Checklist of MORECare Statement

Category	Checklist items	Answer
Introduction/background	1. Present theoretical framework for the intervention and levels of need established	Yes
	2. Present objectives appropriate to the level of intervention development	Yes
Study design	3. Indicate and justify stage in MRC guidance for development and evaluation of complex interventions, for example, feasibility, preliminary evaluation, efficacy/cost effectiveness and wider effectiveness	Yes, this study tested efficacy of education.
	4. Feasibility stages should test both feasibility of the intervention and of methods of evaluation, including outcome measurement	Not applicable
	5. Justify methods, considering appropriate use of existing data sets and secondary analysis as these may produce rapid information	Yes
	6. Justify methods of empirical studies considering mixed methods, observational studies and randomised trials	Yes
Study team	7. Ensure involvement from: (i) consumers, patients and caregivers; (ii) relevant clinicians; (iii) relevant methodologists to develop study questions, questionnaires and procedures; and (iv) researchers familiar with the challenges in EoLC studies	Yes
	8. Ideally, involvement should be well established and continuing, beyond a specific study, with joint meetings or rotations between clinical and research staff	Not applicable
Ethics	9. Note in ethics committee application MORECare recommendations that it is ethically desirable for patients and families in EoLC to be offered involvement in research and MORECare evidence of patient willingness to be approached	Yes, patients and families are involved in this study.
	10. Work within legal frameworks on mental capacity, consent and so on, to ensure that those who may benefit from interventions are	Yes

	offered an opportunity to participate if they wish	
	11. Collaborate with patients and caregivers in the design of the study, vocabulary used in explaining the study, consent procedures and any ethical aspects	Not applicable
	12. Attend the ethics committee meeting with a caregiver or patient, as a means to help the committee better understand the patient perspective	Not applicable
	13. Ensure proportionality in patient and caregiver information sheets, appropriate to the study design and level of risk, as excessive information in itself can be tiring/distressing for very ill individuals	Yes
Participants	14. Adjust eligibility criteria to recruit those patients who may benefit most from intervention, ensuring equipoise	Yes
Procedures	15. Minimise burden for existing clinical staff for participation in the study	Yes
	16. Clearly distinguish between service received and research activity interviews in study arms when multiple interviews with patients are undertaken in trials, for example, using a graphical system	Yes
Outcome measures	17. Choose outcome measures that meet the following criteria: • established validity and reliability in relevant population • responsive to change over time • capture clinically important data • easy to administer and interpret (for example, short and with low level of complexity) • applicable across care settings to capture change in outcomes by location (for example, patients' home, hospital, hospice) • able to be integrated into clinical care • minimise problems of response shift	We captured clinically important data.
	18. Consider including patients' experience of care, as this is central to many interventions	Yes, we incorporated anthropological approach to discover patients' experience of care.
	19. Select time points of outcome measurement to balance the value of early recording, to reduce attrition, but to allow enough time for the	Yes

	intervention to have had an effect	
	20. Consider the potential effect of response shift (that is, a change in a person's internal conceptualisation or calibration of the aspects measured). Questionnaires that include anchor points or descriptions of each response category may be less problematic in this regard	Not applicable
Missing data and attrition considerations	21. Estimate in advance levels of, and reasons for, attrition and missing data, integrating these into sample size estimates and planned collection of data from proxies	Because this study is a pilot trial, the sample size is not calculated based on primary endpoint. Facts about missing or attrition data are described in the Result section.
	22. Monitor during the study and report all levels of, and reasons for, attrition and other missing data	Yes
	23. Assume missing quantitative data NOT to be at random unless proven otherwise	Not applicable
	24. Test results from different methods of imputation – noting that 'using only complete cases' is a form of imputation	Not applicable
	25. Use the MORECARE classification of attrition to describe causes of attrition: that is, • ADD – attrition due to death; • ADI - attrition due to illness; • AaR - attrition at random.	Because the primary outcome was measured in all participants, the classification of attrition was not practically applicable to this study.
	26. Consider reasons for missing data which are not due to attrition, for example missed questionnaire, or missed data item in questionnaire. Consider these in analysis and the potential imputations	Yes
Mixed method studies	27. Mixed methods can be appropriate in all phases of development and evaluation	Yes
	28. Ensure appropriate multi-disciplinary skills mix or training of team	Yes
	29. Define the theoretical paradigm and method of integrating results and safeguards to ensure rigour at the outset	Yes
	30. Plan investigation to avoid undue burden of qualitative and quantitative questionnaires – perhaps dividing data collection or selecting questions and/or sampling appropriately	Yes, we've tried to minimize questionnaires.

	31. Take into account any potential therapeutic effect of qualitative interviews where participants can express their feelings, if these are similar to components of the intervention	To minimize therapeutic effect of interviews, we used anthropological methods.
	32. Ensure that those collecting data are appropriately trained in qualitative data collection	Yes
Implementation	33. Consider implementation implications, including workforce and training needs, in all phases of the study	Yes
Cost-effectiveness	34. Integrate into preliminary evaluations and test feasibility of methods	Not applicable
	35. Collect data on use of services including health, voluntary, social and informal care, to take societal approach to care costs	Not applicable
	36. Justify appropriate outcome measures to generate cost effectiveness	Not applicable

Article information: http://dx.doi.org/10.21037/apm-20-269

Materials Design Analysis Reporting (MDAR) Checklist for Authors

The MDAR framework establishes a minimum set of requirements in transparent reporting applicable to studies in the life sciences (see Statement of Task: doi:10.31222/osf.io/9sm4x.). The MDAR checklist is a tool for authors, editors and others seeking to adopt the MDAR framework for transparent reporting in manuscripts and other outputs. Please refer to the MDAR Elaboration Document for additional context for the MDAR framework.

