



Leveraging Behavioural Theories to Enhance Medication Adherence in Hypertensive Patients: A Systematic Review of Evidence-Based Interventions

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Abstract:

Background:

Hypertension remains a significant public health concern, affecting over a billion people globally and contributing to a high burden of cardiovascular disease, stroke, and mortality. Despite the availability of effective antihypertensive therapies, non-adherence to prescribed medication regimens continues to be a critical barrier to achieving optimal blood pressure control. Behavioural theories, including the Health Belief Model (HBM), Theory of Planned Behaviour (TPB), and Trans-theoretical Model (TTM), have shown promise in addressing complex behavioural issues such as medication adherence.

Aim:

This paper aims to explore the application of behavioral theories to improve medication adherence in hypertensive patients, evaluating their effectiveness and offering insights into integrating theory-based interventions into clinical practice.

Methods:

A systematic review of the literature was conducted using databases such as PubMed, CINAHL, and Google Scholar. Studies that implemented behavioral theories in medication adherence interventions for hypertensive patients were included. The analysis focused on intervention designs, theoretical frameworks employed, and their measurable impact on adherence and health outcomes.

Results:

Evidence suggests that interventions based on behavioral theories significantly improve medication adherence. HBM-based approaches effectively addressed patients' perceptions of risk and benefits, while TPB-oriented interventions leveraged social influences and self-efficacy. TTM-based strategies showed success in tailoring interventions to individual readiness for change. Improved adherence rates translated into better blood pressure control and reduced hypertension-related complications.

Conclusion:

Behavioural theories provide robust frameworks for designing effective medication adherence interventions. Their integration into hypertension management can enhance adherence and improve patient outcomes. Future research should focus on culturally tailored, technology-enhanced, and nurse-led approaches to expand the reach and impact of these interventions.

Keywords:

Behavioral theories, medication adherence, hypertension, Health Belief Model, Theory of Planned Behavior, Transtheoretical Model, patient compliance.

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Introduction:

Hypertension, often referred to as high blood pressure, is a persistent medical condition characterized by sustained elevated blood pressure measurements. This condition typically requires ongoing management, which may include pharmacological interventions and adjustments to lifestyle practices. Hypertension is characterized by a systolic blood pressure of 140 mmHg or higher and/or a diastolic blood pressure of 90 mmHg or higher. It serves as a significant risk factor for various health complications, including kidney disease, cardiovascular disease, stroke, and premature mortality [1]. Ensuring adherence to prescribed pharmacological regimens, particularly in the context of antihypertensive medications, represents a critical challenge in the effective management of hypertension. The extent to which patients comply with these recommendations is paramount in achieving optimal health outcomes. The efficacy of treatment plans is significantly undermined by inadequate adherence rates, which range from 30% to 50%. This situation leads to uncontrolled hypertension and escalated medical costs [2]. For researchers, policymakers, and healthcare practitioners, the issue of medication adherence among patients with hypertension represents a critical and pressing concern that demands immediate attention.

Medication adherence is important since it is essential to attaining ideal blood pressure control and lowering the risk of problems. Behavioural theories including the Trans-theoretical Model (TTM), the Theory of Planned Behaviour (TPB), and the Health Belief Model (HBM) are useful frameworks for comprehending the contextual and psychological elements affecting adherence. Patients' judgments of the severity of their hypertension, their vulnerability to its effects, and the perceived advantages and disadvantages of adherence are all highlighted by the HBM [3]. The TPB also emphasizes how attitudes, subjective norms, and perceived behavioral control influence adherence behaviors [4]. By classifying patients into phases like precontemplation, contemplation, preparation, action, and maintenance, the TTM presents the idea of readiness for behavior change and enables customized interventions [5]. These

theoretical frameworks offer organized methods for creating and putting into practice adherence-boosting tactics.

The significance of incorporating behavioral theories into medication adherence treatments has been highlighted by recent developments. The efficacy of multi-component therapies that integrate technological, motivational, and pedagogical tactics to encourage adherence has been demonstrated by studies [6, 7]. Digital health solutions, such as text-based reminders and smartphone applications, have been shown to be effective in encouraging consistent medication-taking behaviors and improving self-efficacy [8]. Furthermore, it has been demonstrated that nurse-led treatments based on behavioral theories increase patient satisfaction and adherence rates, with nurses playing a critical role in offering tailored support and care [9]. Additionally, therapies that are culturally appropriate and in line with patients' beliefs and habits have become more popular, showing promise in addressing adherence issues unique to a variety of populations [10].

