About Elder Health – Evidence for Action
In support of building evidence-based practice, this digest aggregates selected research, analysis and insight about elder health from a global perspective from UN agencies, INGOs, NGOs, governments, academic and research institutions, consortia and collaborations, foundations, and commercial organizations.

A key resource for this digest is the peer-reviewed journal literature, with special emphasis on systematic reviews, and comparative research on health interventions in low-resource settings and which spans multiple countries and regions. This digest is complemented by The Sentinel, which is published weekly and aggregates content across human rights action, humanitarian response, health education, holistic development and sustainable resilience themes with a global perspective.

We recognize that many leaders, practitioners and organizations may not have full-text access to the academic journals carrying articles presented here (although many articles are "open access"). If a specific article is vital to your work, please contact the Editor as above to explore options. We also provide consultative services to support further desk and field research, analysis, strategy development, and collaboration on ideas and opportunities arising from this digest.

Elder Health – Evidence for Action is a service of the Center for Governance, Evidence, Ethics, Policy & Practice (GE2P2), which is solely responsible for its content. Comments and suggestions should be directed to:
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Global Men\textsuperscript{tal} Health for Older Adults
Aartjan T.F. Beekman, MD, PhD

In times of trouble, older people and children are the most vulnerable age-groups in society. Writing from Europe, the wars going on in the East and the disruption of the lives of so many who are forced to seek refuge is the first compelling example that comes to mind. We can only barely grasp what the effects will be on the mental health of the millions of people involved and have yet to think up an effective way to help.

Older people carry the wisdom, but also the burden of our recent history and their mental health reflects a lifelong interaction between personal and environmental developments. This is both intriguing and frustrating, as a full understanding of lifespan mental health requires more than science is at present able to digest. To better this situation, it is necessary to acquire good data about the mental health among older people from places across the globe. The American Journal of Geriatric Psychiatry has a strong interest in global mental health and the current issue contains four articles arising from Japan (Oyama et al), Lebanon (Karam et al), Ireland (Lutomski et al) and the Netherlands (Meesters et al).
Suicide is one of the most devastating effects of mental illness and efforts to prevent suicide are going on across the world. Suicide is especially prominent among older adults and often associated with depression. The Oyama paper reports on a large and sustained universal prevention program in Japan, aiming to reduce suicide by improving the public awareness and knowledge about depression, coupled with systematic screening and efforts to improve access to treatment among older people. Given the fact that less than 25% of Japanese elderly with depression seek treatment, this strategy would seem to be wise. There are many reasons why universal prevention is difficult to study (Cuijpers et al 2008) and often the effects are short lived. In their study, Oyama et al test whether the effects of their intervention last over 6 years. The results of the study are remarkable and encouraging for all of us invested in reducing the rates of suicide among older people. As in any good study, the paper raises as many questions as it answers, the most important of which may be concerning the mechanism of action of the intervention.

Moving from Japan to Lebanon, Karam et al report the first large community based study concerning the prevalence and correlates of mental illness among elderly in the Middle East. Using standardized instruments within the World Mental Health surveys framework, the study yields data that can be compared to those from other countries and cultures. As the study was part of a larger survey, involving adults of all ages, the authors were also able to compare the prevalence of mental disorder in Lebanon across age. The results are similar to what has been found elsewhere in that the prevalence of full blown common mental disorders attenuates across the lifespan. Given the large scale exposure to war, the high levels of Post Traumatic Stress and the strong correlations of mental disorder with war-experiences is understandable. As in Japan, it is striking that only a small minority of those with mental illness seek treatment. The authors have invested in studying attitudes of the public in Lebanon with regard to mental health treatment and have found that the majority would seek treatment when confronted with a serious mental illness and only a small minority reported that they would be embarrassed if their friends would know. This is encouraging and will hopefully provide a basis for more access to mental health care.

Dementia is one of the most prevalent and taxing of all mental disorders and, given global demographic developments, will prove to be a severe test for health services across the world. A reliable and valid way to assess needs for care, that reflects the stage of development of the dementia and that can be used across different countries would be very helpful. Lutomski and colleagues present Irish data, testing the validity and reliability of the International Dementia Alliance (IDEAL) schedule for the assessment and staging of care. Although the scale was only recently developed, field trials in 9 countries had shown promising results. Although this is a small study, the data provide further encouragement to proceed on the way to a common language and common instruments to assess care needs for people with dementia across the world.

Schizophrenia is another mental illness with enormous impact on the lives and on the functioning of older adults. Although research generally focuses on younger adults, there is a fast growing group of elderly patients with schizophrenia. It is well known that younger patients with schizophrenia have a much reduced life expectancy. This is due to many different factors, including life style, suicide, genetics and the effects of psychotropic medications. It is unknown whether the diminished life expectancy persists into later life. One might think that those patients that ‘survive’ into older age are likely to be the most resilient and that they may be less vulnerable to die early. Meesters et al had access to 5 year follow-up data of a catchment-based cohort of older patients with schizophrenia, comparing their mortality with peers from the
community. Although the study was too small to look at the causes of death in any detail, the results are worrying in that they show that the effects of schizophrenia on the life expectancy of our patients persist into later life.

These four papers attest to the importance of mental health for older people across the world and show that good research, yielding important findings is under way in many countries. Adopting a common language and instruments has often proven difficult for clinicians and researchers. The current issue of the Journal shows what we have to gain if we do.

The Lancet
Feb 20, 2016 Volume 387 Number 10020 p717-816
http://www.thelancet.com/journals/lancet/issue/current
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Comment
What can we expect of health in old age?
Kenneth Rockwood
The longing for longevity without decrepitude is ancient. Homer tells us that to live out his days with Penelope, Odysseus rejected immortality. Later restored to family and kingdom, the gods' further favour included being able to look forward to an unenfeebled old age. So how goes our longing now? Around the world, although life expectancy is increasing for most people, a wholly healthy old age is elusive. In The Lancet, Carol Jagger and colleagues make clear that whether we reckon the ancient longing to be realised depends on how we measure health, and on which perspective we have. The authors compared the results from two rounds of the Cognitive Function and Ageing Study, done in England in 1991 and 2011. Health expectancy was measured in three ways: self-perceived health, life without disability, and time free from cognitive impairment.

In 2011, on a background of increasing life expectancy, men spent 3·8 more years (95% CI 3·5–4·1), and women spent 3·1 more years (2·7–3·4), in good or better self-perceived health than in 1991. Similarly, fewer people rated their health as fair or poor in 2011 than in 1991, although this effect was not significant after adjustment for region, education, and deprivation. In contrast to a Swedish report of cohorts studied 30 years apart, the prevalence of disability increased. However, the pattern gives some cause for hope: men spent 1·3 more years (1·1–1·6) with mild disability, compared with 0·5 years (0·3–0·8) with moderate–severe disability; the corresponding figures for women were 2·5 years (2·2–2·8) with mild disability and 0·6 years (0·3–0·9) with moderate–severe disability. Although more time was spent with disability, moderate–severe disability decreased, so that the increase—and most of the additional time lived—was spent in a mildly disabled state. The least equivocal change was that less time was spent by women with cognitive impairment (0·7 years [0·2–1·3]), and more time spent without cognitive impairment (4·4 years [4·3–4·5]), in 2011 than in 1991. Achievement of longer life and reduced impairment is an important step towards the Homeric ideal.

