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ORIGINAL ARTICLE

Patient perspectives on adapting meaning-centered psychotherapy in advanced cancer for the Chinese immigrant population

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Abstract

The Chinese immigrant community faces multiple obstacles to effective cancer support and psychosocial care post diagnosis. Meaning-centered psychotherapy (MCP) is an empirically based treatment (EBT) that has been found to significantly reduce psychological distress while increasing spiritual well-being and a sense of meaning and purpose in life in patients with advanced cancer. However, it has not yet been adapted for Chinese immigrants who have unique linguistic and cultural needs. This study presents a community needs assessment to inform the cultural adaptation of MCP for Chinese patients with advanced cancer using Bernal et al.'s ecological validity model and the cultural adaptation process model of Domenech-Rodriquez and Weiling. Interviews were conducted until saturation with 12 Chinese immigrants with advanced cancer to determine the community's needs and preferences regarding the MCP intervention. Transcripts were translated and analyzed using Atlas.ti and six frequently occurring themes were identified: Coping; End of Life; Family; Culture, Religion, and Language; Immigration; and Specific Adaptations to MCP. Sociocultural values, beliefs, and practices such as filial piety and the use of Traditional Chinese Medicine (TCM) should be considered when adapting EBTs for Chinese immigrant cancer patients.

Keywords Chinese immigrants · Advanced cancer · Psycho-oncology · Meaning-centered psychotherapy · Cultural adaptation · Spiritual well-being

Background

The Chinese population in the USA is growing, from 2.9 million in 2000 to over 4.9 million in 2015 [1]. The rate of Chinese immigrants moving to New York City (NYC) has grown by 49% from 2000 to 2015 and Chinese immigrants make up approximately 22% of all foreign-born immigrants in NYC [2]. Asian Americans experience a unique and unusual cancer burden, being the only major population group in the USA for whom cancer deaths exceed heart disease deaths [3, 4]. While Asian Americans are at lower risk for certain cancers, they have higher rates of tumors related to infectious diseases, including gastric, liver, cervical, and nasopharyngeal [4]. Chinese Americans in California (disaggregated national data on the major Asian ethnic groups are not routinely available) have higher rates of liver, colorectal, and lung cancer than those of other Asian groups [4].

Chinese immigrants with cancer are confronted with a multitude of obstacles to high quality of life (QOL) post cancer diagnosis [5]. Cultural, linguistic, socioeconomic, and immigration-related factors (e.g., challenges with acculturation and a lack of familiarity with the US medical system) contribute to a lack of accurate information about cancer [5, 6], difficulty navigating the health care system [7], poor access to culturally and linguistically appropriate support [7–9], unmet financial needs [10], and greater vulnerability to cancer stigma [6].

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A major barrier to the delivery of effective cancer support among Chinese immigrant patients, which requires sensitive communication of complicated and distressing information [11, 12] is the linguistic and cultural gap between providers and patients. In 2010, 1.6% of US physicians reported speaking Chinese [13], yet the Chinese immigrant population makes up 5% of the US population and growing [1]. Fifty percent of the US Chinese population speaks English less than "very well" [14]. In New York City, 45% report speaking English "not well" or "not at all" [15]. Chinese cultural factors, such as traditional Confucian philosophy, which emphasizes social hierarchy [16], may contribute to poor communication with doctors (e.g., passively following doctors' advice) [6] and reduced care participation [17]. Cultural differences between providers and Chinese patients can result in miscommunications of prognoses and difficulties delivering end-of-life care, as reflected in the common practice of Chinese family members concealing diagnoses from patients [16].

End of life care may be enhanced for the Chinese immigrant community through the use of meaning-centered psychotherapy (MCP), an empirically based treatment (EBT) developed by Breitbart and colleagues [18] designed to help advanced cancer patients sustain or enhance a sense of meaning as they approach the end of life [19]. MCP has been found to significantly reduce psychological distress (e.g., depression, hopelessness, anxiety, and desire for hastened death) and significantly increase spiritual well-being and a sense of meaning in life in patients with advanced cancer [18–21]. The MCP intervention consists of 7 (individual) or 8 (group) 90-min sessions [20, 21] (Table 1). Treatment manuals have been developed for individual and group MCP and include sample session scripts, handouts, exercises, and homework assignments [22, 23].

