Report on Development and Evaluation of a Board Game for Promoting Advance Care Planning in the Chinese Community

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Despite advanced medical technology nowadays, every one of us would still has to face the end of life. Many diseases are irreversible at terminal stages. Medical treatment can become futile and can only prolong the dying process which may even make the patient suffer to a larger extent. Therefore, it is of utmost importance that people should plan ahead their preferred kind of living and care before suffering from severe illnesses. And most importantly, we should let our family know the plan and wishes.

In reality, plans on future medical and personal care at the end of life can be made via Advance Care Planning (ACP), a thorough communication process among the patient, caregivers and the medical team. Issues such as disease prognosis, benefits and burdens of treatment, preferences of the patient shall be considered and discussed. The patient can then express his/her prior wishes on the preferred care, and refuse any life-sustaining treatment by signing Advance Directive (AD).

However, recent telephone surveys revealed that only 0.5% adults in Hong Kong made AD and 14.3% of the population heard of this planning process (Chung et al., 2017). In 2019, the HKSAR Government conducted “End-of-life Care: Legislative Proposals on Advance Directives and Dying in Place” public consultation. The result showed that the public acceptability of AD was increasing. It is thus hoped that through the promulgation of clear regulations, contradiction between laws and policies could be eliminated and hence, the autonomy and best interests of patients would be safeguarded while ensuring medical staff and first-aiders having legal protection when the patients’ wishes are being fulfilled.

In order to encourage the public to learn more about ACP and AD in a fun and effortless way, Endless Care Services of Tung Wah Group of Hospitals and The Nethersole School of Nursing, Faculty of Medicine, The Chinese University of Hong Kong (CUHK), have jointly designed and created a board game named "The Five Flavours in a Grocery Store", produced by People on Board. With the board game, the elderly, patients with chronic diseases, caregivers and professionals in the social service and healthcare sectors can now have a friendly platform to express and discuss the wishes and arrangements of any end-of-life care, which can prompt them to plan early and accomplish a fulfilling life.

The production of the board game took half a year despite the challenges caused by COVID-19 pandemic. Being the very first board game on ACP in the Chinese community, the outcome and responses from service users and stakeholders have been positive. Apart from giving our heartfelt thanks to our Board of Directors for funding this meaningful research project, we would like to express our gratitude to Dr Chan Yue-lai, Helen and her team from CUHK for the professional input. Last but not least, special thanks have to be given to all research participants including the elderly in the community, volunteer facilitators and practitioners from the relevant industries. Their feedbacks have been constructive and valuable in optimising the board game as a whole.

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EXECUTIVE SUMMARY

Background: Advance care planning (ACP) enables persons to clarify and share their preferences for end-of-life (EOL) care. However, the unpleasant nature of discussing EOL care issues impedes the process. This project aims to adopt gamification approach for bringing up the topics for open discussion, and to involve multiple stakeholders to co-design a culturally specific ACP game for Chinese communities.

Methods: A mixed-methods systematic review was conducted to identify format and content of the existing ACP games and participants' experiences with these interventions. Then, health and social care providers, game developers and older adults were invited to give comment on the game prototype. The game prototype was revised according to their suggestions. The finalised game was entitled "The Five Flavours in a Grocery Store". Its acceptability was evaluated through a feasibility trial and focus group discussions with players and facilitators who tried the game.

Results: Thirty community-dwelling older adults enrolled in the feasibility trial. They generally found the board game interesting and reported significantly higher level of confidence ($p = 0.008$) in sharing their EOL care preferences with their decision makers after the game. However, improvement in their knowledge on EOL care and readiness for various ACP behaviours were not statistically significant. Qualitative findings showed that benefits of the game perceived by the participants included bringing up sensitive topics for open discussion, increasing knowledge on EOL care and facilitating peer learning. They found that group composition, group dynamics and competence of facilitators can influence the game experience. Suggestions for improvement were allowing longer time for the game, increasing the clarity of some questions, improving the design of some game materials and providing more follow up support.

Conclusions: To our best knowledge, this project is the first documented undertaking for developing a serious game for ACP for Chinese communities. Through a co-designing approach with potential end-users and health care professionals, the game is an instrument to raise public awareness towards and promote learning about ACP and EOL care.

1 BACKGROUND OF THE PROJECT

1.1. Planning for end-of-life care

Advance care planning (ACP) is an ongoing process that includes several discrete behaviours, such as completion of an advance directive (AD) and discussions on the evolving values and goals of future care with loved ones or physicians (Rietjens et al., 2017). ACP is a practice that incorporates the core bioethical principle of autonomy (Baughman, Aultman, Ludwick, & O'Neill, 2014) and would benefit older adults with better care outcomes, including increased concordance between their preferences and the end-of-life (EOL) care provided, optimised quality of life at the EOL phase, and decreased unwanted treatments and hospitalization (Houben, Spruit, Groenen, Wouters, & Janssen, 2014; Weathers et al., 2016). However, recent telephone surveys revealed that only 0.5% of adults in Hong Kong have made AD and 14.3% of the population had heard of AD (Chung et al., 2017). One main barrier that has led to the low participation rate highlighted in previous studies is the perceived unpleasant nature of discussions on death and dying issues for health care providers and clients (Howard et al., 2016; Yonashiro-Cho, Cote, & Enguidanos, 2016).

1.2. Gamification

Gamification is an emerging method that incorporates game design elements (e.g. points, social relatedness and interactions, and immediate feedback) in non-gaming environments to invoke playful and enjoyable experiences and motivate players (Garett & Young, 2018). Previous studies have indicated that games can create a safe environment for rehearsal and feedback, allowing mutual respect and interpersonal trust when introducing intense, emotional topics (Jehlen, 2016). Thus, gamification has become an increasingly popular method and effective approach to engage individuals in emotionally sensitive health topics, such as posttraumatic stress disorder (Kim, 2013) and produce positive health-related behavioural change, such as smoking cessation. Gamification intervention may be an innovative educational tool to introduce ACP and motivate individuals to participate in ACP behaviours, such as sharing their values and EOL care wishes (Van Scoy, Green, et al., 2017; Van Scoy, Reading, & Scott, 2016).

1.3. Project aim and objectives

The aim of this project is to design and co-design a culturally specific board game for promoting ACP in the Chinese community. The objectives are as follows: (1) develop an ACP board game for the Chinese culture on the basis of literature review and co-design process; (2) evaluate the feasibility and acceptability of the board game among older adults in Hong Kong; (3) explore the experiences of the stakeholders, including older adults, volunteers and service providers, with the board game; and (4) examine the preliminary effects of the board game on the participants' readiness towards ACP.

2 PROJECT PLAN

This was a six-month project took place between June 2020 and December 2020. The co-production approach adopted for guiding the game development is described below.

2.1. Co-Design approach

Co-design approach promotes active collaboration between end users and service providers in the design process to ensure the deliverable would meet their needs. The approach highlights the importance of patient and public involvement (PPI) in the process because they are experts of their experiences. Co-design has been widely applied in health science for the development of products or services for different purposes and patient populations.

The process of developing the game comprised four stages: from developing game content and format to co-designing with key stakeholders in a cycle until consensus was reached, as shown in Figure 1.

