Perspectives Regarding Adherence to Preventive Behaviors : A Qualitative Study of Thais with Prehypertension

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Abstract: Poor adherence to preventive behaviors can lead to recurrence of diseases. Despite current interventions to assist patients' adherence to preventive routines, there has been minimal improvement in their behaviors. However, in Thailand few research studies have been done to describe adherence to preventive behaviors and this study in particular sought to explore the characteristic adherence regarding preventive behaviors of Thais with prehypertension.

A descriptive, qualitative method using in-depth interviews with nine participants who self-identified as being successful in adherence to preventive behaviors was used. Participants were recruited from three selected primary health care units located in three provinces in southern Thailand. Data were analyzed using content analysis.

Three main themes of adherence to preventive behaviors were identified as being 1) commitment to active participation, with 3 sub-themes (intentional action, expected success, and self-discipline), 2) persistence in practicing preventive behaviors, with 2 sub-themes (repeated action and regular pattern), and 3) maintenance of desired preventive behaviors, with 2 sub-themes (long-term behavior changes and sensations of well-being). The results supported that adherence to preventive behaviors is a multidimensional behavior involving exercise, dietary control, and stress management. This finding may influence how nurses and other health care providers design intervention programs that are congruent with social and cultural contexts for enhancing adherence to preventive behaviors.

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Introduction

Non-communicable diseases (NCDs) are a major cause of death, and people who are diagnosed with them require lifestyle modification for treatment. Given this, high blood pressure has become a major public health concern because it is a major risk factor for multiple NCDs, including ischemic and other

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types of heart disease, stroke, hypertensive disease, and renal disease.[1] Although prehypertension is not currently categorized as a disease, a recent meta-analysis found that prehypertension was associated with a significantly increased coronary heart disease risk.[2, 3]

In Thailand, as in other parts of the world, hypertension is responsible for a considerable proportion of the burden of NCDs. The results from the fourth National Health and Nutrition Examination Survey (NHANES III-IV) show that more than 21.4% of Thais over 15 years of age have been diagnosed with high blood pressure and prehypertension has become a major public health concern because of its high prevalence and association with other cardiovascular risk factors, especially obesity and diabetes.[4] Because of this prehypertension is being targeted for integrated prevention and control under the draft of the Thailand Healthy Lifestyle Strategic Plan (2007-2011 & 2011-2020).

Although lifestyle modification is indicated as an important treatment for prevention of hypertension, one of the biggest challenges facing public health authorities and health care providers is the person with prehypertension who is resistant to recommended lifestyle modifications. There are many reasons why individuals find it difficult to adhere to the practice of preventive behaviors. Some of these reasons, such as lack of social support, daily pressure, food culture and lack of time, lie outside of the patients' control.[5-7] It is even more crucial to address lived experiences in a meaningful way to improve the level of adherence to preventive behaviors. Many studies have suggested that there is a gap between what health care providers prescribe and what patients expect.[8-10]

Adherence to treatment has been primarily studied from a quantitative perspective. Many of these studies focus on how well patients adhere to prescribed treatment as evaluated by provider-assessed outcome measures.[11] However, society and environment are considered important factors influencing the patients way of perceiving, understanding, and approaching treatment adherence. Therefore, understanding the phenomenon of adherence to treatment without the patients' perspective is a crucial problem for progression in adherence research.[9, 11] In the past decade, qualitative research has put more emphasis on the significance of the patients' experience of the disease within their particular life context and culture, and reliance in the treatment. A review article related to lived experience of adherence to preventive behaviors found that adherence is the result of the subjective process in view of the evaluation of values, possible benefits and barriers in practicing preventive behavior [12], and how patients give meaning to their disease.[10, 13] Adherence is also viewed as self-discipline[14] and a dynamic process of self-management that needs time to integrate preventive behaviors into the routine of everyday life.[8]

Although research on adherence to preventive behaviors has increased in recent decades, the knowledge base for this continues to overwhelmingly come from Western studies. Since, the East and West have substantial cultural differences in the ways individuals communicate, interpret information, behave, and in their beliefs and problem solving[15] it becomes increasingly important to understand adherence to preventive behaviors from the Thai adult's perspective, as their concerns might be different from Western understandings. This study has the potential to identify the meanings and elements of adherence to preventive behaviors based on the perceptions and perspectives of Thai persons with prehypertension.

Review of Literature

Four articles on concept analysis were found that defined adherence as having multidimensional aspects.[16-19] Bissonnette[16] found that characteristics associated with adherence behavior included six dimensions: decisional conflict, predictability, personal experience, power, agreement and pervasiveness. In contrast, Cohen[17] described adherence as a four dimensional concept: the alignment of patient behavior

with health recommendations, ongoing collaborative relationships between the patient and healthcare provider, mastery of a new behavior and health knowledge, and their perceived ability to meet the outcome targets. Yet another definition was given by Landier [18] who saw adherence as an eight dimensional concept that included motivation, persistence, collaboration, mindfulness, cognitive capacity, flexibility, active participation, and identification of key participants in the process. Finally, Shay[19] described adherence as having compliance and maintenance aspects. Common to all of these descriptions of the concept are the notions of agreement, compliance, persistence and maintenance.