This study investigates how behavioral theories might be used to help hypertension individuals take their medications as prescribed. A thorough analysis of adherence hurdles is given in the next section, which is divided into three categories: socioeconomic, healthcare system, and patient-related. The next part explores how behavioral theories like the HBM, TPB, and TTM are applied, going over their fundamental ideas and how they influence therapies aimed at improving adherence. The last section examines and assesses the efficacy of evidence-based interventions, including nurse-led and technologically enhanced techniques. The findings are summarized in the conclusion, along with their implications for future study and clinical practice. This study intends to aid in the creation of long-lasting, efficient solutions for the treatment of hypertension by examining the complex issues surrounding medication adherence via the prism of behavioral theories.

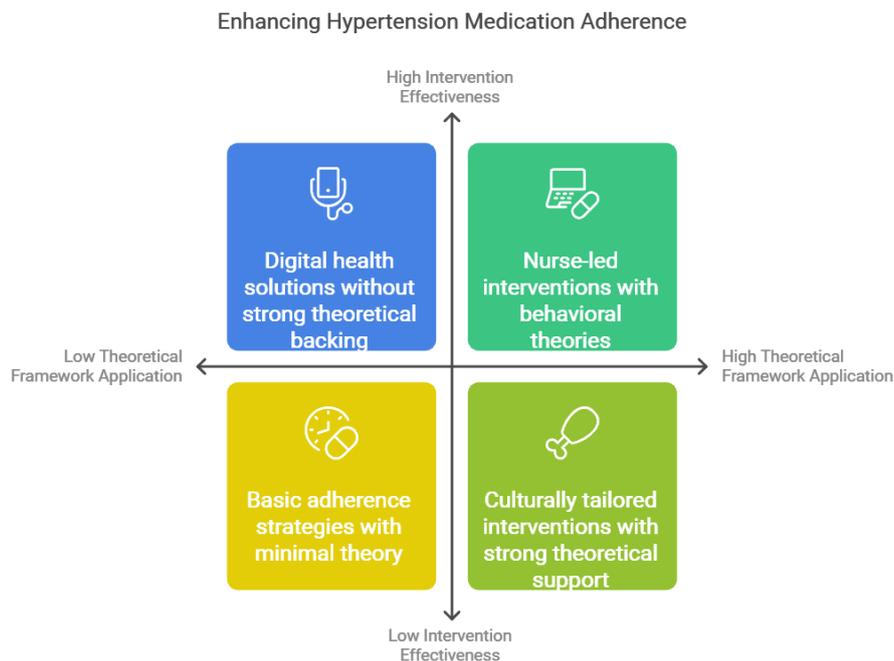


Figure 1: Shows the enhancing hypertension medication adherence

Barriers to Medication Adherence

Despite being a key factor in determining the effectiveness of treatment, medication adherence in hypertension patients is a continuous battle due to a variety of barriers. These challenges can be roughly divided into three categories: patient-related variables, healthcare system, and socioeconomic aspects. Suboptimal adherence rates are a result of the distinct difficulties that each category presents. A thorough

grasp of these various obstacles is necessary to address the complex nature of non-adherence and create focused, successful solutions.

Aspects Related to Patients

Patient-related factors, which include behavioral, cognitive, and psychological aspects, are among the main causes of pharmaceutical non-adherence. These elements affect a person's ability and desire to follow recommended treatment plans.

Low Ignorance, Forgetting, and Perceived Risk

One of the most common excuses for missing doses is forgetfulness, particularly for people who are taking medication for long-term diseases like hypertension. Cognitive problems including memory loss and erratic drug schedules can make this problem worse. Due to their higher risk of cognitive impairment and polypharmacy, elderly individuals are especially vulnerable. Studies show that forgetfulness and aging-related cognitive difficulties are strongly correlated, and that forgetfulness plays a part in medication non-adherence [11].

Another major factor in low adherence rates is a lack of knowledge about hypertension and its implications. Many individuals are unaware that hypertension is asymptomatic and undervalue the importance of long-term therapy in avoiding serious consequences. This ignorance weakens commitment and encourages a noncommittal attitude toward treatment plans [12].

