How Far is Too Far:

What is the evidence for medication abortion among residents of very remote locations?

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Disclosures

Kristina Gemzell Danielsson:

- I have been ad hoc advisory board member or invited to give presentations for Organon (MSD), Bayer, Exelgyn/Nordic, Gedeon Richter, Mithra, Exeltis, Ferring, Obseva, Natural Cycles, Azanta, Gynuity, Medincell,Cirqle, Addeira and HRA-Pharma

Wendy V. Norman:

- I hold a university-based faculty position and conduct research funded by government and non-profit foundations. I provide expert witness services for Canadian governments, am a member of the FIAPAC board, and a former member of the Board of the Society of Family Planning. I have no other conflict of interest to declare

John Reynolds-Wright:

- I have nothing to disclose

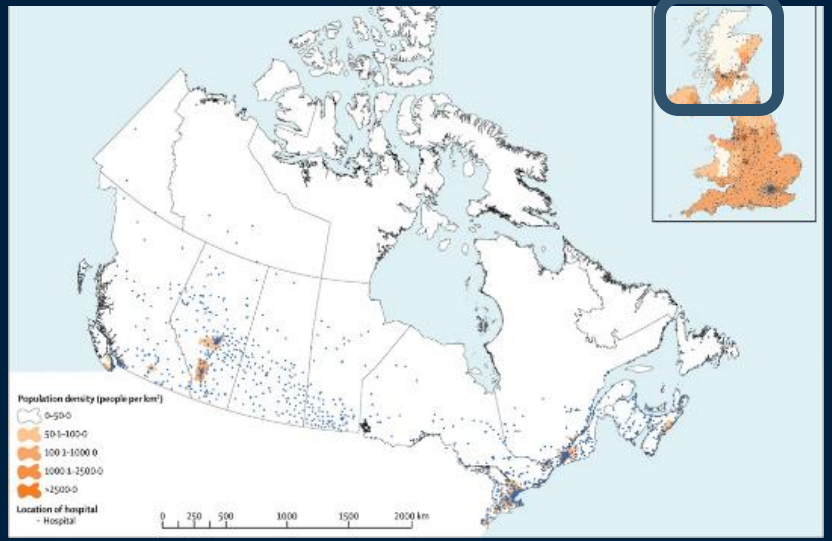
Danielle Mazza:

