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A new approach to fear of falls from connections with the posttraumatic stress disorder literature

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Abstract

Fear of falling (FoF) is as an important psychological problem among older people. While it has been researched for around four decades, paradoxically there is no agreed definition of FoF. Confusion over the definition of FoF inhibits current understanding of empirical findings. The objective of this article is to critique current definitions of FoF and to present a novel theoretical model that aims to resolve theoretical misunderstanding. A narrative review was conducted to present definitions of FoF and concepts often conflated with it including fall-related self-efficacy and anxiety. Then, by drawing on posttraumatic stress disorder (PTSD) theory and research, we present clear distinctions between the concepts. We argue that the presence or absence of anxiety determines whether FoF becomes maladaptive or adaptive, respectively, and that enhancing self-efficacy is key to optimizing postfall psychological recovery. The theoretical clarity presented will aid future research and application of evidence to the benefit older people.

PDF Y Endnote Y

Are the effects of internal focus instructions different from external focus instructions given during balance training in stroke patients? A double-blind randomized controlled trial

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Clin. Rehabil. 2018; ePub(ePub): ePub.

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Abstract

OBJECTIVE: This study aimed to assess if external focus instructions result in greater improvements in motor skill and automaticity compared to internal focus instructions in stroke patients.

DESIGN: Double-blind randomized controlled trial.

SETTING: Inpatient stroke rehabilitation unit.

SUBJECTS: A total of 63 stroke patients (Mean_{age} = 59.6 ± 10.7 years; Mean_{days since stroke} = 28.5 ± 16.6; Median_{Functional Ambulation Categories} = 4).

INTERVENTIONS: Patients were randomly assigned to an internal (N = 31) or external (N = 32) focus instruction group. Both groups practiced a balance board stabilization task, three times per week, for three weeks. Balance performance was assessed at baseline, and after one and three weeks of practice.

MAIN MEASURES: Primary outcome was the threshold stiffness (Nm/rad) at which patients could stay balanced. Secondary outcomes were patients' sway (root-mean-square error in degrees) at the

baseline threshold stiffness under single- and dual-task conditions, and their performance on the Timed Up and Go Test and Utrecht Scale for Evaluation of Rehabilitation.

RESULTS: Both groups achieved similar improvements in threshold stiffness ($\Delta = 27.1 \pm 21.1$ Nm/rad), and single- ($\Delta = 1.8 \pm 2.3^\circ$ root-mean-square error) and dual-task sway ($\Delta = 1.7 \pm 2.1^\circ$ root-mean-square error) after three weeks of practice. No differences were found in improvements in clinical tests of balance and mobility. Patients with comparatively good balance and sensory function, and low attention capacity showed greatest improvements with external focus instructions.

CONCLUSION: External focus instructions did not result in greater improvement in balance skill in stroke patients compared to internal focus instructions.

RESULTS suggest that tailoring instructions to the individual stroke patient may result in optimal improvements in motor skill.

PDF Y Endnote Y

Cardiac cause of frequent falls in an elderly patient

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Am. J. Crit. Care 2018; 27(5): 429-430.

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Abstract [Abstract unavailable]

PDF N Endnote Y

Characteristics and predictors for hospitalizations of home-dwelling older persons receiving community care: a cohort study from Norway

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BMC Geriatr. 2018; 18(1): e203.

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DOI 10.1186/s12877-018-0887-z **PMID** 30176794

Abstract

BACKGROUND: Older persons are substantial consumers of both hospital- and community care, and there are discussions regarding the potential for preventing hospitalizations through high quality community care. The present study report prevalence and factors associated with admissions to hospital for community-dwelling older persons (> 67 years of age), receiving community care in a Norwegian municipality.

METHODS: This was a cohort study of 1531 home-dwelling persons aged ≥ 67 years, receiving community care. We retrospectively scrutinized admissions to hospital for the study cohort over a

one-year period in 2013. The frequency of admissions was evaluated with regard to association with age (age groups 67-79 years, 80-89 years and ≥ 90 year) and gender. The hospital admission incidence was calculated by dividing the number of admissions by the number of individuals included in the study cohort, stratified by age and gender. The association between age and gender as potential predictors and hospitalization (outcome) was first examined in univariate analyses followed by multinomial regression analyses in order to investigate the associations between age and gender with different causes of hospitalization.

RESULTS: We identified a total of 1457 admissions, represented by 739 unique individuals, of which 64% were women, and an estimated mean age of 83 years. Mean admission rate was 2 admissions per person-year (95% confidence interval (CI): 1.89-2.11). The admission rate varied with age, and hospital incidents rates were higher for men in all age groups. The overall median length of stay was 4 days. The most common reason for hospitalization was the need for further medical assessment (23%). We found associations between increasing age and hospitalizations due to physical general decline, and associations between male gender and hospitalizations due to infections (e.g., airways infections, urinary tract infections).

CONCLUSIONS: We found the main reasons for hospitalizations to be related to falls, infections and general decline/pain/unspecified dyspnea. Men were especially at risk for hospitalization as they age. Our study have identified some clinically relevant factors that are vital in understanding what health care personnel in community care need to be especially aware of in order to prevent hospitalizations for this population.

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Circumstances of falls and fear of falling in community-dwelling older adults with cancer: results from a mixed-methods study

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J. Geriatr. Oncol. 2018; ePub(ePub): ePub.

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(Copyright © 2018, Elsevier Publishing)

DOI 10.1016/j.jgo.2018.08.005 **PMID** 30170991

Abstract

BACKGROUND: Falls are common among older adults and are of added concern among those with cancer due to cancer and its treatments. Knowledge on circumstances surrounding falls and fear of falling is vital for understanding how various factors may precipitate falls and for informing development of effective fall prevention interventions. The aim of the study was to explore circumstances of falls and fear of falling in community-dwelling older adults with cancer.

ETHOD: A convergent-parallel mixed-methods design was used in this cross-sectional study. Community-dwelling older adults (aged ≥ 65) with cancer who experienced ≥ 1 fall in the past year were recruited (N = 100) from the Princess Margaret Cancer Centre in Toronto, Canada. Data collection included patient self-reported survey and open-ended interview. Descriptive statistics for quantitative data and thematic analyses for qualitative data were conducted.

RESULTS: One hundred sixty-eight falls were recalled. Falls occurred mostly indoor, during the day and during normal, non-hazardous activities. Many participants had a fall when not using their

walking aid. While some participants (15%) attributed their falls to bad turns or tripping, others blamed themselves for being careless or foolish. Themes from qualitative interviews included 'cognitive appraisal of falls', 'mobility-related fall reasons', and 'opportunity for health-teaching'.
CONCLUSION: Circumstances of falls seem to be similar to those in the general geriatric population. Strategies for fall prevention and management used in the general geriatric population may potentially benefit this population as well. Attention may be warranted specifically regarding medication review, health-teaching on fall safety, home safety evaluation, and balance training referral.

