12C

Exploration of 'risk' as a key construct in long life care contexts

Authors: Ron Thompson, Tracey McDonald, Thomas Harding
Australian Catholic University (ACU)

Abstract

Background: Much has been made of the risks and hazards associated with late age vulnerability and the means by which organisations and individuals ensure their safety and life quality. Key to the maintenance of quality of life is one's engagement in self-determination; socialisation; self-confidence and security, and supportive contact with friends and family. Safety is linked with quality of care in environments offering residential services to people with significant cognitive, functional and sensory deficits and inevitable declines in health and function.

Aim and Method: To identify key risk management and quality assurance elements that impact on the safety and clinical care of older persons in residential care, through a review of literature on risk in aged care and beyond.

Results: Emergent themes: (1) Evidence that risk management and quality monitoring systems can improve certain clinical conditions of residents in care; (2) Clinical indicators provide useful guidance but do not indicate comparative rankings between services, nor reliability in terms of risk-weighting; (3) Limited research has been published on whether improvement or deterioration in a resident's clinical condition drives their perception of life quality; (4) Research on non-clinical factors that impact on risk, quality and amenity has not featured in Australia; (5) There is a need for more research on assessment of the effect of environmental quality and safety on quality of life in residential aged care; (6) an overall risk management framework suitable for this context is not evident.

Conclusions: While research around the safety and quality of services for older persons has occurred here and internationally, there is a need for further research on predictors of risk for this cohort in community and residential care, as well as an evaluation of the effect of risk minimisation strategies on quality of life experiences during late age in care service situations.

12D

National menu survey – a first for Australia developing new menu standards for residential aged care.

Authors: Karen Abbey¹, Dr Olivia Wright², Professor Sandra Capra²

¹ Nambucca Valley Care Limited, Locked Bag 175 Macksville NSW 2447

² University of Queensland Department Nutrition and Dietetics St Lucia Campus

Abstract

The menu is the primary tool for delivering nutritional care to aged care residents. Understanding foodservice preferences and presenting food that residents enjoy may reduce risks of nutritional decline and improve quality of life. Residents in aged care facilities have different nutritional needs to the general population and require energy dense, small, frequent meals rather than the application of typical “dietary guidelines”. The consistency of approaches for aged care foodservice menu design in this country is unknown. A national survey was distributed to all aged care facilities in Australia (n=2648) in January 2010 to investigate items including menu cycle, food preferences, portion control, menu design and structure, menu food selection, menu choice, food fortification, production and delivery systems.

Results on the first 250 surveys (10%) indicate portion control, serving sizes and food fortification were inconsistent nationally. These inconsistent approaches compromise meals meeting the nutritional needs of residents. Menu design was similar nationally, however, with rates of malnutrition in residential aged care in Australia averaging 30-50% [1], the current means of developing menus may not be optimal for the frail aged population. This innovative survey is the first step towards assisting aged care facilities to optimise menus for nutritional care.

References

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ABSTRACTS

SESSION 13

EXPERIENCES OF AGED CARE

RESIDENTS

13A

The Storyline Project: Determining a therapeutic use for the personal archive in aged care and dementia.

Author: J Mihelcic

Faculty of Information Technology, Monash University, Melbourne, VIC

Abstract

Longer lives and the growing incidence of dementia predispose us to increasing numbers of individuals suffering from conditions that affect memory. It also creates the opportunity and the impetus to explore how disciplines, both academic and practitioner, can work together to support the needs of the elderly, drawing on research and its findings to validate a therapeutic role for the personal archive.

The aim of the Storyline Project is to create the personal archive: an electronic register of objects, stories and images which represents autobiographical memories. Each entry in the archive is annotated with important information that provides context for the documented people, events and places.

This research explores how archival practice and emerging technologies can therapeutically contribute to health and aging. It proposes the use of qualitative methods to build a model for the personal archive from the perspective of its owner. The project aims to preserve the memories of individuals and thereby alleviate some of the physical and psychological demands for both the person being cared for and the carer.

The challenge with technology, at a time where it is evolving so rapidly, is to understand where theories converge to support their use. The project highlights the need to see the environment and systems through accumulated knowledge that is grounded in theory as well as observation and practice.

This presentation will reflect on the process undertaken to identify the several common themes which emerged through multidisciplinary research, particularly in regard to the nature of memory and the triggers which constitute the record. It will explore my experience and the need to validate the combination of both old and new theories to create new concepts.

13B

How do elders experience being in a residential care setting?

Author: Nadine Mesnage

AUT University, Department of Rehabilitation & Occupation Studies, Auckland, New Zealand

Abstract

Those aged 85 and older make up the fastest growing sector of the New Zealand population. While it is anticipated most elders will remain in their own homes within the community for most of their lives, the absolute number of those requiring or seeking residential aged care is expected to rise. Therefore, the importance of understanding and improving elders' experiences of living in a residential care setting gains social importance.

The aim of this phenomenological study is to explore elders' lived experience of being in the aged care setting, with a particular focus on understanding how the setting design enables and/or restricts elders' to engage in everyday activities. Up to eight participants will be recruited from two areas in one of Auckland's residential care facilities, where the residents have the ability to make decisions regarding their daily activities. A residents' meeting will be held where the study will be explained and residents have an opportunity to ask questions. Information sheets and consent forms, with reply paid envelopes, will be left at the facility. Voluntary participation will be indicated by return of a signed consent form. Up to eight participants will be recruited according to the inclusion/exclusion criteria. Data will be gathered via individual interviews which will be audio taped and transcribed. A semi-structured interview schedule using open questions aimed at eliciting participants' experiences of being in different spaces within the setting will be used. A typed copy of each participant's stories will be returned to them for verification of accuracy and completeness. In line with phenomenological research methods, an interpretive process will be used to analyse the collected stories.

The research approach will be guided by the work of Heidegger (1927/1962) and van Manen (2001). Lincoln and Guba's (1985) model of trustworthiness in qualitative research will be used to inform rigour in the project design and methods.

13C

Rehabilitation in Residential Aged Care Facilities.

Authors: Mitchell, L., & Pachana, N.
University of Queensland

Abstract

Research in residential aged care facilities (RACFs) provides the opportunity to help foster independence among the residents of such centres. This is particularly relevant in consideration of the fact that research by Resnick and Remsburg (2004) highlighted a link between diminished involvement in everyday skills and activities, with an increasing decrement in functioning overall. Evidence for an individualised, person-centred approach, in which the resident is encouraged to maintain functionality, using compensatory strategies where necessary, has been found to be efficacious (e.g., Zimmerman et al., 2005). Similarly, such a focus has been linked with reduced behavioural and psychological symptoms of dementia, and subsequently a reduction in the experience of carer burden (Brodaty, Draper, & Low, 2002). Unfortunately, the routine-care structure commonly adopted by RACF management and staff does not readily lend itself to such priorities in care. It is therefore important to consider the characteristics of RACFs if rehabilitative protocols are to be encouraged.

This presentation will consider the barriers to rehabilitation in RACFs, as well as looking at those characteristics that can help encourage rehabilitation. In order to effectively promote a rehabilitative outlook for the betterment of all in RACFs, such factors are important for researchers to consider.

13D

Development and Evaluation of a Person-Centred Environment and Care Assessment Tool and Guidelines for use

Author: Chanel Burke

Faculty of Nursing Midwifery and Health. University of Technology Sydney

Abstract

People living with dementia are entitled to a quality lifestyle where their inherent worth and dignity are respected and maintained and their individual needs are met, that is, through a person-centred approach to care. When adopting person-centred services, managers and staff of residential aged care homes focus on maintaining the individual's personhood by recognising their uniqueness, reinforcing their strengths and personal attributes, while allowing choice and decision making in an environment that supports these opportunities. This humane approach to service delivery can assist residential aged care homes to meet many of the requirements of the Australian Aged Care Residential Standards (Standards).

As residential aged care services have no evaluation measure that links the requirements of the Standards and person-centred principles, this study has addressed the need to develop an industry friendly, yet robust measurement tool for this purpose. The PhD study has focused on developing and testing the Person-Centred Environment and Care Assessment Tool (PCECAT), and the accompanying Person-Centred Environment and Care Assessment Guidelines (Guidelines). The PCECAT assists residential aged care staff to assess whether their service has the necessary requisites in place to support person-centred care, and if service provision is person-centred according to Kitwood's (1997) principles that align with the Standards.

The domains and items of the PCECAT were theoretically derived and confirmed for content and face validity by an expert Delphi panel that included national and international expert aged care nurses, other health care professionals and gerontological researchers. The Delphi-confirmed version of the PCECAT and the Guidelines were piloted on two separate occasions by two independent researchers and care managers in 89 residential aged care services of different sizes and locations across New South Wales. The PCECAT was amended in content and layout after piloting. Testing and re-testing of the amended PCECAT has occurred, inter-rater reliability has been established, and factor analysis and other validity tests are underway to confirm the final version of the PCECAT.

ABSTRACTS

SESSION 14

WORKFORCE

14A

Ageing Academics: Career Management Challenges for Universities

Author: Jacqui Larkin
Macquarie Graduate School of Management

Abstract

An ageing academic workforce presents sustainability issues for Australian universities. Close to 40% of all Australian academics are aged 50 and over (Department of Education, Employment & Workplace Relations (DEEWR), 2009), signalling that a large proportion of academics will exit the workforce within the next decade. This is a vital trigger for university management and their HRM policy makers to be responsive and proactive, as it raises crucial sustainability issues for Australian universities related to human resource management (HRM), knowledge management and the role of the university within advanced, modern societies. As Australia's ageing academic workforce presents an unprecedented situation for its universities, it is important to gain an insight on how universities are dealing with this significant workforce issue. This study focuses on the career management for older academics. The main aim is to examine the role of the university in the career management for academics in the 50 – 59 year age bracket. In particular, this research seeks the perceptions of both academics and university management on the suitable ways of supporting the careers of academics in this latter life-stage. This presentation will report some of the initial findings on future career plans based on interviews with Australian academics in their 50s and with university management.

14B

Rethinking the forgotten generation: An exploratory study

Author: Wanda N. Pryor

Faculty of Business & Law, School of Management, Edith Cowan University,
Joondalup Campus

Abstract

This paper contributes to the epistemological body of knowledge in workforce management, and in particular to the emerging body of knowledge on the mature aged management cohort in the Australian workplace context. Academically, new knowledge from this study will contribute towards our pedagogic understanding how the efficacy of embedded knowledge and workplace structures/cultures influence the building of future sustainability and innovation.

This study uses a mixed method approach to map broad organisational and individual trends and to investigate the critical relationships, attitudes, relationships, stereotyping within organisational cultures following the lead of others in the social research field, (Maxwell, 1998; Flick, 1992; 1998; Fielding G. and Fielding L., 1986; Denzin, 1978; Campbell and Fiske, 1959). This research uses the constructivist approach to guide the investigation (Guba and Lincoln 2006). Outcomes from this study will produce recommendations and opportunities to government, industry bodies and organisational leaders about workforce policies, macro and micro-economic risk imbalances in the fields of an ageing workforce, knowledge retention, management, knowledge creation, innovation, leadership, workforce planning, organisational cultures, and workplace structures.

14C

Challenging nursing students' attitudes about older people.

Author: Dr Sharyn Hunter

School of Nursing and Midwifery. University of Newcastle Introduction

Abstract

The number of older people and their levels of morbidity are increasing across the globe. Today nurses require specific knowledge and skills to care for older people. In Australia, it was identified that undergraduate nursing programs' curricula were lacking in preparing nursing students for this role. Traditionally, teaching nursing about older people was integrated across the undergraduate curriculum without targeted outcomes. In 2004 there was a national recommendation that a compulsory course be dedicated to nursing older people in the undergraduate curriculum. Despite the introduction of a discrete course into the undergraduate program at the University of Newcastle, Australia, students' attitudes about nursing older people were negative and their learning outcomes poor. This presentation describes an educational approach and concepts that were utilised to challenge the students' attitudes.

Method

The aim of this project was to positively influence nursing students' attitudes about older people and contribute to their work readiness. A Learner-Centred Framework guided the educational approach (Boud & Prosser, 2004). This Framework included four determinants:

1. acknowledging the learner's context; 2. engaging the learner; 3. challenging the learner; and 4. providing opportunities for them to practice their learning. Strategies were developed from this framework. Three concepts were also woven into the course content; healthy ageing, person-centred care and evidence-based practice.

Results

Course statistics and student feedback demonstrate a change in nursing students' attitudes about older people.

Conclusion

A discrete course in an undergraduate program focused on nursing older people can challenge nursing students' attitudes and contribute to their work readiness.

14D

The ageing Australian healthcare workforce: Implications and issues

Author: Fleur Danielle St. Amand

John Richards Initiative, Faculty Health Sciences. La Trobe University

Abstract

Recent employment figures by the National Health Workforce Taskforce have shown that Baby Boomers comprise approximately 57 % of the current health workforce. Subsequently, their impending retirement will create significant shortages in the Australian healthcare system. In addition, the number of younger employees entering the workforce is also decreasing, posing a threat to the availability of health services to future generations. It is the impending shift in the age structure of the population that will drive future demand for hospital and health care services due to the requirement of additional treatment and more hospital care as the population ages. This paper draws on the findings of a broad, systematic literature review of the issues associated with the ageing of Australia's healthcare workforce, and the implications this has for service delivery into the future. Findings demonstrate that it is rural areas of Australia that will suffer the largest shortages in the healthcare workforce in the coming years, in spite of the implementation at all levels of medical education, training and practice, of explicit regulatory and incentive-based initiatives and programs to increase medical workforce recruitment and retention. While recruitment to rural areas has been a high priority for rural and regional practices in the past decade, the average period for these workers is low, and this is problematic in retaining the number of professionals needed to staff these facilities. The mean age of doctors and nurses is increasing gradually, a trend which is even more pronounced in rural Australia. In light of this mounting problem, harnessing the experience, skill and knowledge of existing older healthcare workers is becoming increasingly important. With the current political focus on Australia's healthcare system, this paper will provide an important perspective on a situation that will become critical if left unaddressed.

ABSTRACTS

SESSION 15

PHYSICAL ACTIVITY

15A

Walk and Talk for Well-being

Author: Elisabeth Lord

School of Social Work and Human Services, and School of Public Health, The University of Queensland.

Abstract

This paper explores men's meaning of walking engagement, or otherwise. What hinders, and what enhances their motivation to be involved.

There are some good reasons why men should be walking, especially if they are depressed, suicidal, and lonely or have poor health. Men experience poor mortality, poor morbidity and poor health related behaviours. We know that exercise is beneficial physically, socially and emotionally for all, especially if you are at risk of suffering depression or poor mental health.

The men in my study were identified 'at risk' as a result of experiencing one or more negative impacts or indicators of suicide risk, the methods chosen were selected for sensitivity. Understanding these men's experiences and listening to their concerns required a qualitative approach. Focus groups were held firstly to inform the program design. For 6 months the researcher walked weekly with the three men's groups in Toowoomba, the Redlands and Hervey Bay. The 132 walk participants fell naturally into three distinct groups of men: stayers, stoppers and non-starters.

Semi-structured interviews were held with men before they commenced walking, and again when they completed the walking program or when they dropped out along the way. Walk diaries were completed by the men for the duration of their involvement. Data on the non-starters was collected by way of focus groups.

Too many men are inactive. Different patterns of engagement revealed by the men hold the key to the design and development of public health programs for those at risk. This study has given a voice to the silent issue of men's experiences of walking engagement.

This paper will provide an avenue to discuss the results of the study. Recommendations will be made for engaging men in physical exercise programs.

15B

Barriers and motivators to physical activity in older home care clients

Authors: Elissa Burton¹, G Lewin^{1,2}, D Boldy¹

¹Curtin University of Technology, Perth, WA

²Silver Chain Nursing Association, Perth, WA

Abstract

Introduction: The Australian population aged 70 years and over continues to increase as people spend longer in “old age” than previously. Over a quarter of a million Australians receive home care services each year to help them remain living in their own home. Having elderly people living independently will avoid the need for significant provision of residential care facilities and being mobile and maintaining strength is an important aspect of remaining independent.

The aim of this study was to identify any differences between the levels of physical activity between older home care clients who have participated in a restorative program, which includes a focus on increasing lifestyle activity, and home care clients who have received ‘usual’ home care services; and to explore the barriers and motivators to being active.

Methods: A random sample of 750 Silver Chain clients who received a restorative program and 750 clients who received ‘usual’ home care services were invited to complete a survey. Survey data were summarised using descriptive statistics and analysed with either t-tests or chi-squares (depending on the variable) to identify significant differences between groups.

Results: Just over five hundred surveys were completed, a return rate of 33.4%. More than three quarters (78.5%) of respondents were women and the mean age of the group was 82.13 years and ranged from 70 to 102 years of age. Initial results indicate a mean PASE score of 82.22 for the group and it appears that the participants receiving a restorative home care service were more active until they reached 90 years of age compared to “usual” home care clients. However this trend was reversed in older age. The four barriers to being physically active most commonly mentioned by survey respondents were: ongoing injury/illness, age/too old, nobody to be active with and a lack of transport.

15C

Feasibility of an intervention to reduce sedentary time in non-working older adults

Authors: Paul Gardiner¹, Elizabeth Eakin^{1,2}, Genevieve Healy^{1,2}, Neville Owen^{1,2}

¹Cancer Prevention Research Centre, School of Population Health, The University of Queensland, Brisbane

²Baker IDI Heart and Diabetes Institute, Melbourne

Abstract

Introduction: Sedentary time (too much sitting, as distinct from a lack of exercise) is a risk to health that is prevalent among older adults. Stand Up For Your Health is the first intervention to examine the feasibility of reducing and regularly interrupting sitting time in non-working older adults.

Methods: A quasi-experimental (pre-post) study with 59 participants (mean age=74 years, range 60-92; men=25%), conducted over two weeks. The intervention was a face-to-face goal setting consultation and one individually-tailored mailing. Feasibility was assessed as program reach and retention, change in accelerometer (GT1M)-derived sedentary time (< 100 counts per minute, expressed as a percentage of total wear time); and, participant satisfaction.

Results: Reach was 85.7% of those screened and eligible; retention was 100%. Participants decreased their sedentary time by 3.2% (95%CI: -4.18 to -2.14) or the equivalent of 30 minutes per day (when standardised to 16 hours of waking time), had four more breaks in sedentary time per day, and reported high satisfaction (median 9/10). There were no adverse events.

Conclusion: This novel study indicates that older adults are able to reduce and interrupt their sedentary time following a brief intervention and that they find such changes acceptable. Stand Up For Your Health provides an important platform for understanding the strategies used to change sitting time in older adults and may inform further interventions to reduce leisure-time sedentary behaviour in other populations.

POSTER PRESENTATIONS

Valuing non-participation in an online community

Author: Oliver K. Burmeister

School of Computing and Mathematics, Charles Sturt University.

Abstract

Non-participation in an online community need not be the antithesis of social interaction. Reported here is a thirty month ethnographic study of members of Australia's most successful online community for seniors. The study focused on the early stages of a human computer interaction (HCI) methodology known as value sensitive design (VSD). One outcome was that participants in the study highly valued being present in their community, without feeling the need to contribute to the activities of the site. The findings were related to the literature on lurking, however the reasons for lurking suggested by the literature did not apply to this group of seniors. Furthermore, although some researchers have described lurkers as 'second-class members', the findings of this study were that, this was not the case for many of the participants. Instead they empathised so strongly with the stories they read online that, they identified with the community, and thought of themselves as members. Using exemplary illustrations to demonstrate participant views, this paper concludes that, it is important for designers to recognise lurking as a valid activity and one that should be effectively supported.

The lived experience of family members who visit a hospitalised older person when the older person has delirium.

Author: Jenny Day

School of Nursing and Midwifery, Faculty of Health. University of Newcastle

Abstract

The importance of hospital services perceiving family members as integral to quality care and supporting them is highlighted in contemporary literature (Higgins & Cadd, 1999; Lindhardt, Bolmsjo, & Hallberg, 2006). Despite this acknowledgement their role and concerns are often unknown and overlooked during hospitalisation of the older person (Higgins & Joyce, 2007; Lindhardt, Hallberg, & Poulsen, 2008; Stenwall, Sandberg, Joˆnhagen, & Fagerberg, 2008). Family support strategies have been suggested by some authors however there is little exploration of family member experiences of delirium as a basis for these strategies and there is little strategy evaluation. Exploring and understanding the experiences of family members during an episode of delirium, and applying this understanding is therefore gaining increased importance.

The study described in this poster adopts a phenomenological approach to explore the lived experience of family members of hospitalised older people who have delirium. Phenomenology has been selected because it is concerned with the study of human lived experience and the meaning embedded in that experience (van Manen, 1990). The intent is to fully describe experience from the perspective of family members themselves (Mapp, 2008), to show the meaning of family member experiences and demonstrate the significance of being a family member visiting an older person who has delirium in an Australian hospital context. Findings from this study have the potential to increase recognition of the impact of experiencing an older person who has delirium on family members themselves, to increase recognition of the family within comprehensive care of the hospitalised older person in the Australian healthcare system, and to inform further research into family support and involvement interventions.

