

Decentralising blood services: lessons from Kwale County

Situation analysis of blood in Kenya

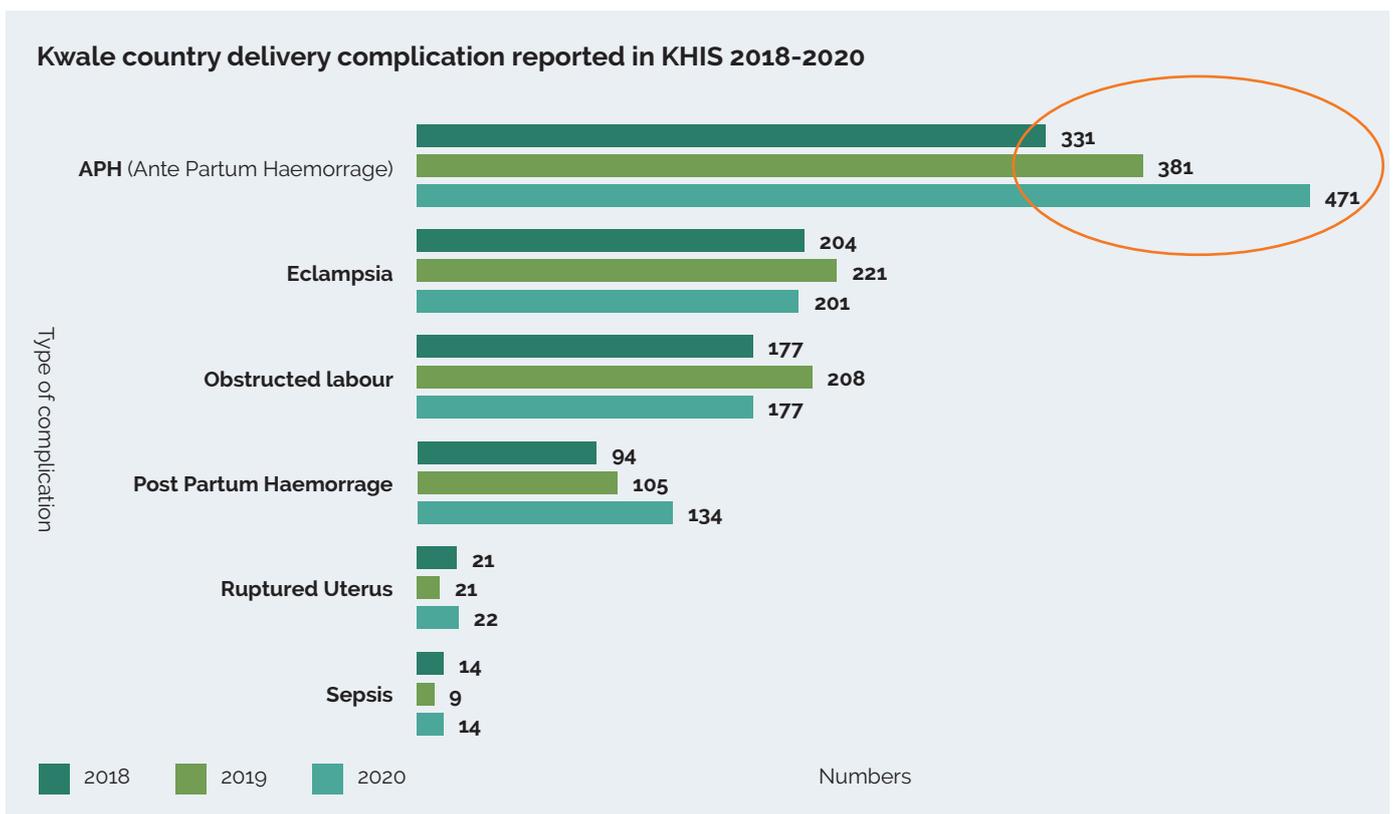
The Kenya National Blood Transfusion Services (KNBTS) manages Kenya's blood services as a national function with over 27 donation centres across the counties comprising Regional Blood Transfusion Centers and Blood Satellite and Blood Donation Centers. KNBTS collects an annual average of 164,275 pints representing about 33% of the targeted 500,000 pints. This causes an enormous shortage in the blood resulting in avoidable mortalities such as maternal mortality.

Kenya's maternal mortality ratio remains significantly high at 362/100,000 live births¹. A third of all maternal deaths are due to bleeding², and half of the maternal deaths recorded in 2020 were caused by obstetric hemorrhage, including post-partum bleeding. Obstetric hemorrhage is a largely preventable and manageable condition if action is taken in time to identify risks and access quality health care, including safe blood transfusion services.