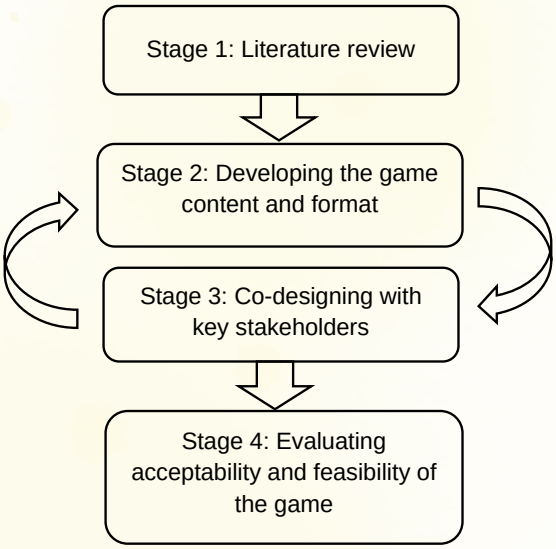

Figure 1. Development process

- *Stage 1: Literature review*
  A comprehensive literature review of quantitative and qualitative studies was conducted to identify the format and content of the existing ACP games, and to summarise their effects and participants' game experiences.
- *Stage 2: Developing the game content and format*
  A prototype of the game was developed based on the findings of the literature review conducted in Stage 1.
- *Stage 3: Co-designing with key stakeholders*
  An expert panel with five health and social care providers involved in life education, geriatric care or palliative care and game developers was invited to give comment on the game prototype. Ten older adults or persons with chronic conditions were invited to focus group interviews to explore their expectations and views toward the game prototype after trying it.

- *Stage 4: Evaluating acceptability and feasibility of the game*
  The evaluation study adopted a mixed method approach. A pre-test post-test study was conducted with 50 participants, including end-users and frontline staff, to evaluate the feasibility and preliminary effects of the board game. The 9-item ACP Engagement Survey was used to assess participants' self-efficacy in ACP behaviours (Sudore et al., 2017). Focus group interviews were conducted to understand their experiences with the game.

2.2. Target participants

The target participants included two groups: potential end-users and service providers. The potential end-users were adults who aged 60 years or over or with a chronic condition, or informal carers of older adults or people with chronic condition. They were excluded if they were mentally impaired or incommunicable due to language barrier or sensory impairment. Service providers were all kinds of frontline health and social care providers involved in life and death education or service.

2.3. Instrument

The Chinese 9-item ACP Engagement Survey was used to test readiness and self-efficacy for ACP behaviours (Appendix 1)(Liu, Zhao, Zhang, & Chan, 2020; Sudore et al., 2017). The readiness subscale includes six items that measure readiness for six ACP behaviours. The five response options allowed each item to categorise the readiness status of participants into different stages of change for each ACP behaviour. The self-efficacy subscale includes three items using a 5-point Likert-type response format from 1 (not at all) to 5 (extremely) was used. A higher score indicates a higher level of self-efficacy to complete ACP behaviours.

2.4. Focus group discussion

Face-to-face focus group discussions were conducted with participants who played the game and health care providers who acted as facilitators in the game session. The discussions were audio-recorded to facilitate analysis.

2.5. Data collection

Ethical approval was granted by the Joint Chinese University of Hong Kong-New Territories East Cluster Clinical Research Ethics Committee. Nature and purpose of the study was explained to the potential participants and written consent was obtained before data collection. Participants were assured about the confidentiality and anonymity of the data. Data were analysed iteratively during data collection. The project team had regular meetings to discuss the findings.

2.6. Data analysis

SPSS version 26.0 was used for statistical analysis. Descriptive statistics were used to summarise the participants' socio-demographic data and study outcomes. Wilcoxon signed ranks test was used to test the within-subject changes among participants in the self-efficacy for ACP behaviours before and after the game intervention. A p value < 0.05 is considered to be significant in statistical analyses. Interviews were transcribed verbatim. Qualitative content analysis was performed for the interview transcripts.

3

SUMMARY OF LITERATURE REVIEW

A mixed-methods systematic review was conducted in Stage 1 to synthesis all relevant evidence from different research traditions to identify format and content of the existing ACP game interventions and summarise their effects and participants' game experiences. This chapters summarised the key findings of the literature review. Details of this review are published in *Palliative Medicine* (Liu, Zhao, Yang, & Chan, 2021).

3.1. Search strategy

Eight databases, including MEDLINE, PsycINFO, EMBASE, CINAHL, the Cochrane Library, WanFang Data, Chinese Biomedical Literature Database, and China Knowledge Resource Integrated Database, were searched from the inception of databases to July 2020. The search terms, including appropriate subject headings and wildcards of "advance care planning," "end of life," "goals of care," and "game" or "gamification" were combined and adjusted according to the indexing systems of other databases. We also sought additional articles by checking the reference lists of selected publications to identify potentially missed primary studies.

3.2. Characteristics of studies included

Eleven English articles from ten studies published between 2010 and 2020 were identified (De la Cruz et al., 2016; Lankarani-Fard et al., 2010; Li, Pei, Chen, & Zhang, 2021; Möller et al., 2020; Phenwan, Apichanakulchai, & Sittiwantana, 2018, 2019; Radhakrishnan, Van Scoy, Jillapalli, Saxena, & Kim, 2017; Van Scoy et al., 2017a; Van Scoy et al., 2017b; Van Scoy et al., 2020; Van Scoy, Reading, Scott, Green, & Levi, 2016). They were conducted in the United States (n=6), Thailand (n=2), Sweden (n=1) and China (n=1). A total of 1,179 participants were enrolled across the studies, with sample size ranging from 33 to 380, from communities, schools and hospital settings. The mean age of the study sample ranged from 20 to 69 years old. The percentage of the male ranged from 20% to 100%.

3.3. Description of the existing ACP games

Three games were identified, namely "Go Wish" (named "Heart to Heart" for the Chinese version) in four studies (Dela Cruz et al., 2016; Lankarani-Fard et al., 2010; Li et al., 2021; Möller et al., 2020), "Hello" (previously named "My Gift of Grace") in four studies (Radhakrishnan et al., 2017; Van Scoy et al., 2017a; Van Scoy et al., 2017b; Van Scoy et al., 2020, 2016), and "Life Unlocking" (a modified Thai version of "Hello") in two studies (Phenwan et al., 2018, 2019).

"Go Wish" consists of 35 cards for English version (52 cards for Chinese version and 46 cards for Sweden version) with statements of wishes and priorities about end-of-life care and one "wild cards" (two for Chinese version and three for Sweden version) that can be assigned any value (Dela Cruz et al., 2016; Lankarani-Fard et al., 2010; Li et al., 2021; Möller et al., 2020). Participants were asked to sort these cards to indicate their level of importance (Dela Cruz et al., 2016; Lankarani-Fard et al., 2010; Li et al., 2021; Möller et al., 2020).

Both "Hello" and "Life Unlocking" card games consist of question cards and game chips for group play to create gameful experience. The question cards include three kinds of open-ended prompts related to (1) death, dying and end-of-life issues, (2) medical decision making or end-of-life planning and (3) emotional

respite (Phenwan et al., 2018, 2019; Radhakrishnan et al., 2017; Van Scoy et al., 2017a; Van Scoy et al., 2017b; Van Scoy et al., 2020, 2016). In the relevant studies, participants played games in groups of 2–10 (Phenwan et al., 2018, 2019; Radhakrishnan et al., 2017; Van Scoy et al., 2017a; Van Scoy et al., 2017b; Van Scoy et al., 2020, 2016). Players took turns to draw cards and shared their answers and thoughts about the prompts, or opted to pass if they would not want to answer the question (Phenwan et al., 2018, 2019; Radhakrishnan et al., 2017; Van Scoy, Green, et al., 2017; Van Scoy et al., 2017; Van Scoy et al., 2020, 2016).