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Psychosocial characteristics of midlife women with arthritis: results from the Australian Longitudinal Study on Women's Health

Authors: M.L. Harris, D.J. Loxton, D.W. Sibbritt, and J.E Byles

Research Centre for Gender Health and Ageing, School of Medicine and Public Health, University of Newcastle

Abstract

Chronic diseases present an ongoing public health challenge, particularly for women at midlife. The development of chronic disease is recognised as a multifactorial process with psychological stress highlighted as a possible mechanism. Purpose: To investigate the relationship between psychological stress, psychosocial factors and arthritis. Methods: Cross-sectional analyses were conducted using data from the fifth mailed population-based survey (conducted in 2007) of the Australian Longitudinal Study on Women's Health. The sample for this analysis focused on the 10,532 women from the cohort born between 1946 and 1951 who responded to the questions relating to arthritis diagnosis. Results: Diagnosis of arthritis is characterised by widespread health-related concerns including poor psychosocial functioning and health-related quality of life. In comparison to women without arthritis, univariate analyses revealed that self-reported arthritis was associated with a 2.5-fold increase in experiencing moderate/high levels of stress, a 1.4-fold increase in experiencing negative interpersonal life events and significantly reduced levels of optimism and perceived social support (all associations $p < 0.001$). Having psychiatric (depression and anxiety) and physical comorbidity (low iron and osteoporosis), being overweight or obese, making frequent visits to a GP, experiencing gastrointestinal symptoms and sleep disturbance as well as having reduced quality of life across all spheres were also predictive of arthritis status at the univariate level. Following adjustment for behavioural, demographic and medical characteristics using a backward stepwise elimination process, being diagnosed with an anxiety disorder remained as the only independent psychosocial predictor of self-reported arthritis in the multivariate model (OR=1.3, 95%CI: 1.1, 1.6, $p < 0.005$). Conclusion: Women with arthritis are more likely to report a range of psychosocial and health-related problems. Longitudinal analyses are required to elucidate the pathways in which the stress process (stress perception and anxiety) and psychosocial mediators may contribute to arthritis risk and poor adaptation in terms of health-related quality of life.

FULL PAPERS

EXPLORING HEALTH LITERACY IN OLDER PEOPLE MANAGING OSTEOARTHRITIS

Marie Brand¹, David Le Couteur², Hal Kendig¹

¹Faculty of Health Sciences, ²Faculty of Medicine, University of Sydney

Abstract

Health literacy is the ability to find, understand and use health information and services. While the role of basic literacy has been widely investigated, other factors are also believed to contribute to health literacy. To date, few studies have investigated the possible influence of these factors. This research explores health literacy in older people with osteoarthritis. This chronic condition predominantly affects older adults, and is responsible for much pain and disability. Understanding health literacy in this population is important, partly because health literacy is poor among older adults, but also because low health literacy contributes to adverse health outcomes in chronic conditions. A review of the literature revealed widespread misconceptions about the condition and its management. Older people often believed that osteoarthritis was a normal part of ageing. Many used complementary medicines with little understanding of whether they were of benefit. There was also evidence that people did not know how to manage pain effectively, did not understand the risks associated with prescribed medicines, and were confused about the use of exercise as a treatment. The next phase of this research involves interviews and focus groups with older people living with osteoarthritis to discuss their experiences of being diagnosed with the condition and managing it on a daily basis. By better understanding how they find and use health information, it may be possible to address existing misconceptions and provide more useful information to improve their care.

Rationale

Over the last 10-15 years it has been recognised that many people, even in developed countries, have low levels of literacy. This has led to concerns about how these individuals manage their own health and interact with the health system. Researchers from a range of backgrounds have been investigating this problem and the term 'health literacy' has become widely used to describe the skills people need to access and use health information.

Much of the research in this area has focused on basic literacy skills, i.e. reading, writing, numeracy and oral communication, in the health context. A number of tools have been developed to assess this aspect of health literacy, and poor performance in these has been correlated with a variety of adverse health outcomes (1). Despite the importance of these findings, it is generally recognised that basic literacy skills are only part of a broader concept of health literacy. Other factors which are thought to be relevant include previous experience, scientific knowledge, motivation, socioeconomic and cultural background, social support and environmental factors (2, 3). Health system factors, such as the accessibility of services, and the delivery method and complexity of information, are also important. They are seen as either contributing to health literacy itself or as interacting with the health literacy skills of the individual to determine health outcomes (4).

To date, measures of health literacy have not included assessments of these broader conceptual factors. Nutbeam stresses that one of the key features of health literacy is that it is context specific, and he goes on to say that 'it is highly likely that different measurement tools will be required for different ages and stages of life' (5). A necessary step towards developing such tools is better understanding of how people seek, understand and apply health information in specific contexts. In line with this thinking, this research explores health literacy in the context of older people managing osteoarthritis.

Osteoarthritis is a chronic disease of the joints. It primarily affects older people and is associated with high levels of pain and disability (6). Many individuals live with the condition for decades and self-management is an important component of treatment. This is of interest as self-care has been put forward as a key area where health literacy may affect health outcomes, and poor health literacy has been associated with adverse outcomes in individuals with chronic disease (4, 7, 8). There is also evidence that health literacy, as measured by existing instruments, tends to be low among older people (9). Individuals with osteoarthritis are therefore a population of interest as they are older people dealing with a chronic illness where low levels of health literacy could be contributing to poor health outcomes.

Methods

A review of the literature was undertaken for studies relevant to health literacy, in its broadest sense, in older adults with osteoarthritis. The databases Medline, Cinahl, Scopus, PsychINFO and ERIC were searched using three major search terms or groups of terms: osteoarthritis; older people, aged, and related terms; and a series of other medical subject headings or keywords, including health literacy; health education; patient education; self efficacy; self care; knowledge; health knowledge, attitudes and practice; sick role; patient participation; and patient compliance. The search results were combined to identify studies which related to osteoarthritis, older people, and various factors thought to be relevant to health literacy.

A large number of studies were obtained which related to the knowledge, attitudes, beliefs and behaviours of older people with osteoarthritis. These were reviewed and those which dealt with clinical diagnosis or management were excluded. Intervention studies were also excluded, as were articles that related to individuals undergoing joint replacement. Studies relating to musculoskeletal disorders or arthritis generally were included if they involved a significant cohort of patients with osteoarthritis. Articles not limited to older adults were accepted as long as older individuals were also included or the impact of age was being studied.

Results to date

Over 2,000 studies were obtained from the combination of the original literature searches. After the application of exclusion criteria, 205 articles were selected for further evaluation. Of these, 72 were considered directly relevant and underwent full text review. These identified a number of issues for this population.

Although the review revealed a range of experiences and attitudes, there were several areas where lack of understanding, misconceptions or confusion about the nature and management of osteoarthritis were apparent. One of the most frequently mentioned was the belief that osteoarthritis was a normal or inevitable part of ageing. There was also poor understanding of the appropriate use of pain medications and a lack of awareness of the risk profiles of medications. Confusion about the value of

exercise was reported, with individuals often concerned that exercise would aggravate their condition. In addition, complementary medicines were frequently used without any understanding of whether these were likely to be of benefit.

Next phase of research

The findings of the literature review were used to further guide the development of the research question and to determine the most appropriate methods for the next stage of the research. Since the focus is on the perspective of individuals, and factors which may influence how they access and understand health information, the study was initially planned to be entirely qualitative. However, some specific questions identified in the literature review were considered to be more appropriately addressed by quantitative means. This led to a predominantly qualitative, mixed methods approach being selected.

The qualitative research components will consist of interviews and focus groups with older individuals with osteoarthritis. Since little is known about what influences health literacy in this situation, a key concern was to avoid making assumptions about what would be important to individuals and directing the interview accordingly. A semi-structured episodic interview format was chosen (10). Four key stages were selected, which were: before being diagnosed with osteoarthritis; at the time of diagnosis; in the early period after diagnosis; and at the current time.

A grounded theory approach will be used to analyse data from the interviews (11). This was considered the most appropriate choice as little is known about what factors influence health literacy in this context. Although models of health literacy suggest a range of factors which may be relevant, hypothesis testing would be premature since it is unclear which would be expected to be of greatest influence in this situation, and whether this would be expected to be the same for all individuals.

Focus groups are planned to take place after the individual interviews. It is anticipated that participants will explore the same episodes as those used in the interviews but that the interaction between individuals within the groups will provide an additional perspective on the issue (12). The focus groups may also be used to confirm or explore in greater depth the themes which emerge from the interview data.

There will also be two quantitative components to the research. The first of these is the collection of background information from all participants. This includes basic demographic data, information about their general health, and details of their osteoarthritis. This is primarily to give context to the information provided during the interview or focus group but is also intended to allow some comparison of the participants with the broader osteoarthritis community. The second component is a survey that participants will be asked to complete and return. It contains some items about access to information sources, and others which relate to common misconceptions identified during the literature review.

In keeping with the mainly qualitative approach, purposive sampling is being used to select the initial informants (13). Individuals attending the rheumatology clinic at Concord Repatriation General Hospital in Sydney are being invited to take part in the study. While this group could be seen purely as a convenience sample, they also fit the profile of an extreme case sample since only a small proportion of all individuals with osteoarthritis are referred to a rheumatologist (6). Theoretical sampling will be used to select subsequent interviewees and focus group participants based on

factors that emerge as significant in the analysis of data from the early interviews. Key inclusion and exclusion criteria are that participants must: be 55 years of age or over; have been told by a doctor that they have osteoarthritis; not have had a joint replacement; be able to communicate in English; and not have any significant sensory or cognitive impairment.

Implications for policy and practice

It is anticipated that this research will contribute to the understanding of how older people managing osteoarthritis use health information, and how this relates to existing models and measures of health literacy. This may help to explain how some common misconceptions occur, and allow better targeting of information to this population. Ultimately, it may be possible to develop new health literacy measures for this group which encompass factors beyond basic literacy and numeracy.

Summary

This research explores health literacy in older people managing osteoarthritis, a chronic condition associated with high levels of pain and disability. The literature indicates that these individuals do not always have the knowledge or understanding to manage the condition appropriately. By using a predominantly qualitative mixed methods approach, it is hoped to identify some of the factors influencing the use of health information. This may suggest approaches which could improve the understanding of self management and improve health outcomes.

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THE ACTIVE LIVING FRAMEWORK – MEDIATING PHYSICAL ACTIVITY

Beth Fuller

The University of Newcastle

Introduction

This paper reports on an application of the Active Living Framework (ALF) in order to understand the factors that mediate physical activity and promote healthy ageing.

Active living is a way of life that integrates physical activity into daily routines. Key elements have been identified in the ALF (see Figure 1). The ALF is consistent with the view that the maintenance of healthful physical activity involves behaviour change, readiness to change, understanding and commitment to social learning and quality of life, and most critically positive self-efficacy. The health, social and societal benefits of participation in regular, moderate levels of physical activity for older adults have been widely reported. Some studies consider benefits at physiological and functional levels (1); other studies report improvements in mental and cognitive function (2), while other researchers have described the links between physical activity and emotional-being, psychosocial functioning and quality of life (3).

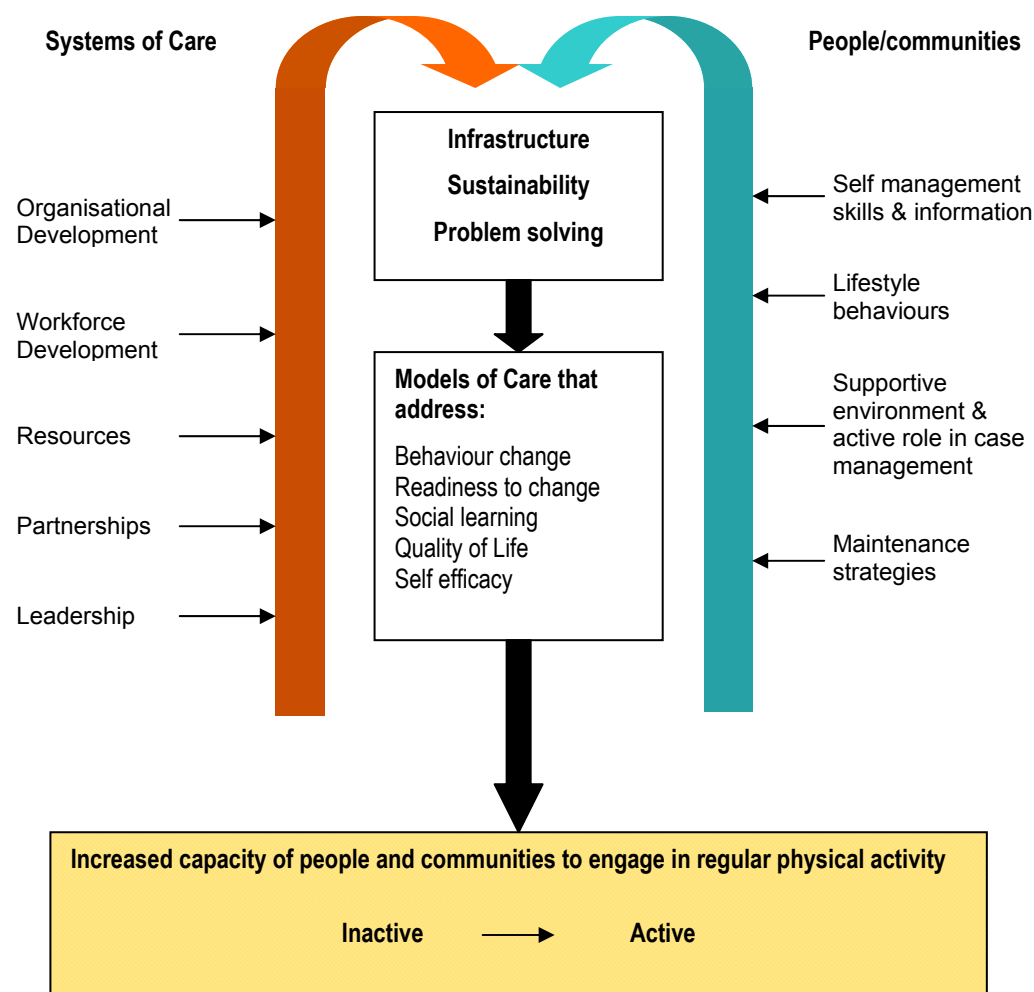


Figure 1: The Activity Living Framework

Methods

The Active Living Intervention Journey

The Active Living Intervention (ALI) provided data on primary and secondary end points. Primary end points gave measures of physical activity levels (questionnaire responses, pedometer readings and self-report diaries) and behavioural influences on maintenance (questionnaire responses gathering information on readiness to change, goal setting, resilience, adoption and maintenance). Secondary end points provided measures of a clinical nature (pulmonary function tests, six-minute walk test, BORG scale of perceived exertion, and health related quality of life (SF-36: mental health and social functioning subscales)).

The study was conducted in the urban area of Newcastle in the Hunter region of New South Wales, Australia (2003-2004), and was conducted as a pre-post trial whereby participants were randomly assigned to one of two groups and exposed to the same intervention 24 weeks apart. Recruitment occurred from Pulmonary Rehabilitation Programs (PRP), and involved participants with moderate to severe Chronic Obstructive Pulmonary Disease (COPD). Participants were exposed to the 12-week ALI followed by a 12-week home-based maintenance program. Baseline measures were collected on all participants and study measures were collected across four time points. Figure 2 summarises the study intervention.

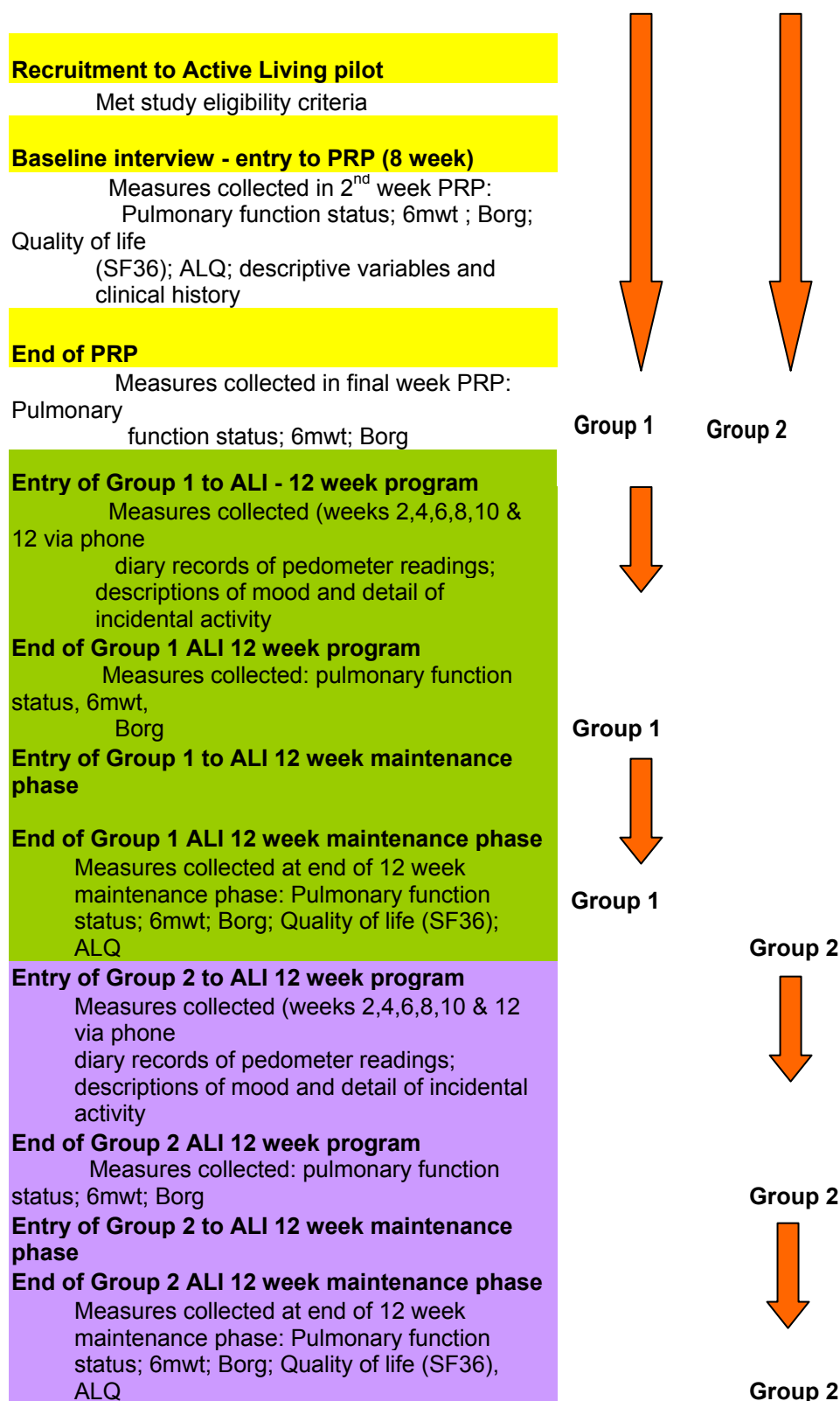


Figure 2: The Active Living Intervention

Statistical analysis

The groups were assessed and compared at baseline using descriptive statistics and statistical hypothesis tests. Outcome measures over time for each group are reported. The paired t-test was used to compare continuous variables between two time points

Results

Fifty four participants commenced the ALI; thirty seven participants completed the intervention, giving a completion rate of 80% across the study period. In general, participants were substantially compromised by their COPD and other diseases, affecting physical and social activity. At baseline 96 comorbidities were reported by Group 1 and 74 co-morbidities by Group 2. Eighty four per cent of the participants reported having two or more comorbidities, with 5 participants reporting their health was affected by six or more co-morbidities. Twenty five per cent of participants reported they never drank alcohol; regular drinkers reported using alcohol on one of two days each week. A total of 79% reported they had been smokers.

Physical Activity Behaviour

At the conclusion of the ALI, the majority of participants in both groups were now exercising occasionally or regularly. Participants indicated that they were walking at either a light or moderate activity level. The results appear to support consolidation of walking tolerance, with the majority of participants from both groups being able to sustain between 5 and 30 minutes. An increase was noted in the number of Group 2 participants walking 5-15 minutes without needing a rest (n=5; 27%) post intervention) as well as Group 1 who were capable of walking 15-30 minutes without a rest (n=10; 53%) post intervention).

Physical Activity – Attitudes, Beliefs and Motivators

Participants drew on their self-motivation rather than gain practical support and motivation from family and friends. Participants' attitude emerged as an important determinant in selecting physical activity. Awareness of self (self-efficacy, self confidence and self-management) and sense of control were predictive of a positive attitude. Male participants reported activity choices where they felt productive and were involved in meaningful productive activity. Female participants were more likely to select their activity plans around meaningful social opportunities.

Secondary Clinical Measures

Table 1 reports functional measures observed for the ALI participants. The small sample size limits power and Type II errors are possible.

