



Pragmatic Method to Assess Blood Pressure Control From Home Blood Pressure Diaries

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CURRENT SELECTION

Article for Discussion

Sharman JE, Blizzard L, Kosmala W, Nelson MR. Pragmatic method using blood pressure diaries to assess blood pressure control. *Ann Fam Med*. 2016;14(1):63-69.

Discussion Tips

This article proposes a pragmatic approach to quickly interpret home blood pressure readings in the clinic setting. The investigators compare their method with 24-hour ambulatory blood pressure monitoring and show a correlation with sonographic measures of target organ damage.

The study by Sharman et al finds that the percentage of the last 10 home systolic blood pressures ≥ 135 mm HG provides a reasonable estimate of the reference standard of 24-hour ambulatory blood pressure.

Discussion Questions

- What question is asked by this study and why does it matter?
- How strong is a cross-sectional study design for answering this question? What other study designs could be used?
- To what degree can the findings be accounted for by:
 1. How patients were selected or excluded?
 2. How the main variables were measured? Could the intensity of the study protocol affect the quality of the blood pressure diaries? How good are 24-hour ambulatory blood pressure and the end-organ biomarkers as reference standards?
 3. Confounding (false attribution of causality because 2 variables discovered to be associated actually are associated with a 3rd factor)?
 4. How the findings were interpreted? Does the timing of measuring predictors (eg, home blood pressures) and outcomes (eg, target organ damage) affect your interpretation of the causal relationship between the 2?
- What are the main study findings?
- How comparable is the study sample to your practice? What would be some barriers to implementing this pragmatic method for other clinicians & patients?
- What contextual factors are important for interpreting the findings? How might the findings relate to recent and evolving recommendations for blood pressure control in different age-groups?
- How might this study change your practice? Is the main outcome of interest patient oriented? What are the limitations of using disease-oriented outcomes?
- What are the next steps in interpreting or applying the findings?
- What researchable questions remain?

References

1. Stange KC, Miller WL, McLellan LA, et al. *Annals Journal Club: It's time to get RADICAL. Ann Fam Med*. 2006;4(3):196-197. <http://annfammed.org/cgi/content/full/4/3/196>.