<table>
<thead>
<tr>
<th>Time</th>
<th>Parallel Session A</th>
<th>Parallel Session B</th>
<th>Parallel Session C</th>
<th>Parallel Session D</th>
<th>Parallel Session E</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:45</td>
<td><strong>Cascade genetic testing for hypertrophic cardiomyopathy: What do family members need to know to enable informed decision making?</strong></td>
<td><strong>Healthy cognitive ageing in the Australian Longitudinal Study on Women's Health (1921-26 cohort).</strong></td>
<td><strong>Low value care in NSW Local Health Districts: trends for carotid endarterectomy and endovascular repair of abdominal aortic aneurysm.</strong></td>
<td><strong>Can exercise improve physical function and prevent falls in older adults with vision impairment?</strong></td>
<td><strong>Enablers and challenges: NSW Health Aboriginal Health Workers and their Aboriginal clients' experiences of care.</strong></td>
</tr>
<tr>
<td></td>
<td>Carissa Bonner, Sydney School of Public Health</td>
<td>Cynthia Forlini, Sydney Health Ethics, Sydney School of Public Health</td>
<td>Tim Badgery-Parker, Menzies Centre for Health Policy, Sydney School of Public Health</td>
<td>Lisa Dillon, The George Institute for Global Health</td>
<td>Gay Foster, Sydney School of Public Health</td>
</tr>
<tr>
<td>12:00</td>
<td><strong>The system here isn’t on patients’ side: Qualitative study on the barriers to utilizing maternal healthcare services in Juba, South Sudan.</strong></td>
<td>Increasing compliance with Australian stroke guideline recommendations using audit feedback and education.</td>
<td>Genomic characterisation of respiratory syncytial virus in New South Wales.</td>
<td>Is dog ownership beneficial for human health?</td>
<td>Mean dietary salt intake and the association with knowledge, attitudes and behaviours in a population from North and South India.</td>
</tr>
<tr>
<td></td>
<td>Ngatho Mugo, Sydney School of Public Health</td>
<td>Angela Vratsistas-Curto, Sydney School of Public Health</td>
<td>Krisna N A Pangesti, Sydney School of Public Health</td>
<td>Lauren Powell, Prevention Research Collaboration, Sydney School of Public Health</td>
<td>Claire Johnson, The George Institute for Global Health</td>
</tr>
<tr>
<td></td>
<td>Anita van Zwieten, Centre for Kidney Research, CHW</td>
<td>Gustavo Machado, Sydney School of Public Health</td>
<td>Barbara Lucas, Sydney School of Public Health</td>
<td>Tie Parma Yamato, Sydney School of Public Health</td>
<td>Adrian Traeger, Sydney School of Public Health</td>
</tr>
<tr>
<td>12:30</td>
<td><strong>Financial resources required to meet the future demands for orientation and mobility services in Australia for vision impairment and blindness.</strong></td>
<td>Forecasting fire smoke exposure and health impacts in Australia.</td>
<td>Health-literate design for smartphone apps: Addressing action planning and problem solving in an app for diabetes self-management.</td>
<td>Examination of the Practice Shift from Plain Film Mammography to Digital Mammography.</td>
<td>Risk factors for stillbirth in Afghanistan: analysis of the 2010 Afghanistan Mortality Survey.</td>
</tr>
<tr>
<td></td>
<td>Kuo-yi Chang, The George Institute for Global Health</td>
<td>Joshua Horsley, University Centre for Rural Health</td>
<td>Julie Ayre, Sydney School of Public Health</td>
<td>Rachel Farber, Sydney School of Public Health</td>
<td>Aliki Christou, Sydney School of Public Health</td>
</tr>
<tr>
<td>Josephine Chau, Prevention Research Collaboration, Sydney School of Public Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mustafa Al Ansari, Sydney School of Public Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pregnancy in Dien Bien Province, Vietnam.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shannon McKinn, Sydney School of Public Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CASCADE GENETIC TESTING FOR HYPERTROPHIC CARDIOMYOPATHY: WHAT DO FAMILY MEMBERS NEED TO KNOW TO ENABLE INFORMED DECISION MAKING?

Carissa Bonner¹, Catherine Spinks²,³, Chris Semsarian²,³, Alex Barratt¹, Jodie Ingles²,³, Kirsten McCaffery¹

¹ Sydney School of Public Health, The University of Sydney, NSW, Australia
² Sydney Medical School, University of Sydney, NSW, Australia
³ Department of Cardiology, Royal Prince Alfred Hospital, NSW, Australia
⁴ Agnes Ginges Centre for Molecular Cardiology, Centenary Institute, NSW, Australia

Correspondence to: Carissa Bonner     E-mail address: carissa.bonner@sydney.edu.au

Biography

Dr Carissa Bonner is a behavioural scientist working in public health, with a particular interest in the cognitive biases that influence medical decision making. She has a NHMRC/Heart Foundation fellowship to develop new systems to communicate research evidence and shared decision making resources to GPs and their patients.

Abstract

Background: Hypertrophic cardiomyopathy (HCM) is a genetic heart disease, which can result in sudden death at a young age. Affected families may be offered cascade genetic testing in addition to clinical surveillance. Asymptomatic family members who are gene positive (silent gene carriers) represent a new group of ‘patients’ who may or may not develop HCM. This study explored experiences of HCM genetic testing to identify potential benefits and harms.

Methods: Thirty-two individuals previously offered genetic testing for HCM were recruited. Semi-structured interviews were conducted face-to-face or by phone, and transcribed audio-recordings were coded using Framework Analysis.

Results: Key themes were: 1) helping the next generation; 2) misunderstanding risk; 3) discrepancy between actual/perceived impact. Participants thought the main benefit of genetic testing was for the next generation, as they hoped to rule out the need for clinical screening of their children/grandchildren. There were misconceptions about whether they had been diagnosed with a heart condition, if their genetic risk meant that they would definitely develop symptoms at some point in the future, and uncertainty over their need to continue regular clinical surveillance. Those who received a positive result stated directly that it had minimal impact on their lives, but described multiple ways it did affect them and their families, including anxiety, increased uncertainty, peer pressure to get tested, and restriction of physical activity.

Conclusion: While genetic testing has the potential to benefit those who receive a negative result, half of those tested will receive a positive result. The meaning of such a result in the absence of physical symptoms or prevention strategies is often unclear, and can lead to misconceptions about disease status and management. The sometimes subtle effects this may have on an otherwise healthy individual should be clearly communicated prior to testing to enable informed decision making.
THE SYSTEM HERE ISN’T ON PATIENTS’ SIDE.” PERSPECTIVES OF WOMEN AND MEN ON THE BARRIERS TO ACCESSING AND UTILIZING MATERNAL AND NEWBORN HEALTHCARE SERVICES: A QUALITATIVE STUDY IN SOUTH SUDAN

Ngatho S Mugo,1 Michael J Dibley, Eliaba Yona Damundu, Ashraful Alam

1 Sydney School of Public Health, University of Sydney

Correspondence to: Ngatho Mugo E-mail address: ngatho.mugo@sydney.edu.au

Biography

Ngatho S Mugo is currently enrolled as a higher degree research student, PhD (Medicine), in the School of Public Health, University of Sydney. She is also a research Assistant, in the School of Public Health and in Sydney Conservatorium of Music, University of Sydney. Her research interest is on maternal and child health.