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Clinical outcome and management for geriatric traumatic injury: analysis of 2688 cases in the emergency department of a teaching hospital in Taiwan

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Abstract

Geriatric traumatic injuries in emergency departments are frequent and associated with higher mortality rates and catastrophic functional outcomes. Several prediction scores have been established to manage traumatic patients, including the shock index (SI), revised trauma score (RTS), injury severity score (ISS), trauma injury severity score (TRISS), and new injury severity score (NISS). However, it was necessary to investigate the effectiveness and efficiency of care for the geriatric traumatic population. In addition, image studies such as computed tomography and magnetic resonance imaging play an important role in early diagnosis and timely intervention. However, few studies focus on this aspect. The association between the benefit of carrying out more image studies and clinical outcomes remains unclear. In this study, we included a total of 2688 traumatic patients and analyzed the clinical outcomes and predicting factors in terms of geriatric trauma via pre-hospital and in-hospital analysis. Our evaluation revealed that a shock index ≥ 1 may be not a strong predictor of geriatric trauma due to the poor physical response in the aging population. This should be modified in geriatric patients. Other systems, like RTS, ISS, TRISS, and NISS, were significant in terms of predicting the clinical outcome.

PDF Y Endnote Y

Contribution of hip abductor-adductor muscles on static and dynamic balance of community-dwelling older adults

Porto JM, Freire Junior RC, Bocarde L, Fernandes JA, Marques NR, Rodrigues NC, de Abreu DCC. *Aging Clin. Exp. Res.* 2018; ePub(ePub): ePub.

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DOI 10.1007/s40520-018-1025-7 **PMID** 30182152

Abstract

BACKGROUND: The previous studies have investigated causes of and risk factors for falls and impairment of functional capability in older adults. However, the biomechanical factors involved in functional performance and postural control, and the contribution of hip muscles, are still unknown.

AIMS: The aim of the present study was to verify the association between the muscle function of hip abductors and adductors and static and dynamic balance, in a narrow base of support, in community-dwelling older adults.

METHODS: Eighty-one older adults, including both women and men, were evaluated. Tandem gait and single-leg stance were used to assess static and dynamic balance, and an isokinetic dynamometer was used to analyze muscle function (peak torque and rate of torque development according to body weight). Data were analyzed by a multivariate linear regression test without adjustment and with adjustment using two models: adjustment I (sex) and adjustment II (age).

RESULTS: There was a statistically significant association between peak torque of abductor in single-leg stance and tandem gait speed. The PT of hip adductors contributed to static balance performance, in a narrow base of support from the unadjusted data and from the adjusted data by sex.

CONCLUSION: The findings of the present study are relevant, because if deficits in balance and functionality in older adults can be linked to a decline in maximum muscle strength of hip abductors, this parameter can be treated to maintain independence in older adults for as long as possible.

PDF Y Endnote Y

Development of the Japanese version of the Westmead Home Safety Assessment for the elderly in Japan

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Hong Kong J. Occup. Ther. 2018; 31(1): 14-21.

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Abstract

OBJECTIVE: Home safety assessment and intervention is a key component in the management of fall risk in elderly people. However, a standardised assessment for home safety has not yet been established in Japan. We developed a Japanese version of the Westmead Home Safety Assessment by partially modifying the original version according to house structures and lifestyles in Japan and examined its inter-rater reliability and content validity.

METHODS: Japanese elderly in the community who had fear of falls were recruited to investigate the reliability of the Japanese version of the Westmead Home Safety Assessment. Two occupational therapists simultaneously visited a participant's home to perform the Japanese version of the Westmead Home Safety Assessment independently. Further, an expert panel of 18 occupational therapists evaluated the relevance of each item of the Japanese version of the Westmead Home Safety Assessment.



RESULTS: Fifty elderly people (aged 78.2 ± 7.1 years) participated in this reliability study. The most frequent hazards were identified as internal steps/stairs, seating, bathroom, bath, and external steps/stairs. Forty-nine items (69%) in the Japanese version of the Westmead Home Safety Assessment were rated to have fair to good ($0.40 < \kappa < 0.75$) or excellent ($\kappa \geq 0.75$) reliability as well as excellent validity (item content validity ≥ 0.78). These items were concerned with basic activities of daily living and some simple instrumental activities of daily living. The scale content validity was 0.78 ± 0.16 but was not excellent (scale content validity index < 0.90).

CONCLUSIONS: This study suggested that 49 items in the Japanese version of the Westmead Home Safety Assessment were appropriate for home safety assessment for Japanese elderly. Further research is necessary to improve the reliability and validity of the present version of the Japanese version of the Westmead Home Safety Assessment for this population.

PDF Y Endnote Y

Editorial: Evidence-based practices to reduce falls and fall-related injuries among older adults

Frieson CW, Tan MP, Ory MG, Smith ML.

Front. Public Health 2018; 6: e222.

Affiliation: College of Public Health, The University of Georgia, Athens, GA, United States.

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DOI 10.3389/fpubh.2018.00222 **PMID** 30186826 **PMCID** PMC6110876

Abstract [Abstract unavailable]

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Elderly fall patients need a urinalysis

Shu A, Paulasir S, Batool F, Corpron CA, Purtill MA, Wahl WL, Brandt MM.

Am. Surg. 2018; 84(8): e299-e301.

(Copyright © 2018, Southeastern Surgical Congress)

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Abstract [Abstract unavailable]

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Fall prevention mobile clinic: a novel fall prevention program for community-dwelling older adults

Singh S, Kwon A, Whitehurst DGT, Friesen K, Scott V, Hejazi S, Feldman F.

Can. J. Aging 2018; ePub(ePub): ePub.

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(Copyright © 2018, Cambridge Press)

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Abstract

Causes of falls in older adults are common, multifactorial, and can lead to significant injury. This before-and-after study evaluated the benefits of a Fall Prevention Mobile Clinic (FPMC) in reducing the risk of falling in older adults in British Columbia, Canada. Four hundred seventy-six participants (average age of 83.6 years) enrolled in the study and were followed for 12 months after attending the FPMC. At 12-month follow-up, the mean percentage uptake of fall prevention recommendations was 48.8 per cent (SD = 25.7%), the Timed Up and Go mobility measure improved from a median of

19.04 seconds to 17.45 seconds and the number of participants falling decreased from 64.8 per cent (in the 12 months before attending the clinic) to 55.6 per cent (in the 12 months after attending the clinic) ($p = .012$). After attending the FPMC, participants acted on recommendations, improved mobility and decreased their risk of future falls.

