



# **The role of midwives in the provision of safe abortion care**

—

## **a systematic review**

Bachelor Thesis

Submission date: 16<sup>th</sup> November 2023, Hamburg

Submitted by: Helen von Kalben

Degree programme: Hebammenwissenschaft B.Sc.

First examiner: Prof. Dr. med. Anke Diemert

Second examiner: Gudula Hansen (M.Sc.)

Please note:

This review often uses the term “women”. The author is aware, that people of all other gender having a uterus need the same access to safe abortion. Nevertheless, the term “woman” is being used, as the literature only refers to women. Only cis women were included in the research results, which then naturally only refer to cis women too. A more inclusive term would include people with uteruses, even though they were not included in the research, thus making them even more invisible. Unless research results or other statements by other authors are explicitly quoted, the terms "pregnant people" or "pregnant persons" are being used usually with the intention to include all people with uteruses.

## Abstract

**Background:** Most cases of morbidity or mortality due to abortion are preventable. Midwives are more or less involved in the provision of abortion care, depending on national health systems. The question arises as to how the involvement of midwives in abortion care influences the provision of pregnant people.

**Methods:** A systematic search was carried out in the databases PubMed, CINAHL and Web of Science. 10 studies (RCTs, Meta-Analyses and Systematic Reviews) were included. CASP checklists were used for quality appraisal.

**Results:** The syntheses of the results were done using thematic analysis. The following themes emerged: improvement of access to abortion care, abortion care – the midwife's choice, midwives' scope of practice in abortion care, barriers to high-quality care and structures supporting midwives' involvement.

**Discussion:** The expertise of midwives could be used to extend their role improving the provision of safe abortion care. It is important to prioritise the de-stigmatisation of abortion. There is a need for evidence-based practice guidelines by and for midwives. Necessary health policy measures are listed, and an insight is given into how abortion care could be adapted to the reality and needs of pregnant people. The evidence on abortion care by midwives is low. Depending on the comparability of settings, results can be implemented.

**Conclusion:** Midwives can be involved in a variety of abortion-related practices to work autonomously from pre-abortion counselling to postabortion care. To fulfil this role as a primary caregiver, they require a supportive work environment and opportunities to receive additional support. Legal, political, organisational, and financial barriers as well as poor material supply and human resources that prevent midwives from offering care must be improved. More research is needed on the best ways to educate and support midwives in abortion care, and on challenges for midwives and patients.

## Table of Contents

List of figures.....	II
List of tables.....	II
<b>1. Introduction .....</b>	<b>1</b>
1.1 Background.....	1
1.2 Problem statement and relevance .....	3
<b>2. Methodology of the systematic review .....</b>	<b>4</b>
2.1 Defining the research question with the PICO framework.....	4
2.2 Literature search.....	4
2.3 Selection of studies .....	6
2.4 Critical Appraisal of the literature .....	7
2.5 Synthesis of literature .....	7
<b>3. Results .....</b>	<b>8</b>
3.1 Overview of the included literature.....	8
3.2 Evaluation of study quality.....	12
3.3 Narrative summary of the results .....	14
3.3.1 Improvement of access to abortion care .....	14
3.3.2 Abortion care - the midwife's choice.....	14
3.3.3 Midwives' scope of practice in abortion care.....	15
3.3.4 Barriers to high-quality care.....	16
3.3.5 Structures supporting midwives' involvement .....	17
<b>4. Discussion .....</b>	<b>19</b>
4.1 Discussion of the results .....	19
4.1.1 Strengthening the expertise and skills of midwives .....	19
4.1.2 Destigmatising abortions .....	19
4.1.3 Evidence-based abortion care.....	19
4.1.4 Measures for health policy.....	21
4.1.5 Prospects and outlook .....	21
4.2 Discussion of the Methodology .....	22
<b>5. Conclusion .....</b>	<b>23</b>
<b>References.....</b>	<b>25</b>
<b>List of annexes .....</b>	<b>28</b>

*List of figures*

Figure 1: PRISMA flow chart [16]..... 6

*List of tables*

Table 1: Search strings of the search in Pubmed, CINAHL and Web of Science..... 5

Table 2: Overview of the included literature..... 8

# 1. Introduction

## 1.1 Background

Abortion care is part of essential health care [1]. This has been noted in 2020 by the World Health Organisation (WHO). The organisation has listed abortion among other sexual and reproductive health services in the guideline “Maintaining essential health services: operational guidance for the COVID-19 context” [1]. The aim was to support countries maintaining a balance between fighting the COVID-19 pandemic and still delivering the essential preventive and curative health services [1]. Especially, in times of global health crisis, safe and comprehensive abortion care should be delivered “to the full extent of the law” [1].

WHO also classifies abortion care within primary health care, by listing the medicines needed for abortion in the „List of Essential Medicines“ [2]. When necessary, there should always be the possibility to refer women to higher-level care [2].

According to the United Nations Human Rights Office, denying access to safe abortion is a violation of fundamental human rights (e.g. right to health and right to privacy) [3].

Worldwide, there are approximately 73,3 million abortions every year. This includes 61% of all unintended pregnancies [4]. The global abortion rate is 39 abortions per 1000 women between the ages of 15 and 49 years [4].

The Turnaway Study showed, “that [in most cases] receiving an abortion does not harm the health and wellbeing of women, but in fact being denied on abortion results in worse financial, health and family outcomes” [5].

According to global reports from the years 2010 to 2014 unsafe abortions account for 45% of the total of induced abortions [6]. 97% of all unsafe abortions take place in countries of the global south [6].

Laws and policies, the health system and the community determine the access to safe and comprehensive abortion care [6].

There are two conditions that the WHO states as fundamental for safe abortion: „a method recommended by WHO appropriate to the pregnancy duration and [a health care worker] with the necessary skills“ [6].

After the WHO, evidence-based policies, available and accessible evidenced-based information on sexuality, contraceptives and abortion is comprehensive abortion care [6]. The

intervention itself must be affordable and accessible [6]. There must be enough health workers with supply products of good quality, in geographical proximity to the patients [6]. Health workers need to be trained in safe abortion and in respectful care, that allows informed-decision making [6]. Furthermore, they must know how to interpret laws and policies determining abortion care [6]. To meet the needs of the pregnant person and the resources of national and regional health care, there should be different options, such as health facilities, digital care and self-managing approaches [6]. The health system should support the health workers providing abortion care [6].

Self-managing an abortion can be safe for a pregnant person, when she “has access to accurate information, quality medicines and support from a trained health worker (if she needs or wants it during the process)” [6].

The “Global Abortion Policies Database” [7] shows 13 countries (France, Ghana, Benin, Cameroon, Central African Republic, Democratic Republic of the Congo, Ethiopia, Kenya, Malawi, Zimbabwe, South Africa, Cambodia, Vietnam) in which midwives or nurse-midwives provide abortion services [7].

The International Confederation of Midwives (ICM) presents the abortion-related services midwives can offer to pregnant people in a position statement [8].

Midwives can

- provide the needed information and counselling [8]
- empower pregnant people to make autonomous decisions [8]
- give “emotional, psychological and social support” [8]
- educate people on contraception and pregnancy planning [8]
- refer women to other healthcare-professionals for further treatment, which is outside of midwifery competencies [8]

ICM summarizes a detailed description of the knowledge and competencies midwives should have to provide abortion care [9]. The WHO also includes midwives in their practice recommendations [2].

The internationally acknowledged ethics of midwives’ states that midwives should be able to reject tasks due to conscientious objection [10]. Nevertheless, they are responsible for the referral to a colleague, that is providing the necessary services, since conscientious objection should not inhibit women from getting the care they need [10].

## 1.2 Problem statement and relevance

Evidence shows, that the number of abortions is not lower in countries with restrictive abortion policies [4]. However, there are significantly more unsafe abortions in countries with highly restrictive laws than in countries with less restrictive abortion laws [5].

The cause of unsafe abortions is rooted in the fact, that safe abortion care is often neither in geographical reach nor affordable, non-discriminatory or timely available [6]. Possible barriers to attaining care are waiting periods as a precondition, inadequate counselling, and the rejection of care from medical staff [6].

Unsafe abortion threatens women's physical and mental health. Besides, stigmatising abortion also influences the health of people with unwanted pregnancies [6]. 4,7 – 13,2% of maternal deaths are attributed to abortions [12]. Most of the health risks caused by abortion can be prevented by using safe methods [7].

“Provid[ing] information to women about their sexual and reproductive health rights” is a competency of midwives [9]. Furthermore, midwives “provide information and support to individuals in complex situations where there are competing ethical principles and rights” [9].

This leads to the question, whether midwives can improve access to safe and respectful abortion care, and which role they already play in the abortion care landscape and in their communities.

The review aims to describe in which areas of abortion care midwives are already involved. Furthermore, it addresses the question, which structural requirements must be met for midwives to provide abortion-related services. The review discusses, in which areas the scope of practice of midwives could expand further to fulfil the role of primary caregiver and to ensure the provision of safe abortions globally.



## 2. Methodology of the systematic review

### 2.1 Defining the research question with the PICO framework

- **Population:** pregnant people undergoing an abortion
- **Influence:** abortions attended by midwives
- **Comparison:** physician-assisted or unassisted abortions
- **Outcome:** changes in the care landscape of safe abortions

**Research question:** What is the impact and potential of midwifery care on the provision of safe abortion care?

### 2.2 Literature search

The aim of the research was set by the question. After that, a systematic review of the literature was carried out on the 23<sup>rd</sup> of September 2023 to get an overview of the evidence.

The literature search was carried out in the databases PubMed, CINAHL and Web of Science. PubMed was chosen, because it is a global free resource database focusing on health science [13]. CINAHL collects the best evidence on nursing and allied health sciences [14]. Besides, Web of Science was chosen as it offers an inside into global research supporting many institutions, organizations and governments [15]. The databases were accessed via the medical faculty of the University of Hamburg. The search terms (table 1) were inserted into the different databases adapted to the specifications regarding Boolean operators, nesting of similar terms, truncations, and quotes for phrases. The researched terms were looked after in titles or abstracts of the corresponding articles.

Different filters were added to specify the search. The search includes only publications from the last 5 years to be able to make statements on the current provision situation. The languages English, German and French were selected. Besides, the publication type was limited to Meta-Analysis, Randomised Controlled Trials, and systematic reviews to ensure the highest possible evidence on the topic. A clinical practice guideline was also included since it was based on a review and thus contributes to screening the best available evidence. Grey literature was not searched.

