Medication adherence and stroke/TIA risk in treated hypertensives: results from the REGARDS study.

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**Abstract**

**BACKGROUND:** The extent to which low medication adherence in hypertensive individuals contributes to disparities in stroke and transient ischemic attack (TIA) risk is poorly understood.

**METHODS:** Investigators examined the relationship between self-reported medication adherence and blood pressure (BP) control (<140/90 mm Hg), Framingham Stroke Risk Score, and physician-adjudicated stroke/TIA incidence in treated hypertensive subjects (n = 15,071; 51% black; 57% in Stroke Belt) over 4.9 years in the national population-based REGARDS cohort study.

**RESULTS:** Mean systolic BP varied from 130.8 ± 16.2 mm Hg in those reporting high adherence to 137.8 ± 19.5 mm Hg in those reporting low adherence (P for trend < .0001). In logistic regression models, each level of worsening medication adherence was associated with significant and increasing odds of inadequately controlled BP (≥140/90 mm Hg; score = 1, odds ratio [95% confidence interval], 1.20 [1.09-1.30]; score = 2, 1.27 [1.08-1.49]; score = 3 or 4, 2.21 [1.75-2.78]). In hazard models using systolic BP as a mediator, those reporting low medication adherence had 1.08 (1.04-1.14) times greater risk of stroke and 1.08 (1.03-1.12) times greater risk of stroke or TIA.
CONCLUSION: Low medication adherence was associated with inadequate BP control and an increased risk of incident stroke or TIA.