

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Positive experiences of family caregivers of patients with chronic heart failure: Protocol for a qualitative systematic review and meta-synthesis
AUTHORS	Yang, Panpan; Guan, Qingyi; Ma, Mengzhen; Fan, Yanyan

VERSION 1 – REVIEW

REVIEWER	Basso, Ines Università degli Studi del Piemonte Orientale Amedeo Avogadro, Department of Public Health and Pediatrics
REVIEW RETURNED	15-May-2022

GENERAL COMMENTS	<p>A very interesting protocol that focuses on an original and relevant aspect of the care, as the positive experiences perceived by a family caregiver of people with heart failure. English is often poor and requires checking and improvements; language revision is highly recommended.</p> <p>Abstract The introduction should be more focused on what is already known about caregivers' positive experiences. Please, add the aim and the study design of the study. In the method section data sources and eligibility criteria should be indicated.</p> <p>Introduction Overall clear, minor revisions should be considered. Please pay attention to the use of the references: the qualitative study of Shamali et al (ref 1) is not the appropriate study design to support that heart failure is the most frequent cause of death. The authors should cite large-scale population-based epidemiological studies. Please check errors in the citations (e.g., page 5, line 65) The authors chose to present the benefits of caregivers' positive experiences through a numbered list. I suggest narratively rephrasing this part.</p> <p>Aim The aim of the qualitative review is already clearly stated in the last rows of the introduction. In my opinion, it is not necessary to add review questions. Moreover, review questions number one and two are not appropriate for a qualitative review.</p> <p>Eligibility criteria Inclusion and exclusion criteria should refer to the studies. I suggest editing all the criteria as follows: Type of participants: Studies that focus on family members....</p>
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	<p>The authors should decide whether to refer to participants as family caregivers or family members and be consistent throughout the text</p> <p>Type of the studies: I don't understand the sentence "...but not limited to". The authors should state clearly which study design will be selected in the review.</p> <p>Search strategy</p> <p>I have some concerns about the choice to screen 4 Chinese databases. Since caregivers' experiences are strongly influenced by culture, if many sources from one country were found, the results would lose their ability to inform health care decision-making.</p> <p>PROSPERO registration number should be reported.</p> <p>I assume that the search for the studies has already been done since the authors state that databases will be searched until April 2022. For the search strategy, the consultation of an expert librarian is highly recommended.</p> <p>Assessment of the risk of bias</p> <p>Authors should state the name of the tool they will use to assess the methodological quality of the studies included (JBI-QARI?), indicate the appropriate reference (please check errors in the citation), and provide an accurate description of the evaluation criteria. It should be also indicated how a positive rating will be assigned (i.e., yes answer)</p> <p>How many authors will assess the methodological quality of the papers?</p> <p>Data extraction</p> <p>The JBI-QARI extraction tool should be cited and described properly (again check errors in the citation). Moreover, the process by which data will be labeled (themes or subthemes) or supported (i.e., quotations) should be indicated.</p> <p>JBI-QARI levels of credibility should be described as well.</p> <p>Data synthesis</p> <p>The JBI meta-aggregation approach should be described clearly in all the steps involved as well as the process by which the findings will be merged.</p>
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REVIEWER	Zippel-Schultz, Bettina
REVIEW RETURNED	The German Foundation for the Chronically Ill 16-Aug-2022

GENERAL COMMENTS	<p>The authors address an important issue in the health system worldwide by conducting a meta-analysis of the positive experiences of family caregivers in the care process. Family caregivers are a central component of health care for chronically ill people. Bringing together the English and Chinese literature may offer an exciting insight.</p> <p>I have a few suggestions regarding the article:</p> <ul style="list-style-type: none"> • Please use direct sources to support your statements and avoid indirect sources, such as sources No. 1 and 3. These did not investigate the statements you made, but cited them themselves as background to their research. • Line 65 – Is the 46 meant as the number of studies? It does not fit into the list of sources. • Line 83 – The quotation seems to be wrong,
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	<ul style="list-style-type: none"> • Please check the order of the quotes in the whole document again. • In lines 88-90 you describe two aims of the analysis: 1. Qualitative evidence for positive experiences and 2. To allow a targeted guidance/support of HCPs and policy makers. However, according to the description of the research questions - line 93-97 - this is not examined. Please clearly define your research questions. As I understand the research questions, you might give indications for such targeted support – real support measures are not part of the analysis. • Search strategy – Did you include all studies that were published ever until 2022 or did you look at the last e.g. 20 years? I also have a few general suggestions: • You could elaborate the background by considering motivational theory, especially intrinsic motivation for physical health and well-being of the caregiver. • Do you also plan to compare the results in the different health systems?
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VERSION 1 – AUTHOR RESPONSE

