

Methods: A cross sectional survey design collected quantitative and qualitative data via a self-administered on line and paper based questionnaire. Expert opinion was sought from physiotherapists, rheumatology consultants and patients to ensure face validity of the questionnaire. The questionnaire was distributed to members of the Hypermobility Syndrome Patient Association (HMSA) and Ehlers Danlos Syndrome Support UK (EDSUK) who were age 18 years and older. 948 questionnaires were returned. Data was transferred to Microsoft Excel and scrutinised by 2 researchers. 2 duplicate questionnaires were removed. Descriptive statistics were used to analyse the data. 12 incomplete questionnaires were included in this data analysis. Qualitative data was analysed thematically.

Results: 900 females and 46 males completed the questionnaire. 95% (897/946) suffered constant or frequent joint pain while 87% (819/946) suffered constant or frequent fatigue. Mental health disorders 44% (411/946), cardiovascular and cardiac dysautonomia 41% (385/946), gastrointestinal dysfunction 27% (251/946) were the most frequently reported comorbidities. 81% (755/942) of respondents had received exercise advice from a physiotherapist. 77% (701/940) agreed or strongly agreed that exercise was important for management. Swimming 28% (261/946), walking 24% (233/946) and Pilates 22% ($n=221/496$) were reported as the most helpful modes of exercises. 87% (821/946) of respondents reported pain to be a barrier to exercise while fatigue 79% (745/946) and fear of injury 50% (453/938) were also reported. Three themes emerged regarding experiences of physiotherapy, 'physiotherapist as a partner', 'communication' and 'knowledge and experience'.

Conclusion(s): JHS/EDS-HT is a complex HDCT and complex comorbidities may coexist. The majority of individuals surveyed, believed exercise to be important in management of JHS/EDS-HT. Swimming, walking and Pilates were reported to be the most helpful modes of exercises. Pain, fatigue and fear of injury were reported barriers to exercise. Physiotherapists working in partnership with individuals, who communicated clearly and who were knowledgeable about JHS/EDS-HT provided a positive patient experience.

Implications: Swimming, walking and Pilates may be helpful forms of exercise for individuals with JHS/EDS-HT. Physiotherapists need to be mindful of the presence of possible comorbidities and the barriers to exercise when advising individuals with JHS/EDS-HT about exercise.

Keywords: Joint hypermobility syndrome; Ehlers Danlos Syndrome – Hypermobility Type; Exercise

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Ethics approval: University of Hertfordshire, School of Health and Emergency Professions Ethics Committee.

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Research Report Poster Presentation

Number: RR-PO-14-04-Sat

Saturday 2 May 2015 13:00

Exhibit halls 401–403

REFERENCE VALUES OF PHYSICAL PERFORMANCE TESTS AMONG OLDER ADULTS WITH PHYSIOLOGICAL HIGH AND LOW FALLS RISK

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Background: Physical performance declines with ageing and may lead to increased risk of falls. Physical performance tests may be useful for initial falls risks screening test among community dwelling older adults. Physiological profile assessment (PPA), a composite falls risk assessment tool is reported to have 75% accuracy to screen for falls risk. PPA correlates with Timed Up and Go test (TUG). However, the correlation between the many other commonly used physical performance tests and PPA is not known.

Purpose: The aim of the study was to establish reference values of various physical performance tests among community dwelling older adults with high and low risk of falls, categorized using PPA. The correlation between various physical performance tests and PPA were also examined.

Methods: Falls risk of 140 community dwelling older adults aged 60 and above was measured using PPA. Falls risk was categorized as high (score of two and above) and low (score of below two) risk of falls. Physical performance measurements performed were ten step test (TST), short physical performance battery (SPPB), functional reach test (FRT), timed up and go test (TUG), gait speed test (GS), dominant hand grip strength test (DHGT) and static balance test (SB).

Results: Significant differences in median values of TST (seconds) (high: 17.84, low: 7.14; $p=0.03$), SPPB (score) (high: 11.00, low: 12.00; $p<0.001$), FRT (centimetres) (high: 26.67, low: 30.67; $p=0.006$), TUG (seconds) (high: 8.43, low: 7.14; $p<0.001$) and SB (degrees) (high: 2.40, low: 1.87; $p=0.007$) were demonstrated between the high and low risk of falls group. A significant weak correlation was found between PPA and TST ($r=0.252$, $p=0.003$), TUG ($r=0.273$, $p=0.001$), SB ($r=0.229$, $p=0.007$) SPPB ($r=-0.328$, $p<0.001$) and FRT ($r=-0.234$, $p=0.005$).

Conclusion(s): The weak correlation results between PPA and the physical performance tests such as TST, SPPB, FRT, TUG and SB suggest that the physical performance tests may not be useful as a standalone test to screen for falls risk among

community dwelling older adults. Further studies regarding the discriminative and predictive ability of these physical performance tests to identify fallers among community dwelling older adults are required.

Implications: The reference values of physical performance tests may be used as a guide for initial falls screening to categorize high and low physiological falls risk among community dwelling older adults. However, a more comprehensive assessment of falls risk should be performed thereafter for more specific intervention of underlying impairments.

Keywords: Community dwelling older adults; Physical performance tests; Physiological falls risk

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Ethics approval: Ethical approval has been obtained from the Secretariat for research and ethics, Universiti Kebangsaan Malaysia (NN-135-2011).

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Research Report Poster Presentation

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Exhibit halls 401–403

CORRELATION BETWEEN A COMPREHENSIVE AND SIMPLE FALLS SCREENING TOOLS AMONG COMMUNITY DWELLING OLDER ADULTS

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Background: A variety of falls screening tools are used to identify older adults at risk of falls. Simple falls screening tools may be administered by non-clinicians and would be beneficial for falls prevention and management strategies in the community settings. Understanding the correlation between a comprehensive and simple falls risk screening tools will assist clinicians to describe the strength and direction of relationships between these tools.

Purpose: The aim of this study was to determine the correlation between a comprehensive and simple falls screening tools among community dwelling older adults.

Methods: Three hundred and twenty five community dwelling older adults (mean age: 67.64 ± 5.5 years) were

recruited using a multi-stage sampling method and screened for falls risk in the state of Selangor, Malaysia. Physiological Profile Approach assessment was used as the comprehensive falls screening tool. Gait speed, Time up and go and Walking while talking tests were used as simple falls screening tools.

Results: Pearson correlation test showed that there was a significant ($p < 0.001$) but weak correlation between Physiological Profile Approach and Gait Speed ($r = -0.157$), Time up and go ($r = 0.239$) and Walking while talking ($r = -0.137$) tests.

Conclusion(s): The weak correlation between the comprehensive and simple falls screening tools suggest that simple falls screening tools may not be precise in identifying falls risk among community dwelling older adults. Further studies regarding the discriminative and predictive ability of these falls screening tools are required.

Implications: Due to its feasibility, simple falls screening tools may be useful in early detection when performing large-scale falls risk screening in the community settings. However, clinicians should not rely on simple falls screening tools alone in evaluating the risk of falls among older adults. Further assessments using a comprehensive falls risk assessment at the clinical settings such as Physiological Profile Approach should be considered where possible.

Keywords: Falls screening tools; Falls risk; Community dwelling older adults

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