Table 1: Summary of Clinical and other Outcome Measures

Clinical Measures	Group 1				Group 2			
	Start of PRP	End of PRP/ Start of AL	End of AL/ start of AL maintenance	End of AL maintenance Group 1	Start of PRP	End of PRP	End of AL/ start of AL maintenance	End of AL maintenance Group 2
6mwt mean (<i>metres</i>) 95% CI	282 (247-316)	348 (317- 378)	352 (319- 385)	376 (347- 406)	295 (251- 340)	345 (290- 399)	351 (292- 410)	347 (297- 392)
<i>p-value</i>		<.0.0005*	<.0.0005*	0.001*		0.004*	0.004*	0.015*
FEV ₁ –mean (<i>litres/minute</i>) 95% CI	1.16 (1.01- 1.32)	1.12 (0.95- 1.29)	1.10 (0.95- 1.26)	1.16 (0.99- 1.33)	1.21 (0.93- 1.49)	1.20 (0.92- 1.48)	1.20 (0.92- 1.48)	1.11 (0.86- 1.35)
<i>p-value</i>		0.841	0.590	0.215		0.921	0.762	0.236
FVC –mean (<i>litres</i>) 95% CI	1.84 (1.68- 2.00)	1.87 (1.66- 2.08)	1.88 (1.67- 2.10)	2.01 (1.82- 2.20)	1.99 (1.63- 2.36)	2.00 (1.65- 2.35)	2.04 (1.64- 2.44)	1.97 (1.55- 2.39)
<i>p-value</i>		0.603	0.303	0.008*		0.964	0.569	0.603
FEV ₁ /FVC mean (%)	63.09	60.39	59.70	58.26	59.69	59.28	58.93	57.21
95% CI	(57.34-68.84)	(53.16- 67.62)	(53.06-66.34)	(50.57-65.96)	(53.95- 65.43)	(52.24- 66.31)	(51.48-66.39)	(50.21-64.20)
<i>p-value</i>		0.561	0.068	0.074		0.861	0.750	0.382
Borg Mean (<i>rank</i>) [95%CI]	3.10 (2.43- 3.76)	3.05 (2.46- 3.00)	2.70 (2.19- 3.22)	2.32 (1.78- 2.87)	3.03 (2.61- 3.44)	2.53 (1.96- 3.09)	2.53 (1.98- 3.07)	2.67 (2.10- 3.23)
<i>p-value</i>		0.195	0.397	0.107		0.035*	0.011*	0.085
SF-36 Social Functioning Median	62.50 (50 – 100)			100.00 (62.5 – 100.00)	75.00 (37.5 – 75.0)			68.75 (37.5-87.5))
IQR (Q1 – Q3)				0.05				0.525
<i>p-value</i>				0.05				
SF-36 Mental Health	61.47			62.95	59.11			62.00
(95% CI)	(52.8 – 70.2)			(54.7 – 71.2)	(50.8 – 67.5)			(54.3 – 69.6)
<i>p-value</i>				0.525				0.523

Most of the participants who completed the maintenance component demonstrated improvement on 6mwt, indicating gains in exercise endurance. Gains were also described in perceived endurance (Borg) for Group 2. Changes in pulmonary function and quality of life were less marked.

Quality of Life

Three of the four measures under review demonstrated improvement, although only one measure achieved a statistically significant improvement (SF36 – Social Functioning subscale: end of study p value=0.05). A positive shift for both groups was noted for the Mental Health subscale.

Discussion

The observations reported give support for a behaviourally-based physical activity intervention effect on adherence and maintain physical levels, at intensity important to the participants.

The small and localised sample size limits the generalisability of the results to other settings and further work is needed establish external validity. It is possible that participants recruited at different PRP sites may have reacted differently to intervention materials and implementation processes.

The results suggest that a maintenance approach has the capacity to improve self-management skills and integrate those skills to achieve increased incidental physical activity for older adults with a diagnosis of COPD.

The effect on maintenance seemed to be linked to the type of social activity. Those who adopted 'productive' activities, increasing sense of worth and social connectedness, and reinforcing meaningful social roles, were more effective in maintaining pedometer output across both phases of the intervention, compared with others who did not.

The role of the supportive environment provided a critical component; it appeared that having friends who were interested in physical activity was a strong predictor of activity levels. Two groups achieved high levels of output: those who received support, and a second group of participants who were in an environment of low personal support, and used the ALI as an opportunity to address this gap. Participants who lived in areas where urban design was conducive to incidental activity or may have had ready access to transport had stronger results.

Factors critical for maintenance

Information on motivations and barriers provided by participants was consistent with reports on maintenance approaches in the literature, across a range of conditions and settings. The extent of social reinforcement is noted by O'Brien Cousins and others as a critical factor for encouraging the initiation of physical activity, and determining whether that activity was enjoyed. The links between social, productive activities and fitness (4-5), the effectiveness of brief intervention approaches (6) and the importance of having strategies in place to prevent relapse (6-8) provided direction during the study design process. The results presented in this paper reaffirmed these factors as being critical for the maintenance physical activity and promoting good health amongst older adults with COPD.

The findings of the ALI give support to the concept of self-efficacy and social support being neither mutually exclusive nor independent in their effect on health (9). Other determinants that appear to have particular effects include access to transport, and safe and supportive environments.

The role of social support was less clear. From the sample population available to the study it appeared that social support and social networks were important factors for a number of participants, but not essential for everyone. Stronger results were found when family social support was provided and environmental cues and prompts were included in the design. This observation concurs with that of Marcus who reported that, where these features are in place, there is greater effect on adoption and maintenance of physical activity (10).

Conclusion

Three factors stand out as being most strongly associated with incidental activity: self-efficacy, social support from family and friends, and local opportunities to walk. Importantly, these factors, which are integral to the ALF, can be used to inform community-based campaigns that target older people with chronic conditions.

In its most simple demonstration, the ALI was successful in establishing a rapport with the participants, and increasing the capacity of some individuals to engage in regular physical activity, and move from relatively inactive to active states in their daily living. The ALI design provided an effective communication method for reinforcing behavioural changes as well as a timely and efficient way of collecting information on processes and outcomes. The socio-ecological platform upon which the ALF was established provided a suitable basis upon which to address immediate and longer-term action and the intervention demonstrated success in advancing outcomes.

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SUSTAINABLE RESIDENTIAL AGED CARE: THE INFLUENCE OF ENVIRONMENT ON CARER WORK SATISFACTION AND STRESS

Trevor Hilaire

Faculty of Engineering and Built Environment, The University of Newcastle

Abstract

People caring for older people in residential aged care face stress that is unique to their area of work on a daily basis. Similarly the care team can experience job satisfaction that is also unique. Both work stress and satisfaction have been shown to influence quality of care which has been associated with quality of life for stakeholders in residential aged care. Evidence is increasing that the physical environment can influence work outcomes through the introduction of potential stressors or stimuli. Therefore if workplace stress/satisfaction can be affected by the physical environment and workplace stress/satisfaction can influence the level of care, which has been associated with quality of life, then residential aged care facilities could benefit from considering the insulation of workers from stressors complemented by the promotion of spaces that stimulate satisfaction. Consideration of these aspects of the built environment has implications for environmental and social sustainability as the population of Australia and much of the developed world are ageing which could be accompanied by an escalation in future demand for residential aged care with increasing levels of dementia specific care. A range of variable factors or environment characteristics with the potential to impact upon carer job satisfaction and stress has been sourced from literature to form the basis of a model of design attributes for sustainable residential aged care facilities. Preliminary research has sought confirmation from members of the care team in residential aged care facilities to confirm and possibly extend this model. Initial responses to the research have confirmed some design factors, cast doubt over the influence of others and provided some new factors. As the research is expanded to include more participants the dependencies and relationships between the factors and the relevance of the discovered factors will be further investigated.

Rationale

The population in Australia and much of the industrialised world is ageing due to increased life expectancy, medical advances, low levels of fertility (1) and the baby boomer generation (2). This shift in demographics has inherent implications for the community's ability to enhance human and social resources which can directly affect their well-being and sustainability (3). The built environment also has an impact on social well-being (4).

Members of the community in the later stages of life require varying levels of care including the care provided in a residential aged care (RAC) facility. The proportion of Australians aged over 65 years is anticipated to grow to 20% of the population by 2023 (5) with an anticipated increase in demand for RAC (6).

Quality of life (QoL) for residents is a primary objective in RAC facilities and has been the subject of many studies, mostly from a care perspective (7) it does however encompass multifaceted domains. There is a strong relationship between QoL and care (8) and also a relationship between care and workplace stress/satisfaction (9). Workplace environments can have an effect on workplace stress/satisfaction (10) and as RAC facilities are workplaces for those who provide a significant proportion of resident care (11) it would seem reasonable to propose the research question:

How does the built environment affect worker stress or satisfaction in residential aged care?

The area of this research among the multi faceted domains comprising QoL is indicated in Figure 1.

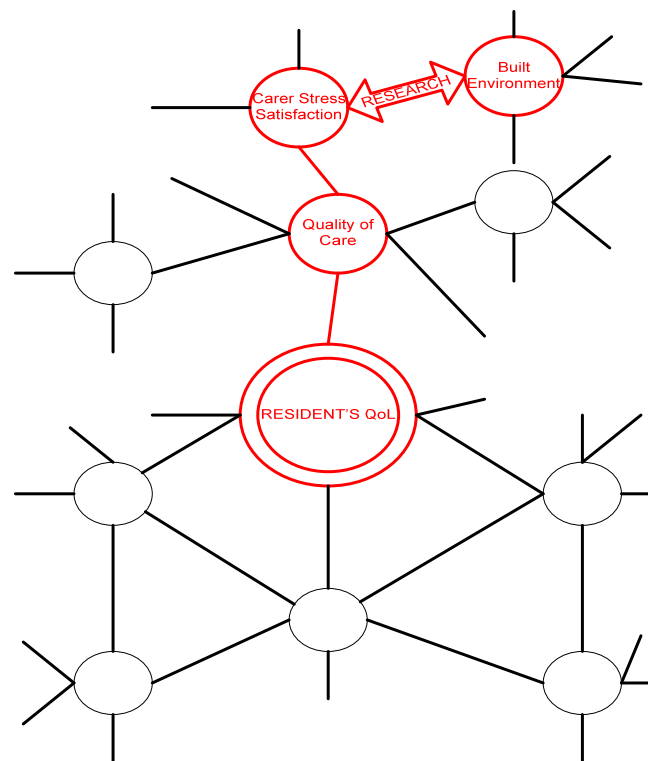


Figure 1: Area of this research being the link between the built environment and carer stress/satisfaction

Methods

The perception of workplace stress/satisfaction set in the context of RAC facilities renders the knower and the known inseparable. Moreover since the participants' values influence their perceptions and shape their responses, these values cannot easily be isolated from the enquiry and must be accommodated in the design of the research. This research will utilise a process of inductive reasoning to determine categories for analysis and obtain probabilistic evidence for the conclusion. This combination of factors would indicate a constructivist position (12).

The reliance on individual perceptions amongst the study population has lead to the research being carried out in two stages to provide a point where those aspects of the physical environment in RAC with a potential to impact on carer workplace stress/satisfaction identified in literature (factors) forming the basis of the initial stage can be assessed and new factors and relationships discovered can also be accommodated in the ensuing stage. Between stages the research design will be revisited allowing accommodation of any new material.

A number of factors have been identified including aggressive or disruptive behaviour, training, residents with high-risks of falls, relatives, privacy, dignity and autonomy, meals, aesthetics, noise, animal-assisted therapy and music (13).

It is intended that Stage 1 will establish a link between the built environment and carer work place stress/satisfaction, discover new factors and discover relationships between factors (see Figure 2).

Achieving the research aim relies on the participant's personal experiences and the individual perceptions and interpretations of the ill defined notions of stress or satisfaction. This reliance on evaluation of personal experience lends itself to analysis of a narrative provided directly by the participants, to this end a qualitative study comprising a structured but informal interview with a mixture of dichotomous, ordinal and open ended questions has been utilised. Stage 1 has gained Ethics Approval from the Human Research Ethics Committee at the University of Newcastle.

The study population has been recruited from those with hands on experience as a part of the care team within a RAC facility. The minimum requirement for participation in the research is enrolment in a TAFE Certificate III in aged care as this method of training would ensure some hands on experience. Participants have been recruited by two methods:

1. The placement of notices in staff areas detailing the research, providing contact details and inviting participation, and
2. The provision of a similar document to "The Lamp" a publication of the NSW Nurses Association for inclusion in an issue.

Stage 1 Study

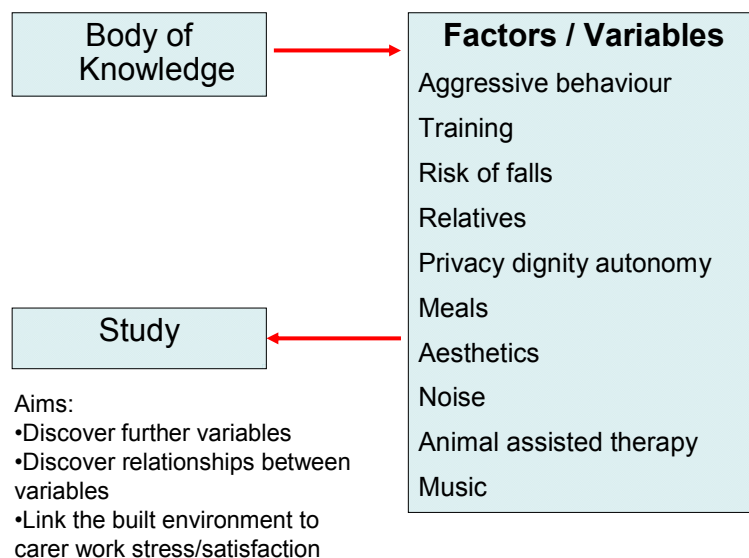


Figure 2: Stage 1 of the research

Stage 2 of the research proposes to:

- Test the factors and relationships from Stage 1 for importance and satisfaction.
- Carry out a case study of facilities to test the factors and relationships and confirm their relevance,
- Identify factors for consideration in environmental design,
- Produce a tool to assess facilities in regard to the potential for work stress/satisfaction

This stage of the research (see Figure 3) will be in two strings. It is intended that carers will form the study population in one string on a similar basis to the initial stage with the added requirement that they are linked to a limited number of RAC facilities. The factors and relationships identified in Stage 1 will be tested for their importance to the study population, in this way a global indication of their relevance will be provided.

The second string of Stage 2 will comprise a number of case studies involving the facilities related to the study population to investigate satisfaction with identified aspects of the built environment.

The two strings will be cross referenced to identify the potential for the built environment to affect workplace stress/satisfaction in RAC facilities. A tool will also be developed which may aid further studies considering design attributes.

STAGE 2 Study

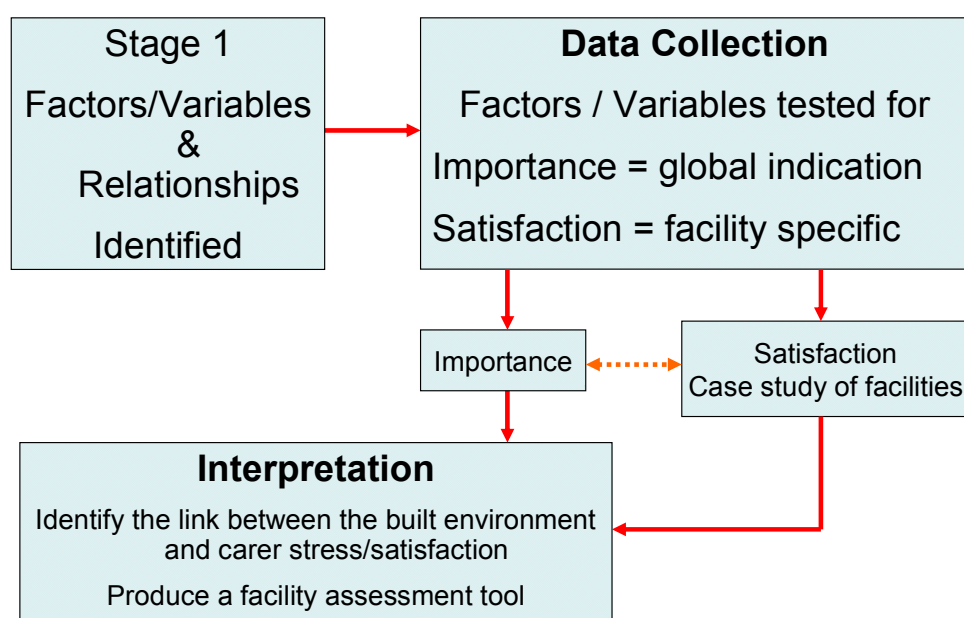


Figure 3: Stage 2 of the research

There have been a number of issues faced in the research to date including noise from other factors contributing to work place stress/satisfaction. The built environment is not the major source for workplace stress/satisfaction with management and interpersonal relationships (14) having a much more significant impact. These other issues can arise during the course of an interview however the informal interview structure has provided the opportunity to direct the participant's thoughts back toward the built environment.

Many carers form interpersonal relationships with residents and have a deep concern for their well-being therefore aspects of the built environment that please and placate residents may contribute ultimately to the workplace stress/satisfaction of carers. These aspects of the built environment are arising as new factors and will be included in Stage 2 of the research. One of the dynamics leading to the decision for a staged approach was the anticipation of new factors.

Results to Date

Stage 1 of the research is well under way and although analysis has not progressed to the point where dependencies and relationships between factors have been investigated several new factors have begun to emerge from the initial data. These potentially new factors will be the subject of another literature review.

These potentially new factors include:

- *Distances of travel within the facility*: although not a factor identified in the initial literature review and not included in the interview questions, distances of travel within the facility has received negative comments by a significant number of participants to date. There have been no negative comments, thus far, about the length of corridors or distances between resident's rooms. Comments include the location of lifts and the need to leave a part of the facility to reach another part of the facility.
- *Sunlight*: has been mentioned by more than half the participants to date in a positive way e.g. "...it let more sun in, it was much happier..." and "...they love to sit in the sun, they don't want to go outside, but they will sit in front of the glass in the sun..." and "The glass and the light is fantastic...". Conversely the lack of sunlight was included in negative comments e.g. "... it's really old and dank, there's no sunlight."
- *Outdoor areas*: more than half the participants to date have mentioned them in a positive way e.g. "I like the outdoor areas." and "We found that since we got the new table and chair setting outside, everyone sits together outside because it's nicer". Access to outdoor areas does not always appear to be essential e.g. "And they look out at the gardens, the bush and the aviary, they love their aviary".
- *Climate control or air conditioning (AC)*: has been mentioned by all participants who work in a facility or part of a facility without it. The only negative comment to date regarding AC has been in a case where the air flow was misdirected and inconvenienced residents. Comments relating to AC include "The old section doesn't have air conditioning and the new section does, I prefer working in the new section." and "I like working in the new section and it's got air conditioning. Air conditioning is a big thing for me, in summer it gets sweltering." and "It holds it's heat, it's really, really hot...it's stifling and they didn't put in air conditioning."
- *Communal areas*: There is a requirement for facilities to provide communal areas for residents (15). Indications at this early stage of the research point towards a preference for residents to gather in areas of higher activity like entry lobbies and corridors which are not designed for these activities. This occurrence, although very popular where it occurs, has not been evident in all facilities and there may be a number of factors that contribute to the popularity over designated "lounge areas". The relationship between communal areas, sunlight and outdoor areas will need further investigation.

Implications for Policy and Practice

This research is concerned with the ways the built environment can influence individual's varying perceptions of workplace stress/satisfaction in RAC facilities. Consequently the research problem lies ontologically at the junction of building design and sociology.

By increasing the understanding of the role of these factors it is hoped that direction will be provided for further studies, centred on the role the built environment may play in the provision of quality care and ultimately quality of life in RAC. The potential subsequent effect could have implications for social and urban sustainability.

Summary

Throughout the world populations are ageing and it is anticipated there will be an increased requirement for RAC. Meeting the community's needs for these facilities is necessary to provide a sustainable environment.

QoL for residents is a requirement of all stakeholders and the primary aim for RAC facilities. It has been studied predominantly from a care perspective and can be affected by the level of care the resident's experience. The level of care in turn can be affected by the stress or satisfaction of the carers which may have a link to the physical environment. Hence the research question how does the built environment affect worker stress or satisfaction in residential aged care?

Factors with the potential to affect carer work stress/satisfaction have been identified in current literature. The research will then proceed in two stages providing an inherent advantage of enabling a point with an opportunity to identify relationships between variables, confirm newly discovered variables with literature, revisit the research design and provide a level of flexibility.

Stage 1 will involve structured interviews with carers in RAC to determine if there are any additional factors, the relevance of those identified and if there are relationships between the factors. The data collected will be analysed predominantly with qualitative methods to identify major themes. In this way the outcomes of Stage 1 will identify the theoretic link between the built environment and carer work stress/satisfaction, increase the understanding of the factors and contribute some factors towards further studies of environmental design.

Stage 2 will test the factors found in Stage 1 on a larger population to determine the importance and satisfaction of each. This data will be cross-referenced with case studies of the facilities to identify the importance of variables and relationships for carer work stress/satisfaction and produce a tool to assess the potential of stress/satisfaction in a facility.

This research will uncover new knowledge by increasing the understanding of the role of these factors/variables and provide direction for further studies centred on the role the built environment may play ultimately quality of life for residents in RAC. The potential subsequent effect could have implications for social and urban sustainability.

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PROMOTING AND MAINTAINING WELLNESS AMONG THE ELDERLY IN SOUTH SULAWESI, INDONESIA: AN ACTION RESEARCH STUDY

Kusrini S. Kadar

School of Nursing and Midwifery, Monash University/Nursing Study Program, Faculty of Medicine, Hasanuddin University, Makassar, Indonesia

Abstract

Meeting the health needs of older people has become a major challenge for most countries globally as the proportion of older people within the population rises. This phenomena is not restricted to developed nations, developing nations such as Indonesia are experiencing similar demographic profile changes. Until recently, providing aged care services has not been a high priority for the Indonesian Health Department (Abikusno, 2006). Older persons living in rural areas of Indonesia have been notably neglected by Department of Health initiatives, as can be seen from the lack of access to social security and social services for older people. Existing government programs for older people are limited in terms of funds and resources and tend to be sectoral, centralized and specifically targeted. These programs focus mainly on poor older persons with specific problems, in particular those who are neglected. Such programs for older people are based on standardised and centralised guidelines that do not address the diverse and changing needs of the older population. This paper presents an overview of the research approach and reports on the implementation of the initial phases of the project.

