

COMBATING MISCONCEPTIONS WITH FACTS

Demystifying Vacuum Assisted Birth

A resource for Safe Vacuum Champions and Advocates | Attachment to the Safe Vacuum Compendium

HOW TO USE THIS RESOURCE

This document is designed to help *Safe Vacuum* champions and advocates respond with confidence when they face common fears, misconceptions, and barriers around vacuum assisted birth (VAB). Each section presents what is commonly believed or feared, and what the evidence actually shows. Use it in conversations with colleagues, during training sessions, in meetings with managers, or when making the case to decision-makers.

The evidence here draws on international clinical guidelines, peer-reviewed research, and local data from Tanzanian facilities. It is a living resource - champions are encouraged to add local success stories and data as they become available.

1. Why This Matters: The Global Context

VAB use has declined globally while caesarean section (CS) rates have risen, even though the evidence consistently shows that VAB, when indicated and performed correctly, is safer for both mother and baby than a second-stage CS. This paradox is driven not by clinical evidence but by fear, misconceptions, and a lack of training and support.

2 million

stillbirths annually worldwide a large proportion are intrapartum and preventable

>10x

higher maternal deaths per 1000 CS in some African countries vs high-income countries.
Sobhy et al., 2019

VAB declining

particularly in LMICs, despite stronger evidence for its safety vs CS Bulletin of the WHO, 2023

In Tanzania, a significant driver of this decline is the perception, shared by both providers and women, that CS is simply the safer and easier option. The goal of this resource is to equip champions with the facts to change that perception.

2. Perceptions: CS vs VAB Safety

Many providers and women in Tanzania hold the belief that CS is safer and less risky than VAB. This perception is not supported by the evidence.

Common Perception

Caesarean section is safer and easier for the mother and baby than vacuum assisted birth.

VS

The Evidence Shows

CS is major abdominal surgery carrying significant risks: infection, haemorrhage, longer recovery, and complications in future pregnancies.

For the baby, outlet VAB is safer than emergency CS for neurodevelopmental outcomes including ADHD, autism, intellectual dysfunction, and epilepsy.

VAB also results in significantly shorter hospital stays (1 day vs 3 days) and lower costs for families — 25,000 Tsh vs 60,000 Tsh at Haydom Lutheran Hospital. Sobhy et al., 2019 | NHS, 2023 | HLH, 2025

Maternal Risk: VAB vs Second-Stage CS (Nolens, 2019)

Outcome	VAB %	CS %	What this means
Risk of infection	0.4	3.9	CS carries nearly 10x higher infection risk
Risk of haemorrhage	3.0	6.1	CS doubles the risk of significant bleeding
Risk of stillbirth	2.1	10.8	CS at 2nd stage carries 5x higher stillbirth risk
Maternal death	0.1	1.5	CS carries 15x higher risk of maternal death
Neonatal death	1.6	4.8	CS carries 3x higher risk of neonatal death

Source: Nolens, 2019 — VAB vs Second-Stage Caesarean Section

3. Fears: Addressing What Keeps Providers from Acting

Fear is one of the biggest barriers to VAB practice. These fears are understandable — but they are often based on incomplete knowledge or outdated assumptions. Champions can play a key role in creating space to discuss them openly.

Fear 1: Neonatal Trauma

The Fear

Vacuum assisted birth causes serious injury to the newborn — including a deformed or damaged head.

VS

The Evidence Shows

Short-term side effects are generally mild and temporary. A temporary mark on the scalp (chignon) from the suction cup usually disappears within 48 hours.

A bruise on the head (cephalohaematoma) is typically harmless and resolves over time. Serious injuries are rare when the procedure is performed correctly according to protocol.

NHS, 2023

Fear 2: Maternal Injury from VAB

The Fear

There is a much higher chance of severe vaginal tears and lasting harm to the mother with VAB.

VS

The Evidence Shows

Like any medical intervention, VAB carries some risks. There is a slightly higher chance of 3rd or 4th degree tears in VAB (approximately 4 per 100 deliveries) compared to spontaneous vaginal birth (3 per 100).

