

RESEARCH ARTICLE

Scoping Review: An Anthropological Analysis of the Beliefs of the Elderly That Influence the Use of Traditional/Complementary and Alternative Medicine

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Abstract: The use of traditional medicines is commonplace among the elderly population. With the growth of this population, a scoping review to ascertain the beliefs that influence decisions to use traditional/complementary and alternative medicine (TCAM) was undertaken. This scoping review focused on identifying the beliefs of members of the elderly population regarding TCAM, especially in comparison with western medicine. The researchers used the methodological framework for a scoping review by Arksey and O'Malley (2005). The main steps of this scoping review included (a) searching for relevant studies, (b) selecting studies based on specific inclusion criteria, (c) extracting data into a charting table, and (d) collating, synthesizing, and reporting the results. However, the process was not linear but iterative. Each stage was moved flexibly, and steps were repeated when needed to ensure that the existing literature was covered fully. The findings of the scoping review are divided into the characteristics and nature of the articles in the scoping review and the beliefs of the elderly that influence their use of TCAM; the latter may be divided broadly into traditional, cultural, social, and economic beliefs. Implications of the findings and suggestions for future research on the influences of beliefs of the elderly on the use of TCAM are elaborated upon.

Keywords: Elderly, beliefs, traditional medicine, alternative medicine, scoping review

The use of traditional medicines is commonplace in most of the globe. With the rise of the globalization of western medicine, traditional medicine has often taken second place in terms of choice, but it remains a staple in most Asian nations, especially among the elderly members of the population. The focus of this

scoping review is to identify the beliefs of the members of the elderly population about traditional medicine, especially in comparison with western medicine. Background of the scoping review, the relevant methodology, findings, and a discussion of the findings are presented within this manuscript.

Elderly and Healthcare

Aging has recently been recognized as a global issue, which implies the need for healthcare and social policies. According to the World Health Organization (WHO, 2011), there were 524 million people aged 65 or older in 2010, and this number made up 8% of the world's population. It is estimated that the percentage of the world's population over 60 years old will double to approximately 22% between 2010 and 2050. A large proportion of elderly population in developed countries will account for 71% of the population, compared with a 250% increase in developing countries. Although population aging started in developed nations (e.g., Japan), a large number of the population in less developed countries over 60 years old has rapidly increased. It is estimated that around four-fifths of the elderly will be living in developing countries by 2050. This means an increase in the aging population (Shetty, 2012). Furthermore, the longevity of the elderly population reflects susceptibility to different diseases and morbidities. Older people are always willing to search for ways to improve their health and use traditional/complementary and alternative medicine (TCAM) more often than other age groups. This leads to a higher demand for all healthcare services and great challenges in policymaking and social security for the elderly. Thus, it is important to comprehensively understand the elderly and their health issues based on their opinions and stakeholders.

Brief Summary of Traditional/Complementary and Alternative Medicine (TCAM)

According to WHO (2005), traditional medicine (TM) is defined as “the knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures, used in the maintenance of health and in the prevention, diagnosis, improvement or treatment of physical and mental illness” (p. 31). TM is also considered as “a therapy or health practice that has developed over centuries within a particular culture. It is usually formed around a particular belief system” (Center for Complementary and Alternative Medicine, 2011). According to Payyappalli (2010), the three main categories of TM are codified medical system, folk medicine, and allied forms of health knowledge. Ayurveda, Siddha, and *Unani* in the Indian subcontinent and traditional Chinese medicine and acupuncture in China are components of codified medical systems. On the other hand, folk medicine

includes those traditional knowledge systems that have been generated and orally transmitted by members of society over centuries and utilize components of the ecosystem that are locally available and accessible. Yoga, tai chi, qigong, and particular meditations and breathing techniques are components of allied forms of health knowledge.

In some countries, TM refers to complementary and alternative medicine (CAM; Che et al., 2017). Complementary medicine refers to remedies that complement allopathic medicine (or traditional western medicine) and are concurrently used with conventional medicine (Qureshi et al., 2018), whereas alternative medicine refers to therapies that are used to replace TM (Tabish, 2008). Based on the classification of complementary therapies by The National Center for Complementary and Integrative Health (NCCIH), there are five categories, including biological (dietary supplements, minerals, vitamins, herbs, and teas), alternative medical systems (naturopathy, traditional Chinese medicine, Ayurveda, and homeopathy), energy (acupuncture, tai chi, qigong), body manipulation (massage, chiropractic, and osteopathy) and mind-body (yoga, meditation, breathing exercises, art therapy, music therapy, guided imagery, and mindfulness-based stress reduction; Cassileth & Deng, 2004; Roberts et al., 2005). The other classification by Office of Cancer CAM (OCCAM) includes alternative medical systems, mind-body intervention, energy therapies, electromagnetic-based therapies, pharmacologic and bio-therapeutics, nutritional therapies, and manipulative and body-based methods (Munshi et al., 2008).

Therefore, TCAM refers to a wide range of healthcare practices that are provided outside of the orthodox healthcare system (WHO, 2013). Eighty percent of people in developing nations rely exclusively on traditional medicine for their primary healthcare (Kumar & Navaratnam, 2013), whereas TCAM usage in developed nations had increased (Fisher & Ward, 1994; Eisenberg et al., 1993).

