Southern California CSU DNP Consortium

California State University, Fullerton
California State University, Long Beach
California State University, Los Angeles

A CULTURALLY SENSITIVE PROVIDER SCRIPT FOR USE WITH HYPERTENSIVE CHINESE AMERICANS

A DOCTORAL PROJECT

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By

Ju-An Broyles

Doctoral Project Committee Approval:

Barbara White, DrPH, RN, Project Chair
Margaret Brady, PhD, RN, CPNP-PC, Committee Member

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ABSTRACT

Hypertension (HTN) rates in Chinese Americans are as high as that of the general population. Non-adherence to medication and the need for life modifications challenge providers and patients in HTN management. With the goal of increased adherence to treatment regimens, a culturally sensitive communication script was developed for healthcare providers. A qualitative design was adopted to collect content for the communication script. The bilingual investigator interviewed eight Chinese patients and seven healthcare providers. The interview data revealed barriers to HTN treatment adherence: initial mistrust of the health care system and health care providers, reliance on the use of traditional Chinese medicine and natural remedies, apprehension about adverse effects of Western medications, the influence of traditional Chinese proverbs and sayings, cultural characteristics of conforming to norms, and beliefs of stress and burden of livelihood as a cause for HTN. A trusting provider-patient relationship, with the adoption of identified motivating factors such as the patient’s responsibilities for family and negative consequences from uncontrolled HTN, help to increase patient adherence to the medication plan. Study implications include communication between providers and patients that include the patient’s health beliefs and disease management preferences in addition to delivering pathophysiological facts and information about medication treatment of HTN. Using the culturally sensitive communication script developed for this project may help providers to motivate Chinese American patients to adopt healthy behaviors in HTN management.
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BACKGROUND

Blood pressure is the force exerted on the wall of the arteries by the circulating blood volume (Tortora & Derrickson, 2011). Two numbers are used to express blood pressure: the systolic blood pressure measures the force exerted by the blood on the artery wall when the heart contracts, while the diastolic blood pressure measures the same force when the heart is at its rest. Normal blood pressure with systolic <120 millimeters of mercury (mm Hg) and diastolic <80 mm Hg is necessary to perfuse the body’s target organs (Tortora & Derrickson, 2011). However, high blood pressure, namely hypertension (HTN; systolic >140 mm Hg and/or diastolic >89 mm Hg) for people aged below 60 (Chobanian et al., 2003) injures and weakens the arteries (Tortora & Derrickson, 2011). Even though HTN is one of the most modifiable diseases with well-established pharmacologic therapies and lifestyle change guidelines, only 70% of the hypertensive adults have their blood pressure under control (Valderrama et al., 2012).

Uncontrolled HTN can cause cardiovascular and kidney diseases and stroke. To prevent these complications, the Joint National Committee (JNC) of the National High Blood Pressure Education Program established evidence-based guidelines and strategies for HTN control (Chobanian et al., 2003; James et al., 2014). Among several health care promotion strategies employed, quality communication between providers and patients plays an essential part in the control of HTN and is considered a prerequisite for patient adherence (Kaplan, Greenfield, & Ware, 1989). In spite of that, little is known about how to provide culturally sensitive information that will promote patient adherence for the improvement of HTN management outcomes and delay complications associated with this chronic condition (Jolles, Clark, & Braam, 2012).
Although patient education is an essential component of the management plan for treating any chronic disease, culturally sensitive information may not be always available for those who do not speak English as their native language. This is particularly true for the Chinese American population for which Chinese is their primary language. Chinese are the largest and the fastest growing Asian minority in the United States (Centers for Disease Control and Prevention [CDC], 2013; U.S. Census Bureau, 2010), and the incidence of HTN in this population is similar to that of the general population (California Health Interview Survey [CHIS], 2011-2012; CDC, 2011). Nevertheless, research information on communicating strategies to best educate this group of patients about their role in managing HTN through the proper use of pharmacological agents, healthful nutrition and eating behaviors, physical activity, in addition to other related health behaviors, is sparse (Jolles et al., 2012). Because of the increasing recognition of the importance of patient education related to health outcomes, there have been increasing efforts and emphasis placed on the development of culturally sensitive educational materials (Bosworth et al., 2007; Li & Leung, 2012; C. Wong, Yeung, Ho, Tse, & Lam, 2012). Tailored teaching modules and behavioral interventions based on patients’ health literacy, social support, and knowledge of HTN were demonstrated to be effective in decreasing blood pressure among African Americans (Bosworth et al., 2007). Social support of communities and families enhanced diet and medication regimen adherence and decreased blood pressure in a Chinese community in Hawaii (C. Wong et al., 2001). These two studies illustrate that disease management must be rendered in the context of family and community support and be culturally sensitive to the needs of patients.
Written material, culturally sensitive pictures, internet use, and the use of computerized programs were demonstrated in research studies to be effective tools the promotion of Chinese immigrants understanding and management of high blood pressure (Li & Leung, 2012; Tang, Pang, Chan, Yeung, & Yeung, 2008; C. Wong et al., 2012). However, there is little research available that identifies effective methods of verbal communication for either the general or Chinese population with HTN despite the fact that verbal communication is the most widely used form of education in the disease management process (Jolles et al., 2012). Furthermore, oral dialogue is often the preferred method of communication by Chinese Americans (Jolles et al., 2012; C. Wong et al., 2012).

There were 2,422,970 Chinese Americans living in the United States, according to the 2010 U.S. Census Bureau report. California has the highest number of this ethnic group in the United States, with Los Angeles county being the leading county and Orange county ranking seventh in Chinese population (Améridia, 2000). It is likely that all health care providers in these areas interact with Chinese Americans. However, assumptions related to educational, ethnic, and cultural backgrounds may affect treatment and cause miscommunications between providers and patients, which may lead to poor outcomes (Kelly & Haidet, 2007).

With the rapid diversification of the nation’s population, and especially in California, efforts to promote providers’ cultural awareness, competence, and sensitivity have increased. The majority of health care organizations have developed mandatory cultural competency courses in California. While most organizations strive to provide culturally sensitive care to patients of several cultural or ethnic groups, there is no
identified evidence-based practice to guide interactions and communication between providers and Chinese Americans who are diagnosed with HTN, a prevalent chronic illness in Chinese Americans (CHIS, 2011-2012; CDC, 2011). The most recent CHIS (2011-2012) shows 29.1% of Chinese adults have been diagnosed with HTN. Among other factors, medication compliance, life style changes, and health literacy contribute to uncontrolled HTN in Chinese Americans (Li & Leung, 2012; Tang et al., 2008; C. Wong et al., 2012).

The rationale for this Doctor in Nursing Practice (DNP) project and the need for development of a provider script is based on three major issues: first, California has the largest percentage of Chinese Americans in the United States; second, the government has emphasized the need to support rectification for better health surveillance in minority groups; and third, there is a lack of available culturally sensitive communication tools. The creation and use of a script that focuses on culturally sensitive dialogue may facilitate the formation of provider-patient partnerships for the promotion of cultural understanding and adoption of healthy behaviors needed for effective HTN management in Chinese Americans.

The Statement of the Problem

Hypertension is a prevalent chronic illness affecting one third of the United States population (CDC, 2011). The prevalence of HTN in the Chinese population is as high as that of the general population (CHIS, 2011-2012). While the JNC has identified a combination of life style changes and pharmacological interventions for HTN treatment (Chobanian et al., 2003, James et al., 2014), little is known about how to provide culturally sensitive information on HTN management to improve clinical outcomes in
Chinese Americans with this chronic condition. Even though HTN is one of the most modifiable diseases, one third of hypertensive cases are not effectively controlled (Valderrama et al., 2012). This information is especially concerning, given that uncontrolled HTN can lead to heart disease, kidney disease, and stroke.

Health care providers play a vital role in blood pressure education and management. Patients’ lack of understanding about their health care issues can lead to a poor outcome in chronic illness management (Kelly & Haidet, 2007). Health care providers’ lack of knowledge and information about a patient's educational, ethnic, and cultural background can affect treatment and prevention and cause miscommunications between providers and patients, which may lead to poor outcomes (Kelly & Haidet, 2007).

**Theoretical Framework**

The theoretical communication framework for this project incorporated four sources: a communication model for HTN management developed by Jolles et al. (2012), Prochaska and DiClemente’s stages of change model, cultural sensitivity conceptualization, and Knowles’ adult learning theory. This multi-based theoretical framework served as a guideline and tool in planning, implementing, and evaluating the script template that was developed.

**The Communication Model and Stages of Change Model**

Effective communication between providers and patients is considered a significant prerequisite for successful HTN management (Jolles et al., 2012; Kaplan et al., 1989). However, until recently there was no validated tool available for the promotion of effective communication between providers and patients with this chronic
illness. Recognizing the need for such a tool, Jolles et al. (2012) developed a communication model for providers in managing HTN based on limited available literature.

Jolles et al.’s (2012) communication model suggests three phases for the effective management of chronic HTN: the comprehension phase, the action phase, and the maintenance phase. Even though this model has not been validated, it aligns well with the Prochaska and DiClemente’s stages of change model (Prochaska, Norcross, & DiClemente, 1995), which has been well validated and adopted to manage physical and psychological chronic health problems such as obesity, smoking, and drug addiction (Prochaska et al., 1994).

**Comprehension phase.** Understanding the diagnosis is the first step in HTN management as it is for any disease (Jolles et al., 2012). The communication during this phase focuses on delivering the news of diagnosed high blood pressure and information about the consequences of uncontrolled blood pressure. During this phase, Jolles et al. (2012) recommended that, when initiating a plan for the blood pressure management, the provider clearly communicate with patients about their blood pressure numbers and the recommended target blood pressure numbers or readings. They also suggested that the communication in this phase be provider-driven. However, if the patient does not agree with or is not ready for the treatment plan, the communication should be tailored based on the patient’s feedback.

Prochaska et al.’s pre-contemplation and contemplation stages of change align with Jolles et al.’s comprehension phase. The two stages described by Prochaska and DiClemente are patient-driven, and the treatment decisions should be guided by the
patient’s viewpoint. During these two stages, the provider’s role is to validate the patient’s readiness or lack of readiness to make a change and encourage the patient to explore the pros and cons of a potential change. Both provider-driven and patient-driven interactions in blood pressure management have been shown to be effective in patient populations with special needs and from different cultural backgrounds (Baldwin, Cvengros, Christensen, Isharic, & Kaboli, 2008; Bensing, 1991; Kaplan et al., 1989).

**Action phase.** Prochaska et al.’s change model includes two phases in terms of the action stage, which address the need for a preparation stage before action. To prepare the client for the action, the provider should help clients identify their social support and skills in preparation for the change. Social support has been demonstrated to be an important part of HTN management for Chinese clients (Wang & Abbott, 2001) as one of the Asian cultural characteristics is collectivism, where people are closely connected and interdependent (Coburn & Weismuller, 2012). According to Jolles et al.’s (2012) communication model, the action phase is characterized by actual behavior changes. During this phase, the patient would fill the prescriptions, take prescribed medications, and implement lifestyle changes. There is a variety of communication methods, such as lab test results, pharmacy’s records, and chart reviews that can be utilized to follow the patient’s status of treatment (Jolles et al., 2012). Verbal communication remains a preferred method of communication especially by Chinese patients (C. Wong et al., 2012). The communication during this phase should be interactive and tailored to the patient’s cultural background, health literacy level, gender, and age (Jolles et al., 2012).

**Maintenance phase.** The JNC recommends a follow-up schedule of appointments during each of the different stages of HTN management (Chobanian et al.,
During the maintenance phase, the communication topics should focus on side effects of the medications, lifestyle modification strategies, current blood pressure, and body mass index (BMI; Jolles et al., 2012). Maintaining treatment adherence to this chronic illness has been problematic. The non-adherence rate is high especially in newly diagnosed patients compared with those who have been treated for a longer period of time (Jolles et al., 2012). Non-adherence to antihypertensive medication has also been identified as an issue in Chinese clients (Li, Stewart, & Scotts, 2005).

Relapse, the term that describes the non-adherence phenomenon, occurs during the maintenance stage. During this stage, some patients return to their previous unhealthful behaviors after they had taken action and made changes. During the maintenance and relapse stages, assessing and identifying barriers and motivating factors and planning for more effective strategies are the focus of the communication with the goal of outcome improvement (Prochaska, Norcross, & DiClemente, 2013).

Cultural Sensitivity Conceptualization

In addition to the timeline of communication, the focus during the management phase of HTN control should consider cultural sensitivity so that the content of communication is tailored to meet the special needs of patients. In this project, the population of interest centers on Chinese Americans with HTN. According to a concept analysis of cultural sensitivity conducted by Foronda (2008), cultural sensitivity has two components: antecedents and attributes. Antecedents are diversity, awareness, and encounter, whereas attributes are knowledge, consideration, understanding, respect, and tailoring. Healthcare providers’ knowledge of cultural beliefs, health values, and
homeopathic practices play an important part in the outcomes of blood pressure control (Li et al., 2005).