MCP may have special relevance for Chinese immigrants with advanced cancer, given the overlap between philosophies held in Eastern religions such as Buddhism and the meaning-enhancing goals of MCP [24, 25]. A qualitative study of the influence of Chinese culture in addressing the spiritual needs of advanced cancer patients in Taiwan found the following spiritual needs: foster hope for survival and obtain a peaceful mindset, fulfill the meaning of life and preserve one's dignity, experience more reciprocal human love, and receive assistance in facing death peacefully [16]. However, to the authors' knowledge, no explicitly meaning-centered psychotherapies are currently being utilized with Chinese cancer patients and MCP has not yet been adapted for Chinese immigrants who may have a different conceptualization of "meaning" than their White counterparts [18, 21].

Culturally adapted treatments have been demonstrated to be more effective than those that have not been adapted, and interventions targeted for a specific ethnic group are more effective than those delivered to patients from a variety of backgrounds [26]. The ecological validity model (EVM) [27] and the cultural adaptation process (CAP) [26] are effective approaches for cultural adaptation. The EVM focuses on cultural adaptations of evidence-based psychosocial treatments for minority populations and consists of eight content-related dimensions: Language, Persons, Metaphors, Content, Concepts, Goals, Methods, and Context [27]. The Cultural Adaptation Process (CAP), developed for use with the EVM, is a broader model that involves both treatment developers and the community [24]. The CAP has three phases: (1) initial work between stakeholders; (2) pilot testing; and (3) adaptation iterations as needed [26].

Table 1 Meaning-centered psychotherapy sessions

Session no.	Topics	Description of session
1	Concepts and Sources of Meaning	Participants first share their cancer stories, then share what "meaning" means to them, i.e., what is important in life—their beliefs, values, hopes for the future
2	Cancer and Meaning	Participants explore how cancer has affected their sense of identity
3*	Historical Sources of Meaning	Participants are asked, "When you look back on your life and upbringing, what are the most significant memories, relationships, traditions, etc. that have made the greatest impact on who you are today? As you reflect upon who you are today, what are the meaningful activities, roles, or accomplishments that you are most proud of? As you look toward the future, what are some of the life-lessons you have learned along the way that you would want to pass on to others?"
4	Attitudinal Sources of Meaning	Participants are asked, "Since your diagnosis, are you still able to find meaning in your daily life despite your awareness of the finiteness of life?"
5	Creative Sources of Meaning	Participants explore meaning derived from creativity and responsibility
6	Experiential Sources of Meaning	Participants are asked to list three ways in which they "connect with life" and feel the most alive through the experiential sources of love, beauty, and humor
7	Transitions	Goodbyes, and hopes for the future: participants give their feedback on the program

*In the group format of MCP (meaning-centered group psychotherapy), the topic "Historical Sources of Meaning" is covered over two sessions. In the individual format (individual meaning-centered psychotherapy), it is covered in one session

The present study utilizes the dimensions of the EVM and the process outlined in the CAP model to guide the cultural adaptation of MCP for the Chinese immigrant population. This study, along with a previous study of providers/community leaders serving the Chinese immigrant population [25], is a CAP phase 1 study assessing the psychosocial needs of Chinese American advanced cancer patients. The purpose of the study is to inform a culturally and linguistically responsive adaptation of MCP for this large, underserved population (MCP-Ch) and to identify salient issues that may affect how they receive cancer care and support.

Methods

This study utilized qualitative, in-depth interviews in order to learn from individuals' cancer experiences, which are subjective and difficult to capture quantitatively. A grounded theory approach was used; its central idea is that the theory is grounded in data by an inductive process in which the data serve to generate rather than verify hypotheses [28].

In-depth, semi-structured interviews were conducted with a convenience sample. Participant inclusion criteria were as follows: non-US born, of Chinese descent, age 21–80 years, Mandarin- and/or English-speaking, and having a diagnosis of stage IV cancer of any type. Study staff worked closely with the following community and clinical partners to recruit participants: Memorial Sloan Kettering Cancer Center (MSKCC), Queens Cancer Center, Chinese Christian Herald Crusades, American Cancer Society Asian Initiatives, Charles B. Wang Community Health Center (CBWCHC), and Dr. Pamela Yew Schwartz, a psychologist treating terminally ill Chinese cancer patients and member of the New York Coalition for Asian American Mental Health (NYCAAMH).