PDF Y Endnote Y

Functional ability, participation, and health-related quality of life after hip fracture

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OTJR 2018; ePub(ePub): ePub.

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Abstract

Hip fracture is prevalent among older adults impacting on all aspects of daily life. The goals of this study were: (a) Examine the trajectory of activities of daily living (ADL)/instrumental activities of daily living (IADL) functioning and participation among older adults with hip fracture from prefracture to 6-months postrehabilitation; (b) determine the relationship between health-related quality of life (HRQoL), functional abilities, and participation 6-months postrehabilitation; and (c) examine whether functional outcomes can predict HRQoL. Both retrospective and prospective data were analyzed. Fifty-five participants (Mean age = 80.82) completed the motor component of the functional independence measure (mFIM), IADL questionnaire, Activity Card Sort, and SF-12. Prefracture levels of function and participation were not attained. Significant correlations were found between HRQoL, functional abilities, and participation. ADL functioning and mobility predicted Physical SF-12, whereas social-cultural activity predicted Mental SF-12. Significant loss of functioning and participation was found, persisting 6 months after rehabilitation that impede their HRQoL. Improving functioning, mobility, and social participation can be achieved by occupational therapy intervention for promoting HRQoL among elderly with hip fracture.

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Low systolic blood pressure from treatment and association with serious falls/syncope

Sim JJ, Zhou H, Bhandari S, Wei R, Brettler JW, Tran-Nguyen J, Handler J, Shimbo D, Jacobsen SJ, Reynolds K.

Am. J. Prev. Med. 2018; ePub(ePub): ePub.

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Abstract

INTRODUCTION: With the growing emphasis on intensive blood pressure control, the potential for overtreatment and treatment-related adverse outcomes has become an area of interest. A large representative population within a real-world clinical environment with successful hypertension control rates was used to evaluate serious falls and syncope in people with low-treated systolic

blood pressure (SBP).

METHODS: A cross-sectional study among medically treated hypertensive individuals within the Kaiser Permanente Southern California health system (2014-2015) was performed. Serious fall injuries and syncope were identified using ICD codes based on emergency department and hospitalization diagnoses. SBPs in a 1-year window were used to compare serious falls and syncope among individuals with SBP <110 mmHg vs \geq 110 mmHg. Logistic regression was used to evaluate the association between low minimum and mean SBP and serious falls/syncope after adjustment for demographics, comorbidities, and medications.

RESULTS: In 477,516 treated hypertensive individuals, the mean age was 65 (SD=13) years and the mean SBP was 129 (SD=10) mmHg, with 27% having a minimum SBP <110 mmHg and 3% having mean SBP <110 mmHg. A total of 15,419 (3.2%) individuals experienced a serious fall or syncope or both during the observation window (5.7% among minimum SBP <110 mmHg and 5.4% among mean SBP <110 mmHg). The multivariable ORs for serious falls/syncope were 2.18 (95% CI=2.11, 2.25) for minimum SBP <110 mmHg and 1.54 (95%CI=1.43, 1.66) for mean SBP <110 mmHg compared with SBP \geq 110 mmHg.

CONCLUSIONS: Among treated hypertensive patients, both minimum and mean SBP less than 110 mmHg were associated with serious falls and syncope. Low treatment-related blood pressures deserve consideration given the emphasis on intensive blood pressure control.

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PDF Y Endnote Y

Low-trauma rib fracture in the elderly: risk factors and mortality consequence

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Bone 2018; ePub(ePub): ePub.

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DOI 10.1016/j.bone.2018.08.016 **PMID** 30172740

Abstract

PURPOSE: Low trauma rib fracture (hereinafter, rib fracture) is common in the elderly, but its risk factors and mortality consequence are rarely studied. We sought to define the epidemiology of rib fracture and the association between rib fracture and postfracture mortality.

METHODS: The study was part of the Dubbo Osteoporosis Epidemiology Study, which was designed as a population-based prospective study, and consisted of 2041 women and men (aged \geq 60). The incidence of rib fracture was ascertained from X-ray reports. Bone mineral density (BMD) was measured by DXA (GE-Lunar). The time-dependent Cox model was used to assess the relationship between rib fracture and mortality.

RESULTS: During the median follow-up of 13 years, 59 men and 78 women had sustained a rib fracture, making the annual incidence of 4.8/1000 person-years. Each SD (0.15 g/cm²) lower in femoral neck BMD was associated with ~2-fold increase in the hazard of fracture (hazard ratio [HR]

1.9; 95% CI, 1.4 to 2.6 in men; and HR 2.1; 95% CI, 1.6 to 2.8 in women). Among those with a rib fracture, the incidence of subsequent fractures was 10.2/100 person-years. Compared with those without a fracture, the risk of mortality among those with a fracture was increased by ~7.8-fold (95% CI, 2.7 to 22.5) in men and 4.9-fold (95% CI 2.0 to 11.8) in women within the first year postfracture.

CONCLUSIONS: A rib fracture signifies an increased risk of subsequent fractures and mortality. The increased risk of mortality during the first 2.5 years postfracture suggests a window of opportunity for treatment.

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Mismatch between risk factors and preventive interventions? A register study of fall prevention among older people in one Swedish county

Witt S, Englander E, Kumlien C, Axelsson M.

Int. J. Older People Nurs. 2018; ePub(ePub): e12209.

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(Copyright © 2018, John Wiley and Sons)

DOI 10.1111/opn.12209 **PMID** 30187674

Abstract

BACKGROUND: Falls are a common and often a devastating health hazard for older people, causing suffering, morbidity and mortality. Falls are costly for society in terms of both resources and direct medical costs. Although knowledge about falls and fall prevention is well known, falls among older people are still a major problem. **AIM AND OBJECTIVES:** The aim was to estimate the prevalence of the risk of falls among older people receiving municipal health care. A further aim was to investigate the consistency between fall risk factors and preventive nursing interventions.

DESIGN: A cross-sectional register study.

METHODS: Data containing risk assessments based on the Downton Fall Risk Index (DFRI) and planned interventions by the municipal health care were collected from the Swedish national quality registry, Senior Alert. Data were analysed using descriptive and analytic statistics.

RESULTS: In the sample of 5,427 older people, the prevalence of the risk of falling was 79%. There was a difference in prevalence between the different types of municipal health care, sex and age. The most common preventive intervention was environment adjustments, and the least planned intervention was information/education about falls. Physical activity as an intervention was planned among 13.2% of the participants. Approximately 27% of the older people did not have any planned interventions despite being at risk of falling. Planned interventions did not always correspond with the risk factors; for instance, only 35.4% of those at risk of falling due to medication obtained pharmaceutical reviews as a preventive measure to decrease the risk.

