

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)	A qualitative study of the needs of injured children and their families after a child's traumatic injury
AUTHORS	Jones, samantha; Tyson, Sarah; Davis, Naomi; Yorke, Janelle

VERSION 1 – REVIEW

REVIEWER	Marthe Egberts Utrecht University, department of Clinical Psychology, the Netherlands
REVIEW RETURNED	09-Mar-2020

GENERAL COMMENTS	<p>This manuscript reports on parent and child needs after child traumatic injury. A strength of the study is that both parents and children were interviewed. Moreover, practical suggestions for the improvement of care are provided and the manuscript is well-written. However, the manuscript may be strengthened in several ways. Potential points for improvement include an elaboration on the existing literature to point out the added value of the current study and to place the current findings in the context of previous research. In addition, I would encourage the authors to provide a more detailed description of the methods and potential consequences of methodological choices. An explanation of these comments and other comments/questions appear below.</p> <p>Abstract</p> <ul style="list-style-type: none">• The methods should be addressed in the abstract• The overview of the results contain quite some detail and the authors might consider to shorten this overview. <p>Introduction</p> <ul style="list-style-type: none">• The introduction is rather brief. The authors are encouraged to include more relevant literature and elaborate on the studies that are already referred to. It is stated that several previous studies have examined the needs of children/parents, but the results are not presented. Which needs were identified in these previous studies? And what may be beneficial outcomes of meeting these needs in terms of physical and psychological recovery? <p>References that may be relevant in this regard:</p> <p>Nobile, C., & Drotar, D. (2003). Research on the quality of parent-provider communication in pediatric care: implications and recommendations. <i>Journal of Developmental & Behavioral Pediatrics, 24</i>(4), 279-290.</p> <p>Power, N., & Franck, L. (2008). Parent participation in the care of hospitalized children: a systematic review. <i>Journal of Advanced Nursing, 62</i>(6), 622-641.</p> <p>Smith, L., & Daughtrey, H. (2000). Weaving the seamless web of care: an analysis of parents' perceptions of their needs following</p>
-------------------------	--

	<p>discharge of their child from hospital. <i>Journal of Advanced Nursing</i>, 31(4), 812-820.</p> <p>Williamson, V., Creswell, C., Butler, I., Christie, H., & Halligan, S. L. (2016). Parental responses to child experiences of trauma following presentation at emergency departments: a qualitative study. <i>BMJ Open</i>, 6(11).</p> <ul style="list-style-type: none"> • The research is introduced in the context of the UK trauma system, but to reach a wider audience, it might be helpful to use a broader context. Is this study only relevant for the UK, or also for other countries? <p>Methods</p> <ul style="list-style-type: none"> • I don't think the study sponsor should be included in the Methods section. • Who conducted the screening of the admission records? • Under 'participants', the text including the exclusion criteria is not formulated correctly (e.g. '...experience of being home to fully contribute: Babies/infants...'). • It is unclear which questions were included in the semi-structured topic guide, the authors only point out the broader topics. Is it possible to include the topic guide in this paper/appendix or to provide example questions? • It is stated that data collection ceased once data saturation was attained. How was data saturation evaluated? • Under 'analysis', it would be helpful if the analysis type (theoretical thematic analysis) is presented earlier and is explained thereafter. From the text, it seems like the authors immediately started with the formulation of initial themes and subthemes. Normally, one of the first steps in thematic analysis is to generate codes (lowest level) based on meaningful fragments in the data, before themes are formulated (higher level). Did the authors skip this step? A more detailed step-by-step explanation of the analysis/coding process is necessary. • Can the authors provide information about the order in which data collection and analysis took place? Were all interviews conducted first and thereafter analysed altogether, or did data collection and analysis take place simultaneously? Did the authors use a constant comparison method? • It is stated that 'the researcher used her knowledge and interest in the area to guide the coding'. Can the authors elaborate on what this knowledge and interest consisted of and how it influenced the coding process? • Were field notes or reflective notes written? • Did the authors use member checking? • Where did the interviews take place that were conducted in person? <p>Results</p> <ul style="list-style-type: none"> • Regarding the participants, do the authors have information about how many families were approached to participate and how many of these families eventually participated? If so, what were reasons for non-participation? • More information about the sample and injury characteristics would be useful to contextualise the findings. For example, what was the mean/median injury severity score and length of hospital stay? • Some interviews were conducted with parent-child dyads or triads, whereas others were conducted individually. Did the
--	--

