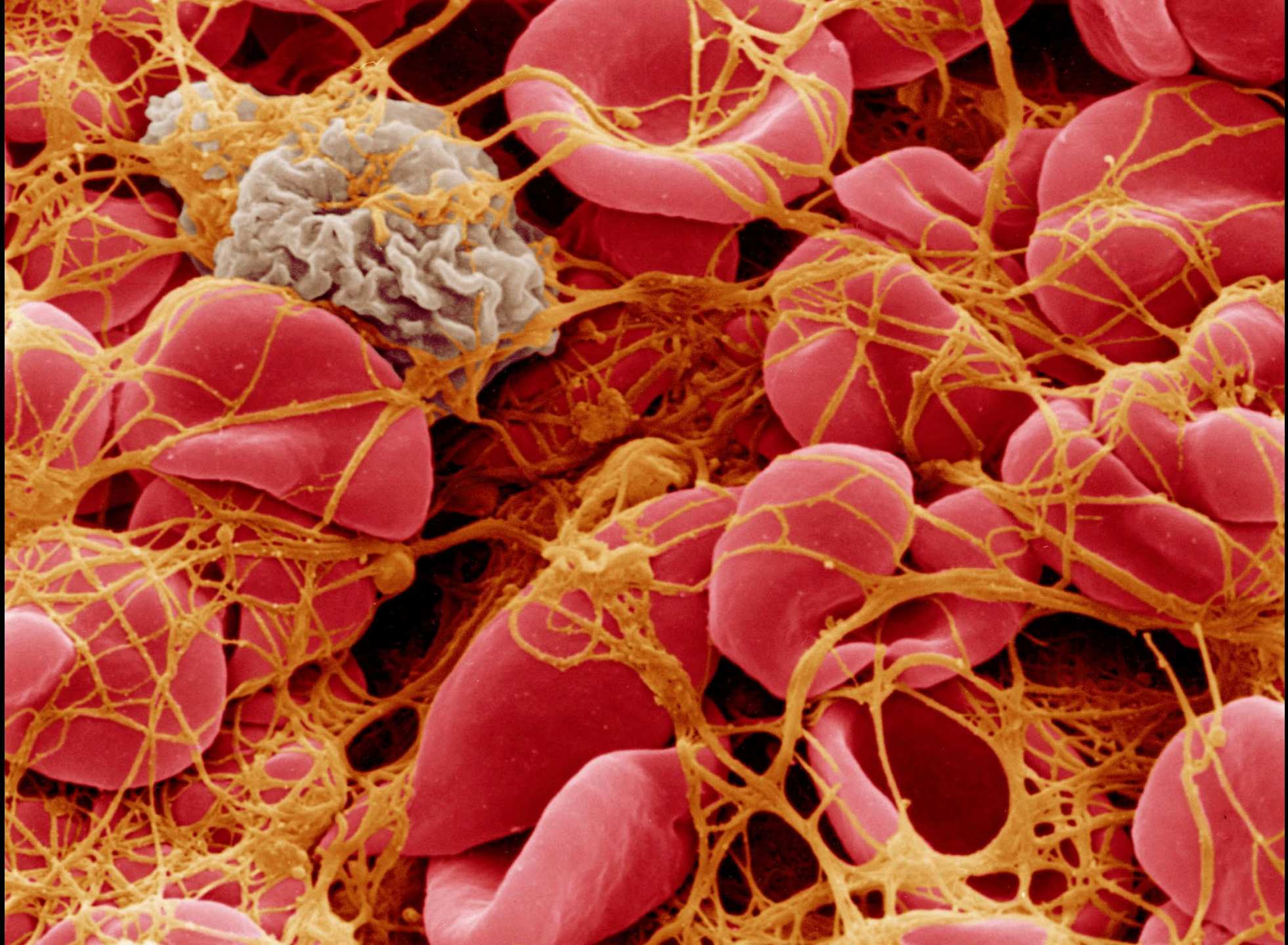


# **Tranexamic acid – much more than a treatment for PPH**

**Postpartum Hemorrhage Community of Practice Annual Meeting**

**Dr Ian Roberts**

**Professor of Epidemiology and Public Health  
Honorary Consultant, Royal London Hospital**





Tranexamic acid reduces PPH deaths (the only proven treatment)