CONCLUSION: The risk of falling is common among older people, and the preventive interventions do not sufficiently follow current evidence. This implies that systematic implementation of fall-prevention guidelines is needed in municipal care. **IMPLICATION FOR PRACTICE:** A better match

between identified risk factors and preventive interventions is warranted.

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PDF Y Endnote Y

Muscle weakness, cognitive impairment and their interaction on altered balance in elderly outpatients: results from the TRIP observational study

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Clin. Interv. Aging 2018; 13: 1437-1443.

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(Copyright © 2018, Dove Medical Press)

DOI 10.2147/CIA.S165085 **PMID** 30174417 **PMCID** PMC6109650

Abstract

BACKGROUND: The determinants of altered balance in older subjects and, particularly, the contribution of muscle strength and cognitive impairment are still uncertain. We hypothesized that both these conditions and their interactions could affect balance in older persons. To address this hypothesis, we studied the cross-sectional association between handgrip strength and balance performance in subjects with and without cognitive impairment.

METHODS: Two hundred and sixty-three elderly outpatients (104 men and 159 women, aged 81.44 ± 7.36 years) were evaluated for the comprehensive geriatric assessment. The patients were enrolled from the cross-sectional observational Traumatic Risk Identikit Parma study that was aimed at identifying risk factors for falling in older outpatients.

RESULTS: Balance deficit, defined as an inability to maintain tandem position for at least 10 seconds, was present in 185 patients (70.34%). The mean mini-mental state examination score was 20.79 ± 6.5 , the median short physical performance battery score was 5.0 and the mean grip strength was 18.54 ± 9.14 kg. After dividing the subjects into four categories according to the presence of low grip strength and/or cognitive impairment, we found that the mini nutritional assessment short-form scale score was negatively and independently (β : -0.02 ± 0.01 ; $p=0.04$) associated with balance deficit in the group with low grip strength and cognitive impairment. In the other three categories, grip strength was negatively and significantly associated with balance deficit.

CONCLUSION: The loss of muscle strength, presence of cognitive impairment and their interaction, influenced probably by malnutrition, could affect balance in older persons.

PDF Y Endnote Y

Participant preferences for an aboriginal-specific fall prevention program: measuring the value of culturally-appropriate care

Angell B, Laba T, Lukaszuk C, Coombes J, Eades S, Keay L, Ivers R, Jan S.

PLoS One 2018; 13(8): e0203264.

Affiliation: The George Institute for Global Health, University of New South Wales, Sydney, Australia.

(Copyright © 2018, Public Library of Science)

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Abstract



BACKGROUND: Culturally-specific services are central to efforts to improve the health of Aboriginal Australians. Few empirical studies have demonstrated the value of such services relative to mainstream alternatives.

OBJECTIVE: To assess the preferences and willingness to pay (WTP) of participants for attending a class and the relative importance of transport, cost and cultural-appropriateness in the choices made by participants.

DESIGN: A discrete choice experiment (DCE) was conducted alongside a study of a culturally-specific fall-prevention service. Attributes that were assessed were out-of-pocket costs, whether transport was provided and whether the class was Aboriginal-specific. Choices of participants were modelled using panel-mixed logit methods.

RESULTS: 60 patients completed the DCE. Attending a service was strongly preferred over no service (selected 99% of the time). Assuming equivalent efficacy of fall-prevention programs, participants indicated a preference for services that were culturally-specific (OR 1.25 95% CI: 1.00-1.55) and incurred lower out-of-pocket participant costs (OR 1.19 95% CI 1.11-1.27). The provision of transport did not have a statistically significant influence on service choice ($p = 0.57$).

DISCUSSION AND CONCLUSIONS: This represents the first published DCE in the health field examining preferences amongst an Aboriginal population. The results empirically demonstrate the value of the culturally-specific element of a program has to this cohort and the potential that stated-preference methods can have in incorporating the preferences of Aboriginal Australians and valuing cultural components of health services. **NOTE ON TERMINOLOGY:** As the majority of the NSW Aboriginal and Torres Strait Islander population is Aboriginal (97.2%), this population will be referred to as 'Aboriginal' in this manuscript.

PDF Y Endnote Y

Polypharmacy is associated with frailty in Japanese community-dwelling older adults

Yuki A, Otsuka R, Tange C, Nishita Y, Tomida M, Ando F, Shimokata H.

Geriatr. Gerontol. Int. 2018; ePub(ePub): ePub.

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Abstract

AIM: The association between polypharmacy and the development of frailty is unknown. The present study assessed the longitudinal relationship between polypharmacy and frailty risk in Japanese community-dwelling older adults.

METHODS: Participants included 299 non-frail older Japanese adults aged 65-81 years who participated in both baseline and follow-up examinations of a longitudinal study of aging (mean duration 6.2 years). At baseline examination, all prescribed and non-prescribed medications used during the previous 2 weeks were confirmed and coded by physicians. Frailty was diagnosed according to frailty criteria, and included shrinking, exhaustion, low activity, low grip strength and low gait speed. The relationship between frailty and the number of medications was assessed using multiple logistic regression analysis. The logistic regression model was used to control for potential confounders, including age at baseline, sex, body fat, total physical activity, education, employment,

current smoking and number of comorbidities.

RESULTS: The percentage of participants who developed frailty during follow up was 5.1% in those taking five or fewer medications, and 22.5% in those taking six or more medications. The fully adjusted odds ratio for frailty among participants taking six or more medications was 5.55 (95% confidence interval 2.17-14.22).

CONCLUSIONS: Polypharmacy appears to be a significant risk factor for the development of frailty in older Japanese adults. © 2018 Japan Geriatrics Society.

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Postdischarge mortality after geriatric low-level falls: a five-year analysis

Gerrish AW, Hamill ME, Love KM, Lollar DI, Locklear TM, Dhiman N, Nussbaum MS, Collier BR.