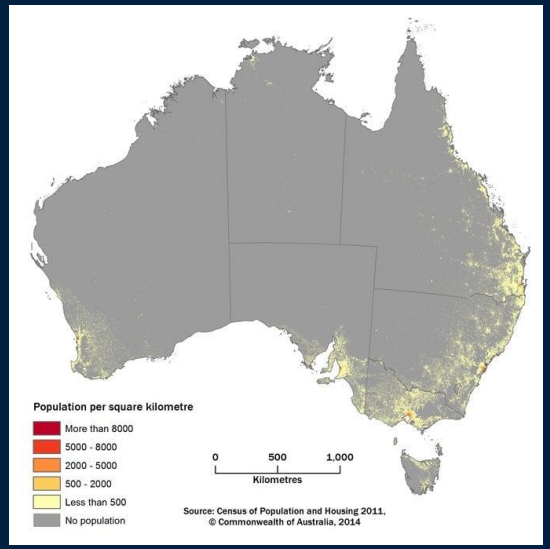
- I have nothing to disclose

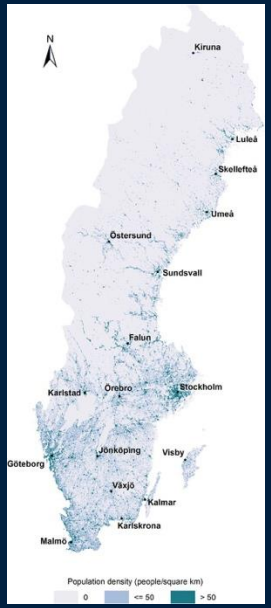
Introduction

Professor Gemzell-Danielsson

Canada Scotland Australia Sweden







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The Problem

Systematic Scoping review of Product Monographs and Clinical Guidelines

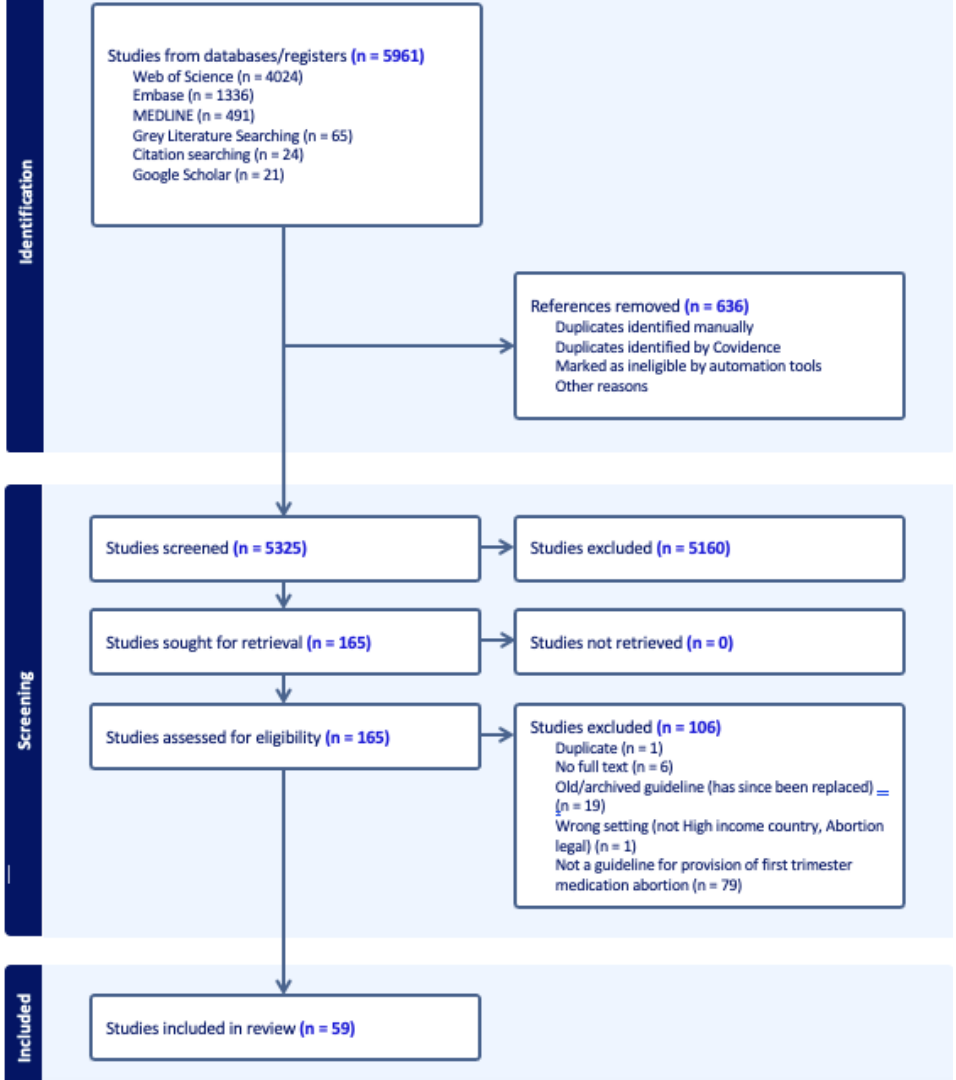
How Far is too Far

Maximum distance to care in current clinical practice guidelines for 1st trimester medication abortion: A Scoping Review

Methods

- Research Question: "How is the need for proximity to emergency services after mifepristone/misoprostol legal first trimester medication abortion in high income countries defined in clinical practice guidelines or drug regulations?"