Potential participants were referred by the community partners and approached by telephone to assess interest in participation. The PI (JL) conducted interviews in English using a Mandarin interpreter (XH) who has been extensively trained in the vocabulary and concepts of MCP. Interviews took place at the following sites: Memorial Sloan Kettering Breast and Imaging Center (Manhattan), Chinese Christian Herald Crusades (Queens), American Cancer Society (Queens), at the participant's home (Queens), and at the participant's nursing home (Queens). An interview guide was developed based on the dimension of the EVM, in consultation with the community partners listed above, and on key articles from the literature [20, 21, 25]. The semi-structured interview guide begins by introducing participants to MCP, describing it as a program to facilitate a greater understanding of possible sources of meaning both before and after a diagnosis of cancer and to help patients cope with cancer by enhancing their sense of meaning and purpose in life and to make the most of the time they have left. The remainder of the guide is comprised of 19 questions concerning the following areas of inquiry: (1) patients' goals for MCP; (2) relevance and adaptability of the MCP session themes; (3) relevance of key cultural themes from literature and preliminary work, e.g., role of the family, traditional Chinese values, and cancer stigma, [25]; (4) preferences for intervention methods; and (5) potential impact of contextual barriers on delivery and effectiveness of MCP. Interviews were conducted from September 2014 to December 2016 and were conducted to data saturation; specifically, once redundancies in responses were reached, study staff discontinued seeking participants.

Interviews ranged from 60 to 90 min. They were audio recorded, transcribed, translated into English, and analyzed using Atlas.ti, a computer program designed and widely used for qualitative data analysis [29]. The PI (JL) and second author (FL) conducted the analysis using inductive analysis techniques from grounded theory [30]. Summary categories were developed by studying the transcripts and considering their meanings and associations with developing themes. Once the coding scheme was established, interview transcripts were reread and coded (JL, FL). This iterative process permitted reviewers to closely examine significant issues raised in the interviews and to identify specific themes, subthemes, and subtopics. JL and FL discussed the results, resolved disagreements on coding, and agreed upon key themes. Reviewers also agreed on selected quotations to illustrate themes.

Results

Twenty-one potential participants were approached by telephone and 12 agreed to participate. Reasons for refusal included the following: only interested in a therapeutic study; a 90-min interview was too long; did not want to do anything (outside of treatment), felt too weak to participate, and not interested. Of the 12 participants, all (100%) were female. The age range of participants was 31–74, with a mean age of 53. Nine participants (75%) were born in mainland China, 2 were born in Taiwan, and 1 in Hong Kong. Five participants had a primary cancer diagnosis of breast cancer (42%), 5 lung cancer (42%), 1 non-Hodgkin's lymphoma, and 1 cancer of the bladder. All were being treated by oncologists at hospitals and cancer centers in New York City.

Inductive analysis yielded a total of 51 codes (subtopics) within 6 key themes: Coping; End of Life; Family; Culture, Religion, and Language; Immigration; and Specific Adaptations to MCP (Table 2).

Coping

All participants discussed methods of coping with advanced cancer. Some identified specific sources of meaning, including their families ($n = 8$), nature ($n = 1$), religion ($n = 6$), personal responsibility ($n = 3$), and helping others ($n = 6$).

Table 2 Key themes, subthemes, and subtopics

Theme	Subtheme	Subtopic
Coping	Sources of meaning	Children/family Nature Religion Helping others Responsibility
	Changes after diagnosis	Shift in occupational goals Dependence vs. independence vs. interdependence Pain Physical appearance
	Coping strategies	Acceptance Positive attitude Present/future-facing Social support Physical exercise
End of Life (EOL)		EOL preparedness Unwillingness to face death Disclosure/speaking sensitively about EOL Need for MCP-Ch
Family	Family expectations	Filial piety Pt as burden on family
	Family relationships	Conflict and forgiveness
Culture, Religion, and Language	Traditional views	Cancer stigma Self-blame Cancer as a message or fated Traditional Chinese Medicine (TCM) Fatalism Lack of expressivity Heterogeneity/individual differences in adherence to traditional views
	Religion	Heterogeneity of religion among Chinese Religion as a source of meaning Incorporating religion in MCP-Ch Use of religion to face death
	Diet	Food therapy
	Culturally syntonic expressions	"legacy"—*jing shen yi chan* (spiritual) vs. *yi chan* (material inheritance) "Creativity"
Immigration		Reframing immigration experience
Specific Adaptations to MCP	MCP-Ch design	Group vs. individual MCP-Ch Incorporate discussion Provide information/resources Phone vs. in-person Simplify topics/questions Food Ongoing program Including family in MCP-Ch Use of concrete examples
	Address treatment barriers	Advanced cancer stage Importance of therapeutic alliance SES Childcare Location of MCP-Ch sessions Transportation

Regarding helping others, a few participants described sharing their experiences with others as therapeutic and meaningful: "[We] visit critically ill patients, get to know them, and provide comfort. There are so many things for you to do, and you shouldn't forget about giving thanks, to be grateful, no matter who you are" (participant #6).