Table 1: Search strings of the search in Pubmed, CINAHL and Web of Science

	Pubmed	Cinahl	Web of Science
<i>Pregnant people undergoing an abortion (P)</i>	Schwangerschaftsabbr*[tiab] OR Abtreib*[tiab] OR Schwangerschaftsunterbrechung*[tiab] OR Abort*[tiab] OR Abruptio*[tiab] OR abortion*[tiab] OR "termination of pregnanc*[tiab] OR "pregnancy termination*[tiab] OR "terminating pregnanc*[tiab] OR "voluntary interruption of pregnanc*[tiab] OR "voluntary termination of pregnanc*[tiab] OR aborticide*[tiab] OR "artificial termination of pregnanc*[tiab] OR "Interruption de grossesse*[tiab] OR avortement*[tiab] OR avorton*[tiab] OR "avortement provoqué*[tiab]	Schwangerschaftsabbr* OR Abtreib* OR Schwangerschaftsunterbrechung* OR Abort* OR Abruptio* OR abortion* OR "termination of pregnanc*" OR "pregnancy termination*" OR "terminating pregnanc*" OR "voluntary interruption of pregnanc*" OR "voluntary termination of pregnanc*" OR "artificial termination of pregnanc*" OR "Interruption de grossesse*" OR avortement* OR avorton* OR "avortement provoqué"	Schwangerschaftsabbr* OR Abtreib* OR Schwangerschaftsunterbrechung* OR Abort* OR Abruptio* OR abortion* OR "termination of pregnanc*" OR "pregnancy termination*" OR "terminating pregnanc*" OR "voluntary interruption of pregnanc*" OR "voluntary termination of pregnanc*" OR aborticide* OR "artificial termination of pregnanc*" OR "Interruption de grossesse*" OR avortement* OR avorton* OR "avortement provoqué"
<i>accompaniment by midwives (I)</i>	Hebamme*[tiab] OR Entbindungspflege*[tiab] OR Geburtshelfe*[tiab] OR Midwi*[tiab] OR "birth attendant*[tiab] OR "nurse-midwi*[tiab] OR "maternity nurse*[tiab] OR "wise wom*[tiab] OR "sage-femme*[tiab] OR accoucheuse*[tiab] OR obstétrienne*[tiab] OR maieuticien*[tiab] OR matrone*[tiab]	Hebamme* OR Entbindungspflege* OR Geburtshelfe* OR Midwi* OR "birth attendant*" OR "nurse-midwi*" OR "maternity nurse*" OR "wise wom*" OR "sage-femme*" OR accoucheuse* OR obstétrienne* OR maieuticien* OR matrone*	Hebamme* OR Entbindungspflege* OR Geburtshelfe* OR Midwi* OR "birth attendant*" OR "nurse-midwi*" OR "maternity nurse*" OR "wise wom*" OR "sage-femme*" OR accoucheuse* OR obstétrienne* OR maieuticien* OR matrone*
<i>Care landscape of safe abortions (O)</i>	Einfl*[tiab] OR Potenzial*[tiab] OR Berat*[tiab] OR Perspektive*[tiab] OR Sichtweise*[tiab] OR Widerst*[tiab] OR Einstellung*[tiab] OR Wahrnehmung*[tiab] OR Versorg*[tiab] OR Versorgungslandschaft*[tiab] OR Praxis[tiab] OR Gesundheitssystem*[tiab] OR System*[tiab] OR provi*[tiab] OR polic*[tiab] OR role*[tiab] OR impact*[tiab] OR potential*[tiab] OR care[tiab] OR option*[tiab] OR work*[tiab] OR service*[tiab] OR professionalism[tiab] OR willingness[tiab] OR counsel*[tiab] OR view*[tiab] OR practice*[tiab] OR landscape*[tiab] OR experience*[tiab] OR resistance*[tiab] OR perspective*[tiab] OR awareness[tiab] OR attitude*[tiab] OR "scope of practice*[tiab] OR perception*[tiab] OR system*[tiab] OR "health system*[tiab] OR healthsystem*[tiab] OR dispos*[tiab] OR role*[tiab] OR impact*[tiab] OR potentiel*[tiab] OR soins[tiab] OR option*[tiab] OR services[tiab] OR pratique*[tiab] OR expérience*[tiab] OR résistance*[tiab] OR perspective*[tiab] OR attitude*[tiab] OR perception*[tiab] OR système*[tiab]	Einfl* OR Potenzial* OR Berat* OR Perspektive* OR Sichtweise* OR Widerst* OR Einstellung* OR Wahrnehmung* OR Versorg* OR Versorgungslandschaft* OR Praxis OR Gesundheitssystem* OR System* OR provi* OR polic* OR role* OR impact* OR potential* OR care OR option* OR work* OR service* OR professionalism OR willingness OR counsel* OR view* OR practice* OR landscape* OR experience* OR resistance* OR perspective* OR awareness OR attitude* OR "scope of practice*" OR perception* OR system* OR "health system*" OR healthsystem* OR disposition* OR role* OR impact* OR potentiel* OR soins OR option* OR services OR pratique* OR expérience* OR résistance* OR perspective* OR attitude* OR perception* OR système*	Einfl* OR Potenzial* OR Berat* OR Perspektive* OR Sichtweise* OR Widerst* OR Einstellung* OR Wahrnehmung* OR Versorg* OR Versorgungslandschaft* OR Praxis OR Gesundheitssystem* OR System* OR provi* OR polic* OR role* OR impact* OR potential* OR care OR option* OR work* OR service* OR professionalism OR willingness OR counsel* OR view* OR practice* OR landscape* OR experience* OR resistance* OR perspective* OR awareness OR attitude* OR "scope of practice*" OR perception* OR system* OR "health system*" OR healthsystem* OR disposition* OR role* OR impact* OR potentiel* OR soins OR option* OR services OR pratique* OR expérience* OR résistance* OR perspective* OR attitude* OR perception* OR système*
<b>Total results</b>	<b>9</b>	<b>12</b>	<b>13</b>

### 2.3 Selection of studies

The selection of the studies will be shown in the following Prisma flow chart (figure 1). The literature was looked through for duplicates. The abstracts of the remaining literature were sorted by relevance. After that, the access of the papers was checked. Lastly, the records were screened full text for eligibility.

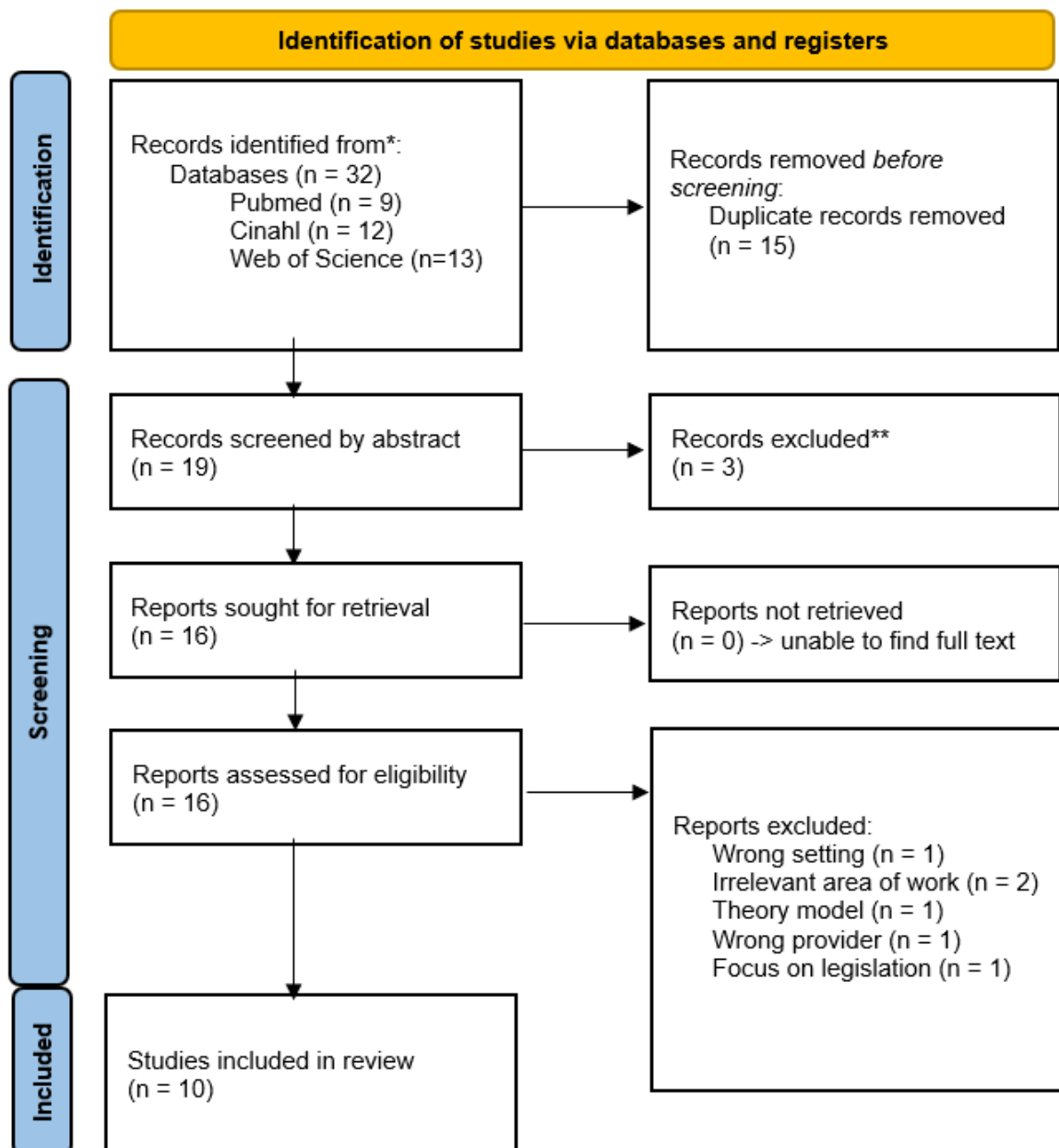


Figure 1: PRISMA flow chart [16]

## 2.4 Critical Appraisal of the literature

The Critical Appraisal Skills Programme (CASP) checklists [17–19] are used for critical appraisal of qualitative research, randomised controlled trials, and systematic reviews.

## 2.5 Synthesis of literature

Different relevant themes were generated from the review (improving access to abortion care, abortion care – the midwife’s choice, midwives’ scope of practice in abortion care, barriers to high-quality care, structures supporting midwives’ involvement). These themes were structured. The results of the reviews were listed according to this structure.

### 3. Results

#### 3.1 Overview of the included literature

An overview of the relevant results of the selected literature can be found in table 1. Ten articles, published between June 2018 and September 2023, with a variety of methods were included. These are described in the following as included literature.

