

Haydom Lutheran Hospital – an Implementation Example



Pictures a), b): A team simulation demonstration by Dr. Anna Sand in the HLH labour ward October 2022

An example of successful reintroduction of vacuum-assisted births is the case in Haydom Lutheran Hospital (HLH). In this hospital, we observed a decreasing trend of vacuum-assisted births since its introduction in 2013. In 2021, we barely performed VAB's anymore, and caesarean section rates were relatively high (24.6%).

We started with a **situational analysis** by conducting a **cross-sectional survey** among the staff of the labour ward, to gain a deeper understanding of the local situation and perspectives, opportunities, barriers and challenges regarding utilization and sustainable reintroduction of vacuum-assisted births in prolonged second stage of labour in HLH. Based on these results, we could formulate and provide recommendations responding to the local needs and situation. These recommendations were presented to the Maternity ward in February 2022.

Reactions were positive, and there seemed to be motivation for change, though we also discussed some misconceptions regarding this intervention. Our next step was to form a **Local Vacuum Committee** (LVC) with one local gynecologist, two local registrars, and two local midwives to plan and organize implementation activities. **Our goal was to increase the percentage of Vacuum Assisted Births (VAB) from 0.04% (2021) to 5% (2024)**, to reduce the percentage

of second stage caesarean sections, thereby improving maternal outcome (less PPH, SSI, Sepsis, faster recovery), reduction of costs, reducing the risk for subsequent pregnancies (uterine rupture, abnormal placentation, PPH), and to improve neonatal outcome (e.g. asphyxia secondary to a decreased decision to birth interval). LVC, arranged face-to-face meetings 1-2 times per month to track progress and plan supporting activities.

Then we educated and sensitized healthcare workers in the labour ward, because everyone needs to be motivated and willing to reintroduce this intervention.

We arranged presentations (focusing on clear indications, contraindications, procedure, beneficial effects and possible complications). In collaboration with Karolinska University Hospital, a Standard Operating Procedure (SOP) with clear roles and responsibilities were written, together with a Safe Vacuum Checklist. These were also presented to the maternity ward, printed and laminated for use in the labour ward.

Sustainable vacuum equipment (Medela vacuum cups and extraction hand pumps), MamaBirthie simulator and Jhpiego HMS training material were provided by Laerdal Global Health, and the first training was arranged in March 2022.

Simulation training was introduced by Karolinska University Hospital later in 2022, which enabled LVC

to plan simulation team training every other week after the morning report in the labour ward. In these sessions, we trained teamwork and communication, nurses, midwives, interns, registrars and gynecologist present at the maternity ward.

Follow-up hand-on skills training for registrars, midwives and interns were conducted every 1-2 months to gain experience and confidence, considering the high turnover of staff, led by a skilled and experienced gynecologist or registrar. In these training sessions of about 3 hours, we shared information regarding the procedure, followed by a demonstration and enough time so everyone could practice their skills on MamaBirthie simulator.

From April 2022 onwards, we initiated Safe Vacuum Assisted Births in the labour ward at HLH. The outcomes were good, and we reflected on every VAB with the team by discussing and filling in a short debriefing form together.

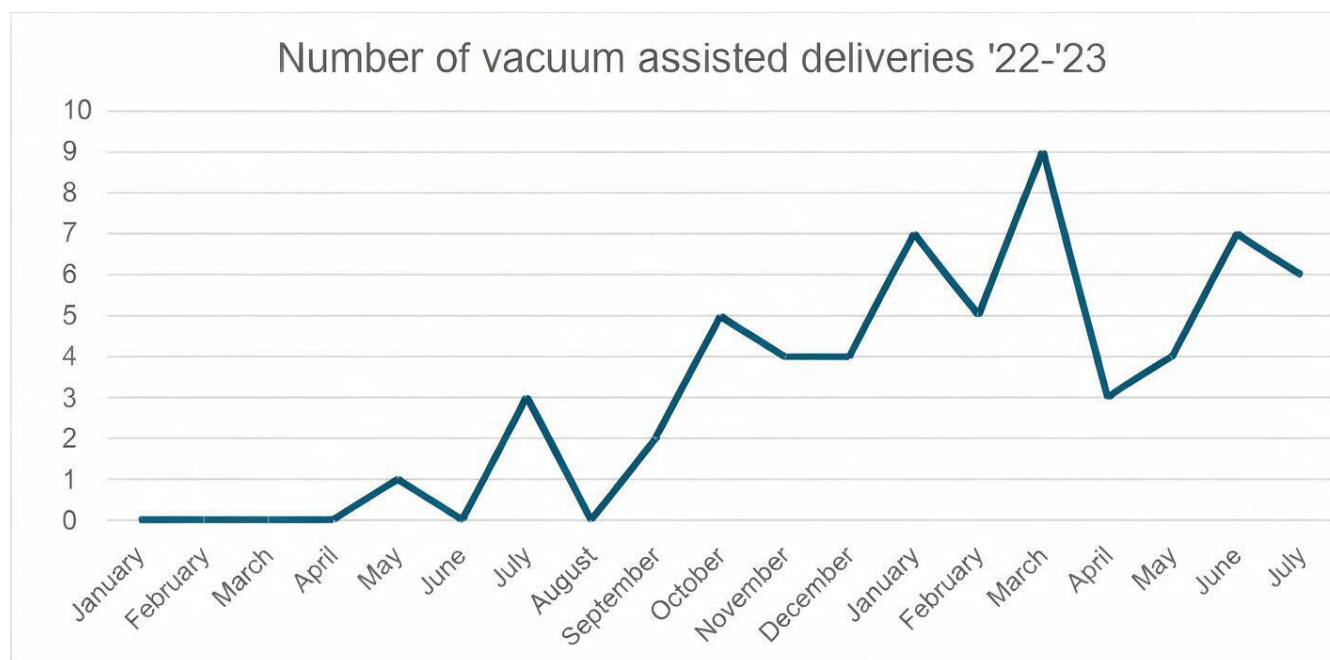
Two times a year, for one week, we welcomed Dr. Anna Sand (an obstetrician from Sweden) for clinical mentor-