Adherence behaviors are significantly shaped by perceived risk. Patients are less likely to prioritize their prescriptions if they do not believe that they are at a major risk for problems associated with hypertension, such as stroke or cardiovascular disease. Misinformation or a lack of health literacy are frequently the causes of this low perceived risk. Therefore, enhancing adherence requires focused instructional efforts that fill in these knowledge gaps [13].

Psychological Factors: Fear of Side Effects, Stigma, and Depression

The problem of non-adherence is made worse by psychological obstacles such as sadness, stigma, and fear of adverse effects. Even when the side effects are minor, patients frequently stop their therapy too soon due to a common fear of side effects. For example, frequent antihypertensive medication side effects like exhaustion or dizziness can discourage patients from sticking with their treatment, especially if medical professionals don't effectively manage these adverse effects. This anxiety is further heightened by misconceptions regarding side effects, which are fed by a lack of reliable information [14].

Another major psychological barrier is the stigma attached to taking medicine, particularly among younger people. Patients are frequently deterred from following prescribed regimens by cultural beliefs or personal motivations to avoid being viewed as "ill." In cultures where using pharmaceuticals is seen negatively or linked to serious sickness, this stigma is especially common [15].

One important psychological issue that seriously hinders medication adherence is depression. Depression frequently results in poor decision-making, decreased motivation, and trouble sustaining regular routines, all of which have an adverse effect on adherence. The important need for mental health care as part of hypertension management regimens is highlighted by studies that demonstrate depression nearly doubles the chance of non-adherence among patients with hypertension [16].

Taking Care of Patient-Related Issues

Interventions must take into consideration the wide spectrum of patient-related barriers in order to increase medication adherence among patients with hypertension. Campaigns to raise awareness of the dangers, signs, and advantages of treating hypertension are essential. Furthermore, by using patient-centered counseling and transparent communication, healthcare professionals should proactively address concerns and misunderstandings regarding side effects.

Support for mental health is equally important. Identifying patients who are at risk of non-adherence and facilitating prompt psychological intervention are two benefits of integrating depression screening into standard hypertension management. Culturally aware tactics that mainstream medication use and foster favorable views of treatment adherence are necessary to combat stigma.

Healthcare professionals can significantly contribute to removing the obstacles preventing hypertension patients from adhering to their prescribed regimens by addressing these patient-related variables in a methodical and compassionate way.

Healthcare System-Related Factors

Adherence behaviors are significantly shaped by the composition and operation of the healthcare system. Inadequate follow-up procedures and communication breakdowns are frequently the root cause of systemic barriers.

Ineffective Communication Between Patients and Providers

Promoting drug adherence requires effective communication between patients and healthcare professionals. Many patients, however, express discontent with the level of communication they receive, especially when it comes to their treatment plans. Patients may feel puzzled or unsupported if providers don't fully explain the significance of adherence, possible side effects, or how to manage them [17]. Furthermore, time restraints during consultations frequently lead to inadequate conversations regarding adherence issues or the patient's unique situation.

This problem is made worse by the use of medical language without adjusting explanations to the patient's degree of health literacy. Reduced adherence results from patients with limited health literacy being less likely to comprehend their ailment and the reasoning for their therapy [18]. Despite being underutilized in many healthcare settings, shared decision-making—in which doctors actively involve patients in their care plans—has been demonstrated to promote adherence [19].

Absence of Support or Follow-Up Mechanisms

Although it is often disregarded, follow-up treatment is an essential part of adherence management. Patients who receive inconsistent follow-up miss out on opportunities to discuss difficulties they have sticking to their prescription schedules. For example, if patients do not get timely assistance from healthcare practitioners, they may stop taking their drugs if they have side effects or questions about their treatment [20]. Furthermore, missed doses are more likely when there are no automatic notifications or follow-up calls to serve as systematic reminders.

The availability of support systems inside the healthcare system, including pharmacist-led interventions or adherence coaching, is frequently restricted. By addressing personal obstacles and reiterating the significance of prescription schedules, these support systems have shown promise in enhancing adherence [21]. Their application is still uneven, nevertheless, especially in environments with limited resources.

Socioeconomic Factors

Significant obstacles to medication adherence are socioeconomic in nature, which reflects the larger structural and contextual difficulties that patients encounter. The consequences of these barriers are typically exacerbated by their intersection with factors linked to patients and the healthcare system.