	<p>authors experience differences in what was communicated as a result of this? How might this have influenced the results?</p> <ul style="list-style-type: none"> • Was there any evidence for a difference in needs between children and parents? • It is not completely clear what the difference is between the theme 'education needs' and 'information needs'. Similar examples, such as expected symptoms or managing the injuries, are provided in both themes. • I am curious to know what the need for psychosocial/mental health support in this sample was. Post-traumatic distress and mental health problems are briefly discussed, but can the authors elaborate more on this? For example, were these problems present in children and/or parents? <p>Discussion</p> <ul style="list-style-type: none"> • Similar to the comments regarding the introduction, can the authors discuss the potential beneficial outcomes of meeting the needs of parents and children, based on previous research? For example in terms of physical and psychological recovery, treatment adherence and patient satisfaction? • Little specific reference is made to psychosocial care throughout the manuscript, the main focus is on practical and physical needs. Did the authors experience this was not an important issue for parents/children? Can they elaborate on this? • No study limitations are provided. These should be included for the reader to be able to interpret the findings. An example of a study limitation may be that mostly mothers participated; how might have this influenced the findings? • The conclusion reads as a repetition of the themes. Can the authors formulate a more overarching conclusion?
--	--

REVIEWER	Ann Glang University of Oregon U.S.A.
REVIEW RETURNED	08-Apr-2020

GENERAL COMMENTS	<p>This is a very well written manuscript on an important topic. There are several weaknesses which could be addressed in a revision.</p> <p>Introduction</p> <p>It would be helpful to contextualize this study in the broader literature on childhood brain injury. For example, I would recommend referencing work by Yeates, Wade, Taylor, McKinlay, Anderson and colleagues. Some of the qualitative studies in related areas (e.g., work by Hartman et al. and Todis et al. in the area of hospital-school transition) could also be referenced, as the findings from the current study could be contextualized in this previous work.</p> <p>The literature review concludes that previous research has focused primarily on TBI and that one goal of this study was to focus on families with children of all ages and with a broad range of injuries. However, the participants were families and/or children ages 2-15 (excluding adolescents) and all had TBI. Please revise the stated study aim or clarify.</p> <p>Participants</p>
-------------------------	--

	<p>There does not appear to be information about race/ethnicity of participants.</p> <p>Methods Please provide more information about the semi-structured interview guide used to guide interview questions. Because there have been previous studies in this area, it would be interesting to know how these questions extend previous work.</p> <p>Results Related to the lack of detail about the interview guide—it does appear that questions focused almost exclusively on the hospital experience and recommendations for improvement in medical settings. There is reference to school and community-based services, but few specific findings in those areas. This seems to be a missed opportunity as the hospital experience for most children is relatively short compared to the years spent in school and community. I would add this as a limitation.</p> <p>I did not find a Limitations section beyond the one in the abstract, which identified only one limitation.</p>
--	--

VERSION 1 – AUTHOR RESPONSE

Response to reviewers' comments

We are very grateful for the time and interest taken to review this manuscript. The comments are encouraging and the reviewers appear to share our judgement that this study and its results are clinically important. Please see below, in blue, our detailed response to comments. All page numbers refer to the manuscript file with tracked changes (marked copy/unmarked copy).

The marked manuscript shows amendments or additions to the original text in red.

R1 Abstract Comment

- The methods should be addressed in the abstract

Authors Response Abstract: Further details of the method have been added under the heading design. (page 2, marked manuscript / Page 2 unmarked manuscript).

The overview of the results contains quite some detail and the authors might consider to shorten this overview.

Authors Response Abstract: The abstract results have been shortened slightly, but aim was to present most of the key points and the presented text is well within the 300-word limit set by the journal. (page 2, marked manuscript / Page 2 unmarked manuscript).

R1 Introduction Comment

- The introduction is rather brief. The authors are encouraged to include more relevant literature and elaborate on the studies that are already referred to. It is stated that several previous studies have examined the needs of children/parents, but the results are not presented. Which needs were identified in these previous studies? And what may be beneficial outcomes of meeting these needs in terms of physical and psychological recovery?