Abstract

Background: In fragile and war-affected setting such as South Sudan, a combination of physical environmental, socioeconomic factors and healthcare’s characteristic contributes to higher rates of home delivery attended by unskilled attendants. This study aims to understand the community members’ experience, perceptions and the barriers in relation to accessing and utilizing maternal healthcare services in South Sudan.

Methods: We conducted in-depth one-on-one interview with 30 women and 15 men to investigate their perspectives on the barriers to access maternal and child health related services. We purposively selected women and their partners in this study.

Results: Our study revealed that inadequate quality of antenatal care services such as lack of essential medicine, supplies and tools was linked to individual’s mothers dissatisfaction with the services they received. In addition, sudden onset of labor and lack of safety and security were important reasons for home delivery in this study. Furthermore, lack of transport as a result of a combination of long distance to a facility and associated costs either restricted or delayed women reaching the health facilities.

Conclusions: Our study highlighted an urgent need for the government of South Sudan to implement security and safety measures in order to improved access to delivery service at night. Incorporating private transports to provide access to affordable and reliable transport services for pregnant and post-partum women is also important. Increasing the budget allocation for medicine and health supplies and improving management of medicine and supply chain logistics are essential.

THE IMPACT OF AGE ON INCOME INEQUALITIES IN OVERALL HEALTH STATUS FROM BIRTH TO ADOLESCENCE: A SYSTEMATIC REVIEW WITH CROSS-COUNTRY COMPARISONS

van Zwieten, A.1,2, Saglimbene, V.1,2, Teixeira-Pinto, A.1, Howell, M.1,2, Howard, K.1, Craig, J.C.1,2,3, Wong, G.1,2,4

1School of Public Health, University of Sydney, Sydney, Australia.
Abstract

Aims: A deeper understanding of the emergence and evolution of socioeconomic inequalities in health across the lifespan is critical to inform the timing and nature of health equity interventions. We aimed to determine the impact of age on associations between income and overall health status from birth to adolescence, and whether this varied across countries.

Methods: Systematic review of primary studies evaluating the effect of age on associations between family income and self-rated or proxy-rated health in children and adolescents aged 0-18 years. Medline, Embase, PsycINFO, CINAHL, SocINDEX and Econlit were searched without language restriction. Results: We included 43 analyses (cross-sectional n=31, cohort n=12) from 39 publications. Most (n=29) had sample sizes above 10,000. Data came from ten regions, both high-income (n=39) and middle-income (n=4) economies. Age differences were mainly examined using age-stratified income-health associations (n=37). US studies (n=21) typically indicated that income-health inequalities were present from early childhood and steepened with age. Coefficients for continuous log income on poorer health ranged from -0.02 to -0.22 for 0-3yo and -0.14 to -0.33 for 13-17yo. In the UK/Ireland (n=8), inequalities emerged early but age patterning was inconsistent. Coefficients ranged from -0.05 to -0.14 for 0-3yo and -0.13 to -0.18 for 13-17yo. In other high-income countries (Canada n=4, Australia n=2, France n=1, Germany n=1, Japan n=1, Republic of Korea n=1), age patterning varied but rarely indicated flattening with increasing age. For middle-income countries (Indonesia n=2, Brazil n=2), gradients flattened or remained consistent across age.

Conclusions: Age-related changes in income-health status inequalities from birth to adolescence appear to vary across countries. In the US, inequalities typically emerge early and steepen into adolescence. Whilst age patterning in other high-income countries is mixed, there is little evidence of equalisation with increasing age. In middle-income countries, inequalities appear to remain consistent or equalise with increasing age.

FINANCIAL RESOURCES REQUIRED TO MEET THE FUTURE DEMANDS FOR ORIENTATION AND MOBILITY SERVICES IN NEW SOUTH WALES FOR VISION IMPAIRMENT AND BLINDNESS

Kuo-yi Chang1, A/Prof Lisa Keay, Prof Stephen Jan, Dr Sophy Shih, Utsana Tonmukayakul

1 The George Institute for Global Health
Correspondence to: Kuo-yi Chang     E-mail address: jchang1@georgeinstitute.org.au

Biography
Kuo-Yi (Jade) Chang is a MPhil student, currently undertaking her research at The George Institute for Global Health, Injury Devision. Her research focus is in health economics, in particular conducting cost-effectiveness analysis, economic modelling and Willing-to-Pay studies on orientation and mobility programs for people with vision impairment and blindness.

Abstract

Introduction: Vision impairment and blindness (VI&B) is a serious health problem in Australia. With an ageing population, the prevalence of VI&B will continue to increase in future decades. Orientation and mobility (O&M) services are offered widely to vision impaired people, equipping them for safe, independent travel. With an increasing number of people with VI&B, the demands for O&M services are likely to rise. In this study we will estimate a) the prevalence of VI&B in the next ten years in NSW; b) the future demands for O&M services as a result of VI&B; and c) financial resource required to meet such service demands.

Methods: Key variables that may be associated with the VI&B were identified through literature review. Historical data of these variables and the prevalence of VI&B in NSW were sought. Meta-regression was used to estimate the prevalence of VI&B in the next ten years. Data of past and current utilisation of O&M services and their associated costs was obtained from O&M service providers. We then forecast the financial resource required to meet the demands for O&M services in NSW from 2017 to 2026.

Results: The literature search revealed that, age, education, income and access to health care are associated with VI&B. Longitudinal data from 2003-2015 was extracted from ABS Survey of Disability, Aging and Carers (SDAC) stratified by these key variables and revealed that the prevalence of VI&B was relatively constant. Uptake of services and cost of delivery of care is available from Guide Dogs NSW/ACT, a major community based service provider of O&M services.

Discussion: The projections generated from this study are important as they will assist service providers in needs assessment and service planning. They are also useful in understanding the financial sustainability of O&M services in the next 10 years in NSW.

LOST IN TRANSLATION - NEWS COVERAGE OF WORKPLACE SITTING RECOMMENDATIONS

Josephine Y Chau¹, Bronwyn McGill, Becky Freeman, Catriona Bonfiglioli, Adrian Bauman

¹ Prevention Research Collaboration, School of Public Health, Charles Perkins Centre, University of Sydney

Correspondence to: Josephine Y Chau     E-mail address: josephine.chau@sydney.edu.au

Biography
Dr Josephine Chau is a researcher at the Prevention Research Collaboration in the Sydney School of Public Health. Jo has worked in the field of physical activity and health for 12 years. Her areas of expertise include sedentary behaviour epidemiology, measurement, and intervention; health promotion; and program evaluation, especially ‘move more, sit less’ initiatives.

Abstract

Background: In June 2015, a position paper was published with recommendations about time spent sitting and moving at work. The position statement recommended that, for workers in mainly desk-based jobs, they should aim to stand up and move around throughout the workday. They should aim to achieve 2 h/day of standing and light activity initially, and gradually build up to a total of 4 h/day of standing and moving. The authors cited caveats around the limited quality of evidence informing their recommendations and that these recommendations were meant to stimulate discussion and awareness. Was there danger of misguiding the public? This study examined the news coverage of this position paper and how the recommendations were communicated.

Methods: We analysed news stories (online and print) about the recommendations published between 31st May and 29th June 2015 according to five recommendations and three caveats extracted from the guidelines’ press release. We also examined mentions of conflicts of interest posed by industry links.

