

PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Study protocol of OncoTalk: An observational study on communication problems in language-mediated consultations with migrant oncology patients in Flanders (Belgium)
AUTHORS	Krystallidou, Demi; Vaes, Lena; Devisch, Ignaas; Wens, Johan; Pype, Peter

VERSION 1 – REVIEW

REVIEWER	Pascal Singy Lausanne University and Lausanne University Hospital Switzerland
REVIEW RETURNED	11-Oct-2019

GENERAL COMMENTS	<p>This is a very interesting article dealing with crucial issues in cancer care and communication. However, the authors should take into account the following observations and revise their paper in accordance:</p> <p>2. Study design</p> <p>The literature search does not clearly state that it will address pre-existing literature on good practices for triadic consultations in medical settings other than oncology. Is this an omission? If this is not the case, it is doubtful whether the study design is really adequate to answer the research questions.</p> <p>The cultural aspect of clinical interactions, which is widely addressed in the literature, particularly with regard to representations and practices relating to illness and death, is not mentioned: neither in the introduction nor in the protocol. Given its importance, it would be useful to know if the authors plan to include it in a way or an other.</p> <p>3. Description of the methods</p> <p>The authors say that they want to carry out a contrastive analysis between originals and renderings. However, the literature shows that there are always many differences if we look at sentences in detail. It is essential to have criteria to decide which of these are problematic. In this respect, it is unclear who will decide on these criteria and according to which procedures.</p> <p>The whole section on the sample is not clear and contains many indications that relate to aspects other than sampling; these should be moved elsewhere and the whole section redrafted.</p>
-------------------------	--

	<p>12. Limitations</p> <p>The authors mention only one limitation in the abstract (value of results for other geographical areas), however it is not addressed in the article itself. Other major limitations will certainly result from the choices made after the state of the art. It is, for instance, doubtful that the research team will be able to look closely simultaneously at micro-level interactive processes (e.g. conversational analysis), agenda negotiation issues, patient education, etc. They will have to select and this will lead to limitations.</p>
REVIEWER	<p>Elisabet Tiselius Institute for Interpreting and Translation Studies, Stockholm University, Sweden.</p>
REVIEW RETURNED	<p>24-Oct-2019</p>
GENERAL COMMENTS	<p>Interesting and important study. You may be interested in looking at the CoLB-q questionnaire (Granhagen Jungner et. al.)</p>
REVIEWER	<p>Amelia Hyatt Peter MacCallum Cancer Centre Australia</p>
REVIEW RETURNED	<p>03-Dec-2019</p>
GENERAL COMMENTS	<p>This protocol paper outlines a fascinating proposed body of work, the outcomes of which have been designed to have a practical application in terms of improving care. The authors are to be commended for their concept development and the amount of thoughtfulness and detail which is clearly present in the study design. However, the current paper needs a little work, as currently the study design and procedures are difficult to follow. In particular, more clarity and consistency in terminology used; and detail, description and justification for methods selected is required. I have therefore outlined some suggestions/queries to assist you in this process:</p> <p>Introduction</p> <ul style="list-style-type: none"> • As a whole, the introduction needs more work. I think you could flesh out your argument more. You seem to be describing in your introduction communication problems which are directly related to language use, where I think in your study it seems you are looking more at problems with communication skills? While I think the study is certainly worthwhile, I think you could build a stronger and clearer argument for your research here. • First sentence paragraph four: please reference these studies, and the literature you refer to • This is a stylistic comment which applies throughout the entire paper: the frequent use of brackets is distracting, especially where there are multiple brackets in a single sentence. I think in most instances, you could remove the brackets. Instead information provided in the brackets can be integrated into the main part of the sentence. For example, I have re-written one of your sentences with the brackets removed to demonstrate: Although the contribution of these ad hoc interpreters might be crucial, the use of trained professional interpreters is recommended²⁵, yet does not guarantee communication without problems either, such as erroneous translation of a medical terms²⁶

