

(MrOS) study. Eligible participants provided a stool sample and completed a food frequency questionnaire at the MrOS Visit 4 in 2014-2016. Dietary patterns were derived by factor analysis. 16S rRNA target gene sequencing was performed. Linear regression and PERMANOVA considered variation in alpha and beta-diversity by dietary pattern, and metagenomeSeq assessed taxonomic variation by dietary pattern. In multivariable-adjusted models, greater adherence to the Western pattern was positively associated certain taxa, including *Alistipes*, *Desulfovibrio*, *Dorea*, *Eubacterium*, and *Ruminococcus*, while greater adherence to the prudent pattern was positively associated with certain taxa, including *Faecalibacterium*, *Lachnospira*, and *Paraprevotella*. Dietary patterns were not associated with measures of alpha diversity; beta diversity measures were significantly associated with both Western and prudent patterns.

VITAMIN D METABOLITES AND THE GUT MICROBIOME IN OLDER MEN

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We examined the bidirectional impact of vitamin D on the composition and diversity of the gut microbiome in 567 MrOS men. Vitamin D metabolites were measured using LC-MSMS and stool sub-operational taxonomic units defined from 16S ribosomal RNA sequencing data using Deblur and Greengenes 13.8. Men's mean serum level of 25(OH)D was in the sufficient range. Faith's Phylogenetic Diversity and non-redundant covariate analyses revealed that 1,25(OH)2D explained 5% of variance in α -diversity; the other non-redundant covariates of site, race, recent antibiotic and antidepressant use explained another 6%. In β -diversity analyses using unweighted UniFrac, 1,25(OH)2D was the strongest factor assessed, explaining 2%. Random forest plot analyses identified 12 taxa, 6 in the phylum Firmicutes, positively associated with either 1,25(OH)2D and/or [1,25(OH)2D/25(OH)D] activation ratio. Higher levels of the active 1,25(OH)2D, but not 25(OH)D, were associated with butyrate producing bacteria. Men with favorable vitamin D activation profiles also had greater gut microbial diversity.

SESSION 7645 (SYMPOSIUM)

MULTIDIMENSIONAL BENEFITS OF WEIGHT MANAGEMENT IN OLD AGE: THE MOBILITY AND VITALITY LIFESTYLE PROGRAM

Chair: Steven Albert

Co-Chair: Elizabeth Venditti

Discussant: Barbara Nicklas

The high prevalence of overweight or obesity in older adults is a public health concern because obesity is associated with risk of mobility disability. The benefits of brief community-based lifestyle interventions that promote modest weight loss and increased physical activity are

unclear. We assessed the impact of a 13-month lifestyle intervention, the Mobility and Vitality Lifestyle Program (MOVE UP), delivered by community health workers (CHW), on a variety of outcomes, including weight loss, performance-based lower extremity function (Short Physical Performance Battery, SPPB), activity, diet, and health-related quality of life (CDC U48 DP005001). The 32-session behavioral weight management intervention enrolled 303 community-dwelling adults (90.4% of those eligible), who were followed for 12 months (2015-19). Participants completed the program at 26 sites led by 22 CHWs. Participants were age (sd) 67.7 (4.1) and were mostly female (87%). 22.7% were racial minorities. The mean (sd) BMI at baseline was 34.7 (4.7). Median weight loss in the sample was 5% of baseline body weight. SPPB total scores improved by +0.31 units ($p < .006$), gait speed by +0.04 m/sec ($p < .0001$), and time to complete chair stands by -0.95 sec ($p < .0001$). Presenters will assess the effect of MOVE UP on activity, diet, fatigue, and health-related quality of life. A final paper examines implementation of MOVE UP and how site and CHW factors affected outcomes. Findings suggest that promoting healthier eating, weight loss, and physical activity in a community setting is an effective strategy for reducing risk of disability in older adults.

WEIGHT LOSS IMPROVES HRQOL PHYSICAL FUNCTION AND VITALITY MORE IN BLACKS THAN WHITES

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Participant-reported outcomes are important. Prior MOVE UP reports show $\geq 5\%$ weight loss was not significantly associated with depressive symptoms but was associated with positive SPPB physical function and the Physical Component Score of the SF-36 HRQOL scale. We examined the SF-36 subscales that showed, a priori, clinically meaningful +5.0-point increases over 13 months, the change in subscales per 5% weight loss, and variability by race. Among all participants ($n = 240$) several subscales show significant pre-post changes [mean (SD)] but only Vitality [+5.6 (15.4)] and Physical Function [+5.0 (16.7)] meet the criterion. Blacks ($n = 60$) compared to Whites ($n = 172$) had higher baseline scores on these subscales, were less likely to lose $\geq 5\%$ (31.7% vs. 59.9%), but mixed regression models indicate that those who did demonstrated a larger change on Vitality (+5.2; $p < 0.048$) than Whites (+3.1; $p < 0.0003$). Studying weight loss and HRQOL associations in larger minority samples is needed.