Rationale

The purpose of this study is to investigate the services and programs needed to support older people in Indonesia and specifically in Gowa Municipality, South Sulawesi to maintain and enhance quality of life using an action research approach. The specific aims of the study are to:

- a) Identify current services and programs that exist for older people in Indonesia and specifically in South Sulawesi,
- b) Describe the role and practice of community health professionals and health teams responsible for delivering services to older people,
- c) Identify service gaps that potentially impact on the quality of life of older people, and
- d) Develop strategies to address aged care service gaps.

Methods

This study utilises an action research methodology. Action research was first introduced by Kurt Lewin in the 1940s (Coghlan & Brannick, 2010; Dick, 1993; Parkin, 2009; Reason & McArdle, 2004). Stringer and Genat (2004) defined action research as a reflective process of progressive problem solving led by individuals working with others in teams to improve the way they address issues and solve problems. This research approach generally is adopted when change is the primary agenda within natural settings. The action research approach is characterized by a series of open-ended cycles of planning, action, analysis and critical reflection. Data generation when working through the cycles can involve both quantitative and qualitative methods such as surveys, interviews and focus groups.

The researchers considered action research the most appropriate approach to achieve the aims of the study and to facilitate change. Parkin (2009) suggests that organizational change can be facilitated if health professionals are equipped with appropriate knowledge to facilitate implementing changes in complex workplaces. The other benefit of this approach is that it expands professional capacity, provides a set of tools to improve general health service planning and program development, and establishes collegiate relationships with service providers engaged in delivery of care to elderly people such as community nurses. It is expected that change will result from participation in this study, including a better understanding of how to improve health outcomes for elderly people in their area. Reason (1991, cited in Parkin, 2009) also suggests that through raising awareness, reflection and collective self enquiry empowers group members to develop knowledge and solve problems within their own organisations or communities.

Action Research Study

The plan for this study was to implement at least four of the action research cycles outlined below. This paper however reports on findings from Cycle 1 and 2. Approval to undertake the study was obtained from the host University and the Indonesian Government.

Cycles	Activities
Cycle 1	<ul style="list-style-type: none"> • Exploratory/diagnostic/fact finding phase involving identification and critique of services provided to older people, establishment of relationship with service providers, reporting of findings to health services. • Gap in service provision highlighted and agreed. • Recruitment of participants interested in working on developing a model of care to promote health and wellbeing of older people.
Cycle 2	<ul style="list-style-type: none"> • Established the action research group. • Disseminated findings from questionnaires to the group member and facilitated discussion among the group member (action research group). • Identified methods for data generation and analysis. • Two meetings were held with group members and also with the DHO key staff. Evaluation was made by the researchers and the DHO staff to decide where to proceed next
Cycle 3	In this cycle, series of meeting with the AR group will be held, reviewing issues arising from participant discussions.
Cycle 4	<ul style="list-style-type: none"> • Evaluation, reflection, re-planning and re-implementation of action. • Finding solution for the gap based on participant discussions. • Withdraw from this project

Report on the initial phase of the project (Cycle 1 and 2)

Initial data collection

Initial data collection was conducted over a 2 month period included face-to-face interviews with key staff from the three health organisations responsible for age care services in the area and a survey of service provider in the region.

Interviews: The purpose of the interviews was to investigate the role of the health service in supporting the health and well-being of older people (those who aged 60 years and above) in the municipality. The key staffs interviewed were the Director of the DHO, the local hospital Director of Nursing and others responsible for providing aged care services.

The qualitative data generated from these initial interviews were analyzed using the method advocated by Creswell (2003). Firstly, data were organized and prepared for analysis including transcribing interviews, typing up field notes, and sorting and arranging data into

different types. Secondly, transcripts are read through to get a general sense of the information that was provided. Secondly, data were categorized and coded, dividing the data into units of meaning. The unitized data were then used to construct an organized system of categories and themes to reflect the issues or phenomenon of interest. These data provided information on policy, models of care and the diversity of health care professionals employed in the region.

Survey: A self-report questionnaire was distributed to health professionals working in local community health centers, independent health practitioners, and volunteers to obtain demographic details and information on the programs and services offered to older people. Although participants were sought from all community health professionals working in Gowa Municipality area, only community health nurses working in community centers agreed to be involved. Eighteen community nurses from a total 23 (78%) completed and returned the questionnaires.

Questionnaire results are presented as a frequency distribution using Statistical Package for the Social Sciences (SPSS). Responses to open-ended questions included in the questionnaire were analysed using similar approach to the one used with interview data to identify patterns and trends in the responses. Results provided background information on the current population of older people, and the range of health and related services available to older people in the region. For example, responses from the questionnaires revealed that the community nurses practice is more curative rather than preventative (from 7 respondents mentioned doing home visit, 5 of them stated that they administer medication for older people). The results also revealed that even though the nurses do health education it is more to individual approach (61.11%) and still some of them do not provide health education at all (38.9%)

Establishing the action research group

Membership of the action research group was intended to be inclusive of all community health professionals including community health nurses and community doctors. The invitation to join this study was forwarded through the district health office to all health professionals working in the community centers. An open invitation also was distributed to private community nurses/doctors/health volunteers who are working in the area do not practice under the district health office employment. The key staff from DHO also agreed to be involved in this meeting as facilitator, which is an advantage for the researchers because they can distribute the information and facilitate the change.

Group members meet regularly each month to review their role and to consider a potential model of care with the intent of enhancing service delivery for the elderly using a prevention focus. The first meeting was held to establish the Action Research group. The second meeting was held to disseminate the questionnaire's result to the group members and discuss the results. The participants were divided into three groups to identify the programs and services currently offered to older people. Participants were also asked to think about innovative ideas for promoting health and well-being of older people. The results from the three discussion groups were similar. All groups acknowledged that current programs and services available to older people do not support enhancing their health and well-being. Data generated from the questionnaire's revealed that the community nurses practice is more curative rather than preventative. The participants commented that they need support to develop the skills and knowledge to change the model of care from an intervention to a prevention focus. To accommodate this need a one day training program addressing the topic healthy ageing was organised. The group continues to meet to advance their agreed agenda, improving the health and well-being of older people. I will be returning to Indonesia to meet with the group later this year. It is anticipated that the group will still actively conduct regular meeting and evaluation will be made to see level of change or achievement of the

group's members. The next two cycles may be implemented for the next six months and withdraw from this project and keep to evaluate and reflect the actions that have been taken.

Implications for policy and practice

Care of older people in rural communities has not been a priority for most community health centers in Indonesia. Current services it is hypothesised are not meeting this group's needs. It is timely that a study of this nature is undertaken as the government has acknowledged that Indonesia has a growing older population and that policy and practice reform is necessary. This study will inform local clinicians practice and health care policy and planning. The study will also result in the development of strategies to collect information about the aged populations needs and methods for conceptualising projects to meet these needs.

Conclusion

This study is an action research study that has at least four cycles and two phases of data collection. From the questionnaire's results and the interview with key staff of health organisations revealed that the programs and services for older people in Gowa municipality still not meet the needs of older people in that area. The information gathered from the initial data collection was presented to the action research group and used as baseline information for the group to critically review their current roles, identify service gaps and to discuss and develop strategies to address service gaps. This information will be considered by the action research team to design, implement and evaluate supporting programs to meet the health needs of older people in rural South Sulawesi, Indonesia.

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STRATEGIES FOR ENJOYABLE HEALTHY EATING HABITS IN OLDER PEOPLE

¹Rina K.Kusumaratna

¹Community Medicine, Faculty of Medicine, Trisakti University

Abstract

Objective: To investigate dietary intake patterns of older Indonesians with a view to promoting awareness of healthy ageing in older people.

Design: Cross-sectional study of 296 community-dwelling older people at Mampang Prapatan district, South Jakarta, as pre-intervention study on socio-demography, dietary intake (assessed by 24-hour recall and Short-Form of Food Frequency Questionnaire), and dietary diversity (assessed by food variety and dietary diversity score). Data analysis was performed using descriptive statistical methods and between-group comparison of dietary intakes was by independent t-test.

Results: Intakes of energy, carbohydrate, protein, zinc, β -carotene and vitamin C were below Indonesian RDA for persons aged 60⁺ years. Total energy intake (78%) was below Indonesian RDA (80%). Percentages of carbohydrate intake from energy were 58%, protein 16.6%, and fat intake 30% below Indonesian RDA. Macronutrient intakes were below Indonesian RDA, whilst micronutrient intakes (iron, zinc, vitamin C, vitamin E) were far below Indonesian RDA. Average Individual Dietary Diversity Score was six out of 12.

Conclusions: Dietary diversity is a useful nutrient adequacy indicator. Promotion and socialisation of healthy eating habits based on national food guidelines need to be implemented among older people.

Keywords: *older people, food diversity, healthy eating, community*

Introduction

The increasing numbers of older Indonesians (aged 60⁺ years) currently face many health problems due to nutrient intakes below Indonesian Recommended Daily Allowances (IRDA)¹. Improving intake of nutrients that are essential for maintaining health might benefit the health of older people and enhance their quality of life. The eating behaviour of community-dwelling older people is complex and multi-dimensional, precluding a single-food or single-nutrient approach for reducing the risk of disease²⁻⁵.

There are few data on nutritional status and assessment of food intakes of older Indonesians, impeding detection of relationships between dietary exposure and chronic diseases of nutritional aetiology. Malnutrition is not only due to lack of food, but also to incomplete knowledge and conventional views on appropriateness of foods for older people⁵. For healthy ageing in older people, appropriate dietary patterns since infancy would be of benefit. For older people with hypertension, dyslipidaemias, obesity or glucose intolerance, there should be increased awareness of the benefits of preventive nutrition for healthy ageing.

The diet of older Indonesians, even when adequate, is commonly lacking in variety, necessitating research studies on the contribution of various food groups to dietary nutritional adequacy of older people in given geographical areas. Thus evaluation of dietary patterns for predicting objective biomarkers of dietary intake and risk of chronic diseases is an important step as predictor of health outcome. The aim of this study was to investigate dietary intake patterns of older Indonesians with a view to promoting awareness of healthy ageing in older people.

Methods

Study design

This cross-sectional pre-intervention study was part of a randomised double-blind controlled trial conducted from April 2008 to June 2009 at the Mampang Prapatan District Health Centre area, South Jakarta, DKI Jakarta Province. Data were collected on socio-demographic background, dietary assessment, and anthropometric measurements.

The dietary assessment was done by a trained interviewer at home visits on three non-consecutive days, using 24-hour dietary recall and short-form of Food Frequency Questionnaire (SF-FFQ) and dietary diversity. Types and amounts of foods consumed were recalled using 3-D food models, measuring cups and plates to facilitate quantification of food consumption. Dietary diversity assessment was by food variety score (FVS) and dietary diversity score (DDS)⁶. The FVS and DDS express the number of each of twelve major food groups reported in the dietary recall, with each group contributing one point to a maximum score of 12. Any type of recommended food (grain, fruit, vegetable, meat, fats, dairy products, and sweets) reported in amounts equal to or exceeding threshold amounts (15 g for beverages, 10 g for non-beverages) contributed one point to the score. For recommended foods reported more than once, the criterion for minimum amount was applied after summing all mentions of a food. Finally, several mentions of a recommended food in a recall contributed only one point to the score.

Study Population

The final number of study subjects comprised 296 community-dwelling older persons, selected according to the following inclusion criteria: apparently healthy (with possibly one chronic disease in stable condition), mobile, independent males/females; able to verbally communicate; willing to join the study and give written informed consent. Excluded were bedridden or physically handicapped persons and those with dementia or uncontrolled hypertension.

Statistical Analysis

The data were summarised for socio-demographic characteristics, daily nutrient intake and food diversity. The pre-intervention data were allocated into group A (treatment; n =149) and group B (control; n =147), normality of data distribution was tested using Kolmogorov-Smirnov test. Results were compared using descriptive statistics and the differences among two groups was performed with Chi-square test. Between-group differences in nutritional intake of each food category were tested using median (25,75-percentile) and independent t-test. To calculate the dietary diversity, the differences were expressed as the total percentage of each food group and food items consumed within in each group. Food analyses were performed for each older person and the daily intakes (g/day) were calculated by Nutrisurvey software. Analyses were performed using SPSS Windows version 15 (SPSS, Chicago), and significance level was considered at $p < 0.05$. Ethical clearance was approved by the Human Ethics Committee, Faculty of Medicine, Trisakti University, Jakarta, Indonesia.

Results

Socio-demographic background and living arrangement

Of the 296 study subjects, 63% were females and 37% males (mean age 65.8 ± 4.6 years). Socio-demographic profiles were comparable in terms of education, marital status, employment, financial sources, health services and living arrangement. 73% of subjects were educated at religious elementary schools and 54.7% was married or widowed. A total of 62.5% of subjects were financially dependent on family members. The majority (86.8%) used out-of-pocket payment for health services. Most of the subjects, whether single (11.1%)

or living in a nuclear family (88.9%), had their own household (80.7%), but preferred to live with extended family.

Nutritional status and dietary diversity

The nutritional status was essentially similar in both groups, with 40.2% of BMI in the normal category, 35.8% overweight-obesity and 24% underweight. Daily nutritional intakes between groups were comparable, although slightly lower in group A, except for total energy and fat (see Table 1). Mean energy intake was 1118.11 \pm 394.84 Kcal/day or 4673.7 \pm 1650.43 KJ (78.8% of IRDA), carbohydrate 162.58 \pm 61.17 g/day, protein 35.32 g/day and fat 37.22 \pm 17.8 g/day. Iron, zinc, vitamin C and β -carotene intakes were 14.77 mg/day, 4.19 \pm 1.63 mg/day, 39.04 mg/day, and 13.08 mg/day, respectively. In general, total energy intakes were lower (63.7%) than IRDA minimal requirement (80%) for 60⁺ older people. Most macronutrient intakes were also below IRDA, while micronutrient intakes (Fe, zinc, vitamin C, vitamin E) were far below IRDA. Dietary nutrient composition was moderate for protein (normal range 10-20%), within normal range of 50-60% for carbohydrate, and high in fat (>25%) in both groups.

Table 1: Nutritional status, daily nutrient intakes and dietary diversity

Nutrient Intakes (IRDA)	Groups		p value [‡]
	A (n= 149) [†]	B (n=147) [†]	
Nutritional status			
BMI (mean \pm SD) [*]	21.8 \pm 4.1	21.6 \pm 3.9	0.581
Total Energy	1069.05	1055.38	
(kcal/d)	(806.2, 1269.6)	(856.7, 1367.1)	0.371
Carbohydrate (g/day)	146.7 (118.4,	154.8 (125.7,	0.198
	188.5)	195.6)	
% of total energy [*]	55	59	
Total protein (g/day)	34.9 (26.3, 47.1)	35.67 (26.3, 48.1)	0.737
% of total energy [*]	13	14	
Fat (g/day)	35.7 (20.2, 46.7)	33.8 (25.5, 48.2)	0.761
% of total energy [*]	30	29	
Iron (mg/day)	19.85 (11.34,	22.62 (10.67, 30.2)	0.698
	31.16)		
Zinc (mg/day)	4.71 \pm 2.68	4.86 \pm 2.43	0.609
Vit A (μ g RE/day)	2198.2	2253.9	
	(1850.3, 2731.7)	(1802.7, 2758.2)	0.663
β- Carotene (mg/day)	13.19 (0.16, 0.47)	13.5 (0.16, 0.47)	0.666
Vit E (mg/day)	0.03 (0.01, 0.03)	0.04 (0.01, 0.04)	0.948
Vit C (mg/day)	51.95 (29.4, 83.2)	54.5 (28.69, 91.96)	0.565
DDS (average, 0-12, %)	6.57	6.61	0.97

Notes: ^{*}) Data are mean \pm SD, Asian category; [†]) median (25,75 percentiles); [‡]) independent t-test was performed

Overall dietary diversity in groups A and B was also similar (mean 6.5 vs. 6.7); around 94% vs. 96.7% consumed \geq 5 food groups. The participants could be categorised into three groups according to DDS: low (using 1 to 5 food groups) = 21% (n=56); medium (6-8 food groups) = 71% (n=195); high (9 to 12 food groups). After exclusion of sugar and miscellaneous foods, apparently none of the subjects used all 10 nutritious food groups (see Table 2).

Table 2: Food groups and items

12-food-group list	Food-item list	Percentage of consumption		Mean daily intake (gram / person)	
		A (n=139)	B (n=134)	A (n=139)	B (n=134)
Grains	Rice	92.1	91	310.5 g	295.6 g
	Corn	10.1	8.2	37.3 g	30.8 g
	Noodles	12.3	14.2	48 g	47.3 g
	Bread	18.7	15.7	46 g	63.7 g
	Wheat	17.4	17.1	56 g	45.6 g
Roots/tubers	Cassava	9.4	4.5	65.4 g	59.4 g
	Sweet potatoes	7.9	6	71.8 g	64.2 g
	Potatoes	18.7	19.4	49.5 g	47.8 g
Fruits/vegetables	Spinach	6.5	9	39 g	47.3 g
	Swampcabbage	5.8	3.7	41.8 g	25 g
	Cassava leaf	2.9	2.2	52.5 g	43.3 g
	Carrots	21.6	27.6	36.5 g	30.5 g
	Papaya leaf	4.3	0.7	62.5 g	100 g
Fruits/vegetables (other)	Oranges	13.7	21.6	113.7 g	120.5
	Tomatoes	3.6	3.7	35 g	30 g
	Banana	12.9	22.4	94.5 g	70.3 g
	Papaya	5	2.2	168.8 g	200 g
	Beans (mung, etc)	30.5	30.6	32.8 g	26.7 g
	Cabbage	10.8	15.7	20 g	24.1 g
	Eggplant	3.6	4.5	42 g	37 g
	Bitter gourd	10.8	18.7	58.4 g	34.6 g
	Mustard greens	10.8	5.2	53 g	34 g
	Cucumber	4.3	10.4	34 g	40 g
Meat/poultry	Chicken	15.8	25	52.9 g	48.7 g
	Meat	14	15.1	40 g	41 g
	Organ meat	8.1	8.8	57.5 g	35 g
	Meatball	8.6	8	27.5 g	30.4 g
Fish	Fish-saltwater	13.7	12.7	48.2 g	56.5 g
	Fish-freshwater	8.6	6.7	63.5 g	54.5 g
	Salted fish	12.2	9	21.8 g	30.3 g
Fats/oils	Cooking oils	82	81.3	16.5 g	16.4 g
	Margarine	2.2	3	11.7 g	10 g
	Coconut oils	22.3	35.1	44.6 g	41.7 g
Egg	All varieties	26.7	25	55 g	53.4 g
Legumes/nuts/fermented food	Tempeh	42.4	41.8	70 g	73 g
	Tofu	44.6	41.8	107 g	94 g
	Soya sauce	15.1	24.6	10.3 g	10 g
Dairy	Fresh milk	1.4	6	135 cc	225 cc
	Ca-enriched	11.5	11.2	21 g	21.7 g
Sweets	Sugar	69.1	74.6	14.5 g	17.1 g
Miscellaneous	Cookies	100	100	59.2 g	59.8 g
	Chips	18.7	28.7	17.9 g	21.4 g

Notes: Figures in boldface = highest percentage of individual food items consumed

The subjects generally had a poor diversity, as few consumed nine to ten food groups, and only 7.7% (n=21) consumed all 10 nutritious food groups. The dietary patterns (Table 2) comprised the following food groups in descending order of frequency of consumption: rice (staple food); fried or fatty foods; sweets and beverages; plant protein (soy-based foods);

vegetables; fresh and dried fish; fruits; meat, chicken or eggs. Antioxidant vitamin sources were mostly vegetables; animal protein and fruits were rarely consumed.

Discussion

Intakes of energy, carbohydrate, protein, zinc, β -carotene and vitamin C were below IRDA for persons aged 60⁺ years. Total energy intake (78%) was below IRDA (80%). Percentages of carbohydrate intake from energy were 58%, protein 16.6%, and fat intake 30% of IRDA. Macronutrient intakes were below IRDA, whilst micronutrient intakes (iron, zinc, vitamin C, vitamin E) were far below IRDA. Some nutritional needs increase with advancing age, so that older people require foods of greater nutritional density and consequently changes in dietary patterns. Malnutrition is known to be a significant clinical and public health problem particularly in older people and is associated with poor health outcomes, such as impaired immunity and increased vulnerability to infection.

Based on the DDS, the majority of subjects consumed more than six food groups, but less of food groups such as milk and meat. The FVS was poor (17 in group A versus 13 in group B), compared with a nutritionally adequate diet of 30 or more different foods per week^{4,7}. A good food variety should reduce the risk of nutritional deficiencies, provided energy intake is sufficient, but achieving nutritional adequacy is more difficult if energy intakes are less. A simple way to increase food variety is to include healthy dishes from other cuisines^{4,7-8}.

Adequate protein consumption, especially animal protein, is necessary for older people to obtain readily absorbed micronutrients. However, the diet of older Indonesians comprises mainly plant protein sources. Older people cannot afford animal proteins regularly, because these are expensive^{1, 9-11}. The association between poverty and malnutrition is well known, because poor populations rely heavily on monotonous plant-based diets low in animal proteins. It is usually recommended that total fat should not exceed $\pm 25\%$ of total energy. In this study, however, total fat intake in most subjects exceeded this threshold, as the subjects preferred more palatable food (very sweet or fried/fatty food). Fat intake should be limited, but not eliminated, e.g. by choosing lean meat, low-fat dairy products or by changing food preparation methods (less or no frying).