	<p>Objectives</p> <ul style="list-style-type: none"> • It is typical to refer to primary objectives and secondary objectives, not ultimate objectives • What is outlined in your objectives is not achievable within the scope of your project. It does not seem to me that you are measuring optimisation of care or communication practices to be able to state that this is an objective of this trial. Suggest that this is removed. • However, I think your goals and outcomes are well described and achievable. <p>Logic model</p> <ul style="list-style-type: none"> • You are missing the steps which detail HOW your activities will result in your outputs, and also how you move from your outputs to your outcomes. The purpose of a logic model is to walk through each and every step you will take to get to your outcomes. For example, it is not detailed how you will synthesise the scientific literature into 'best evidence' or your inventory. How will decisions be made about what is best evidence? Who will decide this? What are their qualifications to be making these decisions? Nor do you describe how coding of communication problems will result in integration of medical recommendations. <p>Methods and Analysis</p> <p>The methods and analysis section would benefit from a considered review and re-structure. In particular information is often located under the wrong heading: for example, information about study design appears in the procedures section, and training and analysis information appears in the sample section, and so on. The purpose of this paper is to provide a clear outline of your research which could be potentially replicated. At present, there are too many gaps and unknowns, and terminology used interchangeably or inconsistently to allow for this to occur. There are also lots of descriptions of processes which are not referenced.</p> <p>I think a study schema would be helpful to include for the reader, and also be useful for you to guide the flow of information you provide in your paper. It would also allow you to demonstrate how each part of your study relates to each other and how you will use each component to address your study goals and create your outputs. You could make the above changes to the logic model and use here – but much more detail is needed.</p> <p>It would also be helpful to think about presenting your study in a chronological order with each section covering all relevant information under section subheadings. For example, the first mention of the systematic review appears in procedures, but the study design should clearly outline all aspects of your study. As noted above, clear definitions, which are used consistently throughout will assist the reader in understanding each component of the study, and the choice of methods used, and how they relate to your study goals.</p> <p>More specific feedback follows:</p> <p>Design</p> <ul style="list-style-type: none"> • More specific information is needed. You mention that you will employ a set of complementary methodologies here, but do not state what they are. In this section you should outline very clearly what you will do, and what frameworks and methodologies you will be employing for each component of your study. These should also be referenced.
--	---

	<p>Sample</p> <ul style="list-style-type: none"> • In your design you state that the study uses mixed-methods, however in your sample section you state that it is a qualitative study, please clarify/be consistent • Can you please reference your sentence: “The scarcity of theoretical perspectives on communication problems in language-mediated consultations in oncology settings requires a relatively large sample too.” • In this section you talk about analysis and training – please move into the analysis section and procedures. • Your paper requires clear definitions about what you are looking at. For example, in your goals you state you are looking at ‘interactional processes and communicative resources (both verbal and non-verbal)’, however in your methods you state you are looking at a range of different things which do not clearly relate to your goals, nor are clearly defined. It would be helpful if you defined what interactional processes and communicative resources referred to and then used these terms consistently throughout. A table might be a useful way to present this information, you could use this to map each element to each component of the study and the measures used. • In your systematic review you state you are looking at communication problems which are intrinsic to oncology consultations, however as you are only including papers about oncology consultations, you cannot say that these are intrinsic to oncology as you are not reviewing consultations in other health areas. Also stating that you will uncover ALL communication issues is not potentially viable. • Patient information recall, or patient understanding is measured, however it is important to note that this is dependent on numerous factors other than communication, such as health literacy, or emotional state. It would be useful to explain how this relates to your study aims/goals (see point above, table). Further – while I freely admit I am involved in this project, it may be useful to you if you are looking to measure information recall as this details the methodology for measuring medical information recall for persons who do not speak the dominant language of a country: Lipson-Smith R, Hyatt A, Murray A, Butow P, Hack TF, Jefford M, Ozolins U, Hale S, Schofield P. Measuring recall of medical information in non-English-speaking people with cancer: A methodology. <i>Health Expectations</i>. 2018 Feb;21(1):288-99. • ‘Information exchange inconsistencies’ is also measured, but it would be useful to define so that the reader can understand how this relates to your study aims/goals. • Will the results of the systematic review be used to inform latter parts of your study? If so, this should be clear to the reader, and the process of how this will happen detailed. • The paragraph detailing the expected results from the systematic review should be removed • Methodologies described in your analysis section should be referenced, and it should be clear who is doing this and how these decision are being made in line with these methods. • How will you identify or determine elements of the consultation which present communication problems, given these are not clearly defined. This component seems to be relating to behaviour, but it is not clear how this fits in with the rest of the study. • Perception of patient understanding is a different thing to patient perception of choice of therapy or patient concern about treatment plan – please clarify?
--	---