Even though it is unrealistic to expect all providers to understand different ethnic cultures, there is evidence-based information regarding cultural sensitivity that providers can refer to when communicating with clients from diverse cultures. In the Asian population, key cultural components include: collectivism, desire to conform, and deference to authorities (Coburn & Weissmuller, 2012). In developing the communication script for this project, these cultural characteristics provided guidance on how to deliver the news of an abnormal blood pressure to the client and how to initiate a treatment plan to achieve a target blood pressure that conforms to norms for age. It is also important to understand that because Asian clients are inclined to respect authorities (Coburn & Weissmuller, 2012), they may not readily share their personal opinions about the proposed treatment plan. Thus, the client’s verbal agreement to the treatment plan may not always translate into action and behavior change.

In order for the desired action to take place, interaction and communication between providers and patients must focus on motivating the client to take medications as directed and make lifestyle changes. Furthermore, motivating factors that the Asian populations embrace during the process of changing health behaviors are different from Western motivating factors. Examples of motivating factors often engaged in by Asian cultures are use of negative role models, not being different, and social harmony (Coburn & Weissmuller, 2012).

These were the factors that were considered in the provider-patient conversation toward the action, maintenance, and relapse phases. Even though some studies promote
patient-centered approaches for better adherence to medications and ultimately better health outcomes (Bensing, 1991; Kaplan et al., 1989), patients from an Asian culture are inclined to carry out an action if the decision is made for them by an authority figure (Coburn & Weismuller, 2012). Thus, the communication script developed for this project gives guidance that has a balance between respecting the client’s preferences and the provider’s evidence based instructions in HTN management.

**Knowles Adult Learning Theory**

To ensure adequacy of a developed communication script, the adult learning theory by Knowles was considered. The adult learning theory was developed based on the assumptions that adult learners are goal orientated and motivated, are ready to learn, and have self-concept and ever-increasing experience (Knowles, 1968). More importantly, Knowles offered practical guidance to providers on how to best work with adult learners. Therefore, the adoption of the adult learning theory was deemed appropriate for the adult Chinese American population targeted by this project.

**Self-concept.** One important aspect of self-concept pointed out by Knowles (1968) is the involvement of the adult in the process of identifying the need to learn. The provider’s role is to assess the patient’s learning needs. The emphasis on self-concept is not focused on the learning process but on how the adult perceives the learning process. The patient’s feedback becomes, then, an essential part of the conversation and effectiveness of the treatment plan. This active role of the adult patient is also well delineated in the stages of change model (Prochaska et al., 2013). However, based on the previously mentioned cultural characteristics of desire to conform and deference to authority in Asian cultures, the conversation with this specific population would be
provider-driven in the comprehension phase of the communication model where facts and evidence-based management for HTN are delivered. Healthcare providers however, must address other aspects of adult learning theory in order to enhance motivation for adherence to a treatment regimen.

**Life experience.** According to Knowles (1968), the richer life experiences of an adult (as compared with a child’s experiences) influence and enhance learning. Knowles espoused the view that the more adult learners participate, the more they will learn. In the process of participating, adult learners take the lead to decide what they want to learn and how they want to learn it. However, in Asian cultures, one respects authority such as teachers and thus may follow the instructions of the respected authority (Coburn & Weismuller, 2012). In working with this group of individuals, the provider needs to balance respect for authority and patient’s life experiences within a culture.

**Readiness.** For adults, the concept of readiness to learn is based on the potential change of a person’s social role in the environment in which he or she resides (Knowles, 1968). The social role for many in an Asian culture defines a person as well as his or her level of respect within an environment (Coburn & Weismuller, 2012). Most Asian cultures stem from a homogenous society (Coburn & Weismuller, 2012) and, in such a society, a person is expected to be a grandparent “having four generations under one roof,” a well-known Chinese proverb that depicts a prosperous family. If high blood pressure means shortening the life span of an adult, that adult may not be able to fulfill the social role of being a grandparent. In this case, the provider may consider emphasizing the social roles of the patient and asking the patient to give an example of an acquaintance who could not fulfill the social role of being a grandfather, that is, a
negative role model. The provider’s guidance to the patient is based on the knowledge that a negative role model in an Asian culture, compared with the concept of a positive role model in the Western culture, can serve as a motivating factor to make changes (Coburn & Weimuller, 2012).

**Goal orientation and motivation.** Readiness to learn leads to the next characteristic of adult learners. They are goal oriented, and the motivation to learn is driven by perceived needs. The purpose of learning is to obtain knowledge that is not in their reservoir of experiences, yet is needed to solve an immediate problem. To achieve the goal of the targeted blood pressure, one of the provider’s roles should then be to help the client identify strategies and resources that promote therapy adherence. Prochaska et al. (2013) also suggested a technique of bolstering the patient’s self-efficacy in the process of achieving a goal. However, one of the motivating factors in Asian cultures is self-effacement, namely humbleness (Coburn & Weismuller, 2012). Chinese populations tend to shy away from being applauded. Thus it would be culturally sensitive for providers not to praise the adult patient who has worked hard to achieve the targeted blood pressure. Rather, the provider’s comment should focus on the achievement of satisfactory blood pressure levels.

In summary, the adult learning theory was appropriate for this project as it aligns with the project’s scope and context (Bonnel & Smith, 2014). Knowles’ framework also provided the context for the project, which is the adult patient with a distinct cultural background and self-concept who needs to solve a health problem with guidance from health care providers. The theory suggested that the educator’s (provider’s) guidance given to the learner and the design of the learning and teaching material should be based
on the learner’s self-concept, experience, readiness to learn, and goal orientation within a cultural context.

**Purpose**

The purpose of DNP project was to develop a culturally sensitive and theoretically driven communication script to assist providers in educating Chinese American patients diagnosed with hypertension. With this purpose in mind, interview questions were reviewed and tested by a panel of experts. Some were native Chinese speakers who understand the Chinese written language and culture. Some worked with this patient population, and others are experts in the field of HTN management.
LITERATURE REVIEW

Search Strategies

Databases utilized for the project’s literature review were CINAHL, PubMeds, PsycINFO EBSCO, Academic Search Primier EBSCO databases, and Google Scholar. The following terms and combinations of terms were used to identify appropriate research articles relevant to this project: “hypertension,” “educational materials,” “Chinese,” “Chinese Americans,” “Asians,” “minorities,” “cultural sensitivity,” and “patient-provider communication.” Due to limited results found on the topics of communication tools and culturally sensitive educational materials for Chinese hypertensive patients, publishing years were not limited. The time of published studies used in this project ranged from 2001 to 2014.

In general, Academic Search Premier and PsycInfo EBSCO databases provided more research studies on learning theories and cultural sensitivity concepts, whereas CINAHL and PubMed databases produced more studies on hypertension management and education. Google Scholar search generated studies conducted in Taiwan, Hong Kong, and China on effective educational materials for hypertension management. However, limited information was identified on how to communicate with Chinese patients who had HTN during face-to-face interactive conversations. One article was of interest. Jolles et al. (2012) conducted a literature review on effective communication in care of patients with hypertension. The search did not come up with any additional studies that described a tool or tools that were used to facilitate a tailored communication process addressing the needs of patients with HTN (Jolles et al., 2012).
The purpose of this project was to develop a culturally sensitive communication script for a Chinese American population with hypertension. Therefore, this literature review addresses empirical information on how communication between providers and patients affects HTN management related to strategies for medication adherence, diet, and exercise regimens for Chinese patients. In addition, commonly recognized factors that influence HTN management such as health literacy level, social support, acculturation, and Chinese medicine were also explored for this review.

**Provider-Patient Communication**

Verbal communication is the most widely used form of communication chosen by providers such as nurse practitioners, physicians, and physician’s assistants. Evidence suggested that effective communication from providers helps patients achieve better physical, functional, and psychosocial health outcomes (Bensing, 1991; Kaplan et al., 1989). Kaplan et al. (1989) suggested that patients are able to more effectively manage their blood pressure when they received clear and respectful communication from their providers. In contrast to most of the studies that used patients’ outcomes as indicators of effective communication (Kaplan et al., 1989). Flickinger, Saha, Moore, and Beach’s 2013 study used experts’ observations and comments to measure how providers’ communication skills and knowledge influenced patients’ health outcomes. In addition to the verbal communication skills, this study further examined providers’ non-verbal communication patterns that influenced patients’ psychosocial health outcomes.

Non-verbal communication such as eye contact, head nodding, and facial expressivity communicates more than 50% of the message (Jolles et al., 2012). Because each patient interprets non-verbal communication differently, based on their cultural and
social backgrounds, verbal communication is important for clarification and confirmation of the message. According to Bensing (1991), providers’ communication skills and knowledge influence patients’ psychosocial health outcomes, which are often neglected in hypertensive patients.

**Patient-Driven Versus Provider-Driven Communication**

The previously identified studies advocate for the adoption of patient-centered approaches to achieve better adherence to medications and ultimately better health outcomes (Bensing 1991; Kaplan et al., 1989). Baldwin et al. (2008) explored patients’ perspectives of their health care. Their study, however, found that preferences for a patient-centered role were associated with poorer blood pressure control. This may be particularly applicable for the Chinese patient population as this group is inclined to carry out decisions made for them by providers instead of making their own decisions when given various choices (Coburn & Weissmuller, 2012). Another experimental study conducted by Theunissen, Ridder, Bensing, and Rutten (2002) suggested that by using structured communication scripts, providers were able to modify patients’ perceptions and understanding of their disease. However, not all participants took action to modify their health behaviors in spite of the fact that they understood the educational script. The results suggested that better understanding of the disease did not automatically lead to a change in health behaviors, and structured communication did not have the same effect on every patient.

According to Jolles et al. (2012), providers could influence conversations with patients through the use of structured communication by first providing information on the patient’s blood pressure and the target blood pressure. If patients were not receptive
to the information given by the providers, the dialogue should then focus on shared-decision making. These findings suggested that patients’ beliefs and perspectives about their health conditions were not always explicit. Thus, providers’ communication with the patient should be tailored based on the patients’ needs and perspectives of their health condition.

**Communication and Health Literacy**

Tailored communication should consider patients’ health literacy, which is the ability to read and understand health-related information (Jolles et al., 2012). Patients with less education were found to have poorer control of their blood pressure (Bosworth et al., 2007). Higher rates of low health literacy were identified in several studies investigating minorities such as Asians, Blacks, and Latinos (Kelly & Haidet, 2007; Lam, Cheng, & Chan, 2004). However, Kelly, and Haidet (2007) noted that health care providers overlooked this phenomenon and overestimated their patients’ literacy level in 36% of Asians, 54% of African Americans, and 11% of Caucasians patients. Lack of health literacy assessment and literacy overestimation may adversely affect the delivery of educational information, especially for minorities (Tang et al., 2007). Tailored educational materials and communication appropriate to a patient’s level of health literacy were hypothesized to produce positive effects on a patient’s medication adherence and health status. Improved blood pressure readings and blood sugar levels were examples of positive outcomes associated with strategies that took into effect of the patient’s level of health literacy (Bosworth et al., 2007).
Language Concordance

Another factor that affects medication adherence is language concordance, which happens when individuals such as providers and patients share the same language (Flickinger et al., 2013; Perez-Stable, Napoles-Springer, & Miramontes, 2014). When the provider speaks the same language and has a similar cultural background as the patient, the patient’s understanding of the disease and its management are optimized (Flickinger et al., 2013; Perez-Stable et al., 2014). However, it is not always realistic to expect providers to speak the same language as their patient. Furthermore, the patient’s understanding of a physical illness does not mean that the patient is motivated to make changes to control the disease (Theunissen et al., 2002). Theunissen et al. (2002) suggested that communication becomes important and effective when it is tailored to the patient’s beliefs and outlook about his or her health status. Only under these conditions, is a patient motivated to make a change.

Providers’ knowledge of, and respect for, different ethnic groups are key elements required for the tailoring of communication styles with the goal of meeting the needs of individuals from a specific culture (Theunissen et al., 2002). People from different ethnic backgrounds encounter special challenges in managing HTN. For example, Chinese male immigrants with increased acculturation compared with female immigrants had lower medication adherence (Li & Froelicher, 2005). This difference may indicate that acculturation can affect how the Chinese patients manage HTN. Evidence has shown that tailored and culturally sensitive communication between providers and patients results in positive health outcomes in the general population as well as in minority populations (Bosworth et al., 2007; Flickinger et al., 2013; Martin et al., 2010). However, little has
been identified about how a provider’s interactive communication style affects hypertension management in Chinese patients with HTN.

The lack of a communication tool motivated this author to embark on a project to develop a script template to guide health care providers addressing a hypertension management plan for Chinese patients, which would incorporate culturally sensitive strategies (Martin et al., 2010; Shen, Pang, Kwong, & Cheng, 2010; Taylor-Piliae, Haskell, & Froelicher, 2006). In addition, this author believed that motivating factors that took into account the health beliefs of Chinese patients (Coburn & Weismuller, 2012) should also be incorporated as a framework to guide a tailored script on HTN management for this population. Thus, the next section of the review of literature investigated cultural practices of Chinese Americans related to traditional Chinese medicine, diet, and exercise, which are essential factors in blood pressure management.

**Cultural Practices in Hypertension Management**

**Dietary Habits**

The JNC on HTN recommended the adoption of healthy lifestyle modifications in hypertension management (Chobanian et al., 2003). The Dietary Approaches to Stop Hypertension (DASH) management plan showed convincing evidence of its affect in decreasing blood pressure (Sacks et al., 2001). There is also evidence that suggests that reducing salt intake to 2000 mg per day for 1 month is associated with the possibility of discontinuing antihypertensive medications in some patients (Appel et al., 2001). Despite limited data available in the United States on salt intake in Chinese hypertensive patients, there is research supporting the need for Chinese patients with hypertension to adopt the
DASH diet due to the high salt content of traditional Chinese food (Woo, Leung, Lam, & Janus, 1998).

