



Implementation of a triage system to reduce wait time and prioritise care for high-risk obstetric patients in a regional hospital in Accra, Ghana

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Abstract

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Background In Ghana, childbirth facilities operate a first-come, first-serve system, leading to delays for women who present with dangerous conditions such as haemorrhage and pre-eclampsia. At Ridge Regional Hospital in Accra, more than 70% of women are referred from more than 100 surrounding facilities, but frequently have long wait times before assessment. A triage process would allow important prioritisation of at-risk patients. We designed and implemented an obstetric triage system and aimed to measure the effect of this programme on wait times for all obstetric patients presenting for care at Ridge Regional Hospital in Accra, Ghana.

Methods We collected baseline data on referral patterns and timeliness of care and recorded patient demographics, workflow patterns, care practices, and compliance with local guidelines. We developed a 2-day triage training programme for midwives to provide staff with a structured approach for clinical assessment, risk recognition, decision making, and communication, using a joint problem-solving approach. Hospital midwives were selected to be clinical champions and role models and to monitor the implementation of locally generated ideas for quality improvement. A system of coloured wrist bands (red, yellow, and green) was introduced to identify high-risk, medium-risk, and low-risk patients. We collected post-training data including audits of wristband use and accuracy to measure changes in the recognition of risk and timeliness of care.

Findings Baseline data were collected between Sept 6, 2011, and Nov 11, 2012. Between January, 2013, and September, 2014, 62 midwives completed triage training and we collected post-training triage data from Dec 12, 2014, to January 24, 2015. In 2014, compliance of use and correctness of wristbanding was independently audited and found to be 92% and 93%, respectively. A patient diagnosis and plan were recorded in 85% and 82% of 200 patient folders audited. Mean wait time for all patients from arrival until assessment decreased from 88 min (SD 155) to 63 mins (83; $p < 0.05$). Maximum wait time was reduced from 26 h, 30 mins, to 8 hours, 50 min.

Interpretation The triage training programme at Ridge Regional Hospital significantly reduced waiting time for all patients and improved categorisation of high risk patients. We plan to monitor the effect of programme-related improvements in infrastructure, such as a new triage pavilion, and also to assess wait times within each risk category. The programme will be implemented at four other regional hospitals in Ghana in 2016–17.

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Declaration of interests

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