

Integrated Mentorship and Quality Improvement: A Provider-centered Approach to Improve Antenatal Care Delivery at Health Centers in Rural Rwanda

Authors: Anatole Manzi, Hema Magge, Hari S. Iyer, Aphrodis Ndayisaba, Fulgence Nkikabahizi, Evariste Bigirimana, Jean Nepo Uwiringiyemungu, Leoncie Mukanzabikeshimana, Joia Mukherjee, Lisa R Hirschhorn, Bethany Hedt-Gauthier

Background:

Inadequate access to quality antenatal care (ANC) can delay referral to emergency obstetrical care (EmOC), contributing to maternal mortality. In 2011, Partners In Health in collaboration with the Rwandan Ministry of Health implemented an integrated Mentorship and Enhanced Supervision at Health centers (HCs) and Quality Improvement (MESH-QI) program to strengthen providers' performance and the quality of ANC. We evaluated the impact of MESH-QI on the quality of ANC assessment at 21 HCs in rural Rwanda.

Methods:

ANC quality was measured by standardized clinical observation checklists. At each HC, baseline measurements were completed from October 2010 to May 2011 (n=330), with follow-up measures completed from February 2012 until November 2012 (n=228), 12-15 months after MESH-QI implementation. Assessments of seven danger signs (headache, blurry vision, facial swelling, convulsions, bleeding, loss of fluid, painful contractions) and history taking during the ANC visit was compared before and after MESH-QI using Chi-squared test. Unpaired t-test was used to compare the percent of danger signs assessed, stratified by nurse EmOC training status at baseline and follow-up.

Results:

Assessment of each danger sign during ANC improved (17.3%-55.8% at baseline to 90.3% to 99.3% after MESH-QI, $p < 0.001$ for all). Similar improvements were found in screening of history of risk factors. Following the MESH-QI intervention, there was no significant difference in the percent of danger signs assessed between EmOC-trained and non-EmOC-trained nurses.

Conclusion

Assessment of critical pregnancy danger signs improved under MESH-QI in rural Rwanda even if nurses had not been trained in EmOC. This approach of combining provider-centered mentoring with QI projects targeting systems improvement has also been effective in other clinical areas in Rwanda (pediatric, HIV care). MESH-QI offers an approach to enhance quality of care after traditional training and may also help newer providers who have not yet attended content-focused courses.