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The effects of a video decision aid to improve advance care planning amongst community-dwelling older adults in Hong Kong

Submission date
10/11/2017

Recruitment status
No longer recruiting

Registration date
21/11/2017

Overall study status
Completed

Last Edited
08/11/2022

Condition category
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Current plain English summary as of 24/02/2022:
Background and study aims
Recent advances in medical technology have increased the use of life-sustaining treatments (LSTs) to prolong life (HAHO, 2015). However, older adults with life-limiting illnesses might have poor responses to LSTs, which can therefore occasionally be futile. It is important to balance the risks and benefits of such treatments and explore patients' wishes about end-of-life (EOL) care. Mentally competent individuals can denote their future medical care preferences through advance care planning (ACP). Several studies from Western countries have shown that a video decision aid (VDA) can effectively support individuals engaging in ACP. However, little is known about the effectiveness of VDAs amongst the Chinese population. The aim of this study is to assess the feasibility and acceptability of the video decision aid in end-of-life decision-making in community-dwelling older adults in Hong Kong.

Who can participate?
Community-dwelling older adults aged 60 or over, able to communicate, and cognitively intact were eligible to join.

What does the study involve?
Participating elderly communities are randomly allocated to either the control group or the video group. A 45-minute educational talk is delivered to all participants. In both groups, a trained member of the research team presents the verbal narrative on the goals of medical care (life-prolonging care and comfort care) using PowerPoint slides. A set of 30-page PowerPoint slides are presented to all participants on a projected screen. Photos, graphic illustrations and simple written description using lay language are included in the PowerPoint slides. Identical PowerPoint slides with a structured script are used for all educational talks. The PowerPoint slides cover background information regarding poor prognosis of multimorbidity in older adults, detailed descriptions of different levels of medical care (life-prolonging care vs comfort care) and various components of advance care planning in Hong Kong. Life-prolonging care is described as any available medical care to prolong life including CPR, mechanical ventilation, artificial hydration, and artificial nutrition. Comfort care is described as any medical or nursing

care to maximize comfort and to relieve pain. Participants in the intervention group also listen to the same verbal narrative using the same set of PowerPoint slides as the control group, followed by a 6-minute video on a projected screen. The 6-minute ACP video illustrates life-sustaining treatments and comfort care options using the same definitions as the verbal narrative, and also includes visual images and videos of the typical treatments. The 6-minute video contains images of simulated chest compressions, mechanical intubation and intravenous medicine injection on a mannequin. Visual images of artificial nutrition (nasal gastric tube feeding), artificial hydration (intravenous fluid) are also shown. Visual images of a mannequin who is receiving oxygen therapy with a nasal cannula resting on bed, representing comfort care, are also shown. The video is filmed with an unbiased approach. No visual or verbal prompts are used to ensure realism and avoid prompting of decision making. No actors or special effects are used. Traditional Chinese dubbing and labels are added to improve readability. The talk and the video are delivered in Cantonese. Participants are asked to complete a questionnaire before and after the intervention on its acceptability and their EOL preferences.

What are the possible benefits and risks of participating?
Through participating in the intervention, participants may gain a better understanding of EOL care issues in order to make informed decisions on personal future EOL care. There are no risks or physical harms of taking part in this study.

Where is the study run from?
District Elderly Community Center (DECC) in Kwun Tong, Choi Fok, Tuen Mun (Hong Kong)

When is the study starting and how long is it expected to run for?
September 2017 to July 2019

Who is funding the study?
Investigator initiated and funded

Who is the main contact?
Ching Ting Lai

_____

Previous plain English summary:
Background and study aims
Advance care planning is the process of communication in which patients with advanced progressive disease and their healthcare providers establish their future goal of medical care during end-of-life (EOL). Studies have shown that video decision aids are effective at promoting end-of-life care decision making. However, little is known about their feasibility in Asian cultures. A local video decision aid has been developed to fit the local context. The video was developed in a balanced manner by showing the positive and negative features of different goals of medical care. Visual images illustrating each goal are shown: simulated cardiopulmonary resuscitation (CPR) and intubation on a mannequin (life-prolonging care) and a patient resting on a bed receiving pain medications and oxygen therapy by a nurse (comfort care). The aim of this study is to assess the feasibility and acceptability of the video decision aid in end-of-life decision making in community-dwelling older adults in Hong Kong.