Reply to Reviewer #1

Dear Dr. Ines Basso,

Thank you very much for your time involved in reviewing the manuscript and your very encouraging comments on the merits: “A very interesting protocol that focuses on an original and relevant aspect of the care, as the positive experiences perceived by a family caregiver of people with heart failure.” We also appreciate your clear and detailed feedback and hope that the explanation has fully addressed all of your concerns. In the remainder of this letter, we discuss each of your comments individually along with our corresponding responses. To facilitate this discussion, we first retype your comments in italic font and then present our responses to the comments.

Comment 1:

Abstract

The introduction should be more focused on what is already known about caregivers' positive experiences. Please, add the aim and the study design of the study. In the method section data sources and eligibility criteria should be indicated.

Response 1:

We have rewritten the section of introduction and added the aim, the study design, data sources and eligibility criteria in the right part according to your suggestion. The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

18 ABSTRACT

19 Introduction: Previous studies have highlighted the experiences of caregivers of patients with
20 chronic heart failure (CHF), which specifically focused on the negative experiences. There are few
21 systematic reviews on the topic to synthesize the positive experiences of family caregivers of
22 patients with CHF. This study aims to understand how experiences such as developing new skills,
23 strengthening their relationships (between the caregiver and recipient) and receiving appreciation
24 from the care recipient assist to improve the caregivers' perception of their circumstances.

25 Methods and analysis This review will be conducted in accordance with the Joanna Briggs Institute
26 methodology for qualitative systematic review. Qualitative studies related with the positive
27 experiences of family caregivers of patients with CHF, reported in English or Chinese, published from
28 inception in the following databases will be included: PubMed, MEDLINE, Embase, Cochrane Library,
29 Web of Science, PsycINFO, CINAHL, Wan Fang Data, China National Knowledge Infrastructure,
30 Chongqing VIP, Chinese Biomedical Literature Database, Open Grey and Deep Blue Library
31 databases. The standard JBI Critical Appraisal Checklist for Qualitative Research will be used by two
32 independent reviewers to appraise the quality of the included studies, and the standardized JBI
33 Qualitative Data Extraction Tool for Qualitative Research will be applied to extract data. The final
34 synthesized findings will be graded according to the ConQual approach for establishing confidence in
35 the output of qualitative research synthesis.

Comment 2:

Introduction

Overall clear, minor revisions should be considered.

(1) Please pay attention to the use of the references: the qualitative study of Shamali et al (ref 1) is not the appropriate study design to support that heart failure is the most frequent cause of death. The authors should cite large-scale population-based epidemiological studies.

(2) Please check errors in the citations (e.g., page 5, line 65)

(3) The authors chose to present the benefits of caregivers' positive experiences through a numbered list. I suggest narratively rephrasing this part.

Response2:

(1) Thank you for the detailed review. We updated the data of this part, and added new references 2, 3 and 4. The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

50 INTRODUCTION

51 Heart failure (HF) is recognized as a global public health problem. According to data from
52 Journal of the American Medical Association in 2020, HF affects approximately 40 million people
53 worldwide. [1] **The statistics of 2022 American Heart Association suggest that 9.9% of people die**
54 because of HF in America. [2] Additionally, the increase in HF cases is placing an increasing burden
55 on health-care systems with total expenditure on HF ranging between 1 and 2% of the total health-
56 care budget in developed countries. [3 4]

189 **References**

190 1 Baman JR, Ahmad FS. Heart failure. *JAMA* 2020;324:1015. PubMed PMID: [32749448](#).

191 2 2022. Heart Disease and Stroke Statistics Update Fact Sheet 2022 [cited 2022 8–28].

192 [https://professional.heart.org/en/science-news/-](https://professional.heart.org/en/science-news/-/media/8D840F1AA88D423888ED3BA96DD61010.ashx)

193 [/media/8D840F1AA88D423888ED3BA96DD61010.ashx](https://professional.heart.org/en/science-news/-/media/8D840F1AA88D423888ED3BA96DD61010.ashx).