Especially for cognitive health, what future progress can be made is debated. The decline in cognitive impairment was not insubstantial (odds ratio [OR] 0·53 [95% CI 0·49–0·56]). Most of this decrease was accounted for by a decline in severe cognitive impairment (OR 0·49, [0·43–0·56]). This decrease is much larger than that returned so far on the massive investments in research on dementia biomarkers and hoped-for disease-modifying therapies. Those
investments gamble that any positive results from proof-of-concept trials in younger (ie, from their 40s) and often otherwise well patients, especially from high-risk samples, will be relevant to older adults with many health deficits, who are the most common patients with dementia.4 Equally, whether improving overall health—lessening health deficits and their effects—would further result in reduced cognitive impairment is unknown.5, 6

Jagger and colleagues2 suggest that the observed increase in mild disability might result from specific problems, notably obesity and musculoskeletal disease. Here, caution must be urged. Although understanding which illnesses contribute to disability is important, disability rates are potently related to age. As a result, the extent of overall, age-related deficit accumulation might be as important to disability rates as which illnesses people have.7 Health deficits are not just diseases, but can range from even minor laboratory abnormalities8 to lower than average enjoyment of life.9 For this reason, a broadly construed approach to improving health might pay current and future dividends. So too might a broadly construed health measure. At present, many single items vie as overall health measures—in addition to the three health measures assayed by Jagger and colleagues,2 or laboratory test abnormalities or life enjoyment, are several other measures, including grip strength, drawing a clock, and the time it takes to get out of a chair and walk.9 Under the rubric of measuring frailty, dozens of measures now combine such items, although which should be combined and how many should be counted are disputed.7 Even if the “problems of old age come as a package”,10 quantification of the package in which those problems come is a challenge for ageing research.

Which view we take affects our understanding of whether progress is being made towards improved health expectancy. For example, whether women are more prone than men to disability, or whether disability is more lethal in men than in women, are two accounts of the same phenomenon.11 That disparities in the extent of health deficits between men and women vary mostly by whether self-reported or test data are used suggests that sex and gender perspectives run deeply enough to affect mortality risk.12

Perspective also matters. For individuals, an estimate of health expectancy provides a sense of their own chances. Policy makers must consider how health expectancy as, for example, disability prevalence, plays out against a background of an increasing number of older adults.1 Obviously, a modestly decreasing numerator will not trump a relentlessly increasing denominator. The numbers will out, with important effects for ageing societies, especially for pensions and health care in which progress is needed. An English audit of intermediate care opens boldly: “The modern general hospital is complex, expensive and has proved harmful to many [older] people, and so simpler, cheaper and safer care alternatives have been sought.”13 The data from the Cognitive Function and Ageing Studies do not support complacency in public policy. Jagger and colleagues2 have documented important gains in health expectancies. Even so, it seems that living the unenfeebled old age promised to Odysseus will still somehow need special favour.

I am the founder and a director of DGI Clinical; I have consulted for Roche and received fees for speaking from Nutricia.
References at link above

Articles
A comparison of health expectancies over two decades in England: results of the Cognitive Function and Ageing Study I and II
Carol Jagger, Fiona E Matthews, Pia Wohland, Tony Fouweather, Blossom C M Stephan, Louise Robinson, Antony Arthur, Carol Brayne, Medical Research Council Cognitive Function and Ageing Collaboration
Open access

Summary

Background

Whether rises in life expectancy are increases in good-quality years is of profound importance worldwide, with population ageing. We investigate how various health expectancies have changed in England between 1991 and 2011, with identical study design and methods in each decade.

Methods

Baseline data from the Cognitive Function and Ageing Studies in populations aged 65 years or older in three geographically defined centres in England (Cambridgeshire, Newcastle, and Nottingham) provided prevalence estimates for three health measures: self-perceived health (defined as excellent–good, fair, or poor); cognitive impairment (defined as moderate–severe, mild, or none, as assessed by Mini-Mental State Examination score); and disability in activities of daily living (defined as none, mild, or moderate–severe). Health expectancies for the three regions combined were calculated by the Sullivan method, which applies the age-specific and sex-specific prevalence of the health measure to a standard life table for the same period.

Findings

Between 1991 and 2011, gains in life expectancy at age 65 years (4·5 years for men and 3·6 years for women) were accompanied by equivalent gains in years free of any cognitive impairment (4·2 years [95% CI 4·2–4·3] for men and 4·4 years [4·3–4·5] for women) and decreased years with mild or moderate–severe cognitive impairment. Gains were also identified in years in excellent or good self-perceived health (3·8 years [95% CI 3·5–4·1] for men and 3·1 years [2·7–3·4] for women). Gains in disability-free years were much smaller than those in excellent–good self-perceived health or those free from cognitive impairment, especially for women (0·5 years [0·2–0·9] compared with 2·6 years [2·3–2·9] for men), mostly because of increased mild disability.

Interpretation

During the past two decades in England, we report an absolute compression (ie, reduction) of cognitive impairment, a relative compression of self-perceived health (ie, proportion of life spent healthy is increasing), and dynamic equilibrium of disability (ie, less severe disability is increasing but more severe disability is not). Reasons for these patterns are unknown but might include increasing obesity during previous decades. Our findings have wide-ranging implications for health services and for extension of working life.

Funding

UK Medical Research Council.

Journal of Medical Society

Year : 2016 | Volume : 30 | Issue : 1 | Page : 15-19

Review Article

Disability among the elder population of India: A public health concern

A Agrawal

Abstract

The Government of India adopted the National Policy on Older Persons in 1999, which defines a "senior citizen" or 'elderly' as a person who is of age 60 years or above." In India the elderly population accounted for 8.2% of the total population in 2011 and the number is expected to increase over the next decades. The link between aging and disability is a biological fact, and disability in the elderly is an important health indicator pointing to jeopardized quality of life. But at the same time, aging should not be treated as synonymous with disability as a large proportion of older people live with good health status. There are many studies from India that have addressed disability in the elderly population; however, they lack uniformity in defining
disability and largely address mostly one aspect, that is, the medical model of disability. It is well recognized that "disability and elderly" encompasses a much larger spectrum of the conditions with unique requirements and needs to be studied as a much broader concept.

Health — Assessment Strategies/Techniques

Ageing Research Reviews
Volume 27, May 2016, Pages 1–14

Review
Walking ability to predict future cognitive decline in old adults: a scoping review
LHJ Kikkert, N Vuillerme, JP van Campen et al

Highlights
:: Accuracy of prediction models for cognitive decline could be improved.
:: Motor and cognitive functions share neuroanatomical structures and psychological processes.
:: We review longitudinal data on the relation between walking ability and future change in cognition.
:: Gait slowing precedes decline in cognitive functions and dementia syndromes.
:: Including dynamic gait measures could strengthen prediction models for cognitive decline.

Abstract
Early identification of individuals at risk for cognitive decline may facilitate the selection of those who benefit most from interventions. Current models predicting cognitive decline include neuropsychological and/or biological markers. Additional markers based on walking ability might improve accuracy and specificity of these models because motor and cognitive functions share neuroanatomical structures and psychological processes. We reviewed the relationship between walking ability at one point of (mid) life and cognitive decline at follow-up. A systematic literature search identified 20 longitudinal studies. The average follow-up time was 4.5 years. Gait speed quantified walking ability in most studies (n = 18). Additional gait measures (n = 4) were step frequency, variability and step-length. Despite methodological weaknesses, results revealed that gait slowing (0.68–1.1 m/sec) preceded cognitive decline and the presence of dementia syndromes (maximal odds and hazard ratios of 10.4 and 11.1, respectively). The results indicate that measures of walking ability could serve as additional markers to predict cognitive decline. However, gait speed alone might lack specificity. We recommend gait analysis, including dynamic gait parameters, in clinical evaluations of patients with suspected cognitive decline. Future studies should focus on examining the specificity and accuracy of various gait characteristics to predict future cognitive decline.

Healthy Aging Research
5:1. doi:10.12715/har.2016.5.1
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Older adults' self-rated health and differences by age and gender: A quantitative study
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Abstract
Background: The older adult population is expected to grow, presenting potential challenges for individuals and society. Maintenance of older adults’ health will be an important factor for
Healthy aging. It will also be a challenge for health professionals who work to promote health and care equity. To promote healthy aging and equal care, an overview of older adults’ self-rated health is needed. The aim of this study was to describe self-rated health among older adults’ living at home describe age group and gender-based health differences.