Effective regardless of the cause of PPH (unlike oxytocin)

Heat stable (unlike oxytocin) and inexpensive

Reduces the need for re-operation to control bleeding

No increase in adverse events

**TXA reduces surgical bleeding**

**TXA cuts major surgical bleeding by 25%**

**TXA reduces blood transfusion by a third**

**Whatever the site of bleeding**

**No increase in thrombotic adverse events**

ORIGINAL ARTICLE

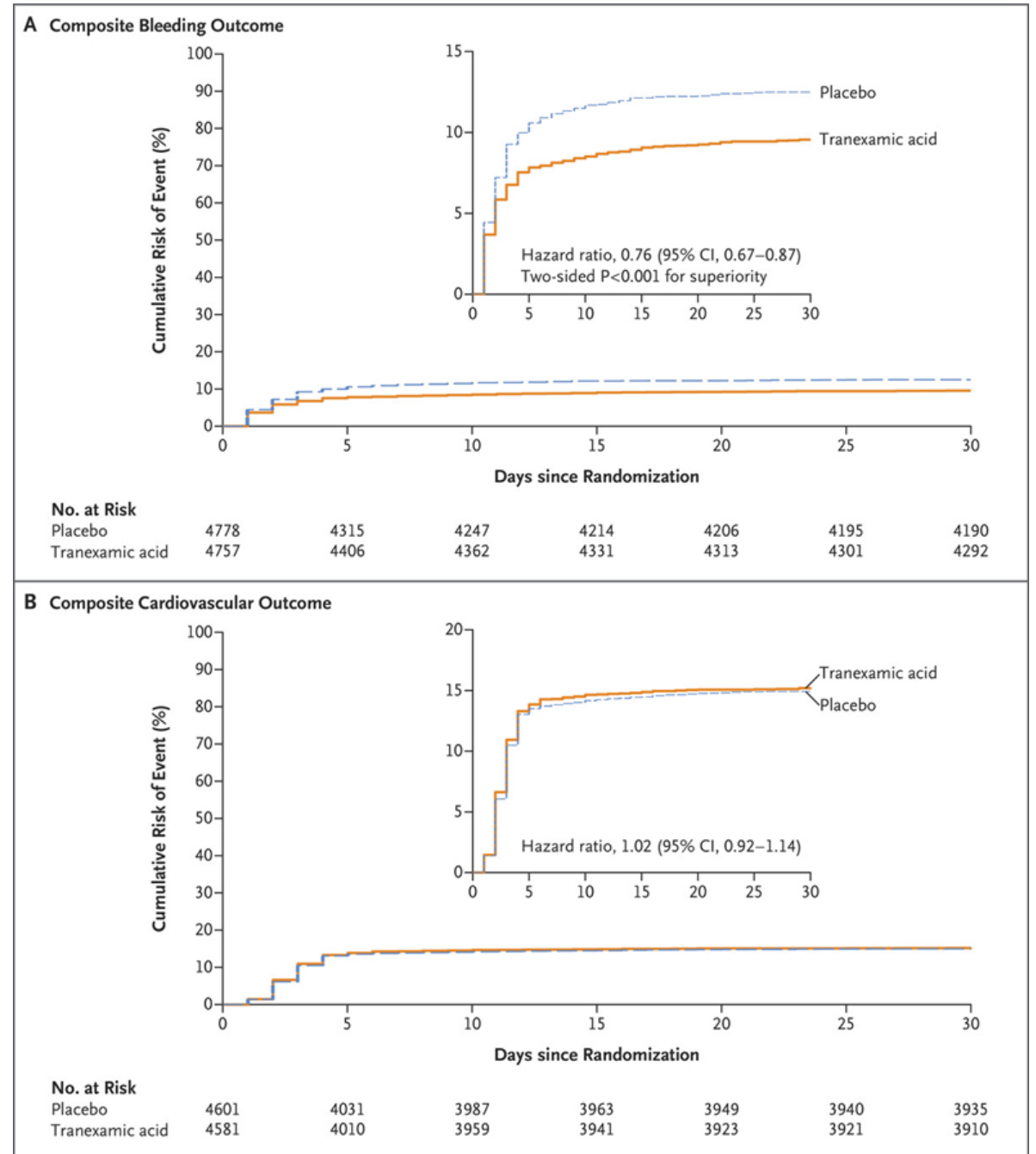
# Tranexamic Acid in Patients Undergoing Noncardiac Surgery