194 3 Conrad N, Judge A, Tran J, et al. Temporal trends and patterns in heart failure incidence: a

195 population-based study of 4 million individuals. *Lancet* 2018;391:572–80.

196 4 Berry C, Murdoch DR, McMurray JJ. Economics of chronic heart failure. *Eur J Heart Fail*

197 2001;3:283–91. PubMed PMID: [11377998](#).

(2)We removed this citation(e.g., page 5, line 65) after verification.

(3)Thanks for your great suggestion. Considering the consistency and conciseness of the language, we deleted the detailed description of the content of positive experiences and restructured this paragraph. The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

67 Most previous studies have indicated that the experiences of family caregivers of patients with

68 CHF are mostly negative during caring, including experiencing social isolation, anguish, anxiety and

69 depression, living with uncertainty, changing physical health and not feeling valued. [7 10 11]

70 However, some studies have shown that when enduring long periods of overwhelming stress or

71 suffering, family caregivers can have positive experiences, [7 9-13] which were identified to play an

72 important role in buffering caregiver stress, promoting caregivers' role adaptation, increasing life

73 satisfaction, and enabling individuals to reflect on their situation and seek a sense of "being" to

74 discover personal ability, talent, strength and courage. [5 14]

Comment 3:

Aim

The aim of the qualitative review is already clearly stated in the last rows of the introduction. In my opinion, it is not necessary to add review questions. Moreover, review questions number one and two are not appropriate for a qualitative review.

Response 3:

Thank you for your suggestions. Review questions were deleted as recommended.

Comment 4:

Eligibility criteria

Inclusion and exclusion criteria should refer to the studies. I suggest editing all the criteria as follows: Type of participants: Studies that focus on family members.... The authors should decide whether to refer to participants as family caregivers or family members and be consistent throughout the text. Type of the studies: I don't understand. The authors should state clearly which study design will be selected in the review.

Response 4: Firstly, we re-edited the section of eligibility criteria and referred to participants as family caregivers throughout the text according to your suggestion; secondly, we added the content of exclusion criteria in part of "Types of studies".

The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

93	Eligibility criteria
94	Type of participants: Studies that focus on family caregivers of patients with CHF, who are 18 years
95	of age or older and unpaid, such as sons, spouses, daughters, parents, and other relatives.
96	Phenomena of interest: Studies that explore the positive experiences of family caregivers caring for
97	patients with CHF.
98	Context: In the home setting.
99	Types of studies: Qualitative studies in English and Chinese and from databases inception and
100	designed in following format: phenomenology, grounded theory, narrative, hermeneutic, action
101	research, field research, feminism, key informant and ethnography, will all be included. Studies in
102	quantitative design, mixed design, case reports, practice guidelines, case series, conference
103	abstracts, expert opinions and book chapters will not be considered.

Comment 5:

Search strategy

- (1)I have some concerns about the choice to screen 4 Chinese databases. Since caregivers' experiences are strongly influenced by culture, if many sources from one country were found, the results would lose their ability to inform health care decision-making.
- (2)PROSPERO registration number should be reported.
- (3)I assume that the search for the studies has already been done since the authors state that databases will be searched until April 2022. For the search strategy, the consultation of an expert librarian is highly recommended.

Response 5:

- (1)Thank you very much for your good suggestion, which gives us a lot of inspiration. We will consider whether to integrate the positive experiences of Chinese separately based on the percentage of Chinese paper. If there were many sources from China, we are going to compare the positive experiences of family caregivers of patients with CHF in different countries.
- (2)PROSPERO registration number have been reported as recommended.
- (3)We have revised and improved the search strategy and presented it in the appendix I . The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

110	Search strategy
111	The search strategy will aim to locate qualitative studies in English and Chinese and from inception.
112	First, index terms will be fixed based on an initial search of PubMed and CINAHL databases. Then, a
113	tailored search strategy will be used to search various databases. Reference lists of all included
114	studies will be screened to identify other relevant studies. PROSPERO registration number is
115	CRD42021282159. The full search strategy is available in online supplementary appendix I.