Models of adherence have been proposed to explicate the concept of adherence behavior.[20-23] The Medication Adherence Model interprets adherence as purposeful action, patterned behavior, and feedback.[20] Purposeful action and feedback describe the cognitive process while patterned behavior is a behavioral process. From this perspective, the term adherence includes the cognitive process to initiate and evaluate prescribed treatment as well as the behavioral process for establishing and maintaining a pattern of treatment. According to a process-oriented model, perceived self-efficacy, perceived benefits of exercise, interpersonal support for exercise, and perceived barriers to exercise were significant predictors of exercise adherence.[21] In Thailand, Pinprapapan and colleagues [22] found that social support, health beliefs, provider-patient communication and perceived self-efficacy were factors which influenced adherence.

The attributes of adherence were analyzed from the patient's perspective in some studies. However, most studies reviewed integrated adherence in the lived experience of chronic illness. Ingadottir and Halldorsdottir[14] explored the perceptions of adherence among persons with diabetes using a phenomenological approach. Adherence was predominantly identified in terms of autonomy and self-discipline, fear, desire and relationship with healthcare professionals. Similarly, Sarradon-Eck[12] studied the meaning of adherence to prescription as perceived by hypertensive patients in France. Adherence to prescription relies on a logic of imputation (about the instrumental cause of high blood pressure, about side effects), a logic of appropriation (related to loyalty to treatment, testing, and integration in everyday life), and a logic of self-regulation (continuity of treatment, body control and medication control). In contrast, Springer[24] explored the perceptions of adherence to a program of physical activity and found six themes: processing through barriers to activity, dealing with a family history of heart disease and health-related issues, drawing logical conclusions, social support, importance of a regular routine with individual nuances, and ability to escape from daily pressures and roles through physical activity. In Thailand, Naemiratch & Manderson[10] used an ethnographic approach to explore adherence in lay perceptions in patients in Bangkok. It was found that the interpretation of adherence depended on what the disease meant to individuals in terms of their everyday life. Adherence meant individuals exercised control strictly to prescribed treatment when they believed that the disease had an impact on their lives while it meant adjustment when they believed that they had power over the disease.

Terms commonly associated with patients following or not following treatment regimens include compliance, adherence, and concordance. Compliance suggests yielding, complaisance and submission. While compliance to treatment is when patients participate in the decision making process to follow the prescribed treatment [25], non-compliance implies disobedience, subversion, error, and blame[11, 23]. The concept of adherence indicates the patient has autonomy to choose to follow a health care regimen and refers to the level of participation achieved in behavioral advice that is mutually agreed upon.[26] Concordance is a basically different approach to adherence or compliance. It focuses on the consultation process rather than on specific patient behaviors.

Research Question

What are the characteristics of adherence to preventive behaviors from the perceptions and perspectives of Thai persons with prehypertension?

Aim of the Study

The purpose of this study was to explore characteristics of adherence regarding preventive behaviors from the perspectives of Thai prehypertensive persons who report success in adhering to preventive behaviors. By examining the adherence to preventive behaviors of prehypertensive persons who report successful adherence it may be possible to recognize commonalities. Therefore, this information was critical to the significance of this study.

Methods

Study design. A descriptive, qualitative study with in-depth interviews was used to uncover the perceptions of adherence to preventive behaviors among Thai persons with prehypertension.

Participants and setting. Participants were purposively selected from three provinces of Southern Thailand (Songkla, Nakron Si Thummarat, Suratthani). The data was collected from one primary health care unit in each province. Recruiting criteria for participants for the in-depth interviews were persons: 1) identified by their health care providers as having prehypertension; 2) receiving a preventive behavior intervention routine from a health care provider; 3) participants who have successful adherence behavior, being Thai and aged 35 years or older who have been practicing preventive behaviors regularly and have participated in preventive behaviors for a minimum of 12 months; and 4) able to understand and speak Thai fluently. To gain access to participants the researcher asked health personnel from primary health care units in the selected areas and personnel in any preventive activity groups to advertise this study. Potential participants were initially screened using the above criteria and then were given a brief description of the study by health personnel. They then were contacted and invited to participate in this study by the researcher and health personnel. The sample of potential participants was purposively drawn to select different personal characteristics in terms of age, gender, level of education, and. socio-economic status.

In total, nine people with prehypertension agreed to participate in the study. Four men and five women ranging from 39 to 72 years in age (average 55 years) participated. Five of them were married; five had completed primary school and four were able to read and write. The majority of the women were farmers and housewives, while the majority of the men were retailers or retired. Most of them had succeeded in adhering to exercise and stress management (Table 1).

