

ETHIOPIA MATERNAL DEATH SURVEILLANCE AND RESPONSE REVIEW

RECOMMENDATIONS ON APPROPRIATE CLINICAL USE OF BLOOD AND BLOOD PRODUCTS

This policy brief is the outcome of national review of MDSR data analysis findings from January 2014 to December 2015 covering 539 maternal deaths. Key findings are presented and relevant recommendations on appropriate clinical use of blood indicated.



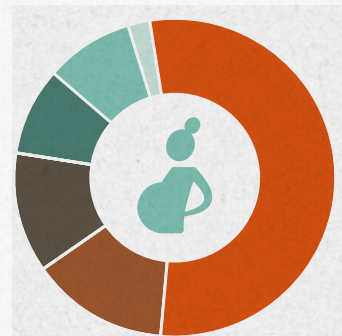
The appropriate clinical use of blood and blood products (ACUB) refers to transfusion of safe blood products to treat conditions likely to lead to significant morbidity or mortality that cannot be prevented or managed effectively by other means. Obstetric hemorrhage remains a major cause of maternal mortality in Ethiopia and appropriate clinical use of blood and blood products is essential to save mothers.



KEY FINDINGS

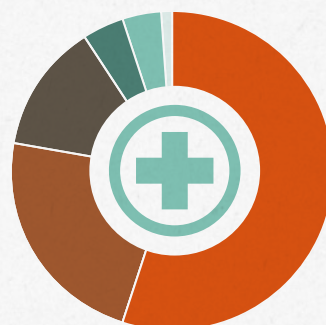
- ✓ Overall, hemorrhage is the major cause of death, causing 48% of all maternal deaths
- ✓ Hemorrhage is the leading direct cause of maternal deaths (54%)
- ✓ Anemia is the leading indirect cause of maternal death (55%)
- ✓ The majority (77%) of obstetric hemorrhage occurred in the postpartum period
- ✓ Overall, 6.1% of reported deaths recorded lack of equipment or supplies as a contributing factor, and among these, just under half (45%) were specifically due to blood shortages
- ✓ 82% of the maternal deaths were deemed preventable

DIRECT CAUSE OF MATERNAL DEATH



- 54% HEMORRHAGE
- 14% OTHER DIRECT
- 12% HDP
- 9% OBSTRUCTED LABOUR
- 9% SEPSIS
- 2% ABORTION

INDIRECT CAUSES OF MATERNAL DEATH



- 55% ANEMIA
- 23% UNSPECIFIED OTHER
- 13% INFECTIONS (HIV, TB, AFI AND MALARIA)
- 4% NCD (ARF, DM, NEUROPSYCHIATRIC, ASTHMA)
- 4% CARDIAC
- 1% INDIRECT HEMORRHAGE

EVIDENCE SHOWS THAT

- ✓ 90% of hospitals have blood transfusion services. However, hospitals are not evenly distributed to satisfy need (NBB)
- ✓ There are only 5000 regular voluntary non remunerated blood donors while the need is 15,000 (NBB)
- ✓ The proportion of health facilities accessing safe blood and blood products from the NBTS and its network is only 52% (HSTP)
- ✓ Inappropriate clinical use of blood is common in the face of limited availability (SS reports NBB)
- ✓ Currently, only 15% of required blood is being collected (134,000 units out of 900,000 units) (ARM 2007)
- ✓ The training package for in-service BEmONC and CEmONC trainings doesn't adequately address appropriate clinical use of blood and blood products

POLICY RECOMMENDATIONS

- 1. All health facilities delivering comprehensive emergency obstetric care (CEmONC) should have reliable access to safe blood products 24 hours a day, 7 days a week.**
- 2. All CEmONC facilities should establish a mini blood bank equipped as per the minimum standards of the NBB functioning 24 hours a day, 7 days a week.**
- 3. All CEmONC facilities should assign a focal person for the mini blood banks who has a qualification in laboratory technology and is responsible for the blood bank.**
- 4. Strengthening the capacity of blood bank agency in blood collection, storage, cold chain transport, quality blood and blood component production and utilization is of paramount importance in averting maternal deaths.**
- 5. All CEmONC facilities should be in a position to practice appropriate clinical use of blood; appropriate training on use of blood and blood products should be emphasized in pre-service and CME trainings, including in-service BEmONC and CEmONC.**
- 6. Equal focus should be given to prevention of obstetric hemorrhage and clinical management practices to stop bleeding besides improving the availability of blood.**
- 7. Monitoring and reporting of hemovigilance issues through HMIS needs to be strengthened to generate reliable evidence on blood safety.**
- 8. Awareness raising on blood donation and mobilization through existing community structures and forums (Health Development Army) should be increased.**