	<ul style="list-style-type: none"> • More detail on how the focus groups will 'test the validity of the findings' (are you referring to face validity here?) and the recommendations will be developed is needed e.g. what framework for decision-making will be used.
REVIEWER	Irene SL Zeng Middlemore Hospital, Community Mental Health and Addiction
REVIEW RETURNED	08-Jan-2020
GENERAL COMMENTS	<p>The protocol is innovative and proposed using multiple methods to investigate the communication problems occurred in doctor-patients-language mediators amongst oncology patients who are second language speakers of Dutch and with different cultural backgrounds. The proposed research will be a valuable contribution to both health-care providers and patients with migration background in oncology setting. However, the protocol can be clearer in its structure and methodology used.</p> <p>I would suggest finding an expert in Multimodal analysis of instances of video and audio to review the protocol. Please find my comments as followed:</p> <p>Introduction:</p> <p><u>Study objective</u></p> <p>The objective 3 is not very clear. Should these be reasons behind problems occurred in the interactional processes and communicative resources?</p> <p>Method and analysis</p> <p><u>Design</u></p> <p>Is this study applying any quantitative method? It is not using mixed-method if it does not use the combination of quantitative and qualitative methods. It can be described as a qualitative study with two phases, first one is the systematic review and followed by an interview and survey. It has mentioned about using focus group at the end of the protocol and this is not introduced in the design section here.</p> <p><u>Sample</u></p> <p>Authors can consider sampling patients, doctors and language mediators using a stratified approach by different languages (i.e. Turkish and Arabic). This will provide equal samples for these two different language/culture.</p>

	<p><u>Procedure</u></p> <p>Systematic review:</p> <p>To collectively review all literature of communication problem between doctors-patients in oncology settings. How would that apply to only communications in Turkish and Arabic language specifically?</p> <p><u>Analysis</u></p> <p>please provide analysis that will be used in the questionnaires and how they can be compared against the video-recording pattern?</p>
--	---

VERSION 1 – AUTHOR RESPONSE

Reviewer 1	Authors' response
<p>R1_1 Study design</p> <p>The literature search does not clearly state that it will address pre-existing literature on good practices for triadic consultations in medical settings other than oncology. Is this an omission? If this is not the case, it is doubtful whether the study design is really adequate to answer the research questions.</p>	<p>Although the objective of the study is to optimize the communication practices of healthcare- and language professionals in oncology settings, we set out to identify communication problems as recorded in the available literature before we take a hands-on approach to the collection and appraisal of clinical evidence (e.g. analysis of real-life consultations) upon which recommendations for good practice will be formulated upon completion of the study. The literature review will be limited to oncology settings. We have now clarified this in the manuscript.</p>

<p>R1_2</p> <p>The cultural aspect of clinical interactions, which is widely addressed in the literature, particularly with regard to representations and practices relating to illness and death, is not mentioned: neither in the introduction nor in the protocol. Given its importance, it would be useful to know if the authors plan to include it in a way or another.</p>	<p>We thank the reviewer for raising the important role of culture in clinical interactions. We acknowledge the cultural aspect that is inherent in clinical interactions. However, in line with the ethnography of communication we view culture as a communicative phenomenon constituted through talk (See Gumperz, J.J. and Cook-Gumperz, J. (2008), <i>Studying language, culture, and society: Sociolinguistics or linguistic anthropology?</i> 1. <i>Journal of Sociolinguistics</i>, 12: 532-545. doi:10.1111/j.14679841.2008.00378.x). By studying how language is used in interaction, we gain insights into participants' culture. What is more, language and culture intertwine and are socially co-constructed in interaction (For an overview of theoretical takes on linguistic co-construction see also Taylor, N. & Mendoza-Denton, N. <i>Language and Culture</i>. In M.J. Ball (Ed) <i>Clinical Sociolinguistics</i> (2005) Malden/Oxford/Victoria: Blackwell Publishing). Gaining insights into participants' culture through the study of the use of semiotic resources (e.g. speech, gaze, body orientation, gestures), we prevent cultural stereotyping. We have now clarified this in the manuscript.</p>
<p>R1_3</p> <p>Description of the methods</p> <p>The authors say that they want to carry out a contrastive analysis between originals and renderings. However, the literature shows that there are always many differences if we look at sentences in detail. It is essential to have criteria to decide which of these are problematic. In this respect, it is unclear who will decide on these criteria and according to which procedures.</p>	<p>We have now included the specific categories against which the assessment of the source language utterances and their rendition into the target language will be conducted. The categories are as follows (see Baker M. In other words: A coursebook on translation: Routledge 2018) : Equivalence i) at word- and above word level (lexical equivalence and collocations), ii) nonequivalence (the source language word expresses a concept which is unknown in the target language and culture), iii) at textual level (thematic-, information structures and cohesion), iv) pragmatic equivalence and implicature (Grice HP. <i>Logic and conversation</i>. <i>Speech acts</i>: Brill 1975:41-58) (what the speaker intended to communicate or what the speaker implied), and v) semiotic equivalence (what semiotic resources mean for participants in a given culture). Assessment of equivalence will be followed</p>