*Table 2: Overview of the included literature*

<b>Title</b>	<b>Authors</b>	<b>Year of publication</b>	<b>Country</b>	<b>Objective</b>	<b>Methods</b>	<b>Outcome measures</b>	<b>Relevant themes</b>
Conscientious objection to participation in abortion by midwives and nurses: a systematic review of reasons	Fleming, Valerie; Frith, Lucy; Luyben, Ans; Ramsayer, Beate	2018/12	USA (9 articles), UK (1 article)	Clarifying reasons of midwives and nurses for declining on conscience grounds to participate in abortion	Systematic review of ethical arguments	Classification and subordination of the reasons in narrow and broad reasons and categories	Reasons (moral, practical, religious, legal) for and against conscientious objection, responsibility and rights of midwives
Evaluating women's acceptability of treatment of incomplete second trimester abortion using misoprostol provided by midwives compared with physicians: a mixed methods study	Atuhairwe, Susan; Hanson, Claudia; Atuyambe, Lynn; Byamugisha, Josaphat; Tumwesigye, Nazarius Mbona; Ssenyonga, Ronald; Gemzell-Danielsson, Kristina	2022/12	Uganda	To evaluate the patient's acceptability of treatment of incomplete second trimester abortion using misoprostol by midwives compared to physicians	generalized mixed effects models, inductive content analysis for qualitative data	14-day follow-up visit for a structured questionnaire rating on treatment experience and satisfaction	Comparison of midwives and physicians post-abortion care, patients experience in postabortion care in Uganda, counselling, increasing access to postabortion care
Moral experiences in caring for voluntary pregnancy losses: A meta-ethnography	Fernández Basanta, Sara; Bouzas-González, Iria; Coronado, Carmen; Movilla-	2022/08	Spain	Synthesize the moral experiences of nurses and midwives who cared for women and couples that decided to abort or terminate the	Meta-ethnography consisting of reciprocal and refutational translations	Participants quotations, authors interpretations	Abortion care as an ethical dilemma when professional duty stands in conflicts with moral

	Fernández, María-Jesús			pregnancy due to foetal abnormalities			principles, lack of preparation and resources, feeling of professional duty
The experiences of nurses and midwives who provide surgical abortion care: A qualitative systematic review	Qian, Jia-lu; Pan, Pang-e; Wu, Meng,wei; Zheng, Qiong; Sun, Shi-wen; Liu, Lu; Sun, Ya-ping; Yu, Xiaoyan	2021/09	Sweden (2), New Zealand (1), Canada (2), Denmark (1), South Africa (4), UK (3), Italy (2), Japan (1), China (1)	Synthesize qualitative evidence on nurses' and midwives' experiences in the provision of surgical abortion care	Synthesize qualitative studies using Thomas and Harden's qualitative thematic synthesis method	Abstraction of verbatim and non-verbatim statements for subsequent qualitative thematic synthesis; review, and discussion of the data by research team	Providing abortion care requires a high level of emotional labour, professionalism of abortion care providers, initiatives in professional development, improving directions for high-quality abortion care
The role of nurses and midwives in the provision of abortion care: A scoping review	Mainey, Lydia; O'Mullan, Catherine; Reid-Searl, Kerry; Taylor, Annabel; Baird, Kathleen	2020/05	Kenya, Nigeria, Ethiopia, Zambia, Uganda, Ghana, South Africa, Mozambique, Tanzania, Poland, England, Wales, Scotland, Northern Ireland, France, Italy, Sweden, Norway, Nepal, India, Bangladesh, Kyrgyzstan, Canada, USA, Mexico, Chile, Vietnam, Japan, Cambodia, Myanmar, Australia	To define the role and scope of the nurse and midwife within the global context of abortion	Scoping review using a methodological framework	Standardised data abstraction tool, designed for this study	the regulated role, providing psychosocial care, the expanding scope of practice
Access to and sustainability of abortion services: a systematic review and meta-analysis for the National Institute of Health and Care	O'Shea, Laura E; Hawkins, James E; Lord, Jonathan; Schmidt-Hansen, Mia; Hasler, Elise;	2020/11	England	Determine the factors that help or hinder accessibility and sustainability of abortion services in England (qualitative review) and strategies that improve these factors, and/or other factors	Qualitative and quantitative review	Qualitative evidence was combined using thematic analysis and quantitative evidence was analysed in Review	Barriers (service level, financial, logistical, personal), confidentiality concerns, training and education,

Excellence - new clinical guidelines for England	Cameron, Sharon; Cameron, Lain T			identified by stakeholders (quantitative review)		Manager 5.3, overall quality of the evidence was assessed using GRADE tool	community prescribing and telemedicine, midwife-led-care results in greater satisfaction in women and shorter waiting periods
Comparison of the effectiveness and safety of treatment of incomplete second trimester abortion with misoprostol provided by midwives and physicians: a randomised, controlled, equivalence trial in Uganda	Atuhairwe, Susan; Byamugisha, Josaphat; Kakaire, Othman; Hanson, Claudia; Cleeve, Amanda; Klingberg-Allvin, Marie; Tumwesigye, Nazarius Mbona; Gemzell-Danielsson, Kristina	2022/10	Uganda (14 health facilities)	To address the knowledge gaps in the provision of post-abortion care by midwives for women in the second trimester	Multicentre, randomised, controlled, equivalence trial	Analysis per protocol and intention to treat, generalised mixed-effects models for risk difference, predefined equivalence range -5% to 5%	Assessment and treatment of second trimester incomplete abortion with misoprostol equally as effective by midwives and by physicians, inclusion of midwives in post-abortion care in low-income settings can increase women's access to treatment
Experiences of midwives and nurses when implementing abortion policies: A systematic integrative review	Carvajal, Bielka; White, Helen; Brooks, Jane; Thomson, Ann M; Cooke, Alison	2022/08	Sweden (4) Ghana, Canada (2), Denmark, Switzerland, Uganda, UK (5), France, South Africa (5), USA (2), Italy (2), Japan, Australia, Brazil, Iran, Taiwan, Poland	Exploring midwives and nurses' experiences related to abortion policy implementation (to provide helpful information to prevent policy failure)	Systematic integrative review	Convergent integrative data synthesis comparing and grouping findings according to similarity, division of the groups in three superordinate themes representing the main sources of concern when providing abortion care	Midwives' belief of appropriate treatment of foetuses, midwives' preferences and expectations of abortion care, midwives experiences with other team members, creativity when it comes to insufficient resources, midwives techniques to cope with work-related stress

No. 360-Induced Abortion: Surgical Abortion and Second Trimester Medical Methods	Costescu, Dustin; Guilbert, Edith	2018/06	Canada	Review evidence relating to the provision of surgical induced abortion (IA) and second trimester medical abortion, including pre- and post-procedural care	Clinical practice guideline based on a literature review	Rating the quality of the evidence with the GRADE methodology framework	While IA is very safe, evidence-based best practices are associated with fewer complications, improved ease, and increased satisfaction for patients and providers
Midwifery care for late termination of pregnancy: Integrative review	Armour, Susanne; Keedle, Hazel; Gilkison, Andrea; Dahlen, Hannah Grace	2023/09	United Kingdom, Switzerland, New Zealand, South Africa, Canada, France, Sweden, Japan, Denmark, Italy, Taiwan, Poland, USA	Examine the research on midwifery care for late termination of pregnancy and identify support strategies and interventions available to midwives in this role	Integrative review	Coding results, capturing, and arranging concepts, making out themes to answer research question	Positive and negative aspects of midwives caring for late termination of pregnancy, support strategies and interventions for midwives



### 3.2 Evaluation of study quality

In the following part, the quality of each study is being assessed. The appendix contains the detailed assessments using the CASP checklists.

The clinical relevance of all included studies is high as abortion is a part of primary health care. Therefore, it is important that scientific space for the discourse is provided. Different types of research need to be developed and conducted, so that a variety of perspectives to understand the role of midwives in abortion care may be depicted and assessed. The studies show explicitly, which changes in abortion practice might lead to better outcomes for midwives and pregnant people seeking abortions. Studies with robust evidence are qualified to give recommendations, whereas studies of lower scientific quality can be beneficial for further considerations in terms of developing prospective hypotheses or determining the need for further research.

The transferability of the studies differs, as the results can only be applied to settings with a comparable health setting or resources as investigated in the corresponding study. Above all, the studies serve as an inspiration for other countries seeking to improve abortion care.

The transferability to general abortion care is lower when studies only focused on one type of abortion care, e.g. abortion due to foetal malformations [20]. Some studies included in the reviews involved mainly nurses [21] not stating clearly whether the results might differ if only midwives were included. Some reviews [21–24] included studies from several countries, which increased the validity of evidence on global abortion care.

The reasons, listed in the systematic review of ethical arguments on conscientious objection [25], seem to be valid. At the same time, there probably are more reasons which have not been listed. One of the strengths of the review is, that many authors were involved in the screening and many abstracts and full texts were screened by several people. In addition, the reasons were organised together, which reduces the subjective evaluation. Nevertheless, the selection of categories was not objective and must therefore be considered as a limitation.

The overall quality of the mixed methods study by Atuhairwe et Al [26] is high, which leads to high validity of the results. The mixed-methods approach allows for significant results on the one hand and a broad understanding of the phenomenon on the other hand. Still a cost-effectiveness calculation as an important factor in health care economics is missing.

The validity of the Meta-ethnography by Basanta et Al [20] is high as all authors were involved in the outcome collection.

The validity of the qualitative systematic review on “The experiences of nurses and midwives who provide surgical abortion care” [21] is high because the authors did a structured data extraction and the studies of high-quality don’t contradict the one’s of low quality. They only included qualitative studies from a few different countries, which implies that it is a national rather than a global picture. The primary strength of the review lies in the systematic research and the search in the reference lists of the included studies. Following aspects might be a limitation: databases were searched from inception possibly including results of older studies, which might not be accurate anymore and the search was limited to articles published in English.

The validity of the review by Mainey et Al [22] is low because the quality of the selected studies was not assessed. Consequently, it is not transparent how robust the evidence is and furthermore this could also lead to a confirmation bias. The strengths of the review are the widespread results in the field of abortion care from educational barriers to practice gaps and abortion policies.

The clinical relevance of the systematic review and meta-analysis on the “Access to and sustainability of abortion services” [27] is high. That is why the results were included into the new clinical guidelines for England on abortion care. The validity is high, as they searched for specific results in different fields. However, they might have missed out on relevant articles since the literature was limited to articles published in English.

The validity of the randomised controlled equivalence trial from Uganda [28] is high because the quality of the study design is very good. The development and process of the study, as well as the analysis of the data were described transparently. Strengths of the study include the transparent representation of the included participants for the intention-to-treat analysis and the pre-protocol analysis. Limitations include the fact that although all the midwives took a preparatory course to provide abortion care, the level of basic training varied from 18 months to 4 years. Comparability seems scarcely achievable.

