Purpose:

Uncontrolled hypertension (HTN) is one of the leading causes of death and disability, as a major modifiable risk factor for chronic illnesses such as cardiovascular disease and stroke (Benjamin et al., 2017). Chow et al., (2013) estimate that the global death rate directly corresponding to HTN is approximately eight million annually. In the United States (U.S.) alone, Merai et al. (2016) estimate that one out of every three American adults have HTN. However, a recent report funded by the Centers for Disease Control and Prevention (CDC) testifies that national treatment adherence rates related to hypertension treatment regimen remain less than 70% (Ritchey et al., 2016). Global initiatives call for drastic reductions in the rates of HTN (Patel et al., 2016). In a concerted effort to reduce HTN's global burden of morbidity and mortality, the World Health Organization (2013) has announced an overarching goal aimed to decrease the rate of HTN by one-fourth of its current level over the next eight years. The advanced practice nurse practitioner (APRN) using evidence-based practice (EBP), particularly in the outpatient primary care setting, can be instrumental in the endeavor to reduce global HTN by increased patient adherence to antihypertensive management. Nilsen (2015) explained that it is essential for the nurse researcher to comprehend theoretical foundations to identify strategies for successful application of EBP.

The purpose of this theoretical review is to discuss how the APRN through analysis of nursing science, from broad metaparadigms to specific constructs of complexity science could advance nursing knowledge and patient-centered care by creating evidence-based protocols closing the gap between knowledge and practice as it relates to adherence.

Methods: Select theoretical models were reviewed, discussed, and applied to the care of patients with hypertension as related to adherence to treatment regimen.

Results:

Fawcett (1984) has identified "person, environment, health, and nursing" as metaparadigms of holistic practice (p. 84). These key themes help not only to define the phenomena of the profession but also to guide and provide the linkage needed from theory to scientific-based evidence for practice (Fawcett, 2012). In relation to adherence, the concept of person refers to the patient diagnosed with HTN, the client's social support system such as family members or the local community, in addition to the APRN who is directing the plan of care. The concept of environment denotes not only the physical home and work environment in which the patient spends most of their time but also the cultural and socioeconomic circumstances that may impact health care or the patient-provider relationship. The concept of health relates to the state of the continuum of a patient's perception of health versus illness about HTN and any chemical effects of the medications prescribed, or consequences experienced from non-pharmacological interventions such as diet and exercise. Treatment involves caring for and educating the patient, as well as carefully prescribing and guiding the treatment thorough modeling of therapeutic relationships to have successful outcomes (Fawcett & DeSanto-Madeya, 2013). Furthermore, open and therapeutic
relationships between the patient and provider influence treatment adoption and as such, directly
influencing adherence rates (Hines & Stone, 2016).

Orem's Self-Care Deficit Nursing Theory (SCDNT) is a broad, yet organized framework which may be
used to promote health, wellness, and autonomy in an individual (Orem & Taylor, 2011). It incorporates
the three congruent philosophical concepts of self-care, self-care deficit, and professional direction. The
person can no longer adequately care for oneself, either from a deficiency of knowledge or a paucity of
physical inability. These requisites are specific to each person and may be influenced by demographics
as well as personal, cultural, or spiritual beliefs as seen in research regarding non-adherence to
antihypertensive treatments (Hugtenburg, Timmers, Elders, Vervloet, & van Dijk, 2013). Utilizing a
systematic approach, the APRN can provide much needed education, direction, and support to the
injured and their families. Together, all three constructs of Orem's SCDNT outline the fundamentals of
holistic and patient-centered professional nursing care which are required by the population of patients
who are nonadherent to antihypertensive management.

By pairing borrowed psychosocial, cognitive, and behavioral models with classical grand nursing theories,
research can lead to the development of new frameworks allowing for identification of predictive or causal
antecedents that promote positive outcomes (Ajzen 1991, 2011; Nilsen, 2015). Such is the case of the congruent use of Ajzen's Theory of Planned Behavior (TPB) along with Orem's SCDNT in a systematic
and reproducible attempt to increase adherence rates in the prevention of HTN and antihypertensive
management. The use of SCDNT and TPB in combination may assist the APRN in identifying the
importance of the main variables found within these philosophies to predict why patients are nonadherent
to interventions that may prevent HTN or control one's blood pressure. Additionally, in Ajzen's TPB, all
four of Fawcett's (1984) nursing metaparadigms are integrated. Finally, although TPB is not original to the
nursing profession, its logical use with SCDNT can assist the APRN in the proper selection of evidence-
based interventions which can be used in collaboration with the patient to promote a return to self-care,
ultimately resulting in lower blood pressure.

Finally, the use of complexity science reverberates the underpinnings of the nursing profession, that is to
take a holistic approach to assess the interconnected concepts of the issue at hand. As such, the APRN
can observe the patient from a holistic point of view, taking into consideration the multitude of variability
surrounding the phenomenon of adherence to antihypertensive treatment. Through the use of an
Adaptive Leadership framework within the complexity science, the APRN's practice can successfully
assist the patient in altering behavior and intentions to promote a return to self-care to meet their new
state of health (Engebretson & Hickey, 2015). Adaptive Leadership informs the APRN in how to best
provide clinical guidance while promoting patient understanding that they are ultimately in control of their
own cognitive, behavioral, and affective aspects of HTN management, which is consistent with Orem's
SCDNT and the TPB.

Conclusion:

Through careful analysis of theoretical constructs within nursing's metaparadigms, midrange theories, and
complexity science, the APRN can identify and develop new, empirically based protocols to address non-
adherence to antihypertensive management, particularly in the outpatient setting. Additionally,
understanding the complexities of a patient's influence on adherence can allow holistic, individualized
care.

Title:
APRNs Application of Transtheoretical Basis to Improve Adherence to Treatment Regimen in
Hypertensive Patients
Keywords:
Adherence, Advanced Practice Registered Nurse and transtheoretical

References:


Abstract Summary:
The purpose of this transtheoretical review is to discuss how the APRN through analysis of nursing science, from broad metaparadigms through to specific constructs of complexity science could advance nursing knowledge and patient-centered care using EBP closing the gap between knowledge and practice related to adherence in hypertensive patients.

Content Outline:

1. Background
   1. Global impact of hypertension
   2. Issues with patient adherence to hypertension regimen
   3. APRN influence through use of appropriate theory to guide evidence-based practice
2. Review of transtheoretical models in relation to patient centered EBP to improve adherence
   2. Nursing theory - Orem’s Self Care (1983)

   • Conclusions / Recommendations
     1. APRN use of theory to enhance understanding of complexities that influence adherence and increase holistic individualized care
     2. Development of new empirically based protocols to address adherence

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