TCAM and the Elderly

Although many studies on TCAM practices have been conducted in the general population in its early stages, little research on the elderly population has been developed. Research on the prevalence of TCAM use in the general population by Immel et al. (1993) reported

that complementary therapies were more common among people aged over 60 years than younger subjects. Moreover, based on Mintel's (1997) report in England, just over half of the elderly population aged over 65 years old reported that TCAM was effective in dealing with their health issues. The research findings by Foster et al. (2000), with 2,055 respondents, stated that 30% of the respondents, aged 65 years and over, utilized at least one alternative therapy. Cohen et al. (2002) also demonstrated that 64% of people at and above 65 years of age at a hospital in New York between 1998 and 1999 used complementary and alternative medicine.

The related impact on health services utilization in the general population elderly subpopulation by health insurance coverage and usual sources of care has been assessed in several previous studies. However, little is known about other factors, such as beliefs about TCAM. Several grey populations believe that TCAM usage can relieve their pain, improve their well-being, or manage their symptoms, especially the elderly with chronic diseases or cancer (Büssing et al., 2010; Lai & Suroid, 2009). Other elderly people reported that the side-effects of TCAM are less than conventional medicine, and the methods of TCAM are more profound and involve more time (Büssing et al., 2010; Ayele et al., 2017). A survey by Ozer et al. (2012) stated that 200 people aged over 65 years in Turkey believed that alternative therapies would be more fruitful when mixed with conventional medicine. With respect to physician-patient rapport, a study on attitudes toward health and healing in German homeopathy and acupuncture users in 2010 indicated that TCAM practitioners make their patients less disappointed than conventional medicine doctors because TCAM practitioners spend much time with their patients (Büssing et al., 2010). Although most studies have identified beliefs about the advantages and disadvantages of TCAM usage, the underlying beliefs about efficacy, beliefs about diseases, and beliefs about TCAM practitioners are only rarely addressed. Therefore, it is beneficial to require an in-depth insight into addressing this by identifying specific gaps in the literature on the subject. This standpoint implies that TCAM usage may be better integrated into the Western-based national healthcare system.

This scoping review focused on identifying the beliefs of members of the elderly population regarding TCAM that influence the use of TCAM.

Methods

For this scoping review, the methodological framework for a scoping review by Arksey and O'Malley (2005) was used. The main steps of this scoping review included (a) searching for relevant studies; (b) selecting studies based on specific inclusion criteria, (c) extracting data into charting table; and (d) collating, synthesizing, and reporting the results. However, the process was not linear but iterative. Each stage was moved flexibly, and steps were repeated when needed to ensure that the existing literature was covered fully.

Definition and Search Strategy

A set of keywords regarding "belief," "traditional medicine," and "elderly" was also created. As mentioned above, TM (as a part of TCAM) is described as a system of health-related practice based on indigenous knowledge. In most developed countries, this term is considered as "folk medicine" because this form is a minor component of health practice. At present, "alternative medicine" or "complementary medicine" in most industrialized countries is used to describe TM. However, based on the definition by Eisenberg et al. (1993), alternative medicine as a wide range of modalities, including herbs, vitamins, diets, hypnosis, energy, biofeedback, acupuncture, homeopathy, folk remedies, self-medication as well as a relaxation technique, massage, imagery, spiritual healing, chiropractic, and commercial weight-loss program. However, the term "alternative" is commonly used as a descriptive term used to stand for non-Western medicine relative to the dominant modern healthcare system. It would be inappropriate in nations and communities where TM is the primary healthcare system. Within the limitation of this scoping review, we took the stance that TM generally refers to therapies or remedies that not only were developed both in the West and in the other part of the world but also have been integrated into the Western-based national healthcare system. Therefore, TM in this scoping consists of acupuncture, massage, Ayurveda, traditional Chinese medicine, homeopathy, naturopathy, and herbal medicine.

"Belief" is defined as "general propositions about the world held to be true" (Hahn, 1973, p. 208) within this scoping review. However, at present, "belief" implies not only outright error but also a falsehood.

Under the anthropological perspective, belief refers explicitly to religion and is a part of the culture (Kroeber & Kluckhohn, 1952, p. 43). Other anthropologists argued that belief is used for claims used by people to explain the natural world or their social institutions. Although British structural-functionalism clarified that individual belief is of little interest to relations between symbolic and the social order, cognitive anthropologists argued that “beliefs are propositions about the relationship among things to which those who believe have made some kind of commitment... for pragmatic or emotional reason” (Goodenough, 1990, p.597). It means that “belief” and “knowledge” are interchangeably used in cognitive anthropology, rather than these terms explicitly juxtaposed. Meanwhile, knowledge requires both certitude and truth; belief involves mistrust, inaccuracy, or both. Therefore, in this scoping review, belief is defined as “what is known” about empirical reality, and it is used with little self-consciousness. Moreover, “belief” in this scoping review implies uncertainty, error, or both. Furthermore, individuals in society have specific beliefs. Therefore, “traditional belief” means that it has existed for a long time and are transmitted from generation to generation.

