PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	Cultural Adaptation of Meaning-Centered Psychotherapy for Latino Families: A Protocol
AUTHORS	Torres Blasco, Normarie; Costas Muñiz, Rosario; Zamore, Carolina; Porter, Laura; Claros, Maria; Bernal, Guillermo; Shen, Megan; Breitbart, William; Castro, EM

VERSION 1 – REVIEW

REVIEWER	Kim, Youngmee University of Miami
REVIEW RETURNED	29-Dec-2020

GENERAL COMMENTS	This manuscript reports the development of a protocol of Family Meaning-Centered Psychotherapy by adapting existing meaning-centered psychotherapy (MCP) and couple communication skills training (CCST) protocols now for Latino patients with advanced cancer and their family caregivers. Developing culturally and linguistically valid psychological intervention for Latino cancer patients and their family caregivers is significant and has important clinical implications. The approach to adapt existing protocols that had been validated, although mainly with non-Hispanic populations, also strengthens the conceptual rigor of the proposed/planned intervention protocol. My primary concern relates to the lack of conceptual framework of the proposed therapy. Clear rationale for selecting the two (meaning-centered psychotherapy and communication skills training model) approaches, out of numerous other validated psychotherapeutic approaches, to adapt for Latinx, "family" therapy for Latinx in particular, is much needed as the subsequent phases should have been carried out grounded on the sound conceptual guidance. More comprehensive information about the selection processes is also needed. It is unclear how the "couples communication" was adapted for non-spousal patient-caregiver dyads. Similarly, how culturally and linguistically those existing protocols had been adapted needs to be specified by clear definition with examples. Which cultural and linguistic characteristics are unique to Latinx and their adjustment to a major illness in the family? Is low family functioning related to greater depression and anxiety only the case among Latinx, or is the effect size of such association greater among Latinx than non-Hispanic/Latinx? To what degree Latino patients' greater burden, depression, physical health problems are attributable to their issues with family? What is "cultural" about meaning- or couple-focused approach for Latinx? Simply citing models and approaches (reference #30 through #36) as methods to culturally adapt, without integration, is problematic. More information is

	needed about the Nueva Vida framework. Overall, processes and conceptual rationale for identifying the critical components of the proposed intervention (presented as phase 1, which is completed) needs to be strengthened. As the success of remaining phases depends on this first phase, it should have been done spotlessly. Literature cited to support the caregiving burden to patients with (advanced) cancer is mainly outdated (the latest is published in 2012), which is problematic because studies published in recent years (past 5 years) focusing on the impact of cancer on the family caregivers' various but mostly psychological well-being and the contribution of family caregivers to their patients' well-being have been in flux. It is also unclear how the initial adaptation was finalized in Phase 2. Two phases (out of four) are completed and the findings are published. Phase 3 appears to be disconnected from phases 1 and 2, as it is unclear how the proposed intervention, Family Meaning-Centered Psychotherapy, is developed from previous studies that appear done independently. What appears to be new information for this manuscript is phase 3 (comprehension and acceptability testing), which is proposed to be carried out by a mixed method of questionnaires and semi-structured interview that would be relevant for earlier phases. No conceptual rationale is presented for selection of the list of measures included in the questionnaire nor for semi-structured interview. The comprehension and acceptability of the content and procedure of the newly developed intervention should have been (proposed to be) tested, as opposed to employing the proposed mixed method alone.

REVIEWER	Bulotienė , Giedrė Vilnius University, Institute of Clinical Medicine
REVIEW RETURNED	12-May-2021

GENERAL COMMENTS	I would suggest including the discussion and also discussing the limitations of the study in detail. More accurate information on trial registration would be appropriate.