To improve the dietary quality of older people, education and behavioral change strategies may be of use. Older people should be encouraged to consume a variety of foods, for adequate macro- and micronutrient intakes, as people consuming a wide variety of foods are healthier, live longer and have reduced risk of illness^{1,4,5,12}. Holistic approaches to improving diet through nutritional education should be done by integrated teams, consisting of the primary health centre staff, cadres and informal key persons. They should encourage and provide support for the maintenance and strengthening of community-based care for older people. Older people should also be recommended to base their dietary intake on the Indonesian Food Guide Pyramid for a nutritionally balanced diet. Revision of food guidelines might be necessary to facilitate creation of specific food guidelines for older people to improve their healthy eating habits and to raise their awareness of healthy ageing.

Conclusions

Dietary diversity is a useful indicator of nutritional adequacy. There is need for promotion on healthy eating habits, particularly on socialisation methods based on national food guidelines among older people.

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WALK AND TALK FOR WELL-BEING

Elisabeth Lord

PhD Student, Social Work and Human Services and the School of Population Health Faculty of Health Sciences, The University of Queensland.

Margaret Shapiro, Associate Professor, SWAHS, The University of Queensland; **Fran Boyle**, Associate Professor, SPH, Faculty of Health Sciences, The University of Queensland; and **Robert Bush**, Professor, Healthy Communities Research Centre, The University of Queensland.

Abstract

The purpose of the research was to collect the perspectives of men as they joined a walking program, stayed walking, dropped out or made the decision not to become involved. This study provides an important exploration of these behaviour differences and changes over time by men. Understanding men's experiences and listening to their concerns required a qualitative approach. Men involved in three established men's well-being groups were approached to be involved. Focus groups were held firstly to inform the program design and to listen to men's perspectives before they began walking. Then for six months the researcher walked weekly with the three men's groups in Toowoomba, the Redlands and Hervey Bay. The 132 walk participants fell naturally into three distinct groups of men: those who completed the walking program ("stayers"); those who commenced but did not complete the program ("stoppers"); and those who were invited but chose not to join the walking program ("non-starters"). This paper will discuss the results of the focus group data collection, focussed on men's experiences of leisure engagement.

Rationale

Exercise is beneficial physically, socially and emotionally for all, especially for men at risk of suffering depression or poor mental health (Dunn, 2004; Saxena, Ommeren, Tang, & Armstrong, 2004). Quantitative studies have identified that higher education and physical activity were predictors of good mental health, in older men. *"Older people who exercise have lower risk of cognitive impairment and depression than those who do not"* (Almedia, Norman, Hankey, Jamrozik, Flicker, 2006, p. 32).

Scientific studies have met with mixed results to engaging men. These studies have reported on the factors that may enable or constrain men's engagement in physical exercise programs. Public Health programs have on the whole been unsuccessful when including men in exercise programs, with some men exercising, however too many men still remain uninterested and sedentary. This study addressed the problem of low levels of participation by men in exercise. Little is known about the reasons for this from men's own perspectives (Australian Government, 2010; Courtenay, 2000). This paper reports on men's perspectives as they entered the study – and why it was important to collect this data at this time.

A social constructionist paradigm allowed the researcher to develop more *general meanings* by analysing the sum of the parts. Understanding men at risk as they describe their experiences of walking or deciding not to walk was important in this study. This inductive process considers the summing of men's individual thoughts, beliefs, ideas, concepts, assumptions and understandings (Jackson, 2005). Men's perspectives were considered within the social environment of their lived experience, and their social world. Their

perceptions of enabling or constraining factors provided key information to help solve a practical dilemma concerning 'how to get more men active'.

To understand men at risk, the researcher considered what was regarded as acceptable knowledge from a wide range of disciplines. Factors that hinder or enhance men's engagement in physical activity may be explored through understanding the relationships men share with the social, cultural, and economic environments in which they live, work and recreate. Health Promotion provides a model of value as it is the process of enabling people to increase control over and to improve their health (WHO, 1986). A central framework for understanding these factors and the multiple dimensions influencing a person's health, in particular men at risk is the social determinants of health (Shultz & Northbridge, 2004). Courtenay (2003) examines 30 key determinants of the health and well-being of men and boys in the United States. The WHO has popularised some of the social determinants research concerning the links between context and health in a document called Social Determinants of Health: the Solid Facts (Wilkinson & Marmot, 2003). The WHO focussed on 10 key determinants, the social gradient, stress, early life, social exclusion, work, unemployment, social support, addiction, food and transport (MacDonald, 2005).

Methodology

This research is designed to address practical questions and it reflects a mixture of practice and research. The researcher set up three walking groups in three locations of south-eastern Queensland, Australia: Hervey Bay, Toowoomba and the Redlands. These three locations were identified as a result of existence of three men's well-being groups. The men's well-being groups were formed by the Department of Communities in response to the funding made available by the Commonwealth Department of Health and Aged Care to address recommendations made in the National Suicide Prevention Strategy (Department of Families, Youth and Community Care, 2001). Membership of the men's well-being groups comprised both workers and retirees. The men joined the groups as a result of experiencing poor mental or physical health, loneliness or isolation, or a life changing event.

The study began in December 2007, when the researcher organised the first of many meetings in Toowoomba, Hervey Bay and the Redlands. Throughout these gatherings the men chatted informally about their physical activity opportunities. As a result of these meetings, three walking groups, one in each location, were planned and established as an extension of the men's well-being group's regular activities. The research questions were developed to explore what hindered, enhanced or sustained men's engagement in a six month walking program:

- 1) What perspectives enable men to maintain / sustain a 24 week walking program?
- 2) What perspectives constrain men's engagement in a physical exercise program?
- 3) What perspectives create barriers and lead to men dropping out of walking?

Research design

The qualitative study was conducted over 18 months with information collected over six research sessions from men during the life of the walking groups, and aided in understanding the group of men at risk involved in the study. This prospective design provided potency to the data collection over single point or retrospective data collection as men's account of their physical activity experiences could be collected over six time periods. The researcher used qualitative methods to foster a non-threatening environment and support the sensitive nature of the group of men involved in the study (Patton, 2002). A range of qualitative methods were used, including semi-structured entry interviews, entry focus groups, walk diaries, semi-structured exit interviews and exit focus groups. The type and timing of data collection varied for walking program participants and non-participants, shown in Table 1 below. This paper reports on the first time period of data collection.

Table 1: Overview of the data sources for each study groups.

Data collection	Walkers- Stayers	Walkers - Stoppers	Non-starters
Entry Focus Group	√	√	√
Semi-structured entry interviews	√	√	X
Walk Diaries	√	√	X
Semi-structured exit interviews	√	√	X
Exit Focus Group	√	√	√

Recruitment of the sample

The sample was selected from participants who were involved in the Department of Communities Men's Well-being groups, located in Hervey Bay, Toowoomba and the Redlands. All men were invited to participate in the study. To be included in the study participants needed to be 45 years and over, male, and be prepared to commit to a six month walking program, and/or be available for interviews over an 18 month period.

The sample

To understand the context relating to the men in the study, personal demographic and health data was collected by asking men involved in the men's well-being groups to complete a questionnaire. The combined membership of the three Men's Well-being groups was 320 men. Of this group, 260 men actively attended these groups, and these men were invited to volunteer for the 18 month study, which included a 24 week walking intervention program. Of the 260 men invited to enter the study, a total of 184 men (70.8%) completed the structured questionnaire to become the eligible participants of the study. A total of 76 members chose not to be involved.

The majority of the sample of men were retired (n=107; 58.1%), with over ¼ of the sample previously working in a management role (n=48; 26.1%). Just over half of the sample lived with their partner (n=93; 50.5%) and felt their health was about the same as their peers (n=92; 50.1%). The majority of the men interviewed were non-starters (60.9%), 72 men started walking over six months (39.2%) and of these walkers, 50 (27.2%) stayed walking, and 22 (12%) dropped out. Young older men 60-74 (n=91; 49.4%) made up nearly half the research sample, with older-old men 75-85 (n=53; 28.8%) creating nearly 1/3 of the sample and mid-life aged men 45-59 (n=40; 21.8%), making up just over 1/5 of the research group. The sample of men in the study included one man of Aboriginal and Torres Strait Islander background.

Men joined the groups as a result of experiencing one or more factors of suicide risk (Department of Families, Youth & Community Care, 2001, p3.). Social isolation was experienced by 35.3% of the full sample of men. Poor physical health was experienced by approximately 20% of the group and poor mental health by 15% of the group. A life changing event was experienced by 22.8% of the men's sample. Companionship, motivated 35.3% of the group to join the men's group, and to have something to do was important to 21.7% of the group. Improving one's health was important to 10.9% of the sample, and to give something back was mentioned by 7.1% of the group.

Entry Focus groups

Focus groups were held with the broader members before men were asked to volunteer to walk with the research study. Nine focus group interviews were conducted with 65 men from the eligible sample of participants (65/184). A total of 109 men (109/184) chose not to take

part in these focus groups. These focus groups were held prior to the walking groups starting.

Insightful comments were obtained through the use of this technique to guide the researcher with the six month walking program. The purpose of the focus group was explained to allow discussions to evolve as a conversation about shared and individual understandings, experiences and preferences of being active. The researcher introduced the topic and welcomed everyone to the focus group. Men were encouraged to discuss their physical activity history, their impressions of being active, and the role an active leisure lifestyle has been in their overall health and well-being (Krueger, 1994). Semi-structured questions were followed to guide the focus group session. These questions included:

1. Can you talk about your experiences of being active in the past?
2. What does it mean to you to be active?
3. Have dramatic events and life changes impacted on your participation in active leisure?
4. Can you tell me how your mood or mental health impacts on your participation in being active?
5. Can you tell me how physical health impacts on your participation in being active?
6. Can you tell me how feeling isolated or lonely may impact on your participation in being active?
7. Can you tell me about any physical barriers that impact on your participation in being active (e.g. walk locations, footpaths, board walks, traffic, etc.)?

Participants completed a consent form to participate in the focus groups. With the participant's permission, the focus groups were digitally recorded for later transcription. In addition to participants completing the written consent form, the researcher requested verbal approval to record the interview. In setting up the focus groups the group facilitator controlled three aspects, these included:

1. Interview location: The regular meeting places of the three men's well-being groups in the Redlands, Toowoomba and Hervey Bay provided the most familiar environment for the men to be interviewed.
2. Physical location: The hall settings provided a large comfortable space for the men to convene, however the environment resulted in some background echo, which made transcribing difficult, at times.
3. Composition of the group: The group provided a mix of ages and friendships in each location.

Analysis of focus groups

NVivo8 was used to code, store and analyse all transcribed qualitative interviews, interview audio files, photos and diary notations. This software program allowed for the input of external data and material collected of relevance throughout the research study. Analysis proceeded using the following steps:

1. The interviews were recorded, de-identified, and stored.
2. Interviews were transcribed verbatim, and word documents checked against original transcripts.
3. Coding was undertaken by the researcher using NVivo8 software to identify the topics that had been raised by the participants. Coding according to common ideas and experiences was conducted. The making meaning step, was completed manually, and provided a thorough coding of the qualitative data into main categories and sub categories allowing for a powerful synthesis of the data coding into NVivo8.

Results to date

Entry focus group data

Focus group provided a valuable way to reach a full range of men, including men who never got started or involved in the walking program, men who started and stayed walking, and men who started and stopped walking. The following *categories evolved from the focus group data*;

1. *Social change*

Strong gender differences were evident within the full study sample of men. Older men 75 years and over identified the influence of strong females in their lives, as a motivator for physical activity, and men viewed these women as advisors and confidants throughout their lived experience. For younger older men, 60-75 years, the changing role of women in society was important to men. These men became close companions to their partners for exercise and were important company since retirement. Some men felt women played a too dominating role in their lives. Strong male role models, both positive and negative were discussed at length by the younger sample of men, aged 45-60 years of age. Social support was raised as a key motivator for all men in the study.

Sedentary men were excited about the prospect of walking with other men, to experience some space from the women in their lives (Godbey, 2003). To walk with other men with shared interests was a motivating factor to getting started. Healthy social networks have been noted to provide males with positive benefits such as resilience, better physical and mental health (Australian Government, 2010, p. 8).

2. *Time*

Men in the study did not seem to be regulated by time. In fact most men were stimulated to have no set time (Lansford, Sherman, & Antonucci, 1998). Many men felt they are too busy to be dedicated to structured physical activity programs. For various men, their free time was committed to volunteer work, and this was momentous to the rhythm of their life. Although in many settings, men were able to access walking programs being conducted early in the morning, men felt they had all day to walk, and wanted to walk at their own pace in their own time. Men in the study did not feel the pressure of diminishing time, as they grew older. These findings seem to oppose the ideas presented by socio-emotional selectivity theory that proposes time is precious and the selection of relationships is based on personal support rather than information (Lansford, Sherman, & Antonucci, 1998). Men in the study reported the value of seeking information from their wider network such as the men's well-being group.

For several men, their belonging support network had reduced, creating feelings of social isolation and loneliness. The feelings of social isolation and loneliness become a negative indicator for physical activity engagement. The focus group discussions provided many opportunities for men to identify shared interests and hobbies. Two men from the Hervey Bay Focus Group identified a historical connection of shared family and friend connections as they discovered they had grown up in the same township in rural Melbourne. Such social re-connections provide important buffers to the experience of social isolation in older males (Australian Government, 2010).

3. *Relatedness*

Prior experience in active leisure experiences as a young child in sport reflected a desire to reconnect with physical activity, and get started again in a regular program with support. Many of the older men, aged 75 years and older, lived an active childhood and mid-life as a result of an active work life and with their origins from a farm. These men reflected positively on their active lifestyles histories. Relating to other men in the focus groups, and sharing

meaningful stories rich in connections, provided opportunities for men to meet others and find common ground.

4. Autonomy

Making one's own choice in retirement, to have a different routine to work, to not be regimented, to make their own decision, and to have control over their decisions was important to men as they talked about exercise experiences.

5. Competence

Men felt confused by the concept 'physical activity' as they perceived it to be only performance based, or a fitness and training based activity. Men desired to be active, however after experiencing various life changing events, such as a heart attack, or age related physical or mental health changes, men experienced decreases in perceived personal competence. In many cases men no longer felt confident that they held the skills or competencies to be physically fit again. These three elements, relatedness, autonomy and competence provide important building blocks to the understanding of one's motivation to be involved in physical activity. Self-determination theory as Coleman and Iso-Ahola (1993) describe helps to explain why intentions to exercise do not always lead to the commencement of activity behaviour.

6. Constraints

Many constraints to participating in physical activity were identified by the men throughout the focus group discussions. Young people were perceived as a threat to men, especially to men once they had moved into the secure and comfortable surroundings of a retirement village environment. Walking alone no longer became a selection for a lot of men involved in the study. Men also discussed the stress associated with the daily administration of medication which resulted in lethargy and an unwillingness by some men to be active. Caring for a life-long partner and companion was a major constraint for a large group of men. As their wife's health deteriorated, these men felt unable to participate in activities outside their home, if it meant leaving their wife at home alone.

Discussion

Gender-based medicine and health care is becoming an important area of attention, however most of the attention previously has focussed on women's health concerns (Courtenay, 2003). Men communicate in different ways to women. There is a growing focus on research into non-gender specific health and well-being, however to date insufficient data exists on the best ways to communicate with men. The National Male Health Policy recognises the need to identify that "men are not the problem" rather the health-care sector needs to use new, relevant (to men) methods of communication (Australian Government, 2010).

This study worked with existing men's well-being groups set up in Hervey Bay, Toowoomba and the Redlands. The entry focus group highlighted six main themes impacting on the experiences of men's engagement in being active. These categories included social change, time, relatedness, autonomy, competence and the constraints of young people, medication and caring for others. It will be important to consider the analysis of these categories, once the data from the full study has been conducted.

With the introduction of a facilitated weekly walking group for men, the walking program fostered a positive avenue for men to chat to each other using a 'shoulder to shoulder' approach to communication while walking. The social constructionist approach allowed the researcher to listen to men, and let men provide meaning to their lived experience of

walking. The researcher was interested, not only in men who were successful in walking but also the men, who walked and stopped, and those men who never became interested.

As highlighted recently in the National Male Health Policy, the focus of the policy is males with poorer health outcomes. Income, education levels, employment, relationships, social networks and violence are powerful determinants of ill health and health inequality (Australian Government, 2010, p3). The men in this research study were men at risk of suicide, as a result of experiencing one or more risk factors of suicide. The social determinants of health framework will provide the basis for unpacking and understanding men's lived walking experience across the full study results. *"A social determinant's of health approach to men's health would help Australia and Australian medical practitioners move away from policies and practices that...ignore the complexity of their health problems. The result would be a more evidence-based approach to men's health policy"* (MacDonald, 2006, p. 456).

Conclusion

Using a mixed set of qualitative methods to reach a group of men at risk helped the researcher to get under the radar and explore men's experiences of physical activity. It is important to take time to develop relationships and build trust and a rapport with the men, to enable men to share their perspectives over time. Men's perceptions of physical activity engagement, and the different patterns of engagement revealed by the men hold the key to the design and development of public health programs for those at risk.

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OLD DOGS, NEW TRICKS? ONLINE DATING AND OLDER ADULTS

Sue Malta & Karen Farquharson

Humanities, Arts and Social Sciences, Faculty of Life & Social Sciences, Swinburne University, Hawthorn, Victoria

Abstract

Most studies of online romantic relationships use younger sample populations, making it difficult to generalise to older adults. This paper describes online dating amongst a group of Australian seniors. Semi-structured qualitative interviews were conducted with 30 older adults (aged 60 – 76 years) all of whom used online dating websites to find new romantic relationships. We chart the progression of their romantic relationships, describing the participants' reasons for going online to look for romantic partners, followed by the way these romances unfold. We argue that the online environment structures their development by predetermining the progression of the romances through several stages: the posting of personal profiles, the initial contact ("kisses" and "winks"), emails, phone contact, face-to-face meeting, and finally sex. The majority of these online-initiated relationships followed this very structured pattern of progression, with only minor variations.

Rationale

Most studies of online romantic relationships use younger sample populations making it difficult to generalise to older adults (see for instance, Donn & Sherman, 2002) and are usually situated within the psychological literature (for example, Whitty & Gavin, 2001). Why older adults are not included in such studies appears to be based on ageist views and stereotypes that depict older adults as technologically incompetent (Philbeck, 1997) and, furthermore, asexual (Minichiello et al., 1996, p. 187). This stereotyping has meant that love and connection in later life have been rarely studied, despite the fact that most of us spend decades as older adults – and despite the fact that older adults who are socially isolated have been shown to be in poorer health and to have less well-being than those who are socially connected (World Health Organization (WHO), 2002, p. 28; WHO, 2003, p. 22). The current study aims to fill the gap in the scholarly literature by taking a sociological approach to understanding online dating amongst older adults.

Methods

This paper reports the findings of semi-structured qualitative interviews with 30 older adults (15 females, 15 males; aged 60 – 76 years; mean age 65.5 years), who sought romantic relationships through online dating websites. The sample was recruited through a number of methods: via an online 'Call for Participants' notice, at *RSVP.com.au*[®], an Australian dating website; through publicity in local and interstate news media and on radio; and, in some cases, through referrals by friends or other participants; in effect, creating a snowball sample. The interviews were conducted using four different interview methods: (1) face-to-face and (2) telephone interviews and (3) email and (4) instant messaging, and have been described previously (see Malta, 2009). The phone and face-to-face interviews were digitally recorded and later transcribed. Instant messaging and email interviews generated their own transcripts. All transcripts were analysed thematically by means of 'analytic grids' (Miles & Huberman, 1994, pp. 127-132). Themes based on the research questions were identified and interrogated.

Results

Why go online?

These older adults went online because they felt there were very limited places and opportunities for older adults to find each other. This is exemplified by Ester:

Because, although I move around in a number of circles, there just wasn't anyone around that I could be interested in. The Net seems to be the "In" thing these days. Ester (71)

In some cases going online was recommended by children, and in others participants had heard a professional or an expert talking about it, such as a counsellor or therapist, or someone on TV or the radio that they trusted.

The structuring of romance through predetermined stages

Once they decided to go online, our participants found that there was a very structured process around online dating that started with registering on a dating website such as *RSVP.com.au*[®] and completing a 'personal profile'. Online dating profiles consist of a series of check boxes detailing one's demographic and physical details and a section where members use their own words to describe themselves and what they like to do (for a more detailed discussion on profiles and their use, see Baker, 2005, pp. 32-34). Members also have the opportunity to post photos of themselves. The profile, which can be likened to a self-portrait in words, is then displayed on the database for other members to look at.

Part of completing a personal profile involves selecting preferences for potential partners by completing an *Ideal Partner Profile*. The websites provide checklists, detailing long lists of characteristics that one might desire in a potential partner – such as height, weight, lifestyle, political affiliation, religion, even hair colour – which members can “tick” according to their preferences. For the older adults in the current study, going through the process of writing a *Personal Profile* and establishing an *Ideal Partner Profile*, meant that they were required to think very carefully about how they wished to portray themselves and what they were looking for in a new partner.

There are approximately 1.6 million registrants on *RSVP.com.au*[®], 11% of whom are aged 56 years and over (Fairfax Digital, 2010). Finding a new partner from the myriad of choices available involves searching the database and scanning photographs “for a person fitting a ‘preferred partner profile’ in a [specific] geographic area” (Owen, 66). Many participants rely on photographs attached to personal profiles as an initial screening tool to see if they find a person attractive or not. Neville (76) said he thought photos were very important, and Russell (70) said he would only ever contact people who supplied their photos. If Neville and Russell did not like the look of a particular photograph, they would not contact the person further.