Results: Nine out of 58 news stories reported all five recommendations. All stories reported the main recommendation (two hours daily of standing and light activity); 62% of stories mentioned the need to regularly breaking up sitting work with a sit-stand desk. Other recommendations received less coverage; e.g., avoid prolonged standing (31%); alleviate musculoskeletal discomfort and fatigue by changing posture (28%). Physical activity was mentioned in 32 stories: 69% said physical activity did not attenuate the risks of prolonged sitting. No stories mentioned any potential conflicts of interest despite co-author links to sit-stand desk industry.

Conclusions: These results demonstrate the need to balance public and market demands for public health guidance around sitting; and could encourage more accurate communication of research outcomes. The physical activity component of the “move more and sit less” message requires greater efforts to raise its public salience.

HEALTHY COGNITIVE AGEING IN THE 1921-26 COHORT OF THE AUSTRALIAN LONGITUDINAL STUDY ON WOMEN’S HEALTH

Cynthia Forlini1, Valerie Carter2, Jayne Lucke3

1 Centre for Values, Ethics and the Law in Medicine, The University of Sydney
2 Brain and Mind Centre, The University of Sydney
3 Australian Research Centre in Sex, Health & Society La Trobe University

Correspondence to: Cynthia Forlini     E-mail address: cynthia.forlini@sydney.edu.au

Biography
Cynthia Forlini is an Australian Research Council Discovery Early Career Research Award Research Fellow at The University of Sydney in the Centre for Values, Ethics and the Law in Medicine (VELiM). Her research explores the neuroethics issues in defining the boundaries between enhancement and maintenance of cognitive performance.

Abstract

Current public health messages are emphasizing the importance of healthy cognitive ageing (HCA) for the ageing population. In addition to addressing the potential increase in the incidence of dementia, HCA can keep older individuals active and productive in their communities for longer. Recommendations for HCA from the Productivity Commission (Australia), Dementia Australia, Government Office for Science (UK), and Institute of Medicine (USA), among others, are encouraging mental, physical, and social activities, in addition to a balanced diet. In this study, we analyze free-text survey responses from the oldest cohort (born 1921-26) of the Australian Longitudinal Study on Women’s Health (ALWSH) to begin exploring whether and how older Australians are following recommendations for HCA. 332 women responded to the free-text question of all six waves of the survey. The content of these responses was coded thematically to identify (1) the strategies that the women have used to care for their cognitive health as they age and (2) any barriers to HCA that they may have experienced. Qualitative analysis of the survey responses situated the lifestyles of the ALSWH women within the context of policy recommendations for HCA to assess whether the women had any difficulty adhering to the recommendations. The results of this study are a first step in helping policymakers and community leaders understand the context of ageing Australians, which will in turn foster policy that is cognizant of the needs, potential limitations and resilience of the ageing population.

INCREASING COMPLIANCE WITH AUSTRALIAN STROKE GUIDELINE RECOMMENDATIONS USING AUDIT FEEDBACK AND EDUCATION

Vratsistas-Curto A1, Schurr K2, McCluskey A1

1 The University of Sydney
2 Bankstown-Lidcombe Hospital

Correspondence to: Angela Vratsistas-Curto E-mail address: avra2442@uni.sydney.edu.au

Biography

Angela is an occupational therapist experienced in acute care and rehabilitation. She recently worked as a discipline specialist lecturer at Sydney University and project managed a series of rehabilitation studies at Bankstown and St Vincent’s Hospital. Her PhD work is investigating dosage of upper limb practice and outcomes after stroke

Abstract

Background: Audits of medical records followed by detailed feedback to clinicians can help to close evidence-practice gaps. Clinical guideline recommendations are often used as the basis for audit. Aim: To increase the proportion of stroke in-patients receiving best practice screening, assessment and treatment.
Methods: A before-and-after design was used. In this project, repeat audits were used to change practice and increase compliance with Australian guideline recommendations for stroke rehabilitation at Bankstown-Lidcombe Hospital. Intervention included four rounds of audit and feedback, barrier identification and education/coaching. Four medical record audits (n=15 files per audit) were conducted between 2009 and 2013. Consecutive files of stroke patients that received allied health, medical and nursing care were selected retrospectively. Formal feedback was provided, barriers to practice change identified using focus groups, and monthly coaching/education provided.

Results: The primary outcome measure was the proportion of eligible patients receiving best practice against target behaviours, based on audit data. Between the first and fourth audit (2009 and 2013), 20 of the 27 areas targeted (74%) met or exceeded the minimum target of 10% change. Practice areas that showed the most change included sensation screening (+75%) and rehabilitation (+100%); neglect screening (+92%) and assessment (100%). Some target behaviours showed a drop in compliance such as anxiety and depression screening (-27%) or little or no overall improvement such as patient education about stroke (6% change).

Conclusion: Audit feedback and education increased the proportion of stroke in-patients receiving best practice rehabilitation in some but not all practice areas. Ongoing monitoring is required to help sustain these improvements.

SMARTPHONE APPS FOR THE SELF-MANAGEMENT OF LOW BACK PAIN: A SYSTEMATIC REVIEW

Gustavo C. Machado,1 Marina B. Pinheiro,2 Hopin Lee,3 Osman H. Ahmed,4 Paul Hendric,5 Chris Williams,3 Steven Kamper1

1 School of Public Health, The University of Sydney
2 Faculty of Health Sciences, The University of Sydney
3 School of Medicine and Public Health, University of Newcastle
4 Faculty of Health and Social Sciences, Bournemouth University,
5 The Florey Institute of Neuroscience and Mental Health, University of Melbourne

Correspondence to: Gustavo Machado E-mail address: gustavo.machado@sydney.edu.au

Biography

Gustavo is a Postdoctoral Research Fellow at the School of Public Health, University of Sydney. His research focuses on the effectiveness of contemporary interventions for low back pain. He is also interested in health services research, currently collaborating with Wiser Healthcare and the Sydney Health Partners.

Abstract

Background: Guidelines for low back pain often recommend the use of self-management. A potentially useful way for patients to self-manage low back pain is by using smartphone applications (“apps”). However, to date there has been no rigorous evaluation of low back pain apps, and no guidance for consumers on how to select high quality, evidence-based apps. Our aim was to evaluate the quality of apps for the self-management of low back pain.
Methods: Using relevant keywords, we searched the Australian iTunes and Google Play stores in November 2016. We only included apps designed for the self-management of low back pain. The 2016 NICE guidelines were used to identify whether interventions recommended by the included apps were evidence-based. Apps were rated for quality using the MARS scale. Descriptive statistics were used to summarise the characteristics of included apps, and multivariable regression analysis to investigate the association between app quality with customer rating and app pricing.

Results: We identified 723 apps and 61 were included in the review. There were 39 free apps, and the median cost for 22 paid apps was AUD $1.99 ($0.99–$14.99). All but three apps recommended at least one guideline-endorsed intervention, but none were tested in a randomised trial. The most commonly recommended interventions were biomechanical (e.g. strengthening) and mind-body (e.g. Yoga) exercises. Apps were of low quality with a mean MARS score of 2.36 (on a 0–5 scale). Multivariable analysis revealed that a higher price was associated with better app quality (coefficient=0.26, p=0.003). Customer rating was not a predictor of better app quality.

Conclusions: There are many apps available for the self-management of low back pain, but the validity and the effectiveness of these apps have not been rigorously assessed. App developers are generally selecting guideline-endorsed interventions, though the quality of these apps is low.