Methods: A descriptive and a comparative cross-sectional study. The questionnaire study was part of a Swedish national population study. Randomly selected older adults 65–84 years living in five counties in central Sweden. The response rates were 79% and 75% for those 65–79 years and 80–84 years, respectively. Participants (n = 13922) were divided into two age groups: 65–79 years (n = 5926 male, n = 5755 female) and 80–84 years (n = 1208 male, n = 1033 female).

Results: Older adults generally self-rated their health as good, especially in the age group aged 65–79 years. Females self-rated their health as poorer than males, especially among those aged 65–79 years. Gender-based health differences decreased in those aged 80–84 years.

Conclusions: It is important to address these gender-based health differences; health policies and programmes are needed that promote equitable healthy aging.

Asian Journal of Gerontology & Geriatrics
2015; 10: 79–82

Validity of the 5-item Barthel Index in the assessment of physical dependence in the elderly
C Nanayakkara MBBS, MD, S Lekamwasam MD, FRCP

ABSTRACT
Introduction. This study examined the validity of the 5-item Barthel index for use as a rapid screening tool in a busy clinical setting to detect elderly patients with physical dependence.
Method. A consecutive series of 68 men and 34 women aged ≥65 years who presented with a non-acute medical illness were included. The 5-item Barthel index was administered by intern medical officers. After 48 hours, patients were reassessed using the 10-item Barthel index as the reference by a blinded assessor. The validity of the 2 assessments was analysed using the Pearson correlation. The positive likelihood ratio for different cut-off values of the 5-item Barthel index was examined.
Results. The 5-item and 10-item Barthel index scales were highly correlated (r=0.9, p<0.001). In the receiver operating characteristic analysis, the 5-item scale predicted self-reported dependence (≤80 in the 10-item scale) with an area under ROC curve of 0.94 and a standard error of 0.024.
Conclusion. The 5-item Barthel index can be used as a rapid screening tool to detect elderly patients with physical dependence. It can be easily administered during recording of medical history.
Background
Joint contractures are a common health problem in older persons with significant impact on activities of daily living. We aimed to retrieve outcome measures applied in studies on older persons with joint contractures and to identify and categorise the concepts contained in these outcome measures using the ICF (International Classification of Functioning, Disability and Health) as a reference.

Methods
Electronic searches of Medline, EMBASE, CINAHL, Pedro and the Cochrane Library were conducted (1/2002-8/2012). We included studies in the geriatric rehabilitation and nursing home settings with participants aged ≥ 65 years and with acquired joint contractures. Two independent reviewers extracted the outcome measures and transferred them to concepts using predefined conceptual frameworks. Concepts were subsequently linked to the ICF categories.

Results
From the 1057 abstracts retrieved, 60 studies met the inclusion criteria. We identified 52 single outcome measures and 24 standardised assessment instruments. A total of 1353 concepts were revealed from the outcome measures; 96.2 % could be linked to 50 ICF categories in the 2nd level; 3.8 % were not categorised. Fourteen of the 50 categories (28 %) belonged to the component Body Functions, 4 (8 %) to the component Body Structures, 26 (52 %) to the component Activities and Participation, and 6 (12 %) to the component Environmental Factors.

Conclusions
The ICF is a valuable reference for identifying and quantifying the concepts of outcome measures on joint contractures in older people. The revealed ICF categories remain to be validated in populations with joint contractures in terms of clinical relevance and personal impact.

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Health – Assistive Technologies

WHO

Assistive technologies for the elderly and disabled
11 February 2016 -- WHO has launched a global survey to gather views on the most necessary and useful assistive technologies, such as hearing aids and wheelchairs. The survey will feed into the first ever WHO mandated list of essential assistive technologies. Governments can use the list to plan and focus efforts to help populations acquire the 50 priority products, thereby improving the everyday lives of the elderly and people living with disabilities.

Background:
We need more than a billion assistive products now and 2 billion by 2050. However, today only 1 in 10 persons in need has access to assistive products (AP). To change this scenario, based on the success and learning of Essential Medicines List (EML), WHO is developing a WHO Priority Assistive Products List (APL) to assist Member States to plan policies and programmes related to the provision of AP. Like the EML, the main goal of this initiative is to improve access to high-quality affordable assistive products. Towards this, WHO is launching a global survey to identify 50 most Priority Assistive Products.

All stakeholders, especially the users/potential users or their family members/organizations are specially encouraged to take part in this survey.

Take the survey
Health – Dementia

Educational Gerontology
posted online: 19 Feb 2016
Caregiving in Dementia–Emotional and Behavioral Challenges
DOI:
10.1080/03601277.2016.1156375
Sidra Ali* & Iram Zehra Bokharey
Abstract
With meager resources and lack of awareness in Pakistan, the phenomenon of caregiving poses a great challenge for those living with the frail elderly suffering from chronic illness. This paper highlights how the informal caregivers are ingrained in this painstaking process due to sociocultural obligations.
Objectives: The purpose of this qualitative study was to carry out in-depth analyses of the lived experiences of the caregivers of patients with dementia and to explore the emotional and behavioral problems faced by them. On the basis of the emergent themes, the researchers would propose a therapeutic intervention plan for the caregivers which would enable them to provide adequate caregiving.
Method: The research strategy employed was Interpretative Phenomenological Analysis (IPA). Eight participants were selected from Govt. Hospitals in Lahore, Pakistan through homogenous purposive sampling. After ensuring confidentiality and taking consent, data were collected through semi-structured interviews which were recorded and transcribed. In-depth analyses were carried out followed by thematic analyses. Moreover, data were verified through clarifying researcher’s bias, peer review and rich thick description.
Results: The most significant themes regarding maladaptive behaviors came out to be reactivity and self-neglect whereas significant maladaptive emotions were worry, low frustration tolerance and anger.
Conclusion: This study would be helpful towards devising appropriate therapeutic intervention for the caregivers in the Pakistani sociocultural context.

Health – Depression/Mental Well-Being

The American Journal of Geriatric Psychiatry
http://www.sciencedirect.com/science/journal/10647481
Available online 10 February 2016
An Innovative Model of Depression Care Delivery: Peer Mentors in Collaboration with a Mental Health Professional to Relieve Depression in Older Adults
Jin Hui Joo, Seungyoung Hwang, Hawa Abu, Joseph J. Gallo
Abstract
Objectives
Traditional mental health services are not used by a majority of older adults with depression suggesting a need for new methods of health service delivery. We conducted a pilot study using peer mentors to deliver depression care to older adults in collaboration with a mental health professional. We evaluated the acceptability of peer mentors to older adults and examined patient experiences of the intervention.
Methods
Six peer mentors met 30 patients for an hour weekly for 8 weeks. A mental health professional provided an initial clinical evaluation as well as supervision and guidance to peer mentors concurrent with patient meetings. We measured depressive symptoms at baseline, depressive symptoms and working alliance at weekly meetings and after study completion. We also interviewed participants and peer mentors to assess their experiences of the intervention.

**Results**

Ninety-six percent of patients attended all 8 meetings with the peer mentor and PHQ-9 scores decreased for 85% of patients. Patients formed strong, trusting relationships with peer mentors. Patients emphasized the importance of trust, of developing a strong relationship, and of the credibility and communication skills of the peer mentor. Participants described benefits such as feeling hopeful, and reported changes in attitude, behavior and insight.

**Conclusions**

Use of peer mentors working in collaboration with a mental health professional is promising as a model of depression care delivery for older adults. Testing of effectiveness is needed and processes of recruitment, role definition and supervision should be further developed.

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**Health – Disaster Impacts/Response/Roles**

**BMC Geriatrics**

2016 - 16:30

*Research Article*

**Relationships between social factors and physical activity among elderly survivors of the Great East Japan earthquake: a cross-sectional study**

Eiichi Yoshimura, Kazuko Ishikawa-Takata, Haruka Murakami, Nobuyo Tsuboyama-Kasaoka, Megumi Tsubota-Utsugi, Motohiko Miyachi, Yukari Yokoyama, Kiyomi Sakata, Seiichiro Kobayashi, Akira Ogawa and Nobuo Nishi

DOI: 10.1186/s12877-016-0203-8

**Abstract**

**Background**

Physical inactivity is a health issue that often occurs after serious disaster. Social factors, which can be disrupted by disaster, are important determinants of physical activity levels in everyday living. This study was designed to confirm the association between social factors and physical activity among elderly survivors of the Great East Japan Earthquake.

