Enhancing Nonpharmacological Labor Pain Management Approaches to Improve Maternal and Neonatal Health Outcomes in Ethiopia

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Executive Summary

Labor pain management remains a critical component of maternal healthcare, significantly influencing the outcomes for mothers and infants. In Ethiopia, where access to pharmacological pain relief may be associated with adverse birth outcomes, nonpharmacological approaches are increasingly vital. Over half of Ethiopian healthcare providers did not use nonpharmacological pain management during childbirth. Key factors influencing this outcome include the poor awareness and knowledge of healthcare providers regarding nonpharmacological pain management approaches and the allowance of companions in the labor ward. Optimizing labor pain management through the integration of nonpharmacological approaches presents a significant opportunity to improve maternal health outcomes in Ethiopia. By focusing on education, integrating nonpharmacological approaches, and cultural sensitivity, healthcare providers can enhance the childbirth outcomes for women across the nation. It is recommended to provide updated in-service training programs for healthcare providers to enhance the use of nonpharmacological pain management techniques. Additionally, policymakers and stakeholders shouldredesign obstetric guidelines to promote effective non-pharmacological pain management during childbirth.

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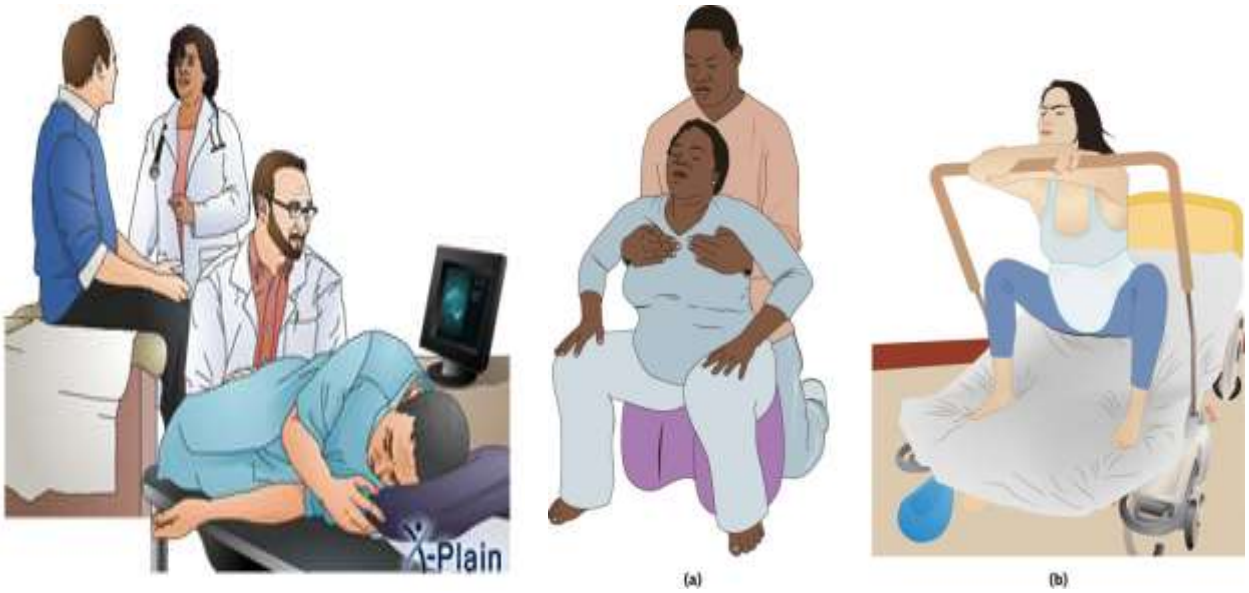


1. Introduction

Maternal deaths from preventable causes remain high, putting Ethiopia off track to meet its 2030 maternal and neonatal mortality targets (Tandon et al., 2025).Urgent action is needed to scale up nonpharmacological labor pain management through national guidelines, provider training, and routine intrapartum care to reduce preventable maternal and neonatal deaths and accelerate progress toward Ethiopia's 2030 targets. Nonpharmacological methods for pain relief during labor, such as emotional support, gentle massage, acupuncture, water immersion, yoga, music therapy, biofeedback, deep breathing techniques, positioning, ambulation, hypnosis, physical touch, cold therapy, and continuous family support, are essential for promoting healthier outcomes for both mothers and babies(Ayele et al., 2021).

Effective nonpharmacological labor pain management is not a luxury; it is a cornerstone of respectful, high-quality intrapartum care and a prerequisite for achieving national and global maternal and newborn health targets (Whitburn et al., 2019). When women are supported with humane, culturally respectful, and evidence-based comfort measures during childbirth, they experience less pain, greater confidence, and improved birth outcomes. These approaches strengthen.

Trust in health facilities, increase skilled birth attendance, and directly contribute to reducing preventable maternal and neonatal deaths (Junge et al., 2018. Investing in nonpharmacological pain management is therefore a strategic, low-cost, high-impact intervention that accelerates

progress toward universal maternal health coverage while safeguarding women's dignity and rights during one of life's most critical moments.