- Followed Joanna Briggs Institute Scoping Review Guidelines to meet the PRISMA-ScR reporting guidelines.
- Protocol published: https://osf.io/bsxn2/
- Searches run 2023 April 5th: Medline, Embase, Web of Science, Google Scholar
- Hand Search: country specific clinical practice guidelines and drug monographs


Identification
Studies from databases/registers (n = 5961)
Web of Science (n = 4024)
Embase (n = 1336)
MEDLINE (n = 491)
Grey Literature Searching (n = 65)
Citation searching (n = 24)
Google Scholar (n = 21)
References removed (n = 636)
Duplicates identified manually
Duplicates identified by Covidence
Marked as ineligible by automation tools
Other reasons
Screening
Studies screened (n = 5325)
Studies excluded (n = 5160)
Studies sought for retrieval (n = 165)
Studies not retrieved (n = 0)
Studies assessed for eligibility (n = 165)
Studies excluded (n = 106)
Duplicate (n = 1)
No full text (n = 6)
Old/archived guideline (has since been replaced) (n = 19)
Wrong setting (not High income country, Abortion legal) (n = 1)
Not a guideline for provision of first trimester medication abortion (n = 79)
Included
Studies included in review (n = 59)

Results:

Among our final 59 guidelines (CPG) and product monographs (PM)

- Guidance for 29 countries and 5 international guidelines (FIGO, WHO, IPPF, ESHRE etc)
- Every country (either in the CPG or PM) except Lithuania mentioned need to access to emergency services
- **49 clinical practice guidelines specified** access to emergency services in time or distance
  - Distance to emergency services = 1-2 hours
  - 6 countries required hospitalization beginning at least from misoprostol administration until the passage of products of conception
  - Duration of access ranged from a few hours (most) to 2 weeks (Australia, Canada) to always (e.g., USA).
- We found a general emphasis on *the prescriber* to provide patient instructions for emergency management and/or that *the prescriber* must be capable of providing emergency services.

Limitations:

- Our study is limited to high resource settings where abortion is legal on demand

- Results may not reflect conditions where abortion is illegal or those for low resource settings

Implications:

Clinical practice guidelines and product monographs for 1st tri MA are inconsistent on the need to be close to emergency services, ranging from

- The USA (must always have access),
- Australia/Canada (access for 14 days)
- Most recommend a few hours or until passage of products of conception.

What do we know about the rates and risk factors leading to transfusion after MA?

Introduction

- Most reviews cite a transfusion incidence after first trimester MA of 1/1000, generally from the original mifepristone studies (600 mg dose)