References that may be relevant in this regard:

Nobile, C., & Drotar, D. (2003). Research on the quality of parent-provider communication in pediatric care: implications and recommendations. *Journal of Developmental & Behavioral Pediatrics, 24*(4), 279-290.

Power, N., & Franck, L. (2008). Parent participation in the care of hospitalized children: a systematic review. *Journal of Advanced Nursing*, 62(6), 622-641.

Smith, L., & Daughtrey, H. (2000). Weaving the seamless web of care: an analysis of parents' perceptions of their needs following discharge of their child from hospital. *Journal of Advanced Nursing*, 31(4), 812-820.

Williamson, V., Creswell, C., Butler, I., Christie, H., & Halligan, S. L. (2016). Parental responses to child experiences of trauma following presentation at emergency departments: a qualitative study. *BMJ Open*, 6(11).

Authors Response Introduction: The objective of the paper was to establish what the needs of injured children and their families are, not to consider the impact of meeting/treating them. This information has not been added, as it represents a separate research question.

- The research is introduced in the context of the UK trauma system, but to reach a wider audience, it might be helpful to use a broader context. Is this study only relevant for the UK, or also for other countries?

Authors Response Introduction: Describing the context in which the study is undertaken does not make it irrelevant to other countries, it just allows the reader to understand the context in which the study was undertaken and therefore be able to make an informed choice about how relevant the results relating to rehabilitation are to other countries/ their own context.

The introduction paper cites the increased survival that resulted from changes to the English system in managing trauma. This is relevant because if more patients are surviving trauma, there is arguably an increased need to focus on improving morbidity, as well as mortality. However, the need to improve rehabilitation is presented as a worldwide problem. (page 5: beginning of introduction, marked manuscript / page 4 unmarked manuscript)

Reviewer 1 Methods Comments

- I don't think the study sponsor should be included in the Methods section.

Authors Response Methods: This statement has been deleted from the methods. (page 6: 2nd paragraph, marked manuscript).

- Who conducted the screening of the admission records?

Authors Response Methods: Relevant detail added to explain that the trauma co-ordinators screened the admission records. (page 6: 3rd paragraph, marked manuscript / page 5: 2nd paragraph unmarked manuscript).

- Under 'participants', the text including the exclusion criteria is not formulated correctly (e.g. '...experience of being home to fully contribute: Babies/infants...').

This paragraph has been restructured. (page 6: 1st paragraph, marked manuscript / page 6 unmarked manuscript).

- It is unclear which questions were included in the semi-structured topic guide, the authors only point out the broader topics. Is it possible to include the topic guide in this paper/appendix or to provide example questions?

Authors Response Methods: A topic guide has now been included in the appendix to show willing, but we are not convinced that it is necessary. NB. Some of the questions in the topic guide refer to other papers which have come from the same project. (page 33, marked manuscript / page 32 unmarked manuscript).

- It is stated that data collection ceased once data saturation was attained. How was data saturation evaluated?

Authors Response Methods: Relevant detail to explain how data saturation was evaluated. (Page 9:

1st paragraph, marked manuscript /end of page 7 & beginning of page 8 unmarked copy).

- Under 'analysis', it would be helpful if the analysis type (theoretical thematic analysis) is presented earlier and is explained thereafter. From the text, it seems like the authors immediately started with the formulation of initial themes and subthemes. Normally, one of the first steps in thematic analysis is to generate codes (lowest level) based on meaningful fragments in the data, before themes are formulated (higher level). Did the authors skip this step? A more detailed step-by-step explanation of the analysis/coding process is necessary.

Authors Response Methods: The analysis which you describe perhaps best fits an inductive analysis where the data is coded without trying to make it fit into a pre-existing framework.[1] However, this study used a different type of analysis known as theoretical thematic analysis described by Braun and Clarke (2006). This type of analysis is best suited to a clearly defined research question and when the researcher has some theoretical knowledge of the area. The analysis is more researcher driven, rather than from themes emerging predominately from the data. In this study the researcher used her knowledge of the subject and previous conduct of a scoping review to develop a coding framework. The analysis section has been re-written to describe this more clearly (page 8 & 9: marked manuscript / page 7: unmarked manuscript).