REVIEWER	Perera, Camila UNICEF Office of Research Innocenti
REVIEW RETURNED	23-Oct-2021

GENERAL COMMENTS	Thank you for the opportunity to review this cultural adaptation protocol. First, I would like to commend the authors for reporting the process of cultural adaptation of the intervention which is an essential practice for advancing the field of cultural adaptation of psychological interventions. Abstract: Do the authors consider the limitation of access to technology an important limitation to their study? Are there other studies on access to technology in this area that could provide more information on this issue? I suggest the authors reflect on other important limitations of the study, in the abstract and also in-text. For example, it seems that the qualitative interviews are the main source of information for the adaptation. Employing

	additional methods such as observation of sessions could provide valuable information to the process of cultural adaptation. Introduction: I suggest the authors consider the literature on the psychological, behavioral, and physiological impact taking care of cancer patients has on informal caregivers and whether and how interventions such as family meaning-centered psychotherapy can help them. Methods and analysis: More information should be provided on the results of the initial adaptation to better understand the results of this step. More information is needed on the quantitative phase. Did the authors conduct any a priori sample size calculations? Seems strange that sample size is provided for the qualitative but not for the quantitative phases. Also, it is unclear how the quantitative phase will contribute to the cultural adaptation process. If the quantitative phase has the sole goal of determining whether participants should receive the intervention, the authors should reconsider whether it should be classified as a phase of the cultural adaptation process. Please also provide more information on who will be delivering the intervention and whether it is provided as part of a long-standing programme for cancer patients and caregivers. If there are manuals on the intervention, I suggest the authors provide them for others to understand the changes from the cultural adaptation process. Even though it is a protocol, I think the authors can provide more information on the potential limitations of the study. I suggest the authors provide a more specific description of the public's involvement in the implementation, as of now this section seems vague. A clarification – seems most of the study was conducted in 2020. If the cultural adaptation process has been completed, can the authors consider publishing the complete process instead of the protocol?

VERSION 1 – AUTHOR RESPONSE

First, we want to thank the reviewers for their helpful comments and reviews. We are pleased to see several strengths of the original application that were highlighted, including: "Developing culturally and linguistically valid psychological intervention for Latino cancer patients and their family caregivers is significant and has important clinical implications" "The approach to adapt existing protocols that had been validated, although mainly with non-Hispanic populations, also strengthens the conceptual rigor of the proposed/planned intervention protocol" (R1) and "I would like to commend the authors for reporting the process of cultural adaptation of the intervention which is an essential practice for advancing the field of cultural adaptation of psychological interventions" (R3). We are grateful that reviewers recognized the importance of this research topic. After careful consideration of each reviewer's comments, our application revisions are included. In general, the study team has re-focused the research phases to include concrete research techniques and better describe the relationship between recent literature, quantitative, and qualitative components. We believe this results in a strong paper. For reviewers' ease, significant changes are underlined throughout the article and are summarized below.

Response to reviewer 1:
- "My primary concern relates to the lack of conceptual framework of the proposed therapy".

o Response: Thank you, Meaning-Centered Psychotherapy is grounded in theory, and we know incorporated literature supporting the MCP grounded theory.

- “Clear rationale for selecting the two (meaning-centered psychotherapy and communication skills training model) approaches, out of numerous other validated psychotherapeutic approaches, to adapt for Latinx, “family” therapy for Latinx in particular, is much needed as the subsequent phases should have been carried out grounded on the sound conceptual guidance”.

o Response: The rationale for selecting the Meaning-Centered Psychotherapy and Couple Communication Skills Training approaches, out of numerous other psychotherapeutic approaches, is that research indicated that communication skills for couples improves family communication dynamics, especially among Latinx families and is there prior data of the effectiveness of meaning-centered psychotherapy as well as Latinx prior indications of need for meaning making such as the literature around spirituality.

- “More comprehensive information about the selection processes is also needed. It is unclear how the “couples communication” was adapted for non-spousal patient-caregiver dyads. Similarly, how culturally and linguistically those existing protocols had been adapted needs to be specified by clear definition with examples”.

o Response: A “Phase 1a: Define Intervention Components” was included to detail the process of the selected intervention components. By using the Couple Communication Skills Training (CCST) approach, we enhanced the MCP session by adding taught coping skills (e.g., how to communicate and listen) as well as how to increase their self-efficacy (i.e., confidence) for sharing through behavioral practice, goal setting, and monitoring progress [52, 53]. The Couple Communication Skills Training approach was adapted for non-spousal patients’ caregivers by eliminating spousal terms (e.g., taking care of your partner-spouse) and changing it to general caregiving terms (e.g., taking care of your significant other). Overview Table 1 presents the FMCP-L content.

