Tranexamic Acid for Post partum Haemorrhage: Current state of Implementation in Nigeria

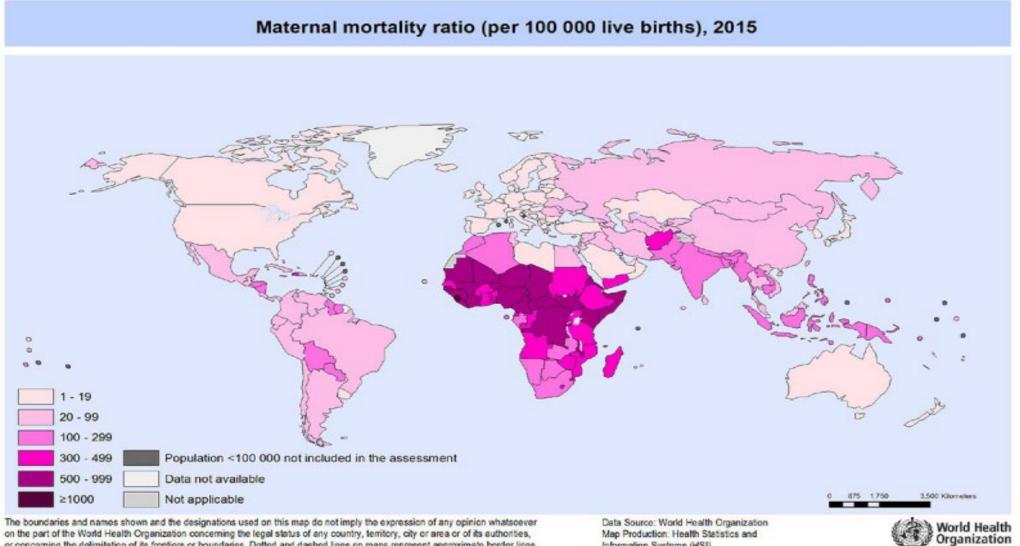
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Post Partum Hemorrhage in Nigeria

- Nigeria has one of the highest Maternal Mortality ratio in the world
- Post partum Haemorrhage is one of the leading causes of death among women in Nigeria
- PPH accounts for 20-25% of all maternal deaths in Nigeria



on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Map Production: Health Statistics and Information Systems (HSI) World Health Organization Source - WHO Trends in Maternal Mortality 1990 to 2015