The online dating process thus begins with registering, then completing and posting a profile. It is the first in a series of steps that registrants hope will culminate in finding romance. Once a search has been undertaken, Neil, a veteran user of dating websites, explained the next stages of the online dating process:

1. Send an electronic kiss [to someone you like the look of]
2. 15-20% send back a “Yes, please email me”. That means using an RSVP “stamp” costing \$4 to \$7
3. Then you can email but anonymously via RSVP for a month, but if it's going to go anywhere you soon exchange personal names, email addresses and phone numbers

4. Then you talk on the phone
5. With the ones who are really interested you start exchanging compliments. If the phone calls go on for a couple of hours at night a few terms of endearment start to creep into the conversation
6. You agree to meet for coffee
7. If you feel pretty good at the meeting, you go out for dinner afterwards
8. By then it's pretty obvious if you have a mutual enough liking to get round to actual dating
9. Keep in mind that we grew up in the swinging late sixties where everyone went to bed with everyone after a dinner date – so sometimes we just relive our youth and do that
10. If not, then there is a period of courting leading up to the physical – if it's obvious that both people want to move to that, sometimes an hour after the coffee meeting, sometimes a week, though often not to full intercourse [right away]. More like teenagers with heavy "petting" it used to be called, but definitely sexual. Neil (71)

Many older adults in this study had initiated meetings in this manner with numerous prospective partners over several months, whilst for others the online dating experience was comparatively brief as they found a connection with someone almost immediately. Russell (70), an experienced online dater, estimated that 150 or more women had either made direct contact with him or had looked at his profile. In contrast, Elaine's online presence was relatively short-lived, as she found a compatible partner in a very short space of time:

The third man I'd contacted replied to my message... and suggested meeting for coffee. I replied that I'd like to email him a bit to learn more about him. We exchanged about three emails apiece and then we met for coffee. Elaine (61)

Online dating websites are for-profit organisations, and part of the structure they provide enables them to earn money from connecting potential partners. "Kisses" can be sent for free, and our participants felt comfortable sending them to many potential partners. The next stage of contact cost money. As Neil reported, if he got a positive response from a "kiss" he had sent, he was then required to spend between \$4 and \$7 on an RSVP "stamp" to respond. The "stamp" enabled our participants to communicate through anonymous e-mails and/or instant messaging (IM) via the dating website. Our older adults found this method worked as a further screening measure before committing to talk by phone. Amanda described the process she went through:

[We] exchanged emails and then phone calls and then met face-to-face. I liked the look of his profile, I liked the sound of his voice and we did do the chat [IM] thing on RSVP and that went off very well. Amanda (60)

For our participants, successful online communication led to phone calls, and successful phone calls led to meeting face-to-face. The majority of participants described their first real life meetings as occurring during the daytime and on neutral ground. This usually meant meeting at a coffee shop where neither of them were known, at a location midpoint between their homes. If the coffee date was successful, other dates usually followed quickly. For example, when it became apparent that Max and his date had enough things in common, they arranged to meet over a cup of coffee, which was quickly followed up by a dinner date – all within one week of meeting online. Similarly, Adam (66) and his partner Marissa had their first date offline at a "morning coffee rendezvous" within 10 days of meeting online.

At this point the relationship either continues or, if no connection is felt, it ends and participants go back online and begin the process again. For Nellie the process took a long time before she found someone she connected with:

Nothing happened for about three years, other than negative responses to kisses I sent and several meetings with men with whom I had no rapport whatsoever. Nellie (63)

Beyond the initial online attraction and the excitement of first dates, taking these burgeoning associations one step further, involved consolidating them into real life partnerships – usually centred on issues of sexual intimacy. Contrary to existing stereotypes, all older adult participants reported that their relationships were sexual.

For the older adults in this study the Internet acted as a means – a tool, in fact – to firstly mediate online romances and then to facilitate their offline formation. Relationships progressed up to the first face-to-face meeting according to predetermined structures put in place by the dating website, and if that meeting was not successful our participants returned to the website to search for other potential matches. Arranging dates with several people simultaneously appeared to be the norm.

After establishing an ongoing relationship, the website was no longer necessary, although many of our participants maintained their profiles and continued to visit the sites. Our participants reported that the system afforded them the opportunity to shop around for their perfect match – discarding those who did not suit – simply because of the large number of possible partners available online. They liked the structure provided by the websites finding it relatively easy to negotiate and stress free. As Nicholas commented, it was “very easy”:

From my limited experience it seemed very easy... without doing more than preparing what is a personal marketing document and lodging it on a site I was approached by a dozen interesting ladies. Where else could that happen? That was within the first 36 hours! Nicholas (63)

Christopher (61) described the structured process of online dating as akin to a “protocol” and said that, for him, it was both logical and reassuring. The anonymity of the contact enabled our participants to approach a number of people simultaneously, picking and choosing the most likely relationships to pursue further.

Varying the structure

The system did not suit everyone. For example, Liam (61) did not like having to use email as a means of contacting people because he said he was a “lousy typist”. Although the dating website forced him to make initial contact through email correspondence, once initial contact was made with someone new, he circumvented the need to continue using it by providing his phone number. His new relationship began with just one email and then quickly progressed to telephone contact. Nevertheless, Liam had to follow the basic process in order to de-anonymise himself to potential partners. The website still structured the progression of his relationship.

These stories illustrate that the initiation of online romances is centred around and organised by the dating website, whereby prospective partners get to meet each other through their personal profiles, photographs and emails, before moving on to online chat and/or telephone contact, eventually meeting in real life. The role of the Internet, in this respect, is as initiator and moderator for these burgeoning relationships and without this role these relationships would not begin.

Summary

Our participants found that online dating followed a predictable structure. The first stage involved searching the personal profiles and photographs on display, followed by initiating anonymous e-mail or instant message contact through the website. If the contact went well, they proceeded to speak by phone and, in due course, met in real life. The structure offered opportunities to both continue and end relationships, and our participants found it easy to follow. The majority of the online-initiated relationships in the present study followed this predetermined pattern of progression, with only minor variations.

Implications for policy and practice

The current study indicates that older adults are utilising the Internet to make romantic connections, connections that are meaningful and important in their lives. However these connections are only available to those who have access to and interest in online communications. Policy around Internet access should therefore specifically target older adults who do not have such access, enabling them to not only remain connected with family and friends, but also to make new links – romantic or otherwise – if they so desire. Such connections could, arguably, have implications for health and wellbeing outcomes in the years ahead, given that socially connected older adults have been shown to be happier and healthier than those who are not.

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“OOPS, I LOST MONEY GAMBLING AGAIN. BUT I JUST CAN’T HELP MYSELF!” DECLINING EXECUTIVE FUNCTIONS IN OLDER AUSTRALIAN GAMBLERS.

AC McCarrey & JD Henry

University of New South Wales, Sydney, NSW

It has been well documented that older adults experience a decline in executive functions as measured by laboratory based experiments. These include verbal fluency and controlled inhibition tasks (Phillips & Henry, 2008). However, older adults function well in real-life situations taxing executive functions such as shopping errands and many household tasks. In the first of its kind, this study aimed to explore the relationship between executive functioning in older Australians and the popular social pastime of gambling. Younger and older adults played an electronic gaming machine programmed to only lose. With intact executive control, players should terminate play as soon as possible. Results showed that older adults played significantly longer, and lost significantly more money than the young adults. Further, this sample of older adults demonstrated significant impairment in several cognitive and executive functioning tasks relative to the younger adults. Implications for executive impairment contributing to maladaptive gambling behaviours in older Australians are discussed.

Rationale

One social activity that engages a large proportion (74%) of older Australians is gambling (McCormack, Jackson & Thomas, 2003), and in particular, electronic gaming, or pokie machines. Pokie machines have become a popular fixture of retirement pastimes since their introduction and consequent rapid expansion in community clubs. Such observations are likely to reflect the enticements gaming venues target towards the older population. These include subsidised meals and free bus pick-up services which offer an attractive outing. This multi-billion dollar industry exploits mismanagement of aspects of our psychology such as emotion processing and higher order cognitions. Importantly, it seems likely that various executive control operations will be implicated in gambling decisions, such as inhibition (to control gambling urges), task switching (to flexibly divert attention to and from the gaming machine), and monitoring of behaviour (to periodically assess how much money has been lost and deciding upon an appropriate course of action). In laboratory studies, older adults exhibit a decline in executive functions such as inhibitory control and mental flexibility (Phillips & Henry, 2008). Preliminary evidence is consistent with the possibility that gambling problems are linked to executive decline in late adulthood (von Hippel, Ng, Abbot, Gill and Powell, in press). Thus, this study aimed to provide a further assessment of whether these age-related executive losses have the potential to affect gambling behaviours. In the first of its kind, younger and older adults' gaming behaviours were compared directly using a real time slot machine with ecologically valid gaming contingencies. The purpose was to examine gambling perseverance in the absence of reward, as an indirect marker of underlying executive control.

Methods

Participants

Sixty healthy gamblers were recruited from gambling establishments in the eastern suburbs of Sydney, from the UNSW careers website and from the Sydney Morning Herald. All participants reported that they gambled at least once per month. Of these 30 were older

gamblers ($M = 70.8$, $SD = 5.6$, range 65-87, 15 females) and 30 younger ($M = 21.5$, $SD = 2.8$, range 18-28; 15 females). Nine older gamblers were excluded from the study following scores ($<83/100$) on The Addenbrooke's Cognitive Examination (ACE-R; Mioshi, Dawson, Mitchell, Arnold, & Hodges, 2006) which placed them in the possible dementia bracket. Additionally, any participants found to have a history of psychiatric disease, mood disorders or head injury, were excluded from the study. Payment for participation was \$10 per hour. Ladouceur and colleagues found that when comparing the validity of laboratory versus naturalistic gambling settings, the single most important variable was that participants be allowed to keep any winnings (Ladouceur, Gaboury, Bujold, Lachance & Tremblay, 1991). Thus, participants were allowed to keep any winnings.

Tests of cognitive functioning

General cognitive functioning was measured to test whether any age differences identified in gambling behaviours simply reflected more general changes in cognitive parameters such as processing speed (Speeded Pattern Comparison Task; Salthouse & Babcock, 1991), memory (Digit Span Test; Wechsler, 1999) or verbal IQ (National Adult Reading Test; Nelson & Willison, 1991).

Tests of executive control

The widely used Stroop colour naming (Perret, 1974) and Hayling sentence completion (Burgess & Shallice, 1997) tasks measured mental flexibility and inhibitory. The Hayling is particularly well suited to older adults due to its sensitivity of advancing years reflected in poorer performance (Bielak, Mansueti, Strauss & Dixon, 2006). Verbal fluency tests including phonemic, alternating and excluded letter were administered (for which repetitions were indexed). These tests are among the most common measures of executive impairment with phonemic deficits associated with frontal lobe function (see Phillips & Henry, 2008). Of noteworthy use with older adults are the time-restricted alternating fluency tasks, which have been suggested as particularly sensitive to advancing years (Henry & Phillips, 2006). Their design requires retrieval and then mental switching between categories, a skill that, when impaired, may feasibly contribute to unwise gambling habits.

Procedure

The slot machine game 'Lucky Sevens' was used in this study, where three cherries, bars or 7s represent a win. Another variable found to be important in the validation of laboratory gambling studies is that participants bet with their own money (Ladouceur et al., 1991). Thus, participants played an unrelated game prior, whereby they won \$20. To promote ownership of betting money, it was with this \$20 that participants played the experimental game. Unbeknownst to the players, the game was programmed to only lose. Players could opt to take their winnings at any stage or stay and play. The dependent variable was how much money the participant lost.

Results

Younger and older participants were matched for years of education ($t(58)=-1.08$, $p>.05$), weekly household income ($t(57)=1.18$, $p>.05$), IQ ($t(58)=-.77$, $p>.05$) and gambling severity ($t(58)=-.31$, $p>.05$). However, older adults played longer, and lost more money in the 'lose only' gambling trial than the younger adults, $t(58)=3.73$, $p<0.001$. See Table 1.

Table 1: Money spent during a 'lose only' gambling trial

	Older adults	Younger adults
Money lost from \$20	\$14.9 (5.9)	\$9.6 (4.9)

Younger adults outperformed older adults on two measures of cognitive function; processing speed ($t(58)=8.64$, $p<.05$) and memory span ($t(58)=-2.78$, $p<.05$). However, older adults scored higher on the National Adult Reading Test, ($t(58)=2.36$, $p<.05$). Age-related deficits were typically greatest on the measures of executive control, implying particular difficulties in this capacity. See table 2.

Table 2: Performance by young and old gamblers on a range of executive control measures

	Old	Young	<i>t</i> statistic
Stroop	34.7	2.2	$t(58)=5.8^*$
Hayling	5.6	6.3	$t(57)=-3.0^*$
Phonemic fluency	36.5	38.2	$t(58)=-0.6$
Phonemic repeats	2.8	1.0	$t(58)=3.5^*$
Alternate fluency	13.6	14.9	$t(58)=-1.5$
Alternate repeats	0.63	0.33	$t(58)=1.8$
Excluded fluency	29.1	35.8	$t(58)=-3.3^*$
Excluded repeats	0.5	0.1	$t(58)=2.1^*$

* $p < 0.05$

As expected, correlational analysis revealed that participants with the greatest executive control deficits perseverated the longest and gambled the most money (Table 3). The final step in analyses was to examine whether measures of executive control mediated the age difference in money lost (spending) during gambling. Results showed that despite age having a significant impact upon spending $c' = 5.25$, $p < 0.05$, and executive control (e.g. Stroop; $c' = -32.5$, $p < 0.05$), after controlling for age, none of the executive control measures had a significant impact upon spending (all $ps > 0.05$; see Preacher & Hayes, 2004).

Table 3: Money spent during gambling correlated against a selection of executive control measures across both age groups

	Money lost	Stroop	Hayling	Excluded fluency	Phonemic repeats	Alternate repeats
Money lost	1	-0.361**	-0.288*	-0.162	0.215	0.184
Stroop	-0.0361**	1	0.260*	0.389**	-0.214	-0.042
Hayling	-0.288*	0.260*	1	0.274*	0.105	0.089
Excluded fluency	-0.162	0.389**	0.274*	1	-0.186	0.089
Phonemic repeats	0.215	-0.214	0.105	-0.186	1	0.315*
Alternate repeats	0.184	-0.042	0.089	0.089	0.315*	1
Excluded repeats	0.309*	-0.125	-0.162	0.109	0.047	0.041

* $p < 0.05$

** $p < 0.01$

Discussion

As predicted, older adults perseverated longer and gambled more money than the younger adults. Further, poorer gambling decisions were associated with a decline in executive

functioning; specifically, the more disinhibited and cognitively inflexible the participant, the more money they gambled. Similarly, tests of perseveration were found to correlate positively with the amount gambled in that repetitious behaviour in tests of verbal fluency were associated with repetitious behaviour when gambling.

As noted previously, von Hippel et al., (in press) found that in older adults, self-reported gambling problems were associated with poorer performance on an inhibition task. However, the mediational analyses in the present study revealed that none of the executive measures accounted for the age difference in money spent gambling. These data imply that executive losses may be relevant to understanding poor gambling decisions made by both young and old, but not necessarily age differences specifically. Compared to their younger counterparts, older adults make poorer gambling decisions when faced with continual losses, yet these data do not support the hypothesis that age-related executive losses contribute to age-differences in gambling. The cause of this differential gambling behaviour across young and old remains unclear. One possibility is that these age-differences may instead be underlain by changes in emotion processing. It has been argued that there is a 'positivity effect' in late adulthood, whereby older adults show increased attention to, and memory for, positive affective stimuli relative to negative affective stimuli (Carstensen, Isaacowitz, & Charles, 1999). Thus, future research should address how older adults process the emotional highs and lows during gambling and its subsequent impact upon gambling behaviours.

Nonetheless, the current finding highlights that older adults play longer and spend more money gambling than younger adults in a maladaptive lose only scenario. Considering that the majority of Australians retire on a \$13,000 per year pension, a predilection to overspend when gambling could have serious ramifications. This could mean the potential loss of millions of dollars each year from the ageing community. An important consideration for future research is therefore clarifying the underlying psychological changes occurring in old age that contribute to the maladaptive gambling behaviours evidenced in this study. This may go some way in explaining the increase in aged problem gambling seen in recent decades (Victorian Casino and Gaming Authority, 1997).

Psychological research of this nature is important in providing guidelines not only for future cognitive ageing research, but also focus groups designed to explore ageing social issues such as inclusion and independence. The fact that gaming venues play a large role in the social activities of older Australians means that studies such as this provide important considerations for government policy makers, such as how gambling revenue may be redirected back into the ageing community. In addition, the present finding has the potential to raise delicate ethical issues as to the effect age-related changes in psychology impact upon gambling behaviours.

Summary

In conclusion, the landscape of older persons social pastimes has changed substantially in recent decades due to the mushroom rate of growth of suburban pokie venues. The long-term consequences remain unknown, but certainly raise pertinent and ethical issues to ageing Australia. As a starting point, this study highlights the behavioural challenges in aged gambling, which can be used to better implement ageing social and financial guidelines.

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HARNESSING THE KNOWLEDGE OF MATURE AGED MANAGERS

Wanda Pryor

PhD Candidate, Faculty of Business & Law, School of Management, Edith Cowan University, Perth, Western Australia

Abstract

This paper contributes to the epistemological body of knowledge in workforce management, and in particular to the emerging body of knowledge on the mature aged management cohort in the Australian workplace context. Academically, new knowledge from this study will contribute towards our pedagogic understanding how the efficacy of embedded knowledge and workplace structures/cultures influence the building of future sustainability and innovation.

This exploratory study uses a mixed method approach to map broad organisational and individual trends and to investigate the critical relationships, attitudes and stereotyping within various organisational cultures following the lead of others in the social research field, (Maxwell, 1998; Flick, 1992; 1998; Fielding G. & Fielding L., 1986; Denzin, 1978; Campbell & Fiske, 1959). This research uses the constructivist approach to guide the investigation (Guba & Lincoln, 1989). Outcomes from this study will produce recommendations and opportunities to government, industry bodies and organisational leaders about workforce policies, macro and micro-economic risk imbalances in the fields of an ageing workforce, knowledge retention, management, creation, innovation, leadership, workforce planning, organisational cultures, and workplace structures.

Key words: *employers; mature aged workers; knowledge; workplace structures and cultures.*

Rationale

Australia is facing two critical workforce issues: considerable shortages of labour and skills and an increase in the departing masses of the ageing workforce. Over the last ten years, the percentage of mature aged workers in the 50 – 65 age group has increased sharply and is predicted to continue over the next 20 years. Of significance, is the paucity of young entrants coming into the workplace as the next ageing generation, the “baby boomers”, depart in significant numbers (ABS, 2010).

This dual phenomena “is occurring at a time when not only skills and labour shortages emerge as an area of concern” (Davey, 2003, p.156), but where “employers need to anticipate and act with a great sense of urgency on the great pool of knowledge that exists within the highly skilled mature aged workers that is available at their disposal” (Slagter, 2007 p.82). The increasing exodus of mature aged employees from the workforce are likely to cause dissonance within many organisations as well as somewhat impair its short to medium term performance, particularly if those organisations are knowledge intensive (Drucker, 1993; Nonaka & Takeuchi, 1995).

In today’s economy where the performance of most organisations are mainly based on knowledge, the certainty of the brain drain will critically affect how organisations will be knowledge productive (Drucker, et.al. 2001). De Long, (2004) asserts that “the costs can be tremendous when the impact of lost knowledge is unanticipated” (p. 27).

This paper highlights the growing need for business and government to recognise that the premature exit of our ageing workforce dilutes organisational diversity and narrows the talent pool.

Whether population ageing really constitutes a problem for the future is not the primary focus of this study. Rather, the intent is to explore the reality 'on the ground' by allowing the voices of the working informants to show how many facets of a complicated situation can be simultaneously illuminated for action.

Methodology

The study will address the existing knowledge management (KM) practices and relationships amongst a cohort of mature aged managers who are 50 years and older and their employers, working in various knowledge intensive organisations. The research process aims to examine the interconnectedness of knowledge within organisations, and the organisational mechanisms that support mature aged managers in translating and articulating their tacit knowledge into an actionable format that can be made productive and sustainable.

Specifically this research will seek to respond to the following questions:

- What effective knowledge management practices and infrastructure have organisations put into place;
- How significant is the knowledge loss of mature aged managers;
- What are the barriers that employers' encounter when capturing the knowledge of their mature aged managers; and
- What are the triggers that motivate mature aged managers to share their knowledge.

This research will use the constructivist approach to guide the investigation (Guba and Lincoln, 2006) while the theories of organisational structuration and motivation will form a conceptual framework for the field study. A mixed method approach will be used to draw from two levels of analysis. A questionnaire will be distributed to 2 000 HR managers across industries and a series of semi-structured interviews will be conducted with self-nominated mature aged managers. All instruments have been designed to take into account the complexity of different types of organisational settings and profiles of managers' expertise and experiences. The analysis will utilise SPSS and NVivo. Regression and matching techniques will be used to make comparisons and the qualitative data will be subject to thematic and grounded approaches.

Attitudes

In literature many references are made to the specific knowledge capabilities of the mature aged workers.

Ageing workers play an important role in the knowledge household of an organisation. Their life experience, their in-depth knowledge of different professional environments (network of contacts, who knows what?), and their knowledge of the culture of these environments (collection of codes, symbols, shared significance, etc. permitting to know how to deal with who?) bestows them differentiated aptitudes to understand issues, interpret information, connect various information and data, integrate knowledge and finally connect and co-ordinate knowledge carriers. (Ebrahimi, Saives, & Holford, 2008, p. 29).

