Reviewer’s report

Title: The paradox of classification of prolonged labour

Version: 1
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Reviewer: Soo Downe

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1. Is the question posed by the authors well defined?

1.1 There does seem to be some confusion about this in the text. The primary aim stated is to examine the prevalence of prolonged labour. The introduction does make the point that this is not a definitive diagnosis, and that there is a great deal of debate about the nature of prolonged labour, resulting in wide discrepancies between diagnoses in different places. Based on these observations, it would seem to be sensible to reframe the question to be about the prevalence and consequences of the diagnosis of prolonged labour: otherwise the implication in various parts of the text is that it is possible to determine the rate of ‘true’ (pathological?) prolonged labour, rather than just of labours that are longer than the statistical norm.

2. Methods

2.1 The study design is appropriate, and the methods are well described.

3. Are the data sound?

3.1 It is not clear what % of those recruited actually took part in the study, or if the final sample is representative of either this initial sample, or, indeed, of the local population (a statement is made to this effect in terms of the population, but no data are presented) – no info is given on the numbers recruited at the time of the scan, or the demographics of this sample.

3.2 The numbers in the tables don’t always add up to 100% where it is implied that they should. It is not clear if this is just a transcription error, or if correcting these data would make a difference to the analysis. This is the case for the mode of birth data for both groups, and for the ‘birth experience data for the ‘no diagnosis of prolonged labour’ group.

3.3 It would be useful to know if women’s beliefs that their labour was prolonged always correlated with the official diagnosis. The % of women who had no diagnosis but still had oxytocin needs to be reported in the abstract as a headline finding. Indeed, this variation between clinical data, diagnosis, and treatment, and the associated strikingly large difference between intention to have more babies in the future are among the most interesting findings in the study, and more could be made of these findings.

4. Findings, discussion, conclusions
4.1 The report of the demographics of the sample should go before the report of the findings.

4.2 Outcomes - it might be useful to add an analysis if this is possible, looking at those with clinically prolonged labour who did or who did not perceive the labour as long/difficult - is it the actual length of labour or the associated interventions that women don’t like?

4.3 In the tables: the following data are presented as %, but the measure is a seven point scale – it is not clear what the % means in the table (though I think this is explained in the text):

Experienced labour length (and check spelling here)

4.4 For the following two items, the scores are statistically significant, but are they really clinically significant?

Pain intensity (1=No pain-7=Worst pain imaginable) 5.63 (1.25) 5.40 (1.24) 0.032
Pain experience (1=Very negative-7=Very positive) 4.31 (1.58) 3.64 (1.52) 0.000

4.5 A birth weight of 2500-3500 gram was associated with less prolonged labour when adjusted for parity.... > compared to what? Bigger babies? Smaller babies?

Also, I think the accurate phrasing is ‘less likely than (xxx) to be associated with a diagnosis of prolonged labour’

4.6 The text says that <<The major findings of this study were that more than every fifth woman was diagnosed with prolonged labour;>>.... but this isn’t reported in the abstract?

4.7 the text says <<When divided by parity, 35.6% of primiparous women and 10.2% of multiparaous women had a prolonged labour, which is fairly similar to findings from a Danish prospective study of nulliparas, where 37% were diagnosed with prolonged labour [14] and from a Swedish study by Selin (2009) which found a prevalence of 33% in first-time mothers and 7% of women with previous children>>>.... but I dont think either study is cited in the introduction, and if we already know this why do the current study?

4.8 In the discussion, there is the following text: >>>>Another explanation could be that women used an epidural to a high extent. A post hoc analysis, however, showed that in the ‘normal group’ 11.7% used an epidural without receiving any augmentation, 16.9% received augmentation without an epidural, and 10% in this group both had an epidural and received augmentation.>> This is data – it should be in the results and not in the discussion

4.9 >>The paradox that healthy women received treatment for prolonged labour and women with prolonged labour sometimes (14.5%) were not treated could be viewed as maltreatment (affecting 40%) that should be noticed and dealt with
regarding identification, classification and treatment of prolonged labour. Is this the paradox noted in the title? If so why isn’t it in made much more of, and why isn’t it in the abstract? In fact, I think there is much more in the data than this paradox of under/over treatment, so I do wonder if this is the right title to capture the data fully?