Comment 6:

Assessment of the risk of bias

- (1)Authors should state the name of the tool they will use to assess the methodological quality of the studies included (JBI-QARI?), indicate the appropriate reference (please check errors in the citation).
- (2)and provide an accurate description of the evaluation criteria. It should be also indicated how a positive rating will be assigned (i.e., yes answer)
- (3)How many authors will assess the methodological quality of the papers?

Response 6:

- (1)The name of the tool we would like to use to assess the methodological quality is "JBI critical appraisal checklist for qualitative research". We stated the name of it in the right place of the article, and indicated the appropriate references 20 and 23.

(2)We added the description of the evaluation criteria in the lines 129-134.
 (3)In our study, three authors will participate in assessing the methodological quality of the papers. We indicated it in the lines 135-137.
 The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

125	Assessment of risk of bias
126	The methodological quality of eligible studies will be critically appraised by using of the standard JBI
127	Critical Appraisal Checklist for Qualitative Research (online supplemental appendix II), [20 23] which
128	includes 10 items that assess research methodology, philosophical foundation, data collection,
129	analysis method, result validity, and research ethics. All items will be evaluated by ‘yes’, ‘no’,
130	‘unclear’ and ‘not applicable’. The evaluation results will be judged by the number of items that
131	meet the standard requirements. Studies will be considered to have a weak rating if ≤6 of the items
132	were answered ‘yes’, to have a medium rating if 7–8 of the items were answered ‘yes’, and to have a
133	strong rating if 9-10 of the items were answered ‘yes’.[24] Only studies with at least a medium rating
134	will undergo data extraction and synthesis. Authors of papers will be contacted to obtain missing or
135	additional data for clarification, where required. Two independent reviewers (YP and GQ) will be
136	blinded to each other’s assessment. Any disagreements that arise between the reviewers will be
137	resolved through discussion, or with a third reviewer (FY). The results of critical appraisal will be
138	reported in a tabular form and narrative form.

Comment 7:

Data extraction

- (1)The JBI-QARI extraction tool should be cited and described properly (again check errors in the citation).
- (2)Moreover, the process by which data will be labeled (themes or subthemes) or supported (i.e., quotations) should be indicated.
- (3)JBI-QARI levels of credibility should be described as well.

Response 7:

- (1)The name of the data extraction we would like to use is “the standardized JBI Qualitative Data Extraction Tool”. We cited it in lines 142 and added the description of the tool in lines 144-150.
- (2)The process by which data will be labeled was presented in lines 146-148.
- (3)We added the description of credibility of JBI-QARI in lines 142-144.

The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

139 **Data extraction**
 140 Data will be extracted by two independent reviewers (YP and MM) from the included articles by
 141 using the standardized JBI Qualitative Data Extraction Tool for Qualitative Research (online
 142 supplemental appendix III), [25] which is part of the JBI Qualitative Assessment and Review
 143 Instrument (JBI-QARI) that was developed by the JBI based on the literature, a panel of experts and
 144 pilot-tested. [26] The author information, year of publication, methodology, method of data
 145 collection, geographical location, setting, participants (type and number of family caregivers), data
 146 analysis, phenomena of interest, and findings (such as the themes, subthemes, authors' analytic
 147 interpretations and relevant illustrations under the headings 'Results/Findings' relating to the family
 148 caregivers' positive experiences), which are referred in the JBI Qualitative Data Extraction Tool for
 149 Qualitative Research, will all be labeled. Only unequivocal and credible findings will be included in
 150 the synthesis. Any disagreements that arise between the reviewers will be resolved through
 151 discussion or with a third reviewer (FY). Authors of papers will be contacted to request missing or
 152 additional data, where required. All extracted data will be presented in a tabular form and narrative
 153 form.

Comment 8:

Data synthesis

The JBI meta-aggregation approach should be described clearly in all the steps involved as well as the process by which the findings will be merged.

Response 8:

We added the description of the JBI meta-aggregation approach and the findings integration process in lines 155-162. The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

154 **Data synthesis**
 155 The extracted data will be pooled using the JBI meta-aggregation approach. [20] Two independent
 156 reviewers (YP and MM) will read the studies, extract findings and accompanying illustrations. The
 157 quality of the extracted findings will be rated on three levels: unequivocal, equivocal and
 158 unsupported, based on the degree of fit or congruency between the data and the accompanying
 159 illustration. Only unequivocal and credible findings will be included and coded line by line. Then
 160 categories will be derived on the basis of similarity in meaning. Finally, the synthesized findings will
 161 be based on the similarity of meaning in categories, which can be used as a basis for evidence-based
 162 practice. Any disagreements that arise between the reviewers will be resolved through discussion or
 163 with a third reviewer (FY).