Kwale County Satellite

Before 2019 Kwale County depended on Blood supply from the Regional Blood Transfusion Centre in Mombasa. This was challenging due to distance and decreased resourcing to KNBTS, causing delays in blood supply to the County. Through the Corporate Social Responsibility Project, the County Government of Kwale and Base Titanium co-funded the building and equipping of the Satellite Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). However, in the 11 months since the satellite was completed, the Satellite was functioning as a blood donation Centre as blood had to be transported for Screening in Mombasa RBTC or Nairobi and would take upto one week to receive results. No screening of blood was done with all the equipment available due to a lack of technical capacity.

Figure 1: Leading maternal complication in Kwale county following maternal death reviews.

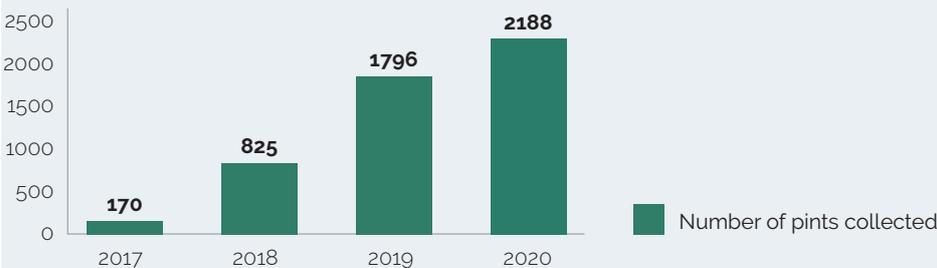


Options' MANI-QC project support to blood satellite

The project supports the County in increasing the monthly blood collection through blood drives, strengthening facility hospital transfusion committees, holding quarterly hemovigilance stakeholder meetings, and providing technical support to counties to prioritize expanding existing blood cold chain and satellite capacity to be able to screen blood. Specifically, to start up screening in Kwale Sattelite, the project provided technical and financial support on the following:

- Capacity building of 4 satellite workers on blood screening in collaboration with KNBT Regional Blood Bank through two weeks' s training on Blood screening and preparation of blood products such as red blood cells, plasma & platelets.
- Building capacity of 35 clinicians on the use of blood and blood products to promote efficiency.
- Initial procurement of two screening kits – that can screen up to 960 pints of blood.
- Networking of the Sattelite for online reporting to the KNBTS portal.

Table 1: Progress summary

| Variables | Achievements | | | | | | | | | | |
|---|--|------|---------------------------|------|-----|------|-----|------|------|------|------|
|  Screening | Reduction to timeline of Screening from over 3 days to 3 hours leading to improved blood availability | | | | | | | | | | |
|  Donation | <p>Progress of blood donation and pints collected over time</p>  <table border="1"> <caption>Number of pints collected</caption> <thead> <tr> <th>Year</th> <th>Number of pints collected</th> </tr> </thead> <tbody> <tr> <td>2017</td> <td>170</td> </tr> <tr> <td>2018</td> <td>825</td> </tr> <tr> <td>2019</td> <td>1796</td> </tr> <tr> <td>2020</td> <td>2188</td> </tr> </tbody> </table> | Year | Number of pints collected | 2017 | 170 | 2018 | 825 | 2019 | 1796 | 2020 | 2188 |
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|  Transfusion capacity | Increased the number of blood transfusing facilities from 2 to 9 in the last 2 years | | | | | | | | | | |
|  Financing | <p>County prioritizing the blood satellite investment the annual workplan in 2021/2022 up to Ksh.75,000,000 to cover the following costs.</p> <ul style="list-style-type: none"> - Strategic planning and framework development. - Human resources costs - Funding monthly blood drives in community and schools - Blood storage cold chain expansion - Commodities – screening kits and consumables - Health workers CME' on blood transfusion and hemovigilance. - Procurement of blood distribution vehicle | | | | | | | | | | |

Progress to date

To date through collaboration with the county tremendous progress has been made, with Kwale Sattelite being among the first two sites to screen blood in addition to Kakamenga county. The table below summarises the progress.

Critical actions to increase blood availability in Kenya:

- Advocacy for counties to invest and manage the blood satellites sustainably.
- There is a need to devolve blood screening function to counties; this will require policy and guideline reviews.
- Improve blood donor recruitment, management, and support system.
- Prioritizing capacity building needs for healthcare workers to use blood and blood products to promote rational use of available blood.

References

¹ Kenya Demographic and Health Survey (KDHS) 2014

² Confidential Enquiry to Maternal Deaths (CEMD) Report 2019

About Options

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