- “Which cultural and linguistic characteristics are unique to Latinx and their adjustment to a major illness in the family? Is low family functioning related to greater depression and anxiety only the case among Latinx, or is the effect size of such association greater among Latinx than non-Hispanic/Latinx? To what degree Latino patients’ greater burden, depression, physical health problems are attributable to their issues with family? What is “cultural” about meaning- or couple-focused approach for Latinx? Simply citing models and approaches (reference #30 through #36) as methods to culturally adapt, without integration, is problematic”.

o Response: We added an additional review of recent literature in the introduction and in the integration phase to describe characteristics unique to Latinx and their adjustment to a major illness in the family.

- “Overall, processes and conceptual rationale for identifying the critical components of the proposed intervention (presented as phase 1, which is completed) needs to be strengthened. As the success of remaining phases depends on this first phase, it should have been done spotlessly”.

o Response: A “Phase 1a: Define Intervention Components” was included to provide more detailed information about the process and conceptual rationale for the selected intervention components.

- “Literature cited to support the caregiving burden to patients with (advanced) cancer is mainly outdated (the latest is published in 2012), which is problematic because studies published in recent years (past 5 years) focusing on the impact of cancer on the family caregivers’ various but mostly psychological well-being and the contribution of family caregivers to their patients’ well-being have been in flux”.

o Response: We now include a review of more recently published literature in the introduction: Impact of cancer on family caregiver’s wellbeing, Impact of cancer on family caregiver’s wellbeing, and Contribution of caregivers to patient’s well-being

- “It is also unclear how the initial adaptation was finalized in Phase 2. Two phases (out of four) are completed and the findings are published. Phase 3 appears to be disconnected from phases 1 and 2, as it is unclear how the proposed intervention, Family Meaning-Centered Psychotherapy, is developed from previous studies that appear done independently. What appears to be new information for this manuscript is phase 3 (comprehension and acceptability testing), which is

proposed to be carried out by a mixed method of questionnaires and semi-structured interview that would be relevant for earlier phases. No conceptual rationale is presented for selection of the list of measures included in the questionnaire nor for semi-structured interview. The comprehension and acceptability of the content and procedure of the newly developed intervention should have been (proposed to be) tested, as opposed to employing the proposed mixed method alone".
o Response: Thank you, we reviewed the protocol phases and made them clearer. We eliminated all published material and identified a clear path from Phase Ia to Phase IIb. Comprehension and acceptability testing (Phase Ib: Refine intervention components) is the second phase following the ORBIT Model, and we know presented a conceptual rationale based on the contextual model of health-related quality of life of patients coping with cancer (e.g., Spiritual wellbeing, depression, anxiety, hopelessness, functional assessment of cancer therapy, family relationship index, burden, fatalism, religiosity, distress and patient's needs-semi-structured interview)

Response to reviewer 2:
1. "I would suggest including the discussion and also discussing the limitations of the study in detail. More accurate information on trial registration would be appropriate".
o Response: We now include a section of Strengths and weaknesses/ limitations of the study. The first limitation is that the qualitative interviews are the main source of information for the adaptation. Thus, we will include observation of sessions in the next phases of adaptation process (Phase IIa: Proof-of-Concept and Phase IIb: Pilot study). Second, patients were predominantly recruited from Puerto Rico. Thus, the results may not generalize to all Latinx, and future studies will include samples from different geographical locations. Third, the selection of patients was not homogeneous in terms of diagnosis and stages, and patients with stages III and IV cancer will be invited to participate. The cancer experience of patients and caregivers at different disease stages with different prognoses could vary significantly. In future studies, analyses should be stratified by stage and prognosis. The final identified limitation is the access to technology. Thus, we will include the possibility of conducting the questionnaire and intervention in person.