Once again, thank you very much for your comments and suggestions. We hope that the correction will meet with approval.

Reply to Reviewer #2

Dear Dr. Bettina Zippel-Schultz,

Thank you very much for your time involved in reviewing the manuscript and your very encouraging comments on the merits: "The authors address an important issue in the health system worldwide by conducting a meta-analysis of the positive experiences of family caregivers in the care process. Family caregivers are a central component of health care for chronically ill people. Bringing together the English and Chinese literature may offer an exciting insight."

We also appreciate your clear and detailed feedback and hope that the explanation has fully addressed all of your concerns. In the remainder of this letter, we discuss each of your comments individually along with our corresponding responses. To facilitate this discussion, we first retype your comments in italic font and then present our responses to the comments.

Comment 1:

Please use direct sources to support your statements and avoid indirect sources, such as sources No. 1 and 3. These did not investigate the statements you made, but cited them themselves as background to their research.

Response 1:

Thank you for your suggestions. We have updated the data and added references No. 2, 3 and 4. The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

50	INTRODUCTION
51	Heart failure (HF) is recognized as a global public health problem. According to data from
52	Journal of the American Medical Association in 2020, HF affects approximately 40 million people
53	worldwide. [1] The statistics of 2022 American Heart Association suggest that 9.9% of people die
54	because of HF in America. [2] Additionally, the increase in HF cases is placing an increasing burden
55	on health-care systems with total expenditure on HF ranging between 1 and 2% of the total health-
56	care budget in developed countries. [3 4]
189	References
190	1 Baman JR, Ahmad FS. Heart failure. JAMA 2020;324:1015. PubMed PMID: 32749448 .
191	2 2022. Heart Disease and Stroke Statistics Update Fact Sheet 2022 [cited 2022 8–28].
192	https://professional.heart.org/en/science-news/-
193	/media/8D840F1AA88D423888ED3BA96DD61010.ashx .
194	3 Conrad N, Judge A, Tran J, et al. Temporal trends and patterns in heart failure incidence: a
195	population-based study of 4 million individuals. Lancet 2018;391:572–80.
196	4 Berry C, Murdoch DR, McMurray JJ. Economics of chronic heart failure. Eur J Heart Fail
197	2001;3:283–91. PubMed PMID: 11377998 .

Comment 2:

Line 65 – Is the 46 meant as the number of studies? It does not fit into the list of sources.

Response 2:

Thank you for your feedback. After verification, we deleted the reference 46 and changed the expression of the sentence and paragraph. The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

67	Most previous studies have indicated that the experiences of family caregivers of patients with
68	CHF are mostly negative during caring, including experiencing social isolation, anguish, anxiety and
69	depression, living with uncertainty, changing physical health and not feeling valued. [7 10 11]
70	However, some studies have shown that when enduring long periods of overwhelming stress or
71	suffering, family caregivers can have positive experiences, [7 9-13] which were identified to play an
72	important role in buffering caregiver stress, promoting caregivers' role adaptation, increasing life
73	satisfaction, and enabling individuals to reflect on their situation and seek a sense of "being" to
74	discover personal ability, talent, strength and courage. [5 14]

Comment 3:

Line 83 – The quotation seems to be wrong,

Response 3:

Thank you for your feedback. After verification, we have revised the quotation. The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

Before:	
83	Several reviews have tried to review the CHF caregivers' experiences in the last years.
After:	

79 Although some researchers used systematic review to integrate the experiences of family caregivers
80 of patients with CHF, [16-19] they do not specifically address the positive experiences. Additionally,
81 all reviews retrieved are only from the English database, which might omit some valuable articles in
82 other languages.

Comment 4:

Please check the order of the quotes in the whole document again.

Response 4:

Thank you for the detailed review. We have carefully and thoroughly proofread the order of the quotes in the whole document again.

Comment 5:

In lines 88-90 you describe two aims of the analysis: 1. Qualitative evidence for positive experiences and 2. To allow a targeted guidance/support of HCPs and policy makers. However, according to the description of the research questions - line 93-97 - this is not examined. Please clearly define your research questions. As I understand the research questions, you might give indications for such targeted support – real support measures are not part of the analysis.