During the game, the players could exchange the game chips at their discretion to offer gratitude for thoughtful responses and deep disclosures, emotional support or for any other reasons (Phenwan et al., 2018, 2019; Radhakrishnan et al., 2017; Van Scoy, Green, et al., 2017; Van Scoy, Reading, et al., 2017; Van Scoy et al., 2020, 2016). There is no winner for the "Life Unlocking", but in the "Hello" game, the game rule is determined by the end of the game based on the outcome of a coin flip on whether the player with the highest or the lowest number of game chips wins to promote light-hearted competitive environment (Radhakrishnan et al., 2017; Van Scoy et al., 2017; Van Scoy et al., 2017; Van Scoy et al., 2020, 2016).

In addition to playing the game, one study (Radhakrishnan et al., 2017) also provided participants a booklet for filling in information related to ACP following the game. The interventions were generally delivered in one to two sessions, ranging from several minutes to 120 minutes. And two of these studies adopted the transtheoretical model and social cognitive theory as the theoretical framework for explaining the mechanism of these games (Radhakrishnan et al., 2017; Van Scoy et al., 2017).

3.4. Effects of the ACP games

The quantitative findings showed that these games significantly increased self-efficacy and readiness for ACP behaviours, thus significantly increased the overall process score of ACP engagement. These games also have beneficial effect on knowledge about ACP. They found that 81% of the participants agreed that the game made them feel better prepared to have end-of-life conversations (Van Scoy et al., 2017) and 72.5% participants expressed the willingness to participate in advance directives immediately after the intervention (Li et al., 2021). However, there was no statistically significant difference on contemplation of ACP.

3.5. Experiences with the ACP games

Two themes emerged from the qualitative evidence: positive impacts and high acceptance, through the meta-aggregation process. In the theme of positive impacts, three subthemes being identified were: heightened awareness, gaining from group interactions and finding gratitude. In the theme of high acceptance, three subthemes being identified were: safe and relaxing atmosphere, mixed opinions on group composition and unclear questions.

3.5.1. Positive impacts

- **Heightened awareness.** Participants thought that the games provided a forum for end-of-life discussions, with guiding questions that gave cues on how to proceed with the conversation (Phenwan et al., 2019; Radhakrishnan et al., 2017; Van Scoy, Reading, et al., 2017; Van Scoy et al., 2020, 2016). Some participants expressed that the game prompted them to realise that death was closer than they thought previously and thus increased their awareness towards the importance of ACP (Möller et al., 2020; Phenwan et al., 2018, 2019; Van Scoy et al., 2020).

- **Gaining from group interactions.** Some participants reported that answering questions and sharing their experience with others were an enjoyable experience (Phenwan et al., 2018; Radhakrishnan et al., 2017; Van Scoy et al., 2020, 2016). They also shared that listening to others' experiences enabling them to gain different perspectives about end-of-life issues (Phenwan et al., 2018, 2019; Radhakrishnan et al., 2017; Van Scoy et al., 2017; Van Scoy et al., 2020, 2016). Especially, some participants who had undergone ACP before the game noted that they received group support and positive reinforcement for their former ACP behaviours. They also gained new ideas about their plans which motivated them to complete advance directives (Radhakrishnan et al., 2017; Van Scoy et al., 2020).
- **Finding gratitude.** Some participants shared that the game experience prompted them to be more aware of their present moments, and to cherish the time they have with their loved ones (Phenwan et al., 2018, 2019).

3.5.2. High acceptance

- **Safe and relaxing atmosphere.** Participants generally found that the games created a safe environment for open and honest sharing of thoughts and emotions (Phenwan et al., 2018; Van Scoy et al., 2020, 2016). Especially, they appreciated a mixture of light-hearted and serious questions in the game and the game rule that made the conversation more comfortable and thus relieved anxiety and fear (Van Scoy et al., 2017; Van Scoy et al., 2020, 2016). Participants found the thought-provoking questions in the games a good opportunity to rehearse for the sensitive conversations in ACP (Lankarani-Fard et al., 2010; Radhakrishnan et al., 2017; Van Scoy et al., 2017).
- **Mixed opinions on group composition.** Participants had inconsistent opinions regarding the group composition. While some participants felt reassured and empowered to share their thoughts with strangers in the group, others expressed that having their family joining the game would be helpful and meaningful for improving mutual understanding about their thoughts towards end-of-life issues (Radhakrishnan et al., 2017; Van Scoy et al., 2017; Van Scoy et al., 2016).
- **Unclear questions.** Some participants found that some of the "Hello" game questions were confusing (Radhakrishnan et al., 2017; Van Scoy et al., 2016), and the game also had missing elements related to end-of-life care. They pointed out that the game had ambiguous wording for some questions, especially on spirituality (Radhakrishnan et al., 2017; Van Scoy et al., 2016), and some missing components of ACP, such as guidance on actual procedures to complete advanced directive forms, and conversations on financial planning (Radhakrishnan et al., 2017). However, some participants acknowledged that these missing components could be beyond the scope of the game.

3.6. Discussion

The quantitative and qualitative data was complementary and coherent to support that ACP game is an effective and acceptable strategy to promote a positive attitude towards the difficult conversation. Participants generally appreciated the safe environment and relaxing atmosphere for frank discussion regarding end-of-life issues, the guiding questions for practicing the conversation, as well as opportunities for peer learning during the game. However, our review revealed that the number and types of games available for ACP are limited. Also, since all the studies were conducted in the Western countries, the acceptability and feasibility of ACP game in the Chinese communities remained questionable.

4 DEVELOPMENT PROCESS

4.1. Game prototype

A game prototype was developed based on the literature review for soliciting stakeholders' comments and suggestions. Initially, the game board designed was similar to the Monopoly board game, with only one unidirectional circular route. The player would unlock game questions printed on separate game cards depending on the colour of the box which their token stopped. A total of 134 questions were summarised from the existing ACP games. They cover a range of issues, including life review, important life events, memorable events, important persons in life, favourites, past decision-making experience, life goals, medical information, goal of end-of-life care, treatment preferences, funeral arrangement, selection of surrogate, unfinished business and personal wishes.

4.2. Expert consultation

Five experts in geriatric care, palliative care and social care were invited to rate the relevancy and appropriateness of the identified questions for an ACP game for Chinese population. A total of 71 questions of ACP conversation were rated "very important" or "important" by over 80% of experts, including personality or preferences (n = 16), value towards life and death (n = 30) and preference towards EOL care (n = 25), but the other questions that were unclear or difficult to answer required revision. In addition, some of them suggested adding knowledge about EOL care to enhance the game effectiveness in knowledge transfer.

Regarding the game design and format, some believed that colourful board design, use of game chips and more game rules can enhance its playfulness and motivate enthusiasm. Some also alerted that questions only related to families should be avoided because some players may be uncomfortable in discussing their family situation or relationship openly.

Table 1. Comments and suggested changes for the game prototype.

