

National Consultative Workshop



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Divya Dhar is a final year medical student at the University of Auckland. She has been on the executive of The New Zealand Medical Students' Association for three years, currently in the role of Vice President, and was the convenor of NCW this year.

The National Consultative Workshop (NCW) was held this year on Friday 3rd of April at Auckland Medical School by The New Zealand Medical Students' Association (NZMSA) and brought together a group of thirty medical students. Registration was free and included flight travel and food for the day.

NCW came to fruition two years ago with the aim of increasing communication and collaboration between national medical student groups. We understand the important role these groups provide in supporting and advocating for medical students. Hence, this year was the first year where we desired to facilitate their growth and development. The groups included Medical Aid Abroad Programme (MAAP), Medical Students for Global Awareness (MSGA), Aotearoa Rural Health Apprentices (ARHA), Maori And Pacific Admission Scheme (MAPAS), Pacific Medical Association (PMA), Te Oranga and New Zealand Medical Students' Journal (NZMSJ).

NCW 2009 consisted of five workshop sessions on key training and development ideas. This consisted of time management by the CEO of Spark Sonali Nidarmaty, media engagement by the Editor of NZ Doctor Barbara Fountain, policy lobbying by New Zealand University Students' Association Co-president Jordan King, sponsorship raising by Faculty of Medical and Health Sciences External manager Tim Greene and event management by United Nations Youth Association of New Zealand's Auckland President Elizabeth Chan. The overwhelming response from the participants was that these speakers were amazing and enriched their professional and personal development.

Time was also allocated for three breakout sessions which consisted of medical student groups coming together in the areas of global health, rural health and Maori and Pacific health in order to discuss common issues of concern and collaborate on new ideas. The main outcomes of these groups were to establish a united overarching medical student global health group which will serve to improve sustainability, to provide avenues for ARHA to comment on NZMSA rural and distant placement policies and use NZMSA media ties for press releases and lastly to establish a joint



Sonali Nidarmaty (CEO of Spark), Alistair Papali'i-Curtin (NZMSA), Divya Dhar (NZMSA)

Maori and Pacific student body.

NZMSA will be creating a NCW 2009 publication with relevant speaker presentations.

We look forward to expanding on NCW next year. If you have any comments or suggestion for the scope of NCW please feel free to contact us. Lastly, I'd like to thank Alistair Papali'i-Curtin for his role in assisting with NCW 2009.

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Sarcopenic-Obesity with Polypharmacy is Associated with Gait and Balance Disturbances in Older Adults

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ABSTRACT

Objective: To investigate the relationship between gait and balance disturbances, body composition, polypharmacy, and falls in an elderly cohort.

Design: Baseline data obtained from a convenience sample within a larger randomized controlled trial (investigating Tai- Chi as a falls prevention intervention).

Setting: University setting.

Participants: 182 community-dwelling people over the age of 65 considered to have a risk of falling.

Main outcome measures: Body composition using dual energy X-ray absorptiometry (DXA), and gait and balance measures (timed up-and-go, single leg stand, step test, 30 second chair stand). Details of medications, physical activity and falls over the previous 12 months were obtained by interview-administered self report. The relationship between these factors was examined using multiple regression models.

Results: DXA scans revealed that 28.1% participants had a normal body composition, 9.3% were sarcopenic, 15.9% were sarcopenic-obese, and 46.7% were obese. The sarcopenic-obese group had poorer functional performance on the chair stand ($p=0.03$), step test ($p=0.03$) and timed up-and-go tests (trend $p=0.06$). This group also reported the lowest levels of physical activity compared to the other body composition groups ($p=0.01$). Regression analysis revealed that the total number of medications and a sarcopenic-obese phenotype was related to poor functional performance in the chair stand test ($p<0.01$) step test ($p=0.01$) and timed up-and-go test ($p<0.01$). Total number of medications known to alter body composition and a sarcopenic-obese phenotype were also related to slower timed up-and-go test ($p=0.002$).

Conclusions: These findings suggest that sarcopenic-obesity with polypharmacy has a relationship with gait and balance disturbances in older adults. Although cause and effect cannot be established from this study, physicians may need to consider both body composition and medication use in older patients when assessing falls risk.



INTRODUCTION

Gait and balance disturbances are a risk factor for falls¹ and also contribute to functional limitations² and instrumental activities of daily living (IADL) disability during aging.² Skeletal muscle mass gradually declines after the age of 45 years³ and contributes to gait and balance disturbances, diminished muscular strength, functional limitations and increased rates of falls.^{2,4} The prevalence of obesity in the elderly is increasing in developing countries with fat mass generally peaking between the ages of 60-70 years.⁵ Sarcopenic-obesity (low lean body mass with high fat mass) has been reported to precede the onset of IADL disability² and functional limitations.^{6,4} However, the precise relationship between lean body mass and fat mass with gait and balance disturbances and increased risk of falling is controversial.⁵ Some studies report obesity as the primary risk factor for gait and balance disturbances^{4,2,7} whereas others report sarcopenia (low lean body mass with low fat mass) as a larger risk factor.⁸ Polypharmacy also increases falls risk in older persons, adding to the complexity of the relationship between body composition, gait and balance disturbances and the risk for falls.^{9,1,10} Polypharmacy refers to the administration of numerous medications, and 90% of people over the age of 65 currently take at least one medication daily, with many taking three or four different medications.^{11,12}

Psychotropic medications (hypnotics, anxiolytics and antidepressants) significantly increase rates of falls in the elderly.^{13,1} Commonly prescribed medications such as analgesics, cardiovascular, endocrine and respiratory drugs have also been associated with an increased incidence of falls.¹³ Despite evidence that some psychotropic and metabolic drugs change body composition,¹⁴ few studies have been conducted to investigate whether drugs altering body composition are also related to decreased physical functioning and increased gait and balance disturbances in elderly people.¹³

This study investigated the relationship between body composition, medication, gait and balance, and falls in healthy, community-dwelling older persons who had an increased falls risk.

METHODS

Design

This study was a cross-sectional secondary analysis funded by the Otago Medical Research Foundation. The primary study was a multi-centred randomised controlled trial (RCT) of Tai- Chi as a falls prevention intervention funded by the Accident Compensation Corporation of New Zealand (ACC). Ethical approval was obtained from the University of Otago Ethics Committee and the ACC Ethics Committee.