Response 5:

Thank you for your feedback. According to your suggestion, we have redefined the research question at the end of 'introduction' section, and deleted the 'Aim' in 'METHODS AND ANALYSIS' section in order to avoid the repeat. The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

83 This study aims to systemically review and synthesize qualitative data on the positive
84 experiences for family caregivers of patients with CHF in both English and Chinese databases, which
85 might give indications to health-care professionals and policymakers for a targeted guidance or
86 supporting measures of family caregivers.

87 **METHODS AND ANALYSIS**
88 **Design**

89 The proposed systematic review will be conducted in accordance with the JBI Methodology for
90 Systematic Reviews of Qualitative Evidence. [20] The review protocol follows the Preferred
91 Reporting Items for Systematic Review and Meta-analysis Protocols (PRISMA-P) 2015 statement. [21]
92 Any amendments to the protocol will be documented on PROSPERO and in the final manuscript.

Comment 6:

Search strategy – Did you include all studies that were published ever until 2022 or did you look at the last e.g. 20 years?

Response 6:

Thank you for your feedback. To ensure the comprehensiveness of the included qualitative studies, we will include all studies from inception to 2022.

Comment 7:

You could elaborate the background by considering motivational theory, especially intrinsic motivation for physical health and well-being of the caregiver.

Response 7:

Thank you for your helpful suggestion. But in the limited revision time it is really difficult for us to elaborate the background by using motivational theory that we are not familiar with. But in future, we

will fully learn this theory, explore about the intrinsic motivation for physical health and well-being of the caregiver and consider elaborating it in our study. If possible, we also hope to learn from you in the future?

Comment 8:

Do you also plan to compare the results in the different health systems?

Response 8:

Thank you for your good suggestion. We will consider whether to compare the positive experiences of family caregivers of patients with CHF in different health systems based on the amounts of papers. If there were enough sources in each health system or some health systems, we are going to compare the results.

Once again, thank you very much for your comments and suggestions. We hope that the correction will meet with approval.

VERSION 2 – REVIEW

REVIEWER	Zippel-Schultz, Bettina The German Foundation for the Chronically Ill
REVIEW RETURNED	29-Sep-2022

GENERAL COMMENTS	<p>Thank you for the revision of the article and the responses to the questions.</p> <p>I have some minor suggestions that could be considered:</p> <p>Introduction,</p> <ul style="list-style-type: none"> - I miss a short explanation, why you focus on qualitative studies and exclude the others. It is good to focus the research question, however, in my point of view you should mention a reason very briefly in the introduction. <p>Line 65: Do you mean that most qualitative studies or most studies in general previously investigated mainly negative effects? You should clarify this - the citations indicate to qualitative studies.</p> <p>line 75-78:</p> <ul style="list-style-type: none"> - Again, do you only consider qualitative studies in this paragraph or also other study designs? - I don't really see the difficulty in distinguishing between positive and negative experiences when they are considered within one study. Does this also mean that you will not consider studies that explore both sides within the analysis? Methodology suggests different. - I still somehow miss a short explanation of the added value that especially the additional information from Chinese databases offers.
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VERSION 2 – AUTHOR RESPONSE

Reply to Reviewer #2

Dear Dr. Bettina Zippel-Schultz,

Thank you very much again for your time involved in reviewing this manuscript and your clear and detailed comments. We have discussed each of your comments and gave our corresponding responses. To facilitate this discussion, we first retype your comments in italic font and then present our responses to the comments. We hope this revised manuscript may address your concerns.

Comments 1:

Introduction,

I miss a short explanation, why you focus on qualitative studies and exclude the others. It is good to focus the research question, however, in my point of view you should mention a reason very briefly in the introduction.

