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# Advance care planning readiness for Chinese older people: An integrative review and conceptual framework



Review

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Abstract: Advance care planning is a process of discussion in which patients can communicate their end-of-life care preferences to family members and health care providers for consideration. Readiness for advance care planning is a patient's preparedness to engage in advance care planning. This review aims to develop the conceptual framework for advance care planning readiness for Chinese older people. The current knowledge from the published studies was identified and synthesized by an integrative review. The conceptual framework was developed based on the social-ecological model and the theory of planned behavior. The factors from the social environment/ community, health care professionals, and individual/family layers were defined. These factors may influence an individual's medical decision-making, which in turn triggers individual behavioral mechanisms that arise from interactions between motivations, attitudes, and beliefs. Relevant factors should be considered when assessing the behavior of personnel engaged in advance care planning or formulating appropriate intervention measures to improve advance care planning participation in China. This framework can be used to guide studies that explore how the social/familial/individual factors predict the readiness for advance care planning among Chinese older people, and to design intervention studies to test the effect of family function on the readiness for advance care planning.

Keywords: advance care planning • Chinese culture • older people • readiness

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## 1. Introduction

There is a large population in China with a high life expectancy. The National Health Commission showed that the average life expectancy in 2019 was 77.3 years. It increased significantly between 2015 and 2019, from 76.3 years to 77.3 years.<sup>1</sup> Moreover, there is a fast-aging population with 254 million people aged  $\geq$ 60 years (28% of the total population), and this population will continue to grow to a predicted 402 million people in 2040.<sup>2</sup> The use of certain invasive treatments,

such as cardiopulmonary resuscitation or endotracheal intubation, might not improve quality of life in critically ill patients.<sup>3</sup> Chinese citizens are living longer; therefore, quality of life and people's right to autonomy are of increasing concern, influenced by Confucianism and collectivism; patient autonomy might be subordinate to family values, so that the Chinese family might play a vital role in the implementation of advance care planning (ACP) and affect the patient, in that these values

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influence the medical decisions that are made in relation to the patient.<sup>4</sup> In clinical practice, although nonresuscitation orders or other end-of-life care forms are signed by the patient, there are still family members who override a living will and refuse to allow the do-notresuscitate order to be implemented. Frequently, invasive treatments are still performed on patients with living wills or do-not-resuscitate order. Advance care planning and advance directives are essential elements of quality palliative care.<sup>5</sup> Health care professionals should ensure patient autonomy, especially when considering the issue of advance care planning. It is important to explore the influencing factors and different values on advance care planning within a Chinese context. The present review aims to develop the conceptual framework for advance care planning readiness for Chinese older people.

## 2. Literature review

Electronic databases such as Medline, PubMed, CINAHL, Science Direct, and China National Knowledge Infrastructure (CNKI) were used to identify relevant studies published from 1 October 2008 to 1 October 2021. The keywords included "advance care planning," "advance care planning readiness," "family function," "elderly," "older people," "Chinese," and "China." Totally, 110 studies were involved in this review.

### 2.1. Advance care planning

Advance care planning is a process of communication and discussion for patients to communicate their end-oflife care preferences for consideration by family members and health care providers.6 After discussing the condition, treatment, and prognosis, the patient's preferences can be recorded via advance directives, a living will, or a non-resuscitation form. An advance directive is a legal document that is signed by a competent person to guide medical and health care decisions (such as the termination of life support or organ donation) in the event the patient becomes incompetent and can no longer make such decisions.<sup>7</sup> A systematic review reported that advance care planning increased the patient usage of advance directives, and it was more acceptable than signing an advance directive because the discussion gave attention to their wishes, values, and beliefs rather than specific treatments and interventions.8 Advance care planning can promote patient-centered care, meet the patient's wishes and respect patient autonomy, and help the patient make difficult medical decisions; reduce the burden of family decision-making, bereavement, stress, and anxiety; and decrease the level of moral dilemmas of employees, minimize hospitalizations, and lower medical costs.9

### 2.2. Advance care planning readiness

Readiness needs to be understood as the desire and ability to be prepared for an upcoming event or occurrence. Advance care planning readiness is a prerequisite of advance care planning or a patient's preparedness to engage in advance care planning discussions.<sup>10</sup> It consists of motivation, attitude, and belief. It is understood as one of the essential aspects for accomplishing successful engagement in advance care planning. A high degree of advance care planning readiness means that patients want to know their diagnosis, treatment plan, prognosis, etc. Uncertainty about advance care planning readiness could hamper efforts to carry out an exercise of advance care planning.11 A systematic review demonstrated that enhancing the readiness for advance care planning would help patients engage in advance care planning and attenuate the obstacles involved in the process of such planning.10

### 2.3. The factors influencing advance care planning readiness

The factors that may influence advance care planning readiness are from individual, family, health professional, and society/community layers.