1 Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;3:77–101. doi:10.1191/1478088706qp063oa

- Can the authors provide information about the order in which data collection and analysis took place? Were all interviews conducted first and thereafter analysed altogether, or did data collection and analysis take place simultaneously? Did the authors use a constant comparison method?

Authors Response Methods: More detail has been to explain that the analysis was completed as interviews were conducted. (page 9, first paragraph / page 7: last paragraph, unmarked manuscript) A constant comparison method was not used, and this is more characteristic of the inductive approach which we did not apply.

- It is stated that 'the researcher used her knowledge and interest in the area to guide the coding'. Can the authors elaborate on what this knowledge and interest consisted of and how it influenced the coding process?

Authors Response Methods: Detail has been provided to explain that the researcher's knowledge and experience in the field helped to develop a coding framework. (page 8: "analysis" paragraph, marked manuscript / page 7: "analysis" paragraph, unmarked manuscript)

- Were field notes or reflective notes written?

Authors Response Methods: Field notes were written to reflect on the interviews and contextualise the interview data. This detail has been added to (page 9: end of first paragraph, marked manuscript / page 8: 1st paragraph, unmarked manuscript).

- Did the authors use member checking?

Authors Response Methods: Member checking was completed in the form of cognitive debriefing interviews as another stage of this project.

- Where did the interviews take place that were conducted in person?

Authors Response Methods: Relevant detail added to describe the proportion of interviews which took place at home and hospital. (page 10: results paragraph, marked manuscript / page 8: results paragraph, unmarked manuscript).

R1 Results Comments

- Regarding the participants, do the authors have information about how many families were

approached to participate and how many of these families eventually participated? If so, what were reasons for non-participation?

Authors Response Results: We do not have data relating to how many children/families were approached who did not wish to participate in the study. Trauma co-ordinators provided study invitation packs for families to read in their own time and then contact the researcher if they wanted to take part. They did not have to make an immediate decision, therefore it was not possible follow up those participants who did not contact the researcher and find out why they did not want to take part in the study.

However, there were five parent participants whose injured child did not take part; detail has now been provided about why their children did not take part in the study. (page 9: final paragraph, marked manuscript / page 8: results paragraph, unmarked manuscript).

- More information about the sample and injury characteristics would be useful to contextualise the findings. For example, what was the mean/median injury severity score and length of hospital stay?

Authors Response Results: We have provided the relevant data that we have available. Our contact with participants was deliberately separated from clinical service, therefore information which would be gleaned from the clinical notes was not sought.

- Some interviews were conducted with parent-child dyads or triads, whereas others were conducted individually. Did the authors experience differences in what was communicated as a result of this? How might this have influenced the results?

Authors Response Results: The study design allowed a range of different interview formats to accommodate different participant preferences and family dynamics. Due to the young age of several children and interviews mainly being conducted in the home environment parents were often nearby during the individual interviews with children.

We have acknowledged in the limitations that both child and parental presence may have influenced the scope of subjects raised by either the child or their parent. However, it is noteworthy that parents often provided useful probes which were beyond the scope of the researcher, which contributed to the richness of the data obtained. (page 26: strength and limitations paragraph, marked manuscript / page 24: strength and limitations paragraph, unmarked manuscript).

- Was there any evidence for a difference in needs between children and parents?

Authors Response Results: The research design aimed to provide a combined analysis of the needs of the parents and children's needs to reflect the way the children's and family's needs are addressed in clinical practice. It was considered that their needs are inextricably linked. It may be the child that needs equipment, but the parent will have to advocate for this if this need isn't met.

Overall parents were able to give more insights into the service, training, education and information needs, but this is because they had responsibility of managing their child's care.

- It is not completely clear what the difference is between the theme 'education needs' and 'information needs'. Similar examples, such as expected symptoms or managing the injuries, are provided in both themes.

Authors Response Results: Education needs and information are interlinked, but the points made about symptoms are different. Under the theme "Education and training" we explain that advice and forewarning is required about symptoms. Whilst the focus under the theme "Information" is the nature of the information about prognosis, symptoms; we highlight that information about prognosis and symptoms needs to be up to date, clear and consistent.

Training: Parents highlighted the need to be warned or advised about the prognosis and forewarned about symptoms (such as pain, seizures, hallucinations, difficulty concentrating, fatigue) which sometimes occurred unexpectedly.

Information: Related to consistency of information, was participants' need for up-to-date information.