**Methods**

From September 2011 to February 2012, 4316 males and females aged 65 or older participated in a health survey of Great East Japan Earthquake survivors. Multiple logistic regression analyses were performed with the dichotomous dependent variable of physical activity (high versus low) and working status, social network, and place of residence (one’s own home versus elsewhere) as independent variables.

**Results**

Participants who had been displaced from their homes were more likely to have low physical activity (odds ratio [OR], 95 % confidence interval [CI] for men: 1.37, 1.12 to 1.68; for women: 1.30, 1.09 to 1.55). Non-working status was significantly associated with low physical activity (men: 2.03, 1.65 to 2.49; women: 1.94, 1.60 to 2.34). Detriments to the social network were significantly associated with low physical activity (men: 1.71, 1.41 to 2.08; women: 1.79, 1.51 to 2.13).

**Conclusion**
Place of residence and social factors were associated with physical activity levels in elderly survivors of the Great East Japan Earthquake. The findings suggest a need for improvement of social factors to encourage increases in physical activity for elderly persons after disaster.

Health – Frailty

**Journal of Geriatric Oncology**
Available online 8 February 2016 - In Press, Corrected Proof

**Detection of frailty in elderly cancer patients: Improvement of the G8 screening test**
A Petit-Monéger, M Rainfray, P Soubeyran, CA Bellera et al

**Abstract**
Objective
The G8 is a screening test to identify frail elderly cancer patients. Objectives were to design and evaluate the performance of alternative tests taking into account other predictive domains for frailty.

Methods
We conducted a literature review to identify predictive factors of frailty. Using a Delphi consensus, we collected 24 European experts’ opinions to validate the most relevant items to improve the G8. Alternative tests were created and performance assessed on a development population (ONCODAGE cohort). The highest performing test was compared to the G8, and validated through both an internal and an external population validation (Aquitaine Geriatric Oncology cohort).

Results
The study population consisted of 1435 patients (ONCODAGE cohort) and 364 patients (Aquitaine Geriatric Oncology cohort). Twenty-three experts validated two items with a strong consensus (> 75%): modification of the threshold for the G8 polypharmacy item to six drugs per day and replacement of the G8 item on neuropsychological problems by four Instrumental Activities of Daily Living (IADL) items predictive of incident dementia, creating three modified G8 tests (addition of either item, or both). Only the G8 IADL-modified test had better performance than the G8 when tested on the ONCODAGE cohort: sensitivity = 77%, specificity = 67%. This test was validated on the internal (sensitivity = 78%, specificity = 71%) and external (sensitivity = 88%, specificity = 69%) validation populations.

Conclusion
Adding the four IADL items improves the performance of the G8. We have developed and validated a G8-modified test that is more specific than the G8 to detect frail elderly, while still sensitive and feasible in less than 10 min.

Health – Goals/Goal Pursuit

**The European Journal of Public Health**
Volume 26, Issue 1, 1 February 2016
[http://eurpub.oxfordjournals.org/content/26/1](http://eurpub.oxfordjournals.org/content/26/1)

**Article**
**An exploration of antecedents of positive affect among the elderly: a cross-sectional study**
Abstract

Background:
Positive affect contributes to the healthy life style, which, in turn, explains life satisfaction and psychological well-being among the elderly. Existent literature has reinforced that physical activity participation influences development of positive affect for the elderly. Because of the increased life constraints and physical problems, however, maintenance of positive affect might be challenging for elderly people.

Methods:
Data were drawn from a sample of the Survey of Health, Ageing and Retirement in Europe. A total sample of 3845 males and 3912 females aged between 65 and 103 years from 16 European countries was analyzed. Perception of life constraints, health problems, physical activity engagement and positive affect were measured by a structured questionnaire. Confirmatory factor analysis and a technique of structural equation modelling were employed using Amos 18 to examine the hypothesized relationships between study variables.

Results:
Perceived life constraints and physical problems significantly affected the acquisition of positive affect among the elderly. Physical activity was found to have a significant path coefficient towards the measure of positive attitude and emotion. Physical activity was also a significant mediator between physical problems and positive affect.

Conclusions:
This study extended our understanding of how the perception of life constraints and health problems influence the elderly’s daily experience. Study finding reinforced the goodness of physical activity participation to enhance positive affect among the elderly. We should administer sustainable and evidence-based physical activity including interventions and infrastructure to improve positive affect and psychological well-being among the elderly.

Health – Health Services Utilization/Models

BMC Health Services Research
http://www.biomedcentral.com/bmchealthservres/content
(Accessed 20 February 2016)
Research article
Factors predicting health services use among older people in China: An analysis of the China Health and Retirement Longitudinal Study 2013
Cathy Honge Gong, Hal Kendig and Xiaojun He
BMC Health Services Research 2016 16:63
Published on: 18 February 2016
Abstract

Background

Rapid population ageing in China is increasing the numbers of older people who are likely to require health services in response to higher levels of poor perceived health and chronic diseases. Understanding factors influencing health services use at late life will help to plan for increasing needs for health care, reducing inequalities in health services use and releasing severe pressures on a highly variable health care system that has constrained public resources and increasing reliance on health insurance and user payments.

Methods
Drawing on the nationally representative China Health and Retirement Longitudinal Study 2013 data, we apply the Andersen healthcare utilization conceptual model to binary logistic regression multivariate analyses to examine the joint predictors of physical examinations, outpatient and inpatient care among the middle-aged and elderly in China.

Results
The multivariate analyses find that both physical examinations and inpatient care rates increase significantly by age when health deteriorates. Females are less likely to use inpatient care. Significant socio-economic variations exist in healthcare utilization. Older people with higher education, communist party membership, urban residence, non-agricultural household registration, better financial situation are more likely to have physical examinations or inpatient care. Factors influencing all three types of health care utilization are household expenditure, losing a partner, having multiple chronic diseases or perceiving poor health. With activities of daily living limitations or pain increases the probability of seeing a doctor while with functional loss increases the rates of having physical examinations, but being the ethnic minorities, no social health insurance, with depression, fair or poor memory could be a barrier to having physical examinations or seeing a doctor, which might delay the early diagnose of severe health problems among these groups. Not drinking, not smoking and regular physical exercises are adaptations after having health problems.

Conclusions
As a rapidly ageing society, in order to address the increasing needs and inequalities in health care utilization, China is facing a massive challenge to reform the current health care system, improve equitable access to health insurance and financial affordability for the most disadvantaged, as well as to provide more health education and information to the general public.

BMC Health Services Research
http://www.biomedcentral.com/bmchealthservres/content
(Accessed 20 February 2016)
Research article
The preventive services use self-efficacy (PRESS) scale in older women: development and psychometric properties
Mini E. Jacob, Wei-Hsuan Lo-Ciganic, Laurey R. Simkin-Silverman, Steven M. Albert, Anne B. Newman, Lauren Terhorst, Joni Vander Bilt, Janice C. Zgibor and Elizabeth A. Schlenk
Published on: 20 February 2016
Abstract
Background
Preventive services offered to older Americans are currently under-utilized despite considerable evidence regarding their health and economic benefits. Individuals with low self-efficacy in accessing these services need to be identified and provided self-efficacy enhancing interventions. Scales measuring self-efficacy in the management of chronic diseases exist, but do not cover the broad spectrum of preventive services and behaviors that can improve the health of older adults, particularly older women who are vulnerable to poorer health and lesser utilization of preventive services. This study aimed to evaluate the psychometric properties of a new preventive services use self-efficacy scale, by measuring its internal consistency reliability, assessing internal construct validity by exploring factor structure, and examining differences in self-efficacy scores according to participant characteristics.
Methods
The Preventive Services Use Self-Efficacy (PRESS) Scale was developed by an expert panel at the University of Pittsburgh Center for Aging and Population Health - Prevention Research Center. It was administered to 242 women participating in an ongoing trial and the data were
analyzed to assess its psychometric properties. An exploratory factor analysis with a principal axis factoring approach and orthogonal varimax rotation was used to explore the underlying structure of the items in the scale. The internal consistency of the subscales was assessed using Cronbach’s alpha coefficient.