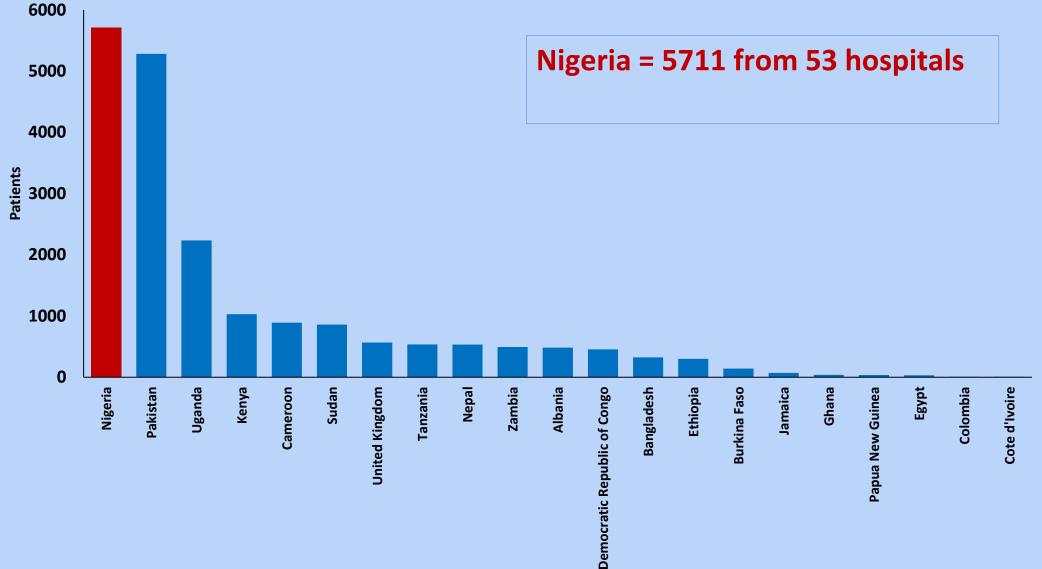
WOMAN trial: Conceived in Nigeria



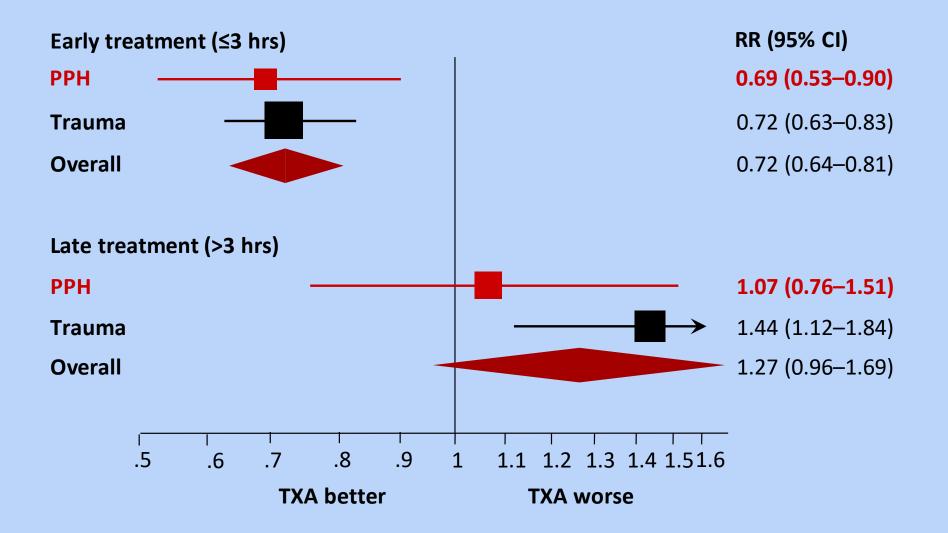
2010 – start of WOMAN trial in Nigeria



Nigeria trial leaders



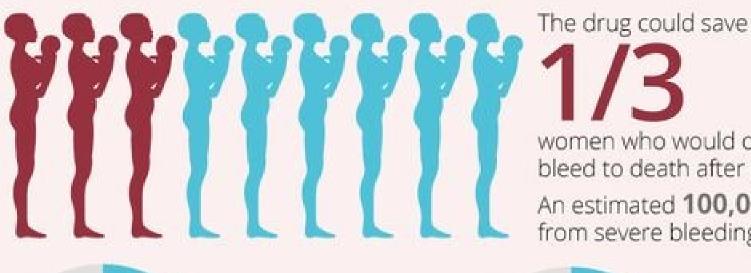
Death due to bleeding in trauma and PPH



TRANEXAMIC ACID

A drug that stops bleeding

Results from the WOMAN trial





20,000 WOMEN **21** COUNTRIES **193** HOSPITALS

women who would otherwise bleed to death after childbirth

An estimated 100,000 women die from severe bleeding after giving birth every year



The drug reduced the number of women bleeding to death after childbirth by more than 30%



The drug reduced the need for urgent surgery to control bleeding by more than 35%



acid in most countries

Source: The WOMAN trial (2017) Credit: Rebeccah Robinson/LSHTM Find out more at womantrial.lshtm.ac.uk

Implementation

- Principal Investigators Pledge
- Globally WHO guideline
- Meeting with the Minister of health
- Presentation at Scientific Conferences in Nigeria
- SOGON Guideline on Management of PPH
- New Research involving centers in Nigeria

YOUR WORK TO FORGET IS A CRIME TO BE LAZY IS A GREATER OF TO NEGLECT WORK AND OFF EXCUSE IS THE GREATEST C ACTION WITHOUT DELAY IS SECRET OF EFFICIENCY





Principal Investigators Pledge

- After WOMAN trial dissemination meeting
- Champions of use for TXA in their Hospitals and States
- Ensure that TXA is on the Hospital Drug list
- Inform other health workers about its effectiveness and use

Collaboration



Tranexamic acid for PPH



Cochrane Database of Systematic Reviews

Antifibrinolytic drugs for treating primary postpartum haemorrhage (Review)

Shakur H, Beaumont D, Pavord S, Gayet-Ageron A, Ker K, Mousa HA



World Health Organization World Health Organization Model List of Essential Medicines

> 21st List 2019

Tranexamic acidInject(for treatingmg/mpostpartumampohaemorrhage)

Injection: 100 mg/mL in 10-mL ampoule

Global Guidelines adopted

- WHO guideline on use of TXA adopted in Nigeria
- Basis for guidelines within Nigeria
- Use of TXA was included in both the pre-service and in-service curricula of all cadres of health workers
- All Chief Medical Directors urged to procure TXA as an emergency drug for widespread use, in a letter from the Honourable Minister of Health in 2017