Response to reviewer 3:
1. "Do the authors consider the limitation of access to technology an important limitation to their study? Are there other studies on access to technology in this area that could provide more information on this issue? I suggest the authors reflect on other important limitations of the study, in the abstract and also in-text. For example, it seems that the qualitative interviews are the main source of information for the adaptation. Employing additional methods such as observation of sessions could provide valuable information to the process of cultural adaptation. Even though it is a protocol, I think the authors can provide more information on the potential limitations of the study".
o Response: Thank you, see Response 1 for Reviewer 2.
2. "Introduction: I suggest the authors consider the literature on the psychological, behavioral, and physiological impact taking care of cancer patients has on informal caregivers and whether and how interventions such as family meaning-centered psychotherapy can help them".
o Response: Thank you, in response to this suggestion we now include more recent literature in the introduction about the impact taking care of cancer patients has on informal caregivers and whether and how interventions such as family meaning-centered psychotherapy can help them.
3. "Methods and analysis: More information should be provided on the results of the initial adaptation to better understand the results of this step. Also, it is unclear how the quantitative phase will contribute to the cultural adaptation process".
o Thank you, we included the ORBIT Model, which explains the process and the conceptual framework of the proposed intervention development more clearly.
4. "More information is needed on the quantitative phase".
o Thank you, we have included the following sections with information on qualitative phases: Sample Qualitative Phase Ib, Qualitative analysis Ib, IIa and IIb.
5. "Did the authors conduct any a priori sample size calculations?"

o No, this is an exploratory and pre-pilot study, and it’s not necessary for a size calculation. However, based on recommendations for exploratory studies of this nature [54-56], a priori size of 114 is selected

6. “Seems strange that sample size is provided for the qualitative but not for the quantitative phases”.

o Thank you for noting this oversight. We have now included information on the sample size for the quantitative phase. One hundred and forty patients and their informal caregivers participated in the quantitative phase of the study.

7. “If the quantitative phase has the sole goal of determining whether participants should receive the intervention, the authors should reconsider whether it should be classified as a phase of the cultural adaptation process”.

o Response: Thank you, with this recommendation we incorporate as part to the cultural adaptation process the ORBIT Model: (1a) Define, (1b) Refine, (2a) Proof-of-concept, (2b) Pilot, (3) Efficacy Trial, and (4) Effectiveness Research.

8. “Please also provide more information on who will be delivering the intervention and whether it is provided as part of a long-standing programme for cancer patients and caregivers. If there are manuals on the intervention, I suggest the authors provide them for others to understand the changes from the cultural adaptation process”.

o Response: Thank you, the adaptation process is ongoing and there is not an available manual, what we include in the protocol is an outline of the intervention.

Family Meaning-Centered Psychotherapy
Session Session Title Content
1 Meaning and Communication Introduction: We will conduct this intervention between the patient and their caregiver, so it is crucial to know how to share thoughts and feelings
Possible Meaning-Centered Themes: The will to meaning, freedom of will and life has meaning
Homework: Encountering Life’s Limitations
2 Identity, Experiential and Creative sources of Meaning This session will reinforce the use of communication skills
Possible Meaning-Centered Themes: Identity before Cancer/ Identity after Cancer, Creative Sources of Meaning and Experiential Sources of Meaning
Homework: Share Your Legacy ~ Tell Your Story and Legacy Project
3 Legacy Project Behavioral rehearsal will reinforce the couple's communication skills, the meaning-centered, and end-of-life themes.
Homework: Connecting with Life
4 Reflections and Hopes for the Future The last session will also include discussions of the couple’s progress during treatment and future issues the couple anticipates addressing relative to meaning
Review of sources of meaning
Reflections on the lesson learned and hopes
Goodbyes for patients and caregivers

9. “I suggest the authors provide a more specific description of the public’s involvement in the implementation, as of now this section seems vague”.

o Response: Thank you. The public, specifically Latinx advanced cancer patients and their informal caregivers, are at the core of the implementation plan. The study’s objective is to develop the first psychosocial family intervention that supports Latinx advanced cancer patients and their informal caregivers to cope with cancer. The study design mentioned above will constantly include the consultation of patients' and their informal caregivers' perceptions, experiences, and opinions to refine a successful final version of Family Meaning Centered Psychotherapy for Latinx families (FMCP-L). The intent is to involve the patients and their informal caregivers (the public), who will be the target user in the development and cultural adaptation of the family psychological intervention (ORBIT: Phase IIa: Proof-of-Concept and Phase IIb: Pilot study). Further, the proposed project will directly (1) impact the Latinx community, (2) contribute to the development of culturally adapted psychosocial interventions, (3) be used in the healthcare field, and (4) reduce disparities in access to psychosocial interventions for Latinx advanced cancer patients.