Studies conducted in China revealed that close to 80% of the Chinese population had a sodium intake level that was related to increases in blood pressure (Woo et al., 1998). Zhang et al. (2013) indicated that the average salt intake of 15,000 Chinese subjects was 9,000 mg per day in urban areas, and as high as 11,000 mg per day in rural areas of China. In comparison, the recommended salt intake by the American Heart Association (AHA; 2014) is 1500 mg per day. Therefore, the salt intake in China may be as high as 6 to 7 times the salt intake amount recommended in the United States. In spite of that, approximately one-third of study’s subjects in Zhang et al.’s study believed that they would have less physical strength with a low salt diet. Although salt comes from many dietary sources, most of the salt intake in the Chinese dietary culture results from homemade traditional Chinese food (Zhang et al., 2013), and the majority of overseas Chinese eat at least one traditional Chinese meal a day (Kwok, Mann, Wong, & Blum, 2009).

Other than high salt intake, most Chinese individuals consider their diet healthy when it is based on a Yin and Yang balanced consumption of food (Kwok et al., 2009; Shen et al., 2010). Yin food possesses cooling and calming property whereas Yang food has warming and stimulating effect (Shen et al., 2010). One study showed that increased Yin food in Yin deficient patients was effective in reducing blood pressure (Shen et al., 2010). Most identified Yin foods in the Shen et al study, such as celery and green leafy vegetables, are part of the recommended DASH food list (U.S. Department of Health and Human Services, 2006). A few additional popular Yin food items used in traditional
Chinese cooking are eggplant, wax gourd, black fungus (a type of mushroom), and chufa (Shen et al., 2010). When communicating with the patient population, providers should also be aware about the possibility of dietary acculturation in Chinese Americans. The change in dietary habit is passive and mostly due to convenience (Satia, Patterson, Taylor, Cheney, & Shiu-Thornton, 2000). It is suggested that dietary adherence should be very feasible for Chinese hypertensive patients, as Chinese believe that food has the healing properties as medication (Satia et al., 2000).

**Physical Activity**

In addition to a healthy diet, the JNC7 recommendations include daily aerobic exercise largely based on meta-analysis findings (Chobanian et al., 2003; Kelley & Kelley, 2000, 2008). Physical activity is known to be an effective nonpharmecological intervention to reduce cardiovascular risks (Kelley & Kelley, 2000, 2008). Studies revealed that Asians, as well as the general population with HTN, benefited from physical activity by achieving a decrease in their blood pressure (Chang, Fritschi, & Kim, 2012; Chiang & Sun, 2009).

Two studies investigated the effectiveness of different types of exercise regimens (Chang et al., 2012; Chiang & Sun, 2009). In a study of 128 Chinese participants with hypertension, the control group was given a culturally modified walking regimen, to which, cultural values of harmony and balance, respect of authority, and the involvement of family support were added (Chiang & Sun, 2009). The results showed that walking with cultural modification proved to be no more effective than a walking regimen without cultural modification (Chiang & Sun, 2009). However, practicing Tai Chi over 12 weeks showed decreased blood pressure among Chinese participants (Taylor-Piliae et al., 2006).
Findings from these studies support the inclusion of physical activity, with or without cultural adaptations, as part of an effective treatment plan for HTN management. Providers then have the option of recommending an exercise regimen based on the patient’s preference.

**Traditional Chinese Medicine**

Traditional Chinese medicine is widely used in China. One population-based study in Taiwan revealed that among 85,622 hypertensive patients; almost one half of them had used traditional Chinese medicine to control essential HTN (Tsai, Chang, Li, & Peng, 2014). In a clinical trial of 240 hypertensive patients conducted in China, the herbal medicine Jiangzhuoqinggan (JZQG) was shown to be effective in decreasing both systolic and diastolic blood pressure (Tong et al., 2013). Another clinical trial comparing the effectiveness of traditional Chinese medicine with Western medications in 1,300 hypertensive patients indicated that patients who were on Western medications achieved better blood pressure control than those who were on Chinese medicine (N. Wong, Ming, Hong-Yan, & Black, 1991). Research studies indicated that traditional Chinese medicines were effective in the management of mild to moderate HTN (Tong et al., 2013; Tsai et al., 2014; N. Wong et al., 1991). In addition, Chinese medicine was also found to augment the effect of hydrochlorothiazide (Qin et al., 2013), a first line of treatment for uncomplicated HTN (Chobanian et al., 2003).

**Summary**

The literature review has provided evidence that adopting culturally appropriate content incorporated into HTN management is effective for the Chinese American patient population. Provider-patient communications plays an important role in HTN treatment
adherence especially in minority groups. However, a validated communication tool has not been identified in HTN management (Jolles et al., 2012). The literature review indicates there is evidence that development of a culturally sensitive communication tool for hypertension management is needed and will benefit Chinese American patients with HTN.
METHODS

The literature review provided evidence that incorporating culturally appropriate strategies as part of a HTN management plan is effective for the Chinese American population. Provider-patient communication plays an important role in HTN treatment adherence especially in minority groups. However, this author did not find any validated communication tools (i.e., scripts) that could be used with Chinese Americans as part of a HTN management strategy. Jolles et al. (2012) testified to the lack of a communication tool and related research for providers to refer to in treating HTN.

To fulfill the project goal of developing a culturally sensitive script for health care providers, a descriptive qualitative methodological approach was used to gather cultural information for this project based on interviews with patients and healthcare providers. The intent of the interview discussions was to generate evidence of Chinese Americans’ preferences surrounding their communication with health care providers.

Sample

Qualitative sampling was purposive and involved identifying a setting that would potentially yield participants who would provide rich information for the topic investigated. One participant was recruited from one cardiology clinic in Southern California. The author also recruited another seven acquaintances as patient participants, who met the interview criteria. The inclusion criteria for patients were: (a) self-identified hypertension, (b) ability to communicate in either Chinese or English or both (Chinese as the native language), (c) a diagnosis of uncomplicated hypertension, (d) no significant cognitive impairment or history of significant psychiatric illness, and (d) older than 18 years of age. In addition, participants were prescribed at least one
antihypertensive medication. There were eight participants as shown in Table 1 who were interviewed until redundant data and discussions occurred.

Table 1

Demographics of the Patient Participants

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age (years)</th>
<th>Gender</th>
<th>Education</th>
<th>Years of having HTN diagnosed</th>
<th>Antihypertensive medications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>60</td>
<td>F</td>
<td>University</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>60</td>
<td>M</td>
<td>Graduate</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>52</td>
<td>F</td>
<td>College</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>52</td>
<td>F</td>
<td>Graduate</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>58</td>
<td>M</td>
<td>Graduate</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>63</td>
<td>F</td>
<td>College</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>63</td>
<td>M</td>
<td>College</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>84</td>
<td>F</td>
<td>High school</td>
<td>2</td>
<td>3 to 4</td>
</tr>
</tbody>
</table>

In addition to interviews with Chinese patients, there were also individual interviews conducted with health care providers. Provider participants consisted of a cardiologist, four family nurse practitioners, a nurse practitioner specializing in nephrology, and a family practice physician. One physician was from the same clinic where one patient participant was recruited; the other six provider participants were the author’s colleagues. In order to obtain culturally sensitive information from the providers, four of the providers were bilingual in English and Chinese, and one provider understood some Chinese. Two providers spoke only English; however, they provided care for Chinese Americans with HTN. Seven health care providers as shown in Table 2 participated by the time the healthcare provider data reached redundancy.
Table 2

Demographics of the Provider Participants

<table>
<thead>
<tr>
<th>Participant</th>
<th>Title</th>
<th>Years of practice</th>
<th>Population seen</th>
<th>Language speaking when seeing Chinese patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MD</td>
<td>10</td>
<td>Chinese American and general population</td>
<td>Chinese and English</td>
</tr>
<tr>
<td>2</td>
<td>NP</td>
<td>9</td>
<td>Chinese American and general population</td>
<td>Chinese and English</td>
</tr>
<tr>
<td>3</td>
<td>NP</td>
<td>10</td>
<td>Chinese American and general population including Latinos and Blacks</td>
<td>English</td>
</tr>
<tr>
<td>4</td>
<td>NP</td>
<td>10</td>
<td>Chinese American and general population</td>
<td>Chinese and English</td>
</tr>
<tr>
<td>5</td>
<td>NP</td>
<td>8</td>
<td>Chinese American and general population</td>
<td>Chinese and English</td>
</tr>
<tr>
<td>6</td>
<td>NP</td>
<td>7</td>
<td>Chinese American and general population including Latinos and Blacks</td>
<td>Chinese and English</td>
</tr>
<tr>
<td>7</td>
<td>MD</td>
<td>29</td>
<td>Chinese American and general population including Latinos and Blacks</td>
<td>English</td>
</tr>
</tbody>
</table>

Instruments

Semi-structured interview questions were used for individual interviews with Chinese American patients and health care providers. An open-ended interview question format was used, and the sequence of questions and discussions moved from general to specific topics. The development of the questions for both the patients and providers were based on identified Chinese cultural characteristics, a communication model, and management recommendations from JNC. The interview questions for patient participants were in English and Chinese. The panel that reviewed the questions was composed of a publisher who is bilingual in Chinese and English, two professors who are
content experts in qualitative research methods, and a nurse practitioner caring for Chinese American patients with HTN. The questions developed by the author underwent an expert review process in order to assure that the questions would generate data that would potentially capture the perspectives on what culturally sensitive communications were for Chinese Americans. The project author served as the interviewer and is fluent in both Chinese and English. Provider interview questions were written and delivered in English only and were reviewed by two professors who are experts on qualitative data and a nurse practitioner who served as an expert on HTN management.

**Patient Interview Questions**

1. If you were found to have high blood pressure, how would you like your doctor or nurse practitioner to tell you this?

   当你的医生发现你有高血压的时候, 你认为他是应该怎样跟你说诊断?

   (This is an open-ended question. This question relates to the content areas in the first phase of the communication model associated with delivering the news of the patient’s high blood pressure.)

2. When a Western provider told you that you had high blood pressure, what did he/she say to make you think that hypertension was an important health problem?

   当一个西医对你说你有高血压他说的那些话让你重视这个问题？

3. When your Western provider told you that you had high blood pressure, what were the barriers that prevented you from listening to him or her?

   当你的西医生你说你有高血压的时候, 不能引起你重视的最大阻碍是什么？
4. As a Chinese American, what are the difficulties that you face regarding taking antihypertensive medication?

对我们华人来说哪些因素影响你按时吃降压药？

(According to the communication model, medication adherence should be emphasized during phase three.)

5. What did your doctor say that made you think that it is important to take your medications regularly?

你的医生跟你讲的那些话让你认为按时吃降高血压的药是非常重要的？

(Literature indicates that Chinese patients usually follow instructions from providers. However, non-adherence is identified in many Chinese Americans. This question was included to help identify the reasons for medication therapy non-adherence.)

6. Can you recall what your doctor said to you that made you aware that it is important to reduce salt intake?

医生的那些话引起你认识到降盐的重要性？

7. Would you describe a person or an event that motivated you to control your hypertension?

你能不能描写一下那一个家人或者事件是你降血压的动力？
(One of the motivating factors is a negative role model [Coburn & Weismuller, 2012]. This question was added to help identify if the Chinese patient uses a negative role model as a motivating factor.)

8. Would you describe what you and your friends say when you talk about hypertension?

当你和朋友谈论高血压时都谈论哪些问题？

(This question is based on the Asian cultural characteristics of collectivism and desire to conform [Coburn & Weismuller, 2012]).

9. What are the factors that helped you keep up with follow-up appointments? What are the factors that prevented you from keeping up with the appointments?

让你守约就诊或不守约是哪些原因？

(This is the communication content associated with the third phase of the communication model. JNC 7 recommends follow-up visits.)

10. How would you feel if your provider asked you about your opinions of how you would like to have your blood pressure managed?

当你的医生问道你是否有计划控制你的血压你是怎么想的？

(According to Coburn & Weismuller [2012], Asians are not motivated to make change based on their own decision; they are more likely to change if the decision is made for them by a respected authority figure.)

11. If your provider recommends foods that are not familiar to you, what would you do?
如果你医生给你建议的食物是你不喜欢的事物你的食物，那你会怎么办？

12. What kind of exercise did your doctor recommended you to do to help to control high blood pressure?

你的医生建议你做那些运动？

Provider Interview Questions

1. When you found that your Chinese patient had hypertension, how did you deliver this news to the patient?

2. Do you ask for your patient’s opinions about how they would like to manage their blood pressure regarding medication treatment and life style modification plans? Would you please share the reasons why?

3. For Chinese patients, what are the barriers you have experienced regarding their taking antihypertensive medication?

4. What do you usually say about salt reduction to your Chinese patients that impacted their salt intake behaviors?

5. What motivating factors have you used to motivate Chinese patients in managing their blood pressure?

Procedures

In this project, individual interviews were used as the data collecting method. In order to meet the requirements of the Institutional Review Board (IRB) for the Protection of Human Subjects and ensure objectivity and quality of the data collected, the following procedures and sequence were observed for interviews with patients as well as with the providers.
Procedures for Patient Interviews

1. The project chair and co-chair reviewed the project proposal and agreed with the methodology of the proposal.

2. The main investigator contacted the potential coordinator from the clinic where the participants were recruited via emails, phone calls, and personal conversations. The clinic coordinator reviewed the project synopsis and agreed to participate and assisted with the investigation.

