SHORT COMMUNICATION

Can a Nurse-led Counseling Clinic Improve the Success of Vaginal Birth after Cesarean Section? A Pilot Project Conducted at a Tertiary Care Center in Sri Lanka

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Abstract

There is a lack of studies reporting successful counseling interventions to increase vaginal birth after cesarean section (VBAC) in low- and middle-income countries (LMIC). We report a pilot study conducted in Colombo, Sri Lanka, to assess the preliminary results of a nurse-led counseling clinic to improve the VBAC rate. Women who attended the VBAC clinic from January 2020 to May 2020 were recruited for this study. They were counseled by trained educator nurses on the VBAC process. The rate of women opting for VBAC almost tripled after counseling, while the rate of women opting for cesarean section (CS) has significantly reduced. In this pilot study, a nurse-led VBAC counseling clinic significantly increased the maternal choice towards VBAC. The observed effect is clinically relevant and warrants further consideration in larger studies.

Keywords: Birth, Cesarean section rates, Childbirth experience, Health education, Vaginal birth after cesarean, Women's choice.

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Despite existing recommendations on vaginal birth after cesarean section (VBAC), elective repeat cesarean section (CS) is frequently performed in many countries.[1–3] Previous studies based on a prospective individual patient database implemented in 2015 at De Soysa Hospital for Women (DSHW), Colombo, Sri Lanka, documented inappropriate practices related to CS, and a prevalence of VBAC of only 17.1%.[3,4] There is a lack of studies reporting successful counseling interventions to increase VBAC in low- and middle-income countries (LMIC).

We report a pilot study conducted in Colombo, Sri Lanka to assess the preliminary results of a nurse-led counseling clinic to improve the VBAC rate which was implemented in August 2019 at DSHW, Colombo 08, Sri Lanka. A team of three educator nurses was trained on how to offer a structured and uniform counseling session on VBAC, and on how to communicate in a respectful, simple, and effective language.

All the women between 12 and 36-weeks period of gestation and one past CS were invited to participate in this clinic. Women who had two previous CS, a history of classical CS, and open myomectomy were excluded. Women were exposed to the nurse-led counseling sessions prior to the standard VBAC counseling by the consultant at 36 weeks.

The counseling sessions included information on the VBAC process, monitoring during labor, effective methods of pain management, such as epidural and other analgesic drugs, and the short-term and long-term pros and cons of VBAC compared to CS. In addition, a patient information leaflet describing all the above-reported information was developed in three languages (Sinhala/Tamil/English), and distributed to women to improve understanding and willingness for VBAC. Women were offered the opportunity to make their doubts explicit and this was a one-time session. Data was collected for this pilot study on 64 women. Informed written consent was obtained from all participants or, if participants are under 16, from a parent and/or legal guardian.