Results
The exploratory factor analysis defined five self-efficacy factors (self-efficacy for exercise, communication with physicians, self-management of chronic disease, obtaining screening tests, and getting vaccinations regularly) formed by 16 items from the scale. The internal consistency of the subscales ranged from .81 to .94. Participants who accessed a preventive service had higher self-efficacy scores in the corresponding sub-scale than those who did not.

Conclusions
The 16-item PRESS scale demonstrates preliminary validity and reliability in measuring self-efficacy in the use of preventive services among older women. It can potentially be used to evaluate the impact of interventions designed to improve self-efficacy in the use of preventive services in community-dwelling older women.

Traumatology
Feb 11, 2016

Formal and Family Caregiver Protective Factors in Systems of Care: A Systematic Review With Implications Toward a Resilience Model for Aging Veterans.
Smith-Osborne, Alexa; Felderhoff, Brandi

Abstract
Increased longevity of veterans and the continuing increase overall in numbers of veterans over age 65 are likely to increase the numbers of informal caregivers (i.e., family) and the need for formal caregivers beyond current rates associated with typical aging, as well as increasing the challenges of both those caregiving roles. The study objective was to identify protective factors for veteran and family outcomes in the veteran caregiving matrix as a basis for future development of a resilient caregiving model for trauma-exposed aging veterans. An exploratory systematic review was performed to identify which care matrix patterns are perceived by all 3 parties (formal caregiver, informal/family caregiver, and aging veteran care recipient) as optimal for resilient outcomes for the veteran and family caregiver. Of 747 research reports identified, 8 met study inclusion criteria. Data were extracted by 2 independent coders, and were synthesized to identify caregiving matrix protective factors from literature with implications for aging veterans in need of care. Identified elements of a resilient caregiving matrix had relevance for trauma-exposed aging veterans receiving care whether from veteran or private health delivery systems/providers. Future research is needed to develop a model incorporating these findings and addressing additional matrix factors such as the gender of the caregivee and caregiver and the balance between formal and informal caregiving.

Health – Immunization and Preventive Interventions

Burden of four vaccine preventable diseases in older adults
Maartje Kristensen, Alies van Lier, Renske Eilers, Scott A. McDonald, Wim Opstelten, Nicoline van der Maas, Wim van der Hoek, Mirjam E. Kretzschmar, Mark M. Nielen, Hester E. de Melker
Abstract

Background
Implementation of additional targeted vaccinations to prevent infectious diseases in the older adults is under discussion in different countries. When considering the added value of such preventive measures, insight into the current disease burden will assist in prioritization. The aim of this study was derive the first estimates of the disease burden in adults aged 50 years or over in the Netherlands for influenza, pertussis, pneumococcal disease and herpes zoster.

Methods
The average annual disease burden for these four diseases in the Netherlands was calculated for the period 2010–2013 using the disability-adjusted life years (DALY) measure. Disease models and parameters were obtained from previous research. Where possible we adapted these models specifically for older adults and applied age-specific parameters derived from literature. The disease burden based on these adapted models and parameters was compared with the disease burden based on the general population models.

Results
The estimated average annual disease burden was from high to low: pneumococcal disease (37,223 DALYs/year), influenza (7941 DALYs/year), herpes zoster (942 DALYs/year), and pertussis (812 DALYs/year). The adaptation of models and parameters specifically for the elderly resulted in a higher disease burden compared to the use of general population models.

Conclusions
Among older adults, the disease burden in the period 2010–2013 was highest for pneumococcal disease, mostly because of high mortality, followed by influenza. Disease burden of herpes zoster and pertussis was relatively low and consisted mostly of years lived with disability. Better information on the course of infectious diseases and long-term consequences would enable more accurate estimation of disease burden in older adults.

BMC Public Health
http://bmcpublichealth.biomedcentral.com/articles
(Accessed 6 February 2016)

Research article

Determinants of tetanus, pneumococcal and influenza vaccination in the elderly: a representative cross-sectional study on knowledge, attitude and practice (KAP)

Severity and incidence of vaccine-preventable infections with influenza viruses, s. pneumoniae and c. tetani increase with age. Furthermore, vaccine coverage in the elderly is often insufficient. The aim of this ...

Carolina J. Klett-Tammen, Gérard Krause, Linda Seefeld and Jördis J. Ott
BMC Public Health 2016 16:121
Published on: 4 February 2016

Abstract

Background
Severity and incidence of vaccine-preventable infections with influenza viruses, s. pneumoniae and c. tetani increase with age. Furthermore, vaccine coverage in the elderly is often insufficient. The aim of this study is to identify socio-economic and knowledge-, attitude- and practice- (KAP)-related determinants of vaccination against influenza, pneumococcal disease and tetanus in the older German population.

Methods
We analysed data from a German nationally representative questionnaire-based KAP-survey on infection prevention and hygiene behavior in the elderly (n = 1223). We used logistic regressions to assess impacts of socio-demographic- and KAP-related variables on vaccine
uptake in general and on tetanus-, influenza- and pneumococcal vaccination. To generate KAP-scores, we applied factor analyses and analysed scores as predictors of specific vaccinations.

**Results**

A low rated personal health status was associated with a higher uptake of influenza vaccine whereas place of residence within Germany strongly impacted on pneumococcal vaccination. For tetanus and influenza vaccination, the strongest single vaccination predictor was attitude-related, i.e., the perceived importance of the vaccine (OR = 18.1, 95% CI = 4.5–71.8; OR = 23.0, 95% CI = 14.9–35.3, respectively). Pneumococcal vaccination was mostly knowledge-associated, i.e., knowing the recommendation predicted uptake (OR = 17.1, 95% CI = 9.5–30.7). Regarding the generated KAP-scores, the practice-score reflecting vaccine related behavior such as having a vaccination record, was predictive for all vaccines considered. The knowledge-score was associated with influenza (OR = 1.3, 95% CI = 1.0–1.6) and pneumococcal vaccination (OR = 1.2, 95% CI = 1.0–1.5). Uniquely for influenza vaccination, the attitude-score was linked to vaccine uptake (OR = 1.1, 95% CI = 1.0–1.1).

**Conclusions**

Our results indicate that predictors of vaccination uptake in the elderly strongly depend on vaccine type and that scores of KAP are useful and valid to condense information from numerous individual KAP-variables. While awareness for vaccinations against influenza and tetanus is fairly high already it might have to be increased for vaccinations against pneumococcal infection.

**Journal of Infectious Diseases**

Volume 213 Issue 3 February 1, 2016  
http://jid.oxfordjournals.org/content/current  
First published online: February 9, 2016

**Declining effectiveness of herpes zoster vaccine in adults 60 years and older**

Hung Fu Tseng1, Rafael Harpaz2, Yi Luo1, Craig M. Hales2, Lina S. Sy1, Sara Y. Tartof1, Stephanie Bialek2, Rulin C. Hechter1 and Steven J. Jacobsen1

**Author Affiliations**

1Department of Research and Evaluation, Kaiser Permanente Southern California, Pasadena, CA  
2Division of Viral Diseases, Centers for Disease Control and Prevention, Atlanta, GA

**Abstract**

Understanding long term effectiveness of herpes zoster (HZ) vaccine is critical for determining vaccine policy. 176,078 members of Kaiser Permanente ≥60 years vaccinated with HZ vaccine and three matched unvaccinated members were included. Hazard ratio (HR) and 95% confidence interval (CI) associated with vaccination at each year following vaccination was estimated by Cox regression model. The effectiveness of HZ vaccine decreased from 68.7% (95% CI, 66.3-70.9%) in the first year to 4.2% (95% CI, -24.0% to -25.9%) in the eighth. This rapid decline in effectiveness of HZ vaccine suggests that a revaccination strategy may be needed, if feasible.