Together with TM and belief, the elderly is also defined in different ways. Aging is the process of getting

older. In most developed nations, the chronological age of above 65 refers to the older population. Although this definition is rather inconsistent, 65 is the age at which aging is associated with the national pension plan at many times (Naja et al., 2017; Orimo et al., 2006). Meanwhile, the Japanese Government clarified that the elderly are persons aged over 70 or 75 years due to their loss of functional independence (Orimo et al., 2006). On the other hand, the United Nations proposed a cut-off at 60 plus years to refer to the greying population despite no standard numeric criteria (Kowal & Dowd, 2001).

After defining the previous concepts, we began the search strategy. Firstly, all published and unpublished studies to answer the research question were found. At that time, a search strategy through different sources such as electronic databases and reference lists was mapped out. A scoping review of original articles exploring TCAM utilization in the world between January 1, 1979, and December 31, 2018, via EBSCO, ProQuest, PubMed, Sage, Scopus, and Science Direct database was conducted. Hand searching in the bibliography of relevant articles was also employed for further relevant materials. Table 1 shows a brief summary of the search strategy conducted.

Table 1

Search Strategy

Database	EBSCO ProQuest PubMed Sage Science Direct Scopus
Other sources	Bibliography of searched articles
Key searched terms	[belief about [herbal medicine OR traditional medicine OR complementary and alternative medicine OR efficacy of traditional medicine]] AND [elderly OR the elderly OR older adult OR geriatric OR aged] (traditional belief of (elderly OR the elderly OR older people OR geriatric OR aged)) AND (traditional medicine OR complementary and alternative medicine OR TCAM OR CAM)
Language	English
Location	Both developing and developed countries
Duration	January 1, 1979 to December 31, 2018
Types of study	All studies that report empirical findings in elderly population for traditional beliefs about traditional medicine
Type of publication	Research articles
Exclusion criteria	Articles including systematic reviews, meta-analysis, scoping reviews, editorial, commentaries, letter to the editor, and studies conducted outside developing countries.

Study Selection

A critical appraisal of relevant articles was undertaken by using specific inclusion and exclusion criteria. All articles focused on the elderly’s traditional beliefs about TCAM. Inclusion criteria included types of TCAM such as acupuncture, massage, Ayurveda, traditional Chinese medicine, homeopathy, naturopathy, and herbal medicine. No exclusion criteria were identified based on study design or publication type, as long as the article represented original research.

All results from the database and hand searches were imported into EndNote X9. Duplicates were removed, and the remaining articles were screened based on the title, abstract, and full text. Because the indexing of many TCAM related terms was lacking, a large number of irrelevant articles were removed. A total of 3,869 articles were identified through the various database. These articles were further screened using inclusion and exclusion criteria that dovetailed with the research focus of this scoping review. Unless the titles and abstracts provided sufficient information, the entire publication was retrieved and examined for relevance. A total of 13 full-text articles were selected for review. Then, we continued searching for additional articles based on the reference lists of 13 full-text

articles. The full text of 20 articles from the reference list were reviewed. Based on the research issue alone, 14 explicit reports were identified. Figure 1 is the PRISMA flowchart that explains how the articles were included and excluded.

Data Extraction

To analyze the literature, a framework with main themes and sub-themes was designed, including belief about a disease, TCAM, TCAM practitioner (TP), and efficacy of TCAM. All these themes and sub-themes were identified by the combination of different models of health and health utilization.

Although the Western healthcare system views health, illness, and healing under a scientific perspective and is observed and measured (Ibeneme et al., 2017), the traditional medical system has a holistic view about health and illness, where the mind-body-spirit is connected in an integral whole. According to Andersen (1995), health beliefs can shape health treatments and outcomes.

With regard to belief about TCAM, sub-themes were drawn from a part of the health belief model, including the advantages and disadvantages of TCAM utilization among the elderly. For detailed analysis, sub-