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(Copyright © 2018, Southeastern Surgical Congress)

DOI unavailable PMID 30185299

Abstract

Geriatric trauma patients with low-level falls often have multiple comorbidities and limited physiologic reserve. Our aim was to investigate postdischarge mortality in this population. We hypothesized that five-year mortality would be higher relative to other blunt mechanisms. The registry of our Level 1 trauma center was queried for patients evaluated between July 2008 and December 2012. Adult patients identified were matched with mortality data from 2008 to 2013 from the National Death Index. Low-level falls were identified by E Codes; other types of blunt trauma were based on registry classification. Patients with multiple admissions were excluded. Univariate analysis was performed using Fisher's exact and Wilcoxon tests. Kaplan-Meier curves were plotted to compare postdischarge mortality. Seven thousand nine hundred sixteen patients were evaluated, 35.1 per cent were females. Patients aged less than 65 years and penetrating trauma were excluded, yielding 1997 patients-63.7 per cent with low-level falls versus 36.3 per cent with other blunt traumas. Geriatric patients sustaining low-level falls were older, more likely female, had a higher inpatient mortality, and were less likely to return home at discharge. Injury severity score, hospital length of stay, and intensive care unit length of stay were similar. Survival analysis demonstrated increased postdischarge mortality in the low-level fall group with 25 per cent mortality at 120 days. Geriatric patients with other blunt trauma had a significantly lower postdischarge mortality. Geriatric patients injured in low-level falls have a higher in-hospital mortality, are more likely to be functionally dependent on discharge, and have a high postdischarge mortality. Opportunities likely exist for injury prevention, consideration of palliative care, and postdischarge rehabilitation.

PDF N Endnote Y

Quality of life in older adults following a hip fracture: an empirical comparison of the ICECAP-O and the EQ-5D-3 L instruments

Milte R, Crotty M, Miller MD, Whitehead C, Ratcliffe

J. Health Qual. Life Outcomes 2018; 16(1): e173.

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DOI 10.1186/s12955-018-1005-9 **PMID**30185193

Abstract

BACKGROUND: The purpose of this study was to empirically compare the performance of two generic preference based quality of life instruments, EQ-5D-3 L (with a health and physical function focus) and ICECAP-O (with a wellbeing and capability focus), in a population of older Australians following hip fracture.

METHODS: Older adults or their family member proxies (in cases of severe cognitive impairment) following surgery to repair a fractured hip were invited to take part in this cross sectional study. Inclusion criteria included an age of 60 years or older, confirmed falls-related hip fracture and those receiving current palliative care or consented to other research studies were excluded. 87 participants completed the ICECAP-O and EQ-5D-3 L instruments between one and three weeks post-surgery.

RESULTS: For the hip fracture population, the mean ICECAP-O score was 0.639 (SD 0.206, n = 82) and the mean EQ-5D-3 L utility score was 0.545 (SD 0.251, n = 87). There was a statistically significant positive correlation between the ICECAP-O and EQ-5D-3 L scores ($r = 0.529$, $p < 0.001$).

CONCLUSIONS: Study findings indicate significant impairments in quality of life post hip fracture. In multiple regression analyses, age and health-related QoL (measured by the EQ-5D) were significant determinants of ICECAP-O scores, while proxy respondent status, age, and capability-related QoL (measured by the ICECAP-O) were significant determinants of EQ-5D scores. Approaches to measuring and valuing quality of life in this sample, should consider the target domains of the intervention in their choice of instrument. Studies aiming to measure the impact of interventions targeting broader domains of wellbeing and QoL should consider including a broader measure of QoL in conjunction with a HRQoL measure.

PDF Endnote

Risk of falls in patients with knee osteoarthritis undergoing total knee arthroplasty: a systematic review and best evidence synthesis

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J. Orthop. 2018; 15(3): 903-908.

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(Copyright © 2018, P. K. Surendran Memorial Education Foundation, Publisher Elsevier Publishing)

DOI 10.1016/j.jor.2018.08.026 **PMID** 30174378 **PMCID** PMC6115537

Abstract

OBJECTIVES: Falls occur frequently in patients with impaired ambulation and may dramatically affect the elderly population. Aim was to document the incidence of falls in knee osteoarthritis (OA) patients undergoing total knee arthroplasty (TKA), and to identify factors and treatments that may influence the risk of falls.

METHODS: A systematic literature search was conducted on three medical electronic databases, PubMed, PeDRO, and Cochrane Collaboration. The Preferred Reporting Items for Systematic Reviews and Meta-analysis guidelines were used. Risk of bias analysis and best evidence synthesis were performed. The main aspects related to falls were analyzed: prevalence, risk factors, correlation with clinical outcome, effect of treatments.

RESULTS: The systematic review identified 11 papers on 1237 patients. Pre-operative fall prevalence

ranged from 23% to 63%, while post-operative values ranged from 12% to 38%. Moderate evidence was found on no influence of clinical scales, no BMI differences between "faller" and "non-faller", and on influence of limited pre-operative range of motion. Conflicting evidence was found for sex, history of previous falls, age, kyphosis, muscle weakness, fear of falling, depression, balance, gait impairment. No evidence was found for the effectiveness of surgical or rehabilitative strategies on falls reduction.

CONCLUSIONS: OA patients undergoing TKA are at high risk of falls, which is reduced but still present after surgery. Although some risk factors were identified, there are no studies demonstrating the possibility of reducing the incidence of this deleterious event, which warrants further research efforts to better manage this fragile population of elderly patients.

PDF Y Endnote Y

Severe injuries from low-height falls in the elderly population

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J. Korean Med. Sci. 2018; 33(36): e221.

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(Copyright © 2018, Korean Academy of Medical Science)

DOI 10.3346/jkms.2018.33.e221 **PMID** 30181730 **PMCID** PMC6115694

Abstract

BACKGROUND: Falls from low-height can cause severe injuries in the elderly population. This study was conducted to determine characteristics of injuries from low-height falls.

METHODS: We retrospectively review surveillance data on injured patients who presented to six emergency departments from January 2011 to December 2015. Study subjects were divided into severe group and non-severe group based on severity of injury. The general and clinical characteristics were compared between the two groups and analyzed factors related with severe injuries.

RESULTS: Of 1,190 elderly patients, severe group comprised 82 patients (7%). The severe group was 2 years younger than the non-severe group. In the severe group, 61% was men and 34% in the non-severe group. In the non-severe, the injuries more commonly occurred at residential facilities and indoors than those in the severe group. Paid work during injury occurrence was 15%, and the more patients presented with non-alert consciousness in the severe group. The most common regions of major injury were head and neck in the severe group.

CONCLUSION: Paid work, non-alert consciousness, and major injury to head and neck are relating factors to severe injuries in the elderly population.

PDF Y Endnote Y

The assessment, management, and reporting of falls, and the impact of falls on cancer treatment in community-dwelling older patients receiving cancer treatment: results from a mixed-methods study

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J. Geriatr. Oncol. 2018; ePub(ePub): ePub.

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(Copyright © 2018, Elsevier Publishing)

DOI 10.1016/j.jgo.2018.08.006 **PMID** 30174258

Abstract

BACKGROUND: Falls are major health issues among older adults and even more so in those with cancer due to cancer and its treatment. Delays in cancer treatment caused by fall injuries may have significant implications on disease trajectory and patient outcomes. However, it is not known how falls impact cancer treatment in this population.