Table 1 Participant Characteristics

Gender (N)		Marital status (N)		Education (N)		Occupation (N)		Adherence groups (N)	
Female	5	Single	2	Less than primary school	4	Agriculturist	3	Exercise	9
Male	4	Married and living together	5	Primary school	5	Housewife	2	Dietary modification	6
		Widowed	2			Merchant	2	Stress management	9
						Retired	2	Weight reduction	1

Data collection. Each individual in-depth interview was conducted by the researcher to obtain valuable information and insights into participants' experiences. Semi-structured interviews were carried out based on an open approach. Open-ended questions were developed based on the components of adherence to preventive behaviors that had been synthesized from literature reviews and the concept analysis. These questions were reviewed for their appropriateness by three experts in a qualitative study (Table 2). During the interview process, field notes were written for every interview to capture nonverbal communication and other relevant contextual information beyond the interview questions. The researcher respected every participant's perspective without judgment so that participants were encouraged to speak freely. Participants were interviewed in private areas of their homes or at local health centers. The duration of the interview varied from 45-60 minutes in length and ended when target data were received. Background information on the participant was gathered at the end of the interviews.

Table 2. Interview guidelines

Topic questions/follow-up questions
1. Tell me what you felt and what you did when you found out that you are at high risk of hypertension?
- How have you changed your lifestyle since you have known you have a high risk of hypertension?
2. Since you have known of your high risk of hypertension, what important behaviors have you practiced to prevent hypertension disease?
3. What preventive activities do you practice?
4. What are the expected results of these preventive activities?
5. At present, what preventive behaviors do you think you have done well?
- What are your reasons for doing them?
6. If you want to continue the preventive behaviors, how should you manage them?
7. Is continuous practice an important factor for preventive behaviors?
8. What are your aims in practicing the preventive behaviors?
- If you cannot follow them, what are the reasons?
9. How do you integrate the preventive behaviors into your daily life to prevent hypertension?

Interviewing continued until data saturation. Saturation refers to a circumstance when no new themes seem to emerge during coding and when concepts are validated with a variety of participants.[27] Despite achieving data saturation after the completion of six interviews, interviews with those who already had agreed to participate were continued to support existing themes. This process included looking for negative cases to confirm saturation had taken place.

Ethics Review. The study was approved by the Human Ethics Committee of the Faculty of Nursing, Prince of Songkla University, Thailand. All participants who met the recruitment criteria gave their informed consent in writing and verbally before the study and after they had been fully informed about the objectives and protocols of the study. They were assured that declining to take part in the study at any time would in no way affect the quality of care provided to them. Confidentiality was assured by replacing identified names with pseudonyms as well as all transcripts and audiotapes being kept in a locked file cabinet until completion of the study.

Data analysis. The data from the interviews were analyzed by using content analysis. First, all

interviews and the content of tape recordings were transcribed verbatim into written text and checked for accuracy. Raw data from participants were read and re-read multiple times for repeated instances of similar meaning. Codes were categorized and themes and sub-themes were identified.[28] Constant comparison and contrast from one case to another was performed. Content analysis continued until the researcher found no new information to support existing themes. In order to confirm the validity and reliability of analysis, the themes were discussed in relation to the data with the thesis advisor. Data gathering and analysis continued throughout the study until saturation was reached.[27]

Trustworthiness of qualitative data. Trustworthiness of the data was identified by using the criteria proposed by Lincoln and Guba.[28] Credibility of the present findings was strengthened through member checking the data. Interview participants were asked during and after the interviews to review the information that they shared, to clarify perceptions, and validate their intended meanings. To enhance the credibility of findings, peer checking was conducted by three experts in qualitative research independently and until they reached agreement by consensus. Moreover, a negative case analysis was conducted by examining both adherers and non-adherers to preventive behaviors. In other words, once characteristics were identified in adherers, understanding of the characteristics increased by considering the instances and cases where participants did not adhere to preventive activities. With respect to dependability, three qualitative researchers examined research-related documents and validated the data.

Results

Three main themes were identified from the study data regarding adherence to preventive behaviors.

Commitment to active participation

Commitment to active participation regarding preventive behavior practices was viewed as cognitive process that facilitates adherence to preventive behaviors. Participation in a preventive behavior program reinforced participants' willingness to change their behavior and incorporate these preventive activities into their daily lives. Sub-themes supporting "commitment to active participation" include intentional action, expected success, and self-discipline.