3. An official letter of agreement (Appendix A) to participate in the project was obtained from the clinic to satisfy the requirements of the Institutional Review Board (IRB) for the protection of Human Subjects at California State University Long Beach (CSULB).

4. The application was submitted to the IRB at California State University Long Beach (CSULB) for approval upon completion of IRB training courses.

5. A flier (Appendix B) with a concise description of the interview process was sent to the potential participants so that they had time to decide whether to participate in the interview. The interested participants called or emailed the author.

6. Consent forms were written and printed in English and Chinese. There were two signatures required for both agreeing to be interviewed as well as to be recorded.

7. The interviews took place in a conference room of the clinic and other locations chosen by the participants. The locations included coffee shops, restaurants, and participants’ homes.

8. At the beginning of the interview, the patient participant received verbal explanation (Appendix C) about the study and procedures for the interview using a pre-
written script. Each participant signed the consent form. Participants also received the information that all data would be kept confidential, and they could withdraw from the interview at any time even though they had signed the informed consent.

9. All interviews were audiotaped. At the end of the interview, the participant received a verbal expression of appreciation for their time and willingness to share their experience managing hypertension using a pre-written script. Some participants accepted a major store/Target $5.00 gift card, while other participants graciously declined the gift card.

10. Verbatim transcription was done at the earliest time possible after the interview. Interviews in Chinese were translated into English by the project’s author. The audiotaped data and hard copies of transcription were secured in a locked drawer. Data stored in the computer had a password set to ensure restricted access.

**Procedures for Provider Interviews**

The procedures for the individual provider interview were the same as those for the patient interviews, except that provider participants did not need to have a letter of agreement to participate according to CSULB IRB instructions, as they participated as individuals and not in their capacity as employees of a particular institution. Provider participants also signed the informed consent agreeing to be interviewed and recorded after they received the explanation of the interview (Appendix D). The interviews were conducted in the locations requested by the participants. They were the provider’s office, coffee shops, restaurants, university campus, and the provider’s home.
DATA ANALYSIS

Interview data were organized into codes using value coding which is a useful strategy to analyze qualitative research data. This type of coding is especially appropriate when exploring and seeking to understand cultural beliefs and practices and in analyzing participants’ interpersonal and intrapersonal experience and observations (Saldaña, 2009). Value coding was used to analyze the values, beliefs, and attitudes exhibited by the participants in treating and dealing with hypertension. Each interview was coded with phrases and paraphrases generated by the project’s author; no other outside experts reviewed the responses. Each phrase and paraphrase were given a number that matched the exemplar in the interview data. The codes from each interview were color-coded. Hence redundancy of the codes from different participants could be readily recognized, and the exemplars from all codes could be easily retrieved.

Results

The codes yielded 35 categories from the provider interviews, and twenty-eight categories from the patient interviews. The categories contained phrases or paraphrases from the exemplars of participants’ attitudes, beliefs, and values in coping with hypertension management. Most of the categories from provider interviews coincided with the categories identified in patient interviews. Upon reviewing the categories of the data, ten themes were drawn from these categories.

Mistrust of Medical Providers and Western Medication

The theme of mistrusting providers and Western medications was repeatedly voiced in both patients’ and providers’ interviews. This mistrust stemmed from four sources. The first area of mistrust was associated with negative experiences participants
or others had that were linked with their involvement with the medical system in their native countries and regions. Second, the preconceived ideas about how to treat chronic illnesses also contributed to their doubts about the value of medical treatment. Third, the cultural practice of conforming to others played a role in questioning treatments prescribed that were different from the treatments given to their families and friends who have HTN. The fourth area involved a strong belief that Western medication has both identified and unidentified side effects.

**Past Negative Experiences as a Role in Mistrust**

The interview responses revealed that the eight Chinese American patients did not trust the American medical system, nor did they trust the providers or the treatment prescribed. Both providers and patients repeatedly mentioned the phenomena of mistrust. Five participants talked about the fact that people from mainland China, particularly, displayed this attitude of mistrust because of the “credibility crisis” that they have experienced or witnessed in China. “Credibility crisis” was described as the patient’s mistrust of medical professionals in mainland China. Three providers mentioned that patients thought health care providers were trying to make money by prescribing unnecessary medication and diagnostic lab tests, or suggesting a medical procedure that was unwarranted. One provider vividly recalled an encounter with a patient who “just wanted me to give her what she wanted, and she thought that I was trying to make money from her by ordering an EKG.” At least two patient participants displayed this mistrust of providers by saying “I don’t feel any different after taking this medication,” and “it is ridiculous to treat something you don’t feel.”
Health Beliefs and Values from Proverbs and Sayings

In addition to the respondents’ negative experiences with the health care system that lead to their mistrust of the diagnostic and treatment process, a second area of mistrust or doubting the treatment regimen relates to the beliefs in proverbs. Proverbs and sayings were quoted frequently during the interviews. The participants believed that they played an important role in attitudes and beliefs of Chinese people related to health and disease treatment. For example, “Keeping your birth energy” was very important. It was believed that medications or procedures would disturb this energy. Another commonly heard saying expressed during interviews was “seven-tenths of any medication are poisonous,” indicating that medications would do more harm than good.

Other proverbs and sayings such as “diseases enter from the mouth,” and “life depends on moving” were also quoted. These two sayings had a positive impact with respect to healthy diet and exercise. However, at the same time, these proverbs exerted a negative effect related to not following providers’ advice about pharmacological management. Of note, all participants had tried some natural remedies or had been non-adherent before they accepted the option of taking Western medications.

One provider participant stated, “Chinese people in general have their own beliefs and ideas about their health” as “the Chinese culture is a culture of medicine.” “Chinese are very aware of their health conditions.” The participant continued to explain that health was a common theme of conversations engaged in at gatherings, where friends and families exchange in story telling particularly related to accounts of what had benefited their health. Two patient participants reported, “Chinese people do not listen to authorities,” “they would rather listen to their friends, and some type of sayings.”
Conforming Characteristics of the Chinese Culture

At least five participants witnessed the phenomenon described by them as “following the wind.” Three providers and six patient participants remarked that Chinese people are not very private about their illnesses and treatments. Confiding and sharing with one another about their illness and treatment are common practices in the Chinese culture. Stories about some magical treatment or the beneficial effect of certain foods spread very fast. One participant shared a phenomenon involving the magical effect of Mung beans in China. The rumor that Mung beans had the power of healing many diseases spread so wide and fast that the demand for this product, a commonly consumed food, increased, resulting in a nationwide shortage in the supply of Mung beans. Another participant mentioned that her aunt who was diagnosed with hypertension started drinking celery water every day to control her hypertension, and it worked. The interview responses showed that Chinese people readily conformed to practices espoused by friends and family. “They listen to their friends more than health care providers.” Furthermore, based on interviews comments, Chinese people prefer natural remedies to Western medications, which were often referred as “pills.”

Beliefs of Western Medications Versus Chinese Medicine

Almost all provider and patient participants talked about beliefs that Chinese have towards Western medications or “pills.” Chinese participants referred to Western medication as “xinyao” meaning Western pills. However, when they spoke about Chinese medication, they would say “zhongyi” meaning Chinese medicine. Zhongyi meant practicing medicine which may entail taking Chinese concoctions. Chinese acupuncture, for example, is another form of the practice of Chinese medicine. Four
participants stated that Western medication had damaging effects. One patient participant believed that other than the known side effects, there were many side effects that were beyond anyone’s knowledge. All patient participants believed that Western medication was effective to a certain degree, but these drug were mostly to be used for acute illnesses and should not be taken for a prolonged period of time. Hypertension is a chronic illness and the idea of having to take medications for the rest of someone’s life was not considered a “lucky” thing.

Other than the “poisonous” effect of medications to treat hypertension, the dosage prescribed was usually believed to be too high. Five providers stated that cutting medications in half or taking a drug every other day were common practices of Chinese patients. One provider stated that even if “they accepted the adjusted dose (higher dose), they still took the lower dosage of the medication.” One patient took her Western medications only when she did not feel well. When she started feeling better, she would take Chinese medicine only. She was very proud of the fact “I manage my own care.” She also believed that Western medication had damaging effects on the liver. In contrast, she thought Chinese concoctions or remedies were “gentle.”

This theme of mistrusting the health care system and doubting the effectiveness of Western medications appeared throughout all interviews except one. Four repeated subthemes supported the theme of mistrust and doubt. These subthemes included negative experiences interacting with the health care system in their native country, preconceived beliefs of health maintenance and illness treatment, conforming characteristics of the Chinese culture, and the belief related to damaging and poisonous effects of Western medications.
Provider and Patient Relationship Affecting Adherence

Even though this author found evidence that Chinese patients did not always trust the health care system, the patient participants observed that a “good relationship fostered” trust and “compelled them (patients) to be compliant.” Both patients and providers agreed that a trusting relationship established between providers and patients helped patient adherence to the medication regimen. However, the establishment of the relationship took time, with participants saying that it took from 1 to 20 years for them to be convinced to treat their high blood pressure with Western medications.

During the interviews, the Chinese patients discussed the fact that they believed prescription dosage of their medication was too high. However, one patient participant accepted an increased medication dosage from 0.25 mg to 0.5 mg. She recalled that after she was prescribed a higher dosage, her doctor gave her the choice of staying on the lower dose or taking the higher dose. She remarked that she decided to accept her doctor’s suggestion and made the adjustment because her doctor was “very conscientious and has a lot of experience.” Another participant thought his doctor was very good because his doctor understood Chinese medicine. His doctor was also “very objective” and did not consider “economic benefit for himself, and he just gave you advice.” This participant also pointed out that “he (the doctor) does not remember every single detail as he has so many patients,” but the participant thought he was very responsible. The participant felt very comfortable with his doctor and, for the past 15 years, he had not missed any follow-up appointments.

One provider participant shared her experience in gaining patients’ trust. She would allow her patients to try natural remedies and Chinese medicine. She would say to
the patient “I will be happy for you if those remedies work for you. If the remedies did not work, then we can try to use the medication I gave you.” She would wait for the patient to come back to her with the high blood pressure not being controlled after the patient had tried all kind of remedies he/she wanted to take. She stated, “It takes time. Once they know that you are trying to do good for them, then they would listen to you.” Another provider said that she would keep on “nagging” and hope one day the patient would listen to her.

One patient participant commented about her perspectives of how Chinese people follow the rules. She noted “Chinese are kind of funny when it comes to the rules.” “They would only play by the rules and follow through a deal with people who have done them good.” Another provider observed that if the providers “explained things a little deeper why they (patients) should do what you (provider) are recommending,” “it fosters a good relationship.” This good relationship helped compel patient adhere with the management plan in treating hypertension. One participant had remained with his health provider for 15 years and developed a trusting relationship with his doctor. At the end of the interview, he shared some advice. He remarked that having a good relationship with a trusted provider could have helped prevent complications of hypertension. He contributed his heart bypass surgery to not taking actions earlier to manage his blood pressure because he did not have a “trustworthy and reliable” provider. He advised that patients should listen to their providers, as they are experts. People should not “pick up anything heard on the road” which is a Chinese proverb that describes people who go to all resources without using good judgment. He advised people not to “go to all resources possible when sick” but listen to the expert.
The Important Role of Food in Chinese Culture

Interview data from patient and provider participants revealed three important roles that food plays in the Chinese culture: health, socialization, and pleasure. One provider explained the functionality of food in Chinese culture. “Food is medicine in Chinese culture.” She further described food as a dictating topic of most conversations. “We eat for health on daily basis” and “we only eat for pleasure when we have special occasions.” The ingredients for a dish were picked because of their health benefits. She illustrated her comments by examples. Chinese people eat carrots to have good vision. Celery is believed to control high blood pressure, and garlic is good for cholesterol lowering.

With the awareness and beliefs of “food is medicine,” one provider remarked, “most people would think Chinese culture is a culture of food.” For most of the participants, eating Chinese food was a must. One participant claimed, without any hesitation, even though he had been in the United States for so long and considered himself to be Americanized, he had to eat Chinese food with the traditional flavors he preferred. Another participant agreed, “Food has to be tasty and flavorful.” One provider said, “How can you live without garlic chicken?” She also shared that her sister was on dialysis and had to follow a low sodium diet, which became a challenging issue for the family get-togethers as “Chinese people especially enjoy food.”

Both providers and patients identified the high salt content in Chinese food as a problem. All patient participants were aware that high salt intake negatively affected blood pressure. All providers stated they had given instruction for reducing salt in their patients’ diet, but none of the participants mentioned any concrete action for the
reduction of salt intake. “Food cannot be without flavor” seemed to be the overall attitude of patient participants as their response to the need for salt reduction. One participant passed along the advice of “don’t eat in restaurants” to her family with a laugh, which expressed the unrealistic expectation of her family not dining out. One provider told his patients, using a mock demonstration, to not shake salt from the saltshaker into food being cooked, but instead put salt into one’s palm and pinch the particles onto food. When asked if the patient followed his technique, he did not know and had no time to check if the patient had followed his advice.