	by revision against clinical relevance (performed by two medical doctors, PP and JW).
R1_4 The whole section on the sample is not clear and contains many indications that relate to aspects other than sampling; these should be moved elsewhere and the whole section redrafted.	Information not immediately related to the sample has now been moved to a new section on training prior to the data collection. The sample section has been redrafted.
R1_5 Limitations The authors mention only one limitation in the abstract (value of results for other geographical areas), however it is not addressed in the article itself. Other major limitations will certainly result from the choices made after the state of the art. It is, for instance, doubtful that the research team will be able to look closely simultaneously at micro-level interactive processes (e.g. conversational analysis), agenda negotiation issues, patient education, etc. They will have to select and this will lead to limitations.	We understand the reviewer's concerns about the rigorous and concurrent analysis of the data considering the increased complexity attached to the selected methodology. However, considering that the selected methodologies are complementary, certain analytical processes will be performed nearly simultaneously (e.g. transcription of consultations and assessment of equivalence). Agenda negotiation issues, patient education and other thematic instances of interaction will not be treated as stand-alone categories that will be analysed separately. Instead, they will be included in the assessment of equivalence, review of clinical relevance and in the multimodal interaction analysis. Members of our team are currently involved in a research project employing similar methodologies and can confirm the feasibility of combined methods in multi-level analysis. (See Krystallidou, D., Salaets, H., Wermuth, C., & Pye, P. (2018). EmpathicCare4All. Study protocol for the development of an educational intervention for medical and interpreting students on empathic communication in interpreter-mediated medical consultations. A study based on the Medical Research Council (MRC) framework phases 0–2. International Journal of Educational Research, 92, 53–62.)
Reviewer 2	Authors' responses
R2_1 You may be interested in looking at the CoLB-q questionnaire (Granhagen Jungner et. al.)	We appreciate the reviewer's suggestion to consult the CoLB-q questionnaire and we acknowledge the rigorous methodology upon which it was developed. We notice that the suggested questionnaire aims to

	measure healthcare professionals' practices and their frequency when communicating over language barriers. On the contrary, in our study we focus on the co-construction of understanding (or lack thereof) and on the interactional processes employed by the participants in interaction.
Reviewer 3	Authors' responses
R3_1 As a whole, the introduction needs more work. I think you could flesh out your argument more. You seem to be describing in your introduction communication problems which are directly related to language use, where I think in your study it seems you are looking more at problems with communication skills? While I think the study is certainly worthwhile, I think you could build a stronger and clearer argument for your research here.	<p>We thank the reviewer for giving us the opportunity to further clarify the focus of our study. In this study we focus on i) the occurrence of communication problems arising from language discordance between healthcare professionals and patients at the level of interaction, ii) the ways in and the reasons for which these communication problems occur at the level of interaction, as well as iii) the effects of these processes on interaction and coconstruction of understanding among patients, healthcare professionals and language mediators during the delivery of care.</p> <p>We do not touch upon participants' communication skills, namely their ability to communicate well. Instead, we depart from i) the participants' inability to communicate with each other as a result of the language discordance between them, and ii) the interactional complexity that is introduced through the presence of a language mediator.</p> <p>It is only upon completion of the study, that we will formulate a set of evidence-based recommendations that will help healthcare professionals, language mediators and patients (and their carers) to hone their communication skills during clinical encounters.</p>
R3_2 First sentence paragraph four: please reference these studies, and the literature you refer to	References have been added.