- Modern protocols may have a differing risks

- Risk factors and timing of need for transfusion may not be known

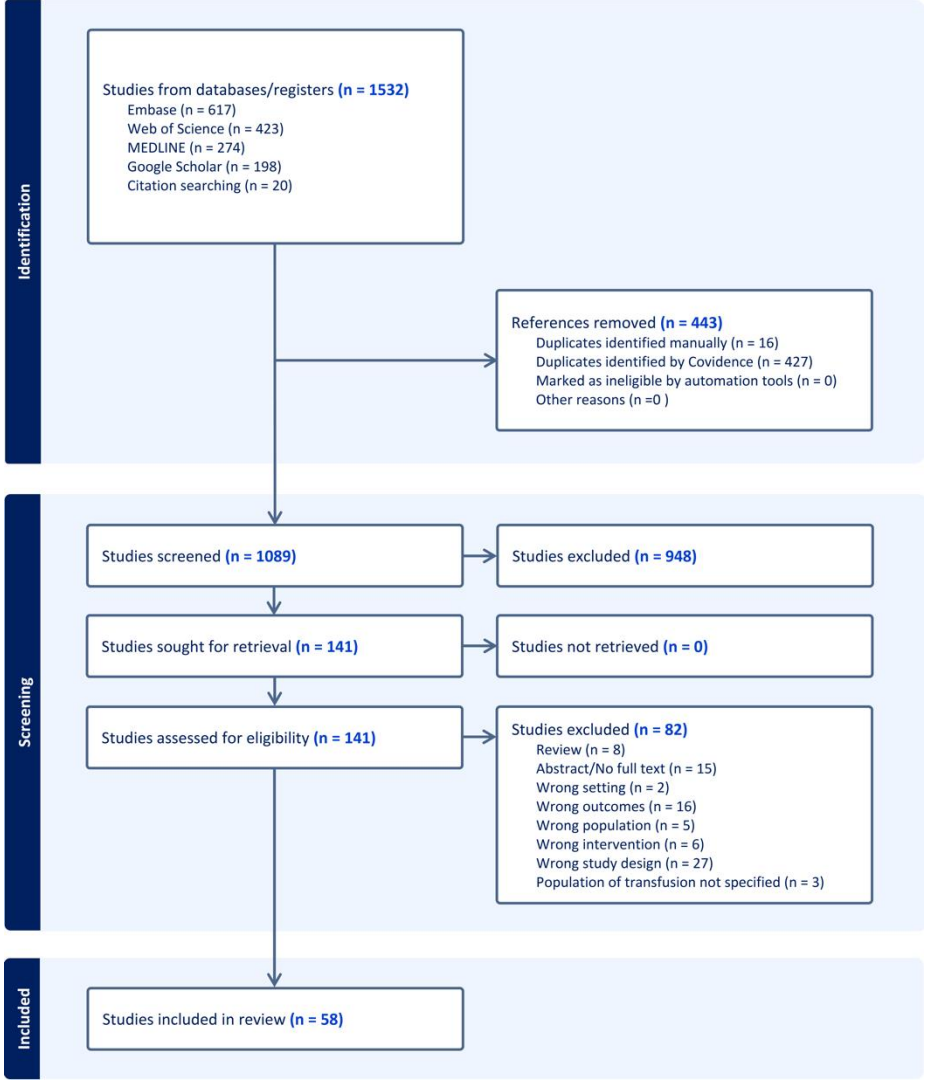
Objective

Evaluate the incidence and the evidence for risk factors related to blood transfusion following mifepristone/misoprostol induced legal first trimester MA in high income countries.

Methods

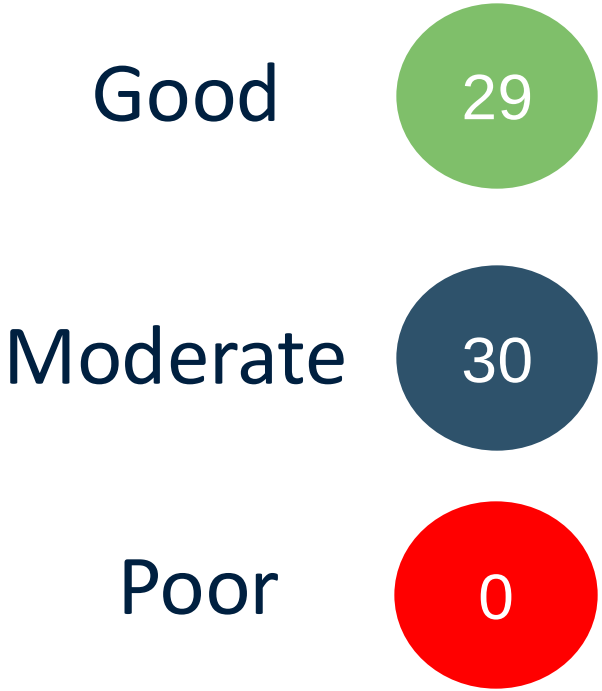
- Systematic review following PRISMA guidelines including any original clinical study reporting transfusion after legal first trimester MA in a high-income country
- All languages and of any year
- Review registered on PROSPERO: CRD42023434904
- Searches run 2023 April 7 and 2024 April 16
- Medline, Embase, Web of Science and Google Scholar
- 2 reviewers independently completed title/abstract and full text screening
- 2 reviewers completed quality assessment of included studies using the QUADS (QUality Assessment with Diverse Studies) tool

