

POLYPHARMACY AND NUTRITIONAL STATUS IN THE ELDERLY AT ERIC WILLIAMS MEDICAL SCIENCES COMPLEX

Parbatie Ramnarine

Project Supervisor: Dr. Selby Nichols

2014

Background: The prevalence of malnutrition and polypharmacy are very common issues among the elderly, with possible negative effects on their functional and cognitive capacity. Many factors may influence malnutrition in the elderly including the natural ageing process, a sedentary lifestyle, social isolation, loneliness, depression, comorbidities and the consequent intake of multiple medications. This, in addition to the study design of current studies, makes it very difficult to investigate the independent role of polypharmacy in nutritional status and thus research on their relationship is very limited.

Objectives: The purpose of this study is to determine whether there is a difference in nutritional status between the polypharmacy and non-polypharmacy users among the elderly age 65 and over.

Design: A case-control study was conducted at the out-patient pharmacy at the EWMSC, Trinidad and Tobago. Interviewer-administered questionnaires were used on 103 participants that were recruited. The questionnaire comprised of 5 parts: demographics, medication information, the MNA tool, food frequency and lifestyle. Data was entered into SPSS version 20 for analyses.

Results: The study found that polypharmacy users had lower MNA scores than the non-polypharmacy users and thus significantly more likely to be malnourished or at risk of it (31.6% vs 13.0%, $p = 0.035$). The polypharmacy participants were also less likely to be involved in exercise routines. It also found that polypharmacy was more present in the East Indian descent compared to the Africans and Info-Africans. Being overweight ($BMI \geq 25$) was found to be associated with high serum cholesterol levels and diabetes mellitus.

Conclusion: There exists a significant difference in nutritional status among polypharmacy and non-polypharmacy users. Persons age 65 and older who use 6 or more medications are more likely to be malnourished or at risk of it than those who use less than 6 medications.