PERCEIVED PHYSICAL FATIGABILITY IMPROVES AFTER A WEIGHT MANAGEMENT INTERVENTION

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The effects of a weight loss and physical activity (PA) intervention on improving perceived physical fatigability are unknown. We examined this question in a subset ($n = 79$) of

older adults who are obese enrolled in the 13-month Mobility and Vitality Lifestyle Program (mean±SD age 68.8±4.2 years, 83.5% female, 26.6% African American, body mass index 34.6±4.3 kg/m²). Accelerometer-assessed PA (mean/day vector magnitude) was measured with a wrist-worn triaxial GT3X+ ActiGraph for 7 full days. Perceived physical fatigability was measured using the 10-item self-administered Pittsburgh Fatigability Scale (PFS, 0-50; lower score= less fatigability). Baseline PFS was 18.7±8.5 with 69.6% having higher fatigability (PFS ≥15). At 13-months, PFS decreased by 15% (2.8 points) to 15.9±8.4 ($p<0.01$) and prevalence of higher fatigability declined to 60.8%. Concurrently, participants lost 6.2% of their body weight and PA increased by 2.4%. A lifestyle intervention may be effective at reducing fatigability, an important component in the age-related disablement pathway.

QUALITY OF DIET AMONG COMMUNITY-DWELLING ELDERLY PARTICIPATING IN THE MOBILITY AND VITALITY LIFESTYLE PROGRAM

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Dietary choices play an important role in disease prevention both through its effect on weight and independent of it. Improving diet can be an effective means of disease prevention among older adults. Participants ($n=303$) were recruited from the Allegheny County, PA area and received nutritional education in group sessions led by trained community health workers over one year. Diet quality was captured at baseline and final endpoint (either 9 or 13 months) using the Rate Your Plate (RYP) instrument for assessing healthfulness of diet and includes 24 items that can be summed to generate a total quality score. The mean RYP diet quality score improved from baseline (RYP=50.87) to endpoint (RYP=54.85) ($p<.001$). Over the course of the intervention, 30.9% of participants made enough improvement in diet to move to a better RYP category. A community-based group intervention for older adults was effective in inducing improvements in diet quality.

IMPLEMENTATION OF MOVE UP AND EFFECT ON OUTCOMES

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The MOVE UP behavioral activation program, consisting of 32 sessions over 12 months, was delivered by trained community health workers (CHWs) at 26 sites. 300 participants completed a mean of 21.5 sessions. Change in body weight was associated with site attendance: among 9 sites with mean attendance < 70%, participants lost a mean of 5.3%; among 12 sites with 70-80% attendance, 5.6%; and among 5 sites with > 80% attendance, 9.2%. Completion of activity and diet logs followed a similar pattern (34.9%, 56.2%, and 72.7%, respectively), as did retention for 13-month outcome assessment (70%, 85%, and 88%, respectively). CHWs at the high-performing sites were more likely to have prior or current employment in weight

management and fitness (90% vs. 41.7% and 44.4%), but did not differ in education, age, race, or employment by sites. CHW experience, not sociodemographics, affected outcomes.

SESSION 7650 (SYMPOSIUM)

TOWARDS A GREATER CONTEXTUALIZATION OF MUSIC AND THE ARTS IN AGING AND COGNITIVE DISORDERS

Chair: Desmond O'Neill

There is an increasing prominence of arts and cultural interventions related to aging and cognitive disorders in the scholarly literature and at gerontological conferences. However, the mechanisms of the salience and relevance of aesthetics, culture and leisure in the lives of older people remains unclear. One aspect which has emerged is that of aesthetic deprivation and its consequences for well-being. This symposium aims to provide perspectives from a range of researchers involved in programs of research and implementation to try to contextualize and better understand the perspectives of older people, arts practitioners and therapists the place and context of arts, culture and leisure in optimal aging.

TOWARD A GREATER CONTEXTUALIZATION OF MUSIC AND THE ARTS IN AGING AND COGNITIVE DISORDERS

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Research suggests that group music-making can improve well-being and cognitive function in people with dementia and their family carers. The importance of the music facilitator's role is recognised. However, empirical studies rarely capture their experiences and perspectives. Semi-structured interviews were conducted with three music therapists and three community musicians with specialisms in dementia care. The interviews sought to gain a detailed understanding of their work with people with dementia. Interpretative Phenomenological Analysis revealed eight super-ordinate themes: (1) benefits of music-making for people with dementia; (2) challenges of working with people with dementia; (3) involving family carers; (4) musical content; (5) impact of the facilitator; (6) developing field of Arts and Health; (7) work as a privilege; and (8) potential for misuse of music. This study provides a useful basis from which to further develop concepts for the amelioration of people living with dementia and their families.

COMMUNITY ARTS PROGRAMMING SUPPORTS PERSONAL GROWTH AND WELL-BEING IN OLDER ADULTS

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