**Family as a Motivator of Good Health**

With the identified challenges in the process of managing high blood pressure, families were viewed as providing positive motivation for patients. Staying well and healthy for the sake of the family was another theme that emerged from both provider and patient interviews. Chinese people really care about their family. Not to burden family with one disability and being able to provide for the family were the motivations for patients to control their high blood pressure. One provider used family as a motivator when she tried to convince the patient to control her hypertension. She would frankly point out that if something were to happen to the patient, nobody would take care of his or her offspring. To be able to provide for the next generation was an effective motivating factor for change. What drove another patient to treat his blood pressure was that his son was still young and had yet to go to college. He had to work hard to establish his business to support his family and his son’s education and future. One patient was worried sick because she was not able to help her son with his education in the United States.
Living a healthy life was another form of taking care of the next generation and being responsible to one’s offspring. Being healthy meant that the younger generation would not be burdened by the responsibility of taking care of a sick parent or grandparent. One participant said, “I did not want to burden my son. One provider would give positive reinforcement by saying “You did a good job and you will live long!” Longevity is a lucky wish in Chinese culture.

**Fear Factor**

Other than using family as a motivator, using negative consequences resulting from high blood pressure was a technique used by all providers interviewed for this project. The providers described this kind of convincing technique as “threatening.” One provider who used to be a dialysis nurse gave her patients examples of people who ended up having renal dialysis because they did not control their high blood pressure. “I call it fear factor,” as she described it. Another provider said that she had to scare the patient by exaggerating the consequences. One patient was very “scared” when she was told that she could have a bleed in her brain if she fell because her blood pressure was too high. Another patient was told, “your heart is deprived of blood.” Those “buzz words” may not always be true, but they worked as one provider exclaimed.

Five providers mentioned that Chinese people possessed their own ideas about their health and did not listen to their providers. Very often when they realized that patients did not follow the instructions for life modifications or medication regimens, they had to threaten the patients with negative and tragic events resulting from having high blood pressure. Those events were “family member died from a heart attack,” and reminding the patient of “your father had a stroke.”
Stress and Burden Affecting Blood Pressure

The theme that stress and burdens of livelihood was a source of increased blood pressure emerged from patient participants. There were no interview questions regarding the causes of hypertension; however, patients expressed their belief that stress caused their elevated blood pressure. Five participants commented on how stress had increased their blood pressure. The stress was mostly related to work and livelihood. One participant said that the burden of his business and responsibility of his son’s future education contributed to his high blood pressure. Another participant also mentioned that her job was the cause of her high blood pressure, “Chinese are hard working. They like to compete and compare. They want to be better at work.” The third participant blamed herself for the stress, “I think the stress is the problem” and “I know it is my fault.” One participant jokingly used a saying that having a family is a burden even though it was his responsibility to take care of them.

Because of the belief that stress from making a living and the responsibility of supporting the family is the main cause for having hypertension, the typical response by patients was that to control their high blood pressure they needed to control their stress. One participant and her good friend frequently discussed difficult situations that had happened at work and how they handled these problems. This participant also occasionally went to Chinese monks to seek advice and peace. She chose yoga as her form of exercise and relaxation. After all non-pharmaceutical measures failed to control the stress that she believed to be the cause her high blood pressure, she started using medications to manage her blood pressure. Later on, she also admitted that her “weight was a problem too.”
Another participant thought having a good mood was the key to her health. She recalled that her doctor complemented her positive mood saying it saved her from death once, when she was hospitalized. “Having a good attitude and a good mood” was one of her four sayings she would refer to if she became ill. “When my mood is not good, my blood pressure goes up.” When she came to America to visit her children, she claimed that “my mood became much better and my condition became good. Then I stopped taking medications.”

**The Culturally Sensitive Communication Script**

Based on the above data, a culturally sensitive communication script (Appendix E) was developed for providers to refer to when interacting with the Chinese American hypertensive patients. The theoretical framework that supported the script consists of Knowles’ Adult Learning Theory, Prochaska and DiClemente’s Stages of Change Model, Jolles et al.’s Communication Model for HTN management, Miller’s Motivational Interviewing, and the identified motivating factors in Asian cultures.

The communication script has three columns. Column one identified the three communication phases: the comprehension phase, the action phase, and the maintenance phase. Column two presents suggested scripts for each communication phase. Column three offers the rationale for the script supported by the interview data and theories. The provider may choose one topic or a combination of topics to discuss with the patient at each visit.
DISCUSSION AND DEVELOPMENT OF THE COMMUNICATION SCRIPT

Comprehension Phase

The first step of high blood pressure management for patients is to comprehend what high blood pressure means. In this phase, Jolles et al. (2012) suggested that the patient should be informed of the numbers that indicate high blood pressure, the target numbers of blood pressure control, and the treatment plan. All patient participants had experienced this stage of receiving the diagnosis and information of high blood pressure from their health care providers. All provider participants had experiences delivering the news of high blood pressure to their patients. Seven patient participants had positive interactions with their providers when learning about their diagnosis and the consequences of uncontrolled high blood pressure.

One patient, however, felt that the diagnosis was not well explained as she had Health Maintenance Organization (HMO) insurance. Her provider stated that he did not “have time to explain more.” Two participants wished they had been given a better explanation of the nature of HTN and the consequences of having this chronic illness. Even though it is too early to know in the first phase of communication how effectively patients will manage their high blood pressure based on the provider’s communication techniques, studies demonstrated that clear and respectful communication from providers helps patients achieve better physical, functional, and psychosocial health outcomes (Bensing, 1991; Kaplan et al., 1989). The patient with HMO insurance felt that she did not receive respectful communication from her provider. This patient struggled with her hypertension management and said, “I did forget to take the medication sometimes, and there was a time, I stopped taking it.”
Jolles et al. (2012) suggested that the conversation in this phase could be provider-driven as most of the information given to patients involves numbers and treatments as shown in the comprehension phase in Appendix E. In this phase of communication, the provider-driven communication may have some effect especially with the Chinese patient population, as this group is believed to respect authorities and is inclined to carry out decisions made for them by providers (Coburn & Weissmuller, 2012). The belief that the Chinese as a whole respect authorities may seem different from the identified theme of mistrust of the health care system and doubt about Western medication. However, the mistrust that emerged from the interview responses of the participants in this project was mainly due to the negative experience of a “credibility crisis” in Mainland China. All participants were eventually convinced to take Western medication regardless of their past experiences.

Other than delivering the readings of abnormal and normal blood pressure, four providers mentioned that they often used the “threatening” technique to emphasize the importance of hypertension control. Stroke, kidney failure, and heart attack seemed to produce the “fear factor.” The consequences of uncontrolled blood pressure are undisputed scientific information; hence the JNC established guidelines for hypertension management (Chobanian et al., 2003; James et al., 2014). Hearing those negative consequences were repeated responses that emerged from the interviews with patients. One participant said that the first time she was diagnosed with high blood pressure her provider told her that she could have a stroke. She felt “very nervous.” Another patient said that she was scared when she was told she could have a hemorrhagic stroke.
One of the motivating factors in Asian cultures is the negative role model (Coburn & Weismuller, 2012). Different from the Western culture, it is believed that the negative role model should be a constant reminder of what not to do. Four providers used “threatening techniques” by giving negative examples. One provider used negative role models of patients who were on dialysis due to uncontrolled blood pressure. Another provider mentioned that it was hard to convince patients without threatening them. One provider emphasized negative consequences to the patient’s family by saying “your family will be disrupted because you had stroke or a heart attack.”

In the Chinese culture, taking care of the sick family member is an obligation of the other family members. A qualitative study on Chinese patients with colostomy suggested that having the ability to take care of ones’ own sickness and disability was also a virtue of respect by not burdening their family with this task (Tao, Songwathana, Isaramalai, & Wang, 2014). The data from this project supports Tao et al.’s findings related to family influence. The majority of provider participants in the project noticed that elderly Chinese patients were always accompanied by family members. However, at the same time, elderly Chinese patient do not want to burden the family: One participant admitted that one of the motivators to treat his high blood pressure was him not wanting to burden his son.

Based on the evidence in the interview data that coincided with the finding of the author’s literature review and what is suggested in various theoretical models, the first part of the communication content in the comprehension phrase would be to deliver the facts of the diagnosis of hypertension, target blood pressure, consequences of uncontrolled blood pressure, and treatments. For example, in asking a patient participant
how she would like to be told about this diagnosis of high blood pressure, she replied that she liked to be told “whatever it is.” One of the provider participants agreed, “tell them exactly what it is.”

All participants accepted the diagnosis the first time when the news of hypertension was delivered to them. As one participant put it, “I am pretty informed, and I understand what it (hypertension) is.” Another participant said, “it is not a problem of understanding, but it is not always easy to treat it.” One participant, who did not start HTN treatment until after 20 years of the diagnosis was given to him, claimed that he would not have changed his initial decision to not take HTN medications knowing what he did today. Six of the eight participants delayed or failed to adhere to the treatment with medication. These behaviors are congruent with Prochaska and DiClemente’s pre-contemplation stage. One provider pointed out in a frustrated manner that some patients denied that they had hypertension when “their (systolic) blood pressure was 180 and 200!”

In the pre-contemplation stage after the news of hypertension is delivered, the patient may not want to consider changes in their lifestyle (e.g., a diet low in salt or the need to take medication) or patients may not accept suggestions from the providers. Some of the techniques employed in this situation would be to validate the lack of readiness from the patient, clarify that the decision about making changes would be made by the patients themselves, and encourage patients to reevaluate their current health-related behaviors (Prochaska et al., 2013). Jolle et al. (2012) also suggested that communication should become patient driven if the patient did not comprehend or agree with the treatment plan.
Another theme that emerged from participant responses emphasized the fact that Chinese patients are very agreeable. However, being agreeable did not mean that patients understood the provider nor would patients do what they had agreed to do. One provider repeatedly mentioned that communication with Chinese patients could be very frustrating. “They would nod no matter what you say” but they would not do what you told them to do. Another provider participant stated, “Some Chinese patients would not listen to you,” and “They have their own ideas.” Even though it was believed that people in the Asian cultures trusted authorities (Coburn & Weismuller, 2012), one of the themes from the interview data was that the Chinese patient population sometimes did not trust authorities or experts contrary to the findings of the Coburn and Weismuller (2012) study. However, when examining the interview data, this mistrust usually was manifested in the early stage of the hypertension diagnosis and at the beginning stage of the patient-provider relationship.

**Action Phase**

In the action phase, according to the Jolles et al.’s (2012) communication model, the patient would take action to manage the high blood pressure. Filling the prescriptions, taking prescribed medications, and implementing life style changes would be the action taken. Seven participants at the time of interview were taking medication on a daily basis. One participant was “managing her own care” by taking the medications when she did not feel good and stopping the medication when she felt good.

Six provider participants had frustrating experiences with their patients not being adherent in taking medications or life style changes. However, one provider was very pleased with his Chinese patient population as insurance companies seldom reported that
the patients did not fill their medication prescriptions although filling a prescription does not insure taking the medication. The records from insurance companies, pharmacies, lab results, and chart reviews could provide some information related to patients’ adherence to treatment status; however, verbal communication in person was the preferred method of both general and Chinese patient populations (C. Wong et al., 2012). One participant was disheartened that her provider did not have time to talk with her, which she rationalized was because she had HMO insurance. The communication during this phase should be patient-centered and tailored to the patient’s health literacy level, cultural background, gender, and age (Jolles et al., 2012).

Patient-centered care is beyond diagnosing diseases and prescribing treatments. It requires providers to focus on the patient’s sociocultural and psychological issues and socioeconomic status (Lambert et al., 1997). Patient-centered care aligns well with Knowles’s adult learning theory. It charges providers to consider the adults’ self-concept and life experience in facilitating adults learning or dealing with a new experience (Knowles, 1968). Self-concept is focused on how the adult perceives the learning process rather than actual learning (Knowles, 1968). According to Knowles’ theory, adult patients assume an active role and their feedback becomes part of the treatment plan.

The interview data showed themes with respect to challenges in managing HTN from the perspectives of both patients and providers. The challenges identified from literature and interview data were not being proficient in English, preference of Chinese medicine or natural remedies over Western medication, deeply rooted health beliefs and values, and mistrust of the health care system and providers. Those challenges are some
of the resources that providers could keep in mind while communicating with the Chinese patient population. The scripts in the Action phase in Appendix E are generally prompting questions for the providers to assess their patients in respect of their understanding ability, health beliefs and values, their perspective of health care providers and HTN treatment.

**Language and Cultural Concordance**

Speaking Chinese to patients whose first language is Chinese has an advantage in educating patients. One patient thought highly of his provider because he spoke Chinese and knew about Chinese medicine. This patient thought that his provider explained things clearly and logically. That was one of the reasons that he listened to his provider’s advice. Knowing the cultural background of patients gives providers greater insight and tools when working with them. For example, some providers had the insights about using family as a motivator to increase adherence to medications. The technique of using negative role models and negative complications of high blood pressure is another example.