To participate in preventive behaviors, these participants suggested that intentional action means to be free to make one's own choices or decisions to follow preventive behaviors without interference from others. As one participant explained:

> *I intend to exercise now I know I am in a high risk group. This is my responsibility. I have had bad behaviors for a long time, eating too much and working too hard, and now they have affected my life.* (P1, 40 years old)

Two participants claimed that the evaluation of hypertensive experiences meant they perceived that their lives were threatened by complications and progression to high blood pressure. They gained insight into what they had to do to control their prehypertension, as described by two participants:

> *I felt dizzy when I had hyperlipidemia. I used to have a high fat diet and eat coconut milk every day, but now I have tried to decrease eating these foods. I intend to continue doing this to prevent dizziness even though all of these were my favorite foods.* (P.2, 39 years old)

> *I intend to control my stress because if I have a lot of stress, I am at risk of hypertension and risk rupturing the blood vessels in my brain.* (P.3, 52 years old)

Involvement in preventive behaviors takes many twists and turns including new attitudes and opinions about what preventive activity adherence will mean in a participants' life. This was explained by participants who identified adherence to preventive behavior experiences with senses of elevated satisfaction,

enjoyment, and attachment as something that reinforced their desire to incorporate and sustain desired preventive behaviors into daily life. These experiences were declared in the following:

> *When I was diagnosed with prehypertension, I tried to do many things to improve my behavior, for example, eating a low fat and high vitamin diet, eating in moderation, meditation, and exercise. Now, I am determined to exercise regularly because I enjoy it, and when I exercise I feel relaxed.* (P.4, 56 years old)

> *I cannot stop exercising. If I do I feel uncomfortable like I need to brush my teeth or to sleep all day. Even after a few days without exercise, I will exercise because I feel unwell and moody as though I feel attached to exercise.* (P.5, 70 years old)

> *I absolutely have stopped eating fish sauce and monosodium glutamate. Even if my food is not tasty I do not add monosodium glutamate to make it better. I enjoy eating this food.* (P.6, 61 years old)

> *Nowadays, when I feel moody, I try to relax and to escape from bad emotions as quickly as possible by trying to talk to my friends or making merit because this can reduce my stress and make me relax and laugh.* (P.7, 56 years old)

Expected success was seen as the feeling of mastery, confidence, and courage to organize or adjust the preventive treatment in various situations. These participants claimed that adherence experiences helped them to learn to be organized and to do this. Most felt that it was less difficult to incorporate the preventive behavior activities into their daily life, whereas others who had considerable experience of non-adherence put immense effort into finding ways to incorporate it into their daily lives, these experiences were identified by:

> *I am determined to exercise regularly. I can do it, and I think that I never have barriers for exercising because I can overcome these obstacles.* (P4, 56 years old)

> *For me, dietary control is very easy and I don't need to push myself hard. I'm determined to eat only fish every day as it is easy to buy from the nearby temple. When I eat outside, I tell the seller not to add monosodium glutamate or pork.* (p6, 61 years old)

Self-discipline was viewed as a prerequisite for success in preventive behavior adherence and well-being. Most participants explained that they must have determination and patience every day to control intentional behavior practices without interference from others and to follow one's own judgments to the treatment. These experiences were declared by:

> *We emphasize that we must exercise every day until it becomes our habit. I never forget to exercise; it is my responsibility to do it. In my mind I know when the time comes, I must go and dance.* (P1, 40 years old)

> *I have restricted my diet so as to lose weight. I remind myself by writing in my calendar every day consistently.* (P8, 51years old)

Persistence in practicing preventive behaviors

Persistence in practicing preventive behaviors was viewed as the ability of the participants to continue practicing preventive behaviors despite the difficulty or perceived barriers. Adherence regarding preventive behaviors means not only performing the act of practicing preventive behaviors but also having to do it often for the rest of your life. Sub-themes supporting "persistence in practicing preventive behaviors" involved repeated action and regular pattern.

Repeated activity referred to the ability of participants to practice preventive behaviors as

prescribed. Most participants talked about how they incorporated the preventive behaviors into their daily lives because some of them became nonadherent unintentionally due to an inability to overcome barriers and difficulties. They indicated that situational obstacles, lack of social support, daily pressures and roles, and food culture were the main barriers that they had to overcome, as explained by four participants in this study:

> *I try to exercise every day even if I have some tasks to do. My family can do these tasks because they encourage me to exercise or I do them after I finish exercising.* (P9, 72 years old)

> *I exercise every day, for example, when I go anywhere for a meeting or just traveling, I never forget to take my exercise shoes even if somebody thinks they are difficult to carry, or I engage in other forms of exercise if I am unable to do aerobic exercise.* (P4, 56 years old)

> *I never eat sour, spicy and salty food at any special events such as a funeral or monk ordination. If I have to eat out I make sure that there is no MSG in my food.* (P6, 61 years old)

> *Even though I don't have a lot of time, I often join in community activities for relaxation.* (P3, 52 years old)

Being adherent to preventive behaviors also referred to being successful in establishing a regular pattern. These participants indicated that this pattern, which was developed over time, allows them to easily move through the day while integrating the preventive behaviors around other activities of daily living, as described by two participants:

> *Exercise need not be too hard but should be regular and we must perform these activities, not only just have intention. I have done exercise and practiced diet control. We should gradually adjust, for example, we should not eat too much especially at dinner because we need to rest, we do not need the energy. We should do this regularly.* (P5, 70 years old)