Materials

Antibodies	Yes (indicate where provided: section/paragraph)	n/a
For commercial reagents, provide supplier name, catalogue number and RRID, if available.		This study does not include any laboratory experiments.

Cell materials	Yes (indicate where provided: section/paragraph)	n/a
Cell lines: Provide species information, strain. Provide accession number in repository **OR** supplier name, catalog number, clone number, **OR** RRID		This study does not include any laboratory experiments.
Primary cultures: Provide species, strain, sex of origin, genetic modification status.		This study does not include any laboratory experiments.

Experimental animals	Yes (indicate where provided: section/paragraph)	n/a
Laboratory animals: Provide species, strain, sex, age, genetic modification status. Provide accession number in repository **OR** supplier name, catalog number, clone number, **OR** RRID		This study does not include any animal experiments.
Animal observed in or captured from the field: Provide species, sex and age where possible		This study does not include any animal experiments.
Model organisms: Provide Accession number in repository (where relevant) **OR** RRID		This study does not include any animal experiments.

Plants and microbes	Yes (indicate where provided: section/paragraph)	n/a
Plants: provide species and strain, unique accession number if available, and source (including location for collected wild specimens)		This study does not include any plant experiments.
Microbes: provide species and strain, unique accession number if available, and source		This study does not include any microbial experiments.

Human research participants	Yes (indicate where provided:	n/a
Identify authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	The IRB approval number was presented on the line 12 of page 8 in the Methods section.	
Provide statement confirming informed consent obtained from study participants.	Content related to written informed consent was described on on the line 14 of page 8 in the Methods section.	
Report on age and sex for all study participants.	Characteristics of all participants are separately submitted as table 1.	

Design

Study protocol	Yes (indicate where provided: section/paragraph)	n/a
For clinical trials, provide the trial registration number **OR** cite DOI in manuscript.		This trial is not registered to clinical trial database.

Laboratory protocol	Yes (indicate where provided: section/paragraph)	n/a
Provide DOI or other citation details if detailed step-by-step protocols are available.		This study does not include any laboratory test.

Experimental study design (statistics details)	Yes (indicate where provided: section/paragraph)	n/a
State whether and how the following have been done**, or** if they were not carried out.		
Sample size determination		There was no sample size calculation because the expected outcome was not known yet. This study also does not include randomization and blinding procedure because its pilot character.
Randomisation		
Blinding		
Inclusion/exclusion criteria	In/exclusion criteria were provided in line 9 to 13 of page 7 in the Methods section.	

Sample definition and in-laboratory replication	Yes (indicate where provided: section/paragraph)	n/a
State number of times the experiment was replicated in laboratory		This study does not include any laboratory test.
Define whether data describe technical or biological replicates		This study does not include any laboratory test.

Ethics	Yes (indicate where provided: section/paragraph)	n/a
Studies involving human participants: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	The details of ethical aspects including IRB approval was described in the line 11 to 15 of page 8 in the Methods section.	
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		This study does not include any animal experiments.
Studies involving specimen and field samples: State if relevant permits obtained, provide details of authority approving study; if none were required, explain why.		This study does not include any non-human experiments.

Dual Use Research of Concern (DURC)	Yes (indicate where provided: section/paragraph)	n/a
If study is subject to dual use research of concern, state the authority granting approval and reference number for the regulatory approval		The name of the institution responsible for the approval of this study is presented in the line 11 to 12 of page 8 in the Methods section.

Analysis

Attrition	Yes (indicate where provided: section/paragraph)	n/a
State if sample or data point from the analysis is excluded, and whether the criteria for exclusion were determined and specified in advance.		No captured data during trial was excluded from the final analysis. However, some questionnaires could not be written because many participants were unable to answer the surveys. This is described in the Results section page 12, line 5 to 13.

Statistics	Yes (indicate where provided: section/paragraph)	n/a
Describe statistical tests used and justify choice of tests.	The statistical tests used and rationale of the choices are described from 15th to 19th line of page 9 in the Methods section.	

Data Availability	Yes (indicate where provided: section/paragraph)	n/a
State whether newly created datasets are available, including protocols for access or restriction on access.		The dataset and protocol are not confidential ones but we do not have plan to make it public. If someone contact us individually, we can provide the necessary information.
If data are publicly available, provide accession number in repository or DOI or URL.		
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.		This study is based on original data which were collected during the study periods. We did not reuse public data.

Code Availability	Yes (indicate where provided: section/paragraph)	n/a
For all newly generated code and software essential for replicating the main findings of the study:		
State whether the code or software is available.	We presented the software used for statistical analyses in the line 19 and 20 of page 9 in the Methods section. No code was used.	
If code is publicly available, provide accession number in repository, or DOI or URL.		No code was used in this study.

Reporting

Adherence to community standards	Yes (indicate where provided: section/paragraph)	n/a
MDAR framework recommends adoption of discipline-specific guidelines, established and endorsed through community initiatives. Journals have their own policy about requiring specific guidelines and recommendations to complement MDAR.		
State if relevant guidelines (eg., ICMJE, MIBBI, ARRIVE) have been followed, and whether a checklist (eg., CONSORT, PRISMA, ARRIVE) is provided with the manuscript.	This manuscript was written following ICMJE guidelines. However, CONSORT is not an appropriate tool because this study is not a randomized one. We applied MORECare checklist which was designed for conduct of research on end-of-life care. Because our	

	study used combined methods of both qualitative and quantitative, this is the best checklist suitable for this study. We will submit file of MORECare checklist separately. (Reference of MORECare checklist: Higginson et al. BMC Medicine 2013, 11:111.)	

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