Mature aged workers distinguish themselves by having practical intelligence or "the ability to solve ill-defined business problems using rules of thumb that can't be put down on paper" (Coy, 2005, p. 79). Conversely, Ebrahimi (2008) asserts that "The majority of employers question the

productivity, as well as their capacity of mature aged workers to adapt and learn” (p.28). Whether these views are illusory, based on misconceptions, myths, prejudices (Ebrahimi et al., 2008; Remery, Henkens, Scheippers, Van Doorne-Huiskes, & Ekamper, 2001) or age discriminations (Kaye & Cohen, 2008) they do impose constraints on productivity in times where employers in Australia cannot afford to ignore the benefits of the talent pool of ageing workers.

This schism in the attitudes of employers and mature aged managers may well pose a problem when employers come to realise that terminating mature aged workers in the traditional way – by offering them redundancies is a very expensive escape route particularly where Australia has a highly skilled ageing workforce that has the potential to become a scarce resource. Without a holistic and consistent approach, it will be difficult to change the attitudes and behaviours of mature aged workers, their employers and society as a whole.

Shifts in Paradigm Thinking

Over the past decade, successive Australian governments have recognised the need to increase the labour force participation rate of mature aged persons as a way to help soften the economic impacts of an ageing population. To date, a range of strategies such as “continue working for as long as possible” (Costello, 2004); raising the pension age from 65 in 2017 to 67 by 2023, (Swan, 2009), and the introduction of the Productive Ageing Package to provide vital training and support to older Australians who want to stay longer in the workforce (Swan & Arbib, 2010). However, despite the intervention of these new policies and incentives, mature aged workers continue to exit the workforce in masses and as a consequence, two paradoxes exist: Firstly, whilst these new policies are directed towards encouraging the workforce to participate beyond the traditional retiring age of 65, “many employers are unwilling to hire or retain them” (Ranzijn, 2004). Secondly, many mature aged workers over 55 are ceasing their employment before they reach sixty-five where they leave behind, irreplaceable levels of knowledge, in times where Australian organisations are struggling to compete domestically and globally for skilled workers. As Encel (2003, p.3) notes: “While it is obvious for individuals to decide when it is right for them to retire, there is growing recognition in Australia and overseas that “some policies and attitudes have encouraged and reinforced a trend towards early exit from the labour force voluntary or otherwise”. It is therefore imperative that policies and strategies are balanced to support those mature aged workers who are “a primary resource in organisations.” (Brooke & Taylor, 2005).

From an organisational perspective, the main problems however appear to be that the majority of employers have lost sight of the capabilities of their mature aged workers and do not know how to make sense of harnessing their knowledge potential. Could able, baby-boomers with the right knowledge/skill sets fundamentally “reinvent retirement” by continuing to work in retirement in the twenty first century?

Indeed, we need to cultivate the behavioural responses of organisations and their mature aged performers because if we fail to act now, then we will pay the price for “Much that once was is lost, for none now live that remember it.” (Tolkien, 1981).

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TRANSFORMATIONS: TRANSCRIPTS TO POETIC REPRESENTATIONS

Dr Margaret Simmons

Monash University Gippsland

Abstract

When faced with pages of interview transcripts, the qualitative researcher is entitled to feel both excited and daunted. Excited by the potentialities of the data, but dismayed because the process of transforming that data into something 'readable' and interpretable can seem challenging, if not overwhelming. This paper shows how I transformed my interview transcripts into poetic representations which helped my understanding of a group of older women's stories of leaving home. While much of the narrative literature suggests the usefulness of poetic representation as a tool of analysis, there is little which attends to its processes. I devised my own techniques and this paper shows how I produced the poetic representations which enabled me to commence the analytical process. I take a piece of transcript and show how it became a poem. I found this activity to be joyful, creative, enlightening and powerful. Undertaking poetic representations to analyse one's data might also appeal to other qualitative researchers on ageing who are feeling overwhelmed with the weight of their data or who might simply be seeking an attractive and alternative method of data representation.

Background

My study emerged from stories my mother told us about being a British WWII evacuee and a British migrant to Australia. During WWII, up to four million British children were evacuated from their city homes to rural areas, to avoid the mass aerial bombing predicted by war advisory committees. Sent to live with strangers for months at a time, there are many images of evacuees carrying little suitcases with labels pinned to their coats, as they travelled mostly by train to their unknown destinations. Following WWII, in an austere post-war environment of food and fuel rationing, housing shortages and cold winters, many Britons felt the lure of an almost utopian Australia advertised as a land of sunshine and unfailing opportunity. Australia, keen to attract skilled industrial workers and immigrants who fitted its unspoken White Australia policy, offered an additional attraction of a 10 pound fare thus ensuring that millions of Britons immigrated to Australia. In my study, I wanted to see if there were other women in the same 'boat' as Mum's and explore how they constructed *their* stories of being evacuated and migrating.

As Ricoeur (1991, p. 30) notes, we are "tangled up in stories". My aim was to try and untangle some of those stories because the two themes of evacuation and migration had not been previously linked together and these women's stories had not been told before. But my dilemma was how best to represent the stories of the 16 women I subsequently interviewed in a way which was epistemologically and ethically sound. It was at this stage that I came across the work of Laurel Richardson who claims writing and poetry as legitimate forms of social inquiry. Richardson (1997, p. 180) describes poetic representation as an evocative form of writing which imbues the work with feeling and reveals the 'handprint' of the researcher. However, I must stress I was not writing poems in a literary sense, but constructing a particular type of poetry from the selected words of my participants to both *represent* and *re-present* their stories, on which I then performed a narrative analysis.

Rationale

Forming the epistemological underpinnings of my study, the notion that social groups construct their own knowledge and versions of reality is key. Thus, it is important not to claim that this way of representing and analysing the women's stories is *better* than any other way, but *different*, and it offers fresh and fascinating ways of exploring data which other researchers might find inspiring. Because with any method, there is no way to capture lived experience, this epistemology posits no single or eternal 'truth', but rather, useful interpretations and representations which are historically and culturally contingent (Belenky et al., 1997, p.138).

Poetic representation is about *showing* and not *telling* stories because showing involves embodiment – about life and about experience. We feel poems, rather than read them. Indeed, we all use the poetic devices of the pause and rhythm in our speech, rather than talk in prose (Richardson, 2003, p.189) and the reader is encouraged to construct their own meanings and understanding of the research through this media. However, the path to these multiple understandings is made less bumpy by the researcher clearing away some of the distractions, the 'uhms' and 'ahs'. As Richardson (2003, p.187) notes, the form in which we write affects and shapes its contents. While prose is the conventional form, it is not the *only* one, nor should it be presumed authoritative.

Ever mindful of Richardson's (2003, p. 192) advice to "revise, revise, revise" during the close and careful work required to construct the poetic representations, I read the poems aloud, moved them around, harmonised some and juxtaposed others; editing, reviewing and revising them in iterative ways. Most poetic representers have devised their own 'rules' when converting their transcripts which might include juxtaposing words from any location in the transcript as long as the flow and rhythm of their speech is retained (Glesne, 1997, p. 205). However, I elected not to re-order words except very occasionally when it obfuscated the story. It is important to remember that while the words might belong to the participants, the poetic representations are mine. In the following section I compare an original verbatim piece of transcript with its poetic representation and have highlighted the words and phrases of the poem in bold. I cannot claim that my poetic representation is a superior form of representation – but I can claim that it made my understanding and analysis of the data easier and more enjoyable.

ORIGINAL TRANSCRIPT	POETIC REPRESENTATION
<p>Beth: Anyway, what we must have done at school ... we'd got our gas masks, and we were all issued with our labels, and uhm ... I never went home! Nobody had said to me: "you won't be coming home tonight". And it was sort of like a mystery to me ... So we picked up our gas masks and off we trotted. Now, not that I knew, but our mothers had put us into school, but they didn't know where we were going, or even when. And all my mother said that day when she took me to school, was: "remember your manners, and stay very close to your sister". Anyway, we came out all in our crocodile ... my sister and I went out together and we went up the road, and we went to a bus stop. My sister said to me: "get a seat by the window", because we were used to going on Sunday School outings and I being the small one, could bob and weave, and I always got the best seats, and if we went anywhere for a week, like on a Sunday School holiday, Dora would look after the luggage, and she'd say to me: "Get the two best seats by the window" [laughter]. I was used to doing it, so of course when the bus came, I got on and got the two best seats just facing the back window, and all the children were ushered on and it starts to go, and I see this crowd of women come, and amongst them was my mother, and ...they are running full tilt. The word had got round that the children are going, so she came down the road. And when she caught up, when the bus goes too far, she puts her apron right over her head and she just stood there – and that was terrible, terrible...</p>	<p><i>Our mothers didn't know Where we were going Or even when All in our crocodile, we went Up the road to a bus stop My sister said to me "Get a seat by the window" I, being the small one, could bob and weave I always got the best seats So of course when the bus came I got the two best seats Facing the back window All the children were ushered on It starts to go I see this crowd of women come Amongst them was my mother They are running full tilt The word had got round That the children are going So she came down the road And when she caught up When the bus goes too far She puts her apron right over her head She just stood there And that was terrible, terrible (Beth)</i></p>

Discussion

From dense text, something with great clarity emerges which enables the researcher to both 'see' and 'read' and understand a little more. The chronicity of the story is unaffected, with lines taken from here and there to enable the poem to flow. As I shaped the text into its new form, it became obvious to me that the tense of this story changes – from past to present as Beth remembers the poignant image of the mothers running alongside the bus. This shift into the present tense is known as the 'historical present' (Ochs and Capps, 1996, p. 24), which vivifies those events, rendering them more immediate and captivating. Even though it is nearly 70 years since these events, Beth's recall is clear, her distress for her mother tangible. The 'poem' is also one of constant and breathless movement, with many active verbs, which gives it a sense of travel consistent with the children being evacuated.

I concede as entirely possible that I might have noticed these changes without transforming the story into a new form, although I cannot be certain. Pared down and without distractions, the poem for me is an enriched version of the original transcribed story and gains from what

is left out to become a thing with its own rhythm and beauty. When I read this poem, as opposed to its original text, I hear again Beth's accent and her emotions - the poem brings her story to life. Another important aspect of this form of representation is that it quite clearly displays itself as a co-creation of the women's stories performed in a way which invokes a shared sense of emotion. Indeed, poetic representation can express the individual subjective experience as well as the collective experience in very powerful and transformative ways. As Richardson (1997, p. 33) notes, there may be recognition in the individual response to the story of, "[t]hat's my story. I am not alone".

Conclusion

Many of this study's participants constructed their stories in terms of their reception to the point of delegitimising themselves. This is consistent with other research showing that as women age, their stories are often overlooked and undervalued. By hearing older women's stories, particularly in a format which is interesting, provocative and powerful, we begin to challenge some of the damaging and silencing discourses surrounding women who age. I suggest that any qualitative researcher, but particularly those working with the older people, whose stories are often overlooked, may find the use of poetic representation of significance and interest. There have been, over many years, determined efforts by feminists across the globe to open up new spaces from which women can speak and be heard. As Belenky et al. (1997, p. ix) admit, their greatest contribution to knowledge has been the "work that it has spawned". Further research, hopefully inspired by alternative forms of representation such as this, can only contribute to older female lives in valuable ways.

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THE EFFECTIVENESS OF RISK MANAGEMENT AND QUALITY ASSURANCE ACTIVITIES IN IMPROVING THE LIFE OF RESIDENTS IN NURSING HOMES

Ron Thompson, PhD Candidate

Supervisors: Professor Tracey McDonald and Associate Professor Thomas Harding

Australian Catholic University

Abstract

Background: Quality care provided to nursing home residents has multiple risk factors as facilities are home to vulnerable adults who have significant cognitive, functional and sensory deficits and are at high risk for declines in health and function.

Objective: To examine areas in risk management that, in addition to ensuring resident safety and clinical care, can also contribute to improving the lives and maximising the quality of life.

Method: Review of the literature.

Results: Several themes emerge. First, risk management and quality systems have improved clinical conditions of residents. Second, clinical indicators do not necessarily indicate how a nursing home is performing compared to peers, and clinical indicator results require careful interpretation and risk-weighting. Third, limited work has been completed to assess whether improvement in clinical conditions has improved quality of life. Fourth, non-clinical factors that impact on risk resident amenity have been reviewed overseas but with little review in Australia. Fifth, there has been limited work completed to assess the quality and safety of the environment and the effect that this has on quality of life. Sixth, an overall risk management framework is not evident.

Conclusions: Aged care is multi-dimensional and no one system provides a comprehensive assessment of risk management and quality assurance as well as an overall assessment of quality of life. Further research on the effectiveness of risk management and quality assurance systems is needed and should include qualitative as well as quantitative methods, including linking risk management practices to resident quality of life.

Introduction

In Australia there are 2.1 million Australians aged over 70 and there are 2,800 nursing homes providing 181,000 places. Importantly, the majority of older Australians live healthy, lives and have no need to use aged care services with less than 9% of people over 70 in residential care [1]. Residential care facilities are home to vulnerable adults who have significant cognitive, functional and sensory deficits and are at high-risk for declines in health and function. A review of the literature has been completed of the key areas in risk management of nursing homes that contribute to improving the lives of residents.

The literature review comprised a search of computerised databases with defined search terms for the period 1985-2010 in the English language with additional searches completed upon review of identified articles. Approximately 80 articles were reviewed in-depth. Search engines used included CINAHL, Journals@Ovid, Academic Search Complete, Medline, Health source, CBCA Business, Proquest, Social Science Journals and Googlescholar. Search words used included: aged care risk management; risk management framework/plan/assessment; making life better for older people/happy older people; what do older people want; aged care quality; long term care/assisted living/nursing home quality; benchmarking.

Risk Management

Organisations face factors that make it uncertain whether they will achieve their objectives. The effect this uncertainty has on the organisation's objectives is "risk". With regard to nursing home residents, all of their activities involve some level of risk. Risk is defined in ISO 31000 [2] as "the effect of uncertainty on objectives". Risks can come from uncertainty in many areas including financial markets, project failures, legal liabilities, credit risk, accidents, natural causes and disasters as well as deliberate attacks from an adversary. Traditionally, the management of risk has been the bailiwick of insurance companies, however insurable risks have been found to only cover 20% of actual losses [3,4]). This leaves a significant risk gap with Meier [5] finding, "risk management is not just buying insurance for a company; it also involves dealing with insurable and uninsurable risks and the choice of the appropriate techniques for dealing with them". In a nursing home setting, the key focus of risk is (quite reasonably) on the vulnerable resident ensuring the protection and clinical care of the person. There is no 'insurance policy' to manage this risk; systems and processes are required to manage and mitigate the risk of harm occurring to residents as well as promoting their quality of life. To manage risks, organisations have risk management systems and some have created risk management frameworks to ensure a holistic perspective is used to minimise risk. ISO 31000 [2] defines risk management as "coordinated activities to direct and control an organisation with regard to risk" and risk management framework as a "set of components that provide the foundation and organisational arrangements for designing, implementing, monitoring, reviewing and continually improving risk management throughout the organisation." Hubbard [6] interprets risk management in a similar fashion, as does Enterprise Risk management advocates [7]. ISO 31000 [2] advocates that the foundations of a risk management framework include the policy, objectives, mandate and commitment to manage risk; the organisational arrangements include plans, relationships, accountabilities, resources, processes and activities; and the risk management framework is embedded within an organisation's overall strategic and operational policies and practices.

Risk Management Initiatives in Aged Care

Quality of Life

In a setting where absence of disease, the standard measure of success for general health services, is not possible, the quality of life a resident experiences is important from a risk management perspective in terms of monitoring and ensuring satisfaction and minimising complaints. By its very nature, quality of life is complex, difficult to assess, and has different meanings to different people and in an aged setting includes psychosocial indicators such as emotional health, social function, and self-worth, in addition to physical health and function [8-16]. Measuring quality through multiple ways such as feedback from the resident direct, the staff, the family plus direct observation, is affirmed by Sloane [17] and Kelley-Gillespie [18] who find limitations in restricting measurement to one model. Key psychosocial factors affecting quality of life includes staffing and staff relationships [19-23] and resident empowerment promoting meaningful activity, choice and the ability to make decisions [24-26]). Perversely, it was found that the nursing home climate may be disempowering, for reasons such as limited finances, staff time, human resources, ageist attitudes and importantly, a risk-averse culture that permeates aged care facilities.

Quality of Care

The literature is heavily influenced by Donabedian's [27] model of three approaches: structure, process and outcome. Quality can be elusive, difficult to measure and multi-dimensional and is challenging because of the heterogeneity of residents plus the diversity of clinical and non-clinical care requirements [28-31]. Consequently, one all-inclusive measure of quality may not be achievable. From a perspective of risk management, defining quality to encompass all these measures is important in ensuring that all the risks to residents *and* to an organisation are given prominence.

In Australia there is an accreditation process that assesses homes based on meeting standards. Reports are publicly available, detailing compliance or non-compliance, however they do not compare between homes, or assess specific quality indicators. Notably, despite accreditation, there are no standardised measureable indicators that all homes complete to enable objective measurement of resident risk, safety, care and satisfaction [32-33], although Nay [34] presented five indicators (pressure ulcers, restraint, polypharmacy, weight change, depression) that are now monitored by Victorian State-run homes.

In seven countries (USA, Australia, Norway, New Zealand, England, Sweden and Denmark), resident clinical indicators have been increasingly employed as a measurement of nursing home resident care effectiveness and quality [35], with the US being the only country that has compulsory reporting of indicators with the federally-mandated Minimum Data Set (MDS) reporting system, which has been validated by Saliba and team of researchers at the University of Wisconsin-Madison [36]. There has been comprehensive external validation of quality indicators generally [37, 38] and in specific areas such as pressure care [39-40], weight-loss [41], depression [42], mobility, nutrition, and restraint, as well as assessing staff perception of [43] and management reaction to [44] the quality indicators. However, the MDS was originally designed for needs assessment and care planning, and was not developed as a quality assurance measure. Further, there is concern regarding the accuracy and value of clinical indicators and the MDS in areas regarding accuracy, self-reporting bias, meaningfulness of the indicators with regard to depression [45], incontinence [46], restraint [47], pain management [48-49]). However, it is evident that the weight of research overwhelmingly supports the rigour of the MDS process as a tool to measure quality and the latest iteration of the MDS (MDS 3.0) introduced in 2009 overcomes a weakness and adjusts for case mix variations identified by Iezzoni [50]. Harris [51] and Rantz [52] found that quality indicators are just that: *indicators* only. Clinical indicators can be used as a guide to clinical quality only and the multi-dimensional aspect of nursing home care and resident quality of life preclude clinical indicators from being the sole arbiter of quality or of risk.

Other Risk Management Identifiers

Staff, Education and Recruitment: As residents become more frail, isolated and dependent, they inevitably increase their reliance on staff to meet psychosocial needs as they provide intimate physical care. Further, the education level offered by a home and the structure of professional and non-professional staffing has been found to have direct impact on clinical care outcomes [53-59].

Leadership: Reviews of high-performing and low-performing nursing homes show a direct correlation with leaders' behaviour with it being evident that key organisational commitments must be in place for staff to consistently provide quality care and for residents to receive quality care [60-63].

Regulatory Compliance: As many residents cannot advocate for quality of life or care, this has led to monitoring by government agencies to protect a vulnerable population, and this

has been validated as providing better resident outcomes and fewer high risk events in aged care homes in the US [64-67].

Physical Environment: Legislative changes associated with the 1997 Aged Care Act resulted in building certification that focuses on fire safety and other environmental aspects including lighting, number of bathrooms, and access routes, thus assisting in providing a safe and secure home for a vulnerable population. Nursing homes have traditionally followed a medical model and emphasised the provision of skilled nursing care for residents. The literature acknowledges the influence that architecture and design can have on both the well-being of the residents and the quality of care by staff in residential aged care settings. To optimise quality of life and mitigate risk, there is a need to provide resident safety and security as well as understanding the environment in fostering residents' positive interactions and engagements [68-73].

Financial and Business Risk Issues: There are limited reviews of overall business risk associated with nursing homes in Australia other than the Hogan review [74], which recommended changes to a more user-pays system. In their 2009 report, accounting firm Stewart Brown [75] finds that that 22% of Australian nursing homes were losing money and 57% were in net operational loss. This parlous state is supported by accounting firm, Grant Thornton [76] who found that "...the current funding and regulatory arrangements do not reward investment in modern aged care infrastructure and policy reform is urgently required." The importance of financial security of nursing home organisations is obviously high from an organisation risk management perspective. It is also important to residents, whose lives would be significantly impacted if a nursing home had to endure a round of cost-cutting or worse still, was forced to close.

Need for an overall Risk Management Framework

Risk and its management has received significant attention from the financial services industry and public sector services and high risk sectors including oil refining, defence, and nuclear power. In business, there is evidence of the prevalence of risk management frameworks, for instance in finance, Kalita [77] found 80% of companies had a framework in place. Pawling [78] concluded that a risk management framework differs from traditional risk management as traditional approaches tend to be fragmented, treating risks as disparate and compartmentalised, and not integrated with other management processes and proactively considering potentially disruptive events. Grundke [79] reviews the 2008/09 Global Financial Crisis and demonstrates that different risk types interact and that there is a need for an integrated approach. An integrated risk management approach was reviewed for engineering, construction and insurance [80], and project management [81]. Today, in a world where there is an increasing level of complexity and interdependency, it has been found that an effective enterprise wide risk management program is essential to manage complex and interdependent risks [82-85].