METHODS: We conducted a convergent-parallel mixed-methods study at the Princess Margaret Cancer Centre in Toronto, Canada, to examine how falls impact cancer treatment in community-dwelling cancer patients aged ≥ 65 , patients' fall reporting, and how falls were assessed and managed in oncology clinics. Data were collected by self-reported survey, chart review, and open-ended interviews.

RESULTS: One hundred older adults and fourteen oncologists participated. Falls were not commonly reported by patients to their oncologists (72 of 168 falls [43%] reported to researchers by patients were also reported to oncologists). One of fourteen oncologists routinely assessed falls. In 7% of all 72 reported falls, cancer treatment was impacted (e.g. treatment delay/cessation, dose reduction). Fifty-seven patients perceived their fall as minor incident not worth mentioning (amounted to a total of 72 falls not reported). When a participant reported their fall to the oncologist, actions were taken to assess and manage the fall. Oncologists indicated that the majority of patients were not forthcoming in reporting falls.

CONCLUSION: One in twenty who fall appear to lead to change in cancer management. However, falls were not commonly reported by patients nor prioritized by oncologists. Incorporating routine fall assessment in oncology clinic appointments may help identify those at risk for falls so that timely interventions can be triggered.

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PDF Y Endnote Y

The association between depressive symptoms and fall accidents among middle-aged and elderly people in China

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Environ. Health Prev. Med. 2018; 23(1): e42.

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DOI 10.1186/s12199-018-0735-y **PMID** 30185143

Abstract

BACKGROUND: Depressive symptoms are a worldwide health problem. However, the research about the effect of depressive symptoms on the fall among the Chinese mid-aged and elderly people is lacking. Therefore, this study aims to investigate the association between depressive symptoms and fall accidents among middle-aged and elderly people in China.



METHODS: This study was conducted based on 12,527 sets of data from China Health and Retirement Longitudinal Survey (CHARLS). The 2011 depressive symptoms data and the 2013 fall data were chosen for this study. The depressive symptom-related data was assessed by the Chinese version of Center for Epidemiologic Studies Depression scales (CES-D). Individuals were divided into subgroups according to gender (male or female), age (45-59, middle-aged or ≥ 60 , elderly people), and residence (rural or urban). The odds ratios (ORs) were compared between subgroups using multivariable logistic regression analysis method.

RESULTS: The adjusted OR value (OR = 1.19 [95% CI 1.07-1.33]) shows there is a significant association between depressive symptoms and subsequent fall accidents. The ORs of the female, elderly people, rural, and urban subgroups are 1.31 (95% CI 1.11-1.55), 1.24 (95% CI 1.08-1.43), 1.17 (95% CI 1.02-1.33), and 1.25 (95% CI 1.04-1.49), respectively, which reveals that this association is also statistically significant in these subgroups.

CONCLUSIONS: This study shows that there is a significant association between depressive symptoms and their subsequent fall accidents among the Chinese middle-aged and elderly people.

PDF Y Endnote Y

The impact of multiple dimensions of socioeconomic status on physical functioning across the life course

Noppert GA, Brown CS, Chanti-Ketterl M, Hall KS, Newby LK, Cohen HJ, Morey MC.
Gerontol. Geriatr. Med. 2018; 4: e2333721418794021.

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DOI 10.1177/2333721418794021 **PMID** 30186891 **PMCID** PMC6113730

Abstract

Objective: We used the Physical Performance Across the LifeSpan Study to investigate the relationships of multiple indicators of socioeconomic status (SES), both in early life and late life, with physical function.

Method: We examined associations between multiple early and late life SES indicators with physical function measured by aerobic endurance, gait speed, and lower body strength.

Results: Higher participant education and household income were associated with increased physical function. In our age-stratified analysis, we observed widening SES disparities with increasing age among those in the two younger strata with lower SES associated with worse physical function. Finally, we observed an association between socioeconomic trend and gait speed, aerobic endurance, and lower body strength. There was also an association between lower aerobic endurance and being in a downward socioeconomic trend.

Discussion: These findings highlight the significance of considering multiple dimensions of the social environment as important correlates of physical functioning across the life course.

PDF Y Endnote Y

The prevalence of orthostatic hypotension: a systematic review and meta-analysis

Saedon NI, Tan MP, Frith J.

J. Gerontol. A Biol. Sci. Med. Sci. 2018; ePub(ePub): ePub.



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(Copyright © 2018, Gerontological Society of America)

DOI 10.1093/gerona/gly188 **PMID** 30169579

Abstract

BACKGROUND: Orthostatic hypotension (OH) is associated with increased risk of falls, cognitive impairment and death as well as a reduced quality of life. Although it is presumed to be common in older people, estimates of its prevalence vary widely. This study aims to address this by pooling the results of epidemiological studies.

METHODS: MEDLINE, EMBASE, PubMed, Web of Science and ProQuest were searched. Studies were included if participants were over 60 years, were set within the community or within long-term care and diagnosis was based on a postural drop in systolic blood pressure (BP) ≥ 20 mmHg or diastolic BP ≥ 10 mmHg. Data was extracted independently by two reviewers. Random and quality effects models were used for pooled analysis.

RESULTS: Of 23090 identified records, 20 studies were included for community-dwelling older people (n 24967) and six were included for older people in long-term settings (n 2694). There was substantial variation in methods used to identify OH with differing supine rest duration, frequency and timing of standing BP, measurement device, use of standing and tilt-tables and interpretation of the diagnostic drop in BP. The pooled prevalence of OH in community-dwelling older people was 22.2% (95%CI 17, 28) and 23.9% (95%CI 18.2, 30.1) in long-term settings. There was significant heterogeneity in both pooled results ($I^2 > 90\%$).

CONCLUSIONS: OH is very common, affecting one in five community-dwelling older people and almost one in four older people in long-term care. There is great variability in methods used to identify OH.

PDF Y Endnote Y

A multicenter study of post-traumatic stress disorder after injury: mechanism matters more than injury severity

Herrera-Escobar JP, Al Rafai SS, Seshadri AJ, Weed C, Apoj M, Harlow A, Brasel K, Kasotakis G, Kaafarani HMA, Velmahos G, Salim A, Haider AH, Nehra D.
Surgery 2018; ePub(ePub): ePub.

