

## ***The Management of Hypertension Utilizing Interdisciplinary Theories***

Hypertension management is a dire public health system concern, and control interventions remain unmet (Parati et al., 2021). Hypertension (HTN) is a chronic health problem requiring nonpharmacological and pharmacological interventions (Vamvakis, 2016). In the United States, approximately 30% of adults are affected, and 66% remain unaware of the diagnosis (Bangurah et al., 2017). Hypertension management requires intensive patient education and counseling, reducing stroke risk, heart attack, and death (Hargraves et al., 2018). Furthermore, HTN management carries a significant financial burden. In 2010, the United States spent \$76.6 billion on blood pressure (BP) control strategies (Bangurah et al., 2017). The findings underscore utilizing theoretical approaches while managing HTN, decreasing poor health outcomes, and public health spending. This paper discusses various interdisciplinary theories managing hypertension, thus promoting optimal healthcare patient outcomes.

### ***Chapter 10: Behaviorist Learning Theory***

Braungart and Braungart (2018) stated the behaviorist learning theory involves directly observing environmental conditions and responses. Additionally, the theory applies life as a matter of habit and how modifying behaviors change stimulus responses or environmental conditions. By using the learning theory, clinicians manage hypertensive at-risk populations using modifiable behaviors. Bangurah et al. (2017) discussed a four-week nurse-led diet and exercise program among African American adults aged 55 and older in a faith-based setting. A 31.8% prevalence exists among African Americans with HTN; however, faith-based organizations provide a positive environment accepting diet and exercise recommendations (Bangurah et al., 2017).

Clinicians use the behaviorism theory incorporating environmental surroundings with modifiable behaviors, such as faith-based organizations. Nearly 40% of African Americans attend church weekly, and pastoral endorsements increase health promotion intervention success (Bangurah et al., 2017). The advanced practice registered nurse (APRN) promotes hypertension management while educating minority at-risk populations through community outreach and awareness (Bangurah et al., 2017). Blood pressure control essentials include healthy eating and adequate physical exercise behaviors. APRN's educate at-risk populations on the Dietary Approaches to Stop Hypertension (DASH) diet and best practice aerobic exercise techniques showing a 93% improvement rating. As healthcare providers utilize theory effectively through education and counseling, a maintainable client response is expected (Bangurah et al., 2017). Incorporating the behaviorist learning theory breaks unhealthy lifestyle decisions utilizing significant patient population environments such as church gatherings. The APRN practices behaviorism by combining physical wellness and spiritual wellness, thus sustaining lifestyle modifications.

### ***Chapter 11: Social Cognitive Theory***

Hypertension is a poorly controlled chronic condition requiring sustained self-care behavior engagement (Tan et al., 2021). Antihypertensive medication adherence, healthy diet, physical exercise, smoking cessation, and reducing alcohol consumption involve self-control and self-efficacy, promoting behaviors reflecting optimal self-care (Tan et al., 2021). Self-care adherence is low among hypertensive adults, and Tan et al. (2021) found significant adherence care barriers involving change lacking behavioral motivation. According to Tan et al. (2021), self-efficacy is a crucial component engaging patients in hypertension self-care, behavioral change, and desired healthcare outcomes. In addition, the cognitive theory suggests that self-care

behavior influences affective factors such as belief, self-efficacy, and social support (Tan et al., 2021).

Social cognitive theory is a dynamic process influencing self-care behaviors and overcoming obstacles maintaining long-term change. Enhancing self-efficacy improves health status and affects necessary hypertensive management self-care behaviors (Tan et al., 2021). Self-efficacy is task-specific and varies with adherence barriers including unwanted side effects, medication costs, easy tobacco access, and convenient fast-food options (Tan et al., 2021). Clinicians using the social cognitive theory prevent unhealthy patient behaviors through encouraging self-efficacy. Tan et al. (2021) discussed low self-efficacy individuals are less likely engaging in self-care; therefore, motivation drives behavioral change.

APRN's incorporate psychosocial interventions such as motivational interviewing and evaluative feedback, optimizing blood pressure control treatment (Tan et al., 2021). Additionally, health coaching interventions improve self-efficacy and promote healthy lifestyle adherence, including diet and exercise. Hypertension is a chronic condition requiring lifelong self-care behavioral commitment (Tan et al., 2021). APRN's optimize blood pressure control utilizing the social cognitive theory and providing psychosocial interventions, thus increasing self-efficacy and control.