P.J. Devereaux, M. Marcucci, T.W. Painter, D. Conen, V. Lomivorotov, D.I. Sessler, M.T.V. Chan, F.K. Borges, M.J. Martínez-Zapata, C.-Y. Wang, D. Xavier, S.N. Ofori, M.K. Wang, S. Efremov, G. Landoni, Y.V. Kleinlugtenbelt, W. Szczeklik, D. Schmartz, A.X. Garg, T.G. Short, M. Wittmann, C.S. Meyhoff, M. Amir, D. Torres, A. Patel, E. Duceppe, K. Ruetzler, J.L. Parlow, V. Tandon, E. Fleischmann, C.A. Polanczyk, A. Lamy, S.V. Astrakov, M. Rao, W.K.K. Wu, K. Bhatt, M. de Nadal, V.V. Likhvantsev, P. Paniagua, H.J. Aguado, R.P. Whitlock, M.H. McGillion, M. Prystajecy, J. Vincent, J. Eikelboom, I. Copland, K. Balasubramanian, A. Turan, S.I. Bangdiwala, D. Stillo, P.L. Gross, T. Cafaro, P. Alfonsi, P.S. Roshanov, E.P. Belley-Côté, J. Spence, T. Richards, T. VanHelder, W. McIntyre, G. Guyatt, S. Yusuf, and K. Leslie, for the POISE-3 Investigators\*

Bad bleeding in 9% of the TXA group and 12% of placebo group (HR 0.76; 95% CI 0.67 to 0.87) P<0.001 superiority.

Cardiovascular event in 14% in the TXA group and 14% in the placebo group (hazard ratio, 1.02; 95% CI, 0.92 to 1.14).

Article published April 2, 2022, at NEJM.org.



# There is a shortage of blood in many low income countries



Research | [Open Access](#) | [Published: 17 February 2010](#)

## Giving tranexamic acid to reduce surgical bleeding in sub-Saharan Africa: an economic evaluation

[Carla Guerriero](#) , [John Cairns](#), [Sudha Jayaraman](#), [Ian Roberts](#), [Pablo Perel](#) & [Haleema Shakur](#)

[Cost Effectiveness and Resource Allocation](#) **8**, Article number: 1 (2010) | [Cite this article](#)

**8844** Accesses | **23** Citations | [Metrics](#)



**If TXA was used in surgery there would be more blood for treatment of PPH**

**If TXA was used in surgery there would be fewer women with HIV and hepatitis**

# Traumatic and surgical bleeding are similar





## TXA reduces death from traumatic bleeding

Bleeding deaths	TXA	Placebo	RR (95%CI)	P value
<1 hour	198 (5.3%)	286 (7.7%)	0.68 (0.57–0.82)	<0.001
1-3 hours	147 (4.8%)	184 (6.1%)	0.79 (0.64-0.97)	0.03