FORECASTING FIRE SMOKE EXPOSURE AND HEALTH IMPACTS IN AUSTRALIA

Horsley, Joshua¹, Morgan, Geoffrey², Reich, Brian³, Fann, Neal⁴, Johnston, Fay⁵, Rappold, Ana⁶, Broome, Richard⁷, Cope, Martin⁸

¹ University Centre for Rural Health – North Coast, The University of Sydney
² Environmental Health, University Centre for Rural Health – North Coast, The University of Sydney
³ Department of Statistics, North Carolina State University
⁴ Health and Environmental Impacts Division, Office of Air Quality Planning and Standards, United States Environmental Protection Agency
⁵ Department of Health and Human Services, Menzies Research Institute Tasmania
⁶ Environmental Public Health Division, National Health and Environmental Effects Research Laboratory, United States Environmental Protection Agency
⁷ Public Health Observatory, Sydney Local Health District
⁸ Ocean and Atmosphere Flagship, CSIRO

Correspondence to: Joshua Horsley E-mail address: joshua.horsley@sydney.edu.au

Biography

Joshua Horsley is a PhD candidate researching fire smoke exposure modelling and health impacts in Australia. He has a strong background in statistics and is based at the University Centre for Rural Health - North Coast, The University of Sydney.
Abstract

Fine particulate matter (PM2.5) is causally associated with cardiovascular and respiratory morbidity and mortality. Smoke from landscape fires is a large contributor to PM2.5 exposure in Australia and is predicted to increase with future population growth and increasing bushfires activity under climatic change. Hazard reduction burning reduces the risks associated with uncontrolled bushfires, but also produces high PM2.5 concentrations. It is therefore increasingly important to better characterize the health burden due to fire smoke in Australia and develop tools for managing health impacts. My presentation will discuss how my PhD research is addressing this need in by: (1) developing tools to improve estimates of population PM2.5 exposure by ‘blending’ multiple sources, including chemical transport models (CTM), fixed monitors and satellite products; (2) assessing the health and economic burden of fire smoke in Australia over the last decade; (3) operationalizing these tools for real-time forecasting of fire smoke exposure and associated population health impacts. By providing easily accessible, relevant, and up-to-date information on fire-smoke to decision makers, and individuals, this research will support improved public health outcomes.

LOW VALUE CARE IN NSW LOCAL HEALTH DISTRICTS: TRENDS FOR CAROTID ENDARTERECTOMY AND ENDOVASCULAR REPAIR OF ABDOMINAL AORTIC ANEURYSM

Tim Badgery-Parker1, Sallie-Anne Pearson, Adam Elshaug

1Menzies Centre for Health Policy, Sydney School of Public Health, University of Sydney

Correspondence to: Tim Badgery-Parker E-mail address: tbad5666@uni.sydney.edu.au

Biography

Tim Badgery-Parker is a PhD student in the Menzies Centre for Health Policy, Sydney School of Public Health. In partnership with the Capital Markets CRC and the NSW Ministry of Health, he is working on measuring low value care in the New South Wales public hospital system.

Abstract

Background: Low value care provides no benefit to patients and may even cause harm. Initiatives such as Choosing Wisely and the Royal Australasian College of General Practitioners EVOLVE program have produced lists of low value services, but little is known about how common these services are.

Methods: We scanned recommendations from Choosing Wisely, EVOLVE, and other sources to identify low value services relating to inpatient care and recorded in NSW hospital admissions data. We adapted recommendations to define indicators of low value care. We present trends in low value care (numbers and proportions) from 2010-11 to 2015-16 by Local Health District for two of these indicators: carotid endarterectomy in asymptomatic high risk patients, and endovascular repair of abdominal aortic aneurysm (EVAR) in asymptomatic high risk patients.

Results: Over 6 years, there were 3,146 carotid endarterectomies in NSW public hospitals; we identified 466 (14.8%) as low value. Similarly, of 2,384 endovascular repairs of abdominal aortic aneurysms, we identified 794 (33.3%) as low value. LHDs showed differing trends in the numbers of services and low value services. In metropolitan LHDs, total
carotid endarterectomies tended to decrease over time while low value carotid endarterectomies remained the same, leading to higher proportions of low value care. In contrast, total EVARs tended to remain steady while low value EVARs decreased, leading to lower proportions of low value care. There were no clear trends in rural LHDs.

**Conclusions:** We have demonstrated the extent and variation in low value care across two services. Understanding how some LHDs are reducing low value care and applying this in other areas has potential to improve value throughout the NSW public hospital system.

---

**GENOMIC CHARACTERISATION OF RESPIRATORY SYNCYTIAL VIRUS IN NEW SOUTH WALES**

Pangesti KNA1, Moataz Abd El Ghany 2 4, Kesson A3 4, Hill-Cawthorne G1 4

1 School of Public Health, The University of Sydney

2 The Westmead Institute for Medical Research, The University of Sydney

3 The Children Hospital at Westmead, Discipline of Child and Adolescent Health, The University of Sydney

4 The Marie Bashir Institute of Infectious Diseases and Biosecurity, The University of Sydney

**Correspondence to:** Krisna Pangesti  
E-mail address: kpan4827@uni.sydney.edu.au

**Biography**

Krisna Pangesti is a second-year PhD student in School of Public Health. Her research focus is the molecular epidemiology of respiratory syncytial virus (RSV) in New South Wales. She aims to improve current knowledge on the pattern of RSV epidemics and the association of viral factors and clinical features.

**Abstract**

**Background:** Respiratory syncytial virus (RSV) belongs to the family Paramyxoviridae and is a major aetiologic cause of acute respiratory infections in infants and young children. There were an estimated 33.8 million new RSV-associated lower respiratory tract infection (LRTI) cases globally in 2005. In Australia, hospitalisation rates among children less than 5 years of age were estimated to be between 2.2 to 4.5 per 1000 children. RSV, as with other RNA viruses, experiences rapid evolutionary change. The great diversity seen in RSV strains has been documented and recent RSV strains found around the world have been shown to have genetic differences compared to the prototype virus strain used in most of vaccine research. Genomic characterisation of RSV provides information to improve surveillance, disease management, and vaccine and therapeutic development.

**Methods:** We have reviewed the global molecular epidemiology of RSV and have also standardised a culture-independent whole genome sequencing approach to characterise a collection of RSV specimens from The Children's Hospital at Westmead. This molecular data will be compared with the clinical and demographic data contained in the medical record from the child from whom the specimen was sampled as well as comparing with our database of existing global RSV molecular sequences.
Conclusion: Our study will provide a better understanding of epidemiology and evolutionary dynamics of RSV circulating in New South Wales and its contribution to the global circulation of the virus.

INTERVENTIONS TO IMPROVE GROSS MOTOR PERFORMANCE IN CHILDREN WITH NEURODEVELOPMENTAL DISORDERS: A META-ANALYSIS

Barbara R Lucas 1,2,3,4 Elizabeth J Elliott1,2,5 Sarah Coggan, 2,6 Rafael Z Pinto, 7,8 Tracy Jirikowic, 9 Sarah Westcott McCoy, 10 Jane Latimer2.

