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Medication Risk and Polypharmacy in Minority Older Adults

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Introduction:

- Adverse drug events refer to an individual being harmed due to taking a medication. These risks can include side effects, damage to different organs, senses impairment and more.
- The older adult population has the highest risk for adverse drug events. Antibiotics and anticoagulants are some examples of medication that cause higher adverse events in the elderly. The risks can increase as more medications are included.

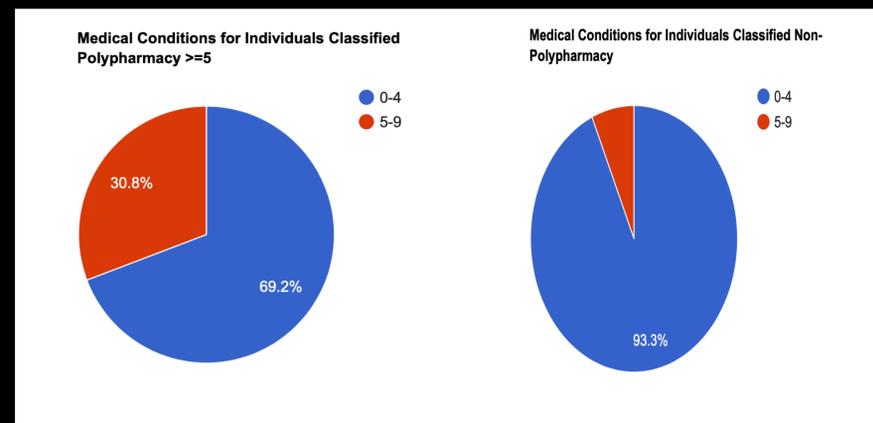
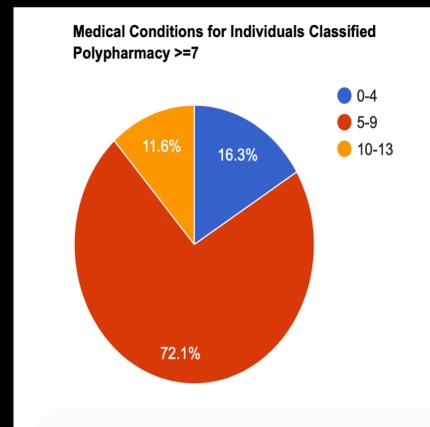
Purpose:

These events are preventable with caution, but it is important to recognize which medications are taken and the possible interactions/risks for the elderly. The purpose of this study was to evaluate the number of high-risk medications used by older adults (age 60 and older) living in a low-income community-based housing.

Methodology:

- Participants included had no history of dementia, Alzheimer's, or Lewy-body disease.
- Data was collected at senior apartment buildings in the Richmond area and at the VCU Health Clinic through the Richmond Health and Wellness Program (RHWP) among Older Adults.
- Variables considered in the model include; 1) Social Determinants of Health (SDH) as defined by income, race/ethnicity, and education; 2) Medication risk was measured by polypharmacy definitions ≥ 5 and ≥ 7 medications.

Chi-Square Test	Yes	No	Marginal Row Totals
Medications ≥ 5	54 (47.5)[0.89]	15 (21.5)[1.97]	69
Medications ≥ 7	41 (47.5)[0.89]	28 (21.5)[1.97]	69
Marginal Column Totals	95	43	138



Results:

- Polypharmacy numbers ≥ 5 and ≥ 7 were compared to identify the significance of the definitions.
- Chi-square statistics shows a significance with a p-value of 0.02.
- 79% were polypharmacy ≥ 5 and 59% with ≥ 7 .
- Over half of the participants are considered in the polypharmacy.
- Pie-charts indicate percentages of medical conditions that each group consists of to help further understand study implications.

Discussion:

- The results allow for us to see that even with a smaller sample, the cut-off number for polypharmacy can be essential.
- Further studies could include identifying and comparing demographics for polypharmacy.
- Adverse drug events and drug-drug interaction risks can also increase with these implications.