Comments	Changes
The current design could hardly differentiate a winner because the number of tokens among the players were similar.	Added some more rules to increase the variety for getting more tokens thus enhance its playfulness.
Increase the types of questions on the game cards.	The revised questions included True/False questions, multiple choices and open-ended questions.
Some of the questions are hard to answers if the players do not know each other beforehand.	Those questions were removed.
Some of the game questions are difficult to understand, or it seems that there were no definite answers.	The wordings were revised.
Need more time for debriefing.	The debriefing time increased to 15 - 20 minutes.
The design of the game board is busy and the routes are unclear.	The background colour was changed to a paler tone.
Putting the game cards on the board seems messy.	It is advised that the game cards to be placed alongside the game board.

4.3. End user consultation

Twenty older adults were invited to two rounds of focus group discussions to solicit their views toward the questions summarized from the existing ACP games. They were asked to indicate the perceived importance and sensitivity of these questions for an ACP game. Some questions were removed for several reasons, for example, indirect or irrelevant to ACP. Some similar questions were combined together. Eventually, 60 questions related to personal experiences, personal values and end-of-life care were kept.

4.4. Conclusion

The project team revised the game prototype to address the comments from the potential end-users and the health and social care providers.

5

FINALISED DESIGN OF THE BOARD GAME

5.1. Theme of the game

The finalised game was entitled “The Five Flavours in a Grocery Store” in which the five flavours refer to sweet, sour, bitter, spicy and salty (Figure 2). The design of the game board was inspired by the traditional grocery store in Chinese communities, which was a common place that sold a variety of food products, such as sauces, condiments, dry goods and canned foods, in the old days. The inclusion of various kinds of tastes matches the conventional Chinese concept that every life embraces positive and negative experiences. We adopted this concept because the game not only prompts the players to plan for future care but also provides an opportunity for them to review and reflect on their fond memories and the challenges they have encountered.

Figure 2. A snapshot of the finalised game

5.2. Game components

- **Gameboard:** The marked surface of the A3-size gameboard shows the routes for the game, with illustrations of items commonly found in a traditional grocery store as decoration.
- **Cards:** A deck of 60 question cards in five colours (flavours), with 15 cards each, are to be piled respectively on the designated place on the gameboard. Each flavour is depicted by a symbolic colour and food, namely, sweet potato (orange, sweet), lemon (yellow, sour), ham (blue, salty), bitter melon (green, bitter) and chilli (red, spicy) (Figure 3).
- **Token:** Four plastic tokens are designed as metallic colour miniature human figures each representing a player on the gameboard.
- **Dice:** A six-sided dice for determining the number of steps for each move on the gameboard.
- **Currency:** The currency used in this game is a chip with a “thumbs-up” icon, denoting “Like” to show appreciation. Players can get the chip by answering the game questions on the card or collecting the game cards strategically.

- **Manual:** A manual is developed to compile all the game rules and questions, explanation for medical jargon, answers to questions related to end-of-life care or treatments, instructions for facilitators and a guide for debriefing.
- **Self-reflective booklet:** A booklet listing all the game questions is created for players to further study after the game is over if they would like to.

5.3. Game design

- **Game rule:** The game is designed to be played by three to four players. The players take turns in rolling the dice in a clockwise manner around the gameboard and advance their token according to the number shown on the dice.

Figure 3. A snapshot of the playing process

- **Choices of routes:** Different routes are linked together, resembling those in mass transit railways. Players can decide on the direction that they will move forward from the starting area and change the route at every junction (Figure 4). The 45 circles along the various routes are spaces for the token to land on. They are designed in five different colours representing the five respective flavours. Players will need to draw the top card of the colour corresponding to the space they landed on, and then the player or the facilitator will read the question aloud.
- **Five types of game questions:** The questions on the cards are categorized into five types according to colour (flavour): fun mini-games (sweet), past experiences (sour), views toward death and dying (salty), end-of-life care preferences (bitter) and knowledge about end-of-life care (spicy). Except for the red-coloured cards, all players can decide whether to answer the question on the game card. A chip will be given to those who attempted to answer as an appreciation. The red-coloured cards are for testing knowledge. Thus, the players need to compete for the chance to answer the question after the facilitator reads out the question.
- **Trading:** The game card is kept by the player who drew it, or for the red-coloured card, the player who answered it. The trading strategy is added to increase the game's playfulness. Players can collect extra chips when they have three cards either in the same colour or in different colour, or trade their cards with other players. In other words, the players can decide their routes strategically or negotiate with other players in exchanging the cards to collect cards according to the colour they prefer.
- **End game:** There are no definite destinations for the tokens. The game is designed to end in 35 minutes, with the facilitator monitoring the time.

5.4. Game session arrangement

- **Duration:** The overall game session is proposed to last for 60 minutes, with 35 minutes for playing the board game and approximately 20 minutes for debriefing.
- **Facilitator:** Given that the game involves sensitive issues related to dying, personal issues and knowledge about end-of-life care, a trained facilitator who is a health or social care professional or an experienced volunteer is needed to support the intervention implementation (Figure 5). The roles include providing cues on the game rules, reading the questions aloud for players who have difficulty reading, monitoring time and group dynamics and hosting the debriefing session.
- **Debriefing:** The debriefing adopts a 4F framework, namely Fact, Feeling, Finding and Future. The facilitator would ask the players to share their experience and perception of talking about their preferences for future care, the effects of the game and how they may apply what they have gained from the game in the coming days.

Figure 4. Game token and board

5.5. Training for facilitators

Training for facilitators was delivered through a three-hour training workshop. It included lectures on the concept of ACP, tasting experience of the board game and role-play of challenging players.

Figure 5. A facilitator (on the right side) was guiding the game

6 FEASIBILITY AND ACCEPTABILITY

6.1. Characteristics of the older adults

Thirty community-dwelling older adults completed the questionnaire before and after the game session. Table 2 shows their demographic characteristics. The mean age of the participants was 72.7 (SD 6.6), ranging from 63 to 85. The majority of them was female (86.7%). Approximately two thirds (66.6%) had junior secondary education or below. Half of the participants was living with family, whereas the other half was living alone.

Table 2. Characteristics of older adults (*N* = 30)

	n (%)
Mean age ± SD	72.7 ± 6.6 (Range: 63 – 85)
Sex	
Female	26 (86.7)
Male	4 (13.3)
Educational level	
Primary education	10 (33.3)
Junior high school	10 (33.3)
High school	8 (26.7)
Tertiary education	1 (3.3)
Not disclosed	1 (3.3)
Marital status	
Single/Divorced	6 (31.6)
Married	4 (21.1)
Widowed	8 (42.1)
Others	1 (5.3)
Living status	
Living alone	14 (46.7)
Living with family	15 (50.0)
Not disclosed	1 (3.3)

6.2. Experiences with health and medical decisions

As shown in Table 3, more than half of them (50.0%) rated their health as fair. Half of the participants (53.3%) had been hospitalized at least once in the last five years. Only a small proportion had the experience of making major medical decision for themselves (26.7%) or documented their end-of-life care wishes (6.7%). Most of them (83.3%) wanted to be told of their medical diagnoses even if it was serious. Many of them preferred their children or grandchildren (50.0%) to be their surrogate decision maker, followed by spouse (16.7%).