They needed to be informed clearly and consistently about any changes in diagnosis, prognosis, management plan or expected symptoms throughout all stages of their care.

- I am curious to know what the need for psychosocial/mental health support in this sample was. Post-traumatic distress and mental health problems are briefly discussed, but can the authors elaborate more on this? For example, were these problems present in children and/or parents?

Authors Response Results: More detail has been added to explain that mental health and emotional issues affected not only the injured, but parents and other family members (parents, siblings and grandparents). Further results describe the difference between psychological support offered in the hospital and the community and the uptake of both. (page 16: 2nd paragraph, marked manuscript / page 15: final paragraph, unmarked copy).

R1 Comments Discussion

- Similar to the comments regarding the introduction, can the authors discuss the potential beneficial outcomes of meeting the needs of parents and children, based on previous research? For example, in terms of physical and psychological recovery, treatment adherence and patient satisfaction?

- Little specific reference is made to psychosocial care throughout the manuscript, the main focus is on practical and physical needs. Did the authors experience this was not an important issue for parents/children? Can they elaborate on this?

Authors Response Results: We have not covered what may (or may not) happen if the injured children and family's needs are met, as this was not the objective of this paper. Our objective was to establish what the needs are and discuss their implications for clinical practice with the word count.

The participants' focus was on practical and physical needs more than psychological issues. Mental health services are now discussed throughout the service needs theme, in terms of making such services more accessible and available.

- No study limitations are provided. These should be included for the reader to be able to interpret the findings. An example of a study limitation may be that mostly mothers participated; how might have this influenced the findings?

Authors Response Results: These are now included in the discussion and highlight:

- Potential bias caused by the majority of participants being mothers.
- The potential for bias in joint interviews.
- The subjectivity of self-reported needs and the potential for participants to under report needs because of social desirability bias.
- The potential to identify more age specific needs if more children been included. (page 26 and 27, strength & limitations section, marked manuscript / marked manuscript / page 24: strength and limitations paragraph, unmarked manuscript).

- The conclusion reads as a repetition of the themes. Can the authors formulate a more overarching conclusion? Authors Response Results: Thank you, a more overarching conclusion is now provided, with clinical recommendations about how the service needs raised in this paper could be met on a wider scale. (page 27: final paragraph, marked manuscript / page 25 & 26: final paragraph, unmarked manuscript)

Reviewer: 2

R2 Introduction Comment

- It would be helpful to contextualize this study in the broader literature on childhood brain injury. For example, I would recommend referencing work by Yeates, Wade, Taylor, McKinlay, Anderson and

colleagues. Some of the qualitative studies in related areas (e.g., work by Hartman et al. and Todis et al. in the area of hospital-school transition) could also be referenced, as the findings from the current study could be contextualized in this previous work.

Authors Response Introduction: We have included a few of these citations in addition to a scoping review we conducted prior to this paper, which investigated needs for all types of injuries. The purpose of this paper was to look at needs for different types of injuries and not just those relating to head injuries. (page 5: 3rd paragraph, marked manuscript / page 5:1st paragraph, unmarked manuscript).

- The literature review concludes that previous research has focused primarily on TBI and that one goal of this study was to focus on families with children of all ages and with a broad range of injuries. However, the participants were families and/or children ages 2-15 (excluding adolescents) and all had TBI. Please revise the stated study aim or clarify.

Authors Response Introduction: The wording for aim of the study has been changed to detail the specific ages of children who were intended to be recruited into the study.

However, the reviewer is mistaken in stating that all the children in this study had TBI. Table 1 details the body parts affected by the injury and shows that there was 1 child with an isolated head injury, and other injuries affected the spine, abdomen, limbs and multiple body parts. (page 10: Table 2, marked manuscript / page 9: Table 2, unmarked manuscript).

R2 Methods Comments

Please provide more information about the semi-structured interview guide used to guide interview questions. Because there have been previous studies in this area, it would be interesting to know how these questions extend previous work.

Response: The interview guide has now been included in the Appendix 1. (page 33, marked manuscript / Page 32: unmarked manuscript)

R2 Results Comments

- Participants: there does not appear to be information about race/ethnicity of participants.

Authors Response Results: We did not record the participants' ethnicity.

