Twenty four hour observation of vital and warning signs in low-risk postpartum care in a referral hospital in Uganda

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Summary
Monitoring of vital and warning signs in low-risk postpartum care in a referral hospital was problematic. Based on an audit of postnatal files, interviews with midwives of the postnatal ward and mothers discharged from postnatal care, and observations made, a quality improvement project was initiated. The management’s approval was obtained, interprofessional collaboration strengthened, posters on vital observations were developed and training was given to healthcare workers. Monitoring of low-risk postpartum patients improved and acute care admissions decreased.

Introduction / Background
Postnatal care starts immediately after birth in the labour ward and continued in the next 6 hours. The postnatal period is a critical phase in the lives of mothers and newborn babies, as most maternal and infant deaths occur within the first 24 hours following birth.

Monitoring of vital signs of postnatal patients is crucial to identify early warning signs of complications or deterioration of mothers and babies. Early identification facilitates early intervention that prevents morbidity and mortality, as well as readmission to the acute care unit.

This was a neglected area in the referral hospital in Uganda.

Methods
A quality improvement project was initiated to address the monitoring practices of low-risk postpartum patients, following the principles of Kouzes and Posner’s Leadership Model.

Baseline data was obtained by auditing n=2398 files in March 2018 (n=1161) and May (n=1237) in the low-risk postpartum unit; and n=1750 files of neonates admitted to the acute care unit: March 60 (n=776), and May 77 (n=974).

The baseline data indicated monitoring of vital data and warning signs of postnatal patients as follows: fully monitored n=0 (0%), partially monitored n=52 (2%) and not monitored at all n=2346 (98%). 7.8% of the neonates were admitted to the acute care unit. This showed inadequate monitoring.

Stakeholders meeting were held to highlight the problem and inspire a shared vision and the processes were challenged. Support was obtained from top management and interprofessional training and collaboration established. Standard operating procedures were developed and shared.

Others were enabled to act as four champion midwives were identified to mentor other health workers in assessment of vital and warning signs.

Fifty health workers were trained and posters have been developed of the standard operating procedures.

Emphasis was put on encouragement for any improvement in practice.

Results
Baseline data was obtained in 2018 prior to the quality improvement project. In 2019, after initiating the project for nine months the files of postnatal patients were audited in March (n=2054), April (n=2176) and May (n=2205) of mothers discharged.

Out of these n=179 (2.8%) were fully observed, n=2057 (32.4%) were partly observed, and 4099 (64.7%) were not observed at all. Full observations improved with 2.8%, partial observations improved with 30.4%, and no observations at all reduced with 33.3%.

Admissions to the acute care unit in lowered to n=38 out of 804 in March 2019 (4.7%), and in May n=23 out of 981 (2.4%) giving a total n=61 of 1785 (average 3.4%), which is a reduction from 7.8%. Monitoring therefor has been improved, leading to less re-admissions of neonates.

Conclusion
It is important to plan the flow of patients according to acuity. Availability of equipment is critical in postnatal and neonatal patient, but knowledgeable staff is even more important. Stakeholders involvement, interprofessional collaboration and a shared vision play a significant role in sustainability of a project. The Kouzes and Posner’s Leadership Model provides valuable guidance for a project.

Implications / Take away message
• An interprofessional approach enhances continuous quality improvement of postnatal care.
• There is need to plan for staff rotation to avoid transferring the trained staff to other wards.
• There is need to have regular orientation and training sessions for staff.

Questions I would like audience to respond to
• What is your approach to such a quality improvement project?
• How do you enhance interprofessional collaboration in postnatal care in your setting?

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