### 2.3.1. Individual layer

The factors from the individual layer included age, education, knowledge of disease, health belief (positive health actions), attitude to death, treatment and rescue experiences, health status, occupational background, religious faith, and gender. Aging is related to poorer physical function and approaching death; there is a growing demand for medical and end-of-life care among older adults, and accordingly, advance care planning engagement is likely to rise with age.12 In terms of educational level and knowledge of disease, low levels of education and a lack of information about disease are barriers to advance care planning readiness.13 Research has shown that health belief (positive health actions) and positive attitude to death are factors related to advance care planning engagement. People who are accepting of death and are active in staying healthy are more likely to engage in advance care planning.12,14 Treatment or rescue experiences might cause suffering and loss of dignity, and there is increasing evidence that treatment or rescue experience was the main factor related to advance care planning.15 In terms of the variable of physical health, the results from a cross-sectional study reported that patients with high comorbid conditions were more likely to complete an advance directive among 456 older nursing home residents.<sup>16</sup> Zhu et al.<sup>15</sup> conducted a mixed-method study among 523 community older adults and the results showed that poor health condition was more preference toward advance care planning. Moreover, Gallagher et al.<sup>12</sup> found that people with experience working in health or social care are likely to have increased advance care planning engagement. With regard to religious beliefs, Miyashita et al.<sup>17</sup> conducted a nationwide survey using a quota sampling among 3167 people and reported that people holding religious beliefs were higher odds of having the discussions about advance care planning (adjusted odds ratio: 1.45, 95% confidence interval [CI]: 1.22-1.73). But Balboni et al.<sup>18</sup> conducted a cohort study of 343 terminal cancer patients and found that patients who are well supported by a religious group were associated with lower advance care planning uptake (adjusted odds ratio: 0.37, 95% CI: 0.20-0.70) and higher odds of opting for aggressive treatment (adjusted odds ratio: 2.62, 95% CI: 1.14-6.06), which might be the consequence of the influence of belief in miracles from religious traditions. Gender differences were pronounced in advance care planning; study has shown that women are more likely than men to engage in advance care planning. Women have more experience in seeking and accessing health care than men, and gender differences in the attitude of the health care system are considered to be possible reasons for gender differences in the engagement of advance care planning.12

#### 2.3.2. Family layer

A family is a unit of interconnected individuals, whether adults or children, with an unspoken agreement to support each other, and family function is the operation of a family system that includes all family members. Family function is defined as the frequency of normal family routines, effectiveness of family communication and problem-solving, family cohesiveness, and how well family members get along.<sup>19</sup>

The literature expands on the relationship between family function and an individual's health status. In a secondary data analysis study among 3159 Chinese older people, family relationships play a vital role in health service utilization. People with poorer family relationships were characterized by significantly more doctor visits and inpatient services' use.<sup>20</sup> Positive family function is essential for an individual's health status. Zhou et al.<sup>21</sup> conducted a cross-sectional study among 388 adults aged 60–65 years in China, and the results showed that effective family function and social support played the most significant roles in helping individuals overcome their high risk of loneliness. A study explored the factors that influence advance care planning engagement among Chinese Americans aged ≥55 years in Hawaii and found that family relationships affect advance care planning in a complex association, and that cultural factors play an essential role in advance care planning.<sup>22</sup> The results of a qualitative study in 28 older adults in Taiwan reported that advance care planning could help reach a death without suffering. Family relationships and family members' readiness were essential roles in advance care planning engagement.9 A systematic review of health care professionals' views in Asia showed that advance care planning had several benefits but patients rarely engaged in advance care planning in Asia. This might result from the health care professionals maintaining family harmony, which was affected by the collectivist cultures in Asia. The initiation of advance care planning in Asia should focus on the role of the family.23 The family function is a critical component that affects the advance care planning readiness for older adults. The impacts of family income, beliefs, religion, and concepts of life and death on advance care planning readiness need to be investigated in future studies.12,23

#### 2.3.3. Health professional layer

A scoping review reported that health care professionals with negative attitudes and awareness were more likely to be reluctant to engage in advance care planning.13 There is growing evidence that a therapeutic trust between patients and health care professionals could facilitate the discussion and engagement of advance care planning.<sup>24</sup> The reasons for Asian health care professionals' difficulties in initiating advance care planning may include a lack of knowledge/skills in advance care planning, personal discomfort in adhering to an advance care planning exercise, fear of conflicts with family members, legal consequences, and the lack of a standard or legal policies for advance care planning.23 Li et al.25 found that the duty of health care professionals to keep a patient alive was a barrier to health care professionals in implementing advance directives, which may increase the reluctance to deliver relevant information to patients, and thus, discussions about advance care planning rarely occurred. Medical guidelines for advance care planning engagement should be developed to guide professionals to implement advance care planning for patients, while knowledge of advance care planning should be further popularized among the public.