10. “A clarification – seems most of the study was conducted in 2020. If the cultural adaptation process has been completed, can the authors consider publishing the complete process instead of the protocol?”
o Response: While Phase Ia of the study was completed in 2021, intervention development is ongoing. We believe it is important to publish the findings from these initial phases as this may be helpful to other researchers conducting cultural adaptations of other psychosocial interventions for minorities coping with chronic illness.

VERSION 2 – REVIEW

REVIEWER	Kim, Youngmee University of Miami
REVIEW RETURNED	04-Feb-2022

GENERAL COMMENTS	This revised manuscript reports the adaptation procedure of adapting am existing meaning-centered psychotherapy (MCP) protocol for Latinx couples and combining with the couple communication skills training (CCST) protocol. My primary concern regarding lack of conceptual framework of the proposed therapy remains inadequately addressed as the models described are regarding adaptation procedures, not theoretical framework that justifies the adaptation of the MCP and combining with and later contrasting against the CCST. It is also unclear how the components of the MCP and the CCST will be integrated. How and which cultural and linguistic adaptation, particularly in the initial adaptation phases will be made also need to be further elaborated. It appears the proposed intervention is for “couples” rather than family. Family often implies an extended family for Latinx, unlike a nuclear family for non-Hispanic White. In addition, communication between couples would quite differ from that between patient and their adult offspring caregivers, for example. Abstract is misleading as if the authors propose developing a new intervention. Abstract also lacks justification for adapting the existing interventions for Latinx. References cited for poorer mental functioning of ethnic minority caregivers are regarding unmet needs, but not mental functioning. Adequate empirical studies should be cited. In addition, great unmet needs are not necessarily considered as a “at-risk” factor. Greater contribution of caregivers to patients’ well-being in Latinx population compared with any other ethnic groups needs to be clarified. Given cited studies are with breast cancer patients, gender issues in Latinx culture also needs to be carefully reviewed. Although acknowledged, proposing to collect the data across different phases solely from participants in Puerto Rico needs stronger justification as the cost involving limited generalizability to larger Latinx in the US would be more likely to be greater than the knowledge gained from the proposed project.

	Some measures (e.g., Zarit Burden Interview, the Age Universal I/E scale for religiosity) proposed are not widely used for cancer patients and their family caregivers. It is also unclear the needs to measure both the HADS and the Distress Thermometer to only use the Distress Thermometer to screen distressed participants. The rationale to use CCST (Communication Skills Training) as a comparison condition of the FMCP-L that has communication skills component is not justified. The FMCP-L intervention consists of 4 sessions that are delivered weekly or every two weeks, thus takes 4-8 weeks. Post-intervention assessment time, however, is set at 5- and 10-week. It is unclear whether the patient-caregiver data of Phase IIb will be no longer treated and analyzed as dyadic data.

VERSION 2 – AUTHOR RESPONSE

Comments from Reviewer 3:

Recommendation 1: Following on from the below comment from reviewer 3, please make it clear in the Abstract that this is an exploratory study: “Did the authors conduct any a priori sample size calculations?” No, this is an exploratory and pre-pilot study, and it’s not necessary for a size calculation. However, based on recommendations for exploratory studies of this nature [54-56], a priori size of 114 is selected

Response 1: See page 3, line 112.

Comments from Reviewer 1:

Dear Dr. Youngmee thank you for your time and important suggestions and comments. We have made the necessary changes and we believe that with your recommendation this result in a stronger protocol paper.

Recommendation 1: My primary concern regarding lack of conceptual framework of the proposed therapy remains inadequately addressed as the models described are regarding adaptation procedures, not theoretical framework that justifies the adaptation of the MCP and combining with and later contrasting against the CCST.

Response 1: Thank you we have include empirical studies that justifies the adaptation and we have described our conceptual framework, see page 8, line 272- 291.

Recommendation 2: It is also unclear how the components of the MCP and the CCST will be integrated. How and which cultural and linguistic adaptation, particularly in the initial adaptation phases will be made also need to be further elaborated.