Budgetary Restrictions

One major obstacle is the expense of prescription drugs, especially for those without sufficient health insurance. Antihypertensive drugs can have unaffordable out-of-pocket costs, which causes patients to cut back on their dosage or stop treatment completely. In low- and middle-income nations, where healthcare systems might not fund necessary pharmaceuticals, this problem is especially severe [22]. For patients with chronic diseases that necessitate long-term drug use, co-pays and deductibles can be substantial financial burdens, even in high-income environments [23].

Obtaining Medication

Medication adherence is also impacted by logistical and geographic obstacles. Patients in underserved or rural locations can have trouble getting to pharmacies or medical facilities, which could cause them to miss refills or put off starting treatment. This problem is made worse by limited medicine availability brought on by supply chain interruptions, especially during emergencies like the COVID-19 pandemic [24].

Cultural Views

Adherence practices are influenced by cultural attitudes and ideas around drugs. Patients may stop using antihypertensive drugs or avoid them altogether in certain cultures where traditional or alternative medicine methods are valued more highly than orthodox therapies [25]. Adherence may also be hindered by mistrust regarding the healthcare system or beliefs that consequences from hypertension are inevitable. Culturally sensitive therapies that emphasize the advantages of adherence while being in line with patients' values and beliefs are necessary to overcome these cultural hurdles [26].

Behavioral Theories and Their Applications

Behavioral theories provide valuable frameworks for understanding and influencing medication adherence among hypertensive patients. These theories offer structured approaches to identify the cognitive, emotional, and social factors that affect adherence behaviors. Among the most widely studied and applied models in healthcare are the Health Belief Model (HBM), the Theory of Planned Behavior (TPB), and the Transtheoretical Model (TTM). Each theory highlights distinct components and applications that can guide the design of interventions tailored to address specific barriers and promote adherence.

Health Belief Model (HBM)

The Health Belief Model (HBM) is a psychological framework designed to explain and predict health behaviors by focusing on individual beliefs about health conditions. Originally developed to understand preventive health behaviors, the HBM has since been widely applied in chronic disease management, including hypertension.

Components of the HBM

The HBM is composed of several key constructs: perceived susceptibility, perceived severity, perceived benefits, and perceived barriers.

- **Perceived Susceptibility** refers to an individual's belief about their vulnerability to a health condition. In the context of hypertension, patients who underestimate their risk of complications such as stroke or heart disease are less likely to adhere to prescribed medications.
- **Perceived Severity** reflects the patient's assessment of the seriousness of the health condition and its potential consequences. Patients who recognize hypertension as a major risk factor for life-threatening conditions are more likely to prioritize adherence.
- **Perceived Benefits** are the patient's beliefs about the positive outcomes of a health behavior. For example, understanding that consistent medication use can prevent complications reinforces adherence.
- **Perceived Barriers** include factors that hinder adherence, such as side effects, cost, or difficulty remembering to take medications.

Applications of the HBM

The HBM is a helpful foundation for creating interventions that focus on patients' perceptions of hypertension and how to treat it. For instance, educational initiatives based on the HBM might draw attention to the dangers of uncontrolled hypertension (perceived severity and susceptibility) as well as the advantages of following antihypertensive medication (perceived benefits). Adherence rates can also be raised by addressing perceived obstacles such as side effect anxiety.

It has been demonstrated that interactive strategies, such as individual counseling sessions with medical professionals, make good use of the HBM framework. Along with addressing any particular obstacles they might have, these sessions can assist patients in understanding their own risks and the significance of adherence. Additionally, by offering reminders and educational materials customized to each person's needs and beliefs, digital interventions—like mobile health applications frequently incorporate HBM elements [27].

Theory of Planned Behavior (TPB)

The theory of Planned Behavior (TPB) focuses on the relationship between attitudes, intentions, and behaviors. It has been extensively used to predict health behaviors, including medication adherence, by emphasizing the role of intention in driving behavior.

Components of the TPB

The TPB comprises three primary components: attitudes, subjective norms, and perceived behavioral control.

- **Attitudes** refer to the individual's positive or negative evaluation of the behavior. Patients with positive attitudes toward their medication regimens are more likely to adhere, particularly if they believe that adherence improves their quality of life [28].
- **Subjective Norms** involve the perceived social pressure to perform or not perform the behavior. Support from family, friends, or healthcare providers can influence patients' adherence by reinforcing the importance of taking medications as prescribed [29].
- **Perceived Behavioral Control** reflects the patient's confidence in their ability to perform the behavior, even in the face of challenges. Higher perceived behavioral control correlates with increased adherence, as patients feel empowered to overcome obstacles such as forgetfulness or logistical difficulties [30].