The validity of the integrative review on the “Experiences of midwives and nurses when implementing abortion policies” [23] is low because studies of all methods were included. In terms of covering many perspectives, again this is to be seen as a strength. Still, low quality studies might be included, which again is a limitation to the results’ significance. Another strength of the review is, that both global and local databases were included in the search. 40 full texts could not be found, accordingly, there is an availability bias. Besides,

there could be a confirmation bias in the comparison and grouping of the results, as it remains a partly subjective process.

The quality of the clinical practice guideline on induced abortion [29] is high, because the authors only included “systematic reviews, randomized controlled trials, clinical trials, and observational studies” [29]. Besides, different perspectives of national and international guidelines were brought in for consideration.

The validity of the integrative review by Armour et al on “Midwifery care for late termination of pregnancy” [24] is low, because all studies were included regardless of their quality. Furthermore, both experimental and non-experimental studies were included. The inclusion of a wide variety of study designs must on the one hand be seen as a strength: it enables a broad representation of phenomena. At the same time it is a weakness, as it is difficult to compare the results. The risk of bias was reduced by excluding all authors from the appraisal of the included literature who previously researched on the topic.

### 3.3 Narrative summary of the results

#### *3.3.1 Improvement of access to abortion care*

Qualitative evidence shows the complicated process of getting access to abortion which is for instance rooted in the lack of information on how to access abortion services [27]. Midwives can increase access to abortion care especially for the rural population and in remote areas [15,18,19,20]. Task-sharing between midwives and physicians is beneficial in particular for uncomplicated abortions [26]. Besides, midwives can improve access in settings without physicians or where there are shortages of physicians and an availability of midwives [26]. In many countries midwives are “higher in number, work at lower-level facilities, and are more evenly distributed across the country” [28].

Evidence shows, that remote appointments, services in the community and including abortion care in midwives' curricula makes abortion care more sustainable and accessible [27]. O'Shea et al address in their quantitative review that more women were seen “within 5 days of referral” when services were provided by midwives compared to physicians (95% CI 1.90-10.05; RR ¼ 4.37) [27]. Also, “the time between referral and assessment was clinically shorter” (95% CI 6.97 - 3.43; MD ¼ 5.20) [27]. Shorter waiting periods are associated with better care [27].

#### *3.3.2 Abortion care - the midwife's choice*

Pressuring midwives to be part of abortion care can be emotionally challenging when midwives perceive that abortion care does not correspond with their personal values, morals,

and beliefs [20]. Midwives felt restricted if there was not any option of conscientious objection [24]. In countries with legal conscientious objection, less midwives were involved in abortion care which means that the midwives included in abortion services have more work to do and thus feel more distress [24].

There are “moral, practical, religious [and] legal reasons” [25] for and against conscientious objection [25]. Basanta et al list and discuss the different reasons in their review [20]. It is to say, that there is not an “absolute argument either for or against conscientious objection by midwives” [20] Even though some articles only argue on one side, most articles argue for a form of conscientious objection by midwives [20].

There is ground for a severe ethical dilemma, since the right of a pregnant person to get an abortion as part of basic health care might conflict with the right of the midwife to deny treatment or care which is not to be aligned with her\*his conscience [20]. Several studies agree that midwives declining abortion care should refer women to a provider who is offering abortion services [20]. Others agree that access to abortion care should not be delayed due to personal reasons of health care workers [27].

### *3.3.3 Midwives' scope of practice in abortion care*

Abortion is still stigmatised, which is why psychosocial care is one of the most important tasks for midwives in abortion care [21,22]. Midwives “adapt their behaviour and language to the responses of the women” [21] and use different techniques to support women’s well-being such as active listening, encouraging women to express their feelings [20,21], creating a calm environment [24], or working together with a psychologist [21].

Midwives have a variability of other tasks in offering abortion care [22]. Firstly, they confirm and date the pregnancy and offer counselling to talk about possible options [22]. The guideline “Induced Abortion: Surgical Abortion and Second Trimester Medical Methods” [29], that includes midwives as intended users, strongly recommends space for decision making and individual counselling [29]. Midwives offer bimanual examinations, they do screenings (e.g. domestic violence) and prophylaxes (e.g. anti-D, antibiotics) [22].

For the abortion itself, midwives prescribe and administer abortion drugs, offer pain relief, perform manual vacuum aspiration abortions and they receive and “handle the products of conception” [22].

In terms of safety evidence shows, that adequately trained midwives can offer abortion care as safe as abortion care by physicians [22]. There was no significant difference when women rated satisfaction of abortion by midwives or physicians (very satisfied: 95% CI 0.97-

1.12, RR ¼ 1.04; satisfied: 95% CI 0.60-1.13, RR ¼ 0.88; dissatisfied: 95%CI 0.07-16.52, RR ¼ 1.04) [27]. In comparing both professional categories' abortion treatment, it was shown that it was "equally and highly acceptable to women", as the risk difference and the CI was within the pre-defined range of -5 to +5% (95% CI 1.3-3.5%, 1.2% adjusted risk difference, p-value lower than 0,05 considered statistically significant) [26].

Medical treatment for incomplete abortion in the second trimester was shown to be as acceptable by midwives as by physicians [26]. Besides, there was no differences in safety and effectiveness comparing medical treatment of incomplete abortion in the second trimester by midwives and physicians regarding a complete abortion within 24 hours. (95% CI -4.4. to -0.3, risk difference of -2.3%, equivalence range of -5% to 5%) [28]. Midwives too provide other services safely, that have a higher risk profile especially compared to medical abortions [22].

There was also no difference between physicians and midwives in providing surgical abortion care when it comes to rates of failure or complication [22]. Another review shows that midwives can provide safe first trimester abortion [29].

Midwives offer continued care after the abortion treatment, for instance treatment of possible complications, counselling in terms of contraception and other topics regarding health, possibly including peer education [22].

If needed, midwives refer women at all stages of the abortion process to an adequate setting and provider [22].

#### *3.3.4 Barriers to high-quality care*

Abortion care often comes with structural barriers, that prevent midwives from fully utilising their potential [22]. The context regarding law and politics greatly impacts midwives' work [22]. There is evidence on abortion being stigmatised leading to "an anti-abortion climate" [27]. Midwives are suffering because of the stigma associated with abortion [21,24]. Having "[a]n unsupportive work environment [...] was directly linked to negative coping strategies in midwives and was shown to contribute to distress and burnout" [24].

From a global perspective word is, that "abortion-related practices are potentially over-regulated" [22]. There are even "special laws restricting nurse/midwifery involvement" [22]. In many countries, legislation is a barrier, challenging midwives providing abortion care [22] and in some countries, midwives "even fear [...] for their safety" [24].

In terms of sustainability, it is important to consider the impact on health care workers and the barriers they might face implementing these policies [23].

A lack of staffing is a common barrier to offering high quality abortion care [21,23,24]. To improve the work situation for midwives and in consequence the quality of abortion care means to “increase the workforce [...] giv[ing] them the ability to care one-on-one”[24].

A lack of resources influences the work of midwives [20,23]. They are, for instance, more likely to not get involved in abortion care [20]. Furthermore, it gives them the impression that there is little interest in their needs [20]. Several studies show the need to prioritise resources towards abortion care [23,24]. It could mean to have a single room for women having an abortion, and a room for midwives dedicated to abortion care to store the materials [24]. It is important for midwives to have access to pain treatment [20,21]. They require easy paperwork [24]. Several studies underline the importance of guidelines and protocols [20,23]. The guideline on “Induced Abortion: Surgical Abortion and Second Trimester Medical Methods” strongly recommends to “have easily available written emergency protocols” (9, 768).

Poor support from management is a barrier for health care professionals to offer abortion care [23,24]. Managers need awareness and knowledge of the legal and political factors, the current guidelines, and the available support services, which is the basis for supporting abortion care [24]. Hospital managers should be able to organise and accompany debriefings [24]. They can improve care by de-stigmatising abortion care and establishing unity along health care workers [24]. It is in their responsibility to optimise the staffing situation, midwives also stated, that hospitals should “establish a professional back-up” [21].

### *3.3.5 Structures supporting midwives' involvement*

Many studies show that, regardless of the work and private environment midwives need to be supported additionally when providing abortion care, and that this support is generally lacking [20,21,23,24]. The higher the number of women a midwife cared for at the same time, the higher was her\*his level of “profound emotional distress [and] burnout” [24]. The importance of emotional support was stated in several studies [21].

Evidence has not yet shown the “most appropriate and effective strategy to support [midwives] in this role” [24]. Midwives could be supported in the form of debriefings [21,24] or supervision [20,24] offering an opportunity for “professional and ethical reflection” [20].

When it comes to the influence of colleagues, family members or friends, studies show different results. Some midwives experience support from colleagues [20,23,24] others

report that colleagues and other medical staff are making their work more difficult [23,24]. Not being able to talk freely about their job in their private environment is a burden for midwives [20,23,24].

Supporting midwives also means to offer them spaces and time to process emotions and experiences [24]. Midwives should be able to take a day off, when needed to on the one hand take care of their personal physical and mental health, and, on the other hand, to be able to continue to provide high-quality care [24].

As abortion care “requires high emotional labour” [21], it is important to prioritize resources supporting midwives to deal with complex emotions [20].

The level of education in midwives performing abortions varies significantly [22]. Midwives themselves state in several studies the lack of preparation, and demand comprehensive ongoing training to provide high-quality care [20,21,24,27]. This includes both practical and ethical skills [23].

Midwives demand to acquire *clinical* knowledge [23,24] (e.g. prenatal diagnosis including genetic anomalies [21,23,24] and pain relief [23,24]), *psychological* knowledge [20,22,23] (e.g. counselling [23] and communication [21–23]), emotional support including grief care [20,21,24] and emotional management [20,21]), *social* knowledge (e.g. community support [24]), *ethical* knowledge [23,24] (e.g. sensitivity, intuition and morale [20]) and knowledge on *legislation* [23,24].

The studies show that there is a need for training and support for midwives performing surgical abortions [21,28]. Training should include practical experiences in abortion care [27,29].

Midwives emphasize the need of career starters for support from experienced colleagues [21]. That could be put into practice in the form of “debriefings or structured group workshops” [21]. Armour et al propose a universal mentoring program for the period of at least one year [24]. Experienced clinicians’ support younger colleagues in learning practical skills, reflecting on the work and setting future goals [24].

A meta-analysis from 2020 by O’Shea et al states that more clinicians provide or intend to provide abortion care, when it is included in their training (95% CI 2.453.90, RR ¼ 3.09) [27], and when “trainees were expected to participate in training unless they opted out for reasons of personal conscientious objection” [27].

## 4. Discussion

### 4.1 Discussion of the results

What is the impact and potential of midwifery care on the provision of safe abortion? With the evidence of the included literature some answers to this research question could be framed.