Sharing the same language between providers and patients is often referred to as language concordance. This finding that evolved from the interview data was supported by the literature. When providers speak the same language as patients do, chronic illness management and patients’ understanding of the disease and its consequences were optimized (Flickinger et al., 2013; Perez-Stable et al., 2014). In addition to the language concordance, having similar cultural backgrounds gives providers an advantage of understand the patients’ perspectives as to their beliefs and values associated with disease management (Flickinger et al., 2013; Perez-Stable et al., 2014).
Language and cultural background concordance often play a vital role in health promotion and disease management. However, speaking the same language does not always ensure a mutual decision making process or guarantee an optimal disease management outcome (Theunissen et al., 2002). One provider participant whose native language was Chinese and who came from this cultural background humbly admitted that she did not ask patients’ opinions about how they would like to proceed with the treatment plan. She claimed that her training was to give education to patients instead of asking their opinions. Even though JNC has the guidelines of how to manage HTN throughout pharmacological treatment, diet, and physical activity, those guidelines do not always provide guidance of how to provide the psychosocial support especially for the minority patients. In a study conducted by Kronish, Leventhal, and Horowitz (2012), patients who were black and Latino elucidated that the course of hypertension was intermittent and the unconventional causes of hypertension were stress, racism, and poverty. Similarly, the causes of hypertension in this project were also divergent from the medical model. Three participants listed the obligations of raising a family and meeting the expectations of the cultural norm that Chinese were hard-working and competitive at work as key factors in developing HTN. They described HTN as a self-inflicted condition.

Additionally, Theunissen et al. (2002) suggested that speaking to a patient in their native language and the fact that a patient had a clear understanding of the disease process did not always guarantee changes in health behaviors. However, providers’ knowledge of and respect for different minority patient population played a significant role in helping a patient adhere to treatment regardless of the language or cultural
concordance (Theunissen et al., 2002). Two provider participants who did not speak the patients’ language shared successful stories of helping patients adhere to lifestyle modification and medications. One participant learned that being frugal was a virtue in Chinese culture. He prescribed generic medications so the drugs were more economical for the patient to purchase. Having witnessed a common practice that his Chinese patients often cut the medication in half, he also prescribed scored medication that was doubled the dose needed. When the patient then cut the pill in half, the correct amount was taken. Language and cultural concordance play an advantageous role in patient-provider relationships. However the respect for and the understanding of the patient were the key to ultimate health outcomes.

**Mistrust of the Medical Providers and Western Medications**

Providers’ respect and manner during the communication process greatly affected patients’ physical, psychosocial, and emotional health outcomes (Bensing, 1991; Kaplan et al., 1989). Patient-centered care focuses on understanding patients’ beliefs and attitudes as well as patients’ physiological wellbeing (Lambert et al., 1997). Studies typically revealed that often health care providers are frustrated and baffled why patients deny their diagnosed health conditions and delay or refuse well-established and readily available treatments (Bauman, 2000). Research supports that low socioeconomic status, inadequate language skills, and lack of family supports, especially in minority populations, are the factors that correlate with patient denial and non-adherence (Bosworth et al., 2007; Flickinger et al., 2013; Li & Froelicher, 2005; Martin et al., 2010).

Knowles’ adult learning theories delineated that adult learners’ self-concept and life experiences significantly influence the process of learning a new behavior or concept
(Knowles, 1968). Certain themes that emerged from the interviews conducted as part of this project were related to factors that contributed to participants’ lack of action or delays in managing their HTN. One theme was mistrust of the health care system or providers. Three providers commented on how their Chinese patients sometimes believed that they were manipulated because the providers were trying to make money by prescribing a medication or ordering diagnostic tests. This kind of attitude arose from prior negative experiences especially concerning the health care system in Mainland China. One reason given by a participant to illustrate his feelings of mistrust because his “medication did not make any difference,” was that it is “ridiculous to treat something that is not there.”

Bauman (2000) discussed the challenges providers face when explaining a chronic disease that has a treatment that does not align with a patient’s belief system. Those challenges emerged from the patient participants’ experiences. Six patient participants had engaged in different natural remedies before they started taking Western medications. One patient went to the temple to seek advice to relieve her anxiety, which she believed to be the cause of her HTN; another patient believed in his own body’s ability to compensate for the high blood pressure. When a patient’s beliefs and attitudes about disease management are incongruent with the evidence-based guidelines, a delay in treatment or mistreatment occurred. At the time of the interview, one patient was still medicating herself with Chinese medicine. She adjusted dosage and frequency of the Chinese medicine based on how she felt. Six patients believed in Chinese medicine although they did not take the Chinese medicine due to varieties of reasons. One patient
participant complained about the time-consuming preparation of the Chinese medicine concoction. She was just too busy to “cook” it.

Traditional Chinese herbal medicines such as JZQG have been shown to be effective in hypertension control in patients with metabolic syndrome and in treating cardiovascular illnesses (Kang & Shin, 2011; Y. Lee et al., 2011; Tong et al., 2013). However, a recent study on the use of guidelines for traditional Chinese medicine showed that development of guidelines and the use of Chinese medicine in treating hypertension have not been clear or consistently used among practitioners (Shi, Han, Yu, Wang, & Lu, 2013). The researchers suggested further investigation of the utilization of these guidelines and better training of practitioners who incorporate Chinese traditional medicine in treating HTN. When communicating with patients, providers should keep in mind that even though Chinese traditional medicine has shown effectiveness in HTN treatment, there are no clear guidelines about the use of traditional Chinese medicine to control hypertension. The providers are responsible for pointing out the treatment result by sharing with patient the numbers indicating the blood pressure levels.

**Beliefs of Proverbs and Sayings and Sensational Stories**

Another source of the beliefs and attitudes of the Chinese patient population was rooted in proverbs, sayings, and friends’ stories. Patient participants reported that Chinese patients “have their own ideas, and they would not listen to you.” This phenomenon is based on specific Chinese proverbs. “Going to all doctors possible when having illness,” means that one should not listen to just one source; rather, one should be open-minded and listen to all sources possible. This is one of many proverbs that almost all Chinese can recite and that elucidates the fact that getting the information from one
provider would not automatically be accepted, as some providers would assume (Bauman, 2000).

The saying of “Seven-tenths of any medications are poisonous” is what many Chinese believe about medications. The assumption of adverse effects of Western medications appeared to be a reason for treatment delay in six of the eight patient participants. These beliefs and attitudes toward Western medications may have never been in the reservoir of reasons that some providers assumed. The provider’s tunnel vision of looking at the physiological way to control HTN may be the reason some providers were frustrated and had misconceptions with respect to adherence to well-tolerated and researched medications (Bauman, 2000). The idea held by some Chinese patients that Western medication could disrupt the integrity of the “birth energy” just as much as the illness may not be a concept familiar to health providers who care for Chinese patients. However, in reality, this particular belief may be part of a Chinese patient’s real life experience. This belief system can then influence the adult patient’s behaviors when learning a new concept as Knowles (1968) pointed out.

Another reason for non-adherence or delay in treatment was the stories shared among friends. One provider pointed out, “Chinese patients would rather listen to their friends than to you.” “Following the wind” was one Chinese cultural characteristic. Four providers pointed out that Chinese patients do not consider sharing diseases and treatments to be a private issue. In the Chinese culture friends talked openly about their medical problems with the intention of passing the good and magical treatment to families and relatives. Some patients became doubtful about their own treatment when their treatment regimen differs from that of their friends. This phenomenon is referenced
to as a desire to conform to the norm (Coburn & Weismuller, 2012). The norms that emerged from the interviews in this project were proverbs, sayings, and friends’ stories. Patients use these as norms to judge the information and treatment given by providers.

As most of the stories that emerged from the project’s interviews were unique personal experiences, providers’ information usually did not match what patient participants said they wanted from their providers. Although both providers and patients were trying to achieve the same goal of the target blood pressure, they did not combine the valuable resources of providers’ scientific information and patients’ motivations for problem solving. Providers were disheartened that patients did not follow the treatment regimen, and patients cried out, “I understand,” but “it is hard to do it.” However, all providers have at some point “claimed the victory” when finally the patient “got on medications,” understanding that “It takes time!”

One provider summed up her interview by saying: “there is no magical bullet!” “Everyone was different.” A common theme emerged from the interview data: when a trusting relationship developed, a mutually negotiated plan of the treatment would be carried out. One patient commented that if the patient became convinced that the provider had the best interest of the patient in mind, the patient would “return a favor” by following the providers’ instructions. Both patient and provider participants commented that the goal of the treatment plan, if mutually made by both parties, would be more feasible to achieve.

The concepts of a respectful interaction and interactive communication with patients promote holistic well-being (Bensing, 1991; Kaplan et al., 1989). However, the trusting relationship theme emerging from the interview data did not just refer to the
correct treatment and medication prescribed. As an example, one patient suggested that his doctor was good because the physician made an informed decision from his understanding of Chinese medicine. One provider gave her patient time to try natural remedies and Chinese medicine. She claimed a victory if patients came back when they became convinced that Chinese medicine did not work and were willing to try Western medication. One patient bluntly pointed out, “it would not play” (i.e., it would not work if the provider forced him to take medications) . . . , “I have to make the decision. . . ,” “No one can force me do what I don’t want to do. . . ,” and “After all it was my body, and I understand my body.”

Knowles’ (1968) adult learning theory supported the interview results that readiness was one of the characteristics of adult learners. Regardless of culture, adult learners become willing and ready to learn if new information or behavior helps to fulfill a realistic goal in life, which may potentially change their social role (Knowles, 1968). According to Prochaska et al. (2013), preparation to take action is part of the action phase. Going to monks for guidance, trying natural remedies and preparing for a new routine (taking a pill every day) were commendable actions taken by the participants. Very often, participants made fun of their “vain efforts” such as telling the family to eat a low salt diet. According to Prochaska et al. (2013), providers should recognize these preparatory actions by verifying with patients that they had underlying skills and assisting them in identifying obstacles and social supports.

Likewise, the Miller and Rollnick’s Motivational Interviewing model supported the interview data that identified successful interactions suggested by patient participants. Miller and Rollnick (1991) recommended five principles of interacting with patients:
acceptance, discrepancy establishment, argument avoidance, allowing resistance, and self-efficacy support. The provider script in this phase should be patient-centered and patient-driven (Prochaska et al., 2013). The communication in the action phase should include prompting questions for patients to share with the provider as to who they are, what they want, and how they want it. And finally, the provider should ask patients to assess if the plan they choose is feasible.

**Maintenance Phase**

Follow-up appointments are imperative to maintain the targeted blood pressure and are part of the guidelines by the JNC (Chobanian et al., 2003). The communication contents during this phase should focus on current blood pressure, life style modification strategies, body mass index (BMI), and adverse effects of the medications (Jolles et al., 2012). Maintaining treatment adherence to this chronic illness has been problematic in this specific population (Li & Froelicher, 2005; Li et al., 2005). The non-adherence rate is high in newly diagnosed patients compared with those who have been treated for a longer period of time (Jolles et al., 2012). Six of the eight patient participants delayed their treatments. All participants had stopped taking their medications for various reasons at some point of the treatment. At the time of the interview, only one participant reported she was not adhering to the dosage and intervals of her medication regimen as prescribed.

During the maintenance stage, Prochaska et al. (2013) understood and allowed behaviors of relapsing. Some patients will fall back into their previous behaviors after they have taken action and made changes (Prochaska et al., 2013). This behavior of relapsing was well demonstrated by the participants. Even for those who claimed, “I
have never stopped taking medications,” there were times when they had stopped taking medication from days to weeks. One patient did not take her medication for weeks because she ran out of the medication, not realizing her medication was for high blood pressure control. Another patient took the medication every day because it “was not too much of an effort to take it.” He explained further that he also had to take his antidepressant medication every day. If he forgot to take his antidepressant, he could feel the difference and could not function without it. However, if he forgot to take his antihypertensive medication, it was not problematic since he could not feel the difference.

When patients delayed treatment or did not adhere to the treatment plans, most providers assumed unfavorable events had recently occurred and were the cause of the delay or non-adherence (Bauman, 2000). These reasons could be loss of job and insurance, loss of family and financial support to sustain the modified life style, and/or change of providers due to insurance status or relocation (Bauman, 2000). However, the justifications for relapses in treatment adherence that emerged from the interview data were the same reasons reported by patients for the treatment delay. One patient was successfully managing her blood pressure to the targeted number, but then stopped taking the medication because “long term use of the medication could hurt my liver.” Another participant claimed that long-term usage of the medication definitely had damaging effects.

The presence of side effects was a repeated concern expressed by patients during the maintenance phase of treatment as validated by the interview data. The belief of “seven-tenths of any medication is poisonous” compounded the fear of Western medication. When the treatment guidelines are different from patients’ beliefs and
values, non-adherence is more likely to happen (Bauman, 2000). This is particularly true with the Chinese American patient population. Chinese history and deep-rooted traditions and practices influence a Chinese American’s reference of what they do in their daily activities (H. Lee, Ju, Vang, & Lundquist, 2010). Prochaska et al. (2013) suggested that assessing and identifying barriers and motivating factors and planning appropriate strategies be the focus of communication during the maintenance phase.

Most factors that affect relapsing behaviors such as non-adherence to medications were the same issues that caused a delay in treatment. Therefore, the communication content in the action phase is applicable in the maintenance phase. The five principles of interaction suggested by Miller and Rollnick (1991) should guide providers’ communication with patients. Providers should focus on active listening without being judgmental or argumentative and guide patients in identifying barriers and better strategies to solve problems (Miller & Rollnick, 1991; Prochaska et al., 2013).