Table 3. Experiences with health and medical decisions (*N* = 30)

	n (%)
Had been hospitalized in the past 5 years	16 (53.3)
Self-rated health	
Very good	2 (6.7)
Good	7 (23.3)
Fair	15 (50.0)
Poor	4 (13.3)
Very poor	0
Had the experience of making major medical decision	8 (26.7)
Had the experience of making major medical decision for others	5 (16.7)
Had the experience of having significant others making major medical decision for yourself	3 (10.0)
Had signed advance directive	2 (6.7)
Wanted to be told of medical diagnosis even if it was serious	25 (83.3)
Preferred person to be surrogate decision-maker	
Spouse	5 (16.7)
Children/Grandchildren	15 (50.0)
Medical doctor	1 (3.3)
Others	2 (6.7)
Never thought about this	7 (6.7)

6.3. Acceptability of the board game intervention

Table 4 shows that the majority of the participants were satisfied with the game experience. They were generally satisfied with the game design and found the board game interesting.

Table 4. Level of satisfaction with the ACP game (*N* = 30)

	Agree	Neutral	Disagree	Missing
1. The game is interesting.	86.7%	10.0%	0	3.3%
2. I am satisfied with the game design.	86.7%	10.0%	0	3.3%
3. I am satisfied with the questions on the game cards.	90.0%	6.7%	0	3.3%
4. Overall speaking, I am satisfied with the game experience.	90.0%	6.7%	0	3.3%

6.4. Effects on readiness in ACP behaviours

Figure 6 compares the participants' readiness in six ACP behaviours before and after the game intervention. At baseline, approximately half of the participants have never thought about assigning a person to be their decision maker (43.3%), letting the medical team know about their own preferences for surrogate (60.0%), communicating their EOL care preferences with surrogate (50.0%) or medical team (53.3%), nor documenting assignment of surrogate (56.7%) and their EOL care preferences (53.3%). Following the game session, there were a slight increase in proportion of players indicated that they would plan to do these ACP behaviours in the coming month.

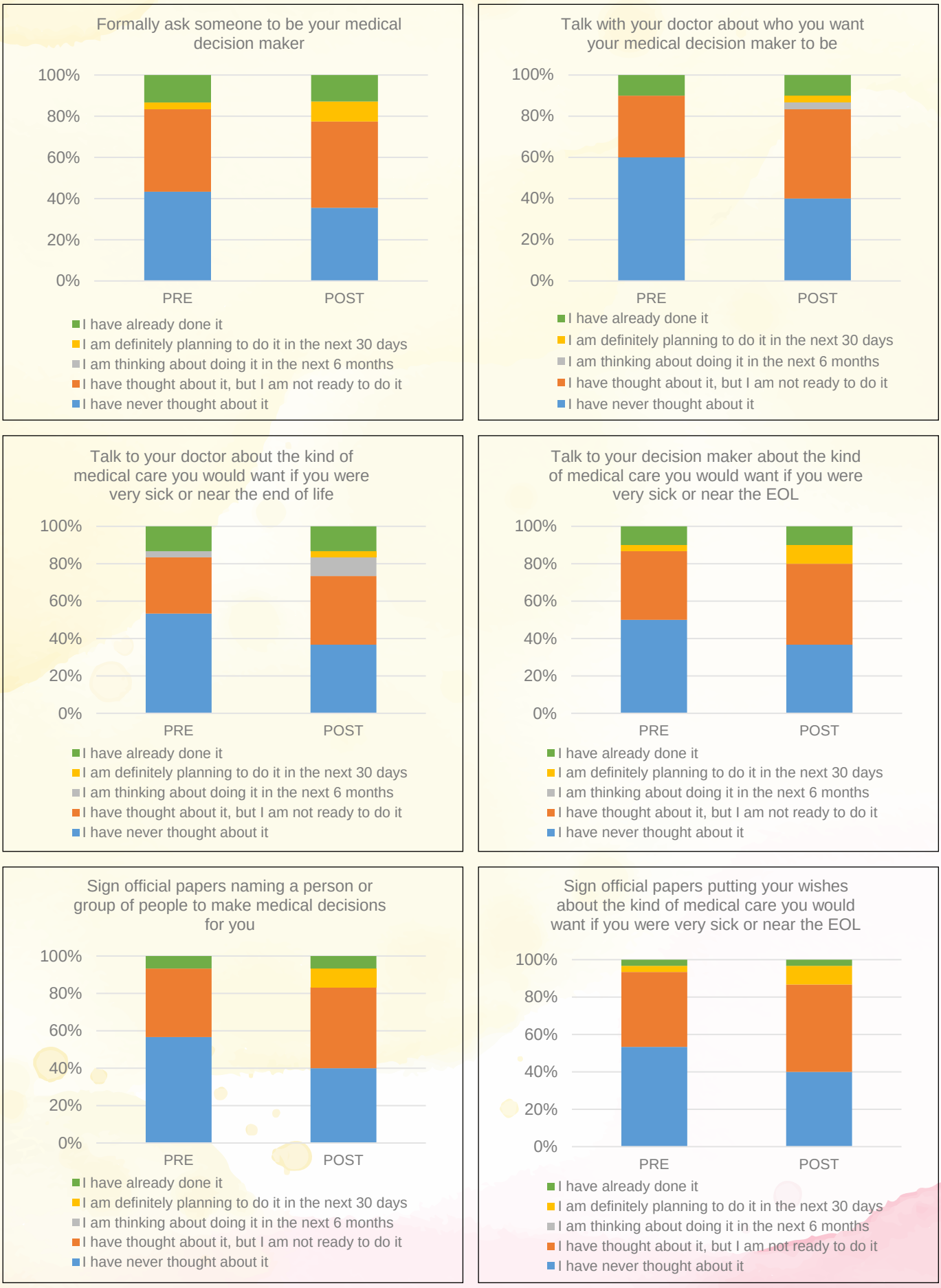

Figure 6. Comparison of readiness in ACP before and after the game intervention (*N* = 30)

6.5. Effects on self-efficacy in ACP behaviours

Table 5 shows the players' self-efficacy in ACP behaviours. Overall speaking, the players reported a higher level of confidence in asking someone to be their surrogate, talk with their surrogates and doctors about their EOL care preferences after the game session. The improvement in the level of confidence in sharing EOL care preferences with one's own decision maker is statistically significant (p = 0.008). However, the ratings generally remained low as the response format ranged from 1 to 5.

Table 5. Self-efficacy in ACP behaviours (*N* = 30)

	PRE	POST	*p* value
1. How confident are you that today you could ask someone to be your medical decision maker?	2.27±1.46	2.57±1.45	0.239
2. How confident are you that today you could talk with your decision maker about the care you would want if you were very sick or near the EOL?	2.00±1.28	2.40±1.30	0.008
3. How confident are you that today you could talk with your doctors about the care you would want if you were very sick or near the EOL?	2.07±1.26	2.17±1.23	0.518

Footnotes: Range from 1 to 5, with higher score higher level of confidence; Wilcoxon sign ranked test

6.6. Knowledge regarding end-of-life care

Apart from knowing their rights to information and choices for medical decision-making, the participants generally have poor knowledge about end-of-life care at baseline. As shown in Table 6, a trend of increasing knowledge was noted following the game, especially on the concept of ACP and nature of tube feeding and mechanical ventilator. However, there remained two thirds of participants unable to differentiate the nature of forgoing life-sustaining treatment from euthanasia or giving up patients, acknowledged the low survival rate of cardiopulmonary resuscitation and the need for ACP before serious illness.