PRISMA


Identification
Studies from databases/registers (n = 1532)
Embase (n = 617)
Web of Science (n = 423)
MEDLINE (n = 274)
Google Scholar (n = 198)
Citation searching (n = 20)
References removed (n = 443)
Duplicates identified manually (n = 16)
Duplicates identified by Covidence (n = 427)
Marked as ineligible by automation tools (n = 0)
Other reasons (n =0)
Screening
Studies screened (n = 1089)
Studies excluded (n = 948)
Studies sought for retrieval (n = 141)
Studies not retrieved (n = 0)
Studies assessed for eligibility (n = 141)
Studies excluded (n = 82)
Review (n = 8)
Abstract/No full text (n = 15)
Wrong setting (n = 2)
Wrong outcomes (n = 16)
Wrong population (n = 5)
Wrong intervention (n = 6)
Wrong study design (n = 27)
Population of transfusion not specified (n = 3)
Included
Studies included in review (n = 58)

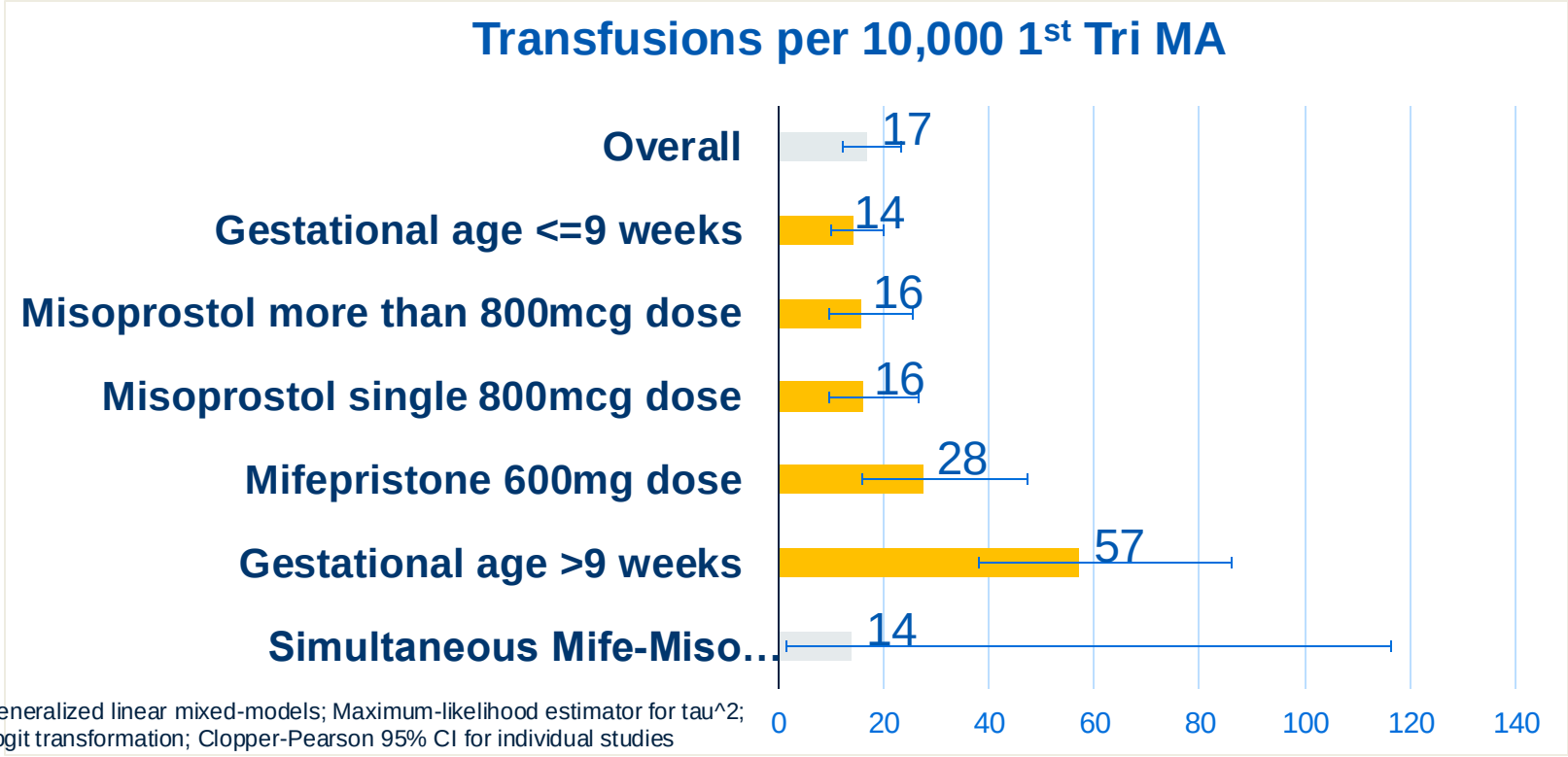
Results

Quality assessment found all final studies were of Good to Moderate quality.



