A Primary Care Based Interdisciplinary Team Approach to Manage Uncontrolled Hypertension in Rural Adult Population

Justin B. Montgomery

Johns Hopkins School of Nursing

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Dr. Phyllis Sharps

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Abstract

**Background:** Hypertension is a major independent risk factor for cardiovascular disease, and it disproportionately afflicts rural populations that have limited access to primary care.

**Purpose:** The purpose of this quality improvement project was to improve hypertension control, patient health confidence and satisfaction by implementing an existing evidence-based interdisciplinary clinical practice guideline in a rural primary care clinic.

**Methods:** This project used a pre-post cohort project design in a single rural primary care clinic. All adult patients with confirmed hypertension were eligible for referral to the nurse-led interdisciplinary team for clinical management. Nurses made referrals to pharmacist if medication criteria were met. The evidenced-based clinical practice intervention took place over 12-weeks. A paired t-test (two-tailed $\alpha = .05$) was used to analyze changes in SBP and DBP after the intervention. A Wilcoxon Signed Rank test was used to analyze changes on the “My Health Confidence” scale and satisfaction on the brief instrument to measure patients’ overall satisfaction with their primary care physician post intervention.

**Results:** A total of 31 patients completed the intervention. There was a statistically significant mean reduction in systolic and diastolic blood pressure 19.1 mmHg ($SD = 13.4$) and 9.7 mmHg ($SD = 11.3$) respectively. There was a statistically significant median increase in patient health confidence and satisfaction 1.0 (IQR: 2) and 1.0 (IQR: 6) respectively.

**Implications:** This nurse-led quality improvement project, consistent with existing literature, demonstrates that implementation of a clinical practice guideline for interdisciplinary management of hypertension in rural primary care practices is effective. A nurse-led interdisciplinary team is an important strategy for rural primary care practices struggling to provide access to high quality care for hypertensive patients.
Conclusions An interdisciplinary team using a clinical practice guideline significantly lowered blood pressure and increased patient health confidence and satisfaction.

Key words: hypertension, rural, interdisciplinary, clinical practice guideline