4.10 When dealing with issues related to obstetric care, e.g. prolonged labour, which is a common obstetric problem, women’s feelings and experiences must be taken into account, as it was shown that these more ‘soft variables’ had a strong impact on women’s experiences as well as their future reproduction. References? Is this saying that experiences have an effect on experiences? If this is referring to the current data, it needs to be reframed a bit, as the current study doesn’t show that there is an actual effect on reproduction, but only on intention at two months postnatal. Also, I think it is worth reframing the statement 'this is a common obstetric problem' to 'this is a common obstetric diagnosis' for the reasons stated above.

4.11 The really interesting and meaningful findings in the data are a) that so many women even with no diagnosis of prolonged labor were given oxytocin – why? And 2) that women with a diagnosis of prolonged labour are far less likely to plan a future baby. These are hardly touched on, though, in the abstract and the discussion. I’m not clear why this is underemphasized, when the far less interesting and probably far less clinically significant data on labor pain is highly trailed?

4.12 Given that there are antenatal data, are there any data on initial number of children desired, to see if intentions for future pregnancy is a confounder, or a true outcome?

4.13 The conclusions are good, and could form a better basis for the abstract.

5. Are limitations of the work clearly stated?

Yes, apart from the above.

6. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?

6.1 Yes – though, given that the authors cite several studies that show large variation in the diagnosis of prolonged labour, and studies that show that this is associated with distress in women, it might have been better to focus on the more original findings in this study, as stated above.

7. Do the title and abstract accurately convey what has been found?

7.1 No, as noted above. It is not clear why the paper presents a paradox, as suggested in the title. What is particularly paradoxical about the findings, as presented?

7.2 Is it interesting that women with diagnosis of prolonged labour had a longer
7.3 It is interesting that half of the women with diagnosis of prolonged labour didn’t see the labour as complicated and 20% without this diagnosis did see their labour as complicated – might this be to do with very short labours? It would be very interesting to look at this aspect, which is almost always overlooked – the assumption seems to be that labour can never be too short, which is very clearly not the case – women with very short labours can be deeply traumatised by the intensity of the pain in this situation.

7.4 In the abstract, if 6% of primiparous women in Sweden have prolonged labour and 14% of all women have it, this implies that there is a higher diagnosis of prolonged labour in multips than primips. Is this really true? These data are contradicted in other parts of the paper, and the findings of the study are very different from these rates. It would be helpful for these differences/discrepancies to be reflected on in the discussion.

7.5 The text in the results section in the abstracts suggests that nearly 100% of women in the study had a prolonged labour – I think this is meant to say that 9x% of women with a prolonged labour had oxytocin.

8. Is the writing acceptable?

Generally yes, but there are some grammatical and stylistic errors in places.

REVISIONS REQUIRED (compulsory)

1. Refocus the title/ paper/abstract to ensure that these are all consistent with the aims, and that they accurately report the findings in terms of both statistical and clinical significance
2. Ensure that the most relevant studies in this area are cited in the background
3. Change ‘prolonged labour’ to ‘diagnosis of prolonged labour’ in the text, and for the column headings of the tables (‘diagnosis of prolonged labour’ versus ‘no diagnosis of prolonged labour’)
4. Respond to the issues raised above about the calculations in the tables
5. give the numbers of women recruited in pregnancy, and demographics for the local and/or national population
6. Tone down the claims made for the clinical importance in the difference in pain in labour scores

OTHER REVISIONS

Please look at all the other issues raised above, and consider making changes as suggested.
Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
'I declare that I have no competing interests'