Meetings with the Honorable Ministers of Health



- Meeting with Prof I F Adewole and with his successor, Dr Osagie Ehanire
- These meetings were important in getting Tranexamic acid on the list of essential drug list

Presentations at Conferences in Nigeria

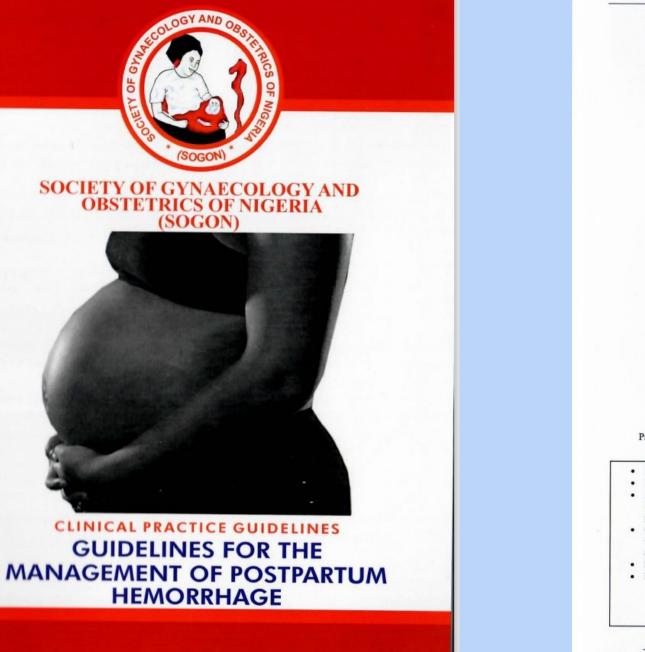
- Presentations at 2017 and 2018 SOGON conferences
- More Recently at AFEMSON conference last year
- Audience included policy makers and health professionals in reproductive health

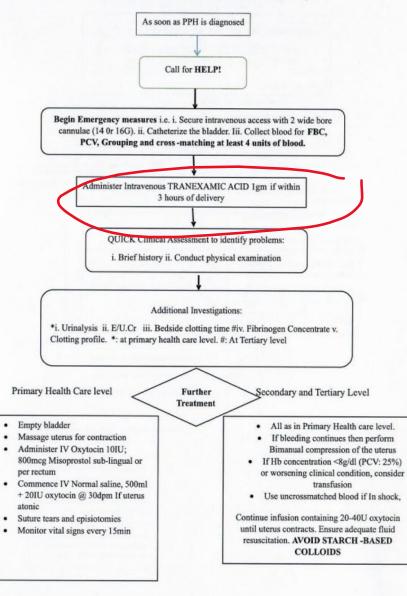
Tranexamic acid for postpartum haemorrhage: too simple to be of interest?



GUIDELINES FOR THE MANAGEMENT OF POSTPARTUM HEMORRHAGE

ALGORITHM OF MANAGEMENT OF POST-PARTUM HAEMORRHAGE (PPH)





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Cost efficiency analysis

Tranexamic acid for treatment of women with post-partum haemorrhage in Nigeria and Pakistan: a cost-effectiveness analysis of data from the WOMAN trial



Bernadette Li, Alec Miners, Haleema Shakur, Ian Roberts, on behalf of the WOMAN Trial Collaborators

Summary

Background Sub-Saharan Africa and southern Asia account for almost 85% of global maternal deaths from post-partum haemorrhage. Early administration of tranexamic acid, within 3 h of giving birth, was shown to reduce the risk of death due to bleeding in women with post-partum haemorrhage in the World Maternal Antifibrinolytic (WOMAN) trial. We aimed to assess the cost-effectiveness of early administration of tranexamic acid for treatment of post-partum haemorrhage.

Methods For this economic evaluation we developed a decision model to assess the cost-effectiveness of the addition of tranexamic acid to usual care for treatment of women with post-partum haemorrhage in Nigeria and Pakistan. We used data from the WOMAN trial to inform model parameters, supplemented by estimates from the literature. We estimated costs (calculated in 2016 US\$), life-years, and quality-adjusted life-years (QALYs) with and without tranexamic acid, calculated incremental cost-effectiveness ratios (ICERs), and compared these to threshold values in each country. Costs were assessed from the health-care provider perspective and discounted at 3% per year in the base case analysis. We did a series of one-way sensitivity analyses and probabilistic sensitivity analysis to assess the robustness of the results to parameter uncertainty.