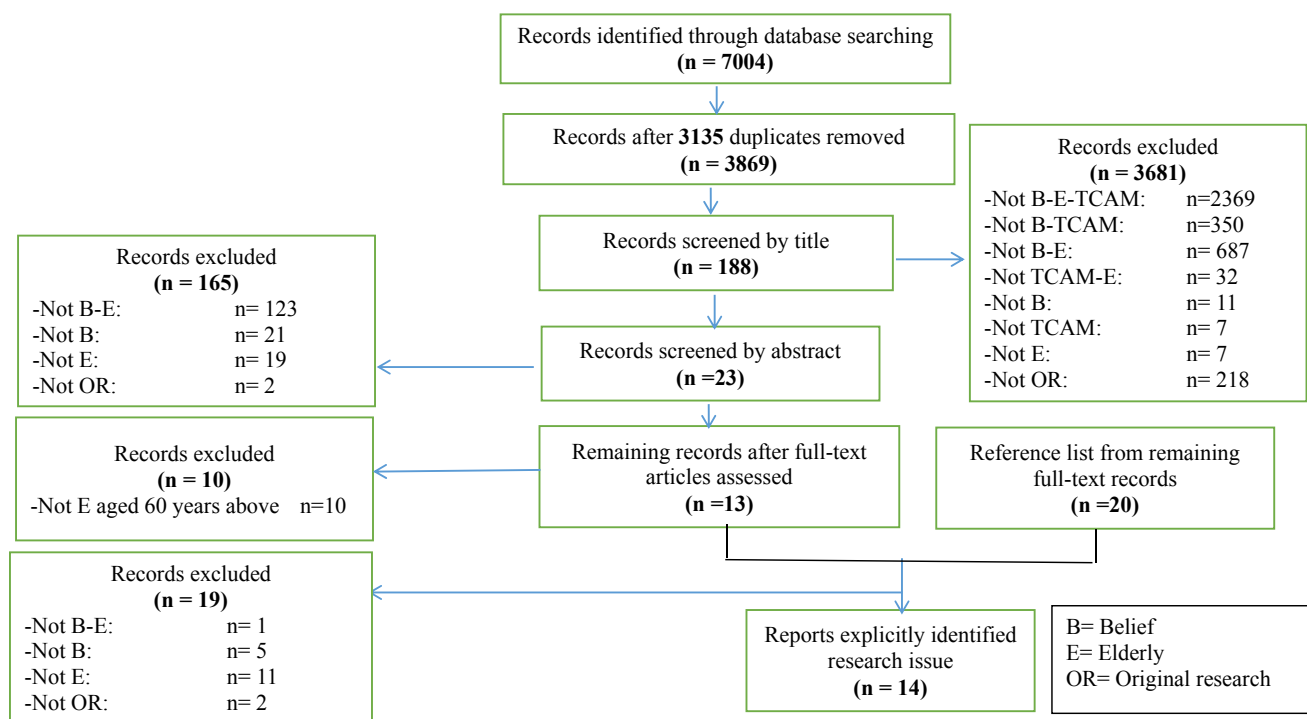


Figure 1. PRISMA Flowchart

Table 2*Creation of Sub-Themes*

Theme	Original model	Content	Sub-themes
Belief about disease	Explanatory model (Kleinman et al., 1978; Kleinman, 1980)	Each culture has its own beliefs about health and illness.	<ol style="list-style-type: none"> 1. Aetiology of the illness 2. Time and mode of onset of symptoms 3. Pathophysiology 4. Course of the illness 5. Treatment of the illness
	Explanatory model of illness catalog (EMIC) with semi-structured interviews (Weiss, 1997)	Ethnic differences in patterns of distress, perceived causes of current problems, stigma towards illness, and help-seeking practices.	
	Weinman et al.'s (1996) Illness Perception Questionnaire (IPQ) using a quantitative questionnaire	To assess illness in the field of health psychology by using five dimensions (identity, casual attributions, timeline, consequences, and cure).	
	The Barts explanatory model inventory (BEMI) by Rudell et al. (2009) uses mixed method	To provide a comprehensive understanding of the research problem than either of each alone in 5 domains of the model is more relevant with Kleinman's dimensions, including identity, cause, timeline, consequences, and cure/control.	
Belief about TCAM	Andersen et al., (2014)	The behavioral model is a multilevel model that incorporates both individual and contextual determinants of health services use. <i>Enabling factors is one of three components to describe health utilization.</i> Financing and organizational factors are considered to serve as conditions enabling services utilization. Individual financing factors involve income and wealth at an individual's disposal to pay for health services and the effective price of healthcare, which is determined by the individual's health insurance status and cost-sharing requirements. Organizational factors entail whether an individual has a regular source of care and the nature of that source. They also include means of transportation, travel time to, and waiting time for healthcare.	<ol style="list-style-type: none"> 1. Purpose of TCAM use 2. Accessibility 3. Acceptability 4. Availability 5. Affordability 6. Concurrent with conventional medicine 7. Easy to use
	Rosenstock (1974)	The health belief model (HBM) is a psychological model that attempts to explain and predict health behaviors by focusing on the attitudes and beliefs of individuals. The HBM posits that perceived barriers and benefits will get behavioral change. – Perceived benefits refer to an individual's assessment of the value or efficacy of engaging in a health-promoting behavior to decrease the risk of disease. – Perceived barriers to taking action include the perceived inconvenience, expense, danger (e.g., side effects of a medical procedure), and discomfort (e.g., pain, emotional upset) involved in engaging in the behavior.	
Belief about traditional medicine practitioner	Henderson (1935)	The interactions between physicians and patients are processes of mutual feedback, where each is constantly affecting the behavior of the other.	<ol style="list-style-type: none"> 1. Competence of traditional medicine practitioners. 2. Role of traditional medicine practitioner. 3. Interaction between traditional medicine practitioner and client.
	Pearson & Raeke (2001)	For some patients in the medical field, it can be their belief or expectation for the physician to behave in a certain way. Patients might expect their health care provider to be competent, compassionate, honest, empathic, dependable, and interested in their goodwill and expect a good outcome of their visit.	

themes of beliefs regarding the purpose of TCAM use, accessibility, acceptability, availability, affordability, concurrently with conventional medicine, and ease of use were designed. Furthermore, the conviction of what TCAM is to elderly was also defined.