ship in vacuum-assisted births, by guiding and helping us perform VABs, gaining skills and confidence. Also, this was a good time for reflecting on failed VABs, so we could learn from these cases.

We created a **Safe Vacuum registry** enabling us to reflect on our outcomes. Every 3 months we carried out a quarterly evaluation of the VAB project, including maternal and neonatal outcomes and presented this to the maternity ward, including **celebration of successes** and discussing the way forward.

We observed an increasing trend of VABs and good outcomes. Two local midwives, Sabina Mmao and Fortunata Francis, were motivated to perform research by investigating patient and healthcare workers' perspectives regarding VABs.

Catherine de Sonnaville



Implementation Logbook Safe VAB project at HLH

Date	Activity	Details
4/10/22	VAD education+ research presentation by Dr. Catherine	For the whole department after the morning report
6/10/22	VAD skills training by Dr. Jorgen + obstetrician	For the registrars
18/10/22	Simulation team training by Dr. Anna + team	After morning report for the maternity department
19/10/22	Meeting/discussion library	Discussion about the vision of VAD in HLH, with whole maternity department
20/10/22	Simulation team training by Dr. Anna + team	After morning report for the maternity department
24/10/22	Meeting VAD committee	About the action points and planning of training and education
25/10/22	Skills training for registrars and (2) midwives	By Dr. Anna + Munyaw
25/10/22	Online meeting with Norway	Via MS Teams
27/10/22	Simulation team training by Dr. Munyaw	After morning report for the maternity department
27/10/22	VAD education by Dr. Munyaw	For the midwives and nurses of labour ward
4/11/22	Skills training for midwives	By Dr. Nai, Sabina and Fortunata
17/11/22	Simulation team training with Dr. Catherine as guider	After morning report
13/12/22	Simulation team training with Dr. Munyaw + skills training for midwives	After morning report
27/12/22	Vacuum committee meeting	With Fortunata, Nai, Munyaw and Catherine
4/1/23	Skills training Dr. Munyaw + Dr. Catherine	For midwives, new registrars and intern doctors.
24/1/23	Simulation team training with Sabina as guider	After morning report
30/1/23	Skills training Dr. Jorgen	For midwives, new registrars and intern doctors.
31/1/23	Simulation team training with Dr. Issa as guider	After morning report
31/1/23	Vacuum committee meeting	With Fortunata, Sabina, Issa, Munyaw and Catherine
02/02/23	SOP presentation by Catherine and Issa	After the morning report
14/02/23	Simulation team training with Dr. Munyaw as guider	After morning report
28/02/23	Simulation team training with Dr. Catherine as guider	After morning report
08/03/23	Skills training by Dr. Munyaw	For midwives, new registrars and medical interns
14/03/23	Simulation team training with Fortunata as guider	After morning report
15/03/23	Vacuum committee meeting	With Fortunata, Issa, Munyaw and Catherine
20/03/23	Vacuum committee meeting about safe vacuum progress and Anna's plan	With Fortunata, Issa, Munyaw and Catherine
21/03/23	Simulation team training with Dr. Issa as guider	After morning report With Dr. Anna
21+22+23/03/23	Skills training by Dr. Munyaw and Dr. Anna	For midwives, new registrars and medical interns
21/04/23	Vacuum committee meeting + Jorgen	With Fortunata, Jorgen Munyaw and Catherine
27/04/23	Quarterly audit/evaluation of VAB presentation by Dr. Catherine	After morning report for the whole ward

9/05/23	Simulation team training with Dr. Catherine as guider	After morning report
23/05/23	Simulation team training with Sara as guider	After morning report
5/06/23	Vacuum committee meeting	With Sabina, Munyaw, Issa, Catherine
6/06/23	Simulation team training with Sabina as guider	After morning report
27/06/23	Simulation team training with Domitila as guider	After morning report
06/07/23	Vacuum committee meeting	With Sabina, Fortunata, Issa, Catherine
11/07/23	Simulation team training with Matajiri as guider	After morning report
12/07/23	Skills training theory + practice, by Dr. Issa/ Dr. Catherine/Fortunata/Sabina	For newcomers: nurses, midwives, interns.
25/07/23	Simulation team training with Fortunata as guider	After morning report
9/08/23	Vacuum committee meeting	With Dr. Munyaw and Catherine
15/08/23	Simulation team training with Dr. Catherine as guider	After morning report
29/8/23	Simulation team training with Sabrina as guider	After morning report
31/8/23	Vacuum committee meeting	With Issa/Catherine/Fortunata/Sabina