All provider participants interviewed in this project had used positive reinforcement. Some of the providers had also used “threatening” words as motivators. The practice of using negative motivators with patients from Asian cultures is different from the positive motivation approach of Western cultures (Coburn & Weismuller, 2012). All provider participants of Asian descent recalled talking to patients about the negative effects of uncontrolled hypertension with the intention of trying to “scare” the patient to be compliant with HTN treatment. Providers should accept relapsing behaviors in the maintenance stage; however, establishing discrepancy is one of the provider’s professional responsibilities (Miller & Rollnick, 1991). Uncontrolled blood pressure due to lack of adherence or suboptimal natural remedies should be pointed out to the patient.
For the Chinese population, family is not only a motivator for treatment but is also a supportive resource. Two non-Asian provider participants admiringly repeated the fact that “the family was always there” with the patient, especially when the patient was an elder. However, the providers also noted that the family member who was the caregiver was not necessarily the decision-maker. For example, one provider noted that the daughter-in-law always accompanied one elderly patient, but the patient was the decision maker as he was “grandpa,” the authoritative figure of the family. Asian providers who were interviewed did not discuss family’s support in great detail as they assumed the family should be supportive. Life experience and knowledge of certain cultures contributed to positive provider-patient interactions and good health outcomes (Flickinger et al., 2013; Perez-Stable et al., 2014). However, stereotyping certain qualities associated with a specific culture can lead to misjudging patients (Kelly & Haidet, 2007). In order to extend the care to beyond just the physiological presentation of HTN, the five principles suggested by Miller and Rollnick (1991) should be the reference and guidance in providing patient-centered assessment and care when communicating with the Chinese patient population.

During the phase of maintenance, Prochaska et al. (2013) suggested reinforcing internal rewards. Most of the provider participants had used positive reinforcement techniques. One participant made a point of clearly explaining her way of complimenting patients. She complemented her Chinese patient population by saying, “Your blood pressure is controlled. You would live a long life.” In Asian cultures, self-effacement was considered a motivator in the study conducted by Coburn and Weismuller (2012). Unlike Western cultures, people in Asian cultures strive not to be noticed, especially in
the process of achieving certain goals (Coburn & Weismuller, 2012). This quality of being humble was greatly respected. This provider’s careful choice of compliment aligns with self-effacement. She did not praise the person; instead, she complemented the target blood pressure number that resulted from diligence of a healthy diet and exercise and adherence to medications. She also used the “lucky” phrase “long life,” which was derived from the commonly used good luck proverb of “live as long as the South Mountain.”

Modification of life style and body mass index (BMI) were additional topics during the maintenance phase. Multiple well-designed research studies demonstrated that dietary salt intake from traditionally prepared food was a major dietary contributor to high blood pressure especially in Chinese hypertensive patients (Woo et al., 1998; Zhang et al., 2013). One study showed that almost all overseas Chinese ate at least one Chinese meal a day (Kwok et al., 2009). What compounded the problem of excessive salt intake was a belief that salt produced energy (Zhang et al., 2013).

All participants have stated that eating traditional Chinese food was a must even though they did not reject Western food. One participant stated he had to eat Chinese food and liked it to be authentically prepared. Another participant stated, “You can’t deprive me of Chinese food.” All participants had received advice about a low salt diet, but only two participants stated that their food was “lighter” which only indicated less salt instead of the recommended amount of 1500 mg per day (AHA, 2014). Although this project author did not find a study that identified the typical daily salt intake of Chinese Americans, one study showed that the average salt intake in China was from 9,000 mg to 11,000 mg per day (Zhang et al., 2013).
All patients participating in this project expressed a desire to reduce their salt intake but did not seem to have concrete ways of doing so. One patient half-jokingly mentioned that his wife prepared the food, and he would eat whatever she put on the table. One provider shared her own challenge associated with reducing her salt intake. She added that it was especially challenging to do so when at family get-togethers. The central focus of Chinese family get-togethers is food, which is expected to be tasty. Eventually, she identified strategies such as eating Sushi without using soy sauce. She only used pickled ginger, as pickled ginger has salt in it already. Although she had identified and executed strategies to reduce salt, she contributed her final success to her Caucasian husband who requested “no salt in the food.”

Coburn and Weismuller (2012) identified physical pleasure as a motivating factor in both Western and Asian cultures. However, for physical pleasure to be a motivational factor in Asian cultures, it has to be a collective idea and linked to society (Coburn & Weismuller, 2012). Coburn and Weismuller further discussed the idea of physical pleasure as a motivator by using the example of food. Asian populations find food to be pleasurable because the culture regards food as pleasurable and it brings pleasure to a group of people instead of an individual (Coburn & Weismuller, 2012).

One provider participant in this project supported Coburn and Weismuller’s findings to some degree. Her insightful observation was, “Chinese culture is a culture of medicine” rather than “a culture of food.” When people get together, the most common topic of the conversations is about the health benefit of food. This participant also pointed out that Chinese eat for health on daily basis, for pleasure on special occasions. She went on to say the Chinese chose ingredients based on the health benefit instead of
its flavor. She served dinner before the interview. Anecdotally, this author recalled that she explained the health benefit of every ingredient she used for dinner. Tofu had calcium and was rich in vegetable protein. The tree mushroom had the property of keeping one’s vessels elastic. Beef tender, rich in collagen, helped to keep the skin youthful. Lastly, the porridge of flaxseed and oatmeal was cooked in a slow cooker so the nutrients were not disturbed. Food in Chinese culture is considered very important; it serves as a motivating factor, provides nutrients, and has healing properties like medicine.

Dietary modification should be feasible for Chinese hypertensive patients as Chinese believe that food has the property of medication (Satia et al., 2000). One provider who was interviewed pointed this out. Other than its medicinal property, food can also have an adverse effect. “All disease comes in from the mouth” was a commonly used proverb. One provider quoted this often when giving dietary advice to her patients. Providers can also provide examples of commonly consumed foods that are known to be effective in reducing blood pressure. Yin food in Yin deficient patients was shown to be effective in reducing blood pressure (Shen et al., 2010). Yin food has a cooling and calming effect comparing to warming and excitable Yang food (Shen et al., 2010). Most of Yin food is listed in the DASH diet list (HHS, NIH, NHLBI, 2006). Other Yin foods used in Chinese cooking are eggplant, wax gourd, black fungus (mushroom), and chufa (Shen et al., 2010). Providers can use this information when providing dietary advice to Chinese patients based on their food preference. In addition to understanding traditional dietary habits in the Chinese culture, providers should be informed of the dietary acculturation in Chinese Americans. Even though the change of dietary habit is passive
and mostly due to convenience, many people, especially the younger people, have adopted some components of the Western diet that are deleterious in patients with HTN (Satia et al., 2000).

All providers had given advice about salt reduction in some fashion. Asians providers seemed to have a more insightful understanding of sources of salt. One provider taught patients what kind of the commonly consumed food had high salt contents. Pickled fish, meats, and vegetables are commonly used for traditional Chinese food for their intense flavors. She also stated that some patients did not realize that soy sauce had high salt content. They thought soy sauce was used for flavor and color.

There was general consensus among both providers and patients that salt reduction was not an easy task. The providers had engaged in different coaching methods and ideas for a low salt diet. One study suggested that the intention of wanting to reduce the salt had to come before the action (Zhang et al., 2013).

Other than dietary modification, exercise was another form of lifestyle modification. The JNC recommended daily aerobic exercise (Chobanian et al., 2003; Kelley & Kelley, 2000, 2008). The exercises engaged in by the patients were walking, playing tennis, yoga, and Tai Chi. Studies have shown aerobic exercises such as walking or Tai Chi help decrease blood pressure. “Having no time for exercise” seemed to be the excuse for not doing enough exercise. “Hot weather” was another reason for not adhering to the exercise routine. One participant considered moving boxes at work a form of exercise.

“Life depends on moving” was the attitude of the participants. However, not all participants followed an exercise plan. Some providers assessed patients’ baseline
exercising habits and found them to be an effective strategy to motivate patients to do a little more of what they have already been doing. There were studies that showed that exercise with cultural modification, in which the exercise was supported by family, authorities, and the idea of harmony, had no more effect than the exercise without cultural modification (Chang et al., 2012; Chiang & Sun, 2009). Culturally specific exercise such as Tai Chi practiced over for 12 weeks did, however, show a blood pressure decrease among the Chinese participants in a study by Taylor-Piliae et al. (2006).

**Trustworthiness and Integrity in Data Analysis**

There are challenges in data analysis of qualitative studies. To ensure quality data analysis and trustworthiness, the four criteria of credibility, dependability, conformability, and transferability were the guiding framework used to analyze the interview response gathered in this project (Denzin & Lincoln, 2005). In this project, credibility was established by using open-ended questions. This form of questioning was chosen to give participants much room and freedom to describe their own experiences of coping with high blood pressure as a patient, and treating hypertension as a provider. As credibility cannot be completely established without dependability and vice versa (Polit & Beck, 2012), the dependability of responses was supported by redundant findings from the interviews.

Another criterion of trustworthiness is confirmability, which refers to objectivity (Polit & Beck, 2012). Objectivity is to ensure that the data must represent what the interviewee actually intended and are free of researcher’s perspectives. To establish confirmability in this project, the researcher transcribed data sentence-by-sentence as well as examining the data as a whole to capture the real meaning of the interview data.
The researcher being bilingual in Chinese and English contributed to the accuracy of the interview data.

The last criterion is transferability. This project may be replicated in the future in another group of Chinese hypertensive patients to see if the same theme and concepts would emerge. In addition to emerging concepts and themes from the interview contents, one of characteristics of the qualitative data is its rich and detailed description of the personal experiences. The participants in this project had similar cultural background and experience dealing with chronic illness and had unique experiences of interacting with health care providers in managing hypertension. Other Chinese hypertensive patients may share this diverse experience.

**Strengths and Weaknesses**

The strength of the project is its rich interview data that captured explicit behaviors as well as implicit beliefs and attitudes of this unique patient population. The themes that emerged from the data were from the point of view of both patients and providers. The author who was born and raised in the culture was another strength of the project as she had insights about this culture and the proverbs and sayings that participants addressed. Additionally, being able to speak the same language as the participants and being proficient in English insured accurate transcription and translation. Finally the data provided by non-Chinese providers provided further validation of the need for this project.

Despite the fact that qualitative narrative data were richly descriptive and realistic, they were subjective and may have introduced limitations due to the particular environment and social system of these Chinese American participants. The author
acknowledges that differences can emerge among the various groups of Chinese from different regions and countries in both China and America. Another limitation of the project was the researcher single-handedly performed all transcription, translation, and data analysis. It is possible that in the process of data analysis and synthesis, the themes could have been affected by the researcher’s bias. Triangulation of data with more than one researcher might enhance trustworthiness. Finally, seven of the eight patient participants and six of providers were acquaintances and colleagues, respectively, of the author. Personal friendship and working relationships introduce in the possibility of participant bias and seeking to give responses they believed the author wished to hear.

**Recommendations for Practice Change**

The goal of the project was to develop a script that would highlight cultural awareness when communicating with Chinese patients with HTN. The goal in using such a script (Appendix E) was to assist healthcare providers to ultimately achieve increased success of hypertension management when providing care for Chinese Americans. The first phase was to conduct a qualitative study to look at the essence and phenomena of the patient and provider relationship. The second phase was the development of the script based on the interview data, literature review, and theories on learning and behavioral changes and Asian cultures. The third phase, which is not part of this DNP project, will involve pilot testing and revision of the script, implementation of the communication script, and evaluation of its effectiveness.

One of the first deliverables from this project will be the distribution of the scripts to the providers who participated in the interviews. The providers as well as their colleagues will be asked to use this script as a reference when interacting with their
Chinese patient population. After 12 months of using the communication script, a survey will be conducted to evaluate the effectiveness of the communication script.

The communication script developed in this project is a guide to help providers as they interact with this special population within their reference of health beliefs and attitudes. Traditional Chinese proverbs were the references patients used as guidance for health maintenance in disease management of chronic conditions like hypertension. However, little has been identified in respect to proverbs playing a role in their health decision-making process. This research has generated an idea that the Chinese patient population may be using the proverbs as their evidence-based practice. Future studies should focus on the influences of the traditional proverbs that have been quoted for thousands of years in Chinese culture on health maintenance.

The cultural characteristic of conforming to norm was found to be a barrier to adherence to treatments, but this characteristic was also found a motivating factor. Having support groups of fellow Chinese patients from local organizations and communities and offering meetings conducted by a healthcare provider can produce a phenomenon of norm, and also clarify how treatments can differ and still be effective. This could be a strategy to promote the adherence to antihypertensive medications and healthy life style.

**Summary**

Managing HTN is a life-long commitment for both providers and patients. When the clear explanation of the rationale of treatment for HTN fails to convince Chinese American patients to follow a treatment plan, this project suggests that providers consider devoting time to eliciting patients’ believes and preferences that are usually not readily
shared by Chinese patients. The communication script produced in this project and supported by well-recognized theories should help guide providers to shorten the distance between providers’ medical guidelines and Chinese patients’ beliefs and attitudes in managing HTN. It is the hope of this author that the communication script can be used as a resource tool to guide provider and patient discussion in establishing a partnership to achieve ultimate health outcomes in managing HTN in Chinese American patients.
REFERENCES

American Heart Association. (2014). Sodium content. Retrieved from https://www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/HealthyEating/Sodium-Salt_UCM_303290_Article.jsp


APPENDIX A

LETTER OF APPROVAL FOR PARTICIPATION

Institutional Review Board for the
Protection of Human Subjects
1250 Bellflower Blvd. MS 4509
Long Beach, CA 90840

TO: Institutional Review Board for the Protection of Human Subjects
FROM:

Ms. Zhenghong Broyles, a student of Doctor of Nursing Practice, is conducting a project to develop a communication script. Upon reviewing the project proposal synopsis titled A Culturally Sensitive Script for Clinicians caring for Chinese Americans with Hypertension, we agree that this project is worthy of investigation, and may potentially benefit Chinese Americans with hypertension.

