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Increased Awareness of Olfactory Dysfunction among MCI Individuals using the Extended Olfactory Self-Report

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Olfaction plays an essential influence on human behavior and notably its deterioration is one of the earliest symptoms in neurodegenerative diseases. The aim of this study was to evaluate the reliability of the single question and the extended olfactory self-report to determine if seniors and/or individuals with Mild Cognitive Impairment (MCI) are able to accurately gauge their olfactory function. A total of 35 participants (17 controls, 18 MCI) participated in the ORCA2 study. A self-report questionnaire containing one question, another self-report containing 4 questions, as well as the quantitative UPSIT olfactory test were used to interview the participants. Based on the self-report, there was no significant difference in the single question self-report answers between control and MCI, with both reporting that they had no olfactory dysfunction. Despite this, there is a significant difference in the olfactory subcategories between control and MCI ($p=0.003$). Looking overall, in the MCI group, a large proportion have olfactory deficits compared to controls: 78% versus 18%, respectively ($p=0.0006$). Of the individuals responding no, there is a significant difference in olfactory subcategories between controls and MCI ($p=0.016$). Also, when looking at the sum of the self-report three question scores, there is a significant difference between control and MCI participants ($p=0.017$). These results reveal that there is more olfactory dysfunction among the MCI group and that MCI participants can more accurately quantify their olfactory dysfunction when they complete a more elaborate self-report questionnaire. Research has shown that olfactory dysfunction is an early predictor of cognitive decline. Finding an efficient, cost-effective method to facilitate screening of olfactory dysfunction among seniors in order to augment the early detection of neurodegenerative diseases is essential and our data suggests this may be done with the use of a more elaborate self-report questionnaire.

Biography:

Maryann Nicola is currently a fourth-year medical student at the University of Sherbrooke, Quebec, Canada. She got the opportunity to complete multiple clinical rotations in Internal Medicine subspecialties, Neurology, Radiology and Psychiatry. She also has a broad range of volunteer experience, including hospital experience, tutoring and volunteering at a non-profit offering service for people with disabilities. To this day, she still participate in homeless outreach service in her community. She is currently in the process of applying for residency in Neurology and Psychiatry, in hopes of obtaining further training in those specialties.