Findings Early treatment of post-partum haemorrhage with tranexamic acid generated an average gain of 0.18 QALYs at an additional cost of \$37.12 per patient in Nigeria and an average gain of 0.08 QALYs at an additional cost of \$6.55 per patient in Pakistan. The base case ICER results were \$208 per QALY in Nigeria and \$83 per QALY in Pakistan. These ICERs were below the lower bound of the cost-effectiveness threshold range in both countries. The ICERs were most sensitive to uncertainty in parameter inputs for the relative risk of death due to bleeding with tranexamic acid, the discount rate, the cost of the drug, and the baseline probability of death due to bleeding.

Interpretation Early treatment of post-partum haemorrhage with tranexamic acid is highly cost-effective in Nigeria and Pakistan, and is likely to be cost-effective in countries in sub-Saharan Africa and southern Asia with a similar baseline risk of death due to bleeding.

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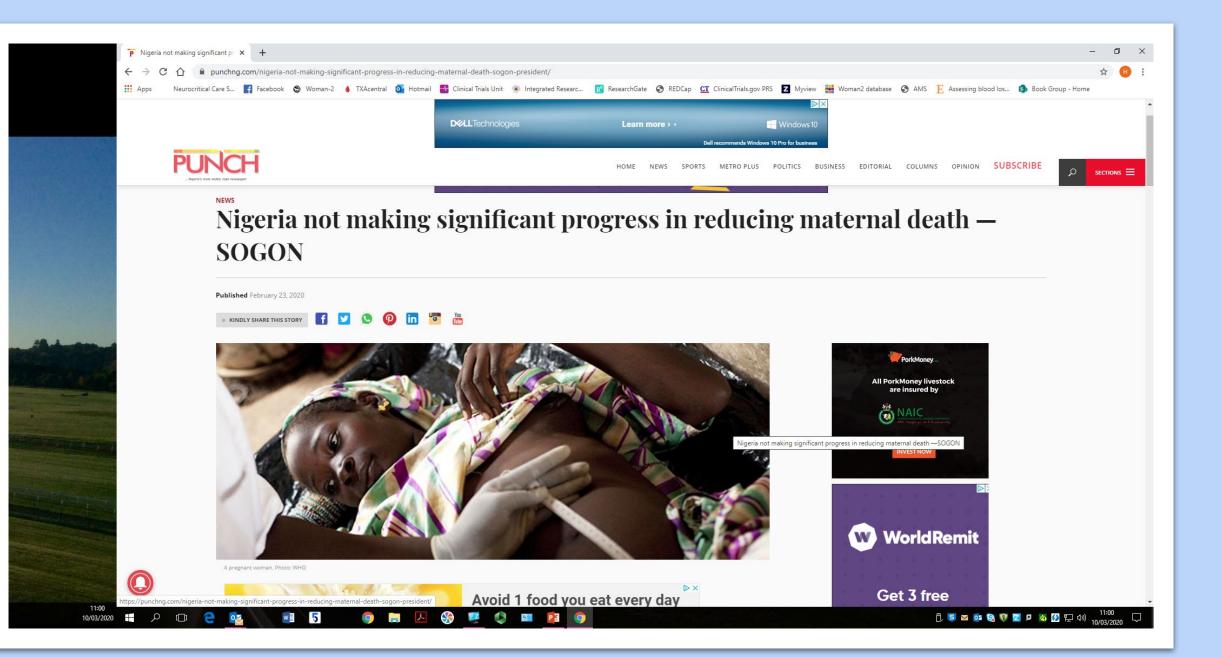


Lancet Glob Health 2018; 6: e222–28

See Comment page e132

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Barriers to Implementation in Nigeria

- National issues
 - Availability and Cost of Tranexamic Acid
- Health care Workers
- Institutional Barriers

TXA – generic, widely available



Barriers to the Use of Tranexamic Acid: Health Care Workers

- Awareness and Training in the management of TXA in the management of PPH
- Do the health workers consider the addition of tranexamic acid a burden?
- Can the health care workers be motivated or incentives provided to use tranexamic acid?

Barriers to the Use of Tranexamic Acid: Institutional

- Are the institutions prioritizing the use of TXA for PPH?
- Are there Institutional Policies to make TXA available?
- Are the heads of Institutions aware of the evidence for use of TXA in managing PPH?
- Do the heads of institutions consider the additional cost of introducing TXA into the system cost effective?

Additional Research in Nigeria

- E-MOTIVE trial includes the formative aspect which will provide information to barriers
- Has identified that most women do not get uterotonics and tranexamic acid
- WOMAN2 trial ongoing to provide evidence for prophylactic use of Tranexamic acid
- Trials needed to provide evidence for intramuscular use of TXA
- Will allow health worker at all levels to be able to administer TXA

THANK YOU