Meanwhile, belief in traditional medicine practitioners means to trust that someone is honest, nice or good, and will not harm their clients. In other words, belief about the health practitioner-client relationship is something that involves both

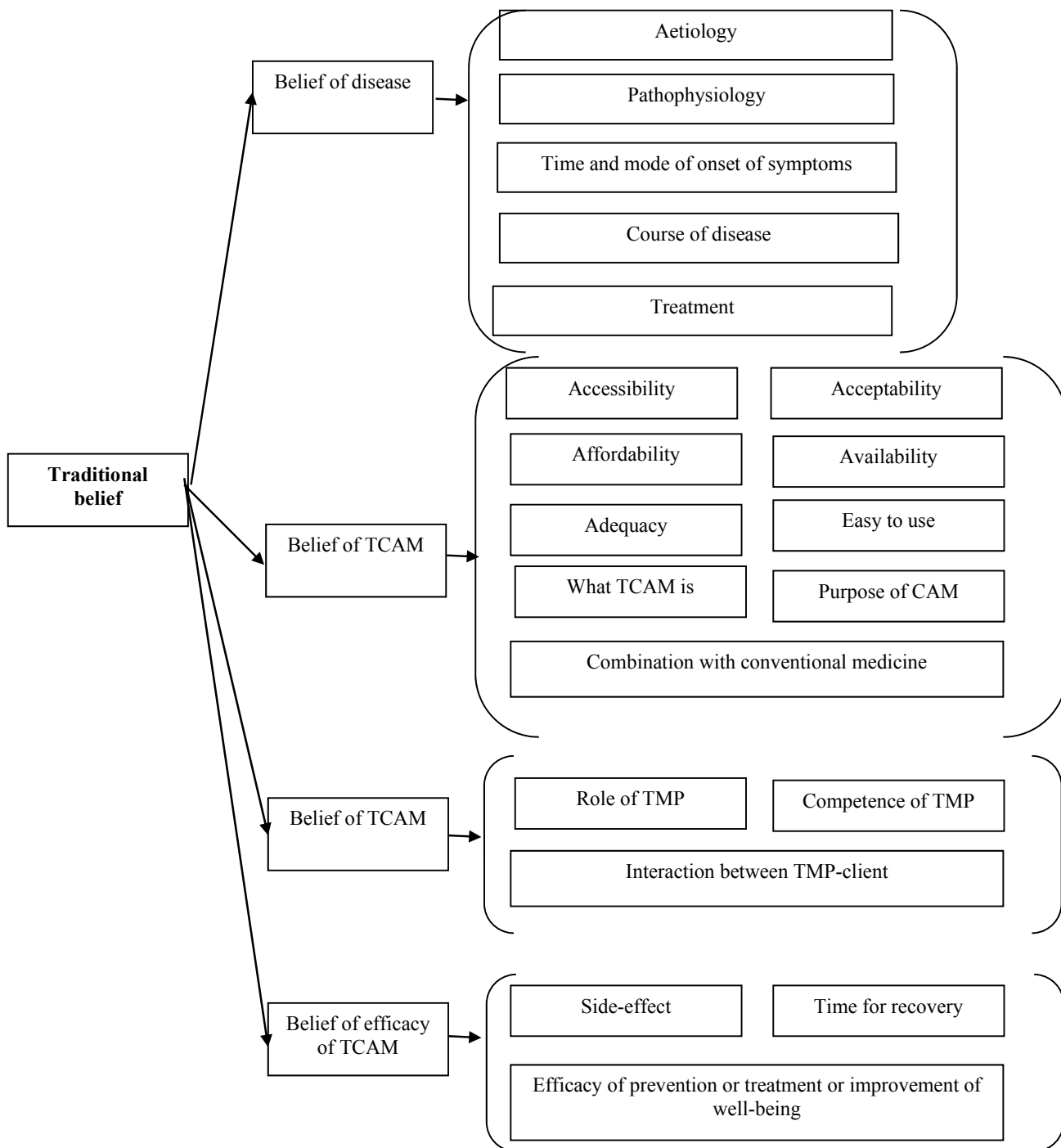


Figure 2. Framework of Analysis

confidence and reliance. For beliefs about the efficacy of TCAM, side effect, time for recovery, and efficacy of prevention or treatment or improvement of well-being were considered. Table 2 shows how sub-themes were created by the combination of models.

We used the framework of analysis shown in Figure 2 to extract data from each original research article that would enable the description of the quantity, focus, and scope of research related to TCAM and belief, as well as to synthesize and circulate the findings. All data regarding the year of publication of each article, type of TCAM products or therapies, research site, the research approach, characteristics related to methodological research, and beliefs were extracted carefully and inputted them into an Excel database.

Collating, Synthesizing, and Reporting the Results

A qualitative descriptive approach was used to summarize the results, grouping the statements identified to be topically similar. Moreover, a descriptive summary of the research using the categories of quantity, focus, the scope of the research, and summary of research findings were produced.

Results

Characteristics and Nature of Articles

A total of 14 articles from the result of the literature search in 3,869 citations were located that described research on TCAM and beliefs among the elderly population. Three articles were published from 1995 to 2017. Although half of the articles had been published for eight years (2010–2017), there does not appear to be a growing trend towards publishing in this field in recent years. The articles covered types of TCAM from many countries, with some articles focusing on types of TCAM from more than one country. Ten articles mentioned belief about TCAM from developed countries, such as the United States of America (4), Australia (2), German, Italy, Mexico, and the United Kingdom, whereas four articles each from developing countries (Ethiopia, Turkey, Malaysia, and Bangladesh).