1 Discipline of Paediatrics and Child Health, The University of Sydney, The Children’s Hospital at Westmead, Clinical School
2 The George Institute for Global Health, Sydney Medical School, University of Sydney
3 Poche Centre for Indigenous Health, Sydney School of Public Health, The University of Sydney
4 Physiotherapy Department, Royal North Shore Hospital
5 The Sydney Children’s Hospital Networks (Westmead)
6 School of Public Health, Curtin University
7 Pain Management Research Institute, University of Sydney at Royal North Shore Hospital
8 Departamento de Fisioterapia, Faculdade de Ciências e Tecnologia, UNESP – Univ Estadual Paulista, Presidente Prudente
9 Division of Occupational Therapy, Department of Rehabilitation Medicine. University of Washington
10 Division of Physical Therapy, Department of Rehabilitation Medicine, University of Washington

Correspondence to: Barbara Lucas E-mail address: blucas@georgeinstitute.org.au

Biography

Barbara is a Specialist Paediatric Physiotherapist with over 20 years clinical experience. She completed a PhD in 2016 investigating the association of prenatal alcohol exposure and gross motor performance as part of the Lillwan Project and has a special interest in Aboriginal Health, telehealth, public health and early intervention.

Abstract

Background: Gross motor skills are fundamental to childhood development. The effectiveness of current physical therapy options for children with mild to moderate gross motor disorders is unknown. The aim of this study was to systematically review the literature to investigate the effectiveness of conservative interventions to improve gross motor performance in children with a range of neurodevelopmental disorders.
**Design**: Systematic review with meta-analysis of papers published between January 1980 to June 8, 2015.

**Method**: MEDLINE, EMBASE, AMED, CINAHL, PsycINFO, PEDro, Cochrane Collaboration, Google Scholar databases and clinical trial registries were searched. Published randomised controlled trials were included of children aged 3 to ≤18 years with mild to moderate gross motor impairment receiving (i) non-pharmacological or non-surgical interventions from a health professional and had (ii) gross motor outcomes obtained using a standardised assessment tool. Methodological quality and strength of meta-analysis recommendations were evaluated using Pedro and the GRADE approach respectively.

**Results**: Of 2513 papers, 9 met inclusion criteria including children with Cerebral Palsy (n = 2) or Developmental Coordination Disorder (n = 7) receiving 11 different interventions. Only two of 9 trials showed an effect for treatment. Using the least conservative trial outcomes a large beneficial effect of intervention was shown (SMD:-0.8; 95% CI:-1.1 to −0.5) with “very low quality” GRADE ratings. Using the most conservative trial outcomes there is no treatment effect (SMD:-0.1; 95% CI:-0.3 to 0.2) with “low quality” GRADE ratings.

**Conclusion**: Although we found that some interventions with a task-orientated framework can improve gross motor outcomes in children with DCD or CP, these findings are limited by the very low quality of the available evidence. High quality intervention trials are urgently needed.

---

**HEALTH-LITERATE DESIGN FOR SMARTPHONE APPS: ADDRESSING ACTION PLANNING AND PROBLEM SOLVING IN AN APP FOR DIABETES SELF-MANAGEMENT**

**Julie Ayre**¹, Carissa Bonner, Don Nutbeam, Kirsten McCaffery

¹University of Sydney

**Correspondence to:** Julie Ayre     E-mail address: jayr5092@uni.sydney.edu.au

**Biography**

Julie commenced her PhD candidature in late October 2016. Her research interests include health literacy, smartphone health interventions (mhealth) and behaviour change techniques for chronic disease. The PhD specifically focuses on type 2 diabetes self-management behaviours including blood glucose self-monitoring, medication adherence, diet and physical activity.

**Abstract**

Education materials for diabetes primarily aim to motivate patients by improving knowledge about the condition, its consequences and its management. However, knowledge improvement alone is generally insufficient for behaviour change. Tools that help translate intention into action are also important. These tools involve quite complex skills such as action planning, self-monitoring and problem solving, and are often challenging for patients with lower health literacy. Smartphone apps have unique capabilities that could facilitate the implementation of these more complex skills. For example, apps can be highly tailored, interactive, and are usually kept on the person. However, with the exception of self-monitoring (of blood glucose, insulin, diet and physical activity), these tools are currently underutilised in commercial apps for diabetes self-management. This study will explore how a custom designed app can optimise action planning and problem solving skills for individuals with type 2 diabetes who have lower health literacy. The
study forms part of a larger project to develop an app for self-management of type 2 diabetes for patients with lower health literacy. This study consists of three key stages. The first stage involves qualitative interviews to explore patients’ (~20) and general practitioners’ (~20) experiences of diabetes, lifestyle management and attitudes towards health mobile apps. Framework analysis of these interviews will then inform the second stage, which will test different strategies to reduce the amount of cognitive effort required and improve the ease and quality of action planning and problem solving. In the third stage the findings from the previous phases will be incorporated into a more comprehensive diabetes app that will be tested in a randomised trial. Preliminary findings from interview data will be presented.

CAN EXERCISE IMPROVE PHYSICAL FUNCTION AND PREVENT FALLS IN OLDER ADULTS WITH VISION IMPAIRMENT?

Lisa Dillon,1 Lindy Clemson, Pradeep Ramulu, Catherine Sherrington, Lisa Keay

1 The University of Sydney, The George Institute for Global Health

Correspondence to: Lisa Dillon E-mail address: ldillon@georgeinstitute.org.au

Biography

Lisa is a PhD student undertaking research into the effectiveness of an exercise program to increase physical function and reduce falls in older adults with vision impairment. Lisa is also an Orientation and Mobility Specialist, teaching people with vision impairment to travel safely and efficiently through their unique environments.

Abstract

Design: Systematic review of randomised controlled trials with meta-analysis. Participants: Older adults (≥ 50 years) with vision impairment. Intervention: Individual or group exercise programs inside or outside the home. Outcome measures: Physical function using performance tests or questionnaires and/or falls using calendars or incident reports.

Results: Four hundred articles were identified after removal of duplicates. Article titles and abstracts were independently screened by two reviewers and after examination of the full text of seven remaining studies, three met the inclusion criteria and were added to the four which were included in the original review. New studies evaluated yoga, the Otago Exercise Programme in combination with a home safety program and the Alexander Technique as falls prevention strategies. Meta-analysis of data from two trials (n = 163) indicated a non-significant positive impact of exercise on the Chair Stand Test (weighted mean difference 0.281 seconds, 95% CI -0.025 to 0.587, p=0.072, I² 0%). In this update two new studies were found with falls as an outcome measure so meta-analysis was possible for three trials (n = 539) and revealed no impact on falls (pooled rate ratio = 1.076, 95% CI 0.81 to 1.42, p=0.602, I² 26%).

Conclusion: There are still few trials of falls prevention programs for older people with vision loss but diverse approaches are being used, including the Alexander Technique, yoga, tai chi and the Otago Exercise Programme alone and in combination with home modifications. Exercise or physical training can improve physical function in older adults with vision impairment. However, reductions in falls in older adults with vision impairment have not consistently been reported and require further investigation.

IS DOG OWNERSHIP BENEFICIAL FOR HUMAN HEALTH?
Adrian Bauman, Kate Edwards, Paul McGreevy, Lauren Powell, Emmanuel Stamatakis

Preventative Research Collaboration, School of Public Health Charles Perkins Centre, University of Sydney

Correspondence to: Lauren Powell E-mail address: lauren.powell@sydney.edu.au

Biography

Lauren Powell is a PhD student with the Dog Ownership and Human Health node at the University of Sydney. Having recently completed an undergraduate degree in Animal and Veterinary Bioscience with a focus on canine behavioural genetics, she is now exploring the influence of human and dog coexistence on health.