Overall, the evidence on the effects of midwife-led abortion care is limited due to several reasons. The systematic reviews on this topic are rarely summaries of RCTs, but rather they summarise studies of both high and low quality. In many studies, the focus lay on nurses and not on midwives. It is therefore questionable whether the results are transferable. This review cannot provide a global picture of midwifery abortion care as the research is limited to only a few countries.

#### *4.1.1 Strengthening the expertise and skills of midwives*

In general, midwives “support [...] women’s reproductive rights” [24]. Their multifaceted competencies make them suitable for comprehensive abortion care [22]. It is important to understand, strengthen and use the expertise of midwives to establish a qualitatively and quantitatively higher standard of abortion care and thus improve accessibility. Individual experiences, beliefs and the cultural and religious background of midwives must be respected. Midwives should not be forced to offer abortions. At the same time, the denial of abortions remains a violation of human rights and, care must therefore be guaranteed. This means that midwives who perform abortions must be supported.

#### *4.1.2 Destigmatising abortions*

Still existing stigmata associated with abortion cause harm on a variety of grounds, which has been shown in the results section. The social stigma increases the complexity of abortion care [20]. It also often results in the fact that the emotional work of abortion providers is neither acknowledged nor socially valued [20,23]. The de-stigmatisation of abortion care would greatly simplify midwives’ work and improve the quality of care for pregnant people. [23] proposes to use the intersectionality approach when destigmatising abortion as it allows to look at different categories simultaneously [23].

#### *4.1.3 Evidence-based abortion care*

It has been shown that midwives can improve access to abortion in some countries and settings [27]. It is important to question whether these results are transferable to different countries and work contexts.



When midwives work in abortion services, “they should also be included in the counselling process” [23]. It should be “take[en] into consideration to supplement [abortion] services by assessing and counselling via phone or video call” [27].

Midwives accompanying abortions need good education to rely upon as well as a supportive work environment. It could be shown, that in countries where midwives provide abortion care, the field of activity should be included in the training curriculum to an appropriate extent. Midwives need continuous further education and training in theoretical and practical skills. Overall, sufficient midwives should be trained to accompany abortions so that the work can be shared between them (e.g. in the form of a rotation system), and all of them are also able to carry out their other responsibilities [23].

It has been shown in several studies, that midwives judge or feel negative emotions towards women who repeatedly call for an abortion [20,23]. Thus, a professional reflective capacity of midwives should be continuously promoted, so that women receive “equitable care” [21].

It is striking, that most of the research on midwifery care has not been done by midwives. There is an urgent need for midwives to conduct investigations in all areas of their care themselves. By taking scientific research in their own hands, midwives ensure an accurate and practice-oriented choice of research questions. Furthermore, midwives as experts of their practical activities know best how theoretical research findings can be disseminated and implemented in their profession. An example is the “invisibility of midwives [...] in the whole debate concerning conscientious objection reflecting a gap between literature and practice, as it is they whom WHO recommend as providers of this service” [25]. As there are contradictions within this topic and research is often done by other professions, it is of great interest especially to midwives in research.

Analysis has shown that in many countries where midwives provide abortion care, this topic receives little to no scientific attention. Regional, national, and international research is required to best integrate midwives into the existing care systems as well as to identify what kind of support they need in different settings to be able to do their job in the best possible way.

Whilst reviewing the literature, it stood out that the literature usually only refers to people with uteruses identifying as women. This focus on cisgender people makes all people with uteruses not identifying as women invisible. These people of course also need access to safe abortions, what reveals another research gap.

More research is required too on how to provide midwives with the necessary skills for abortion-related services [21,22,24]. This includes research on “person-centred models of care” [22], which focus on the decentralisation of abortion services [22]. “Moving away from the hospital [could] give control of the process to the woman” [22].

It has been shown that midwives accompanying abortions need a support network to be able to practise their profession in a sustainable way. What exactly this network could look like to provide midwives with the best possible support has not yet been sufficiently researched. It appears, that little value each on social, political and scientific level has been given to support midwives working in abortion care [20,24]. Midwives need the possibility to exchange experiences and thoughts on their complex emotional and practical tasks [21]. There may also be differences in various healthcare systems and cultural contexts.

Research should focus on how barriers (see results section) can be broken down.

Furthermore, midwives need to create international and national evidence-based practice guidelines to ensure high-quality care.

#### *4.1.4 Measures for health policy*

Improving health policies for abortion care requires a profound understanding of midwives’ competencies, methods, and settings. Besides, it relies on an understanding of what factors influence the safety of abortion care.

Robust evidence shows, that midwives can safely handle more autonomy in the first trimester when it comes to medical and surgical abortion and postabortion care [22]. Consequently, “[g]overnments and regulatory bodies could safely extend [midwives] scope of practice to increase women's access to safe abortions” [22].

Health policy measures should actively reduce the barriers that midwives face in their work. This also includes financing, for example, as current funding models usually limit their support to physician-led models of care [22].

#### *4.1.5 Prospects and outlook*

It was also shown that the provision of abortion in pharmacies is as effective as in health facilities [22]. It is recommended to adapt abortion care settings to the local population, for instance, to offer care in hospitals as well as in the communities [27]. Using telemedicine and offering care in community settings can increase the access to abortion care [27] making the same more flexible and therefore meeting the needs of pregnant persons [27].

To provide appropriate care for pregnant people and to strengthen reproductive health and justice in their local area, it is necessary for different professional groups to work together in the best possible manner, regardless of whether people wish to terminate their pregnancy or carry to term. This requires an interprofessional division of care and good interface management.

#### 4.2 Discussion of the Methodology

The method of a systematic review was suitable, because it summarized the best evidence available on the topic and therefore gives an overview on which areas robust evidence can be found. In general, the evidence displayed must be described as low. Other methods, such as a political or a theoretical thesis, would also have been a suitable approach to the topic as they would have shown other perspectives on the involvement of midwives in abortion care. Besides, the development of a research design would have been interesting and would have had the secondary effect to support the increase of high-quality research in this field.

Limitations of this paper account to the fact, that only three databases were selected for the systematic literature search and the literature search was limited to three languages. This may have meant that relevant literature in other languages was not reviewed. Limiting the time span of the publication data to 5 years, could have excluded older literature with still relevant results. Also, some reviews involved studies from the last century which means that it is unclear whether the results can still be applied to the present day. Limiting the article types, can lead to an exclusion of the newest studies in the field showing the most recent developments. Only the title and abstracts were searched. This restriction could also have been excluding relevant articles. Not all included studies were of high quality. The results of this review could have been stronger, if only qualitative or only quantitative articles had been included from the outset. Finally, the data analysis was not performed using a special method or technique. Consequently, the synthesis could have been done more objectively.

The strength of this paper lies in the fact that the process of defining the search was done carefully including Boolean operators, nesting of similar terms, truncations, and quotes for phrases. Moreover, the paper reviews the most recent articles. The systematic approach contributes to the fact that the selection of literature has been conducted as objectively as possible. Besides, the review includes qualitative and quantitative research to ensure different perspectives on research foci. The critical appraisal of every included literature piece increases the quality of the review. No records had been excluded because of availability.

## 5. Conclusion

In general, the role of midwives in the provision of abortion care depends on the context they work in. Law and politics, health care guidelines and institutions can either support midwives to autonomously provide care from pre- to postabortion, to provide care in a task-shared setting with other health workers, or they can inhibit midwives from offering any abortion-related services at all.

Midwives confirm and date the pregnancy, offer option counselling, examinations, screenings, prophylaxis, prescribe and administer abortion drugs, pain relief, manual vacuum aspirations and postabortion care and counselling. At all stages of care, midwives offer psychosocial care and refer patients to physician-led care when needed.

To improve access, services can be given in hospitals as well as in community settings and include telemedicine. In many countries, midwives are part of the community they care for and therefore know their needs and access to health services best.

In most countries, the full potential of midwives' expertise is not utilised. To allow and support midwives to work in their role as primary health care provider can improve the access to safe abortions, especially when it comes to uncomplicated abortions and settings of rural and remote areas.

There are contradictory results when it comes to the topic of conscientious objection. Most studies argue for applying a form of conscientious objection. In any case, it is necessary to ensure that conscientious objection does not lead to a delay in access of abortion care.

It is more likely for midwives to offer abortion care when they had comprehensive-, ongoing training including focus on both practical and ethical skills. To provide comprehensive abortion care, midwives need evidence-based national and international policies and access to evidence-based information. Furthermore, they can benefit from learning from experienced colleagues for example within the framework of a mentoring program.

In addition to abortions, midwives have many other responsibilities within their work. It is important for job satisfaction that midwives can fulfil their diverse tasks. Enough midwives who learn and practise abortion care are needed to make an even distribution of the workload possible.

To fulfil the role as an abortion provider, midwives need a supportive work environment and opportunities to get additional support, especially in order to deal with complex emotions and work-related stress.

Barriers preventing midwives from offering care, such as restricting laws and policies, poor organisation, lack of material and human resources and the stigma associated with abortion, must be removed.

The research on midwives in abortion care is limited to a few countries. Even though reviews of high scientific quality exist, the underlying studies greatly vary in their quality. Thus, robust evidence on the topic is rare. When displaying evidence-based recommendations therefore, the evidence available and all limitations must be made transparent. One must accept, that in some cases the required evidence for well-founded recommendations might still be insufficient. Still, existing research should be considered when implementing practice guidelines and as a starting point for developing further research.

Overall, the clinical relevance of the topic is high, as it is part of essential health care. More research on the best ways to educate and support midwives in abortion care, and on challenges for midwives and patients is needed. Various types of research are important to show qualitative and quantitative perspectives and results on the topic adequately. In particular, midwifery research should be promoted.

To improve reproductive health and justice for pregnant people seeking an abortion, midwifery-led abortion care needs to be well researched, supported and strengthened.