**European Geriatric Medicine**

http://www.sciencedirect.com/science/journal/18787649  
Available online 12 February 2016 - In Press, Corrected Proof

**The role of vaccination in successful independent ageing**

JE McElhaney, G Gavazzi, J Flamaing, J Petermans

**Abstract**

Ageing increases the risk and severity of infectious diseases, especially when chronic diseases are present. Healthcare providers generally view vaccination as a childhood intervention and
consider vaccination of the elderly not to be sufficiently effective due to immunosenescence. However, the burden of frequent vaccine-preventable diseases, such as influenza, pneumococcal disease and herpes zoster, increases with age, so that the perceived lower vaccine effectiveness should be considered in the context of this higher burden. Vaccination can prevent infection and mortality hospitalization and functional decline, and their consequences thereby having a positive impact. The use of medications will be reduced (e.g. antibiotics, analgesics) and therefore the iatrogenic risk would be lower. This contributes to an improved quality of life and to successful ageing. Many countries recommend influenza and pneumococcal vaccination in the elderly and, more recently, some recommend the live-attenuated herpes zoster vaccine. However, better guidelines and recommendations, especially for frail individuals are needed. Protection may be improved by offering vaccination to younger, fitter individuals, before they become frail. In addition, offering vaccination to caregivers and others who are in contact with the elderly could also improve protection. Many studies have demonstrated that influenza, pneumococcal and herpes zoster vaccinations in the elderly are cost-effective and can even be cost-saving. Healthcare providers and public health decision-makers need to understand more fully the value of vaccination and to consider it as an important preventive tool in the promotion of successful ageing.

THE NATIONAL ADULT IMMUNIZATION PLAN (NAIP)
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
NATIONAL VACCINE PROGRAM OFFICE
February 2016 :: 67n pages

EXECUTIVE SUMMARY
Vaccination is considered one of the most important public health achievements of the 20th century and continues to offer great promise in the 21st century. Vaccines save lives and improve the quality of life by preventing serious infectious diseases and their consequences. However, the benefits of vaccination are not realized equally across the U.S. population. Adult vaccination rates remain low in the United States, and significant racial and ethnic disparities also exist.

The U.S. Department of Health and Human Services National Vaccine Plan (NVP), released in 2010, is a road map for vaccines and immunization programs for the decade 2010–2020. While the NVP provides a vision for improving protection from vaccine-preventable diseases across the lifespan, vaccination coverage levels among adults are not on track to meet Healthy People 2020 targets. The National Vaccine Advisory Committee and numerous stakeholder groups have emphasized the need for focused attention on adult vaccines and vaccination. The National Adult Immunization Plan (NAIP) outlined here results from the recognition that progress has been slow and that there is a need for a national adult immunization strategic plan.

As a national plan, the NAIP will require engagement from a wide range of stakeholders to achieve its full vision. The plan emphasizes collaboration and prioritization of efforts that will have the greatest impact. The NAIP also aims to leverage the unique opportunity presented by the implementation of the Affordable Care Act.

The NAIP is intended to facilitate coordinated action by federal and nonfederal partners to protect public health and achieve optimal prevention of infectious diseases and their consequences through vaccination of adults. The NAIP includes indicators to draw attention to and track progress against core goals. These indicators will measure progress against set standards and inform future implementation and quality improvement efforts.
The plan establishes four key goals, each of which is supported by objectives and strategies to guide implementation through 2020:
Goal 1: Strengthen the adult immunization infrastructure.
Goal 2: Improve access to adult vaccines.
Goal 3: Increase community demand for adult immunizations.
Goal 4: Foster innovation in adult vaccine development and vaccination-related technologies.

Health – Isolation/Loneliness

Psychiatry Research
Volume 237, 30 March 2016, Pages 78–82

Articles
Loneliness and depressive symptoms among older adults: The moderating role of subjective life expectancy
Ehud Bodner, Yoav S. Bergman

Highlights
:: Subjective life expectancy is an important factor for physical and mental well-being.
:: Loneliness predicts depressive symptoms in old age.
:: Subjective life expectancy moderates the loneliness-depressive symptoms link.

Abstract
Loneliness and depressive symptoms are closely related, and both are indicators of reduced physical and mental well-being in old age. In recent years, the subjective perception of how long an individual expects to live (subjective life expectancy) has gained importance as a significant predictor of future psychological functioning, as well as of physical health. The current study examined whether subjective life expectancy moderates the connection between loneliness and depressive symptoms in a representative sample of older adults. Data was collected from the Israeli component of the fifth wave of the Survey of Health, Ageing and Retirement in Europe (SHARE-Israel). Participants (n=2210; mean age=70.35) completed measures of loneliness, depressive symptoms, and life expectancy target age. A hierarchical regression analysis predicting depressive symptoms yielded a significant interaction of loneliness and subjective life expectancy. Further analyses demonstrated that low subjective life expectancy mitigated the loneliness-depressive symptoms connection. Findings are discussed in light of the potential burden of higher subjective life expectancy for lonesome older adults, and practical implications are suggested.

Geriatrics & Gerontology International
Article first published online: 21 JAN 2016
Social isolation and risk for malnutrition among older people
Christa Boulos, Pascale Salameh, and Pascale Barberger-Gateau
DOI: 10.1111/ggi.12711

Abstract
Aim
Social isolation and loneliness are emerging issues among the geriatric population. The relationships between both, and their impact on health and nutritional status in older people are complex. The purpose of the present study was to evaluate the association between three components of social isolation: social network, feeling of loneliness, commensality and nutritional status.
Methods
A total of 1200 randomly selected elderly individuals aged ≥65 years and living in rural areas of Lebanon participated in the present study. Data were collected during a face-to-face interview including nutritional status (Mini-Nutritional Assessment), measures of social isolation (Lubben Social Network Scale), subjective loneliness (Jong-Gierveld Loneliness Scale), sociodemographic conditions, and health and functional status.

Results
Both social isolation and loneliness were independently associated with a higher risk of malnutrition (OR 1.58, P = 0.011; OR 1.15, P = 0.020, respectively). However no association was found between the frequency of sharing meals and the risk of malnutrition.

Conclusions
The present study showed that social isolation and subjective loneliness are two independent risk factors for malnutrition among older people.

MacArthur Foundation
http://www.macfound.org/

Publication
Fewer Women Ages 65 and Over Living Alone
Published February 18, 2016

A report by the Pew Research Center, conducted in partnership with the MacArthur Foundation Research Network on an Aging Society, finds the share of older Americans who live alone has fallen 3% since 1990, largely because women ages 65 to 84 are increasingly likely to live with their spouse or their children. The report attributes this trend to an increase in life expectancy, especially among men, which has made it more likely that older women would be living with their spouses rather than as widows.

The European Journal of Public Health
Volume 26, Issue 1, 1 February 2016
http://eurpub.oxfordjournals.org/content/26/1

Article
Impact of living alone on institutionalization and mortality: a population-based longitudinal study

Abstract
Background:
Living alone is common among elderly people in Western countries, and studies on its relationship with institutionalization and all-cause mortality have shown inconsistent results. We investigated that the impact of living alone on institutionalization and mortality in a population-based cohort of elderly people.