Who can participate?
Patients aged 60 or over with multimorbidity (two or more chronic medical conditions)

What does the study involve?
Participating elderly communities are randomly allocated to either the control group or the video group. A 45-minute educational talk is delivered to all participants. In both groups, a trained member of the research team presents the verbal narrative on the goals of medical care (life-prolonging care and comfort care) using PowerPoint slides. A set of 30-page PowerPoint slides are presented to all participants on a projected screen. Photos, graphic illustrations and simple written description using lay language are included in the PowerPoint slides. Identical PowerPoint slides with a structured script are used for all educational talks. The PowerPoint slides cover background information regarding poor prognosis of multimorbidity in older adults, detailed descriptions of different levels of medical care (life-prolonging care vs comfort care) and various components of advance care planning in Hong Kong. Life-prolonging care is described as any available medical care to prolong life including CPR, mechanical ventilation, artificial hydration, and artificial nutrition. Comfort care is described as any medical or nursing care to maximize comfort and to relieve pain. Participants in the intervention group also listen to the same verbal narrative using the same set of PowerPoint slides as the control group, followed by a 6-minute video on a projected screen. The 6-minute ACP video illustrates life-sustaining treatments and comfort care options using the same definitions as the verbal narrative, and also includes visual images and videos of the typical treatments. The 6-minute video contains images of simulated chest compressions, mechanical intubation and intravenous medicine injection on a mannequin. Visual images of artificial nutrition (nasal gastric tube feeding), artificial hydration (intravenous fluid) are also shown. Visual images of a mannequin who is receiving oxygen therapy with a nasal cannula resting on bed, representing comfort care, are also shown. The video is filmed with an unbiased approach. No visual or verbal prompts are used to ensure realism and avoid prompting of decision making. No actors or special effects are used. Traditional Chinese dubbing and labels are added to improve readability. The talk and the video are delivered in Cantonese. Participants are asked to complete a questionnaire before and after the intervention on its acceptability and their EOL preferences.

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Who is funding the study?
Investigator initiated and funded

Who is the main contact?
Ching Ting Lai

Contact information

Type(s)
Public

Contact name

Miss Ching Ting Lai

Contact details
5B Sun Ho Court
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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
1

Study information

Scientific Title
The effects of video decision aid to improve advance care planning amongst community-dwelling older adults in Hong Kong: a cluster randomized controlled trial

Study objectives
Current study hypothesis as of 24/02/2022:
In comparison to a verbal narrative, a video decision aid (VDA) will increase readiness to engage in advance care planning (ACP) behaviours, knowledge of ACP and life-sustaining treatments (LSTs), certainty in choice of care, and lower decisional conflicts.

Previous study hypothesis:
Primary hypothesis: older adults in the intervention arm would be more readily to discuss end-of-life (EOL) care preference compared to those patients who received usual care.
Secondary hypothesis: older adults in the intervention group would have better knowledge about life-sustaining treatments.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Current ethics approval as of 24/02/2022:
Approved 20/03/2018. The Joint Chinese University of Hong Kong-New Territories East Cluster Clinical Research Ethics Committee (CUHK-NTEC CREC), ref: 2017.674

Previous ethics approval:
Survey and Behavioral Research Ethics Committee of the Chinese University of Hong Kong, 30/11/2016

Study design
Multi-site cluster randomised controlled trial

Primary study design
Interventional

Secondary study design
Cluster randomised trial

Study setting(s)
Community

Study type(s)
Other

Participant information sheet
Not available in web format, please use the contact details to request a patient information sheet

Health condition(s) or problem(s) studied
The effects of video decision aids on advance care planning

Interventions
A 6-minute video decision aid (DA) was developed. Visual images comprising each goal were shown: simulated CPR and intubation on mannequin (life-prolonging care) and a patient rest on bed receiving pain medications and oxygen therapy by a nurse (comfort care).

In order to determine the feasibility and acceptability of a video DA in EOL decision making in community-dwelling older adults in Hong Kong, a pilot study is performed. This is a one-group pre-test post-test study. Older adults are recruited from elderly centres. A 6-minute video DA is shown followed by a 30-minute talk to clarify questions. Participants are asked to complete a questionnaire before and after the intervention on its acceptability and their EOL preferences. Chi-square test is performed to compare their preferences at the two time points.

In the main study, there will be multi-sites cluster randomisation. Several elderly communities who join the study will be randomly allocated to either control arm or video arm using a computer-generated allocation sequence.

