

# Factors associated with high adherence to secondary preventative medications 12 months after a stroke

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## Introduction

Prior stroke is one of the biggest risk factors for future stroke events<sup>1</sup>. Secondary prevention medications are key to reducing subsequent vascular events, and guidelines recommend use of antithrombotics, antihypertensives and lipid lowering drugs<sup>2</sup>. We carried out a retrospective study of adherence to these medications in a post stroke population.

## Methods

Consecutive patients admitted with acute stroke over 18-month period from the hospital stroke registry

Interview at 1 year post stroke:

- Demographics
- Clinical info
- Care needs
- Functional ability (Modified Rankin score)

Medication adherence:

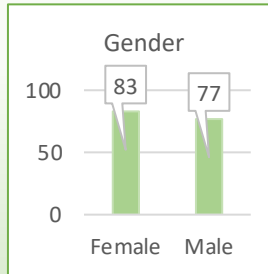
- Asked to show current medications
- 3 key categories
- 4-item Morisky Medication Adherence Scale

## Results

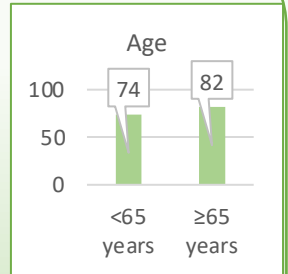
### Participant characteristics

- 197 people enrolled
- Mean age 68.8 years
- 66% male
- 79% white Irish ethnicity
- Twelve living in nursing homes
- 68% functionally independent (mRS 0-2)
- 51% had an involved carer

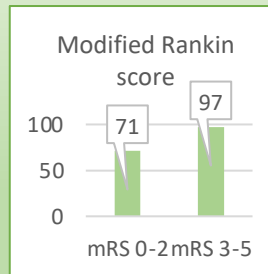
### Percentage of participants with high adherence:



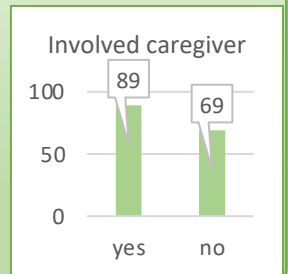
p = 0.31



p = 0.21



p < 0.0001



p < 0.0001

Medication at 12 months	Prescribed N (%)	Adherent N (%)
Oral anticoagulant	56 (28)	55 (87)
Antiplatelet agent	130 (66)	107 (86)
Lipid lowering	176 (89)	136 (78)
Antihypertensive	129 (65)	114 (87)

## Discussion

Self-reported adherence to medication was high in this cohort but a significant proportion were not adherent to important secondary prevention medications 1 year after a stroke. Adherence was higher for those who had more disabling strokes and an involved caregiver. We did not find any significant differences between age, race or gender groups.

### References

1. Martin SS, Aday AW, Almarzoog ZI, Anderson CAM, Arora P, Avery CL, et al. 2024 Heart Disease and Stroke Statistics: A Report of US and Global Data From the American Heart Association. *Circulation*. 2024;149(8):e347-e913.
2. National Clinical Guideline for Stroke for the UK and Ireland, 2023 edition. <https://www.strokeguideline.org/> accessed August 2023