Prolonged/Obstructed Labor: Gaps in Guidelines & Knowledge

Vandana Tripathi | June 20, 2017

Obstructed labor doesn’t end at delivery: Strengthening postpartum care following prolonged/obstructed labor
Obstructed labor – prevalence and impact

• 3-6% of deliveries are complicated by obstructed labor. [Dolea & AbouZahr, 2003]

• Obstructed labor contributes ~2.8% of global maternal mortality, up to 6.4% in Southeastern Asia. [Say et al., 2014]

• Obstructed labor estimated to be “the most disabling of all maternal conditions,” with long-term sequelae including genital fistula, other forms of incontinence, and nerve injuries. [Dolea & AbouZahr, 2003; GBD, 2008]

• Estimates that, in 49 countries with inadequate access to C-section, appropriate management of obstructed labor would result in:
  – 1.1 million DALYs averted
  – 59,150 obstetric fistulas prevented
  – 16,800 maternal deaths prevented [Alkire et al., 2012]

• And yet...
Challenges in definition of P/OL

- There appears to be no consensus on the definition of prolonged/obstructed labor.
- Numerous definitions in global literature.
- Terms associated with prolonged/obstructed labor (P/OL) are not well defined, e.g., “unsatisfactory progress of labor” and “delay in labor.”
- This inconsistency can lead to delays in identification, referral, and management.

Source: Pett 2015, Literature synthesis, unpublished
Gaps in guidelines and evidence

• Much guidance for managing P/OL and assessing the quality of care for P/OL ends with delivery (“decided on assisted or operative delivery section”) and cursory mention of immediate post-operative monitoring.
  – e.g., Bailey et al., 2002: Improving EmOC through Criteria-based Audit

• Postpartum care for P/OL more frequently referenced in the fistula literature.
  - e.g., WHO fistula prevention guidelines & ECSA nursing curriculum

• Very little guidance for the postpartum period specific to P/OL; guidance that does exist is inconsistent.
  – e.g., WHO OF manual + midwifery training module on managing P/OL recommend urinary catheterization (UC) for 14 days for all women who have recently experienced P/OL (WHO 2006, 2008); WHO IMPAC manual recommends UC for 48 hours after P/OL (WHO 2009)

Source: Pett 2015, Literature synthesis, unpublished
P/OL – Addressing knowledge gaps

- Limited information on actual practices in defining and managing P/OL, including postpartum care.
- FC+ has launched an online global survey of low- and middle-income country (LMIC) skilled birth attendants (SBAs), particularly midwives, to understand routine bladder care practices as well as practices during and after P/OL.
  - Pilot phase: May 7-June 2, 2017
  - 108 SBAs initiated the survey
  - 59 SBAs completed enough questions to be included in analytic sample
71% work in sub-Saharan Africa and 15% in South/Southeast Asia.

85% are midwives or nurse-midwives.

All have at least two years of professional experience, 37% ≥10 years.

46% work in national or academic hospital; 32% work in district or sub-district hospital.

Most work in urban/peri-urban settings (81%) and public facilities (78%).

61% work in comprehensive emergency obstetric and newborn care (CEmONC) facilities; 27% work in basic EmONC (BEmONC) or “BEmONC-1” facilities.
Global SBA Survey – Defining P/OL

- Responses showed considerable variation in how P/OL is defined by SBAs.

![Chart](image-url)

**Defining prolonged / obstructed labor: Hours of active labor**

- **Primapara**
- **Multipara**
Variation extended to other criteria used in identifying P/OL

<table>
<thead>
<tr>
<th>Criteria used to identify prolonged/obstructed labor, n=37</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No advance of the presenting part despite strong uterine contractions</td>
<td>35</td>
<td>95%</td>
</tr>
<tr>
<td>Slow or no dilation of the cervix despite strong uterine contractions</td>
<td>31</td>
<td>84%</td>
</tr>
<tr>
<td>Fetal distress</td>
<td>27</td>
<td>73%</td>
</tr>
<tr>
<td>Maternal distress</td>
<td>26</td>
<td>70%</td>
</tr>
<tr>
<td>Clinical signs of shock (systolic blood pressure &lt;100 mmHg, pulse &gt;100/min)</td>
<td>13</td>
<td>35%</td>
</tr>
<tr>
<td>Temperature ≥37.5°C</td>
<td>13</td>
<td>35%</td>
</tr>
<tr>
<td>Odorous vaginal discharge</td>
<td>14</td>
<td>38%</td>
</tr>
<tr>
<td>Active phase of labor &gt; 12 hours</td>
<td>28</td>
<td>76%</td>
</tr>
<tr>
<td>Uterine tetany</td>
<td>12</td>
<td>32%</td>
</tr>
<tr>
<td>Uterine atony</td>
<td>15</td>
<td>41%</td>
</tr>
<tr>
<td>Abnormal pelvis</td>
<td>24</td>
<td>65%</td>
</tr>
<tr>
<td>Bandl’s ring</td>
<td>24</td>
<td>65%</td>
</tr>
<tr>
<td>Haematuria</td>
<td>16</td>
<td>43%</td>
</tr>
<tr>
<td>Caput and/or molding</td>
<td>27</td>
<td>73%</td>
</tr>
</tbody>
</table>
Global SBA Survey – Care after P/OL

- 67% of respondents report that they always provide UC after P/OL, with no difference between midwives and other cadres.
- One-third identified specific benefits of UC, including: fistula prevention, bladder injury prevention, and monitored urinary output.
- Respondents report a wide range of UC duration.

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Minimum and maximum # of days respondents reported catheterizing patients after prolonged/obstructed labor, n=34
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![Bar chart showing the minimum and maximum number of days respondents reported catheterizing patients after prolonged/obstructed labor, n=34. The chart includes options for 1 day, 2 days, 3 days, 4 days, 5 days, 6 days, 7 days, 8 days, 14 days, and 30 days. The bars are color-coded to represent minimum and maximum values.]
Global SBA Survey – Barriers to UC after P/OL

- Perceived risks/challenges: Infection is most frequently identified risk or challenge noted by midwife respondents.
  - Others include bladder injury during insertion, inadequate monitoring, and increased hospital stay.

- Lack of guidance: Only 42% of respondents report that their facility has a protocol for UC after P/OL.

- Lack of consistent supplies: Less than half (47%) of respondents report that catheterization supplies are always/generally available.
Global SBA Survey – Please participate!

• The survey is available in English at:
  https://www.surveymonkey.com/r/SBA-Survey-En

• The survey is available in French at:
  https://fr.surveymonkey.com/r/SBA-Survey-Fr

• Please share the survey with other skilled birth attendants in your professional networks!