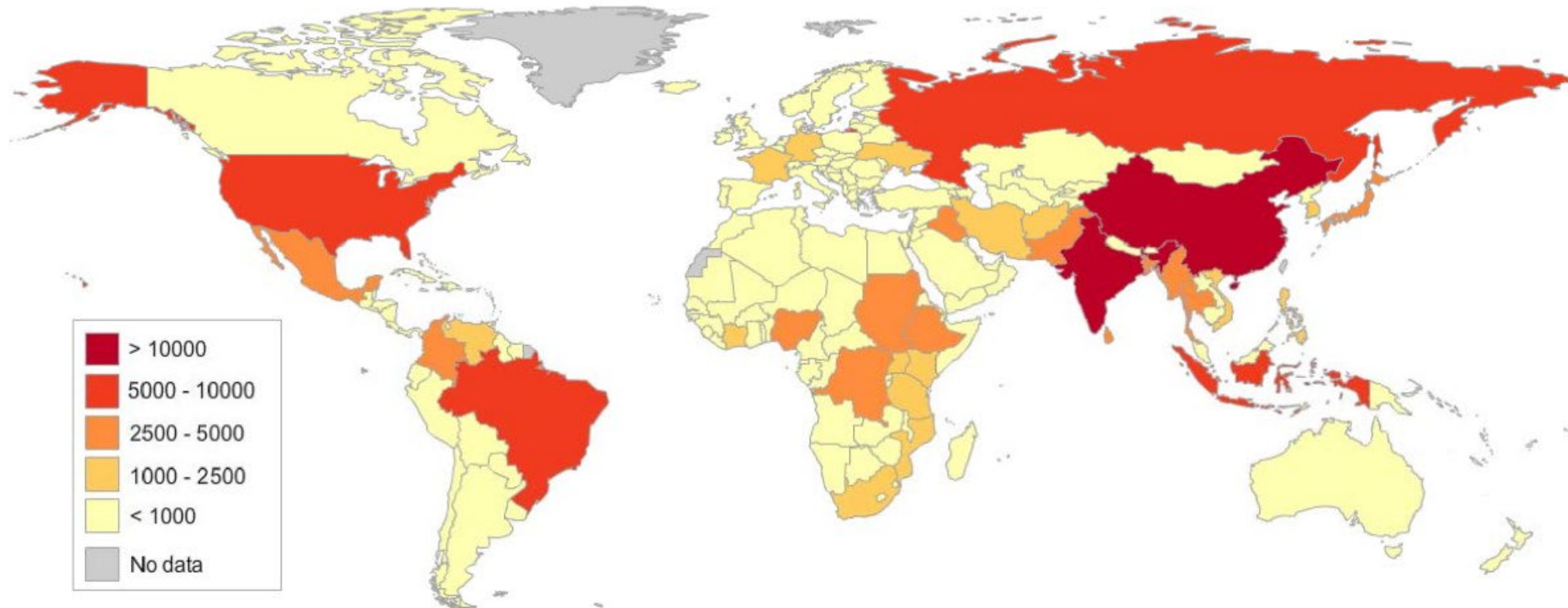
## Lives saved with TXA (every year)

Avoidable mortality from giving tranexamic acid to bleeding trauma patients: an estimation based on WHO mortality data, a systematic literature review and data from the CRASH-2 trial

**TXA < 1 hour = 128,000 lives**

**TXA < 3 hours = 112,000 lives**

Katharine Ker\*, Junko Kiriya, Pablo Perel, Phil Edwards, Haleema Shakur and Ian Roberts



# Pregnant women are also trauma victims

Original Research

## Homicide During Pregnancy and the Postpartum Period in the United States, 2018–2019

Maeve Wallace, PhD, Veronica Gillispie-Bell, MD, Kiara Cruz, MPH, Kelly Davis, MPA, and Dovile Vilda, PhD

**OBJECTIVE:** To estimate the national pregnancy-associated homicide mortality ratio, characterize pregnancy-associated homicide victims, and compare the risk of homicide in the perinatal period (pregnancy and up to 1 year postpartum) with risk among nonpregnant, nonpostpartum females aged 10–44 years.

**METHODS:** Data from the National Center for Health Statistics 2018 and 2019 mortality files were used to identify all female decedents aged 10–44 in the United States. These data were used to estimate 2-year pregnancy-associated homicide mortality ratios (deaths/100,000 live births) for comparison with homicide mortality among nonpregnant, nonpostpartum females (deaths/100,000 population) and to mortality ratios for direct maternal causes of death. We compared characteristics and estimated homicide mortality rate ratios and 95% CIs between pregnant or postpartum

and nonpregnant, nonpostpartum victims for the total population and with stratification by race and ethnicity and age.