#### 2.3.4. Society/community layer

A good support network is one of the facilitating factors of advance care planning that people with higher social support were more willing to engage in advance care planning uptake.<sup>13</sup> In addition, when the government underpins advance care planning policies, the chance of successful advance care planning completion is improved.<sup>15,26</sup> Confucianism, Chinese culture, the doctrine of filial piety, and taboos around talking about death may influence the readiness for advance care planning in the individual/ family/health professional layer. Laws or policies related to advance care planning need to be developed.

## 3. Developing a conceptual framework

The conceptual framework for advance care planning in older people was developed based on the socialecological model and the theory of planned behavior.

### 3.1. Social-ecological model

The social-ecological model was formulated by sociologists. According to this model, health is a system of interaction between multiple layers including the individual, the group/community, and the physical, social, and political environments. This model provides a large and well-established view of factors that affect human behaviors. It can be used by researchers, community leaders, and health professionals to identify factors that affect people's health at the individual, familial, community, and social levels and to formulate disease prevention and health promotion strategies. It concentrates on integrating different approaches to alter the social and physical environments instead of changing only individual health behaviors.<sup>27</sup>

### 3.2. Theory of planned behavior

The theory of planned behavior is a psychological perspective theory that links beliefs to behavior and includes an individual's behavior, attitude, and intention. Behavior is an individual's observable response to a presented condition concerning a given target. Attitude is the level to which a person has a favorable or unfavorable evaluation of the behavior of concern. It involves behavior, belief, and attention to the results of carrying out the behavior. Intention is the motivational factor that influences a given behavior, where the more vital the intention to perform the behavior, the more likely an individual is to perform the behavior.28 The intention is affected by one's attitude toward that particular behavior and the values (norms) of the individual, whether or not the individual thinks the behavior is appropriate. Individuals are more likely to perform a particular behavior if they believe that it can lead to the expected outcomes and have the necessary resources and opportunities to do it.

### 3.3. The conceptual framework for advance care planning readiness for older people

The social-ecological model considers the complex interplay between individual, relationship, community, and societal factors. The theory of planned behavior connects beliefs and behaviors; it believes that the core components of attitude, subjective norms, and perceived behavior control together shape individual behavioral intentions. The theory of planned behavior and the social-ecological model analyze individual behavioral mechanisms and social factors affecting behaviors, respectively. Advance care planning is a health behavior that involves discussing personal care plans and medical treatment, made by interacting between individuals, their families, and health providers. The complex interplay of factors correlates with advance care planning readiness, family function, and other individual psycho-social characteristics. In this study, researchers used some constructs of the theory of planned behavior and added components from the social-ecological model to make a more integrated conceptual framework for advance care planning readiness for older people (see Figure 1).

Advance care planning involves the planning for future medical care and wishes that align with the values and preferences of the patient, especially in the case of severe illness or at the end of life. Advance care planning readiness is a patient's preparedness to engage in advance care planning discussions.6,10 It is caused by the interactions between motivation, attitude, and belief. The factors from the social environment/community, health care professional, and individual/family layers were defined. The factors from the society/community layer include an essential aspect of Chinese culture, i.e., Confucianism (such as the doctrine of filial piety, concern for living, and a taboo around talking about death), laws or policies related to advance care planning, and social support. Cultural, community, and social consensus are the factors in the societal layer and may affect the health professional, family, individual, and medical decision-making and advance care planning readiness. The next layer is the health professional layer. The factors include medical guidelines, therapeutic trust, duty to keep patients alive, publicity of advance care planning, attitudes and awareness to advance care planning, and concern for the family members' will. Advance care planning readiness may be hindered if health care professionals lack experience in advance care planning programs or lack medical guidelines for implementation. The last layer is the individual and family layer, in which the factors influence each other. Based on the integrative review in this study, individual factors include knowledge of