6.7. Characteristics of professional staff

Twenty-five health care providers participated in a 3-hour training session (Table 7). The majority was female (72.0%), had completed tertiary education (88.0%) and were social workers (76.0%). The participants were generally well experienced, with a mean of 8.3-year clinical experience, though five had less than a year of experience. Over half of them were in the age group of 31 – 40, currently working in care home setting, had previously received training related to ACP and had the experience of conducting ACP with their clients.

Table 6. Percentage of correct responses to the knowledge test (*N* = 30)

	PRE	POST	Changes
1. ACP is a process for expressing one's own preferences for future medical care.	47.4%	84.2%	+36.8%
2. Patients have the right to information about medical condition and treatment effects.	94.7%	94.7%	-
3. Individuals have the right to autonomy to make decision for future medical care when they are mentally competent.	89.5%	94.7%	+5.2%
4. Only people with serious illness need ACP.	21.1%	36.8%	+15.7%
5. Not providing futile life-sustaining treatment is same as euthanasia.	31.6%	36.8%	+5.2%
6. Forgoing life-sustaining treatment is same as giving up patients.	26.3%	36.8%	+10.5%
7. Tube feeding is a kind of medical treatment.	52.6%	78.9%	+26.3%
8. CPR refers to chest compressions for people whose heartbeat and breathing has stopped to maintain blood circulation.	73.7%	89.5%	+15.8%
9. The 30-day survival rate of CPR for adult patients with serious chronic condition exceeds 50%.	15.8%	31.6%	+15.8%
10. Patients receiving mechanical ventilation usually required sedatives to maintain unconsciousness.	21.1%	47.4%	+26.3%

Footnotes: CPR - cardiopulmonary resuscitation

Table 7. Characteristics of professional staff (*N* = 25)

	n (%)
Age group	
< 30	7 (28.0)
31 – 40	13 (52.0)
41 – 50	2 (8.0)
51 – 60	3 (12.0)
Sex	
Female	7 (28.0)
Male	18 (72.0)
Educational level	
Secondary education	3 (12.0)
Tertiary education	22 (88.0)
Types of professional	
Nurses	6 (24.0)
Social workers	19 (76.0)
Clinical experience (months), mean ± SD	100.9 ± 97.7 (Range: 2 - 360)
Current place of work	
Community centres	7 (28.0)
Care homes	13 (52.0)
Others (e.g. home care)	5 (20.0)
Had previously received ACP training	13 (52.0)
Had previously conducted ACP with clients	14 (56.0)

6.8. Preparedness for ACP

As shown in Table 8, there were significant improvements in their readiness for various ACP behaviours following the game. The participants generally had high level of agreement that ACP is related to their current work at baseline. Significant improvements were found in their willingness and confidence on conducting ACP subsequent to the training session.

Table 8. Preparedness for ACP (*N* = 25)

	PRE	POST	*p*
	Mean ± SD	Mean ± SD	
Readiness[1]			
Planning for own EOL care	2.52 ± 1.36	3.76 ± 0.66	< 0.001
Discussing EOL care preferences with family	2.24 ± 1.27	3.52 ± 0.77	< 0.001
Discussing EOL care preferences with doctor	1.76 ± 1.17	2.84 ± 1.21	0.001
Signing advance directives	1.84 ± 1.18	2.92 ± 1.00	< 0.001
Relevance of ACP with current work[2]	7.28 ± 1.58	7.60 ± 1.58	0.192
Willingness to conduct ACP with clients[2]	6.88 ± 1.42	7.52 ± 1.29	0.011
Confidence in conducting ACP with clients[2]	5.64 ± 1.98	7.00 ± 1.29	< 0.001

Footnotes: EOL: end-of-life; ACP: advance care planning; [1]Possible range: 1 – 5 (higher score higher level of readiness); [2]Possible range: 0 – 10 (higher score indicates higher level of agreement; Wilcoxon signed-rank test

6.9. Challenges of conducting ACP

Table 9 lists the major challenges perceived by the participants for conducting ACP. Over half of the participants (52.0%) considered that time constraint was the major barrier for conducting ACP in their current work. About one third (32.0%) considered that the clients or their families might not understand the concept of ACP. Lack of confidence in the conversation was also a common concern among the participants.

Table 9. Challenges of conducting ACP in current work (*N* = 25)

Challenges (can choose more than one option)	Percentage
Time constraint	52.0%
Lack of client or family understanding	32.0%
Lack of confidence	28.0%
Limited physical space	20.0%
Lack of management support or resources	16.0%
Concern of legal liability	4.0%
Concern of communication skill	4.0%

6.10. Experience with the board game

Focus group discussions were conducted with players and facilitators shortly after the game sessions held between May and July 2021 in three different districts. A total of 72 participants, including 58 older adults or family carers, 7 volunteers and 7 staff members, joined the eight sessions of group discussion. Key themes related to perceived benefits of the board game, factors influencing the game experience and room for improvements are summarised as follows.

6.10.1. Perceived benefits of the board game

- **Brought up sensitive topics for open discussion**

  Many players appreciated that the game raised topics they rarely thought about or discussed openly, and this game experience triggered them to contemplate EOL care issues. One player noted that "*These are important issues, but you do not know how to talk about these issues in daily life. This game allowed us to share our thoughts in a relaxing atmosphere.*" Another player echoed that, "*It would be odd to share these thoughts in casual conversation. Who would be interested to listen to your views? However, through this game, we can share our thoughts with others.*" Several players contended that, "*We did not care much about the game rules because we enjoyed the sharing moments and had forgotten about collecting the game chips.*"

- **Increased knowledge on EOL care**

  Many players shared that they gained more knowledge about EOL care through playing the game. One player pointed out that, "*I really learned a lot through this game. I have never heard about these before.*" Another player, who believed she had well prepared for her death, noted that "*To my understanding, I have prepared for all matters related to death, including signing an organ donation form and enrolment form to become a silent teacher, completing a will, deciding on the funeral arrangements and so on, but this is the first time I learned about this…advance care planning. Now I know what I have missed. I will think about my EOL care and document my care wishes after this game.*"

- **Facilitated peer learning**

  Apart from having the chance to share one's thoughts on EOL care, the players appreciated the chance to learn from others' perspectives on the same question. One player stated that "*It is valuable to learn about the views of others. I remembered that one of the players shared how she managed the care for her mother. I have never thought in that way. It is a good lesson for me.*" A player shared her observation of another player during the game, "*At the beginning of the game, she was withdrawn and did not want to share her view much, she just sat in the group watching how we played…Several of us enjoyed talking about our caregiving experiences even though some were unhappy experiences because we have similar concerns that facilitate mutual understanding. We just want to ventilate. That player remained quiet and we did not force her to answer. Thereafter, on another occasion, it seems that she had become more easy-going. This is my gut feeling. Perhaps she has learned something from others' experience.*" Some facilitators also noted that the game allowed them to get to know their clients better and caused them to reflect on their own personal life.