- Related to the lack of detail about the interview guide—it does appear that questions focused almost exclusively on the hospital experience and recommendations for improvement in medical settings. There is reference to school and community-based services, but few specific findings in those areas. This seems to be a missed opportunity as the hospital experience for most children is relatively short compared to the years spent in school and community. I would add this as a limitation.

Authors Response Results: On page 11 of the results we highlight that school-based service needs are discussed in a separate paper. Within the journal's word limit it was not possible to discuss the full scope of educational needs alongside those discussed in this paper. We have not detailed this as a limitation, because we made the decision to address this in a separate paper. (page 11: 1st paragraph, marked manuscript / page 10: 1st paragraph, unmarked manuscript).

Furthermore, detail has now been added to make clear that most services needs related to those provided in the community. The section related to mental health needs have been expanded as requested by Reviewer 1. (pages 16 & 17: 2nd paragraphs, marked manuscript / pages 15 & 16: 3rd paragraphs, unmarked manuscript).

I did not find a Limitations section beyond the one in the abstract, which identified only one limitation.

Authors Response Results: These are now included in the discussion and highlight:

- Potential bias caused by the majority of participants being mothers.
- The potential for bias in joint interviews.
- The subjectivity of self-reported needs and the potential for participants to under report needs because of social desirability bias.
- The potential to identify more age specific needs if more children been included. (page 26 and 27:

strength and limitations, marked manuscript / page 24: strength and limitations paragraph, unmarked manuscript).

VERSION 2 – REVIEW

REVIEWER	Marthe Egberts Utrecht University, department of Clinical Psychology, the Netherlands
REVIEW RETURNED	27-Jul-2020

GENERAL COMMENTS	<p>The authors incorporated most of the reviewers' suggestions in the manuscript. Overall, the manuscript has been considerably strengthened by these revisions. A few minor comments are included below.</p> <p>Abstract</p> <ul style="list-style-type: none"> The sentence starting with "Participants highlighted that throughout their ..." ends unexpectedly and should possibly be linked to the next sentence. <p>Introduction</p> <p>The introduction has greatly improved through the inclusion of references to previous studies. The research gap is also clearly addressed.</p> <ul style="list-style-type: none"> The authors point out "the current evidence base focusses on the need of children with traumatic head injuries" and other injuries have received little attention. Can the authors briefly address the differences between these types of injuries? Why is it important to study other injuries as well? Regarding the study aims, to authors state that they include children of "all ages", whereas this is not completely the case (i.e., not 0-18 years). In addition, according to Table 2, the age range appears to be 5-15 years. The authors might consider using "a wide range of ages". Shouldn't the last sentence read "the delivery of family-centred services" instead of patient-centred services, since this paper also explicitly reports on parents' needs? <p>Methods</p> <p>The information added helps to understand the theoretical thematic analysis framework. I also appreciate the addition of the topic guide.</p> <ul style="list-style-type: none"> In the 'author's responses', the authors point out that some of the questions in the topic guide refer to other papers from the same project. I would suggest to integrate this note in the main manuscript as well. The authors' used previous knowledge to develop a preliminary coding framework of "some main themes". Can examples of these themes be briefly presented? The addition of information on data saturation is helpful. At which point was data saturation achieved? It is stated that "any actions required from the interviews were documented in the field notes". It is unclear to me what is meant by this; what kind of actions? <p>Results</p>
-------------------------	---

	<ul style="list-style-type: none"> • Can the authors explain what is meant by “two children were not considered to be at an appropriate point in their psychological recovery” to participate? This is somewhat vague. • On p. 10 and 18 (unmarked manuscript), it is stated that a report on school needs is provided in another publication: please provide a reference. • Due to the authors’ explanation in the rebuttal letter, I now better understand the difference between “education needs” and “information needs”. It might be helpful to include this in the paper as well, namely that “information needs” is more about the nature (and delivery?) of information. • On p. 15 (unmarked manuscript) it is stated that “participants’ experiences are reported elsewhere”: please provide a reference. • On p. 16 (unmarked manuscript): ‘normal ‘life’ should be ‘normal life’. <p>Discussion The discussion has been improved by the addition of the strengths- and limitations section and the formulation of a conclusion.</p> <ul style="list-style-type: none"> • Similar to the introduction, patient-centred care is referred to, but the authors might consider to change this into ‘family-centred care’.
--	---

REVIEWER	Ann Glang University of Oregon Eugene, OR USA
REVIEW RETURNED	12-Aug-2020

GENERAL COMMENTS	The authors have satisfactorily responded to the critiques. The lack of race/ethnicity data should be listed as a limitation.
-------------------------	---

VERSION 2 – AUTHOR RESPONSE

Reviewer 1 Minor Revisions

Abstract

- The sentence starting with “Participants highlighted that throughout their ...” ends unexpectedly and should possibly be linked to the next sentence.