## References

1. WHO-2019-nCoV-essential\_health\_services-2020.2-eng.pdf [Internet]. [cited 2023 Sep 2]. Available from: [https://apps.who.int/iris/bitstream/handle/10665/332240/WHO-2019-nCoV-essential\\_health\\_services-2020.2-eng.pdf?sequence=1&isAllowed=y](https://apps.who.int/iris/bitstream/handle/10665/332240/WHO-2019-nCoV-essential_health_services-2020.2-eng.pdf?sequence=1&isAllowed=y). p. 29.
2. Abortion care guideline [Internet]. [cited 2023 Jul 5]. Available from: <https://www.who.int/publications-detail-redirect/9789240039483>. p. 14,16.
3. INFO\_Abortion\_WEB.pdf [Internet]. [cited 2023 Nov 3]. Available from: [https://www.ohchr.org/sites/default/files/Documents/Issues/Women/WRGS/SexualHealth/INFO\\_Abortion\\_WEB.pdf](https://www.ohchr.org/sites/default/files/Documents/Issues/Women/WRGS/SexualHealth/INFO_Abortion_WEB.pdf). p. 1.
4. Unintended pregnancy and abortion by income, region, and the legal status of abortion: estimates from a comprehensive model for 1990–2019. *The Lancet Global Health*. 2020 Sep 1;8(9). p. e1152,e1159.
5. The Turnaway Study [Internet]. ANSIRH. [cited 2023 Sep 2]. Available from: <https://www.ansirh.org/research/ongoing/turnaway-study>. p. 2372.
6. Abortion [Internet]. [cited 2023 Sep 2]. Available from: <https://www.who.int/health-topics/abortion>
7. GAPD - The Global Abortion Policies Database - The Global Abortion Policies Database is designed to strengthen global efforts to eliminate unsafe abortion [Internet]. [cited 2023 Sep 2]. Available from: <https://abortion-policies.srhr.org/>. p. 1.
8. International Confederation of Midwives. Midwives' Provision of Abortion-Related Services [Internet]. 2014 [cited 2023 Sep 5]. Available from: <https://www.internationalmidwives.org/assets/files/statement-files/2018/04/midwives-provision-of-abortion-related-services-eng.pdf>. p. 1.
9. icm-competencies-en-print-october-2019\_final\_18-oct-5db05248843e8.pdf [Internet]. [cited 2023 Sep 6]. Available from: [https://www.internationalmidwives.org/assets/files/general-files/2019/10/icm-competencies-en-print-october-2019\\_final\\_18-oct-5db05248843e8.pdf](https://www.internationalmidwives.org/assets/files/general-files/2019/10/icm-competencies-en-print-october-2019_final_18-oct-5db05248843e8.pdf). p. 9,16.
10. eng-international-code-of-ethics-for-midwives.pdf [Internet]. [cited 2023 Nov 3]. Available from: <https://www.internationalmidwives.org/assets/files/definitions-files/2018/06/eng-international-code-of-ethics-for-midwives.pdf>. p. 2,3.
11. Ganatra B, Gerdtts C, Rossier C, Johnson BR, Tunçalp Ö, Assifi A, et al. Global, regional, and subregional classification of abortions by safety, 2010–14: estimates from a Bayesian hierarchical model. *The Lancet*. 2017 Nov;390(10110):2372–81
12. Say L, Chou D, Gemmill A, Tunçalp Ö, Moller AB, Daniels J, et al. Global causes of maternal death: a WHO systematic analysis. *The Lancet Global Health*. 2014 Jun;2(6):e323–33.
13. About [Internet]. PubMed. [cited 2023 Oct 30]. Available from: <https://pubmed.ncbi.nlm.nih.gov/about/>
14. CINAHL Database | EBSCO [Internet]. [cited 2023 Oct 30]. Available from: <https://www.ebsco.com/products/research-databases/cinahl-database>

15. About us [Internet]. Women in Global Health. [cited 2022 Aug 8]. Available from: <https://womeningh.org/about/>
16. PRISMA [Internet]. [cited 2023 Nov 16]. Available from: <http://www.prisma-statement.org/PRISMAStatement/FlowDiagram.aspx>
17. CASP-Systematic-Review-Checklist-2018\_fillable-form.pdf [Internet]. [cited 2023 Nov 16]. Available from: [https://casp-uk.net/images/checklist/documents/CASP-Systematic-Review-Checklist/CASP-Systematic-Review-Checklist-2018\\_fillable-form.pdf](https://casp-uk.net/images/checklist/documents/CASP-Systematic-Review-Checklist/CASP-Systematic-Review-Checklist-2018_fillable-form.pdf)
18. CASP-RCT-Checklist-PDF-Fillable-Form.pdf [Internet]. [cited 2023 Nov 16]. Available from: <https://casp-uk.net/images/checklist/documents/CASP-Randomised-Controlled-Trial-Checklist/CASP-RCT-Checklist-PDF-Fillable-Form.pdf>
19. CASP-Qualitative-Checklist-2018\_fillable\_form.pdf [Internet]. [cited 2023 Nov 16]. Available from: [https://casp-uk.net/images/checklist/documents/CASP-Qualitative-Studies-Checklist/CASP-Qualitative-Checklist-2018\\_fillable\\_form.pdf](https://casp-uk.net/images/checklist/documents/CASP-Qualitative-Studies-Checklist/CASP-Qualitative-Checklist-2018_fillable_form.pdf)
20. Fernández Basanta S, Bouzas-González I, Coronado C, Movilla-Fernández MJ. Moral experiences in caring for voluntary pregnancy losses: A meta-ethnography. *Nurs Ethics*. 2022 Aug;29(5):1134–51. p. 1,6,8-12,14,16.
21. Qian J lu, Pan P e, Wu M wei, Zheng Q, Sun S wen, Liu L, et al. The experiences of nurses and midwives who provide surgical abortion care: A qualitative systematic review. *Journal of Advanced Nursing*. 2021;77(9):3644–56. p. 3644,3648,3650-3653.
22. Mainey L, O’Mullan C, Reid-Searl K, Taylor A, Baird K. The role of nurses and midwives in the provision of abortion care: A scoping review. *Journal of Clinical Nursing*. 2020;29(9–10):1513–26. p. 1513,1514,1516,1517,1520-1522.
23. Carvajal B, White H, Brooks J, Thomson AM, Cooke A. Experiences of midwives and nurses when implementing abortion policies: A systematic integrative review. *Midwifery*. 2022 Aug 1;111:103363. p. 9-12.
24. Armour S, Keedle H, Gilkison A, Dahlen HG. Midwifery care for late termination of pregnancy: Integrative review. *SEX REPROD HEALTHC*. 2023 Sep;37:N.PAG-N.PAG. p. 1, 12-14, 23,24.
25. Fleming V, Frith L, Luyben A, Ramsayer B. Conscientious objection to participation in abortion by midwives and nurses: a systematic review of reasons. *BMC Med Ethics*. 2018 Apr 27;19:31. p. 1,5,9,10.
26. Atuhairwe S, Hanson C, Atuyambe L, Byamugisha J, Tumwesigye NM, Ssenyonga R, et al. Evaluating women’s acceptability of treatment of incomplete second trimester abortion using misoprostol provided by midwives compared with physicians: a mixed methods study. *BMC Women’s Health*. 2022 Nov 5;22(1):434. p. 1,4,5,11.
27. O’Shea LE, Hawkins JE, Lord J, Schmidt-Hansen M, Hasler E, Cameron S, et al. Access to and sustainability of abortion services: a systematic review and meta-analysis for the National Institute of Health and Care Excellence—new clinical guidelines for England. *Human Reproduction Update*. 2020 Nov 1;26(6). p. 887,894,896,897,899-901.
28. Atuhairwe S, Byamugisha J, Kakaire O, Hanson C, Cleeve A, Klingberg-Allvin M, et al. Comparison of the effectiveness and safety of treatment of incomplete second trimester abortion with misoprostol provided by midwives and physicians: a randomised,

controlled, equivalence trial in Uganda. *Lancet Glob Health*. 2022 Aug 26;10(10). p. e1505,e1511.

29. Costescu D, Guilbert E. No. 360-Induced Abortion: Surgical Abortion and Second Trimester Medical Methods. *J Obstet Gynaecol Can*. 2018 Jun;40(6). p. 754,755,757,768,771.



## List of annexes

Annex 1: CASP checklist (systematic review) [17] applied to “Conscientious objection to participation in abortion by midwives and nurses: a systematic review of reasons” [25]

Annex 2: CASP checklist (randomised controlled trial) [18] applied to “Evaluating women’s acceptability of treatment of incomplete second trimester abortion using misoprostol provided by midwives compared with physicians: a mixed methods study” [26]

Annex 3: CASP checklist (qualitative research) [19] “Moral experiences in caring for voluntary pregnancy losses: A meta-ethnography” [20]

Annex 4: CASP checklist (systematic review) [17] “The experiences of nurses and midwives who provide surgical abortion care: A qualitative systematic review” [21]

Annex 5: CASP checklist (systematic review) [17] “The role of nurses and midwives in the provision of abortion care: A scoping review” [22]

Annex 6: CASP checklist (systematic review) [17] “Access to and sustainability of abortion services: a systematic review and meta-analysis for the National Institute of Health and Care Excellence - new clinical guidelines for England” [27]

Annex 7: CASP checklist (randomised controlled trial) [18] “Comparison of the effectiveness and safety of treatment of incomplete second trimester abortion with misoprostol provided by midwives and physicians: a randomised, controlled, equivalence trial in Uganda” [28]

Annex 8: CASP checklist (systematic review) [17] “Experiences of midwives and nurses when implementing abortion policies: A systematic integrative review” [23]

Annex 9: CASP checklist (systematic review) [17] “No. 360-Induced Abortion: Surgical Abortion and Second Trimester Medical Methods” [29]

Annex 10: CASP checklist (systematic review) [17] “Midwifery care for late termination of pregnancy: Integrative review” [24]

## CASP Checklist: 10 questions to help you make sense of a **Systematic Review**

**How to use this appraisal tool:** Three broad issues need to be considered when appraising a systematic review study:

- ▶ Are the results of the study valid? (Section A)
- ▶ What are the results? (Section B)
- ▶ Will the results help locally? (Section C)

The 10 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is “yes”, it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a “yes”, “no” or “can’t tell” to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

**About:** These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

**Referencing:** we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Systematic Review) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

©CASP this work is licensed under the Creative Commons Attribution – Non-Commercial-Share A like. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/3.0/> [www.casp-uk.net](http://www.casp-uk.net)

Paper for appraisal and reference: **Conscientious objection to participation in abortion by mid**

Section A: Are the results of the review valid?

1. Did the review address a clearly focused question?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: An issue can be 'focused' In terms of

- the population studied
- the intervention given
- the outcome considered

Comments: Population: midwives or nurses  
Intervention: abortion provision  
Outcome: reasons in the argument based literature for or against conscientious objection

2. Did the authors look for the right type of papers?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: 'The best sort of studies' would

- address the review's question
- have an appropriate study design (usually RCTs for papers evaluating interventions)

Comments: A systematic review can in this case determine causality for different reasons. Besides, it can summarize the evidence and thus make more generalisable statements on conscientious objection.

Is it worth continuing?

3. Do you think all the important, relevant studies were included?

Yes	<input type="checkbox"/>
Can't Tell	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

HINT: Look for

- which bibliographic databases were used
- follow up from reference lists
- personal contact with experts
- unpublished as well as published studies
- non-English language studies

Comments: The period for the literature search was 2000 to 2016. It is questionable whether this wide period is representative anymore, as the conscience is influenced by social changes. A systematical method by Strech and Sofaer was used for the review. It is hard to tell, if all relevant studies were included, as they didn't demonstrate a full search string. So it isn't clear, whether they used synonym, plural, truncation and quotation marks around phrases. They searched in many different databases (HE N lega, Medlin, CINAHL, Psychinf, Academic Search Complete, Web of Science). A broad search in different databases augments the probability

4. Did the review's authors do enough to assess quality of the included studies?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies' results ("All that glisters is not gold" Merchant of Venice – Act II Scene 7)

Comments: The quality of the studies is not assessed transparently.