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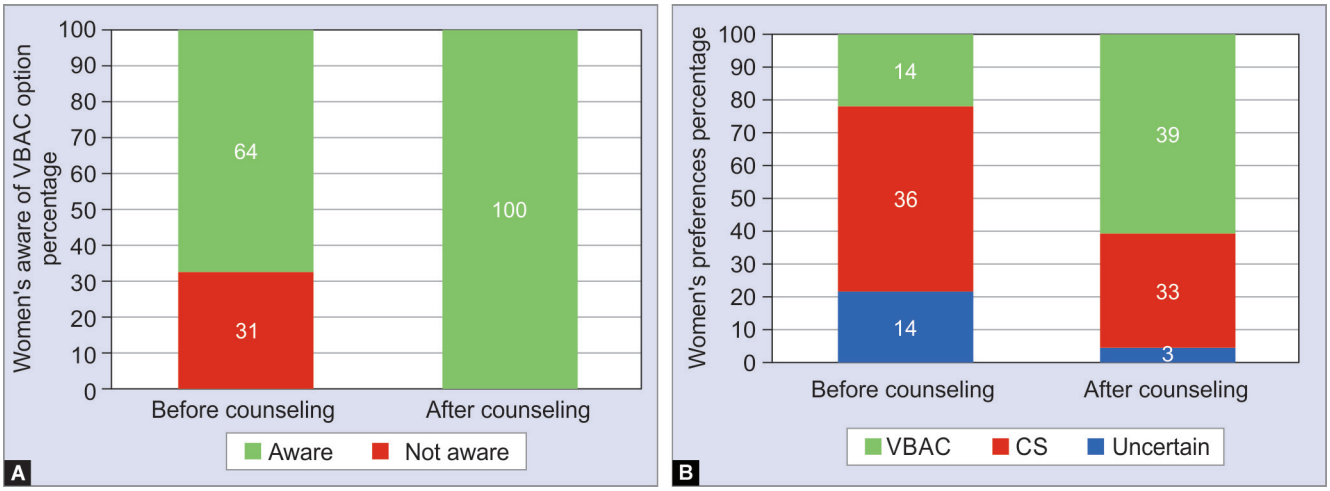
Prior to VBAC counseling sessions, only 31 (48.4%) were aware of the possibility of VBAC (Fig. 1A). Prior to the counseling, the women's preferences were as follows: A total of 14 (21.9%) wished to undergo VBAC, 14 (21.9%) were uncertain, and 36 (56.2%) wanted a repeat CS (Fig. 1B).

After the counseling, 14/36 (38.9%) women who had previously decided to undergo CS changed their decision and wished to proceed with a VBAC, while 11/14 (78.6%) of those who were undecided eventually planned to proceed with a VBAC, and a total of 25/50 (50%) women previously uncertain or against VBAC ultimately opted for VBAC as their birth mode. In simple terms, 14 women agreed to VBAC and 50 did not agree or were uncertain about the decision of VBAC before the counseling; however, following the counseling session, 39 agreed and 25 either did not



Figs 1A and B: (A) Women aware of VBAC option; (B) Women's preferences. CS, cesarean section; VBAC, vaginal birth after cesarean section

agree or were uncertain about VBAC (Mc Nemars Chi-squared value was 23 and $p < 0.001$).

Overall, 45/64 (70.31%) women strongly agreed that they preferred this method of counseling compared to usual counseling sessions by doctors in clinics because it offered an opportunity to receive clarifications and clear whatever doubts they had rather than being merely told they could undergo VBAC or CS. A total of 50 (78.1%) were completely satisfied with the overall quality of the VBAC counseling offered.

Out of the 39 women who desired to attempt VBAC, 21 (53.8%) ultimately had a successful VBAC while the rest had CS, for a VBAC rate on the total sample of 32.8%, with documented reasons for CS being related to obstetric complications: poor progression, scar tenderness, and fetal distress. Despite this, the rate of VBAC documented in this study was significantly higher than what was previously documented at DSHW (32.8% vs 17.1%, $p = 0.002$, odds ratio [OR] = 2.33, 95% CI: 1.36–4.01).

This pilot study showed that this clinic significantly increased maternal choice for VBAC—almost tripling it—and resulted in a higher rate of maternal satisfaction. It is encouraging to note that the majority of the women were satisfied with the quality of counseling received. Limitations of this study include the uncontrolled design and the small sample. The uncontrolled design was a choice driven by ethical considerations. The small number of participants was the result of the COVID-19 pandemic, which led to difficulty in recruitment and follow-up of the patients, as well as in data collection. Although the sample documented in this study is small, the observed effect is clinically relevant and warrants further larger-scale studies to address the effectiveness, sustainability, and economic impact of counseling interventions to improve VBAC rates in LMIC settings.

Availability of Data and Material

The dataset of the current study is available from the corresponding author upon reasonable request.

Authors' Contributions

Study conception, design, data collection, analysis and interpretation was done by MR; MR and PR drafted the article, with major inputs from ML and HS. All authors have read and approved the manuscript.

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Ethical Approval

Ethical approval was obtained from the ethics committee of the Faculty of Medicine, University of Colombo, Colombo, Sri Lanka (EC-18-128).

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