Authors response: Thank you – the missing word and full stop have now been added, so the sentence now reads:

“Participants highlighted needs throughout their recovery (during and after the hospital stay).

Education and training were needed to help children and families understand and manage the injury, and prepare for discharge.”

Marked manuscript Page 2/unmarked manuscript Page 2

Introduction

The introduction has greatly improved through the inclusion of references to previous studies. The research gap is also clearly addressed.

- The authors point out “the current evidence base focusses on the needs of children with traumatic head injuries” and other injuries have received little attention. Can the authors briefly address the differences between these types of injuries? Why is it important to study other injuries as well?

Authors response: The paragraph has been restructured to explain why it is important to understand the needs for different types of injuries, and highlights the key differences between injuries affecting the head and other parts of the body.

“As trauma involves the whole-body system it is important for clinicians to understand needs for different types of injuries. In addition to head injuries, children suffer from injuries to the limbs/pelvis, spine, abdomen and thorax, which occur in a variety of combinations. [30] Childhood head injuries often result in cognitive, behavioural and functional impairments. [11,25,31,32], whilst other types of injuries (orthopaedic, abdominal and thoracic injuries) cause mainly physical problems, such as pain, loss of mobility and breathing difficulties. Head injuries are often thought of as invisible injuries [9], which could also be the case for internal organ injuries, but orthopaedic injuries are often associated with visible physical signs, such as a cast or the use of mobility aids. All types of injuries have the potential to affect psychological health and/or to be life changing. [15]”

Marked manuscript Page 5/ unmarked manuscript Page 5

- Regarding the study aims, the authors state that they include children of “all ages”, whereas this is not completely the case (i.e., not 0-18 years). In addition, according to Table 2, the age range appears to be 5-15 years. The authors might consider using “a wide range of ages”.

Authors response: This sentence has been restructured to include the description suggested by reviewer 1. “This study aims to address this gap in the evidence by exploring the needs of injured children and their parents, including children with a wider range of ages and injuries affecting different body parts. This will help to inform the delivery of family-centred services.”

Marked manuscript Page 5/ unmarked manuscript Page 5

- Shouldn't the last sentence read “the delivery of family-centred services” instead of patient-centred services, since this paper also explicitly reports on parents' needs?

Authors response: “patient centred services” has been replaced with the description “family centred services” throughout the paper.

Marked manuscript Pages 5, 25, 26 unmarked manuscript Pages 5, 25, 26

Methods

The information added helps to understand the theoretical thematic analysis framework. I also appreciate the addition of the topic guide.

- In the ‘author's responses’, the authors point out that some of the questions in the topic guide refer to other papers from the same project. I would suggest to integrate this note in the main manuscript as well.

Authors response: This has been reintegrated into the manuscript as follows:

“Some of the questions in the topic guide are dealt with in companion papers addressing children's and family's experiences and educational needs which are in preparation and will be published in due course.”

Marked manuscript Page 7/ unmarked manuscript Page 7

“(participants' experiences will be reported in detail in a pending publication).”

Marked manuscript Page 16/ unmarked manuscript Page 16

- The authors' used previous knowledge to develop a preliminary coding framework of “some main themes”. Can examples of these themes be briefly presented?

Authors response: The following sentence provides the precise reference from which the preliminary framework was derived. The preliminary coding framework is very similar to that presented in the results and sounds repetitive.

“The results of the scoping review relating to the needs of injured children and their families were used to produce a preliminary framework of key themes.”

Marked manuscript Page 8/ unmarked manuscript Page 8

- The addition of information on data saturation is helpful. At which point was data saturation achieved?

Authors response: We have explained that:

“Data saturation was deemed as the point at which coded data from new interviews only added to existing themes and no new themes were developed.”