Applications of the TPB

The TPB is instrumental in designing interventions that promote positive attitudes toward adherence and leverage social support to influence behavior. For instance, community-based programs that involve family members in hypertension management have shown success in increasing adherence by fostering supportive environments [31].

Moreover, interventions that enhance perceived behavioral control are particularly effective. These include skill-building activities, such as teaching patients how to set reminders or organize their medications, and providing resources that reduce barriers to adherence, such as transportation assistance for pharmacy visits [32]. Healthcare providers can also enhance adherence by using motivational interviewing techniques, which align with the TPB by addressing patients' attitudes, subjective norms, and control beliefs.

Transtheoretical Model (TTM)

The Transtheoretical Model (TTM), also known as the Stages of Change Model, is a comprehensive framework for understanding behavior change as a process that unfolds over time. It categorizes individuals based on their readiness to change and provides strategies tailored to each stage.

Stages of Change

The TTM outlines five primary stages of change:

1. **Precontemplation:** Individuals in this stage are not considering behavior change and may be unaware of the consequences of their current behavior. For hypertensive patients, this could manifest as a lack of concern about missed doses or the seriousness of hypertension [33].
2. **Contemplation:** Patients recognize the need for change but are ambivalent or unsure about taking action.

3. **Preparation:** In this stage, individuals make plans to change their behavior, such as setting goals for consistent medication use.
4. **Action:** Patients actively engage in adherence behaviors, such as taking medications as prescribed.
5. **Maintenance:** Individuals sustain the behavior over time and work to prevent relapse.

Applications of the TTM

When it comes to adjusting therapies to patients' preparedness for behavior change, the TTM is especially useful. Educational treatments aimed at patients in the precontemplation stage, for instance, concentrate on increasing knowledge of the dangers of hypertension and the advantages of adherence. On the other hand, goal-setting and action planning, like establishing regular medication routines, are beneficial for patients in the preparation stage [34].

Healthcare professionals can conduct stage-appropriate interventions by using the TTM framework to divide patients into groups according to their readiness for change. For example, by addressing ambivalence and encouraging commitment, motivational interviewing is a popular technique used to help patients go from contemplation to preparedness. Reinforcement techniques, such prizes and positive feedback, support adherence during the action and maintenance phases [35].

Additionally, digital health tools complement the TTM. By addressing the unique difficulties patients have at each stage of change, applications that monitor adherence behaviors and offer personalized feedback can help patients go through the phases of change. For instance, while instructional modules benefit patients in earlier stages, reminders and progress tracking help patients in the action stage remain consistent [36]. Tailored approaches, to maximize their impact on medication adherence and overall hypertension management.

Evidence-Based Interventions



Figure 2: Shows the evidence-based practices

Improving medication adherence in hypertensive patients is a complex challenge that requires comprehensive, evidence-based interventions. Drawing on behavioral theories, healthcare professionals have developed multifaceted strategies tailored to address the cognitive, emotional, and contextual barriers that hinder adherence. These interventions range from educational programs and motivational techniques to technology-enhanced tools and nurse-led initiatives, all grounded in robust theoretical frameworks such as the Health Belief Model (HBM), the Transtheoretical Model (TTM), and the Theory of Planned Behavior (TPB). This section explores the key interventions derived from behavioral theories,

highlights technology-driven advancements, and emphasizes the critical role of nursing in their implementation.

Interventions Derived from Behavioral Theories

Behavioral theories offer organized frameworks for creating treatments that focus on particular behavioral and psychological aspects that affect medication adherence. Two popular tactics based on these notions are motivational interviews and educational initiatives.

Programs for Education According to the HBM

The HBM-based educational initiatives seek to dispel myths and improve patients' comprehension of hypertension and how to treat it. Perceived susceptibility, perceived severity, perceived benefits, and perceived barriers are the four main elements of the HBM that these programs aim to address. A planned education campaign can, for example, emphasize the life-saving advantages of adhering to antihypertensive medicine (perceived benefits) and raise knowledge of the dangers of uncontrolled hypertension (perceived susceptibility) [37]. These initiatives aid in changing patient attitudes and promoting adherence by dispelling widespread myths, such as the idea that drugs are not required for asymptomatic diseases.