Participants reported changes occurring post diagnosis, e.g., a shift in occupational goals ($n = 3$), physical pain ($n = 3$), physical appearance ($n = 2$), and a shift from independence to dependence and interdependence ($n = 2$). A number described specific coping strategies that would be helpful to discuss in MCP, including acceptance of one's diagnosis ($n = 1$), being present/future-facing rather than ruminating on the past ($n = 5$), giving and receiving social support ($n = 6$), engaging in physical exercise ($n = 3$), and having a positive attitude ($n = 7$). One participant explicitly described meaning-making as a way of fostering a positive attitude: "If cancer patients can realize their lives are still meaningful, then their attitude will improve" (participant #9). Participants' emphasis on coping suggested that Chinese patients may benefit from a coping-skills component to MCP-Ch, potentially in the session on "Experiential Sources of Meaning."

End of life

Participants reported varying levels of end of life (EOL) preparedness ($n = 6$). Some described a cultural reluctance to discuss EOL matters: "A hospice center … told me that I only had six months to live. [Friends] said, 'We Chinese do not accept this!'" (participant #9). Others welcomed the opportunity to prepare for end of life: "Maybe they would think, 'Ah, how do I prepare myself to face the time I have left'" (participant #2).

A few participants ($n = 3$) raised the significance of speaking sensitively about EOL with Chinese cancer patients, suggesting that during the session on "Attitudinal Sources of Meaning," where what constitutes a "good" or "meaningful" death is discussed, the common cultural practice of not disclosing terminal prognoses with patients should be taken into consideration: "Chinese people don't seem to accept being told that they only have a few months to live. Maybe there is a way to convey the same thing with more subtlety?" (participant #9).

A number of participants ($n = 5$) felt MCP adapted for the Chinese population would be particularly useful in helping Chinese cancer patients face EOL issues: "It's not like once you have cancer, you have nothing to do except wait for death to come. [MCP-Ch] provides an opportunity to talk about and recall things in the past, and [to think about] what they can do now" (participant #10).

Family

All participants discussed the importance of family in their cancer experience. Many ($n = 5$) raised the cultural value of filial piety, i.e., a Confucian virtue of respect for one's parents, elders, and ancestors, indicating that MCP-Ch should take into account such Chinese traditional values in the session on "Historical Sources of Meaning": "Filial piety, no matter where you are, is a good thing to promote" (Participant #11). Two participants raised their concern about being a burden on family members and related fears of not meeting family responsibilities. "I feel indebted to my family … If I were healthier, I could help [my daughter] out, clear some things off her plate. But … I couldn't do anything" (participant #7).

Others ($n = 5$) described their cancer diagnosis as a turning point in deepening or repairing relationships with family members. One participant described the arduous process of forgiving her ex-husband post cancer diagnosis: "I often tell [my children] to love their father. I do not hang on to what he did to me" (participant #6).

Culture, religion, and language

All participants raised cultural issues in adapting MCP for the Chinese cancer population. A majority ($n = 10$) described traditional views of Chinese patients as perpetuating cancer-related stigma, particularly through the idea of cancer as fated or punishment for misdeeds in a past life. A few ($n = 3$) grappled with understanding cancer as a message from a higher power: "I thought … God wanted me to rest" (participant #2). Another participant described being separated from her husband due to his family stigmatizing her because of her cancer diagnosis: "When my husband found out that I have this disease, his family didn't allow me to go back" (participant #4). These responses suggested that Chinese patients may benefit from a discussion of experiences of cancer stigma, as well as cancer education to counter cancer myths in session 2 of MCP-Ch ("Cancer and Meaning").

Participants also identified fatalism and self-blame as traditional Chinese views that could impact well-being and contribute to a lack of expressivity: "Chinese cancer patients … just bear the burden on their own … They don't want to create trouble for other people. But in this process, they bury things in their heart, and it's not good for their health or for their family" (participant #10).