Abstract

Dog ownership has been linked with a variety of human health benefits, including increased physical activity and improved cardiovascular function and mental health. However, the literature is often contradictory and much of these findings are based on methodologically-weak, cross-sectional studies. Moreover, evidence on the likely mechanisms of such benefits remains scarce. The Physical and Affective Wellbeing of dog owners Study (PAWS), is the first of its kind aiming to assess the influence of dog ownership on human health in a longitudinal, semi-randomised control trial setting. As a pilot study, the primary aim is to examine the feasibility of recruitment, randomisation and measurement methods. The protocol also incorporates measurements on human physical activity levels, cardiometabolic health, mental and social wellbeing to explore the influence of dog acquisition on human health. Canine physical activity patterns and behaviour will be recorded in a bid to strengthen our understanding of the human-dog relationship, and its role in health outcomes. Physical inactivity is widely documented as a primary cause in rising obesity rates, and the subsequent development of chronic disease in both humans and dogs. Dog ownership has been cited as a motivating factor in regular physical activity and therefore, dog-walking presents a unique opportunity to increase human and dog physical activity levels and produce long-term engagement. Again, research investigating the impact of dog-walking on either human or canine health is sparse, often relying on cross-sectional designs or subjective, self-reported measures of physical activity and health outcomes. The Dog-Walking, Health and Human-Dog Bond study aims to identify the acute human and canine hormonal response (specifically oxytocin) and human cardiovascular response (heart rate variability) to dog-walking. It also includes subjective measures of the human-dog bond, to assess the influence of relationship quality and attachment strength on health outcomes associated with dog-walking.

THE PREVALENCE, RISK FACTORS, PROGNOSIS AND TREATMENT FOR BACK PAIN IN CHILDREN AND ADOLESCENTS: AN OVERVIEW OF SYSTEMATIC REVIEWS

Steven J Kamper1, 2, Tie Parma Yamato1, Christopher M Williams2, 3

1 Sydney School of Public Health, University of Sydney
2 Centre for Pain, Health and Lifestyle, Australia
3 Hunter New England Population Health, Hunter New England Local Health District, Australia

Correspondence to: Tie Parma Yamato E-mail address: tyamato@george.org.au
Biography

Tiê is a PhD student at School of Public Health supervised by Professor Chris Maher. She has more than 30 publications in peer-reviewed journals. Tiê works as a casual research assistant on the Physiotherapy Evidence Database (PEDro) project and she is also part of the International Collaboration for Early Career Researchers (ICECReam).

Abstract

**Background:** Emerging data suggests that back pain in children is responsible for a substantial disability burden and health implications in adulthood.

**Aim:** This is an overview of systematic reviews on the prevalence, risk factors, prognosis, and treatment for back pain in children and adolescents.

**Methods:** Searches on MEDLINE, Embase and the Cochrane Database were conducted in Jan 2017. We identified 1,889 articles, of which 27 studies were eligible. The quality of the studies was rated using the AMSTAR.

**Results:** Eleven reviews were considered low quality, 7 moderate, and 9 high quality. Prevalence - Point prevalence ranged from 3 to 39% and lifetime prevalence ranged from 7 to 72%. Several reviews reported a pattern of increasing prevalence with age. Risk Factors - Several reviews reported an association between gender (female) and back pain. One high quality review found that taller children were at higher risk. One high quality review reported an association between BMI (higher) and back pain. Six reviews, one high quality, reported an association between psychosocial factors and back pain. Five reviews, one high quality, reported an unclear association between schoolbag use and back pain. Course/Prognosis - Just one systematic review was found and reported that sex, baseline disability and BMI are unclear prognostic factors. Prevention/Treatment - Three high quality reviews evaluated preventive interventions, and four reviews (two high quality) evaluated treatments. Most preventive interventions were ineffective or marginally effective, while interventions involving exercise were clinically effective in reducing pain.

**Conclusion:** Our findings point to problems with volume and quality of research into back pain in children. It is apparent that research output is mismatched to the burden of the condition, and that clinicians working with children have little good quality research to inform their practice.

---

**EXAMINATION OF THE PRACTICE SHIFT FROM PLAIN FILM MAMMOGRAPHY TO DIGITAL MAMMOGRAPHY**

Rachel Farber, Katy Bell Kevin McGeehan, Alexandra Barratt

Sydney School of Public Health, University of Sydney

**Correspondence to:** Rachel Farber  
E-mail address: rachel.farber@sydney.edu.au

**Biography**

Rachel Farber is a PhD candidate at the University of Sydney School of Public Health with Wiser Healthcare. Her research focuses on evaluating the effect of technology change in breast cancer screening. She holds a M.P.H from the University of Sydney and a B.A. from Binghamton University.
Abstract

Objectives: Most breast screening programmes worldwide have replaced the use of screen-film mammography (SFM) with full-field digital mammography (FFDM) in expectation of technical, clinical and economic advantages. For this scoping review, we aimed to identify published evaluations on the effects of this practice shift on patient health outcomes in screening programmes.

Methods: Using published reports on trends before and after the introduction of FFDM, we examined the effects on detection rates of breast cancer (invasive and DCIS) and recall rates.

Results: In the UK, SFM and FFDM had similar detection rates (7.2 vs 6.8/1000, p=0.74) and recall rates (3.4% vs 3.2% p=0.44). In both the US and Netherlands, detection rates were similar for all cancers (4.5 vs 4.6, P=0.62) (5.30 vs 4.91/1000, P=0.23) and for DCIS (0.11 vs 0.07, p=0.53) (1.1 vs 1.1, p=0.81), however FFDM had a higher recall rate (9.3% vs 10%, p<0.001) (2.1% vs 3.0%, P<0.001). In Norway, detection rates were similar for all cancers (0.65% vs 0.77% p=0.058), but higher for DCIS (0.11% vs 0.21%, p<0.001); recall rates were the same (4.16% vs 4.09%, p=0.65).

Conclusion: The benefits and harms of the shift from SFM to FFDM remain unclear. To address this, we now plan to conduct a systematic review of breast screening studies reporting on SFM and FFDM. We will collate all published data of screening populations that report both benefits (e.g. lower interval cancer rate; breast cancer mortality reduction) and harms (e.g. false-positive rates; overdiagnosis). We will evaluate the extent to which any improved sensitivity with FFDM reflects the detection of clinically important cancers. These results are likely to have important implications for breast cancer screening practice and policy both in Australia and internationally.

ALCOHOL CONSUMPTION AMONG UNIVERSITY STUDENTS IN IRAQ: PRELIMINARY FINDINGS

Mustafa Al Ansari¹, Kate Conigrave²,¹, Angela Dawson³

¹ Sydney School of Public Health, Sydney Medical School, University of Sydney
² Drug Health Services, Royal Prince Alfred Hospital
³ Faculty of Health, University of Technology, Sydney

Correspondence to: Mustafa Al Ansari E-mail address: mustafa.alansari@sydney.edu.au

Biography

Mustafa is undertaking a PhD at the University of Sydney. His research topic is "Attitudes of Youth towards Alcohol in Muslim Majority Countries (MMCs): Insights from Iraq." He has previously completed a Bachelors of Arts and Sciences with Honours in Middle Eastern and Islamic Studies.