Figure 7. A player was sharing her experience during the game

6.10.2. Factors influencing the game experience

- **Group composition**

  Mixed opinions about the composition of players within the group arose. While some players believed that sharing inner thoughts with strangers is a carefree experience, some players who played the game with friends noted that the game enabled them to have a deeper understanding of their friends. A player who played the game with groupmates who just got acquainted with in the game session shared that, "*It's good to play it with strangers. I can share my thoughts directly because I do not need to worry if they would gossip about me with my relatives or friends afterwards.*" A facilitator also noted that "*The merit of this game is that you do not need to have established rapport among the players before the game.*" However, in another group, a player shared that, "*We [players] have known each other for years and so we can share our views freely. We do not need to worry if our conversation would appear offensive.*"

- **Group dynamics**

  Participants generally agree that group dynamics is the key to the game experience. It is noted that, in some groups, players tended to answer the game questions briefly, with limited elaboration of one's thoughts or experiences. One player pointed out that, "*It might seem embarrassing [to share one's experience/view] at the beginning. It's important to have a player willing to share his/her views openly first. Once this happens, other players would also open their heart to share.*" Another facilitator has also highlighted that "*Personal sharing is powerful and infectious. When someone is trying to share his/her own story, the others would also become active in sharing their own.*"

- **Competence of facilitators**

  Many participants emphasized that the knowledge and communication skills of the facilitators are crucial factors that influence the overall game experience. They need to observe the players' reactions and emotions during the game process. One facilitator stated that "*I need to be very cautious during the game to ensure a smooth process…Sometimes, the participants may be confused about who gets the game card or whose turn it is to roll the dice.*" One player shared her observation, "*My groupmates answered the questions hurriedly. I noticed there was a lot of sharing and laughter in another group next to us. I think the facilitator played a very important role in breaking the ice.*" Some facilitators also acknowledged the challenge of explaining the questions or answers related to EOL care on the spicy game card because it involved medical knowledge.

6.10.3. Room for improvement

- **Allow longer time for the game**

  Many players wanted to extend the playing time. For example, one player shared that, "*We have only gone through three questions in an hour. You know, we have many stories to tell and we also respond to each other. We are not aware that time has elapsed.*" Likewise, several players did not have the chance to read the questions on different flavours of game cards.

- **Increase the clarity of some questions**

  Some players appreciated the game questions as being direct and relevant, but some found the wordings of the questions difficult to understand and suggested framing them using colloquial language. One player shared that "*We are not familiar with some of the terms, for example, cardiopulmonary resuscitation. We do not use such terms in daily conversation…instead, we may just call it heart massage or rescue… Some written Chinese is also difficult to understand, is it possible to change these to colloquial and conversational format?*" To better prepare themselves, some facilitators shared that they reviewed the game questions and rules before the game session to familiarize themselves with the content again. One facilitator noted that "*I'm afraid I might not understand the questions myself and so I read the manual and question cards meticulously the day before the game session.*"

- **Improve the design of some game materials**

  The players generally like the board game format. One player shared that "*The board game design brings back memories of childhood.*" Another player who was a family carer stated that, "*I feel that the token represents me. When I looked into the board and moved the token, it is kind of relaxing…as if I can choose different paths to go.*" Nevertheless, one facilitator noted that the players may not be able to differentiate the metallic colours of different tokens and the representative human figures during the game. He suggested changing the token from human figures to miniatures of different food, such as carrot and banana. Another facilitator also noted that the orange and red colours used for the game card for the sweet and spicy flavours, respectively, looked alike to older adults with visual problems, and thus, different sharp colours should be used to avoid confusion.

- **Provide more follow up support**

  Generally, all the participants expected that more follow up support would be provided to enhance the continuity of care following the game session. Some players expected more practical support, such as information for them to learn more details on EOL care or services to facilitate the completion of advance directives. One player mentioned that "*We have only learned about those ideas briefly in the game. It would be good if there are some follow-up sessions to explain these in greater detail.*" Another facilitator also highlighted the need to clarify some common myths on EOL care during the game or immediately in the debriefing session. Meanwhile, some facilitators also expected more emotional support would be provided. One facilitator worried about a player who burst into tears when sharing her experience in the game. She noted that "*Talking about these issues are sensitive, particularly on the bereavement experience. I think we should provide detailed explanations on the content of the game in the introduction to alert the potential players. That player cried sorrowfully. I wondered if this was necessary. I would give her a call [to counsel her] after this.*"

7

DISCUSSION AND IMPLICATIONS

7.1. Summary of the project

To our best knowledge, this project is the first documented undertaking for developing a game for ACP for the Chinese communities. This serious game aims to raise public awareness towards and promote learning about ACP and EOL care (Van Scoy et al., 2016). Through a co-designing approach with potential end-users and health care professionals, this project developed a board game entitled "The Five Flavours in a Grocery Store".

The findings of the feasibility trial suggested that this game provides opportunities for players and care providers to openly discuss their concerns related to death and dying issues in a relaxing atmosphere. The adoption of gamification elements, such as reward system and trading strategy, helps to motivate active participation in the process. Participants were generally satisfied with the game design and had positive experience in view sharing, knowledge gaining and peer learning. Additionally, the players' confidence in communicating their EOL care wishes with their decision makers significantly improved immediately after the game session. However, improvement in communicating their EOL care wishes with the medical team and signing relevant official documents were minimally apparent. Possibly the players were relatively healthy and they may not perceive the necessity and urgency in completing these ACP behaviours. Another possible reason is that more support is needed to facilitate them to document their care decisions given that relevant services are under developed in the community.

7.2. Recommendations

7.2.1. Delivering a comprehensive ACP educational programme

We recommend that a comprehensive educational programme should be delivered together with this board game. The experience in this project suggested that the game is an ice-breaking tool for presenting EOL issues for open discussion. ACP should be conducted continuously to provide time to contemplate a range of medical and legal issues in one's own context. A single game session is insufficient to meet the participants' needs for information on EOL care, clarify misunderstandings or support them to complete the ACP behaviours. Therefore, the board game can be introduced as a reflective exercise after the introductory sessions on EOL care. Apart from a debriefing session conducted immediately after the game session, follow-up sessions should also be provided in the subsequent weeks. These sessions will further clarify myths or common misunderstandings identified during the game session and provide tangible support in completing ACP behaviours, such as holding family conferences, documenting individual care wishes or identifying medical doctors for signing advance directives.

7.2.2. Safeguarding psychological burdens

Conversations on death and dying issues have generally been regarded as challenging across cultures and communities. Moreover, holding group game sessions may be complicated because they engage players with different characters and background together. Nevertheless, previous ACP studies have shown that the opportunity to share concerns on EOL care is generally regarded by clients as a safe and therapeutic process (Billings & Bernacki, 2014; Chan & Pang, 2010). Instead of avoiding these topics, we recommend providing clear explanations on the purpose and content of the game during activity promotion. Additionally, emotional

support should be offered proactively during or after game sessions to address possible feelings of anxiety, anticipated grief, frustration or guilt amongst players. Counselling skills, including acknowledgement of their emotions, exploration of their concerns, silence and reassurance, can be applied as appropriate. If necessary, individual counselling would be provided as a follow-up action.

7.2.3. Emphasising facilitator training

Given the two recommendations, preparation for facilitators should not be limited to gaining familiarity with the game. Additional professional education on EOL care and ACP communication skills may be required. The reason is that facilitators are expected to be knowledgeable on EOL care, skilful in fostering an atmosphere for open sharing and confident in handling emotions. Therefore, following the training workshop, we encourage facilitators to work in pair with colleagues initially and start with clients with established rapport, and reflect on the process through learning their game experience.

7.2.4. Evaluating long-term effects

We recommend that organisations interested in adopting the game into the care service to design a mechanism for the long-term evaluation of the effects of the game or the entire educational programme. Evidently, ACP is a complicated process (Brull, 2019). Hence, the completion of the relevant ACP behaviours may not simply be based on self-determination, particularly in Chinese communities, where medical decisions are often regarded as a collective family decision (Cheng et al., 2020). Other factors, including understanding of family members and availability of medical doctors as witness for documentation, may be influential to the outcome (Chan, Lee, & Woo, 2020). The evaluation results on how the game or other relevant interventions have or have not influenced EOL care would provide insights into relevant service and policy development.