5. If the results of the review have been combined, was it reasonable to do so?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- results were similar from study to study
- results of all the included studies are clearly displayed
- results of different studies are similar
- reasons for any variations in results are discussed

Comments: It was reasonable to combine the results of the studies, as it gives the reader a broader overview of the reasons mentioned in the studies.

### Section B: What are the results?

6. What are the overall results of the review?

HINT: Consider

- If you are clear about the review's 'bottom line' results
- what these are (numerically if appropriate)
- how were the results expressed (NNT, odds ratio etc.)

Comments: In total there are more reasons for the provision of conscientious objection than against it. The results are expressed in numbers and percentages.  
269 reason mentions within the articles  
116 narrow reasons: 81 for conscientious objection (70%), 35 against conscientious objection (30%)  
23 broad reasons: 11 (moral), 5 (practical), 4 (religious), legal (3)

7. How precise are the results?

HINT: Look at the confidence intervals, if given

**Comments:** The results are summarized in different categories. Critical is, that the classification is quiet subjective. Even though they chose a numerical approach, it is not possible to make a general prediction to frequency and strength of the different reasons.

Section C: Will the results help locally?

8. Can the results be applied to the local population?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>

HINT: Consider whether

- the patients covered by the review could be sufficiently different to your population to cause concern
- your local setting is likely to differ much from that of the review

**Comments:** As 9 out of 10 articles were from the United States, the results are not applicable globally. They can though give an inspiration for research in other parts of the world. Only one article from England mentions specifically midwives.

9. Were all important outcomes considered?

Yes	<input type="checkbox"/>
Can't Tell	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- there is other information you would like to have seen

**Comments:** The authors searched in the studies for all reasons mentioned. So this is trustworthy. After that they classified and categorised them. That's why I can't tell, if other categories or another focus would have given other arguments and reasons.

10. Are the benefits worth the harms and costs?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- even if this is not addressed by the review, what do you think?

**Comments:** It is beneficial to look at different perspectives on the topic abortion and conscientious objection to get a deep inside into the discussion and understand midwives and nurses moral understanding. This is necessary for practical and policy guidelines.

### CASP Randomised Controlled Trial Standard Checklist:

11 questions to help you make sense of a randomised controlled trial (RCT)

**Main issues for consideration:** Several aspects need to be considered when appraising a randomised controlled trial:

- ┆ Is the basic study design valid for a randomised controlled trial? (Section A)
- ┆ Was the study methodologically sound? (Section B)
- ┆ What are the results? (Section C)
- ┆ Will the results help locally? (Section D)

The 11 questions in the checklist are designed to help you think about these aspects systematically.

**How to use this appraisal tool:** The first three questions (Section A) are screening questions about the validity of the basic study design and can be answered quickly. If, in light of your responses to Section A, you think the study design is valid, continue to Section B to assess whether the study was methodologically sound and if it is worth continuing with the appraisal by answering the remaining questions in Sections C and D.

Record 'Yes', 'No' or 'Can't tell' in response to the questions. Prompts below all but one of the questions highlight the issues it is important to consider. Record the reasons for your answers in the space provided. As CASP checklists were designed to be used as educational/teaching tools in a workshop setting, we do not recommend using a scoring system.

**About CASP Checklists:** The CASP RCT checklist was originally based on JAMA Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL and Cook DJ), and piloted with healthcare practitioners. This version has been updated taking into account the CONSORT 2010 guideline (<http://www.consort-statement.org/consort-2010>, accessed 16 September 2020).

**Citation:** CASP recommends using the Harvard style, i.e. *Critical Appraisal Skills Programme (2020). CASP (insert name of checklist i.e. Randomised Controlled Trial) Checklist. [online] Available at: insert URL. Accessed: insert date accessed.*

©CASP this work is licensed under the Creative Commons Attribution – Non-Commercial- Share A like. To view a copy of this licence, visit <https://creativecommons.org/licenses/by-sa/4.0/>

**Study and citation:** .....

Section A: Is the basic study design valid for a randomised controlled trial?			
<p><b>1. Did the study address a clearly focused research question?</b> <i>CONSIDER:</i> Was the study designed to assess the outcomes of an intervention? Is the research question 'focused' in terms of:</p> <ul style="list-style-type: none"> <li>Population studied</li> <li>Intervention given</li> <li>Comparator chosen</li> <li>Outcomes measured?</li> </ul>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Can't tell <input type="checkbox"/>
<p>P: women with incomplete second trimester abortion I: misoprostol provided by midwives C: misoprostol provided by physicians O: acceptability of treatment</p>			
<p><b>2. Was the assignment of participants to interventions randomised?</b> <i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>How was randomisation carried out? Was the method appropriate?</li> <li>Was randomisation sufficient to eliminate systematic bias?</li> <li>Was the allocation sequence concealed from investigators and participants?</li> </ul>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Can't tell <input type="checkbox"/>
<p>for qualitative study recruitment using the generated sampling frame</p>			
<p><b>3. Were all participants who entered the study accounted for at its conclusion?</b> <i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>Were losses to follow-up and exclusions after randomisation accounted for?</li> <li>Were participants analysed in the study groups to which they were randomised (intention-to-treat analysis)?</li> <li>Was the study stopped early? If so, what was the reason?</li> </ul>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Can't tell <input type="checkbox"/>
<p>all women included in RCT, who were randomizes, received treatment and returned for the 2 weeks' follow-up visit; explained losses e.g. 6 people declined to participate in qualitative study due to long distance, work-related engagements and lack of transport money</p>			
Section B: Was the study methodologically sound?			
<p><b>4.</b></p> <ul style="list-style-type: none"> <li>Were the participants 'blind' to intervention they were given?</li> <li>Were the investigators 'blind' to the intervention they were giving to participants?</li> <li>Were the people assessing/analysing outcome/s 'blinded'?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5. Were the study groups similar at the start of the randomised controlled trial?</b> <i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>Were the baseline characteristics of each study group (e.g. age, sex, socio-economic group) clearly set out?</li> <li>Were there any differences between the study groups that could affect the outcome/s?</li> </ul>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Can't tell <input type="checkbox"/>
<p>in the quantitative group all met inclusion criteria but they were not divided in characteristic groups, in the qualitative group they formed different samples e.g. women up to 24 years or above 24 years</p>			

<p><b>6. Apart from the experimental intervention, did each study group receive the same level of care (that is, were they treated equally)?</b></p> <p><i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>• Was there a clearly defined study protocol?</li> <li>• If any additional interventions were given (e.g. tests or treatments), were they similar between the study groups?</li> <li>• Were the follow-up intervals the same for each study group?</li> </ul>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Can't tell <input type="checkbox"/></p> <p>midwives and physicians used the same predefined checklist in the quantitative study, for the interviews research assistants and the main researcher used a pilot tested interview guide with open-ended questions and probes</p>
---	---

**Section C: What are the results?**

<p><b>7. Were the effects of intervention reported comprehensively?</b></p> <p><i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>• Was a power calculation undertaken?</li> <li>• What outcomes were measured, and were they clearly specified?</li> <li>• How were the results expressed? For binary outcomes, were relative and absolute effects reported?</li> <li>• Were the results reported for each outcome in each study group at each follow-up interval?</li> <li>• Was there any missing or incomplete data?</li> <li>• Was there differential drop-out between the study groups that could affect the results?</li> <li>• Were potential sources of bias identified?</li> <li>• Which statistical tests were used?</li> <li>• Were p values reported?</li> </ul>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Can't tell <input type="checkbox"/></p> <p>Outcomes: 1) treatment experience (as expected/ better than expected/ worse than expected); 2) satisfaction - patient would recommend the treatment to a friend (yes/no) or choose the method again (yes/no)</p> <p>QUAN-QUAL analysis beginning with quantitative analysis followed by qualitative analysis -&gt; qualitative as explanatory for the quantitative p-value lower than 0,05 were considered statistically significant</p> <p>inductive content analysis for analysing interview data</p>
<p><b>8. Was the precision of the estimate of the intervention or treatment effect reported?</b></p> <p><i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>• Were confidence intervals (CIs) reported?</li> </ul>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Can't tell <input type="checkbox"/></p> <p>equivalence risk difference and the 95% confidence interval (CI) of the estimate was within the -5 to +5% pre-defined range</p>
<p><b>9. Do the benefits of the experimental intervention outweigh the harms and costs?</b></p> <p><i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>• What was the size of the intervention or treatment effect?</li> <li>• Were harms or unintended effects reported for each study group?</li> <li>• Was a cost-effectiveness analysis undertaken? (Cost-effectiveness analysis allows a comparison to be made between different interventions used in the care of the same condition or problem.)</li> </ul>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Can't tell <input type="checkbox"/></p> <p>even though the costs of the RCT are not transparent, there is a high chance, that the benefits outweigh the harms and costs, since there is not comparable research done in the field and the quality of the RCT is high</p>



Section D: Will the results help locally?




<p><b>10. Can the results be applied to your local population/in your context?</b></p> <p><i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>• Are the study participants similar to the people in your care?</li> <li>• Would any differences between your population and the study participants alter the outcomes reported in the study?</li> <li>• Are the outcomes important to your population?</li> <li>• Are there any outcomes you would have wanted information on that have not been studied or reported?</li> <li>• Are there any limitations of the study that would affect your decision?</li> </ul>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Can't tell <input type="checkbox"/></p> <p>the outcomes are beneficial for considerations about abortion care by midwives all over the world, even though it may be easier to apply and implement the results in similar settings</p>
<p><b>11. Would the experimental intervention provide greater value to the people in your care than any of the existing interventions?</b></p> <p><i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>• What resources are needed to introduce this intervention taking into account time, finances, and skills development or training needs?</li> <li>• Are you able to disinvest resources in one or more existing interventions in order to be able to re-invest in the new intervention?</li> </ul>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Can't tell <input type="checkbox"/></p> <p>probably yes because women often lack access to safe abortion care and the inclusion of midwives in abortion-related-services can increase the access</p>

**APPRAISAL SUMMARY:** Record key points from your critical appraisal in this box. What is your conclusion about the paper? Would you use it to change your practice or to recommend changes to care/interventions used by your organisation? Could you judiciously implement this intervention without delay?

The overall study quality is high and leads to high validity of the results. The clinical relevance is high, because the outcomes are beneficial for considerations about abortion care by midwives all over the world, even though it may be easier to apply and implement the results in similar settings. The mixed-methods approach allows for significant results on the one hand and a broad understanding of the phenomenon on the other. A cost-effectiveness calculation is missing.