Methods:
Data originate from the Swedish National study on Aging and Care-Kungsholmen. Participants aged ≥66 years and living at home (n = 2404) at baseline underwent interviews and clinical examination. Data on living arrangements were collected in interviews. All participants were followed for 6 years; survival status and admission into institutions were tracked continuously through administrative registers from 2001 to 2007. Data were analysed using Cox proportional hazard models, competing risk regressions and Laplace regressions with adjustment for potential confounders.
Results:
Of the 2404 participants, 1464 (60.9%) lived alone at baseline. During the follow-up, 711 (29.6%) participants died, and 185 (15.0%) were institutionalized. In the multi-adjusted Cox model, the hazard ratio (HR) of mortality in those living alone was 1.35 (95% confidence interval [CI] 1.18 to 1.54), especially among men (HR = 1.44, 95% CI 1.18 to 1.76). Living alone shortened survival by 0.6 years and was associated with the risk of institutionalization (HR = 1.74, 95% CI 1.10 to 2.77) after taking death into account as a competing risk.

Conclusions:
Living alone is associated with elevated mortality, especially among men and an increased risk of institutionalization. Over a 6-year period, living alone was related to a half year reduction in survival among elderly people in Sweden.

Social Science & Medicine
Volume 150, February 2016, Pages 95–103
Original Research Article
The effect of living alone on the costs and benefits of surgery amongst older people
Pages 95-103
Alex J. Turner, Silviya Nikolova, Matt Sutton
Abstract
Older people who live alone are a growing, high-cost group for health and social services. The literature on how living alone affects health and the costs and benefits of healthcare has focused on crude measures of health and utilisation and gives little consideration to other cost determinants and aspects of patient experience. We study the effect of living alone at each stage along an entire treatment pathway using a large dataset which provides information on pre-treatment experience, treatment benefits and costs of surgery for 105,843 patients receiving elective hip and knee replacements in England in 2009 and 2010. We find that patients who live alone are healthier prior to treatment and experience the same gains from treatment. However, living alone is associated with a 9.2% longer length of in-hospital stay and increased probabilities of readmission and discharge to expensive destinations. These increase the costs per patient by £179.88 (3.12%) and amount to an additional £4.9 million per annum. A lack of post-discharge support for those living alone is likely to be a key driver of these additional costs.

Health – Insurance
No new digest content identified.

Health – Pharmaceuticals/Substance Abuse

Journal of the American Geriatrics Society
Volume 64, Issue 2, pages 401–408, February 2016
Article first published online: 25 JAN 2016
Drugs & Pharmacology
Recent Literature on Medication Errors and Adverse Drug Events in Older Adults
Jennifer G. Naples PharmD1,2,3, Joseph T. Hanlon PharmD, MS1,2,3,4,5,6, Kenneth E. Schmader MD7,8 and Todd P. Semla MS, PharmD9,10,11,*
Author Information
Abstract
Medication errors and adverse drug events are common in older adults, but locating literature addressing these issues is often challenging. The objective of this article is to summarize recent studies addressing medication errors and adverse drug events in a single location to improve accessibility for individuals working with older adults. A comprehensive literature search for studies published in 2014 was conducted, and 51 potential articles were identified. After critical review, 17 studies were selected for inclusion based on innovation; rigorous observational or experimental study designs; and use of reliable, valid measures. Four articles characterizing potentially inappropriate prescribing and interventions to optimize medication regimens were annotated and critiqued in detail. The authors hope that health policy-makers and clinicians find this information helpful in improving the quality of care for older adults.

Archives of Gerontology and Geriatrics
Volume 65, July–August 2016, Pages 9–16
Mortality, hospitalisation, institutionalisation in community-dwelling oldest old: The impact of medication
doi:10.1016/j.archger.2016.02.009
Maarten Wauters a, Monique Elseviers a, Bert Vaes b, c, Jan Degryse b, c, Robert Vander tichelea, Thierry Christiaensa, Majda Azermaia
Highlights
:: In a primary care sample of oldest old (80+), the mean chronic medication use was 5.4.
:: High medication use was strongly associated with hospitalisation (11% increase per extra medication).
:: High medication use was less clearly associated with increased mortality.
:: High medication use was not associated with entering a nursing home.

Abstract
Background
High drug use and associated adverse outcomes are common in older adults. This study investigates association of medication use with mortality, hospitalisation, and institutionalisation in a cohort of community-dwelling oldest old (aged 80 and over).

Methods
Baseline data included socio-demographic, clinical, and functional characteristics, and prescribed medications. Medications were coded by the Anatomic Therapeutic Chemical classification. Survival analysis was performed at 18 months after inclusion using Kaplan–Meier, and multivariate analysis with Cox regression to control for covariates.

Results
Patients’ (n = 503) mean age was 84.4 years (range 80–102), and 61.2% was female. The median medication use was 5 (0–16). The mortality, hospitalisation, and institutionalisation rate were 8.9%, 31.0%, and 6.4% respectively. The mortality and hospitalisation group had a higher level of multimorbidity and weaker functional profile. Adjusted multivariate models showed an 11% increased hospitalisation rate for every additional medication taken. No association was found between high medication use and mortality, nor with institutionalisation. A higher association for mortality was observed among verapamil/diltiazem users, hospitalisation was higher among users of verapamil/diltiazem, loop diuretics and respiratory agents. Institutionalisation was higher among benzodiazepines users.

Conclusion
In the community-dwelling oldest old (aged 80 and over), high medication was clearly associated with hospitalisation, independent of multimorbidity. The association with mortality was clear in univariate, but not in multivariate analysis. No association with institutionalisation
was found. The appropriateness of the high medication use should be further studied in relation to mortality, hospitalisation, and institutionalisation for this specific age group.

New England Journal of Medicine
February 18, 2016 Vol. 374 No. 7
http://www.nejm.org/toc/nejm/medical-journal

Editorial
Establishing a Framework — Does Testosterone Supplementation Help Older Men?
E.S. Orwoll

Extract
Aging is variably but inevitably accompanied by declines in health; concomitantly, in men, circulating sex-steroid levels fall with age.1 To what extent these two processes are causally linked and whether testosterone therapy can prevent or ameliorate important age-related problems have been major issues in men's health. In 2003, a committee assembled by the Institute of Medicine (IOM) found a paucity of randomized, placebo-controlled clinical trials involving older men and noted a lack of definite evidence that testosterone therapy conferred benefits.2 The committee recommended that clinical trials be initiated, first to evaluate the efficacy of testosterone supplementation in older men and then to assess long-term benefits and risks through large-scale trials.

Little has changed to alter the conclusions of that report; if anything, the issue of testosterone supplementation has become more controversial.3 However, in this issue of the Journal, Snyder et al.4 describe the long-awaited initial results of the National Institutes of Health–sponsored Testosterone Trials, which were designed to address the key issues identified by the IOM. Their report is important, not only because it deals with an essential public health issue but also because the investigators have succeeded in conducting the kind of generally well-conceived studies that are sorely needed in the field. The findings begin to provide a basis for more rational clinical decisions about testosterone use as well as for additional research...

Original Articles
Effects of Testosterone Treatment in Older Men
P.J. Snyder and Others

Abstract
Background
Serum testosterone concentrations decrease as men age, but benefits of raising testosterone levels in older men have not been established.

Methods
We assigned 790 men 65 years of age or older with a serum testosterone concentration of less than 275 ng per deciliter and symptoms suggesting hypoandrogenism to receive either testosterone gel or placebo gel for 1 year. Each man participated in one or more of three trials — the Sexual Function Trial, the Physical Function Trial, and the Vitality Trial. The primary outcome of each of the individual trials was also evaluated in all participants.

Results
Testosterone treatment increased serum testosterone levels to the mid-normal range for men 19 to 40 years of age. The increase in testosterone levels was associated with significantly increased sexual activity, as assessed by the Psychosexual Daily Questionnaire (P<0.001), as well as significantly increased sexual desire and erectile function. The percentage of men who had an increase of at least 50 m in the 6-minute walking distance did not differ significantly between the two study groups in the Physical Function Trial but did differ significantly when men in all three trials were included (20.5% of men who received testosterone vs. 12.6% of men who received placebo, P=0.003). Testosterone had no significant benefit with respect to
vitality, as assessed by the Functional Assessment of Chronic Illness Therapy–Fatigue scale, but men who received testosterone reported slightly better mood and lower severity of depressive symptoms than those who received placebo. The rates of adverse events were similar in the two groups.

