Experiences of non-progressive and augmented labour among primiparous women.
A qualitative interview study in a Grounded Theory approach

Thank you for the reviewer’s comments and for the opportunity to revise our manuscript again. We have fully addressed the reviewer’s criticisms in the text and also give the revisions below point by point. We have checked the manuscript-formatting checklist and we do hope that everything is ok now.

On behalf of the authors
Yours sincerely
Hanne Kjaergaard

Reviewer’s comments and our responses
Reviewer: Background (as well as title and abstract). The authors use the word non-progressive labour and put dystocia in brackets. I propose to use one concept and declare the definition of this as there exists several definitions/criterias for both “non-progressive labour” and “dystocia”.

We agree with the reviewer that the literature lacks consistency in defining non-progressive labour. Inconsistency in the literature is also seen in the terminology (dystocia, arrest of labour, cephalopelvic disproportion, prolonged labour, failure to progress etc). We have chosen to hold on to the term “non-progressive labour” in this paper and consequently we have deleted the term dystocia. Our reason for using the term “non-progressive labour” in this paper is, that data are comprised of women’s own words and concepts and as the women use the term “non-progressive labour” it seems the most natural for us to use this term as well.

In the methods section we have added a paragraph, page 4 in the middle:

The criteria for non-progressive labour were based on cervical dilatation over time in labour’s first stage, active phase and descend in the second stage of labour. The criteria were based on guidelines from the Danish Society of Obstetrics and Gynaecology with regard to time limits during the first stage of labour (http://www.dsog.dk/files/dystoci-aktiv-fase.htm, http://www.dsog.dk/files/dystoci-secondstage.htm, in Danish, retrieved on April 22nd 2004). We used the ACOG guideline with regard to diagnosing non-progressive labour exclusively when labour was in the active phase and to broaden the definition of arrest in second stage, descending phase, when epidural was administered (ACOG). Criteria for diagnosing non-progressive labour are given in Table 3.

Table 3.
Definitions of Stages and Phases of Labour and Diagnostic Criteria for Non-progressive Labour

<table>
<thead>
<tr>
<th>Stage of labour</th>
<th>Definition of stage and phase</th>
<th>Diagnostic Criteria for non-progressive labour</th>
</tr>
</thead>
<tbody>
<tr>
<td>First stage</td>
<td>From onset of regular contractions leading to cervical dilatation to full dilatation of cervix</td>
<td></td>
</tr>
<tr>
<td>Latent phase</td>
<td>Cervix 0 – 3 cm dilatation</td>
<td>The diagnosis is not given in this phase</td>
</tr>
<tr>
<td>Active phase</td>
<td>Cervix ≥ 4 cm dilatation</td>
<td>&lt; ½ cm dilatation of cervix per hour, assessed over 4 hours</td>
</tr>
</tbody>
</table>
Second stage From full dilatation of cervix to the child is born
Descending phase From full dilatation of cervix to strong and irresistible urge to push > 2 hours without descend; if epidural is administered: > 3 hours
Pushing phase Strong and irresistible pushing during the major part of the contraction >1 hour without progress

Reviewer: Results including figure, outline of a theory, page 11-12:
The authors use the word “themes” without defining what a theme is, according to Grounded Theory. As I understand GT “theme” is not a common used word in this methodology. The authors have not described it in “method”. In addition the themes are not well defined (titled) In the figure there is a word "satisfaction". This word is not at all mentioned in the text page. What is the relationship between acceptance satisfaction and reconciliation?

We are sorry about the confusion created by using the term “theme”. We do not use the term “theme” any more, but hold on to the original term, “issue” as it appeared in the first version of the manuscript and to which the reviewer had no comments. The issues were not named, as they were neither codes nor sub-categories or categories, but intermediate steps between these. We have now revised the section “Outline of a theory” and named it “Outline of a theoretical model”. In the text we have elaborated on the process in which the two issues emerged and contributed to the progressing categorisation and eventually to the development of an outline of a theoretical model.

