

## Perineal Trauma Following Vaginal Delivery in a Low- Income Area: A Criterion-Based Audit

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### ABSTRACT

Trauma to the perineum following vaginal delivery is common and can lead to anal incontinence and pain but can be prevented by perineal support. However, the incidence and how to prevent perineal injury in sub Saharan Africa has not previously been described. The objective of the study was to assess the incidence of perineal trauma at vaginal delivery and to assess a training intervention in perineal support using a criterion-based audit (CBA) design. A CBA was conducted at Kilimanjaro Christian Medical Centre in Tanzania. In total, 552 women who delivered vaginally were included, of whom 80% completed a follow-up interview after three months. Perineal support as trained for this study was not performed before the intervention but was performed in 78.6% of deliveries after the intervention ( $p < 0.000$ ). The number of women with second degree lacerations decreased after the intervention (RR 0.74, CI: 0.61-0.90), and more had an intact perineum (RR 2.85, CI: 1.74-4.69). Anal sphincter lacerations were not significantly changed by the intervention (6.6 to 3.4%, RR 0.52, CI: 0.24-1.14). The frequency of anal incontinence changed insignificantly from 6.1 to 4.9% (RR 0.81, CI: 0.37-1.77) after intervention. Perineal pain three months after delivery was reduced by 72% (RR 0.28, CI: 0.15-0.52). The study demonstrates that CBA may be useful in introducing a simple intervention such as perineal support thereby decreasing the number of women having perineal trauma following vaginal delivery. However, the impact of our intervention on the sustainability of our observations is uncertain and must await long-term studies.

**Keywords:** Clinical audit, Developing countries, Perineum, Trauma, Obstetric labor, Complications

### ABBREVIATIONS

CBA: Criterion-Based Audit

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