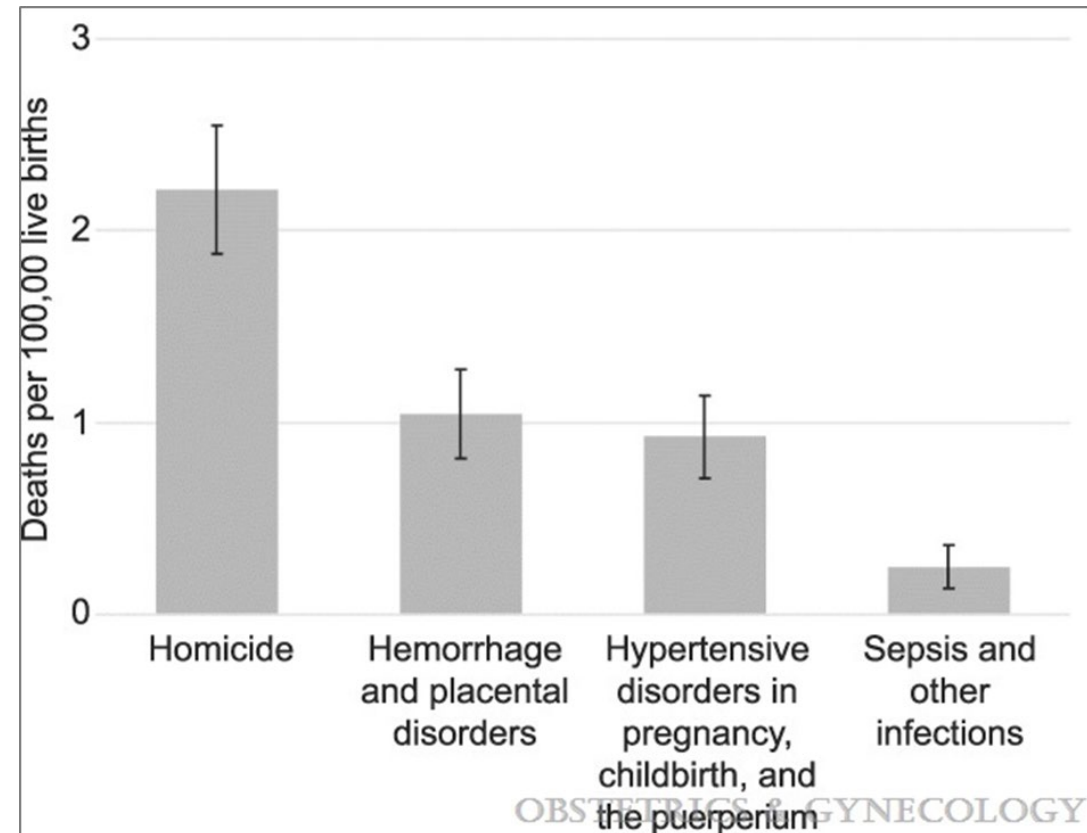
**RESULTS:** There were 3.62 homicides per 100,000 live births among females who were pregnant or within 1 year postpartum, 16% higher than homicide prevalence among nonpregnant and nonpostpartum females of reproductive age (3.12 deaths/100,000 population,  $P < .05$ ). Homicide during pregnancy or within 42 days of the end of pregnancy exceeded all the leading causes of maternal mortality by more than twofold. Pregnancy was associated with a significantly elevated homicide risk in the Black population and among girls and younger women (age 10–24 years) across racial and ethnic subgroups.

**CONCLUSION:** Homicide is a leading cause of death during pregnancy and the postpartum period in the United States. Pregnancy and the postpartum period are times of elevated risk for homicide among all females of reproductive age.

(*Obstet Gynecol* 2021;138:762–9)

DOI: 10.1097/AOG.0000000000004567

From the Mary Amelia Center for Women's Health Equity Research, Department of Social, Behavioral, and Population Science, Tulane University School of Public Health and Tropical Medicine, the Department of Obstetrics and Gynecology, Ochsner Baptist Medical Center, and the National Birth Equity Collaborative, New Orleans, Louisiana.