Workshops and individual counseling are examples of interactive modalities that function especially well for reiterating the elements of the HBM. According to studies, these kinds of treatments significantly enhance blood pressure control and adherence rates, especially when they are tailored to the patient's educational and cultural background. Because they make educational content more approachable and interesting, digital education tools like interactive tests and video lessons also fit within the HBM paradigm.

Motivational Interviewing Motivating interviewing (MI), a counseling technique that corresponds with the stages of change in the TTM, assists patients in moving from ambivalence to action. For patients in the precontemplation or contemplation stages, who may understand the importance of adherence but are not yet dedicated to changing their behavior, this method works very well. MI increases self-efficacy and preparedness to follow recommended routines by examining patients' ambivalence and identifying their reasons for wanting to change.

An MI session might, for instance, concentrate on assisting a patient in expressing their objectives for better health and identifying potential barriers to adherence. Together, the patient and the counselor create practical plans for getting past these obstacles. Research suggests that MI increases overall patient happiness and involvement in care in addition to improving medication adherence [38]. Delivered by qualified healthcare professionals who can include the TTM into their strategy and customize interventions to each patient's readiness for change, it has a particularly powerful effect.

Technology-Enhanced Strategies

There are now more chances to enhance medication adherence because to the quick development of digital health technologies. Technology-enhanced therapies use behavioral theories to provide scalable, customized solutions that tackle typical obstacles like low self-efficacy, forgetfulness, and lack of drive.

Reminders and Mobile Apps According to TPB Components

Automated reminders and mobile health applications (mHealth apps) are now essential resources for encouraging adherence. These technologies, which focus on attitudes, subjective norms, and perceived behavioral control, frequently include TPB components. For example, by decreasing forgetfulness and streamlining adherence processes, apps that remind patients to take their medications can improve perceived behavioral control [39]. Additionally, some apps have tools that monitor users' progress and offer encouragement, which promotes a feeling of achievement and strengthens favorable attitudes regarding adherence.

Social support elements, like app community forums or caregiver notifications, use peer and family influence to address subjective standards. Patients who use mHealth applications are more likely to follow their prescription schedules, according to research, especially if the apps provide customisable reminders

and user-friendly interfaces [40]. The incorporation of gamification components, including incentives for regular compliance, improves user motivation and engagement even more.

Digital Interventions Focusing on Social Norms and Self-Efficacy

The use of digital platforms, such as telemedicine services and online portals, to address social norms and self-efficacy has grown. Peer support groups, educational modules, and virtual coaching are frequently used in these interventions. A telehealth program might, for instance, assign patients to virtual coaches who offer encouragement, do frequent check-ins, and instantly handle adherence issues [41].

Social norms are also significantly shaped by peer support groups that are conducted online. People with hypertension can offer emotional support, counsel, and experience sharing to patients. By normalizing adherence behaviors and fostering a sense of community, these interactions increase their acceptability and accessibility [42]. Because digital treatments may be accessed remotely and at a low cost, they are especially useful in addressing marginalized communities.

Role of Nursing in Implementing Interventions

As frontline healthcare professionals who can establish trust, remove obstacles, and offer individualized care, nurses are essential in putting adherence-enhancing strategies into practice. Initiatives headed by nurses are very successful in incorporating behavioral theories into standard practice.

Counseling Sessions Led by Nurses

In order to address adherence hurdles, especially for patients with complex needs or low health literacy, nurse-led counseling sessions are essential. By using behavioral theories, nurses are able to customize their counseling strategies for each patient. The HBM might be used, for example, by a nurse to inform a patient about the dangers of uncontrolled hypertension, stressing the advantages of adherence while addressing particular issues like cost or side effects [43]. The TTM can also help nurses determine the patient's stage of change and provide interventions that are appropriate for that stage, including motivational interviewing for patients in the contemplation stage.

Research indicates that nurse-led counseling enhances clinical outcomes and adherence rates, especially when paired with supportive services and frequent follow-ups. In order to provide continuity of care and gradually reinforce adherence behaviors, nurses are in a unique position to build lasting connections with their patients [44].