Response 2: How the components of MCP and the CCST will be integrated is better described in page 11, line 403- 413. How and which cultural and linguistic adaptation will be made is further elaborated in page 12, line 416.

Recommendation 3: It appears the proposed intervention is for “couples” rather than family. Family often implies an extended family for Latinx, unlike a nuclear family for non-Hispanic White.

Response 3: Thank you for the observation, we received and incorporate to make it clearly that we are talking about caregivers and patients. See an example of the changes, page 8, line 294.

Recommendation 4: In addition, communication between couples would quite differ from that between patient and their adult offspring caregivers, for example.

Response 4: We have considered the difference ways of communication between couples or their adult offspring’s that why we are culturally adapting and linguistically changing the speaker and listen skill with a neutral role. Specifically, we have indicated in the protocol the following aspect: “The Couple Communication Skills Training approach was adapted for non-spousal patients’ caregivers by eliminating spousal terms (e.g., taking care of your partner-spouse) and changing it to general caregiving terms (e.g., taking care of your significant other)”. See page 11, line 403- 412.

Recommendation 5: Abstract is misleading as if the authors propose developing a new intervention.

Response 5: Thank you, we have made it clearly. Our goal is to culturally adapt a novel psychosocial intervention protocol entitled “Caregivers-Patients Support to Latinx coping advanced-cancer” (CASA). We want it to be more clearly, so we make the necessary changes in the intervention tittle.

Recommendation 6: Abstract also lacks justification for adapting the existing interventions for Latinx.

Response 6: Thank you we have add more justification in the abstract for adapting the existing interventions for Latinx. See page 3, line 100-105.

Recommendation 7: References cited for poorer mental functioning of ethnic minority caregivers are regarding unmet needs, but not mental functioning. Adequate empirical studies should be cited. In addition, great unmet needs are not necessarily considered as a “at-risk” factor. Greater contribution of caregivers to patients’ well-being in Latinx population compared with any other ethnic groups needs to be clarified. Given cited studies are with breast cancer patients, gender issues in Latinx culture also needs to be carefully reviewed.

Response 7: Thank you, we have updated the literature review based on this recommendation and know we include empirical studies. See page 6, line 212- 224.

Recommendation 8: Although acknowledged, proposing to collect the data across different phases solely from participants in Puerto Rico needs stronger justification as the cost involving limited generalizability to larger Latinx in the US would be more likely to be greater than the knowledge gained from the proposed project.

Response 8: We have made it clear that this project will be conducted in Puerto Rico and New York for the pilot phase. See page 9, lines 306-310. See page 19, line 589. See page 23, line 715.

Recommendation 9: Some measures (e.g., Zarit Burden Interview, the Age Universal I/E scale for religiosity) proposed are not widely used for cancer patients and their family caregivers.

Response 9: Thank you, the Zarit Burden Intervention is adapted for Latinos caregivers we have include the paper of the validation, see page 16, reference 84-86. The Age Universal I/E scale for religiosity have been used by our team and is culturally adapted for Latinx population in general, see page 16, reference 89.

Recommendation 10: It is also unclear the needs to measure both the HADS and the Distress Thermometer to only use the Distress Thermometer to screen distressed participants.

Response 10: We will use the Distress Thermometer as a screening tool for the interviews; however, we will use the HADS scores to access the depression and anxiety in dyadic analysis. We have made it clearly that we will used the results between depression and anxiety in the dyadic analysis, see 20, line 531.

Recommendation 11: The rationale to use CCST (Communication Skills Training) as a comparison condition of the FMCP-L that has communication skills component is not justified.

Response 11: Thank you for the observation, we believed that for the use pilot study it will be more adequate to compare the results with usual care, see page 19, line 593 and line 545.

Recommendation 12: The CASA intervention consists of 4 sessions that are delivered weekly or every two weeks, thus takes 4-8 weeks. Post-intervention assessment time, however, is set at 5- and 10-week.

Response 12: Thank you, we have now made it clear that that post-intervention is set after the intervention is completed, see page 19, line 510.

Recommendation 13: It is unclear whether the patient-caregiver data of Phase IIb will be no longer treated and analyzed as dyadic data.

Response 13: Thank you, we have known make it clear that we will treated and analyzed the data as dyadic data, see page 21, line 656- 666.