Abstract
**Introduction**: Globally, 5.9% of preventable deaths are attributable to alcohol. Research about alcohol in Muslim majority countries is scarce due to the Islamic prohibition of alcohol. However, research indicates that across cultures, young university students are especially vulnerable to risky alcohol consumption. Those under the age of 24 represent the majority of Iraq’s population and have lived through a mixture of international sanctions, war, terrorism and ongoing political and economic instability. This work aims to investigate the influence of these and other factors such as exposure to global media on university students’ consumption and attitudes towards alcohol.

**Method**: Literature was reviewed to determine alcohol’s place in Iraqi cultures, religions and society. A mixed-method approach was also undertaken to identify attitudes towards alcohol and consumption patterns of young Iraqi students. The quantitative online survey (n=ongoing) was distributed to Iraqi university students via eLearning systems as well as student organisations and social media groups. In addition, qualitative semi-structured interviews (n=40) were conducted with university students from various faculties at three Iraqi cities/universities.

**Findings**: A brief look at Iraq’s history displays an array of differing attitudes towards alcohol throughout the millennia. This is reflected in the diversity of cultural and personal views on alcohol in Iraq today. Students in Iraq are increasingly affected by economic despair, conflict and a lack of basic life and health necessities. Preliminary findings of attitudes towards alcohol and consumption patterns among young university students will also be provided. These data provide a starting point to understand and address alcohol as a public health issue in contemporary Iraq.

---

**ENABLERS AND CHALLENGES: NSW HEALTH ABORIGINAL HEALTH WORKERS AND THEIR ABORIGINAL CLIENTS’ EXPERIENCES OF CARE**

Gay Foster, Kylie Lee, Juanita Sherwood

Sydney School of Public Health, University of Sydney

**Correspondence to**: Gay Foster  
E-mail address: gfos4140@uni.sydney.edu.au

For the purposes of this research the term Aboriginal is generally used in preference to Aboriginal and Torres Strait Islander, in recognition that Aboriginal people are the original inhabitants of NSW.

**Biography**

Gay Foster, a NSW Aboriginal woman of the Stolen Generation, has a Master and a postgraduate diploma of Indigenous Health Substance Use from the University of Sydney (School of Public Health). She also has a postgraduate diploma in Clinical Drug Dependence Studies from Macquarie University, Sydney. Gay has worked for many years for NSW Health in a variety of roles. Her current role is as a Senior Project Officer in the Aboriginal workforce unit in the NSW Ministry of Health. She is passionate about her family, all Aboriginal issues including Aboriginal workforce development, Aboriginal health and drug and alcohol health among the Aboriginal population.

**Abstract**

*Introduction and Aims*: The ninth annual ‘Closing the Gap’ report found that Australia is not on track to close the life expectancy gap between Indigenous and non-Indigenous Australians. In fact, the divide is widening and deaths are increasing when it comes to cancer and other chronic diseases. Aboriginal Health Workers (AHWs) play an important role in combating the high burden of disease and mortality in Aboriginal Australians across NSW. Their role in delivering culturally safe services remains vital, with the NSW
Aboriginal population expected to grow by a percentage point in the next decade. This talk will provide an overview of the background and proposed methods for a MPhil research project that commenced in February 2017. This study aims to: 1. Summarise and analyse NSW Health’s AHW categories and roles across three local health districts (metropolitan, regional and remote or rural), 2. Evaluate the impact and perceived acceptability of AHWs, 3. Evaluate Aboriginal clients’ experience of care by AHWs.

**Design and Methods:** Survey and other semi-structured interview frameworks are being determined for this mixed methods study. AHWs in the study sites will be invited to be involved in study design, data collection and interpretation of results. Data will include: 1. Quantitative data collected from AHWs will be compared with key characteristics reported in the 2012 NSW Health Aboriginal Health Workforce Survey, 2. Focus groups and semi-structured interviews to explore the impact of AHWs on their Aboriginal clients and their Aboriginal clients’ experiences of AHW care.

**Discussions and Conclusions:** Traditionally, AHWs were community brokers who delivered culturally safe health promotion services. A recent change in NSW Health more clearly defines the roles, qualifications and skills of AHWs. This research will address some of the enablers that support AHWs in their roles and the challenges that impede their delivery of culturally safe services to Aboriginal clients.

---

**MEAN DIETARY SALT INTAKE AND THE ASSOCIATION WITH KNOWLEDGE, ATTITUDES AND BEHAVIOURS IN A POPULATION FROM NORTH AND SOUTH INDIA**

Claire Johnson 1,2, Sailesh Mohan 3, Roopa Shivashankar 4, Sudhir Raj Thout 5, Feng J He 6, Jacqui Webster 1,2, Anand Krishnan 7, Pallab K Maulik 5, Dorairaj Prabhakaran 3,4, Bruce Neal 1,2,8,9,10

1 The George Institute for Global Health. Sydney Australia
2 The University of Sydney, Sydney Australia
3 Public Health Foundation of India, New Delhi, India
4 Centre for Chronic Disease Control, New Delhi, India
5 The George Institute for Global Health, Hyderabad, India
6 Wolfson Institute of Preventive Medicine & Barts and the London School of Medicine & Dentistry, London, United Kingdom
7 All India Institute of Medical Sciences, New Delhi, India
8 Charles Perkins Centre, University of Sydney, Australia
9 Imperial College, London, United Kingdom
10 Royal Prince Alfred Hospital, Sydney, Australia

**Correspondence to:** Claire Johnson  E-mail address: c.johnson@georgeinstitute.org.au
Biography

Claire Johnson is a Post-Doctoral Research Fellow with the World Health Organization Collaborating Centre on Population Salt Reduction Division at The George Institute for Global Health. Previously Claire led the NHMRC-GACD funded program 'Developing a national salt reduction program for India' which formed the basis of her PhD. Claire’s primary research interests are in nutritional epidemiology with a focus on the prevention of NCDs in low and middle income countries.

Abstract

Background: The scientific evidence base in support of population wide salt reduction is strong but current high quality data about salt intake levels in India are mostly absent. We sought to establish any associations between estimated daily salt consumption levels measured through 24-hour urinary sodium excretion and knowledge, attitudes and behaviours towards salt in selected communities of Delhi and Haryana in North India and Andhra Pradesh in South India.

Methods: Data were collected through a cross-sectional survey comprising a single 24-hour urine sample, participants’ physical measurements and questionnaire data on consumer knowledge, attitudes and behaviour towards salt, in an age-and sex-stratified random sample of 1395 participants in urban and rural areas of North and South India. Measures were made for the overall population of each region and major subgroups by weighting the survey data to the population of Delhi and Haryana, and Andhra Pradesh.

Results: Complete 24-hour urine samples and data on KAB were available for 637 individuals from Delhi and Haryana and 758 from Andhra Pradesh (65% and 68% response rate, respectively). The mean age of participants was 40 years, 47% were women and mean 24-hour urinary salt excretion was 9.3 (8.9–9.7) g/day. Many participants reported favourable knowledge and behaviours to minimise risks related to salt. Several of these behaviours were associated with reduced salt intake—less use of salt while cooking, avoidance of snacks, namkeens (savoury snacks), and avoidance of pickles (all p < 0.003).

Conclusions: Salt consumption in India is high, with mean population intake well above the WHO recommended maximum of 5g/day. Several consumer behaviours related to use of salt during food preparation and consumption of salty products were related to actual salt consumption and therefore appear to offer an opportunity for intervention. A national salt reduction programme, including community-wide education as part of a multifaceted strategy, would prevent large numbers of cases of hypertension as well as strokes and heart attacks, averting much premature death and disability.