Conclusions
In symptomatic men 65 years of age or older, raising testosterone concentrations for 1 year from moderately low to the mid-normal range for men 19 to 40 years of age had a moderate benefit with respect to sexual function and some benefit with respect to mood and depressive symptoms but no benefit with respect to vitality or walking distance. The number of participants was too few to draw conclusions about the risks of testosterone treatment. (Funded by the National Institutes of Health and others; ClinicalTrials.gov number, NCT00799617.)

Health – Physical Activity/Impacts

Current Cardiovascular Risk Reports
January 2016, 10:5
First online: 29 January 2016
Sedentary Behavior and Cardiovascular Risk in Older Adults: a Scoping Review
Alexandra M. Hajduk, Sarwat I. Chaudhry
Abstract
Sedentary behavior is an emerging risk factor for cardiovascular disease (CVD) and may be particularly relevant to the cardiovascular health of older adults. This scoping review describes the existing literature examining the prevalence of sedentary time in older adults with CVD and the association of sedentary behavior with cardiovascular risk in older adults. We found that older adults with CVD spend >75 % of their waking day sedentary, and that sedentary time is higher among older adults with CVD than among older adults without CVD. High sedentary behavior is consistently associated with worse cardiac lipid profiles and increased cardiac risk scores in older adults; the associations of sedentary behavior with blood pressure, CVD incidence, and CVD-related mortality among older adults are less clear. Future research with larger sample sizes using validated methods to measure sedentary behavior are needed to clarify the association between sedentary behavior and cardiovascular outcomes in older adults.

British Medical Journal
352 :i245 (Published 03 February 2016)
Effect of structured physical activity on prevention of serious fall injuries in adults aged 70-89: randomized clinical trial (LIFE Study)
Open Access
Abstract
Objective
To test whether a long term, structured physical activity program compared with a health education program reduces the risk of serious fall injuries among sedentary older people with functional limitations.
Design
Multicenter, single blinded randomized trial (Lifestyle Interventions and Independence for Elders (LIFE) study).
Setting
Eight centers across the United States, February 2010 to December 2011.
Participants
1635 sedentary adults aged 70-89 years with functional limitations, defined as a short physical performance battery score ≤9, but who were able to walk 400 m.

Interventions
A permuted block algorithm stratified by field center and sex was used to allocate interventions. Participants were randomized to a structured, moderate intensity physical activity program (n=818) conducted in a center (twice a week) and at home (3-4 times a week) that included aerobic, strength, flexibility, and balance training activities, or to a health education program (n=817) consisting of workshops on topics relevant to older people and upper extremity stretching exercises.

Main outcome measures
Serious fall injuries, defined as a fall that resulted in a clinical, non-vertebral fracture or that led to a hospital admission for another serious injury, was a prespecified secondary outcome in the LIFE Study. Outcomes were assessed every six months for up to 42 months by staff masked to intervention assignment. All participants were included in the analysis.

Results
Over a median follow-up of 2.6 years, a serious fall injury was experienced by 75 (9.2%) participants in the physical activity group and 84 (10.3%) in the health education group (hazard ratio 0.90, 95% confidence interval 0.66 to 1.23; P=0.52). These results were consistent across several subgroups, including sex. However, in analyses that were not prespecified, sex specific differences were observed for rates of all serious fall injuries (rate ratio 0.54, 95% confidence interval 0.31 to 0.95 in men; 1.07, 0.75 to 1.53 in women; P=0.043 for interaction), fall related fractures (0.47, 0.25 to 0.86 in men; 1.12, 0.77 to 1.64 in women; P=0.017 for interaction), and fall related hospital admissions (0.41, 0.19 to 0.89 in men; 1.10, 0.65 to 1.88 in women; P=0.039 for interaction).

Conclusions
In this trial, which was underpowered to detect small, but possibly important reductions in serious fall injuries, a structured physical activity program compared with a health education program did not reduce the risk of serious fall injuries among sedentary older people with functional limitations. These null results were accompanied by suggestive evidence that the physical activity program may reduce the rate of fall related fractures and hospital admissions in men.

Trial registration
ClinicalTrials.gov NCT01072500.

Health – Therapy: Occupational/Other Therapies

Physical & Occupational Therapy In Geriatrics
Volume 34, Issue 1, 2016 pages 21-42

**Occupational Therapy and Occupational Participation in Community Dwelling Older Adults: A Review of the Evidence**
Nicole Papageorgioua*, Ruth Marquis Professora, Julie Darea & Rachel Battena
DOI:10.3109/02703181.2015.1109014
Published online: 16 Feb 2016

**Abstract**
Aims: To review recent occupational therapy literature to establish the current level of evidence on how occupation may influence participation and may prevent or reduce social isolation in community dwelling older adults aged 60 years and over. Methods: Pertinent electronic databases were comprehensively searched using a guiding search strategy and inclusion criteria. Data extraction and quality assessment was conducted on included studies. Results: 14
studies were included in the review. The occupational domains within the studies that contributed to social participation or social isolation included instrumental activities of daily living, education, leisure, work and social participation. Conclusions: Evidence is emerging within recent literature to support a positive relationship between occupations, social participation and the prevention of social isolation in community dwelling older adults aged 60 years and over. Evidence supports the highly relevant and valuable role of occupational therapy in facilitating healthy aging through supporting social participation and addressing social isolation for the increasingly aging global population.

:::::::

**Health - Suicide**

*No new digest content identified.*

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**Additional Articles of Interest…selected full text articles**

**BMC Geriatrics**

[http://bmcgeriat.biomedcentral.com/](http://bmcgeriat.biomedcentral.com/)

Published: 11 February 2016

**Involvement of older people in the development of fall detection systems: a scoping review**

Friederike JS Thilo, Barbara Hürlimann, Sabine Hahn, Selina Bilger, Jos MGA Schols and Ruud JG Halfens

DOI: 10.1186/s12877-016-0216-3

**Abstract**

**Background**

The involvement of users is recommended in the development of health related technologies, in order to address their needs and preferences and to improve the daily usage of these technologies.

The objective of this literature review was to identify the nature and extent of research involving older people in the development of fall detection systems.

**Methods**

A scoping review according to the framework of Arksey and O’Malley was carried out. A key term search was employed in eight relevant databases. Included articles were summarized using a predetermined charting form and subsequently thematically analysed.

**Results**

A total of 53 articles was included. In 49 of the 53 articles, older people were involved in the design and/or testing stages, and in 4 of 53 articles, they were involved in the conceptual or market deployment stages. In 38 of the 53 articles, the main focus of the involvement of older people was technical aspects. In 15 of the 53 articles, the perspectives of the elderly related to the fall detection system under development were determined using focus groups, single interviews or questionnaires.

**Conclusions**

Until presently, involvement of older people in the development of fall detection systems has focused mainly on technical aspects. Little attention has been given to the specific needs and views of older people in the context of fall detection system development and usage.
Abstract

Lately, the use of Internet has become increasingly common and is source of benefits in terms of information, communication and health applications. Its use is, sometimes, problematic with psychiatric and physical negative consequences. Growing literature provides data on adolescents and adults. Entry into advanced age and characteristics involve interaction with Internet, different from that of the adult or young adult.

This paper aimed to review literature on problematic Internet use in elder persons. Literature search on Medline database has shown no study on problematic Internet use targeting subjects aged over 60 years old. Only 3 studies including subjects entering into elder age (over 55 years old) have been found. They showed Problematic Internet use (PIU) being present in this subgroup population but no further data were presented specifically for this age group.

Why problematic Internet use in elderly should be a concern for the medical community at a neurological, social, somatic and psychiatric level is discussed in the present article.

Further research is needed to screen for problematic use of Internet in this population and to characterize it.