<p>R3_3</p> <p>This is a stylistic comment which applies throughout the entire paper: the frequent use of brackets is distracting, especially where there are multiple brackets in a single sentence. I think in most instances, you could remove the brackets. Instead information provided in the brackets can be integrated into</p>	<p>We have now taken better care of stylistic issues and have reduced the use of brackets to the bare minimum.</p>
<p>the main part of the sentence. For example, I have re-written one of your sentences with the brackets removed to demonstrate: Although the contribution of these ad hoc interpreters might be crucial, the use of trained professional interpreters is recommended²⁵, yet does not guarantee communication without problems either, such as erroneous translation of a medical terms²⁶</p>	
<p>R3_4</p> <p>Objectives</p> <ul style="list-style-type: none"> • It is typical to refer to primary objectives and secondary objectives, not ultimate objectives 	<p>The ultimate objective is now presented as the primary objective.</p>
<p>R3_5</p> <p>What is outlined in your objectives is not achievable within the scope of your project. It does not seem to me that you are measuring optimisation of care or communication practices to be able to state that this is an objective of this trial. Suggest that this is removed.</p>	<p>We acknowledge that the original formulation might have been misleading and might have placed the emphasis on measurement of optimization of care. We have now redrafted the paragraph in question.</p>

<p>R3_6 Logic model</p> <ul style="list-style-type: none"> You are missing the steps which detail HOW your activities will result in your outputs, and also how you move from your outputs to your outcomes. The purpose of a logic model is to walk through each and every step you will take to get to your outcomes. For example, it is not detailed how you will synthesise the scientific literature into 'best evidence' or your inventory. How will decisions be made about what is best evidence? Who will decide this? What are their qualifications to be making these decisions? Nor do you describe how coding of communication problems will result in integration of medical recommendations. 	<p>We have now included a more comprehensive version of our logic model.</p>
<p>R3_7 Methods and Analysis The methods and analysis section would benefit from a considered review and restructure. In particular information is often located under the wrong heading: for example, information about study design appears in the</p>	<p>We have now revised and re-structured the methods and analysis section in order for it to provide a clearer view of the ways in which evidence will be collected and analysed. The analytical steps are presented in a chronological order. Descriptions of processes are referenced.</p>
<p>procedures section, and training and analysis information appears in the sample section, and so on. The purpose of this paper is to provide a clear outline of your research which could be potentially replicated. At present, there are too many gaps and unknowns, and terminology used interchangeably or inconsistently to allow for this to occur. There are also lots of descriptions of processes which are not referenced.</p>	
<p>R3_8 I think a study schema would be helpful to include for the reader, and also be useful for you to guide the flow of information you provide in your paper. It would also allow you to demonstrate how each part of your study relates to each other and how you will use each component to address your study goals and create your outputs. You could make the above changes to the logic model and use here – but much more detail is needed.</p>	<p>We have now included a more comprehensive version of the logic model in which it is shown how each part of the study relates to each other.</p>

<p>R3_9</p> <p>It would also be helpful to think about presenting your study in a chronological order with each section covering all relevant information under section subheadings. For example, the first mention of the systematic review appears in procedures, but the study design should clearly outline all aspects of your study.</p>	<p>We have now adjusted the Methods and Analysis section and described the analytical levels in chronological order.</p>
<p>R3_10</p> <p>As noted above, clear definitions, which are used consistently throughout will assist the reader in understanding each component of the study, and the choice of methods used, and how they relate to your study goals.</p>	<p>We have now tried to use terms which are used more systematically throughout the text in order to enhance coherence.</p>
<p>R3_11</p> <p><u>Design</u></p> <p>More specific information is needed. You mention that you will employ a set of complementary methodologies here, but do not state what they are. In this section you</p>	<p>We have now revised the section on the study design and referenced the various methodologies and analytical tools.</p>
<p>should outline very clearly what you will do, and what frameworks and methodologies you will be employing for each component of your study. These should also be referenced.</p>	
<p>R3_12</p> <p><u>Sample</u></p> <p>In your design you state that the study uses mixed-methods, however in your sample section you state that it is a qualitative study, please clarify/be consistent</p>	<p>The study is primarily qualitative. However, for a part of the analysis (ECCS) we will use pre-defined categories that are typically associated with quantitative methodologies, hence the reference to mixed methods.</p>