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(Copyright © 2018, Elsevier Publishing)

DOI 10.1016/j.j.surg.2018.07.017 **PMID** 30170820

Abstract

BACKGROUND: Traumatic injury is strongly associated with long-term mental health disorders, but the risk factors for developing these disorders are poorly understood. We report on a multi-institutional collaboration to collect long-term patient-centered outcomes after trauma, including screening for post-traumatic stress disorder. The objective of this study is to determine the prevalence of and risk factors for the development of post-traumatic stress disorder after traumatic injury.

METHODS: Adult trauma patients (aged 18-64) with moderate to severe injuries (Injury Severity



Score ≥ 9) admitted to 3 level I trauma centers were screened between 6 and 12 months after injury for post-traumatic stress disorder. Patients were divided by mechanism: fall, road traffic injury, and intentional injury. Multiple logistic regression models were used to determine the association between baseline patient and injury-related characteristics and the development of post-traumatic stress disorder for the overall cohort and by mechanism of injury.

RESULTS: A total of 450 patients completed the screen. Overall 32% screened positive for post-traumatic stress disorder, but this differed significantly by mechanism, with the lowest being after a fall (25%) and highest after intentional injury (60%). Injury severity was not associated with post-traumatic stress disorder for any group, but lower educational level was associated with post-traumatic stress disorder within all the groups. Only 21% of patients who screened positive for post-traumatic stress disorder were receiving treatment at the time of the survey.

CONCLUSION: Post-traumatic stress disorder is common after traumatic injury, and the prevalence varies significantly by injury mechanism but is not associated with injury severity. Only a small proportion of patients who screen positive for post-traumatic stress disorder are currently receiving treatment.

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PDF Y Endnote Y

Anxiety independently contributes to severity of freezing of gait in people with Parkinson's disease

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J. Neuropsychiatry Clin. Neurosci. 2018; ePub(ePub): ePub.

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DOI 10.1176/appi.neuropsych.17090177 PMID 30187821

Abstract

Freezing of gait is a disabling feature of Parkinson's disease, and it has been shown that nonmotor symptoms, such as anxiety and cognitive impairment, may be involved in the pathophysiology of the phenomenon. However, the association between freezing of gait severity and nonmotor symptoms is yet to be determined. Therefore, the overall aim of this study was to determine factors that contribute to severity of freezing of gait in people with Parkinson's disease. Participants (N=78) were assessed by disease-specific and self-report measures, including the Hospital Anxiety and Depression Scale (HADS), the Montreal Cognitive Assessment, and the Freezing of Gait Questionnaire (FOG-Q). Participants were classified as "freezers" if they scored ≥ 1 on item 3 of the FOG-Q; the sum of items 3-6 was used to determine freezing of gait severity. Freezers (N=27) showed higher scores on the HADS anxiety ($p=0.002$) and HADS depression ($p=0.006$) subscales. A multivariate linear model showed that disease severity (as measured by using the modified Hoehn and Yahr scale) accounted for 31% of the variance in FOG-Q severity scores ($p<0.001$). The presence

of HADS anxiety ≥ 8 points increased the explained variance to 38% ($p=0.010$), and the full model (reached by adding the levodopa equivalent dose) explained 42% of the variance in freezing of gait severity ($p=0.026$). The findings provide additional support for the contribution of anxiety to greater freezing of gait severity, taking into account not only the frequency but the duration of the episodes, and suggest that anxiety should be routinely evaluated in people with Parkinson's disease who present with freezing of gait.

PDF Y Endnote Y

Balance changes in patients with relapsing-remitting multiple sclerosis: a pilot study comparing the dynamics of the relapse and remitting phases

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Front. Neurol. 2018; 9: e686.

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(Copyright © 2018, Frontiers Research Foundation)

DOI 10.3389/fneur.2018.00686 **PMID** 30186223

PMCID PMC6110896

Abstract

Aims: To compare balance changes over time during the relapse phase of relapsing-remitting multiple sclerosis (RRMS) with balance control during the remitting phase.

Methods: Balance control during stance and gait tasks of 24 remitting-phase patients (mean age 43.7 ± 10.5 , 15 women, mean EDSS at baseline 2.45 ± 1.01) was examined every 3 months over 9 months and compared to that of nine relapsing patients (age 42.0 ± 12.7 , all women, mean EDSS at relapse onset 3.11 ± 0.96) examined at relapse onset and 3 months later. Balance was also compared to that of 40 healthy controls (HCs) (age 39.7 ± 12.6 , 25 women). Balance control was measured as lower-trunk sway angles with body-worn gyroscopes. Expanded Disability Status Scale scores (EDSS) were used to monitor, clinically, disease progression.

Results: Remitting-phase patients showed more unstable stance balance control than HCs ($p < 0.04$) with no worsening over the observation period of 9 months. Gait balance control was normal ($p > 0.06$). Relapsing patients had stance balance control significantly worse at onset compared to remitting-phase patients and HCs ($p < 0.04$). Gait tasks showed a significant decrease of gait speed and trunk sway in relapsing patients ($p = 0.018$) compatible with having increased gait instability at normal speeds. Improvement to levels of remitting patients generally took longer than 3 months. Balance and EDSS scores were correlated for remitting but not for relapse patients.

Conclusions: Balance in remitting RRMS patients does not change significantly over 9 months and correlated well with EDSS scores. Our results indicate that balance control is a useful measure to assess recovery after a relapse, particularly in patients with unchanged EDSS scores. Based on our results, balance could be considered as additional measurement to assess recovery after a relapse, particularly in patients with unchanged EDSS.

PDF Endnote

Cardiac cause of frequent falls in an elderly patient

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Am. J. Crit. Care 2018; 27(5): 429-430.

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DOI 10.4037/ajcc2018267 **PMID** 30173176

Abstract [Abstract unavailable]

PDF Y Endnote Y

Effect of toe joint stiffness and toe shape on walking biomechanics

Honert EC, Bastas G, Zelik KE.

Bioinspir. Biomim. 2018; ePub(ePub): ePub.

Affiliation: Vanderbilt University, Nashville, Tennessee, 37240-0002, UNITED STATES.