7.3. Study limitations

We acknowledge several limitations in the evaluation study that may affect the interpretation of the result. Firstly, participants were recruited through community centres and the purpose of the intervention was explained beforehand. Given that the participants may be considerably supportive of the ACP concept, the findings may not be generalisable to the general older population or chronically ill patients. Secondly, the sample size for feasibility testing was small. Lastly, the effects of the game on health and care outcomes was not examined. An extensive study should be conducted to evaluate the long-term and broad intervention effects.

7.4. Conclusion

In this project, gamification approach is adopted as an innovative strategy for introducing the concept of ACP. Experiences from this project laid the foundation for cultivating a supportive, compassionate and empathic culture for laypersons to share their views and wishes on EOL care.

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Appendix 1 – The Chinese 9-item ACP Engagement Survey

	完全沒有	有一點	有些	很多	非常多
1. 您有多少**信心**可以**請某人**做您的醫療決策代理人?	☐	☐	☐	☐	☐
2. 您是否**準備**好正式**邀請某人**成為您的醫療決策代理人?	☐ 1 - 我從未想過這件事 ☐ 2 - 我曾經考慮過，但我還沒準備好去做 ☐ 3 - 我正在考慮在未來6個月內做這件事 ☐ 4 - 我已經計劃在接下來的30天內做這件事 ☐ 5 - 我已經完成了這件事				
您認為自己會邀請誰成為您的醫療決策代理人?	☐ 父母 ☐ 丈夫 / 妻子 ☐ 子女 /孫 ☐ 朋友 ☐ 醫生 ☐ 其他 ☐ 未決定				
3. 您是否**準備**好與您的**醫生**談論您**想要誰**成為您的醫療決策代理人?	☐ 1 - 我從未想過這件事 ☐ 2 - 我曾經考慮過，但我還沒準備好去做 ☐ 3 - 我正在考慮在未來6個月內做這件事 ☐ 4 - 我已經計劃在接下來的30天內做這件事 ☐ 5 - 我已經完成了這件事				
4. 您是否**準備**好**簽署正式文件**以指定**某人或某組人**成為您的醫療決策代理人?	☐ 1 - 我從未想過這件事 ☐ 2 - 我曾經考慮過，但我還沒準備好去做 ☐ 3 - 我正在考慮在未來6個月內做這件事 ☐ 4 - 我已經計劃在接下來的30天內做這件事 ☐ 5 - 我已經完成了這件事				
	完全沒有	有一點	有些	很多	非常多
5. 在今天您有多少**信心**可以與您的**醫療決策代理人談論**有關您想要的晚期照顧?	☐	☐	☐	☐	☐
6. 在今天您有多少**信心**可以與**醫生談論**有關您想要的晚期照顧?	☐	☐	☐	☐	☐
7. 您是否**準備**好和您的**醫療決策代理人談論**有關您想要的晚期照顧?	☐ 1 - 我從未想過這件事 ☐ 2 - 我曾經考慮過，但我還沒準備好去做 ☐ 3 - 我正在考慮在未來6個月內做這件事 ☐ 4 - 我已經計劃在接下來的30天內做這件事 ☐ 5 - 我已經完成了這件事				
8. 您是否**準備**好和**醫生談論**有關您想要的晚期照顧?	☐ 1 - 我從未想過這件事 ☐ 2 - 我曾經考慮過，但我還沒準備好去做 ☐ 3 - 我正在考慮在未來6個月內做這件事 ☐ 4 - 我已經計劃在接下來的30天內做這件事 ☐ 5 - 我已經完成了這件事				
9. 您是否**準備**好**簽署正式文件 (預設醫療指示)**，以書面形式表明您想要的晚期照顧?	☐ 1 - 我從未想過這件事 ☐ 2 - 我曾經考慮過，但我還沒準備好去做 ☐ 3 - 我正在考慮在未來6個月內做這件事 ☐ 4 - 我已經計劃在接下來的30天內做這件事 ☐ 5 - 我已經完成了這件事				

ENDLESS CARE SERVICES
TUNG WAH GROUP OF HOSPITALS

The Endless Care Services under Elderly Services of Tung Wah Group of Hospitals, was established in 2009. It offers a wide range of services including plan-ahead funeral arrangement, bereavement counselling, community palliative care support, as well as life and death education.

Service Objectives:

- To encourage the elderly to live a positive, fulfilling life upon entering the late stage, and by planning ahead for the funeral arrangements, so as to relieve the stress of the elders as well as the caregivers in facing the end of life;
- To break the taboo about death in the community and facilitate members of the public to review and reflect on their lives so as to promote the message "Cherish Life and Positive Living".

Scope of Services:

1. Plan Ahead Funeral Arrangement

To facilitate the elders and their caregivers to plan ahead for the funeral arrangement, and to promote the message "Cherish Life and Positive Living" in the community through various innovative and immersive activities.

2. Funeral Care Service

To provide the childless elderly singleton and elderly couples with pre-funeral service and handle their funerals according to their will after they pass away.

3. "My Present for You" Video Shooting Service for the Elderly

Through the production of videos for their beloved ones, the elderly can review their pasts while mutual-appreciation of the achievements they have made can be facilitated.

4. Be-with Bereavement Support Service

To offer companionship for the bereaved, assisting them in handling the funeral affairs and providing bereavement counselling to ease their grief.

5. Community Palliative Care Support Project

To offer case management, nursing care, counselling service and home visits to the terminally-ill patients and their caregivers, also to provide community education talks and professional training to frontline staff on palliative care.

THE CHINESE UNIVERSITY OF HONG KONG
FACULTY OF MEDICINE
THE NETHERSOLE SCHOOL OF NURSING

The Nethersole School of Nursing, formerly the Department of Nursing (hereafter referred to as "School" in this paper), was established under the Faculty of Medicine at The Chinese University of Hong Kong (CUHK) in 1991. The School is the first university department of nursing in Hong Kong. The primary focus of the School is on high-quality nursing education and research so that nurses can become major contributors to improving population health and facilitating nursing development in Hong Kong. With the generous support of the Executive Committee of the Alice Ho Miu Ling Nethersole Hospital and the United Christian Medical Service, the School has further invigorated its commitment to pursuing excellence in nursing education, research and practice under the name of "The Nethersole School of Nursing" since 1 January 2002. In addition to nursing education, the School has provided gerontology education since 2012, in response to the needs of Hong Kong's rapidly aging population. Undergraduate and postgraduate qualifications from the School enhance career progression of graduates locally, regionally and internationally. According to the QS World University Rankings 2019 – Nursing, the School ranks No. 1 in Hong Kong, No. 2 in Asia and No. 26 in the world.

Mission

To excel in teaching, research, and promotion of the highest standards of nursing and gerontology practice

Motto

To serve the community with compassion

Objectives

- To offer high-quality undergraduate and postgraduate education in nursing and gerontology that meets the changing needs of the profession and the health needs of the society
- To foster lifelong learning and to provide a foundation for continuing education
- To advance the art and science of nursing
- To promote the highest standards of nursing and aged care through scholarship, research, and innovative practice
- To increase nursing and gerontology knowledge through research

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