<p>R3_13 Can you please reference your sentence: “The scarcity of theoretical perspectives on communication problems in languagemediated consultations in oncology settings requires a relatively large sample too.”</p>	<p>To the best of our knowledge there are no theoretical perspectives on communication problems in the literature available when it comes to cancer communication in interpreter-mediated consultations. Recent systematic reviews of the literature on communication in language-discordant oncology settings have shown that most of studies are observational and do not offer theoretical perspectives on communication problems. (See for example: Silva MD, Genoff M, Zaballa A, et al. Interpreting at the End of Life: A Systematic Review of the Impact of Interpreters on the Delivery of Palliative Care Services to Cancer Patients With Limited English Proficiency. Journal of Pain and Symptom Management 2016;51(3):569-80. doi: https://doi.org/10.1016/j.jpainsymman.2015.10.011)</p>
<p>R3_14 In this section you talk about analysis and training – please move into the analysis section and procedures.</p>	<p>We have now introduced a separate section ‘training prior to the data collection’</p>
<p>R3_15 Your paper requires clear definitions about what you are looking at. For example, in your goals you state you are looking at ‘interactional processes and communicative resources (both verbal and non-verbal)’, however in your methods you state you are looking at a range of different things which do not clearly relate to your goals, nor are clearly defined. It would be helpful if you defined what interactional processes and communicative resources referred to and then used these terms consistently throughout. A table might be a</p>	<p>We now provide a table including the most frequently used terms along with their working definitions. (See Table 1)</p>
<p>useful way to present this information, you could use this to map each element to each component of the study and the measures used.</p>	

<p>R3_16</p> <p>In your systematic review you state you are looking at communication problems which are intrinsic to oncology consultations, however as you are only including papers about oncology consultations, you cannot say that these are intrinsic to oncology as you are not reviewing consultations in other health areas. Also stating that you will uncover ALL communication issues is not potentially viable.</p>	<p>We have now adjusted the wording further to the reviewer's suggestion.</p>
<p>R3_17</p> <p>Patient information recall, or patient understanding is measured, however it is important to note that this is dependent on numerous factors other than communication, such as health literacy, or emotional state. It would be useful to explain how this relates to your study aims/goals (see point above, table). Further – while I freely admit I am involved in this project, it may be useful to you if you are looking to measure information recall as this details the methodology for measuring medical information recall for persons who do not speak the dominant language of a country: Lipson-Smith R, Hyatt A, Murray A, Butow P, Hack TF, Jefford M, Ozolins U, Hale S, Schofield P. Measuring recall of medical information in non-English-speaking people with cancer: A methodology. Health Expectations. 2018 Feb;21(1):288-99.</p>	<p>We thank the reviewer for bringing PIC-code to our attention. We have now included it into our research protocol. PIC-code will be used for measuring information recall by all participants in the consultation.</p> <p>We acknowledge that information recall is subject to a number of factors, such as health literacy and emotional state. However, in this study we limit our analyses to observable behaviours, meaning that we will analyse participants' accounts and behaviours as presented to the research team. Investigating the effect of variables, such as health literacy and emotional state on participants' ability to recall information, exceeds the scope of this study.</p>
<p>R3_18</p> <p>'Information exchange inconsistencies' is also measured, but it would be useful to define so that the reader can understand how this relates to your study aims/goals.</p>	<p>This relates to inconsistencies in the understanding of the contents of the consultation. This has now become clearer in the revised version of the manuscript.</p>
<p>R3_19</p> <p>Will the results of the systematic review be used to inform latter parts of your study? If so, this should be clear to the reader, and the process of how this will happen detailed.</p>	<p>Yes, they typology of categories of communication problems that will emerge from the systematic review of the literature will be used for an additional screening of the video-recorded consultations.</p>
<p>R3_20</p> <p>The paragraph detailing the expected results from the systematic review should be removed.</p>	<p>The paragraph in question has now been removed.</p>