A majority of participants ($n = 10$) discussed the importance of addressing Traditional Chinese Medicine (TCM) in the MCP intervention, given its potential to interfere with Western cancer therapies. One reported the death of a friend with cancer who refused non-TCM treatment: "She insisted on taking Traditional Chinese Medicine and passed away shortly after. She did not go to the doctor nor had any checkups. There are many people who are blind like this" (participant #6). Another proposed incorporating nutrition/dietary education in MCP sessions to combat the use of TCM: "Chinese people have a very different diet than Americans. You should tell them that [diet] is beneficial to their condition or health. Chinese people are receptive to this" (participant #12).

Some participants ($n = 5$) also discussed religion as a meaningful source of strength in facing EOL issues such as pain and distress. "For ten weeks, it hurt even to breathe … religion gave me great comfort and something to rely on" (participant #2). However, participants were split on whether or not to incorporate religion in MCP. Several brought up the heterogeneity of religion among Chinese immigrants as a potential challenge: "Buddhism and Christianity are different. Catholicism is also different … Everyone has their own religious beliefs" (participant #3). However, another participant noted that traditional Chinese culture (e.g., values rooted in Confucianism, such as respect for society and social hierarchy) was a connecting thread for Chinese cancer patients with different religious beliefs: "Maybe Chinese traditional values have given us … a kind of emotional and mental support. This has nothing to do with religion. Chinese traditional values are more or less the same for all Chinese people" (participant #1).

Participants also discussed challenges related to the Chinese translation of expressions used in MCP, sometimes making recommendations to clarify key concepts. For example, several participants ($n = 4$) suggested clarifying the meaning of legacy discussed in session 3 (on Historical Sources of Meaning), differentiating between *yi chan* (material legacy or "inheritance") vs. *jing shen yi chan* (spiritual legacy): "I will of course give that [material inheritance] to my son. As to [non-material] legacy … to be able to raise him … this is my greatest honor" (participant #5). Similarly, some ($n = 4$) were perplexed by the meaning of "creative sources of meaning" (Session 5). However, when creativity was reframed more concretely, and as inclusive of responsibility to others (e.g., taking care of your family, working, and parenting), participants were more responsive: "We [need] to define ourselves as people who are not useless. Every person has contributed something to a family" (participant #7).

Immigration

Some participants ($n = 2$) emphasized their identity as US immigrants and positively framed their immigration experience as providing opportunities not possible in their homelands. One interviewee expressed gratitude for her immigration experience, which led to a deeper sense of meaning: "Thanks to the American government, we can get these treatments. I would have died already if I were in Hong Kong or in the countryside [of China]. But in the U.S., we have the best medical treatment, so we need to share our experience with our friends … If you help someone, you will feel happy that day" (participant #7). Patients' statements indicated that immigration histories should be considered as a potential source of meaning in session 1 of MCP-Ch on "Concepts and Sources of Meaning."

Specific adaptations to MCP

Participants made specific suggestions for adaptations to MCP for the Chinese population to decrease treatment barriers and increase the intervention's cultural relevance, receptivity, and treatment adherence among Chinese cancer patients.

A majority preferred MCP-Ch to take place in group (vs. individual) format ($n = 8$), in-person (vs. over the phone) ($n = 11$), and to have the option of including family members ($n = 12$). Several also supported incorporating discussion and/or experiential exercises ($n = 4$) and providing information/resources, e.g., patient rights and information on navigating healthcare systems ($n = 2$). Some ($n = 4$) recommended using concrete examples to illustrate session themes. For instance, in response to session 3 (on Historical Sources of Meaning), one participant suggested, "We can simplify it a little … '[What are] my happiest, most joyful memories, for example when I was in elementary school, or when I was with my family, the things that made me the happiest?" (participant #8). A few ($n = 2$) also suggested an ongoing (vs. time-limited program) to provide social support for patients: "A regularly scheduled program with discussion, so that the patients will have something to look forward to … the biggest issue is that we feel very empty inside and we don't know what to do about it" (participant #1). Another suggested incorporating food to facilitate group discussion: "You can bring your favorite foods to share with everyone, and people could eat and chat, and feel very happy" (participant #2).

Strategies to address barriers to the acceptability of MCP-Ch were also discussed. A few participants ($n = 3$) emphasized the significance of therapeutic alliance, i.e., developing a connection between patient and interventionist: "You need to spend time talking to them to bring them around, to calm them. Then they would start thinking about these things, like 'How should I walk the road ahead?'" (participant #9).