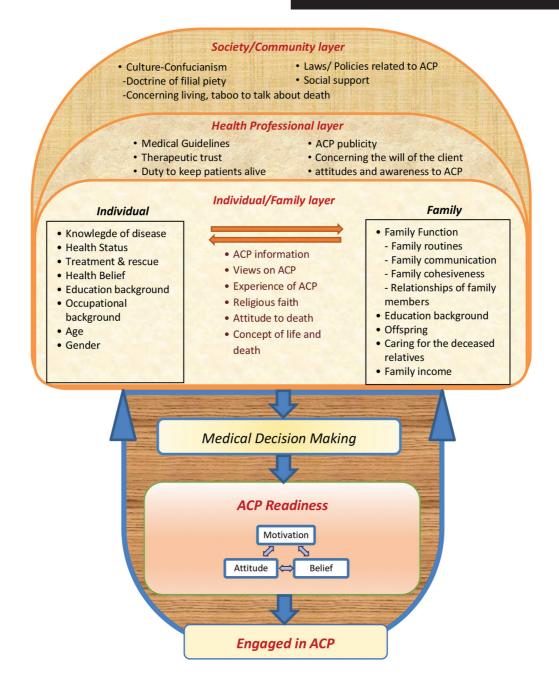


Figure 1. The conceptual framework for ACP for older people under Chinese culture. ACP, advance care planning.

disease, treatment or rescue experiences, health status, health belief (positive health actions), education level, occupational background, and age/gender. Family factors include education background, family income, offspring, relationships and caring for deceased family members, and family function, which consists of family routines, family communication, family cohesiveness, and relationships of family members. The interaction of the individual and family factors has a sizable effect on advance care planning information, views on advance care planning, the experience of advance care planning, religious faith, attitude to death, and the concepts of life and death. Finally, the 3 levels of factors have an effect on personal medical decision-making, which in turn triggers the personal behavior mechanism caused by the interaction of motivation, attitude, and belief. All layers interact to facilitate the participation in advance care planning. In addition, when advance care planning is successfully implemented, it will serve as a feedback mechanism at the individual and familial levels of the conceptual framework of advance care planning preparation, thereby improving the overall advance care planning preparation of the entire society in the future.

## 4. Discussion

Based on the above-mentioned inferences concerning the advance care planning readiness conceptual framework, the interaction between individual and family members can be judged to be one of the essential mechanisms affecting the readiness for advance care planning. It can promote family harmony consistent with Chinese culture and help families make decisions together that may increase the opportunity to achieve the patient's wishes. The concept of informed consent and respect for autonomy are 2 of the most important ethical issues for health care professionals. Nevertheless, it is not easy to maintain consistency between ethics and clinical practices. The doctors might inform patients about their whole situation, including prognosis, the likelihood of a cure, and treatment choices for the patient. The families might think that doctors are irresponsible and untrustworthy, and as a result, doctors in China tend not to explain advance care planning. Therefore, public education is an essential part of advance care planning engagement. On the other hand, the lack of laws and policies is a considerable barrier to the implementation of advance care planning. If advance care planning and advance directives are lawful and practical, with the statutory procedures and forms in order, this may promote the engagement of advance care planning. It is suggested to make relevant policies or laws based on traditional Chinese culture as well as increase public recognition of patient autonomy.

Regarding the implementation in nursing research, this framework can be used to guide studies that explore how the social/family/individual factors predict the readiness for advance care planning among Chinese older people. A mixed-method quantitative study accompanied by qualitative research is suggested to assess the readiness for advance care planning and its influencing factors. Primary data should be collected from older people, their family members, health care professionals, and relevant policymakers through questionnaires or interviews. Furthermore, this framework can also be used to design intervention studies to test the effect of family function on the readiness for advance care planning.

## 5. Conclusions

As the aging populations continue to grow, a fast generation of studies outlining the variables that affect advance care planning readiness will be crucial. This study has formulated a new and theoretically supported conceptual framework for facilitating the engagement of advance care planning under Chinese culture. Meanwhile, based on an integrative review of previous empirical studies, this paper summarized the factors from the social environment/community, health care professional, and individual/family layers to understand the fundamental information and framework of advance care planning for Chinese older people. Relevant factors should be considered when assessing the behavior of personnel engaged in advance care planning, analyzing individual behavior mechanisms, or formulating appropriate intervention measures to improve the participation of advance care planning in China.

## 6. Recommendations

Further empirical studies are proposed to test this conceptual framework in various circumstances to confirm its usefulness and identify the gaps in knowledge. This conceptual framework needs to be further modified for diverse cultures. Moreover, practical protocols based on this framework should be developed and translated into appropriate policies and practices for promoting the engagement of advance care planning in the Chinese population. It is suggested to popularize knowledge about life and death, advance care planning, and patient autonomy to the public; establish mutual and harmonious support in the family; and promote communication with health professionals.

## **Ethical approval**

Ethical issues are not involved in this paper.

## **Conflicts of interest**

All contributing authors declare no conflicts of interest.

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