<p>R3_21 Methodologies described in your analysis section should be referenced, and it should be clear who is doing this and how these decision are being made in line with these methods.</p>	<p>We have added missing references and have indicated which members of the team will perform the analyses.</p>
<p>R3_22 How will you identify or determine elements of the consultation which present communication problems, given these are not clearly defined. This component seems to be relating to behaviour, but it is not clear how this fits in with the rest of the study.</p>	<p>We make a distinction between informative/instructional and emotional talk and we employ distinct methodologies to analyse them. In this study we focus on the role of interactional- and communicative processes in the co-construction of understanding or lack thereof, thus leading to communication problems. Identifying the elements of the consultation that present communication problems goes beyond the scope of this study and should be investigated further.</p>
<p>R3_23 Perception of patient understanding is a different thing to patient perception of choice of therapy or patient concern about treatment plan – please clarify?</p>	<p>Any reference to this has been removed from the revised version of the manuscript.</p>
<p>R3_24 More detail on how the focus groups will ‘test the validity of the findings’ (are you referring to face validity here?) and the recommendations will be developed is needed e.g. what framework for decision-making will be used.</p>	<p>Yes, we are referring to face validity; we see this as a member check of the findings leading to recommendations. We have now provided more details on the focus group section.</p>
Reviewer 4	Authors’ responses
<p>R4_1 I would suggest finding an expert in Multimodal analysis of instances of video and audio to review the protocol.</p>	<p>The first author has extensive experience in multimodal interaction analysis in interpreter-mediated consultations and has developed an analytical framework (published, see ref. 28) that will be used in this study.</p>
<p>R4_2 Introduction: Study objective The objective 3 is not very clear. Should these be reasons behind problems occurred in the interactional processes and communicative resources?</p>	<p>We have now adjusted the wording.</p>
R4_3 Design	

Is this study applying any quantitative method? It is not using mixed-method if it does not use the combination of quantitative and qualitative methods. It can be described as a qualitative study with two phases, first one is the systematic review and followed by an interview and survey. It has mentioned about using focus group at the end of the protocol and this is not introduced in the design section here.	The study is mixed methods because it combines qualitative methodologies with predefined categories which are typically associated with quantitative methods. Reference to the focus group discussions has now been added in the Design section.
R4_4 <u>Sample</u> Authors can consider sampling patients, doctors and language mediators using a stratified approach by different languages (i.e. Turkish and Arabic). This will provide equal samples for these two different language/culture.	We appreciate the reviewer's suggestion to opt for stratified sampling. However, the high heterogeneity in the patient population, along with factors such as cancellation of appointments, availability of language mediators, confirmation of bookings, along with time constraints do not allow for this approach to sampling, nor is it required, since we are not conducting a comparative study between different languages.
R4_5 <u>Procedure</u> Systematic review: To collectively review all literature of communication problems between doctors-patients in oncology settings. How would that apply to only communications in Turkish and Arabic language specifically?	By reviewing the literature on communication problems across languages (without applying language filter), problems relating to Turkish and Arabic speaking patients will be included in the literature review.
R4_6 <u>Analysis</u> please provide analysis that will be used in the questionnaires and how they can be compared against the video-recording pattern?	In the revised version of the manuscript we have included the PIC-code as a tool for the semistructured information recall interview.

VERSION 2 – REVIEW

REVIEWER	Singy Pascal Lausanne University Hospital
REVIEW RETURNED	18-Feb-2020
GENERAL COMMENTS	<p>This new version has greatly improved, apart from the issue relating to the limitations of the study. On the one hand, you need to address this issue in the body of the article (not only in the abstract). On the other hand, any scientific study has limited scopes and in a paper focused on a research protocol, what is left out needs to be clearly stated.</p> <p>In addition, even though we understand the authors' focus on oncology and their wish to favor findings from natural data, we strongly suggest that the authors take into consideration the major studies and literature reviews on the interaction with interpreters within medicine in general.</p>

REVIEWER	Irene SL Zeng iSTATDOME online datalab New Zealand
REVIEW RETURNED	26-Feb-2020

GENERAL COMMENTS	The revised proposal have provided thorough descriptions in method and have addressed most of my comments.
-------------------------	--

VERSION 2 – AUTHOR RESPONSE

Thank you for providing us with the reviewers' reports on the revised version of our manuscript.

We appreciate the reviewers' comments and we have now revised the manuscript according to their latest comments.

Please, find attached the revised version of our study protocol along with our response to the reviewers' comments.

Thank you for your time and consideration.