> *I felt so stressed in the past, but I feel better because I follow a moral guide book and the priest's teaching. I do this consistently whenever I feel stressed even though I have poor vision. I'm not going to be stressed.* (P7, 56 years old)

Maintenance of desired preventive behaviors

This theme was viewed as the achievement of desired preventive behavior changes over a long-term and practicing to sustain the change for promoting health and preventing diseases. Adherence to preventive behaviors requires time before the desired preventive activity changes are successfully integrated into everyday life to prevent hypertension. Sub-themes supporting "maintenance of desired preventive behaviors" include a long period of preventive activity routine and experiencing sensations of well-being. Participants explained that the duration of preventive behavior experience needs to be long enough to meet a threshold believed to be necessary to prevent an illness and improve personal health or well-being, these experiences were declared by:

> *I have eaten fruits and vegetables continually for years which helps me not only control and prevent high blood pressure but also makes me have regular bowl movements.* (P1, 40 years old)

> *I started to decrease salty food intake a long time ago. I have eaten plain tasting food since then and that helps reduce high blood pressure.* (P6, 61 years old)

> *I have exercised since 2002, for over 10 years, which has made me feel very refreshed and energetic.* (P6, 61 years old)

Participants mentioned experiencing sensations of well-being when they were able to sustain preventive behavior changes for a long-term. These experiences were identified by:

> *I have continued to exercise for a long time. My neighbors followed me and also took up exercise and diet control because I am strong and in good shape. It has made me feel good and I've tried to continue exercising although before that I was not an active guy.* (P4, 56 years old)

> *I maintain a sense of humor to cope with stress and that helps me to feel relaxed.* (P3, 52 years old)

> *I'm still proud to say that my health problems have improved and my weight has decreased and that is why I love to continue exercising.* (P2, 39 years old)

Limitations

The results may be limited in terms of their ability to represent the adult Thai population because all the participants were persons from Southern Thailand. Therefore, further exploration by interviewing participants covering the four regions of Thailand is recommended. Despite attempts to recruit the participants from various types of hypertensive prevention adherence groups, most key informants in this study did not experience alcohol dependence or frequent consumption. Therefore, the findings may lack the perspectives of adherence to moderation of those who consume alcohol.

Discussion

The information provided by the participants makes clear that adherence to preventive behaviors of Thais with prehypertension is a complex phenomenon which consists of three important characteristics. Some of the study's results are concordant with other studies that have addressed the issue of adherence to preventive behaviors.

The first theme analyzed was "commitment to active participation". This may be the best-recognized aspect of the cognitive process and preventive treatment, and is a prerequisite for successful self-management. In these findings, commitment to active participation reveals the importance of autonomy, a patient-centered approach and how deeply it affects the patient-treatment interaction. Intentional action has been found to be an important cognitive aspect of adherence to preventive behaviors in previous studies.[17,29] According to the findings, the perception of desire to participate in preventive behaviors relates to the need for independence. This supports the notion that the patient's agreement on the course of treatment is an important aspect of adherence to preventive behaviors.[16, 17, 23, 30] Expected success of the participants in this study was consistent with "the mastery of a new behavior and health knowledge" as found in the previous study.[17] Expected success is an important indicator of adherence to preventive behaviors where it can represent the person's readiness and willingness to carry out the intentional behaviors.[31] Self-discipline commonly fosters the level of adherence to preventive behaviors and well-being. Although previous studies found that flexibility and adjustment were used to construct adherence tasks for controlling chronic disease conditions [10, 13], self-discipline as found in this study supports the view that Thais followed the prescribed treatment strictly when they believed that disease impacted on their lives or had power over them.[10, 13]

"Commitment to active participation" could be explained by viewing it in the Thai cultural context such as independence and task achievement orientation. Adherence to preventive behaviors reflected an image of independence because Thais will follow and maintain the prescribed treatments depending on the individual's experiences, feelings and perceptions.[10, 13] In addition, mental strength, expected success and

self-control, to carry out the intentional behaviors become important factors for success in adherence to preventive behaviors since it has been stated that Thais have low motivation to achieve their goals through hard work.[32] Therefore, commitment to active participation supports the view that Thais with prehypertension have a strong need for independence. This independence means the adherent person has less difficulty fitting the regimen into their life.

The second component of adherence to preventive behaviors is persistence in practicing preventive behaviors which supports the fact that Thais with prehypertension who perceived preventive behaviors as a top daily priority need to have abilities to translate their intentions into actions. This means that there are numerous ways that an individuals' resources and environment may be inadequate for carrying out the preventive activities.[33] Repeated action provides a test of whether the individuals' resources and environment are adequate for carrying out the preventive activities. Additionally, frequently performed behavior strengthens the establishment of an automatic or regular behavior by increasing the level of skill and mental capacity as well as reducing the discomfort.