Based on the literature reviewed, the type of TCAM in developed countries includes vitamins, mineral supplements, yoga, massage, tai chi, bio-energy, biofeedback, chiropractic, herbs, traditional Chinese medication, acupuncture, homeopathy, spiritual healing, and podiatry. Most of the research

in developed countries also used the term “alternative medicine” or CAM to describe TM, such as herbal therapy, massage, and spiritual healing. On the other hand, the terms “traditional medicine” and CAM in developing countries were used to describe the same type of CAM in developed countries, excluding biofeedback and podiatry. Of the types of TCAM, herbal therapy is the most common in all countries.

Research in this field has been designed under a variety of disciplinary perspectives, such as public health, psychology, and complementary medicine. The number of quantitative research is equal to the number of qualitative research. The most commonly used research tool was an interview with a semi-structured or structured questionnaire. Only one article used the focus group discussion and key informant interview to collect data (Rayner & Bauer, 2017). The majority of qualitative research used thematic analysis (n=4), interpretive phenomenological analysis (n=1), and systematic text analysis (n=1) to explore issues surrounding TCAM utilization among the elderly population. One article did not describe how data was analyzed (Steven, 1995).

Meanwhile, most of the quantitative research used descriptive, univariate analysis, multivariate analysis, and regression to analyze data. Traditional belief about TCAM use in qualitative research was observed among large sample size (≥ 70 ; McLaughlin et al., 2012; Arcury et al., 2005) and small sample size (< 30 ; Hossen & Westhues, 2012; Rayner & Bauer., 2017; Steven, 1995; Cartwright, 2007; Nichols et al., 2005). Similar to quantitative research, traditional belief about TCAM was observed among studies with large samples (≥ 500) compared with studies with smaller samples (< 500 ; Ayele et al., 2017; Zeilmann et al., 2003; Gupchup et al., 2006; Ozer et al., 2012; Mitha et al., 2013).

In three of these articles, the elderly aged 65 years and above with chronic diseases were invited to participate, whereas other authors did not describe any diseases in the elderly population (n=11). Moreover, the tendency for recall bias based on whether TCAM was utilized within at least one year or less was identified in almost all studies. The majority of articles were conducted in urban areas (n=7), five in rural areas, one in an aged-care setting, one inside of a clinic, and one is outside of a health center.

In total, all research findings from 14 articles were extracted and summarized according to the four areas

of belief: belief about disease, belief about TCAM, belief about traditional medicine practitioner (TMP), and belief about the efficacy of TCAM.

It is clear that the focus of the seven qualitative research is to explore issues related to TCAM use, such as the perception of efficacy, reasons for use, the role of folk healing, and experience of use among the elderly population, whereas traditional belief was indirectly described in the research objectives of the literature. Furthermore, the common purpose of quantitative research was to identify the prevalence of TCAM use, pattern, and reasons for use by sociodemographic factors (a) to assess the extent to which TCAM is used and level of satisfaction with such therapies, (b) to determine elderly with chronic disease's belief about herbal medicine, or even (c) to compare beliefs underlying significant predictors of intention with the use herbal medicines for health problems in the next six months. However, the personal beliefs of TCAM and TMP, which affect TCAM use in the elderly population, have not much been revealed; especially notable is that a gap remains in the body of knowledge of how the elderly traditional belief about TCAM are associated with their practices and why these beliefs can affect their TCAM practices.

Additionally, a range of TCAM beliefs have been identified to be associated with TCAM utilization in quantitative research and have been highlighted by TCAM users in qualitative research as relevant to their decisions to practice TCAM. However, one literature review was cross-sectional in design, and therefore it is impossible to determine whether TCAM beliefs are held prior to and affect TCAM utilization or are actually a result of TCAM experiences. The multivariate analysis of TCAM utilization implies that there might be significant differences between groups of TCAM users. The number of older people suggested that this might be an effective way of thinking about TCAM utilization. Besides, there is evidence that the beliefs that are associated with TCAM utilization might also be distinguishable in different illness groups.

Of the qualitative research, thematic and phenomenological analyses were used. Meanwhile, phenomenology is used to explore the elderly's lived experience, and that explains the meanings of the experience to the individual's practice. This means that phenomenological analysis attempts to clarify the meaning of a certain phenomenon instead of discovering causes. A typical example is a research

of the relationship between Hispanic ethnicity and attitudes and beliefs toward herbal medicine use by Gupchup et al. (2006).

This scoping review has provided a systematic summary of the current understanding of beliefs that are associated with TCAM utilization, and that might constitute factors that predict TCAM use by the elderly. However, few articles explore beliefs about the role and competence of the traditional medicine practitioner as well as belief about the interaction between the practitioner and their clients, which influences the elderly's health-seeking behaviors. It also suggested that components of TCAM that are defined by the elderly (such as natural or holistic treatment) might be incorporated into conventional medicine and clarifies factors of the elderly's beliefs that might be targeted for health education by conventional medicine and TCAM practitioners. To achieve a comprehensive understanding, it is essential to move beyond cross-sectional designs and explore the interplay between beliefs about illness, treatment, adherence, and experiences with TCAM utilization. There remains a need for greater specification of how these beliefs can influence TCAM use in different illness groups and different types of TCAM use.

