## P210: The impact of interventions on undergraduate healthcare student empathy towards older adults and people with dementia; a systematic review and meta-analysis.

Authors: Yvonne Feeney, Stephanie Daley, Nicolas Farina, Sube Banerjee

**Background:** Empathy is a core characteristic expected from all healthcare professionals. Higher empathy is associated with reduced burnout, greater job satisfaction, and better patient outcomes. However, there are inequalities in care provided to older adults and people with dementia. Several reports have highlighted that, too often, care lacking in empathy is provided to older populations. The healthcare workforce needs to have the skills and attitudes to provide high-quality care that incorporates empathy. Therefore, appropriate education needs to be provided at undergraduate level to enhance empathy. To understand how empathy can be enhanced towards older adults and people with dementia, a systematic review and meta-analysis were completed.

**Objective:** The objectives of this systematic review and meta-analysis were:

- To identify what educational interventions were used to enhance empathy in healthcare students towards older adults and people with dementia,
- To identify what instruments were used to measure empathy change,
- To determine the efficacy of interventions on empathy.

**Methods:** A systematic literature search was completed in March 2021 using five electronic databases, grey literature, and snowball approaches. Studies were assessed by two independent reviewers using a predetermined set of criteria. A narrative synthesis was completed, data was grouped and tabulated, and a random-effects meta-analysis was completed on eligible studies.

**Results:** Of 1,937 studies, 25 studies of moderate quality evaluated interventions that targeted empathy towards aging (n=20) and dementia (n=5). Three types of interventions were used: simulation, intergenerational contact, and mixed approaches, and most (84%) reported positive empathy change post-intervention. Empathy was measured most frequently using generic, self-administered instruments. Meta-analysis of studies (n=9) showed a small, but significant effect on empathy change; however, heterogeneity was high.

**Conclusion:** The evidence suggests that interventions can enhance empathy in undergraduate healthcare students towards older adults. However, few studies reviewed empathy towards dementia and the impact of interventions, therefore further research is needed.

## P1: Dosing and treatment outcomes of rTMS for treatment-resistant depressed older adults in a naturalistic outpatient clinic population.

**Authors:** Amanda Tan, Adriana Patricia, Rachel Hershenberg, Anthony Chatham, Eugenia Giampetruzzi, Valeriya Tsygankova, Gregory Job, Andrea Crowell, Patricia Riva Posse, William McDonald, Brandon Kitay

**Introduction**: Repetitive transcranial magnetic stimulation (rTMS) is an effective, safe, and well-tolerated option for treatment-resistant depression (TRD). The minimal medical and cognitive side effects are advantages of rTMS for all patients. However, the majority of rTMS studies in older adults are notable for underdosing rTMS relative to the corresponding FDA-protocol, as noted by recent international meta-analyses. This study utilizes the