Although previous studies found that adherence to preventive activities associated with good self-discipline resulted in some frustration, suffering and restriction of individuals' social lives.[13, 34] This finding showed that Thais with prehypertension use "gradual adjustment "or "the Middle Path" as the key to integrating preventive activities into their daily routines such as moderation in consumption, lifestyle and relationships. Thai people usually use Buddhist religious practices such as the Middle Path to control their stress levels.[35, 36] Therefore, practicing gradual adjustment as found in this study is an effective strategy for Thais to diminish both extremes of their individual requirements and social life.

The last category, "maintenance of desired preventive behaviors" reflected continued regular practice of desired preventive behaviors over the long term. This involves long-term behavior changes and sensations of well-being. Findings indicate that adherence to preventive behaviors is not a static state but rather, is dynamic. Long-term behavior change is an important indicator of adherence to preventive behaviors where adopting regular preventive behavior patterns does not automatically lead to sustained preventive behavioral change.[37] This study also found that the time frame used to define adherence to preventive behaviors varied by interviewee. This is consistent with numerous studies suggesting that the time frame for adherence to preventive behavior is inconsistent even though most health promotion research identifies a period of 6 months of sustained behavior change.

The sensations of physical and psychosocial well-being, are also used by Thais with prehypertension to identify that the desired preventive behavior had been maintained. Thais sense of well-being is deeply rooted in cultural values and norms which affect behaviors in daily life. The feeling of well-being reflects images of holism and most Thais believe that, physical, mental and spiritual well-being are intertwined.[38] This study has shown that Thais from varying backgrounds with prehypertension view some aspects of well-being and adherence to preventive behaviors similarly. Those interviewed reported that preventive behavior participation was an essential part of well-being of body and mind. They valued the feeling of well-being as among the most important aspects of life. This feeling and desire has a strong influence on their behaviors.

Conclusion

The findings of this study provide a better understanding of the perspectives of adherence to preventive behaviors for Thais with prehypertension. The study also supports the idea that prescribed treatment is correct, effective, and adaptive to each patient's health condition. Additionally, this study

verifies the concept of adherence to preventive behaviors gained from literature reviews by focusing on the culturally grounded conceptual structure in the Thai context. Adherence to preventive behaviors in Thais with prehypertension is identified as the dynamic of following prescribed preventive treatment through commitment of active participation, persistence in practicing preventive behaviors, and maintenance of desired preventive behaviors. This study also found that adherence to preventive behaviors is identified in ways consistent with the Thai cultural context that governs everyday life. Notions of acceptance, holism, autonomy and gradual adjustment provide a philosophical basis and practical guidelines for adherence to preventive behaviors.

Implications

National health care policies are needed to increase the rate of success of adherence to preventive behaviors for controlling high blood pressure, especially persons who are prehypertensive. The findings show that adherence to preventive behaviors is the dynamic interaction of a prescribed treatment regimen and the patient's behaviors for physical and psychosocial well-being and preventing hypertension. Therefore, this knowledge can subsequently be applied by healthcare providers working in public health, education, and local administrative organizations to promote adherence to preventive behaviors for prehypertension among all age groups in Thai society. Moreover, national policies can be developed based on research finding to encourage Thai persons with prehypertension to succeed in adhering to preventive behaviors.

An understanding of adherence to preventive behavior attributions in Thais with prehypertension by nurses and other healthcare providers is beneficial for designing intervention programs that are congruent with social and cultural contexts for enhancing adherence to preventive behaviors, specifically in the management of Thais with prehypertension. The multifaceted nature of adherence to preventive behaviors identified in this study could serve as a basis for development of an adherence to preventive behaviors scale for Thais with prehypertension. In addition, future qualitative study should be done to further explore processes and relating factors of adherence to preventive behaviors among Thais with prehypertension.

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References

1. Lawes CM, Vander Hoorn S, Rodgers A. Global burden of blood-pressure-related disease, 2001. Lancet. 2008 371:1513-8.
2. Habib GB, Virani SS, Jneid H. Is 2015 the primetime year for prehypertension? prehypertension: A cardiovascular risk factor or simply a risk marker? J. Am. Heart Assoc. 2015 4(2): e001792.
3. Huang Y, Cai X, Li Y, Su L, Mai W, Wang S, et al. Prehypertension and the risk of stroke: a meta-analysis. Neurology. 2014 82(13):1153-61.
4. Aekplakorn W, Sangthong R, Kessomboon P, Putwatana P, Inthawong R, Taneepanichskul S, et al. Changes in prevalence, awareness, treatment and control of hypertension in Thai population, 2004-2009: Thai National Health Examination Survey III-IV. J Hypertens. 2012 30:1734-42.
5. Trief PM, Ploutz-Snyder R, Britton KD, Weinstock RS. The relationship between marital quality and adherence to the diabetes care regimen. Ann Behav Med. 2004 27(3):148-54.
6. Dunton GF, Cousineau M, Reynolds KD. The intersection of public policy and health behavior theory in the physical activity arena. J phys Act Health. 2010 7(Suppl 1):S91-8.
7. Serour M, Alqhenaei H, Al-Saqabi S, Mustafa AR, Ben-Nakhi A. Cultural factors and patients' adherence to lifestyle measures. Br J Gen Pract. 2007 57(537):291-5.
8. Scotto CJ. The lived experience of adherence for patients with heart failure. J Cardiopulm Rehabil Prev. 2005 25(3):158-63.