Currently, most studies have used the health belief model (HBM) to explain the prevalence and reasons for TCAM utilization in the general population, as well as specific subpopulations. The HBM develops from psychological and behavioral theory with the base that two elements of health-related behavior are (a) the desire to avoid disease and (b) the belief will prevent or cure disease. Basically, an individual's course of practice often depends on the individual's perceptions of the benefits and barriers related to health behaviors to predict whether an individual chooses to engage in healthy action (Rosenstock, 1974). However, the HBM does not explain an individual's beliefs, attitudes, or other determinants that impose an individual's acceptance of health behavior. It also assumes that everyone has access to equal amounts of information about the disease, whereas each person has his or her own perception of illness or disease.

The theory of planned behavior (TPB) based on the theory of reasoned action (TRA) identified three predictors of behavior: attitude, subjective norm, and perceived behavioral control (Ajzen, 1985, pp.11-39). According to Ajzen (1985), attitudes refer to an individual's beliefs of the outcomes of the behavior

combined with an evaluation of the importance of these outcomes, whereas subjective norm refers to beliefs that assess others' approval or disapproval. In terms of perceived behavioral control, this term refers to an individual's perception of the ease or difficulty of performing the behavior of interest. The TPB also predicts an individual's intention to engage in a behavior at a typical time and setting. However, there is a difference between the HBM and TPB. There are no rigorous guidelines on how the different variables anticipate behavior. Instead, the HBM recommends that the individual independent variables can contribute to the prediction of health behaviors.

Beliefs of the Elderly That Influence TCAM Choice

Although extensive study has been conducted on illness perception and the use of conventional medicine (Weinman et al., 1996), few studies have been conducted within the context of TCAM. Only a total of 14 studies found significant relationships between TM utilization and belief of disease. This research concentrated on perceptions of the causes of illness and the seriousness of illness among the elderly population aged 60 years and older in rural Bangladesh (Hossen & Westhues, 2012). It is suggested that within older people's belief systems, the causes of illness are different from a medical doctor's diagnosis. Although spiritual causes affect the acceptance of the elderly of diagnosis and treatments, "wind" and "evil eyes" are the main causes of disease. Older people believed that doctors could not recognize these causes when prescribing treatment; hence they seek TCAM as a way to cure their illness. Furthermore, Hossen and Westhues (2012) explored that older people in rural Bangladesh divided the seriousness of disease into two categories: mild disease and severe disease. Mild disease is normal, tolerable, and can be treated by self-medication, herbalists, and faith healer, whereas severe disease is treated by a medical doctor.

Four of the 14 articles reported that the elderly use TCAM when the failure of conventional medicine occurs, which means that TCAM is defined as complementary or alternative medicine. Three articles described the elderly's use of TCAM as more effective when combined with conventional medicine. Moreover, TCAM was also defined as natural products or holistic medicine. The Australian elderly, according to McLaughlin et al. (2012), believed that TCAM is

not an antibiotic medicine like conventional medicine, which is prescribed by a medical doctor and leads to death as they use too many antibiotics for treatment.

The results suggested that TCAM is used to relieve pain, manage health, prevent specific health problems, and cure disease. According to Steven (1995), the use of TCAM is not only for mild but also for serious diseases. Specifically, the most common aim of TCAM use in the elderly with chronic disease is to relieve pain.

Regarding belief about the cost of TCAM utilization, some studies suggested that there is a relatively low cost involved in TCAM use compared with conventional medicine (Hossen & Westhues, 2012; Gupchup et al., 2006). In other studies, the cost of TCAM was higher than conventional medicine (Rayner and Bauer 2017; McLaughlin et al., 2012). Moreover, Hossen and Westhues (2012) reported that older people in rural Bangladesh paid for TCAM in-kind/goods instead of money. Interestingly, Gupchup et al. (2006) explored that the elderly's use of TCAM was more convenient.

Issues related to the elderly's beliefs related to TMP were addressed in three articles. Büssing et al. (2010) interviewed elderly German health insurance of the Die Continentale Versicherung to determine how beliefs of TMP influence their use of homeopathy and acupuncture. Older people in this study believed that the treatment method is not important, but the treatment practitioner is. This means that TMPs make elderly people less disappointed than conventional practitioners. Other research examined the interaction between TMP and older people that influence the elderly's use of alternative medicine. Older people trusted in the TMP's who had the same cultural heritage as older people, which made their relationship more comfortable. Therefore, the elderly can ask a question or talk about their illness and treatment to their TMP (Hossen & Westhues, 2012). However, TMP in this study is not an herbalist but a spiritual healer. As a result, this article does not meet inclusion and exclusion criteria. Hence, none of the 14 articles can describe the relationship between TMP and the elderly, which have profound impacts on their use of TCAM. Steven (1995) also reported that Mexican American elderly people believed that folk healers who could treat individuals with physical, spiritual, and psychosomatic issues would prescribe good remedies and were effective as all else fails.