OBSTETRICS & GYNECOLOGY

# Tranexamic acid reduces heavy menstrual bleeding



CORRESPONDENCE | [VOLUME 397, ISSUE 10268, P26, JANUARY 02, 2021](#)

## Menstruation should not be overlooked in control of anaemia

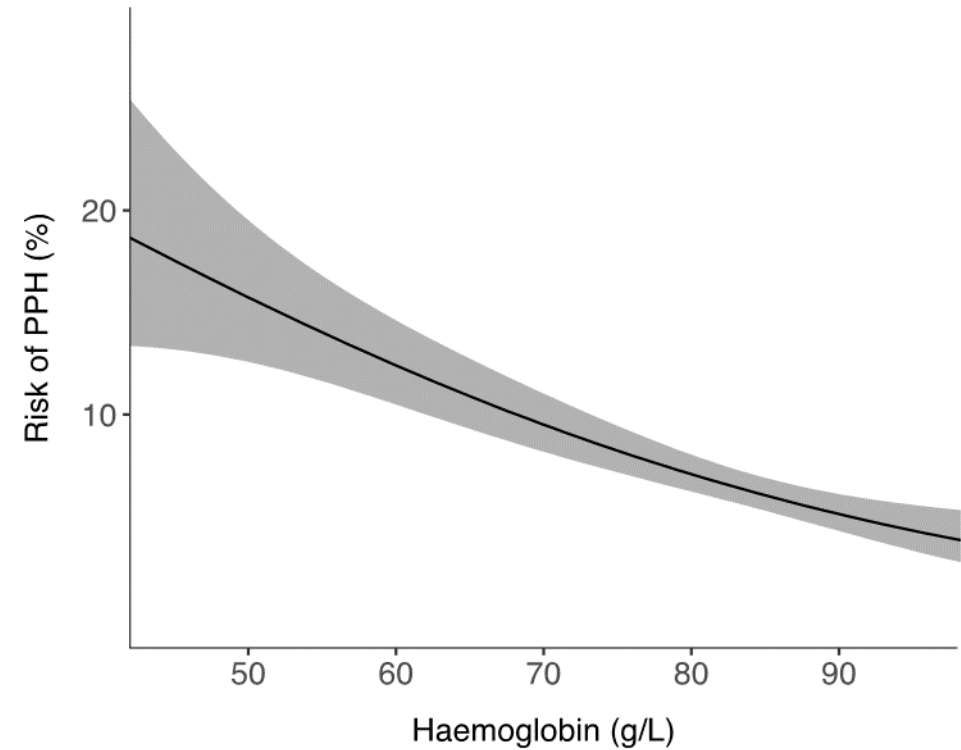
[Hilary O D Critchley](#) • [Malcolm G Munro](#) • [Haleema Shakur-Still](#) • [Ian Roberts](#) Published: January 02, 2021 • DOI: [https://doi.org/10.1016/S0140-6736\(20\)32718-5](https://doi.org/10.1016/S0140-6736(20)32718-5)

References

Article Info

The 2020 WHO report on global reduction efforts for anaemia in women of reproductive age<sup>1</sup> (15–49 years) shows clearly that without new approaches the global target of a 50% reduction in the percentage of women with anaemia by 2025 will not be met. In most countries, the prevalence of anaemia in women of reproductive age has increased and, even in countries where there has been some reduction, no country is on target for a 50% reduction by 2025. To date, global health efforts to reduce anaemia focus largely on nutrition. Menstrual bleeding is a major contributor to anaemia in women of reproductive age,<sup>2, 3</sup> but interventions to reduce menstrual blood loss are neglected and were overlooked by WHO.<sup>1</sup> Dietary intervention for anaemia involves daily iron and folate supplementation and compliance is limited by gastrointestinal side-effects. Women with anaemia and debilitating heavy menstrual bleeding might be more motivated to comply with effective treatments for heavy bleeding than with dietary interventions for anaemia.<sup>4</sup> The contribution of menstruation and heavy menstrual bleeding to iron deficiency and anaemia deserves wide recognition by people who menstruate, their families, employers, and society. Menstruation can no longer be a taboo topic.<sup>5</sup>

# Anaemic women bleed more



**Tranexamic acid is more than a treatment for PPH**

**Surgical use will increase the availability of blood**

**Trauma use will reduce maternal trauma deaths**

**It can help to prevent maternal anaemia**

**TXA is an essential medicine for many reasons**