Predictors of decline in medication adherence: results from the cohort study of medication adherence among older adults.

Few data are available on the predictors of decline in antihypertensive medication adherence and the association of decline in adherence with subsequent blood pressure (BP) control. The current analysis included 1965 adults from the Cohort Study of Medication Adherence Among Older Adults recruited between August 2006 and September 2007. Decline in antihypertensive medication adherence was defined as a ≥2-point decrease on the 8-item Morisky Medication Adherence Scale assessed during telephone surveys 1 and 2 years after baseline. Risk factors for decline in adherence were collected using telephone surveys and administrative databases. BP was abstracted from outpatient records. The annual rate for a decline in adherence was 4.3% (159 participants experienced a decline). After multivariable adjustment, a decline in adherence was associated with an odds ratio (OR) for uncontrolled BP (≥140/90 mm Hg) at follow-up of 1.68 (95% CI: 1.01-2.80). Depressive symptoms (OR: 1.84 [95% CI: 1.20-2.82]) and a high stressful life events score (OR: 1.68 [95% CI: 1.19-2.38]) were associated with higher ORs for a decline in adherence. Female sex (OR: 0.61 [95% CI: 0.42-0.88]), being married (OR: 0.68 [95% CI: 0.47-0.98]), and calcium channel blocker use (OR: 0.68 [95% CI: 0.48-0.97]) were associated with lower ORs for decline. In summary, a decline in antihypertensive medication adherence was associated with uncontrolled BP. Modifiable factors associated with decline were identified.
Further research is warranted to determine whether interventions can prevent the decline in antihypertensive medication adherence and improve BP control.

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