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Title: *Impact of a rested waiting room blood pressure compared to usual care*

Abstract

Background: The 2017 American College of Cardiology/American Heart Association (ACC/AHA) hypertension guidelines recommend patients sitting quietly for \geq 5 minutes prior to having their blood pressure taken.¹ This recommendation is not always followed in many primary care settings, possibly leading to inaccurate BP measurements which can impact diagnosis, cardiovascular disease risk, and medication therapy.

Objective: The objective of this study was to determine the difference between rested waiting room blood pressure checks versus usual care.

Methods: This single-center, prospective interventional study analyzing patients aged 18-89 years old with a scheduled appointment at the clinic between January 27,2020 and March 23,2020. The primary outcome assessed the difference between rested waiting room blood pressure obtained at 5 minutes and 10 minutes versus usual care. Secondary outcomes include the percentage of participants with uncontrolled blood pressure after 5 minutes of waiting, 10 minutes of waiting, and usual care.

Results: There was a 0.3 mm Hg increase in blood pressure when comparing the 5 minute rested BP to that of usual care (respectively, 136.3 [SD 17.9], 136.6 [SD 21.1], p value 0.84). The percentage of patients with uncontrolled BP for the 5 and 10 minute rested waiting room BP was 77.7% and 65.4% respectively. The percent of patients with uncontrolled BP obtained via usual care was 61.6%.

Conclusion: Rested waiting room readings did not show a decrease in blood pressure measurements versus usual care.