A 45-minutes educational talk will be delivered to the subjects. In both groups, a trained member of the research team will present the verbal narrative on the goals of medical care (life-prolonging care and comfort care) using PowerPoint slides. A set of 30-page PowerPoint slides will be presented to all subjects on a projected screen. Photos, graphic illustrations and simple written description using lay language will be included in the PowerPoint slides. Identical PowerPoint slides follow with structured script will be used for all educational talks. The PowerPoint slides will cover background information regarding poor prognosis of multimorbidity in older adults, detailed description of different levels of medical care (life-prolonging care vs comfort care) and various component of advance care planning in Hong Kong. The EOL care framework was adopted from previous similar research and validated by experts. Life-prolonging care will be described as any available medical care to prolong life including

cardiopulmonary resuscitation, mechanical ventilation, artificial hydration, artificial nutrition (Volandes et al., 2012; HAHO, 2015). Comfort care will be described as any medical or nursing care to maximize comfort and to relieve pain (Volandes et al., 2012; HAHO, 2015).

Subjects in the intervention group will listen to the same verbal narrative using the same set of PowerPoint slides as the control group followed by a 6-minute video on a projected screen. The 6-minute ACP VDA illustrates life-sustaining treatments and comfort care options using the same definitions as the verbal narrative, and also includes visual images and video of the typical treatments. The VDA was developed in a systematic approach followed by a comprehensive literature review and internet search. The ACP VDA was reviewed by an expert panel comprises of physicians and nurses and it was developed through an iterative process. The 6-minute video contains images of simulated chest compressions, mechanical intubation and intravenous medicines injection on a mannequin. Visual images of artificial nutrition (nasal gastric tube feeding), artificial hydration (intravenous fluid) will also be shown. Visual images of a mannequin who is receiving oxygen therapy with nasal cannula resting on bed representing comfort care will also be shown. The video is filmed with an unbiased approach. No visual or verbal prompts were used to ensure realism and avoid prompting of decision making. No actors or special effects were used. Traditional Chinese dubbing and labels were added to improve readability. The talk and the video will be delivered in Cantonese.

Intervention Type
Other

Primary outcome measure
Readiness to participate in advanced care planning, measured by a Readiness ruler with 5-point scale at T0 (baseline, before the intervention) and T1 (immediately after the intervention)

Secondary outcome measures
Measured at T0 (baseline, before the intervention) and T1 (immediately after the intervention):
1. Knowledge of EOL care planning, measured by 5 knowledge questionnaires
2. Decisional conflicts towards EOL care choices, measured by SURE test
3. Care preferences, measured by participants' self-stated care preferences (comfort care vs life-prolonging care)

Overall study start date
01/09/2017

Completion date
01/07/2019

Eligibility

Key inclusion criteria
Current participant inclusion criteria as of 24/02/2022:
1. Aged 60 or above
2. Cognitive intact (AMT >6)
3. Able to communicate in Cantonese
4. Able to provide informed consent

Previous participant inclusion criteria:
1. Aged 60 or above

2. Multimorbidity
3. Able to communicate in Cantonese
4. Able to provide informed consent

Participant type(s)
Patient

Age group
Senior

Sex
Both

Target number of participants
n=83 per group with n=10-20 per cluster in each centre

Total final enrolment
182

Key exclusion criteria
1. Cognitive impairment (AMT < 6)
2. Severe deafness or severe visual impairment

Date of first enrolment
11/11/2017

Date of final enrolment
11/11/2018

Locations

Countries of recruitment
Hong Kong

Study participating centre
District Elderly Community Center (DECC) in Kwun Tong, Choi Fok, Tuen Mun
Hong Kong
00000

Sponsor information

Organisation
Association of Hong Kong Nursing Staff

Sponsor details

Kowloon Jordan White Gas Street 25
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Hong Kong
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Sponsor type
Other

Funder(s)

Funder type
Other

Funder Name
Investigator initiated and funded

Results and Publications

Publication and dissemination plan
Planned publication in a high-impact peer reviewed journal.

Intention to publish date
01/07/2022

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are/will be available upon request from Miss Ching Ting Lai. Individual participant data that underline the results reported in the article, after deidentification (text, tables, figures, and appendices) will be shared. Data will be available beginning 3 months and ending 5 years following article publication. Data will be shared with investigators whose proposed use of the data has been approved by an independent review committee identified for this purpose for individual participant data meta-analysis. To gain access, data requestors will need to sign a data access agreement.

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		04/11/2022	08/11/2022	Yes	No