However, this must be weighed against the substantially higher risks of infection, haemorrhage, and death associated with second-stage CS. Overall, maternal outcomes are significantly better with VAB than emergency CS.

NHS, 2023 | Nolens, 2019

Fear 3: Blame and Judgment if VAB is Unsuccessful

The Fear

If a VAB attempt does not succeed and a CS is performed instead, the provider will be blamed for making the wrong decision.

VS

The Evidence Shows

A provider who attempts VAB and then proceeds to CS has not made a wrong decision — provided clinical indications were met, VAB checklist and SOP were followed. The initial decision to attempt VAB is medically valid. Successful VAB, when appropriate, avoids a more invasive surgical procedure.

What matters is clinical reasoning and documentation, not the outcome alone. Champions can help build a culture where sound clinical decision-making (not outcome alone) is how practice is judged.

RCOG, 2023 | Ameh & Weeks, 2009

4. Misconceptions Among Providers: Indications and Contraindications

Some providers avoid VAB based on clinical beliefs that do not align with international guidelines. These misconceptions lead to missed opportunities for timely intervention and contribute to unnecessary caesarean sections.

Common Misconception

Certain conditions that are not contraindications to VAB according to international guidelines – such as a 'big baby' (macrosomia) or caput succedaneum – are treated as reasons to avoid the procedure.

VS

The Reality

These conditions are NOT contraindications to VAB. Underlying this misconception is often a genuine competency gap: some providers have concerns about their own skills, fear adverse outcomes, or worry about blame if the procedure does not go as expected.

The Safe Vacuum Learning Solution directly addresses this gap through hands-on training, simulation, debrief, and ongoing clinical mentorship.
Vital Strategies, 2023

Key VAB Indications (when to act)

- Prolonged second stage of labour
- Fetal distress / suspicious or pathological fetal heart rate
- Maternal exhaustion
- Need to expedite delivery for maternal or fetal reasons

True Contraindications (when NOT to proceed)

- Less than 34 weeks gestation
- Unengaged fetal head / head not low enough
- Face or brow presentation
- Known fetal bleeding disorder
- Clinician not competent in the procedure

Consult your local protocol and the WHO Labour Care Guide for full guidance on indications and contraindications.

5. Local Evidence from Tanzania

International evidence is powerful – but local data is often more persuasive for colleagues, managers, and community members. Champions are encouraged to collect and share facility-level data on VAB outcomes, recovery times, and cost savings.

1 Day

average VAB hospital stay at Haydom Lutheran Hospital

vs 3 days for CS
HLH, 2025

25,000 Tsh

cost for a VAB delivery

vs 60,000 Tsh for CS
HLH, 2025

Add your data here

Record VAB cases, outcomes, and recovery time at your facility and use them in advocacy conversations

6. The Role of the Safe Vacuum Advocates

Advocates are not just skilled practitioners - they are ambassadors of evidence and practice. Their role goes beyond performing VAB themselves; it includes mentoring colleagues, creating psychological safety for difficult conversations, and making the case for VAB in clinical and management settings.

- 1 Model calm, competent practice. The most powerful thing a champion can do is perform VAB confidently, document it clearly, debrief every VAB case with the team.
- 2 Name and challenge misconceptions directly. When you hear fear or misinformation, respond with the evidence in this document. Normalise the conversation.
- 3 Mentor colleagues individually. The Dominico et al. (2021) study showed that hands-on solo practice is the single strongest predictor of sustained VAB practice. Your mentorship creates the conditions for that.
- 4 Use local data and stories to explain. Numbers from your own facility are more compelling than global statistics to most audiences. Collect and share them.
- 5 Advocate upward. Bring this evidence to management, district medical officers, and professional organisations. Make the case for protected training time, equipment readiness, and team support.

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This resource is adopted for the Safe Vacuum Compendium and developed through the Safe Vacuum ToT programme.