Risk management frameworks have been found to be in place in health-related areas including State-wide healthcare; pharmacy drug trials [86-88], mental health assessment [89] and trials with new methods of treatment [90]. However, risk management is a tool that has been underused in the healthcare industry largely because of the difficulty of quantifying the value of preventive, risk-reduction programs [91]. While individual risk management activities may reduce risk in specific areas, there are potential interdependencies between risks across activities that might go unnoticed. Thus, while individual risk management activities can reduce risk from a specific source, an overall framework strategy aims to reduce risk by preventing aggregation of risk across different sources [2]. In aged care, there is evidence in the literature that risk is being measured and monitored in several ways,

focusing on quality of life, quality of care and other indicators such as staffing and regulatory compliance, as outlined in this paper. However, there is limited evidence of a comprehensive framework of risk management being in place, particularly when assessing the linkage of risk management to strategy as being the hallmark of true risk management framework programs [92].

Summary

Several themes emerge. First, there is evidence that risk management and quality monitoring systems have improved certain clinical conditions of residents. Second, whilst providing useful guidance, specific clinical indicators do not necessarily indicate whether a nursing home is performing at a better or worse level than peer homes, and that the clinical indicator results require careful interpretation and risk-weighting. Third, there has been limited work published to assess whether an improvement in these clinical conditions has improved a resident's quality of life. Fourth, other non-clinical factors that impact on risk, quality and resident amenity, have been reviewed overseas, particularly the US, but with limited review in Australia. Fifth, there has been limited work completed to assess the quality and safety of the environment and the effect that environment standards have on quality of life of residents in aged care. Sixth, an overall risk management framework is not evident among the articles reviewed in this instance.

In summary, aged care is multi-dimensional and no one system provides a comprehensive assessment of risk management and quality assurance in aged care, as well as an overall assessment of quality of life for residents. Further research on the effectiveness of risk management and quality assurance systems is needed and should include qualitative as well as quantitative methods, including linking risk management practices to resident quality of life outcomes within a risk management framework.

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THE NEED FOR A MULTIDIMENSIONAL CONCEPTUALISATION OF RURAL AGEING

Jacqueline M Wilson & Helen J Stain

Centre for Rural and Remote Mental Health, University of Newcastle

Abstract

Positive ageing agendas have become the central focus of government policy and research globally. However, research examining healthy ageing in rural contexts is sparse, and subsequently policy and practice tend to be urban centric. The translation of such policies into rural communities ignores the unique challenges faced by many older rural people in maintaining their independence and health. Population ageing presents significant social and economic challenges at both the societal and individual level. These challenges can only be amplified when combined with the population decline that is taking place across many rural and remote communities. Ageing in a rural community is not a homogeneous experience. Rural communities, even those within short distance of each other, may differ widely in their geographical, social, and/or cultural characteristics. The structural change occurring in communities also differs widely, with some experiencing growth whilst others are in decline. There are, however, commonalities in the challenges of maintaining health and wellbeing, which stem from living in areas of low population density distant to goods, services, and social opportunities. This paper will bring together international research conducted in rural and remote regions to address the multidimensional context of rural ageing.

Rationale

To date, research on ageing and quality of life in rural contexts has focused primarily on urban-rural differences [1, 2]. Studies that have focused solely on rural populations have tended to draw participants from confined homogeneous regions [3], or have grouped participants from a wide range of rural regions together [4, 5]. Thus, most of the existing research has failed to capture the diversity present in rural communities. Social and cultural differences in the ageing process also limits the generalisability of results, whilst inconsistencies in how 'rural' is defined across studies have conceptual implications for research outcomes and policy formation [6, 7]. This paper reviews research conducted in rural and remote regions of developed countries over the last 15 years to establish a foundation for a more multidimensional research approach.

Rural Diversity

The urban-rural comparison studies have generally found that older rural adults, when compared to their urban counterparts, are more financially disadvantaged [8-10], have poorer physical [11-13] and mental health [14, 15], and participate in fewer social activities [16]. Conversely, older rural people feel safer in their homes and communities [17, 18], and experience comparable or higher levels of subjective well-being and satisfaction with life than older urban adults [19-21]. Differences emerge in service use patterns with older rural people having fewer visits to general practitioners, specialists, and allied health professional [22-24]. This may be explained by the limited access and scope of aged care, health care, and ancillary services in many rural areas [4, 25-28]. The rural-urban focus of research has revealed many divergences in the ageing experience resulting as a function of residence. However, the treatment of 'rural' as a single entity is of questionable value for rural policy development. This is demonstrated in studies that examine well-being outcomes across

different levels of 'rural' [29, 30]. One such study found more variation in variables, such as: chronic illness interference; instrumental activities of daily living (IADL); and self rated mental health, across rural categories than between urban-rural categories [29]. Rural residence has also been shown to affect health outcomes differentially by village, state, and country [31-34]. For example, where rural residence was associated with increased number of health conditions, more mobility limitations and depressive symptoms in one region of the USA, the opposite was true for older rural adults residing in another region [32]. Thus highlighting the need to go beyond the simple urban-rural dichotomy and examine the associations between different rural environments and well-being outcomes.

Rurally Focused Research

Research within rural populations have found that older women, widows, and those living in more remote areas are at higher risk of experiencing poverty in later life [35, 36]. In countries where government support is means tested, older people in remote areas are less likely to claim entitlements compared to those in less remote rural areas [37]. Moreover, those living in more remote rural communities have higher mortality rates than those living in within closer proximity to regional or metropolitan centres [38]. The socioeconomic status of the area of residence has been shown to influence structural and behavioural factors associated with negative health outcomes [37, 39, 40]. However, unlike urban areas where disadvantage tends to be concentrated within select neighbourhoods, disadvantage in rural areas is more unpredictably spread across the rural landscape [37, 41]. Consequently, categorisations of rurality based solely on population density, which accounts for the majority of studies reviewed here, may be inadequate in identifying associations between environmental factors and health outcomes [30, 42]. Definitions which take into account the varied characteristics of rural areas and residents permit a more fine grained analysis better equipped to identify such associations [30, 43, 44].

The Rural Social Environment

The social environment plays an important role in sustaining older people and shaping their physical and mental well-being [45, 46]. Older rural people born in the district, who own farming property, or who were engaged in agriculture associated occupations tend to have more family living locally compared to those who have relocated to the district at later stages [47]. However, social ties with friends and neighbours are often found to be more extensive than family associations, and in many cases serve as proxies for absent familial support [48]. Migration and mortality have been identified as the main factors associated with shrinking social networks [48]. Accordingly, the informal support networks of those residing in more isolated areas, where out-migration is more pervasive, would appear to be the most tenuous. This is borne out in a US study where 35% of older people surveyed from an isolated community indicated having no-one available to provide practical, emotional or financial support if it were needed [49]. Despite declining social networks, historical and emotional ties to the location and a sense of community connectedness bind older people to their communities [50]. In some cases a strong sense of community is evident despite low levels of social interaction and participation in social activities [41, 51]. However, the demise of local informal support networks leaves those with health complications in vulnerable positions. Relocation to more urbanised areas has been associated with low social support [22], widowhood [52], higher rates of physical illness [22, 52], and poorer mental health [22].

Physical Health Status

The within-rural studies indicate health conditions such as arthritis, hypertension, cardiovascular problems, and cancer are the most prevalent in older rural populations, with sizable proportions of people reporting multiple conditions [53-56]. Research with community dwelling older rural people has found 14% to 69% in need of assistance with instrumental activities of daily living (IADL), and 5% to 29% needing assistance with activities of daily living (ADL) [53, 56-58]. A comparison across rural categories indicated those living in

remote areas were more likely to report IADL limitations than those living in larger rural towns [29]. Although reporting a similar number of medical conditions, a US study found rural women were less likely than men to report that health problems interfered with their daily activities [59]. Functional decline in ADLs and IADLs over a two year period has been found to be minimal until the age of 80 years [57], after 80 decline in functional status was found to be almost universal [13, 54, 57]. Despite such decline, physical functioning in a 75+ rural cohort in the US exceeded age-matched norms based on a national sample [60]. However, caution is warranted when interpreting these results as the cultural mores and characteristics of communities examined differ greatly. The failure, in many cases, to adequately describe the environmental context of study populations under focus hinders comparisons across studies.

Mental Health Status

The prevalence of loneliness in studies assessing older community dwelling rural people has ranged from 15% - 47% [58, 61, 62]. Predictors of loneliness in a rural sample included fears about the adequacy of future income, living alone, feeling that seniors are not respected, low life satisfaction, and having four or more chronic illnesses [58]. Loneliness was found to increase with age [61, 62], and when gender differences were found they tended to indicate loneliness was more common in women [62]. The identification of depression in community dwelling older rural people has ranged from 6% to 40% [14, 33, 63-65]. However, studies looking at the mental health of rural people in general show that older residents tend to have lower levels of psychological distress compared to younger age groups [30, 66]. Gender differences in the prevalence of depression vary between studies with no clear patterns emerging [33, 65, 67]. Gender differences are evident however in the predictors of depression, with lower levels of interaction with neighbours, society and friends, decline in functional status, and pain associated with depression in males across studies [33, 67]. Conversely, social engagement, social support, leisure activities, and time spent with children and grandchildren, have been demonstrated to be protective against depression in older rural females [33, 67]. Regional differences in the experience of depressive symptoms have also been noted. Residents in townships reported less depressive symptoms compared to more remote residents in a US study [29], whilst the predictors of depression differed by nationality with pain predicting depression in Australian men and women, whilst dissatisfaction with social support predicted depression in older rural American women [33].

Associations between physical functioning, mental health and cognitive functioning have also been identified. Poor subjective health ratings at baseline were found to predict the development of depressive symptoms in older women at a five year follow up [65]. In a group of older rural people receiving community based care the number of chronic health conditions was positively associated with depressed affect [68]. Furthermore, depressed affect was also found to be significantly associated with disabilities in both cognitive and physical IADLs, which subsequently predicted disabilities in BADLs. However, the cross-sectional design of this study prevents the determination of causality between factors. Depression has also been found to be cross-sectionally associated with poorer performance on cognitive measures, poorer performance on selected cognitive tasks at baseline for those who went on to develop dementia, but not related to cognitive decline longitudinally in older rural people [64]. Delays in obtaining help for many mental health issues is associated with an increased burden of associated diseases and health complaints [69]. This is a particular problem in rural communities where access to mental health professionals, especially those specialised in treating older people, is limited [10, 69].

Barriers to Health Maintenance

Barriers to maintaining health include transportation difficulties, limited health care supply, social isolation, and financial constraints [54, 70-72]. For example the travelling distance, long waiting lists, and the cost of dental procedures are cited by older rural adults who,

despite poor oral health, infrequently attend dentists [73, 74]. Difficulties with travel and transportation arrangements figure prominently in research as significant barriers in accessing medical and social services, as well as participation in social activities [3, 71, 72, 75-77]. The centralisation of medical services to regional hubs is problematic from both a transport and financial perspective, with longer distances to travel and potentially added costs associated with accommodation and living expenses [71, 75]. Strategies to cope with the cost of prescription medicine in a US study included not taking the medication, reducing the prescribed dosage, or forgoing food purchases in order to fill the prescription [72]. Importantly, qualitative studies have found older rural adults often minimise their experiences of disadvantage, and rather focus on the positive aspects of rural living [36, 41]. Researchers need to be aware of this positive appraisal bias, which may skew subjective ratings of health and wellbeing in rural samples and conceal the true impact of environmental factors.

Conclusion

In many ways older rural people are not dissimilar to their urban counterparts. Yet the environments they inhabit and the constraints these environments impose upon them vary greatly from both older urban people, and often from other older rural people. Commonalities in maintaining physical and mental health in rural areas are primarily associated with structural factors. The lack of adequate and accessible services responsive to the needs of older rural people appears almost universal across rural communities. Community connectedness and social networks play a vital role in sustaining older rural residents, and the absence or demise of these networks threatens the ability to age in place. Moreover, problems with transportation are ubiquitous and have far reaching consequences for social integration and access to services crucial for maintaining wellbeing. However, intra-rural and inter-individual differences are manifest at many levels. For example, the level of remoteness or the period of time residing in a community are important factors that shape the financial, social, physical, and/or emotional health and well-being of individuals. The failure of studies to consider contextual factors like these mean that potentially important associations may be overlooked. The determinants of health and wellbeing encompass both individual and environmental factors that interact on several levels. Research that investigates these interactions offers a more thorough examination of person-environment transactions, and better informs policy development and practice in rural and remote regions.

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EXPLORING THE DIFFERENTIAL EFFECTS OF AGEING ON CONTROLLED AND AUTOMATIC INHIBITORY TASKS

Chantelle Vonarx, Karen Drysdale & Pat Michie

Centre for Brain and Mental Health Research, School of Psychology, University of Newcastle

Abstract

One of the dominant theories of cognitive ageing has proposed that age-related declines in cognition are the result of declines in inhibitory processes (Hasher & Zacks, 1988). However, research over the last two decades has found inconsistent patterns of inhibitory decline with age. The current study aimed to reconcile these contradictory findings by directly exploring the relationship between ageing and inhibition in line with Nigg's (2000) inhibition taxonomy which distinguishes between controlled and automatic forms of inhibition. Sixty younger adults (18-35) and sixty older adults (60-79) completed a series of inhibitory tasks which required various levels of executive control. It was found that older adults performed at the same level as younger adults on the automatic inhibitory measures of the Inhibition of Return effect and the Negative Priming effect but that older adults demonstrated declining levels of performance on the controlled inhibitory measures of the Stop Signal Task and the Stroop Interference effect. These results provide evidence for a differential effect of ageing on controlled and automatic inhibitory tasks. The researchers propose that the incorporation of this controlled/automatic distinction into Hasher and Zacks's (1988) Inhibitory Deficit Hypothesis can help resolve many of the inconsistencies that are currently present in the cognitive ageing literature. These results also have important implications for the selection of inhibitory measures when investigating inhibitory deficits in ageing or clinical populations.

Rationale

Older adults typically demonstrate declining levels of performance across multiple cognitive domains, including working memory, episodic memory, prospective memory, attention and executive control (see Craik & Salthouse, 2000 for a review). These declines in cognitive functioning have profound ramifications on everyday behaviours such as social interactions, work performance, healthcare compliance and routine behaviours. By better understanding cognitive ageing we will be able to implement effective interventions and strategies for older adults to maintain independent living and produce positive life outcomes.

An influential account of cognitive ageing was proposed by Hasher and Zacks (1988) who argued that deficits in inhibition could account for the wide variety of age-related cognitive declines. Inhibition involves the ability to suppress a dominant response or to suppress distracting or irrelevant information from entering working memory. They proposed that ageing reduces the efficiency of these inhibitory mechanisms which allows for the intrusion of task-irrelevant information into working memory. Consistent with this inhibitory deficit hypothesis, older adults have shown lower levels of inhibitory functioning than young adults across a variety of paradigms (Van Hooren, et al., 2007). However, not all tasks involving inhibition decline with age (McDowd, 1997), which has led many researchers to question the utility of the Inhibitory Deficit Hypothesis.

However, there has been much theoretical debate on the concept of inhibition over the last few decades. A useful distinction was proposed by Nigg (2000) who argued that inhibition may be classified by the extent to which the task requires controlled, conscious inhibitory

processes compared to more automatic processes of inhibition operating below the level of conscious control. A thorough examination of the tasks which show a consistent age-related decline reveal that the inhibitory processing required is relatively effortful and controlled in nature (Amieva, Phillips, Della Sala & Henry, 2004). Conversely, when we examine the tasks which fail to demonstrate any consistent age-related decline it is evident that they tap different inhibitory processes that are more automated and act beneath the level of conscious control. However, it is difficult to make firm comparisons across different studies which use different participant groups and methodologies.

The current study involves the comparison of performance of younger adults and older adults on one automatic inhibition task (Inhibition of Return), one controlled inhibition task (Stop Signal task) and a single task which provides a measure of both controlled and automatic inhibitory processes (Stroop task with Negative Priming). If we find the expected age-related decline on controlled inhibitory measures, but no decline in automatic inhibitory measures this would aid in resolving many of the contradictions that are present in the cognitive ageing literature.

Method

Sixty young adults (aged 18-35) from the University of Newcastle participated for course credit in an introductory psychology course and sixty older adults (aged 60-79) were recruited from the Hunter Medical Research Institute Volunteer register. Each participant completed the four inhibitory tasks and one reaction time task within a single two and a half hour session.

A variant of Posner's spatial cuing task (Posner, 1980) was used to examine Inhibition of Return. Participants were presented with two boxes adjacent to a central fixation cross. On each trial one of the peripheral boxes was cued exogenously with a brightening of the box outline 500ms before a target was randomly presented in either box. The Inhibition of Return effect was calculated by subtracting the average reaction time to targets presented at the uncued location from the average reaction time to targets at the cued location.

The Stop Signal Task from the CANTABclipse Battery: Version 3 was used. This task requires participants to make speeded responses to the direction of an arrow presented on a computer screen but if they heard an auditory signal (a beep – presented on 25% of trials) they were instructed to withhold their response and not press the button for that trial. A stop signal reaction time was estimated by subtracting the median stop signal delay over the last half of trials from the median reaction time on the last half of Go trials.

A manual reaction time computerised version of the Stroop Task with a negative priming component was also used. Each trial was presented using a prime-probe paradigm and participants had to simply respond to the colour of the font of each stimulus presented on the screen. There were four types of trials: (a) neutral trials comprising of a string of asterisks printed in one of four colours (red, green, blue, yellow), (b) incompatible trials with a colour word printed in a different colour (e.g. 'red' printed in yellow), (c) compatible trials of a colour word printed in the corresponding colour (e.g. 'green' printed in green), and (d) negative priming trials in which the word from the prime stimulus is used as the colour in the probe stimulus. The Stroop interference effect was calculated by subtracting the average reaction time on the neutral trials from the average reaction time on the incompatible trials. A Stroop Negative Priming effect was calculated by subtracting the average reaction time on the negative priming trials from the average reaction time on the incompatible trials.

Finally, participants also completed the Reaction Time (RTI) test from the CANTABeclipse Battery: Version 3 which asked participants to respond as quickly as possible when they saw a yellow dot appear on the screen. This was included as a measure of simple reaction time.

Results

Initial analysis found that older adults were significantly slower than younger adults on simple reaction time. Therefore our analysis controlled for these reaction time differences. A multivariate analysis of covariance was conducted with the four inhibitory measures (Stroop Interference, Stroop Negative Priming, Inhibition of Return and Stop Signal Reaction time) as the dependent variables, simple reaction time as a covariate and age group as an independent groups factor. Using Wilk's criterion the combined dependent variables were significantly different between the two age groups, $F(4,114) = .919, p = .046$. The results of the univariate tests are displayed in Table 1. These results indicated that after controlling for simple reaction time there was no significant difference between younger and older adults for Inhibition of Return or Stroop Negative Priming, but there was still a significant difference in the Stop Signal Reaction Time while Stroop Interference approached significance. Using a Roy-Bargmann step-down procedure we also found that Stroop Interference made a unique contribution to group membership over and above that which is accounted for by Stop Signal Reaction Time. Subsequent stepdown analysis of Inhibition of Return and Stroop Negative Priming showed that these variables did not significantly contribute to group differences. Therefore, after controlling for reaction time there was a differential effect of ageing on controlled and automatic inhibitory tasks.

Table 1: Summary of MANCOVA and Roy-Bargman Stepdown Tests.

	Univariate F	df	p	Stepdown F	df	p	η^2
SSRT	5.362	1,117	.022	5.362	1,117	.022	.044
Stroop Effect	3.712	1,117	.056	4.150	1,116	.044	.035
IOR Effect	.644	1,117	.424	.184	1,115	.669	.001
Negative Priming	.045	1,117	.833	.008	1,114	.927	.001

Implications for Policy and Practice

These results can further our understanding of the construct of inhibition. A current focus in inhibitory research centers on establishing the distinct types of inhibitory processing (see Friedman & Miyake, 2004). Our results indicate that inhibition is not a unitary construct. Therefore, an integration of the controlled/automatic inhibitory distinction to the inhibitory deficit hypothesis would be useful and could resolve many of the controversies currently present in the cognitive ageing literature. Additionally, given that controlled inhibitory measures are sensitive to ageing effects it is proposed that these measures would also provide better diagnostic value when examining inhibition in clinical populations.

Finally, the sparing of automatic inhibitory processes has implications for interventions and training for older adults. It is now clear that there are key cognitive processes which do not decline with age. By better understanding these processes we can begin to implement learning and training strategies which rely on the spared processes and avoid the declining ones. For example, due to inhibitory declines in simultaneous processing when providing novel information to older adults we should present information in a clear, direct and uncluttered manner, limiting the amount of irrelevant stimuli needing to be suppressed. Additionally the provision of greater time and practice for older adults will be beneficial as it would reduce the strain on declining controlled processes. By understanding the ageing

brain and implementing strategies that best work with the strengths of older adults we can help older adults to maintain independent living and produce positive life outcomes.

Summary

The aim of the present study was to test the hypothesis that ageing results in a decline in controlled inhibitory processes while automatic inhibitory processes are preserved. To test this we utilised one automatic inhibition task (Inhibition of Return), one controlled inhibition task (Stop Signal task) and a single task which provided a measure of both controlled and automatic inhibitory processes (Stroop task with Negative Priming). Younger and older adults produced a significantly different Stroop Interference effect and Stop Signal Reaction Time, while there was no significant difference between groups for the Inhibition of Return effect or Stroop Negative Priming effect. These results support our hypothesis that ageing affects controlled inhibitory processes but spares automatic processes.

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