Response 1:

Thanks for your great suggestion. We have revised the introduction part and gave the reason that why qualitative studies would be focused on . The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

68 In 2018, the “Research Priorities in Caregiving Summit” convened by the Family Caregiving
69 Institute at the Betty Irene Moore School of Nursing at UC Davis called for increased awareness of
70 informal caregivers and conducting needs assessment, especially for the subjective experience of
71 caregiving.[10] Some tools tailored to caregivers’ positive experiences assessment were developed at
72 least 20 to 30 years ago, such as Caregiving Appraisal Scale, [11] Caregiver Reaction Assessment,
73 [12] Benefit Finding Scale, [13] and Positive Aspects of Caregiving, [14] which mainly focused on
74 experiences of satisfaction, mastery, ideology, finding meaning, personal growth, self-affirmation,
75 and outlook on life. **However, these tools are dated and fail to yield the appropriate situational or**
76 **contextual data. [15] In comparison, qualitative approaches are a legitimate way to provide extensive**
77 **data on how people interpret and act upon their needs or symptoms. [16]**

Comments 2:

Line 65: Do you mean that most qualitative studies or most studies in general previously investigated mainly negative effects? You should clarify this - the citations indicate to qualitative studies.

Response 2:

According to your suggestion, we rewrote the content of this part, indicated the citations of qualitative study, and updated the relevant references. The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

78 **To date, qualitative studies [9 17-19] have explored the experiences of family caregivers for**
79 **patients with CHF. Some [9 17] extracted a few themes of positive experience during caregiving,**
80 which were identified to play an important role in buffering the stress of caregivers; promoting
81 caregivers’ role adaptation; increasing life satisfaction; and enabling individuals to reflect on their
82 situation and seek a sense of “being” to discover personal ability, talent, strength and courage. [5 20]

Comments 3:

line 75-78:

1) Again, do you only consider qualitative studies in this paragraph or also other study designs?

2) I don't really see the difficulty in distinguishing between positive and negative experiences when they are considered within one study. Does this also mean that you will not consider studies that explore both sides within the analysis? Methodology suggests different.

3) I still somehow miss a short explanation of the added value that especially the additional information from Chinese databases offers.

Response 3:

1) After reconsideration of your suggestion, we decided to include the mixed methods studies, too. But only the qualitative data would be considered. The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

93 Therefore, this study will systemically review and synthesize qualitative data in both qualitative
94 and mixed methods studies on positive experiences of family caregivers for patients with CHF in both
95 English and Chinese databases from inception to now. This can offer a bird's eye view of the positive
96 experiences of caregiving and might inform healthcare professionals and policymakers of targeted
97 guidance or supporting measures for family caregivers.

2) We are so sorry to make you confusion because of the not good English expression. Qualitative studies that explore both sides within the analysis will also be considered in our systematical review, but only the positive experiences will be extracted and analyzed. The relevant contents are provided below as a screen dump for your quick reference. The modified and added contents have been marked in red font.

104 **Eligibility criteria**
105 Type of participants: Family caregivers of patients with CHF, who are aged ≥ 18 years and unpaid,
106 such as sons, spouses, daughters, parents, friends, and other relatives.
107 Phenomena of interest: The positive experiences of family caregivers caring for patients with CHF.
108 Context: In home settings.
109 Types of studies: Qualitative and mixed methods studies in English and Chinese and from databases
110 since inception and designed in the following format: phenomenology, grounded theory, narrative,
111 hermeneutic, action research, field research, feminism, key informant, and ethnography. We will only
112 consider the qualitative component of the mixed methods studies. Studies with a quantitative design,
113 case reports, practice guidelines, case series, conference abstracts, expert opinions, and book chapters
114 will not be considered.

3) We have added the reason that why Chinese databases will be considered.

83 The limited two qualitative systematic reviews [21 22] focused on the experiences of family
84 caregivers for patients with CHF and were published in 2011 and 2020 respectively. They reviewed
85 studies published from 2003 to 2018 in English databases, and they did not provide clear themes of

86 positive experiences. Therefore, the qualitative information related to positive experiences of family
 87 caregivers for patients with CHF is still fragmented and lacks synthesis. Furthermore, two studies [5
 88 23] specifically focused on positive experiences of family caregivers for patients with CHF. They
 89 were published in 2019. One [23] was published in a Chinese database, while the other [5] employed
 90 a mixed methods design. However, studies about the experience of family caregivers for patients with
 91 CHF, either published in Chinese database or designed in mixed methods were not considered in the
 92 past qualitative systematic reviews. [21 22]

VERSION 3 – REVIEW

REVIEWER	Zippel-Schultz, Bettina The German Foundation for the Chronically Ill
REVIEW RETURNED	28-Nov-2022
GENERAL COMMENTS	Thank you for addressing the suggestions.