Results

Final eligible papers included clinical data from 10 countries: Australia, Canada, Czech Republic, Finland, France, Iceland, Norway, Sweden, United Kingdom, United States.



Generalized linear mixed-models; Maximum-likelihood estimator for tau^2; Logit transformation; Clopper-Pearson 95% CI for individual studies

RESULTS

- **Risk Factors, or interim predictive clinical signs/symptoms before transfusion**
  - Insufficient data to characterize

- **Timing post MA of transfusions**
  - Insufficient data to characterize

- **URGENCY of post MA of transfusions**
  - Insufficient data to characterize

LIMITATIONS

- Included only studies with at least one transfusion
- Many studies had subgroups but did not specify which subgroup or characteristics were associated with the transfusion cases
- We excluded any studies that appeared to report on the same subjects as an included study
- Results may not reflect conditions where abortion is illegal or those for low resource settings.

IMPLICATIONS

- First trimester MA carries a very low risk of transfusion

- The lowest risk is among
  - ✓ gestations under 9 weeks and
  - ✓ protocols offering optional additional misoprostol

- Risk factors, urgency and timing for transfusion after first trimester MA are unknown

How can we define risks for people living in remote locations who wish to have their 1st tri MA while in their community?

How Far is too Far:

Creating an evidence base to support safe provision of medication abortion for people living far from emergency services

A four-country study

- Australia, Canada, Scotland, Sweden

MONASH University

UBC a place of mind

The University of Edinburgh

Karolinska Institutet

CIHR IRSC
Canadian Institutes of Health Research
Instituts de recherche en santé du Canada

British Columbia

Action Canada for Sexual Health & Rights

BC Women's Hospital+ Health Centre
An agency of the Provincial Health Services Authority

naf canada
National Abortion Federation
Fédération nationale de l'avortement

The Society of Obstetricians and Gynaecologists of Canada
La Société des obstétriciens et gynécologues du Canada

Northwest Territories Health and Social Services

How Far is too Far

Creating an evidence base to support safe provision of medication abortion for people living far from emergency services

RESEARCH QUESTION:

- How far from a facility capable of blood transfusion and emergency surgery can first trimester medication abortion be safely provided?

Methods

1. Determine incidence, urgency, and risk factors for post-MA hemorrhage requiring blood transfusion, including the proportion of transfusions that are emergent or life-saving (i.e., same day as ordered by physician) vs those administered in 1-4 days (allowing travel from a remote location).
   - Case-control study using charts from 4 countries (Sweden, Scotland, Canada, Australia)
   - Population-based government health administrative data (Canada, Scotland)

2. Investigate the experiences of people in remote communities in accessing abortion, and the perspectives, approaches and experience of HCP providing abortion care for these communities.
   - Interviews

Methods

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   - Interviews
3. Integrate all data to inform practice guidelines, shared decision aids, Product Monographs

How Far is too Far:

Creating an evidence base to support safe provision of medication abortion for people living far from emergency services

✓ Discussion

- Professor Kristina Gemzell-Danielsson, Sweden
  - What data do you need for your practice?
  - What are your experiences with post-MA transfusion?
  - What patient and provider preferences have you considered relating to those living remotely?

How Far is too Far:

Creating an evidence base to support safe provision of medication abortion for people living far from emergency services

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- Dr. Atul Sharma, (research associate, UBC, Canada)
- Professor Sharon Cameron (U Edinburgh, Scotland)
- Professor Felicity Goodyear Smith (U of Auckland, New Zealand)

The How Far is too Far Study Team

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