Revisions (apart from replacing the word theme(s) and changing “a theory” into “a theoretical model”) are marked in bold in the text below:

**Outline of a theoretical model**

Two central issues emerged during data collection and analyses. The first one had its origin in expectations of a natural delivery and experience of a non-progressive labour with augmentation and, for some, also an instrumental delivery. Feelings of disappointment and frustration were expressed. The second issue appeared when a perception of the body having its own will was expressed. It was voiced that “the body can manage this”, “my body would not - -” and “I didn’t have any help from my body”. These two issues were intermediate steps between codes and categories and were repeated and strengthened by the progressing categorisation. Eventually they contributed to the category **Balancing natural and medical delivery and through this category they** constituted the basis for an outline of a theoretical model that includes all the final three main categories and can be presented as follows: Having expectations of a natural delivery is, among other factors, based on a fundamental confidence that the body will be able to manage the physical demands of labour and delivery. During labour the body is seen as being separated from the mind and this dualism creates a conflict that makes the woman in labour feel let down by her body when her labour is non-progressive. She perceives her mind as “me” or “I” whilst her body is outside “me” or “I”. Accordingly she must balance her body, which is not interacting with her mind, to her mind, which is disappointed that the expectation of a natural delivery is not being met.
In this situation the woman faces the impact of the process of Interacting with the midwife and the partner and the impact of the process of Losing and regaining control. Both of these processes hold possibilities of dialectical interplay with the potential to create reconciliation. Reconciliation is seen as a mentally healthy synthesis in the dialectical process. **For the women in this study, reconciliation was the end point in an emotional motion initiated by acceptance of the need for augmentation and potential subsequent interventions, i.e. a medical delivery.** A feeling of satisfaction followed acceptance immediately after the delivery and eventually reconciliation was expressed as a present feeling at the time of the interview. The midwife’s handling of inter personal interaction with the woman and support of the woman’s feeling of being in control has a major impact on whether a dialectical birth process will include reconciliation or not. Figure 1 illustrates the dialectical birth process that this outline of a theoretical model is based upon.

[To support the text above, we have added a paragraph in the results section, in the description of the category “Balancing natural and medical birth” page 9, middle of the page]

Section starting with: At the time of the interview the overall perception of the birth experience was positive. The added sentence: This was expressed as a motion over time. The feeling of acceptance of the need for augmentation occurred during the course of labour. Immediately after the delivery a feeling of satisfaction was prevalent and eventually at the time of the interview an overall feeling of reconciliation was achieved. [The next paragraph has been deleted, as the above paragraph is more illustrative.]

Reviewer: The authors have put italics on two of the three main categories, while the first: "balancing natural birth and medical birth", is not at all mentioned in this paragraph. Why?
The category is now mentioned explicitly and in italics in the manuscript, please see the text above

Reviewer: Figure: I miss an explainaing text as well as a title of this figure.
According to BMC author instructions for manuscripts, the figure title and text was written in a separate page (page23) in the manuscript. This is still so. There have been some minor language revisions of the figure legend in the present version. In addition the figure has been revised in order to clarify the three main categories, their interacting and their association with acceptance, satisfaction and reconciliation (some lines have been made dotted, and the title of the figure is now included in the figure).

Reviewer: Discussion, separation between mind and body: Be careful how "body and mind" is used as this is one of the most interesting findings in the study. The use of Merleau-Ponty who has developed a philosophical description of the body as "I am a body" not I have a body" ( in for example the book "Phenomenology of perceptions") should increase the quality of this discussion. We have added a section in the discussion, and a section in the conclusion, please see below. The supplements are in bold
Page16 top of the page, supplement after the paragraph: “- - - who are seriously ill, as described by Charmaz [27]. This dualism, expressed by separation between body and mind is contradictory to the concept of a lived and existential body as voiced by Merleau-Ponty who criticises the philosophical tradition, which has a tendency to consider the body simply as an object that a transcendent mind orders to perform varying functions [28]. Pregnant women’s basic perception of body and mind being separated is probably influenced by the prevailing philosophy and basic view of disease in the
natural sciences and Western European medicine (Wulff, Juul Jensen). Knowing that this perception of separation between body and mind might entail a negative feeling in the labouring woman of being let down by her body, the midwife should not assist this perception but stress a broader approach to the subject already during antenatal visits and prenatal classes.

Page 19, bottom: The midwife has an important task in securing that the woman’s psychological process of realising that the labour is non-progressive and that augmentation is needed, is handled with respect for the dialectical process and thus the midwife should actively assist the woman in being reconciled with a medical birth including reconciliation with her body.