Beliefs about efficacy issues were a domain of each article reviewed. Accordingly, several

categories emerged and were synthesized to provide a comprehensive understanding of how the efficacy of TCAM is believed in among the elderly population. Six of 14 articles indicated that the side-effects of TCAM influence the elderly's decision-making on TCAM practices to manage their health issue. Older people aged 60 years and above believed that the use of TCAM has fewer side-effects than conventional medicine (Büssing et al., 2010; Hossen & Westhues, 2012; Zeilmann et al., 2003; Mitha et al., 2013). The elderly believed that the use of TCAM is a slower process of treatment than other medicines, but TCAM can solve the root causes of diseases (Hossen & Westhues, 2012). Also, other older people believed that the use of TCAM has few potential side-effects (Ayele et al., 2017; Gupchup et al., 2006).

Discussion

In gist, the findings of the scoping review indicate the following:

- (1) The articles on TCAM that are published in non-Asian countries are indicative of the growing interest by scholars outside of the Asian region in the use of alternative modes of medicine for managing illnesses among the elderly. This could be caused by a growing acceptance of treatments alternative to western medicine in these non-Asian countries that it is becoming more common for the elderly to seek alternative medicine choices both in Asian and non-Asian countries and a developing interest among scholars in non-Asian countries of the TCAM use, specifically among the elderly population.
- (2) The diaspora of recognized alternative therapies is growing. Although one umbrella term is used, there are many modalities of alternative medicine in the world that are available to the elderly population, even though not necessarily accessible by all economic strata of the elderly;
- (3) The elderly possess long-held cultural and traditional beliefs about illnesses, and these influence their choices of medical treatments, including TCAM.
- (4) Although the elderly may lend credence to western diagnostic and medical systems, they

also mix these with cultural and traditional beliefs when assessing which medicinal treatment plan to take, indicating that the elderly are savvy in making their medical choices.

- (5) The belief of the elderly in the non-invasive and non-harmful nature of TCAM makes it feasible to be used in tandem with western medicine due to its pain-relief and curative effects.
- (6) The elderly's beliefs regarding the lower cost of TCAM and higher cost of western medicine influence them to choose alternative medicines over western medicine options, especially in situations where cultures work outside the western capitalist model and barter and in-kind forms of payment for traditional medicine may be used.
- (7) The elderly's belief in the convenience of accessing TCAM influences their choice to use traditional medicine over western medicine.
- (8) The belief in the similarity of traits with the TMP influences the elderly to use traditional medicines, and this makes traditional medicine more acceptable to them (in-group, out-group situation).
- (9) The elderly believe that western medicine has undesirable side-effects and that TCAM is a more acceptable option that is more efficacious.

All these findings of the elderly's beliefs influence their use of TCAM.

Suggestions for Future Research

These above indicates that the elderly population who use TCAM has more than one belief when deciding to use either TCAM or western medicine. Some of these beliefs are based on culture and upbringing, but others are based on financial considerations. This lack of a core fundamental belief in TCAM, as an influencer of the use of TCAM as found in the scoping review, has implications on the future research of this subject.

First, the research into the use of TCAM has to take a multi-prong approach and cannot be reliant on only one belief as an indicator of the use of traditional medicines among the elderly population. Although various disciplines and theoretical perspectives are in use within the research of the use of traditional medicine

by the elderly, it perhaps would be more productive if future research would take into consideration several factors at one time in assessing the beliefs of the elderly and the influence these beliefs have on their traditional medicine use.

Second, the elderly population is not homogenous despite their shared nationality or cultural background. Future quantitative research on the use of traditional medicines by the elderly should ideally be wide enough to encapsulate the depth of diversity of beliefs among them within the parameters of the research to reach generalizations that also address the variations of differences within the elderly population. Additionally, research from a qualitative perspective should take into consideration that although qualitative research gathers snapshots of lived experiences, these snapshots can change due to the diversity of the elderly population, and these can influence their beliefs and use of traditional medicines.

Third, future research on the elderly's use of traditional medicine can question if the use of traditional medicines with a spiritual dimension (such as yoga or herbal treatments) are at odds with religious beliefs and if this influences the choice to use or not use traditional medicine despite its efficacy of medicinal properties. From an anthropological or sociological perspective, such a study would expand the present body of literature on how the beliefs in the use of traditional medicines influence the choice between traditional and western medicine.

Limitations

There are several limitations to this scoping review. First, only 14 articles on the topic were located and summarized, which impedes a comprehensive review of such a diverse field. These articles were rather varied, which means we had to make decisions regarding which of the many meaningful results to synthesize. Additionally, it is possible that belief about TCAM is embedded within published research indexed using perceptions, attitudes, and behavior-related keywords.

Conclusion

Traditional beliefs about traditional medicine have not appeared widespread in both developed and developing countries, although most studies on the topic emerged in recent years. TCAM is used by

substantial proportions of the elderly and elderly with chronic diseases. This scoping review has identified a wide range of research approaches. In spite of the diversity in approach, the review has highlighted some main concepts that should be considered in designing and reporting future research.

Declaration of ownership:

This report is our original work.

Conflict of interest

None.

Ethical clearance

The study was approved by the institution.

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