Behavioral Theories and Their Integration into Care Plans

In order to ensure that therapies are patient-centered and supported by research, nurses play a crucial role in integrating behavioral theories into customized care plans. By encouraging positive attitudes through education, using family support to reinforce subjective norms, and improving perceived behavioral control through skill-building activities, a nurse could, for instance, create a care plan that incorporates TPB components [45]. Practical tactics like establishing pill organizers, making prescription schedules, and granting access to adherence aids like smartphone applications are frequently included in these care plans.

Additionally, nurses are crucial in assessing the success of these interventions, utilizing patient input to improve care plans and remove new obstacles. In order to ensure that interventions are both useful and effective, nurses can close the gap between theoretical models and practical application by integrating behavioural theories into their practice [46].

Conclusion:

Medication adherence in hypertensive patients may be improved with evidence-based therapies based on behavioural theories. While motivational interviewing utilizing the TTM helps patients go through the phases of change, educational programs based on the HBM clear up misconceptions and improve patients' comprehension of the significance of adherence. Digital platforms and mobile apps are examples of technology-enhanced strategies that use TPB components to provide scalable, customized solutions that

tackle typical adherence challenges. Lastly, it is impossible to overestimate the importance of nursing in carrying out these measures. Nurses incorporate behavioural theories into clinical practice to improve patient outcomes and adherence through counselling sessions, care plan creation, and continuing support.

Future initiatives should concentrate on integrating these treatments to optimize their effects, investigating cutting-edge techniques like culturally specific tactics and AI-powered adherence aids. Healthcare professionals can create all-encompassing, long-lasting solutions that enable patients to take charge of their health and improve the management of hypertension by expanding on behavioural theories.

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"توظيف النظريات السلوكية لتعزيز الالتزام الدوائي لدى مرضى ارتفاع ضغط الدم: مراجعة منهجية للتدخلات القائمة على الأدلة"

الملخص:

الخلفية: يُعد ارتفاع ضغط الدم من أكثر الحالات المزمنة شيوعًا على مستوى العالم، مما يجعله أحد الأسباب الرئيسية للإصابة بأمراض القلب والأوعية الدموية. على الرغم من توفر العلاجات الدوائية الفعالة، إلا أن الالتزام الدوائي يظل تحديًا رئيسيًا، حيث يعاني العديد من المرضى من صعوبة في الحفاظ على انتظام تناول الأدوية. توفر النظريات السلوكية، مثل نموذج المعتقدات الصحية (HBM)، ونظرية السلوك المخطط (TPB)، ونموذج المراحل المتعددة للتغيير (TTM)، إطارًا هيكليًا لفهم وتحسين الالتزام الدوائي.

الهدف: يهدف هذا البحث إلى استكشاف كيفية استخدام النظريات السلوكية لتحسين الالتزام الدوائي لدى مرضى ارتفاع ضغط الدم وتقييم فعالية هذه الاستراتيجيات في تحقيق نتائج أفضل.

الطرق: تم مراجعة الأدبيات العلمية من قواعد بيانات موثوقة لدراسة تطبيق النظريات السلوكية في التدخلات لتحسين الالتزام الدوائي. شملت المراجعة استراتيجيات مثل البرامج التعليمية، والاستشارات التحفيزية، والتقنيات الرقمية التي تستهدف تغيير السلوك.

النتائج: أظهرت النتائج أن استخدام النظريات السلوكية يُحسن بشكل كبير الالتزام الدوائي. ساهمت البرامج التعليمية المبنية على نموذج المعتقدات الصحية في زيادة وعي المرضى بالمخاطر والفوائد، بينما أثبتت الاستشارات التحفيزية فعاليتها في دفع المرضى إلى تغيير السلوك بناءً على مراحل الاستعداد. كما أظهرت التطبيقات الرقمية والتذكيرات المستندة إلى نظرية السلوك المخطط نجاحًا كبيرًا في تحسين الالتزام.

الخلاصة: توفر النظريات السلوكية أدوات قوية لتصميم تدخلات فعالة لتحسين الالتزام الدوائي لدى مرضى ارتفاع ضغط الدم. يُوصى بدمج هذه النظريات في الممارسات السريرية اليومية لتعزيز الصحة العامة وتقليل مضاعفات ارتفاع ضغط الدم.

الكلمات المفتاحية: النظريات السلوكية، الالتزام الدوائي، ارتفاع ضغط الدم، نموذج المعتقدات الصحية، نظرية السلوك المخطط، نموذج المراحل المتعددة للتغيير.