PHYSIOTHERAPISTS IN THE EMERGENCY DEPARTMENT: A SCOPING REVIEW

Giovanni Ferreira, Adrian Traeger¹, Chris Maher

¹ Musculoskeletal Health Sydney, School of Public Health, Sydney Medical School, University of Sydney, Australia

Correspondence to: Adrian Traeger E-mail address: atraeger@georgeinstitute.org.au

Biography

Dr Adrian Traeger is a physiotherapist and postdoctoral research fellow. He works with the NHMRC Wiser Healthcare research collaboration aimed at reducing overdiagnosis and overtreatment in Australia and around the world. Adrian’s research interests include improving the effectiveness of primary-care based advice and reassurance for musculoskeletal conditions.
Abstract

Background: Overburdened healthcare systems around the world are increasingly employing physiotherapists in emergency departments. Little research has investigated whether this practice is more effective, efficient or safe compared to traditional emergency department models of care.

Aim: Outline the breadth of research on physiotherapists working in emergency departments.

Methods: We performed a scoping review. Scoping reviews evaluate the state of research, on several different topics, in a research area. We searched four databases (MEDLINE, EMBASE, CINAHL, and Cochrane CENTRAL) for research on physiotherapists working in emergency departments.

Results: Our search retrieved 2012 records and we included 28 studies. There were 5 RCTs (n=1434), 12 prospective observation studies (n=153,767), 2 retrospective studies (n=7532), 2 case reports, 2 surveys (n=62), and 5 qualitative studies (n=144). Studies were conducted in Australia (16 studies), UK (6 studies), USA (5 studies), and Hong Kong (1 study). Physiotherapists working in emergency departments predominantly managed musculoskeletal conditions. In addition to triage and initial treatment, physiotherapists ordered imaging and prescribed limited medications. For low-urgency musculoskeletal conditions in the emergency department, care provided by physiotherapists appeared to be equally effective on patient-related outcomes (e.g. disability) compared to care provided by other clinicians (5 RCTs). Among observational studies, the majority found an association between physiotherapists working in the emergency department and shorter wait times. Safety data were unreliably reported. Results of qualitative studies suggested patients were receptive to seeing a physiotherapist in the emergency department. Other staff had concerns about efficiency and overlapping roles.

Conclusions: There is little high quality research on physiotherapists working in emergency departments. Preliminary evidence suggests care from physiotherapists in emergency departments is acceptable to patients and could improve efficiency. Future high quality research should investigate the safety and cost-effectiveness of this model of care.

RISK FACTORS FOR STILLBIRTH IN AFGHANISTAN: ANALYSIS OF THE 2010 AFGHANISTAN MORTALITY SURVEY

Aliki Christou, Michael Dibley, Camille Raynes-Greenow

The University of Sydney, Australia

Correspondence to: Aliki Christou E-mail address: aliki.christou@sydney.edu.au

Biography

Aliki Christou is a PhD candidate in International Public Health within the School of Public Health, University of Sydney. Her PhD is on improving perinatal outcomes in low and middle-income countries.

Abstract

Background: The majority of the 3 million stillbirths that occur every year take place in South Asia and sub-Saharan Africa. Very few studies exist examining risk factors for stillbirth in low-income settings due to the absence of nationally representative, quality data. Antenatal and delivery care data is rarely collected for stillbirths and is major
limitation to investigating risk factors, given the known importance of such care on pregnancy outcomes. The 2010 Afghanistan Mortality Survey is one of few surveys with such data available for stillbirths.

**Aim:** To examine socio-demographic, maternal and health care utilisation factors associated with stillbirth in Afghanistan.

**Methods:** We used data from the 2010 Afghanistan Mortality Survey. The analysis included 11,050 women aged 12-49 with a pregnancy outcome in the preceding five years. We restricted the analysis to women’s last pregnancy, and examined the association between socio-demographic characteristics, maternal factors, and health care utilisation factors with stillbirth using logistic regression. Stillbirth was defined as a pregnancy loss at ≥7 months.

**Results:** In this sample, there were 208 stillbirths and 10,842 live births giving a stillbirth rate of 19 per 1000 births. After adjusting for confounders, the odds of having a stillbirth was almost three times higher among women in the lowest wealth quintile (OR: 2.7; 95%CI: 1.1-6.4) and residing in the highland region (OR: 3.5; 95%CI: 1.04-11.5), and nearly four times higher among mothers aged 35-39 (OR:3.7; 95%CI: 1.1-12.4) and 40-49 (OR:4.3; 95%CI: 1.2-15.3). Mothers who had an adverse outcome in the pregnancy prior to the index pregnancy had over six times the odds of the next birth being a stillbirth (OR: 6.4; 95%CI: 2.97-13.6), while receiving at least 2 or more tetanus injections significantly reduced the odds (OR:0.62; 95%CI: 0.38-0.99). Mothers attending their first antenatal care visit because of a problem had twice the odds of stillbirth (OR:1.8; 95%CI: 1.1-2.9), as did mothers who had a delivery complication and sought care for the complication (OR:2.1; 95%CI: 1.2-3.8).

**Conclusions:** In Afghanistan, complications during pregnancy and delivery need to be identified and managed appropriately. Our results suggest that the quality of antepartum and intra-partum care may need attention. Ensuring women receive adequate number of tetanus injections during antenatal care, and monitoring older women during pregnancy will be important for reducing stillbirths.

**MATERNAL HEALTH LITERACY AND DECISION-MAKING DURING PREGNANCY IN DIEN BIEN PROVINCE, VIETNAM**

Shannon McKinn¹, Duong Thuy Linh, Kirsty Foster, Kirsten McCaffery

¹Sydney School of Public Health, The University of Sydney

**Correspondence to:** Shannon McKinn

**E-mail address:** shannon.mckinn@sydney.edu.au

**Biography**

Shannon McKinn is a PhD candidate in the Sydney School of Public Health. Her research is focused on health literacy and patient-provider communication in ethnic minority communities in Dien Bien Province, Vietnam.

**Abstract**

**Background:** Dien Bien Province is a mountainous province of Vietnam, predominantly populated by ethnic minorities with higher levels of maternal and infant mortality and lower education levels than the national average. Many ethnic minority women do not understand the information provided about pregnancy and childbirth, with health professionals increasingly relying on written information over interpersonal communication tailored to women’s circumstances. This study aims to explore which sources of
Methods: We conducted focus groups with pregnant women and mothers (n=37) and grandmothers (n=5) of children under five years from the Thai and Hmong ethnic groups. Semi-structured interviews were conducted with key informants, including village health workers. We performed a thematic analysis of focus group and interview data.

Findings: Thai and Hmong women seek information about pregnancy and childbirth from a variety of sources, including health professionals, the media, traditional sources, and older, experienced women in their communities, especially mothers and mothers-in-law. Community sources were more specific in their advice to pregnant ethnic minority women. Family members play a significant role in providing information, and were also called on to act as mediators between health professionals and women who experienced language barriers. Although many women said that they would listen to the advice given by health professionals over conflicting advice from their families, in practice, family members’ preferences often prevailed, particularly when making decisions about when to access health services.

Conclusions: Family members are an important source of information and advice for pregnant ethnic minority women, and an important influence on decision-making during pregnancy and childbirth. Older female relatives and husbands of pregnant women should be included in community maternal health education.