We agreed that Ms. Broyles could conduct a focus group interview at our office under the condition that each participant signs an informed consent. To facilitate the project, Ms. Broyles is permitted to

1. Distribute the pamphlets for recruiting participants for the focus group interview a month before the recruitment.
2. Recruit eight volunteering participants.
3. Use the conference room for the focus group interview.
4. Provide lunch for the interview group.
I would like to invite you to a friendly interview about your experience communicating with your health care providers in managing your blood pressure.

Time: about one hour

Location: To Be Determined

If you are interested in the interview please contact:

联系人: 趙娟
Ju-An Zhao
Phone: (310) 977-9316

Email: jbroyles@csu.fullerton.edu
APPENDIX C

OPENING AND CLOSING SCRIPT FOR PATIENT INTERVIEWS

Opening script:

First of all, I would like to thank you for coming to this interview. I am a DNP nursing student. One of my passions is serving Chinese American population and managing chronic illnesses. In the years of my nursing practice and according to my literature review, there is not any communication tool identified for providers to use to communicate with Chinese Americans with hypertension. One of the reasons is that the Chinese culture is not well understood. That is why my project is to develop a culturally sensitive script. Our discussion today will help me to create this communication script. I would like to hear your insight about the effective communication you have had with your health care providers and how you manage this chronic illness. I hope, in the future, Chinese Americans with hypertension will benefit from this project.

Before the interview session, I would like to have you sign two consent forms. One consent form is to consent that you agree to be interviewed; the other is that you agree that our conversation can be recorded. However, even though the consent forms are signed, you have the right to withdraw from the interview at any time. I would like to ensure you that the data will be kept confidential and your care with your provider will not be compromised because of this interview.

Closing script:

Thank you so much for participating in this interview. Again I want to ensure you that what we discussed today will be confidential, and if I use any quotes, no names will be identified in the paper. Thank you for your participation and contribution to this DNP project, I hope this project will benefit more patients.
今天我想感谢您和我分享您的经历和您的故事。如果我要引用您今天说的话，我一定不会用您的名字的。你今天说的话给我有很多的启发和指导。我希望我的项目能够帮助很多华人。根据您和其他人的经历，我会写出来的小册子给医生们去用。那以后我们不论是看中国医生还是美国，华人病人都会得利。
APPENDIX D

OPENING AND CLOSING SCRIPT FOR PROVIDER INTERVIEWS

OPENING SCRIPT

Opening Script:
First of all, I would like to thank you for coming to this interview. I am a DNP nursing student. One of my passions is serving Chinese American patient population and managing chronic illnesses. In the years of my nursing practice and according to my literature review, there is not any communication tool identified for providers to use when communicating with Chinese Americans with hypertension. One of the reasons is that the Chinese culture is not well understood. That is why my project is to develop a culturally sensitive script. Our discussion today will help me to create this communication script. I would like to hear your insight about how you communicate with Chinese American patients with hypertension. I hope, in the future, Chinese American patients with hypertension will benefit from this project.

Before the interview session, I would like to have you sign two consent forms. One consent form is to consent that you agree to be interviewed; the other is that you agree that our conversation can be recorded. However, even though the consent forms are signed, you have the right to withdraw from the interview at any time. I would like to ensure you that the data will be kept confidential and your care with your provider will not be compromised because of this interview.

Closing script:

Thank you so much for participating in this interview. Again, I want to ensure you that what we discuss today will be confidential and if I use any quotes, no names will be identified in the paper. Thank you for your participation and contributing to this DNP project, I am confident the project product will benefit more patients.
APPENDIX E

A CULTURALLY SENSITIVE PROVIDER SCRIPT FOR USE WITH HYPERTENSIVE CHINESE AMERICANS

Hypertension (HTN) in Chinese Americans is as prevalent as that of the general population. Non-adherence to medication treatment and lifestyle modifications challenges both providers and patients in HTN management. With the goal of increased adherence to treatment regimens recommended by JNC, a culturally sensitive communication script was developed for providers to refer to when interacting with the Chinese American hypertensive patient. Qualitative data from health care provider and patient interviews provided content for the communication script. The theoretical frameworks that supported the script are Knowles’ Adult Learning Theory, Prochaska and DiClemente’s Stages of Change Model, Jolles et al.’s Communication Model for HTN management, Miller and Rollick’s Motivational Interviewing, and the identified motivating factors in Asian cultures.

This culturally sensitive communication script serves as a guide in addition to the JNC’s guidelines for HTN management. Column one contains three communication phases and expected communication topics. Column two presents suggested scripts for each communication phase. Column three describes interview data and theories that support the scripts. The provider may choose one topic or a combination of topics to discuss with the patient at each visit.
# A Culturally Sensitive Provider Script for Use with Hypertensive Chinese Americans

## Phases

<table>
<thead>
<tr>
<th>Comprehension Phase</th>
<th>Suggested scripts for providers</th>
<th>Rational for the suggested scripts</th>
</tr>
</thead>
</table>
| Delivering the news of HTN | **How do I deliver the diagnosis of HTN to the patient and suggest treatment?**  
Your blood pressure is high. The normal blood pressure is 139/89. Numbers higher than 139 and 89 are considered high blood pressure.  
Uncontrolled blood pressure can cause heart disease, stroke, and kidney failure.  
(Note: JNC 8 recommends BP limits of 150/90 or lower for people aged 60 years or older).  
There are three ways that can be used to control your blood pressure. Diet and exercise may be sufficient to control blood pressure. If diet and exercise do not work, then we can use medications to control the high blood pressure.  
Change of life style alone can help bring the blood pressure back to normal. As the Chinese proverb says, “Life depends on movement.” | Delivering the news of the diagnosis with the clinical facts is well accepted by Chinese patients.  
Negative events/consequences are motivating factors in the Chinese culture.  
JNC recommends lifestyle modifications. Chinese patients prefer natural remedies to medications.  
Exercise is a preferred management supported by the proverb “life depends on movement.” Tai Chi is an effective exercise to reduce HTN.  
Chinese patients believe in natural remedies. Food is believed to have healing properties like a medication.  
However food can also cause disease based by the proverb “All diseases enter from the mouth.”  
Letting the patient decide on the action he/she would like to take provides a sense of autonomy and greater chance of compliance with healthcare regimen.  
Chinese patients tend to appear agreeable with the authorities when having a face-to-face communication even if they do not understand or agree with the provider. |

*JNC = Joint National Committee*
<table>
<thead>
<tr>
<th>Possible denial of the diagnosis or treatment plan.</th>
<th><strong>How do I handle resistance to the news or treatment?</strong></th>
<th>Possible denial can be a part of the comprehensive stage.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understand that you are not prepared for this new diagnosis. If you would like to take some time to learn more about hypertension, I would like to help.</td>
<td><strong>What strategies might I employ to empower the patient to make a decision on treatment regimens and lifestyle modifications:</strong></td>
<td>Consulting with family and friends are common practice in Chinese culture. Provider gives patient permission to seek opinions from friends and family.</td>
</tr>
<tr>
<td>It is all right if you are not ready to start any treatment at this point. Would you feel comfortable starting non-medication treatment?</td>
<td><strong>Action Phase</strong></td>
<td>Being able to provide for the family is a motivating factor in Chinese culture.</td>
</tr>
<tr>
<td>I understand you still have some doubt. You may want to talk to your families and friends about it, and see what they think. Let’s schedule a follow-up to revisit this.</td>
<td>Exploring and supporting the patient’s health beliefs and preferences about medication treatment and lifestyle modifications.</td>
<td>Chinese patients tend to seek different opinions from friends and family and are not always ready to follow providers’ recommendations.</td>
</tr>
<tr>
<td>You seem so important to your family. I am sure you want to stay healthy so you can take care of your family.</td>
<td>I understand you are concerned about the long-term use of the Western medications.</td>
<td>The provider allows the patient to be resistant to Western medications. Chinese patients believe that the adverse effects of Western medication have damaging effect to one’s health.</td>
</tr>
<tr>
<td>Some tests are necessary. However, it is up to you to decide when you would like to have it done. I am here to support your decisions.</td>
<td>“Seven tenths of any medication is poisonous” is referred to often. I can see why you don’t want to take them.</td>
<td>The provider accepts the patient’s belief of “seven tenths of the medication is poisonous.”</td>
</tr>
<tr>
<td>It is still important for you to stay healthy so you can take care of your family.</td>
<td>Have you thought about taking Chinese medicine or using other natural remedies?</td>
<td>The provider explores the alternative treatments the patient may be using. Chinese medicine, relaxation, meditation, and Yin foods (celery, cucumbers, wax gourd, black mushroom) have been used by Chinese patient population in HTN management.</td>
</tr>
<tr>
<td>Some Chinese medicine has been shown to be effective in treating hypertension.</td>
<td>Chinese medicine can be used with Western medications together.</td>
<td></td>
</tr>
</tbody>
</table>
who are using the medication regimen and lifestyle modifications have controlled their blood pressure successfully.

**How might I support the treatment plan the patient chooses to be on?**

I am glad you are looking for help from the natural resources. Some Chinese medicines are effective in lowering blood pressure.

I am glad you are taking the Chinese medication; however, the blood pressure number is still high.

**How might I explore the patient’s health beliefs and practices?**

What Chinese proverbs or sayings help you when you are ill?

These Chinese proverbs are referred to often; I can see why you are using them as references as well.

Reliable sources of a second opinion and from different resources can be valuable. I am also here to provide answers to questions you might have.

It is completely up to you to decide how you want to control your blood pressure. I am here to support whatever you have decided to do.

I am confident that eventually, you will find the right methods to control your blood pressure.

Is there anyone among your family and friends who suffered from stroke, heart attack, or kidney failure because their blood pressure was not controlled?

characteristic. Chinese patients may be motivated to conform to those who follow the treatment regimen.

The provider supports the patient’s effort of seeking alternative treatments such as traditional Chinese medicine.

Some Chinese medicine is found to be effective in treating HTN. Some Chinese medicine enhances effectiveness of the Western medications. However the guideline use of Chinese medicine for hypertension treatment is not consistent among providers.

The provider supports the patient’s effort and establishes the lack of efficacy.

Health beliefs and attitudes can be based on Chinese proverbs.

“Following the wind,” meaning listen to all different opinions, and conforming to the norm are cultural characteristics.

The provider avoids arguments with the patient’s choice of treatment.

The provider supports the patient’s self-effacement and efforts of trying alternative treatments.

Using negative role models is a motivating factor in Chinese culture. It is appropriate for providers to remind patients of their friends and family who suffered from uncontrolled HTN.
### How might I support the patient’s health practices?

<table>
<thead>
<tr>
<th>How might I help the patient with dietary modification?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some of the medications can certainly be cut in half. That is why they are scored.</td>
</tr>
<tr>
<td>I can prescribe a medication of the double dosage. You just need to take half of it. That could also help save some money. Would you like me to do that for you?</td>
</tr>
</tbody>
</table>

**How might I help the patient with dietary modification?**

<table>
<thead>
<tr>
<th>When you cook a dish, how much salt do you usually use?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soy sauce has high salt content. If you use soy sauce when you cook, you may not have to use (crystalized) salt or use less of it.</td>
</tr>
</tbody>
</table>

**How can I explore possible barriers and support systems:**

<table>
<thead>
<tr>
<th>How do I engage positive reinforcement:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The blood pressure numbers are very good today.</td>
</tr>
<tr>
<td>Being humble is considered a virtue in Chinese culture. The provider may choose to compliment the patient’s blood pressure numbers and possible good outcomes instead of complementing the patient.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maintenance Phase</th>
<th>How do I engage positive reinforcement:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying barriers to treatment adherence and stronger strategies for HTN management</td>
<td>Being humble is considered a virtue in Chinese culture. The provider may choose to compliment the patient’s blood pressure numbers and possible good outcomes instead of complementing the patient.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maintenance Phase</th>
<th>How can I explore possible barriers and support systems:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Following up on identified life style modification strategies that are being followed by patient and are feasible. Further questioning helps identify barriers.</td>
<td></td>
</tr>
<tr>
<td>Bringing up family to the patient reinforces why they are making changes.</td>
<td></td>
</tr>
</tbody>
</table>

How is your family doing? They must be so happy now that your blood pressure is controlled. Does your family eat what you eat, or do you have to eat a special diet? Chinese families eat together as the dishes are shared. Preparing a special diet
| You may have to take the medication for the rest of your life, as high blood pressure is a chronic illness. |
| Beliefs of side effects of the Western medications may prevent the patient from continuing medication as an ongoing therapy. Identifying this may increase communication about whether or not this might be an issue. |
| Your family will be happy about this result. I wish you a long healthy life. |
| Longevity is a lucky saying to wish on a Chinese person. |