9. Brundisini F, Vanstone M, Hulan D, DeJean D, Giacomini M. Type 2 diabetes patients' and providers' differing perspectives on medication nonadherence: a qualitative meta-synthesis. BMC Health Serv Res. 2015 15:516.
10. Naemiratch B, Manderson L. Control and adherence: living with diabetes in Bangkok, Thailand. Soc Sci Med. 2006 63(5):1147-57.
11. Vermeire E, Hearnshaw H, Van Royen P, Denekens J. Patient adherence to treatment: three decades of research. A comprehensive review. J Clin Pharm Ther. 2001 26(5):331-42.
12. Sarradon-Eck A. The meaning of adherence. Ethnography of medication practices in hypertensive patients. Sciences Sociales et Santé. 2007 25(2):5-36 [in French].
13. Panpakdee O, Sritanyarat W, Tanomsup S. Self-care process in thai people with Hypertension: An Emerging Model. Thai Nurs Res. 2003 7 (2):121-36.
14. Ingadottir B, Halldorsdottir S. To discipline a "dog": the essential structure of mastering diabetes. Qual Health Res. 2008 18(5):606-19.
15. Mihalko SL, Brenes GA, Farmer DF, Katula JA, Balkrishnan R, Bowen DJ. Challenges and innovations in enhancing adherence. Contro Clin Trials. 2004 25:447-57.
16. Bissonnette JM. Adherence: a concept analysis. J Adv Nur. 2008 63(6):634-43.
17. Cohen SM. Concept analysis of adherence in the context of cardiovascular risk reduction. Nurs Forum. 2009 44(1):25-36.
18. Landier W. Adherence to oral chemotherapy in childhood acute yymphoblastic leukemia: An evolutionary concept analysis. Oncol Nurs Forum. 2011 38:343-52.
19. Shay LE. A concept analysis: adherence and weight loss. Nurs Forum. 2008 43:42-52.
20. Johnson MJ. The Medication Adherence Model: a guide for assessing medication taking. Res Theory Nurs Pract. 2002 16(3):179-92.
21. Hellman EA. Use of the stages of change in exercise adherence model among older adults with a cardiac diagnosis. J Cardiopulm Rehabil Prev. 1997 17(3):145-55.
22. Pinprapapan E, Panuthai S, Vannarit T, Srisuphan W. Casual Model of Adherence to Therapeutic Regimens among Thais with Hypertension. Thai Nurs Res. 2013 17(3) 268-281.
23. World Health Organization. Adherence to Long-Term Therapies: Evidence for Action. Geneva, Switzerland: World Health Organization; 2003.
24. Springer J. Health behavior change as it relates to the adoption of and adherence to a program of physical activity [Ph.D.]. Ann Arbor: The University of Wisconsin - Milwaukee; 2004.
25. Lehane E, McCarthy G. Medication non-adherence—exploring the conceptual mire. Int J Nurs Pract. 2009 15:25-31.
26. Sandman L, Granger BB, Ekman I, Munthe C. Adherence, shared decision-making and patient autonomy. Med Healthc Philos. 2012 15(2):115-27.
27. Morse JM. Designing funded qualitative research. In: Denzin NK, Lincoln YS, editors. Handbook of qualitative research Thousand Oaks: California:Sage Publications; 1994.
28. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. Nurse Educ Today.2004 24(2): 105-112.
29. Horne R. Compliance, adherence, and concordance*: Implications for asthma treatment. Chest. 2006 130(1_ suppl):65S-72S.
30. Ahmed R, Aslani P. What is patient adherence? A terminology overview. Int j clin Pharm. 2014 36(1):4-7.
31. Amrhein PC, Miller WR, Yahne CE, Palmer M, Fulcher L. Client commitment language during motivational interviewing predicts drug use outcomes. J Consult Clin Psychol. 2003 71(5):862-78.
32. Komin S. Psychology of the Thai people : Values and behavioral patterns. National Institute of Development Administration: Bangkok, Thailand; 1991.
33. McArthur D, Dumas A, Woodend K, Beach S, Stacey D. Factors influencing adherence to regular exercise in middle-aged women: a qualitative study to inform clinical practice. BMC women's health. 2014 14:49.
34. Kirdphon W. Accepting and adjusting to chronicity of hypertension: A grounded theory study in Thai people [Ph.D.]. Ann Arbor: University of Washington; 2003.
35. Naewbood S, Sorajjakool S, Triamchaisri SK. The role of religion in relation to blood pressure control among a Southern California Thai population with hypertension. J Relig Health. 2012 51(1):187-97.
36. Phutthikhamin T. Spirituality of Thai Buddhists with chronic cardiovascular disease [Ph.D.]. Ann Arbor: The University of Texas School of Nursing at Houston; 2008.
37. Prochaska JO, Redding CA, Evers KE. The transtheoretical model and the stages of change. 2 nd ed. K. Glanz, Lewis FM, Rimer BK, editors. San Francisco: CA: Jossey-Bass;1997.
38. Rattanakun P. Buddihism, Health, Disease, and Thai Culture. In: Harold C, Rattanakun P, editors. A cross-cultural Dialogue on Health Care Ethics. Canada: Wilfrid Laurie University; 1999.