Despite strong evidence and clear alignment with quality of care standards, nonpharmacological labor pain management remains poorly implemented across many Ethiopian health facilities. Barriers such as limited provider training, weak institutional commitment, high workloads, inadequate infrastructure, and insufficient emphasis on respectful maternity care continue to deprive women of safe and supportive childbirth experiences. This policy brief calls for urgent action to integrate nonpharmacological pain management into routine maternity services through strengthened clinical guidelines, targeted healthcare providers' training, and facility-level accountability. By closing these gaps, Ethiopia can rapidly improve childbirth outcomes, increase facility-based deliveries, and make decisive gains in maternal and newborn survival.

2. Methodology

This policy brief applied an evidence-informed methodology by synthesizing findings from high-quality systematic reviews, primary studies, and global clinical guidance on nonpharmacological labor pain management, with particular attention to evidence from sub-Saharan Africa (Abikou et al., 2024), (Zenbaba et al., 2021, Puchalski Ritchie et al., 2016). Relevant literature was systematically reviewed to identify implementation gaps, effective interventions, and contextual barriers within Ethiopia's maternal health system(Zeleke et al., 2026), along with recommendations from the World Health Organization (WHO, 2020). The extracted evidence was analyzed thematically and translated into practical policy options, which were then assessed for feasibility, cost-effectiveness, and alignment with Ethiopia's respectful maternity care framework to ensure actionable and locally relevant recommendations.

3. Key Research Findings

Maternal Outcomes

- Over 50% of Ethiopian healthcare providers did not use nonpharmacological pain management during childbirth. Women who receive nonpharmacological support report better subjective pain control, an enhanced sense of dignity and autonomy, and greater overall satisfaction with the childbirth experience.

- Evidence aligns with global findings that continuous nonpharmacological labor support is associated with improved labor progress and reduced need for unnecessary medical interventions (e.g., lower rates of epidural analgesia or operative deliveries) in settings where continuous support is provided.
- Cultural Context: Cultural beliefs play a significant role in shaping women's experiences of labor pain.
- Nonpharmacological labor pain management approaches such as continuous labor support, positioning and mobility, breathing techniques, massage, hydrotherapy, companionship, and relaxation exercises have statistically significant reductions in reported pain levels and improved maternal satisfaction.

Barriers and System Constraints

- Structural barriers such as crowded labor wards, lack of private spaces, limited equipment for mobility or comfort, and high patient numbers restrict providers' ability to implement supportive techniques.Absence of well-standardized clinical guidelines for a nonpharmacological pain management approach in intrapartum care.
- Poor awareness and knowledge of healthcare providers regarding nonpharmacological pain management.

4. Policy Recommendations for the Ministry of Health

- Update national maternal and intrapartum care guidelines without delay
- Disseminate clear clinical protocols and practical tools to all maternity facilities to ensure uniform application.
- Incorporate nonpharmacological pain managementinto obstetric education and training
- Enable low-cost facility improvements to support woman-centered care
- Enforce policies that promote dignity, companionship, and choice during childbirth
- Incorporate indicators on respectful maternity care and use of nonpharmacological pain management into routine supervision, maternal audits, and facility performance reviews to improve accountability and service quality.

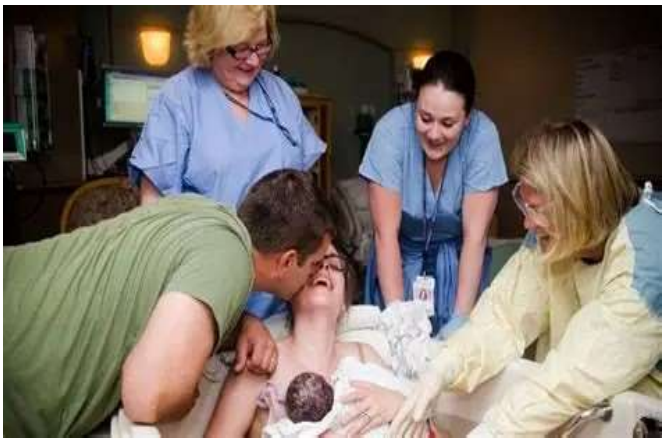
The Target Audience for this policy brief will be

- The Ministry of Health and regional health bureaus are responsible for healthcare policies.
- Professional Associations: Ethiopian midwifery associations.

- Academic Institutions: Universities and research institutions focused on health sciences.
- Non-Governmental Organizations (NGOs): Organizations working in maternal and child health.

How to disseminate the policy brief document?

- After receiving comments and being well-prepared, this policy brief is essential to ensure that the findings and recommendations reach the appropriate target audience
  - ✓ Workshops and Seminars:
  - ✓ Conferences
  - ✓ Collaborate with Local Partners
  - ✓ Ethiopia Ministry of Health website



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