Marked manuscript Page 8/unmarked manuscript Page 8

- It is stated that “any actions required from the interviews were documented in the field notes”. It is unclear to me what is meant by this; what kind of actions?

Authors response: Actions were detailed to cover any safeguarding referrals or other urgent referrals which may be required as a result of the interviews. No urgent referrals were required as a result of interviews; thus, this sentence has been deleted as it gives unnecessary detail.

Marked manuscript Page 8/ unmarked manuscript N/A

Results

- Can the authors explain what is meant by “two children were not considered to be at an appropriate point in their psychological recovery” to participate? This is somewhat vague.

Authors response: The sentence has been restructured to explain:

“.....and two children were receiving psychological support and they and/or their parents did not feel they could manage the potential psychological impacts of an interview.”

Marked manuscript Page 9/ unmarked manuscript Page 8&9

- On p. 10 and 18 (unmarked manuscript), it is stated that a report on school needs is provided in another publication: please provide a reference.

Authors response:

As explained previously there is a companion paper relating to education needs which is in preparation and will be published in due course.

“School-based service needs were identified in the analysis, but will be addressed in a separate paper due to the range and depth of information obtained relating to these needs. This paper is in preparation.”

Marked manuscript Page 11/ unmarked manuscript Page 11

“Many met and unmet needs were highlighted regarding return to education (whether at school or at home) after a traumatic injury and these are addressed in a separate manuscript which is in preparation.”

Marked manuscript Page 19/ unmarked manuscript Page 19

- Due to the authors' explanation in the rebuttal letter, I now better understand the difference between “education needs” and “information needs”. It might be helpful to include this in the paper as well, namely that “information needs” is more about the nature (and delivery?) of information.

Authors response: The authors have explained the difference between education/training and

information needs in the following sentences:

“Education and information needs are inter-related. Education/training needs focus on what children and families need to help them look after the injury, whilst information needs relate how advice is delivered.”

Marked manuscript page 11/ unmarked manuscript Page 11.

- On p. 15 (unmarked manuscript) it is stated that “participants’ experiences are reported elsewhere”: please provide a reference.

Author’s response: As explained previously there is a companion paper relating to children’s and family’s experiences which is in preparation and will be published in due course.

“Post-traumatic stress type symptoms and/or mental health issues were often experienced in injured child and their family members, including parents, grandparents and siblings (participants’ experiences are reported in detail in a pending publication).”

Marked manuscript Page 16/ unmarked manuscript Page 16.

- On p. 16 (unmarked manuscript): ‘normal ‘life’ should be ‘normal life’.

Authors response: The additional punctuation has been deleted.

Marked manuscript Page 17/ unmarked manuscript Page 17.

Discussion

The discussion has been improved by the addition of the strengths- and limitations section and the formulation of a conclusion.

- Similar to the introduction, patient-centred care is referred to, but the authors might consider to change this into ‘family-centred care’.

Authors response: The description ‘family centred care’ has now been changed throughout the discussion.

Marked manuscript Pages 25-26/ unmarked manuscript Pages 25-26.

Reviewer 2

- The lack of race/ethnicity data should be listed as a limitation.

Authors response: The article summary (strength and limitations) and discussion section of the paper now acknowledge the limitation of not having data on the ethnicity of the participants:

“No data is available relating to the ethnicity of the study participants. Therefore, we do not know if the sample reflects population diversity.”

Marked manuscript Pages 3 & 26/ unmarked manuscript Page 3 & 26.

On the marked copy we have indicated amendments to address minor corrections and remove surplus or repeated words. In Box 1 (page 16) a quote 1.g has been replaced to a wider range of participant citations within this table.

The reviewers have asked for additional information since the original manuscript submission, which has resulted in a higher word count than that recommended by the journal.

We hope the minor amendments meet your approval.

VERSION 3 – REVIEW

REVIEWER	Dr. Marthe Egberts Utrecht University, the Netherlands
REVIEW RETURNED	13-Oct-2020

GENERAL COMMENTS	The authors addressed all reviewer comments. Thank you!
-------------------------	---

REVIEWER	Ann Glang Center on Brain Injury Research and Training University of Oregon USA
REVIEW RETURNED	10-Sep-2020

GENERAL COMMENTS	The authors have satisfactorily addressed all critiques.
-------------------------	--