มุมมองของการยึดมั่นกับพฤติกรรมป้องกันโรค: การศึกษาเชิงคุณภาพของคนไทยที่มีภาวะเสี่ยงสูงต่อโรคความดันโลหิตสูง

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บทคัดย่อ: การยึดมั่นกับพฤติกรรมการป้องกันโรคในระดับที่ต่ำสามารถนำไปสู่การกำเริบของโรคได้ แม้จะมีการแทรกแซงในปัจจุบันเพื่อช่วยให้ผู้ป่วยมีการยึดมั่นกับพฤติกรรมการป้องกันโรค แต่การเพิ่มขึ้นของพฤติกรรมการป้องกันโรคในผู้ป่วยก็พบเพียงเล็กน้อยเท่านั้น โดยเฉพาะอย่างยิ่งประเทศไทยที่ซึ่งมีการศึกษาวิจัยเพื่ออธิบายถึงการยึดมั่นในพฤติกรรมการป้องกันโรคน้อยมาก ดังนั้นจึงมีความจำเป็นในการที่จะระบุมุมมองของการยึดมั่นกับพฤติกรรมป้องกันโรคของคนไทยที่มีความเสี่ยงสูงต่อโรคความดันโลหิตสูง

วัตถุประสงค์หลักในการวิจัยครั้งนี้เพื่อศึกษาถึงคุณลักษณะของการยึดมั่นกับพฤติกรรมป้องกันโรคตามมุมมองของคนไทยที่มีความเสี่ยงสูงต่อโรคความดันโลหิตสูง การศึกษานี้ใช้วิจัยเชิงคุณภาพเก็บข้อมูลโดยการสัมภาษณ์ระดับลึกในคนไทยที่มีความเสี่ยงสูงต่อโรคความดันโลหิตสูงและระบุตนเองว่าประสบความสำเร็จในการยึดมั่นกับพฤติกรรมป้องกันโรค จำนวน 9 คน กลุ่มตัวอย่างจำนวน 3 คนที่ล้มเหลวในการยึดมั่นกับพฤติกรรมป้องกันโรคใช้เพื่อยืนยันผลการอิ่มตัวของข้อมูลและจำนวนกลุ่มตัวอย่างทั้งหมดมาจาก 3 หน่วยบริการสุขภาพระดับปฐมภูมิในสามจังหวัดภาคใต้ของประเทศไทย วิเคราะห์ข้อมูลโดยใช้การวิเคราะห์เนื้อหา

การยึดมั่นในพฤติกรรมป้องกันโรค ประกอบด้วย 3 มิติ ได้แก่ 1) ความมุ่งมั่นในการปฏิบัติ โดยมี 3 มิติย่อย คือ ความตั้งใจทำ การคาดหวังความสำเร็จ และการมีวินัยในตนเอง 2) การปฏิบัติพฤติกรรมป้องกันโรคอย่างต่อเนื่อง โดยมี 2 มิติย่อย คือ การทำซ้ำ และ ความสม่ำเสมอ 3) การคงไว้ซึ่งพฤติกรรมป้องกันโรคที่ต้องการ โดยมี 2 มิติย่อย คือ การเปลี่ยนแปลงพฤติกรรมในระยะยาว และ ความรู้สึกถึงการมีสุขภาพดี การศึกษานี้แสดงให้เห็นว่าการยึดมั่นกับพฤติกรรมการป้องกันโรคของคนไทยที่มีความเสี่ยงสูงต่อโรคความดันโลหิตสูงเป็นพฤติกรรมที่มีหลายมิติที่ประกอบด้วย การออกกำลังกายและการควบคุมอาหารและการจัดการความเครียด ผลการศึกษาครั้งนี้อาจมีประโยชน์ต่อการออกแบบโปรแกรมการแทรกแซงซึ่งสอดคล้องกับบริบททางสังคมและวัฒนธรรมไทยของพยาบาลและเจ้าหน้าที่ทางสุขภาพในการเพิ่มระดับการยึดมั่นในพฤติกรรมป้องกันโรค

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คำสำคัญ: การยึดมั่น การวิจัยเพื่อการสำรวจ พฤติกรรมป้องกันโรค ภาวะความเสี่ยงสูงต่อโรคความดันโลหิตสูง ผู้ใหญ่ไทย

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