Regarding practical barriers to participation in MCP-Ch, participants suggested providing childcare or allowing participants to bring children in their care ($n = 3$), providing transportation ($n = 5$), and a convenient clinic- or hospital-based location for the intervention ($n = 4$) so that patients could participate before or after receiving cancer treatment. Some ($n = 2$) discussed socioeconomic status as a potential barrier to access, e.g., lack of insurance and difficulties understanding session material for less educated patients. Interviewees ($n = 2$) also raised the needs of advanced cancer-stage patients and suggested shortening the 90-min session times for those who are undergoing intensive cancer treatment.

Discussion

This qualitative study describes the needs, priorities, and preferences of a sample of immigrant Chinese patients with advanced cancer, which will help in informing a cultural adaptation of MCP for this population. Participating Chinese cancer patients described how the centrality of family, traditional cultural values (including cancer stigma and the use of TCM), the role of coping, and attitudes toward end of life may impact how they and other community members might react to, engage in, and benefit from MCP-Ch. Participants expressed the need for enhancing meaning post cancer diagnosis and described specific adaptations to MCP to improve adherence, reduce barriers, and enhance the quality of the intervention.

Themes in the present study generally overlapped with themes elucidated in our previous study conducted with providers and community leaders [25]. Both patients and providers/community leaders emphasized the role of the family, culture (particularly traditional views and cancer stigma), and EOL preparedness in adapting MCP, using examples that highlighted how these themes overlap in complex ways. For example, both patients and providers discussed the importance of sensitively disclosing medical information and discussing EOL issues with Chinese cancer patients, who may designate another family member to make medical decisions on their behalf. These overlapping themes suggest MCP-Ch should be inclusive of family members, e.g., by inviting them to participate in group and/or "family" sessions. Our results, in concert with those from our previous providers/community leaders study [25] and findings from the literature [31, 32], emphasize the need for linguistically and culturally tailored, effective cross-cultural communication in psychosocial treatments for the Chinese population [33–35].

Patients' contributions, however, did differ from providers'/community leaders' statements in two important ways. First, patients emphasized the role of coping with cancer whereas providers/community leaders discussed patients' distress, suicide, and symptom control [25]. This may be a matter of framing from the provider vs. patient perspective; providers may be more likely to focus on clinical presentation while patients may be more focused on facing daily struggles. In addition, providers may have greater exposure to patients with extreme distress [36] whereas patients with extreme distress were unlikely to participate in this study. Patient participants' focus on coping also echoes previous findings that Asian Americans may prefer more direct advice, goal setting, and problem-solving in psychotherapy as opposed to open-ended, exploratory psychotherapies [37–39]. MCP-Ch interventionists should consider the role of such culturally influenced preferences regarding treatment approaches while keeping in mind the heterogeneity of the Chinese community [40], another theme highlighted in our study.

Second, preferences regarding MCP-Ch design differed slightly between the patient interviews and the provider interviews. Both groups endorsed preferences for family participation in sessions, experiential exercises and discussion, and in-person vs. phone sessions. However, the majority of providers/community leaders felt Chinese cancer patients would prefer individual to group sessions while the majority of patients preferred a group modality. This could reflect a sampling bias whereby participants who agreed to participate in our study were also more likely to seek social support (which is more commonly available in group formats, e.g., cancer support groups) and, therefore, to prefer group to individual modalities. Ideally, MCP-Ch would be offered both in individual and group formats to accommodate individual patient preferences.

The study's limitations include sampling bias inherent in utilizing a convenience sample of voluntary participants. Also worth noting is that participants' regions of origin varied from Hong Kong and Taiwan to mainland China; future studies should recruit more participants to compare how patient perspectives differ by region, each of which has a unique history and culture. Still, patient perspectives provided valuable insight into the needs and preferences of this underserved group and indicated that utilizing a general framework of cultural humility and sensitivity [41] (e.g., having MCP-Ch interventionists engage in self-critique, asking patients directly for their preferences, and ongoing evaluation of the utility and cultural relevance of MCP-Ch) will increase the likelihood of buy-in from the community. In addition, our study, in conjunction with previous findings [7, 17, 25, 32, 42–44], suggest that incorporating specific Chinese cultural values and beliefs (e.g., the role of family in disclosure and EOL planning and the use of TCM) will result in a more effective adaptation of MCP for Chinese patients with advanced cancer.

Compliance with ethical standards

Conflict of interest This study was funded by the National Institutes of Health Research Project Grant Program (3R01CA128134-05S1) and the National Institutes of Health Small Grant Program (R03CA178124-01A1). The authors have full control of all primary data and agree to allow the journal to review the data if requested.

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