(Copyright © 2018, Institute of Physics Publishing)

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Abstract

During typical human walking, the metatarsophalangeal joints undergo flexion/extension, which we term toe joint articulation. This toe joint articulation impacts locomotor performance, as evidenced by prior studies on prostheses, footwear, sports and humanoid robots. However, a knowledge gap exists in our understanding of how individual toe properties (e.g., shape, joint stiffness) affect bipedal locomotion. To address this gap, we designed and built a pair of adjustable foot prostheses that enabled us to independently vary different toe properties, across a broad range of physiological and non-physiological values. We then characterized the effects of varying toe joint stiffness across a range of different ankle joint stiffness conditions, and different toe shapes on walking biomechanics. Ten able-bodied individuals walked on a treadmill with prostheses mounted bilaterally underneath simulator boots (which fixated their biological ankles). We collected motion capture and ground reaction force data, then computed joint kinematics and kinetics, and center-of-mass (COM) power and work. To our surprise, we found that varying toe joint stiffness affected COM Push-off dynamics during walking as much as, or in some cases even more than, varying ankle joint stiffness. Increasing toe joint stiffness increased COM Push-off work by up to 48% (6 J), and prosthetic anklefoot Push-off work by up to 181% (12 J). In contrast, large changes in toe shape had little effect on gait. This study brings attention to the toes, an aspect of prosthetic and robotic foot design that is often overlooked or overshadowed by design of the ankle. Optimizing toe joint stiffness in assistive and robotic devices (e.g., prostheses, exoskeletons, robot feet) may provide a complementary means of enhancing Push-off or other aspects of locomotor performance, in conjunction with the more conventional approach of augmenting ankle dynamics. Future studies are needed to isolate the effects of additional toe properties (e.g., toe length).

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Effects of physical exhaustion on local dynamic stability and automaticity of walking

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Gait Posture 2018; 66: 135-138.

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(Copyright © 2018, Elsevier Publishing)

DOI 10.1016/j.gaitpost.2018.08.031 **PMID** 30189371

Abstract

BACKGROUND: While the effects of diseases, performance of proprioceptors, anxiety or pain on gait stability or automaticity of walking are well-explored, physical fatigue might be another relevant factor whose consequences are not sufficiently investigated, yet. **RESEARCH QUESTION:** The aim of the current study was to evaluate the effect of physical exhaustion on local dynamic stability (LDS) and automaticity of gait.

METHODS: In a randomized controlled trial, 30 young and healthy adults were randomly assigned to either a passive control group or a fatigue group. The participants assigned to the fatigue group passed a shuttle-run test which finished at maximal exhaustion while those of the control group rested in sitting position for 15 min. Immediately before and after the intervention, local dynamic gait stability as well as the cognitive (serial seven subtractions) and motor dual-task costs, as a measure of automaticity, were registered.

RESULTS: While there was no effect of fatigue on LDS during single-task walking, we observed an interaction effect for LDS in the dual-task condition ($p = .034$) and for the motor dual-task costs ($p = .031$). Lower dual-task costs were found in the fatigued group in the post-test compared to the pre-test while the control group increased their costs at the same time. **SIGNIFICANCE:** In conclusion, gait automaticity might increase after total exhaustion in young adults. Still, the underlying mechanisms are not completely resolved and further research incorporating measurements of cortical gait control might be promising.

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Identifying risk for falls in pediatric patients

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AACN Adv. Crit. Care 2018; 29(3): 343-347.

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DOI 10.4037/aacnacc2018936 **PMID** 30185501

Abstract [Abstract unavailable]

PDF N Endnote Y

Impact of vascular disease, amputation level, and the mismatch between balance ability and balance confidence in a cross sectional study of the likelihood of falls among people with limb loss: perception versus reality

Wong CK, Chihuri ST.

Am. J. Phys. Med. Rehabil. 2018; ePub(ePub): ePub.

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DOI 10.1097/PHM.0000000000001034 **PMID** 30188335

Abstract

OBJECTIVE: Investigate impact of balance ability, Activities-specific Balance Confidence (ABC), and other self-reported and clinical factors on incidence of falls among people with lower-limb loss.

DESIGN: Cross-sectional study (N=305) with multivariable logistic regression analysis

RESULTS: Participants included 68.3% males with age 55.5 ± 14.9 ; with 50% dysvascular and 56.8% transtibial amputations. Average ABC = $2.1/4 \pm 1.1$, balance ability = $2.9/4 \pm 1.3$ and walking speed = 0.766 ± 0.387 m/s. The final model showed fall risk was heightened for people with vascular comorbidities (odds ratio [OR]=3.46, 95% confidence interval [CI]=1.40-8.54) and better balance (OR=23.29, CI=3.19-170.23); but attenuated for people with transfemoral (OR=0.08, CI=0.01-0.82) and vascular amputations (OR=0.38, CI=0.15-0.95). Significant interactions existed between age and amputation level (OR=1.06, CI=1.02-1.11) and between balance confidence and balance ability (OR=0.27, CI=0.13-0.57).

CONCLUSIONS: While people with vascular amputations were less likely to fall than those with nonvascular amputations, people with concurrent vascular comorbidities were more likely to fall than those without. People with transfemoral amputations were less likely to fall-however, fall risk increased with each year of age compared to people with transtibial amputations. People with balance ability ≥ 3.5 fell more often than those with lower ability, but people with lower balance ability and mismatched confidence in their balance ability had 3.7 times greater fall risk.

PDF Y Endnote Y

Views of key stakeholders on the causes of patients falls and prevention interventions: a qualitative study using the International Classification of Functioning, Disability and Health

Baris VK, Intepeler SS.

J. Clin. Nurs. 2018; ePub(ePub): ePub.

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(Copyright © 2018, John Wiley and Sons)

DOI 10.1111/jocn.14656 **PMID** 30182477

Abstract

AIMS AND OBJECTIVES: This study aimed to examine the views and suggestions of healthcare professionals, patients, and family members on the causes of inpatient falls and fall-prevention practices.

BACKGROUND: Patient falls are one of the most prevalent medical errors in the hospitals. In order

to prevent patient falls, it is necessary to identify and classify the situations causing falls in detail and preventive interventions for these situations need to be developed.

DESIGN: The study was designed using a descriptive qualitative research method.

METHOD: The semi-structured interviews were conducted with 4 physicians, 4 charge nurses, 12 nurses, 4 support staff members, 8 patients, and 8 family members of patients in the palliative, internal disease, surgery, and orthopedics clinics in a training and research hospital between March 2017 and May 2017. Thematic analysis method was used to analyze data. The defined themes were classified based on the International Classification of Functioning, Disability and Health Core Set for Falls in Acute Rehabilitation Settings.

RESULTS: In this research, 71 themes related to situations causing falls and 30 themes related to prevention-interventions were determined. Defined themes were linked with 44 categories under five International Classification of Functioning, Disability and Health domains and organized accordingly. Among the categories included in the International Classification of Functioning, Disability and Health Core Set for Falls in Acute Rehabilitation Settings, 65% were verified, while 22 new categories that were not included in the original core set were defined.

CONCLUSION: In accordance with this result, evaluating the opinions of all stakeholders on the research and development of fall-prevention programs will increase the effectiveness of fall prevention in hospitals. The ICF model can be used to classify the causes of falls and fall-prevention interventions to create a common language about this topic. This article is protected by copyright. All rights reserved.

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