### ***Chapter 16: Edward Deming's PDCA Cycle***

Edward Deming's focus included transforming the Japanese and United States industrial systems, creating cost-effective quality improvement ideas (Anderson, 2018). Deming's system emphasized initial product success achievement and outlined process importance over product completion (Anderson, 2018). Deming's PDCA cycle (plan, do, check, act) incorporates healthcare clinical problems focusing on changing quality improvement quickly and effectively

(Anderson, 2018). For example, hypertension management includes prompt assessment, planning, acting, monitoring, evaluating, and reassessing (Anderson, 2018). The “planning” stage identifies a clinical issue, such as hypertension control, and explores potential solutions (Anderson, 2018). According to Kraus et al. (2015), physical inactivity increases cardiovascular morbidity and mortality rates. Additionally, special populations such as schools, workplaces, or churches lack adequate physical activity efforts. Planning involves analyzing current processes and creating root cause solutions; therefore, diverse efforts increase physical activity, such as the U.S. National Physical Activity Plan (NPAP) involving all society sectors (Anderson, 2018; Kraus et al., 2015).

The “do” stage undergoes new plan testing while gathering and documenting data, meanwhile noting upcoming problems (Anderson, 2018). Kraus et al. (2015) discussed healthcare provider counseling utilizing the Exercise is Medicine (EIM) initiative promoting patient physical activity engagement. The cycle's “check” phase explores possible successful physical activity interventions reviewing patient counseling effectiveness (Anderson, 2018). Lastly, the “act” phase involves implementing, changing, or abandoning physical inactivity interventions (Anderson, 2018). Kraus et al. (2015) incorporated the “act” phase illustrating physician policy efforts and engaging importance. Therefore, physicians are role models representing change outcomes. The PDCA cycle provides pertinent clinical problem improvement efforts through action plans and quality improvement strategies (Anderson, 2018).

### ***Chapter 17: Critical Race Theory***

Baker (2018) outlined the critical race theory involving research, scholarship, and practice aiming towards racial equity. The critical race theory provides essential mechanisms and interventions; therefore, eliminating disadvantaged population health barriers (Baker, 2018).

Additionally, minority populations, such as at-risk African Americans, withstand health disparities. As the leading cause of death worldwide, cardiovascular events are highly prevalent in African Americans (Beckie, 2017). Uncontrolled high blood pressure significantly impacts African Americans causing high morbidity and mortality rates (Beckie, 2017). Furthermore, hypertension frequently affects African American women previously diagnosed with cardiovascular conditions.

Researchers discussed racial and ethnic hypertension control differences, including less aggressive treatment, limited effective medications, and genetic physiological factors (Beckie, 2017). Environmental factors including neighborhood poverty, crime rates, healthy food availability, and racial isolation sustain disparities (Beckie, 2017). The critical race theory identifies care barriers, including suboptimal provider-patient communication and medication follow-up (Baker, 2018; Beckie, 2017). Identifying at-risk population barriers guides clinicians and promotes optimal patient outcomes (Beckie, 2017). The theory supports establishing risk factors during screening and referral programs equalizing racial disparities (Carey et al., 2018). Physicians aim towards correcting hypertension management disparities utilizing the critical race theory (Beckie, 2017). Moving towards equal care across all races, lifestyle counseling, and health literacy decrease social disparities (Beckie, 2017). Closing disparity gaps, physician outreach, and community service offer culturally sensitive educational messages and lifestyle support, promoting hypertension management (Beckie, 2017).

### ***Implications for Advanced Practice Nurses***

According to Saleh (2018), theory precedes nursing practice generating research questions and providing appropriate clinical issue interventions. Clinicians are patient advocates utilizing data and models reshaping racism, inadequate health knowledge, and low self-efficacy

care barriers (Baker, 2018). Additionally, theories provide population health knowledge strategies; therefore, providing advanced practice nurse initiatives and improving care. Implementing practice change requires guidance, and nursing theory provides best practice recommendations breaking healthcare barriers (Saleh, 2018). Furthermore, research findings optimize care and provide current nursing practice protocols.

Making clinical decisions such as managing hypertension integrates theory and research generating evidence-based nursing care perspectives (Saleh, 2018). Nursing practice theory impacts life quality and overall patient health (Saleh, 2018). Saleh (2018) described the “gap” between practice and theory as a common problem among nurse practitioners; therefore, nurses rarely use theory-guided care. Furthermore, closing “gaps” involves integrating theory, practice, and research for APRNs. Theoretical approaches imply evidence-based practice techniques for advanced practice nurses.

### ***Conclusion***

Managing hypertension utilizing theoretical approaches such as the behaviorist learning theory, social cognitive theory, Edward Deming’s PDCA cycle, and the critical race theory guides future nursing practice. Providing effective, efficient, and holistic care involves addressing healthcare issues and eliminating care barriers (Saleh, 2018). Hypertension affects 30% of adults; therefore, practitioners potentially decrease prevalence utilizing theory-guided care (Bangurah et al., 2017). Summarizing previously discussed information, interventional theories provide valuable strategies improving uncontrolled blood pressure.

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