**CASP Checklist:** 10 questions to help you make sense of a **Qualitative** research

**How to use this appraisal tool:** Three broad issues need to be considered when appraising a qualitative study:

-  Are the results of the study valid? (Section A)
-  What are the results? (Section B)
-  Will the results help locally? (Section C)

The 10 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is “yes”, it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a “yes”, “no” or “can’t tell” to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

**About:** These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

**Referencing:** we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Qualitative) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

©CASP this work is licensed under the Creative Commons Attribution – Non-Commercial-Share A like. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/3.0/> [www.casp-uk.net](http://www.casp-uk.net)

Paper for appraisal and reference: Moral experiences in caring for voluntary pregnancy losses

Section A: Are the results valid?

1. Was there a clear statement of the aims of the research?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

- HINT: Consider
- what was the goal of the research
  - why it was thought important
  - its relevance

Comments: The aim is to synthesize the moral experiences of nurses and midwives who cared for women and couples that decided to abort or terminate the pregnancy due to foetal abnormalities.

2. Is a qualitative methodology appropriate?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

- HINT: Consider
- If the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants
  - Is qualitative research the right methodology for addressing the research goal

Comments: Yes it is appropriate as it is a synthesis of qualitative studies.

Is it worth continuing?

3. Was the research design appropriate to address the aims of the research?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

- HINT: Consider
- if the researcher has justified the research design (e.g. have they discussed how they decided which method to use)

Comments: A meta-ethnographic approach by Noblit and Hare's and the eMERGE reporting guideline. So the meta-ethnography provides an evidence base for moral experiences of midwives caring for voluntary pregnancy losses.

4. Was the recruitment strategy appropriate to the aims of the research?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- If the researcher has explained how the participants were selected
- If they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study
  - If there are any discussions around recruitment (e.g. why some people chose not to take part)

Comments: comprehensive systematic search strategy in 5 databases, search terms and medical subject headings included

5. Was the data collected in a way that addressed the research issue?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- If the setting for the data collection was justified
- If it is clear how data were collected (e.g. focus group, semi-structured interview etc.)
- If the researcher has justified the methods chosen
  - If the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews are conducted, or did they use a topic guide)
  - If methods were modified during the study. If so, has the researcher explained how and why
  - If the form of data is clear (e.g. tape recordings, video material, notes etc.)
    - If the researcher has discussed saturation of data

Comments: systematic search strategy for qualitative studies

6. Has the relationship between researcher and participants been adequately considered?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>

HINT: Consider

- If the researcher critically examined their own role, potential bias and influence during (a) formulation of the research questions (b) data collection, including sample recruitment and choice of location
- How the researcher responded to events during the study and whether they considered the implications of any changes in the research design

Comments: It is not relevant, as it is a synthesis.

Section B: What are the results?

7. Have ethical issues been taken into consideration?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- If there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained
- If the researcher has discussed issues raised by the study (e.g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study)
- If approval has been sought from the ethics committee

Comments: Since it is a synthesis an approval from the ethics committee was not needed.

8. Was the data analysis sufficiently rigorous?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- If there is an in-depth description of the analysis process
- If thematic analysis is used. If so, is it clear how the categories/themes were derived from the data
- Whether the researcher explains how the data presented were selected from the original sample to demonstrate the analysis process
- If sufficient data are presented to support the findings
  - To what extent contradictory data are taken into account
- Whether the researcher critically examined their own role, potential bias and influence during analysis and selection of data for presentation

Comments: critical reading of the included studies, intra- and inter-study comparison, building new concepts by combining or opposing the participants quotations and the authors interpretations from the different studies, development of a argument synthesis, elaboration of a metaphorical phrase that captured the essence of the findings -> all authors involved in synthesis, the role of the authors not critically examined

9. Is there a clear statement of findings?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- If the findings are explicit
- If there is adequate discussion of the evidence both for and against the researcher's arguments
- If the researcher has discussed the credibility of their findings (e.g. triangulation, respondent validation, more than one analyst)
- If the findings are discussed in relation to the original research question

Comments: The results were precisely shown and discussed.

Section C: Will the results help locally?

10. How valuable is the research?

HINT: Consider

- If the researcher discusses the contribution the study makes to existing knowledge or understanding (e.g. do they consider the findings in relation to current practice or policy, or relevant research-based literature
- If they identify new areas where research is necessary
- If the researchers have discussed whether or how the findings can be transferred to other populations or considered other ways the research may be used

Comments: included articles predominantly from Western countries, consideration could be used for different settings

## CASP Checklist: 10 questions to help you make sense of a **Systematic Review**

**How to use this appraisal tool:** Three broad issues need to be considered when appraising a systematic review study:

- ▶ Are the results of the study valid? (Section A)
- ▶ What are the results? (Section B)
- ▶ Will the results help locally? (Section C)

The 10 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is “yes”, it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a “yes”, “no” or “can’t tell” to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

**About:** These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

**Referencing:** we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Systematic Review) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

©CASP this work is licensed under the Creative Commons Attribution – Non-Commercial-Share A like. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/3.0/> [www.casp-uk.net](http://www.casp-uk.net)



Paper for appraisal and reference: **The experiences of nurses and midwives who provide sur**

Section A: Are the results of the review valid?

1. Did the review address a clearly focused question?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: An issue can be 'focused' in terms of

- the population studied
- the intervention given
- the outcome considered

Comments: To synthesize qualitative evidence on nurses' and midwives' experiences in the provision of surgical abortion care  
 (a) what are the experiences of nurses and midwives in surgical abortion care?  
 (b) what are their responses and coping strategies?  
 (c) what are the deficiencies in surgical abortion care?

2. Did the authors look for the right type of papers?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: 'The best sort of studies' would

- address the review's question
- have an appropriate study design (usually RCTs for papers evaluating interventions)

Comments: The authors included qualitative or mixed method studies.

Is it worth continuing?

3. Do you think all the important, relevant studies were included?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Look for

- which bibliographic databases were used
- follow up from reference lists
- personal contact with experts
- unpublished as well as published studies
- non-English language studies

Comments: They might have included all the relevant papers, because they searched in 6 databases. They searched in the reference lists of the papers for further relevant papers. They identified studies published from inception of the databases until 5th August 2020. All identified studies were independently reviewed by two authors.

4. Did the review's authors do enough to assess quality of the included studies?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies' results ("All that glisters is not gold" Merchant of Venice – Act II Scene 7)

**Comments:** They assessed the studies using 12 criteria focusing on reporting quality, validity or reliability of data collection and analysis, as well as the degree to which the findings were grounded in participants' view. They included all studies, because the results of the studies with low evidence don't contradict the one's with high evidence.

5. If the results of the review have been combined, was it reasonable to do so?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- results were similar from study to study
- results of all the included studies are clearly displayed
- results of different studies are similar
- reasons for any variations in results are discussed

**Comments:** It was reasonable to combine the results, since it is a qualitative review and they chose to group the results in concepts to get an overview and the best evidence.

## Section B: What are the results?

6. What are the overall results of the review?

HINT: Consider

- If you are clear about the review's 'bottom line' results
- what these are (numerically if appropriate)
- how were the results expressed (NNT, odds ratio etc.)

**Comments:** The analytical themes of the review are: Providing abortion care requires high emotional labour, professionalism of abortion care providers, initiatives in professional development and improving directions for high-quality abortion care.

7. How precise are the results?

HINT: Look at the confidence intervals, if given

**Comments:** There are clear results showing which support midwives need in their role as abortion provider. It also shows the need for research in midwifery education. Besides, the results show that optimization of abortion services should start from hospital management models, pain management and bereavement care.

Section C: Will the results help locally?

8. Can the results be applied to the local population?

Yes	<input type="checkbox"/>
Can't Tell	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- the patients covered by the review could be sufficiently different to your population to cause concern
- your local setting is likely to differ much from that of the review

**Comments:** Some of the included studies had only nurses as participants. So it is unsure, whether the results can be applied to midwives also. Also there were only a few countries included. Since all of the studies were qualitative, they cannot be generalized.

9. Were all important outcomes considered?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- there is other information you would like to have seen

**Comments:** As the review process was done by two authors, it is likely, that they included all relevant statements.

10. Are the benefits worth the harms and costs?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- even if this is not addressed by the review, what do you think?

**Comments:** There is not much evidence on the topic, so the review is worth the harms and costs. This paper inspires further research in the field and might impact training and clinical practice.

## CASP Checklist: 10 questions to help you make sense of a **Systematic Review**

**How to use this appraisal tool:** Three broad issues need to be considered when appraising a systematic review study:

- ▶ Are the results of the study valid? (Section A)
- ▶ What are the results? (Section B)
- ▶ Will the results help locally? (Section C)

The 10 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is “yes”, it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a “yes”, “no” or “can’t tell” to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

**About:** These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

**Referencing:** we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Systematic Review) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

©CASP this work is licensed under the Creative Commons Attribution – Non-Commercial-Share A like. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/3.0/> [www.casp-uk.net](http://www.casp-uk.net)

Paper for appraisal and reference: **The role of nurses and midwives in the provision of abortion**

Section A: Are the results of the review valid?

1. Did the review address a clearly focused question?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: An issue can be 'focused' in terms of

- the population studied
- the intervention given
- the outcome considered

Comments: To define the role and scope of the nurse and midwife within the global context of abortion

2. Did the authors look for the right type of papers?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: 'The best sort of studies' would

- address the review's question
- have an appropriate study design (usually RCTs for papers evaluating interventions)

Comments: The authors decided to include original research, commentaries and reports. They included qualitative, quantitative and mixed methods. This decision seems appropriate for the paper design five-stage methodological framework).

Is it worth continuing?

3. Do you think all the important, relevant studies were included?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Look for

- which bibliographic databases were used
- follow up from reference lists
- personal contact with experts
- unpublished as well as published studies
- non-English language studies

Comments: They developed a search strategy in a team. 4 databases were included. Only English texts included.

4. Did the review's authors do enough to assess quality of the included studies?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies' results ("All that glisters is not gold" Merchant of Venice – Act II Scene 7)

Comments: They didn't assess quality of the individual articles included. They justified it on the grounds, that it is not required in scoping reviews.

5. If the results of the review have been combined, was it reasonable to do so?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- results were similar from study to study
- results of all the included studies are clearly displayed
- results of different studies are similar
- reasons for any variations in results are discussed

Comments: It was reasonable to combine the results, because all of the results were included in the three categories: the regulated role, providing psychosocial care and the expanding scope of practice.

### Section B: What are the results?

6. What are the overall results of the review?

HINT: Consider

- If you are clear about the review's 'bottom line' results
- what these are (numerically if appropriate)
- how were the results expressed (NNT, odds ratio etc.)

Comments: three themes: the regulated role, providing psychosocial care and the expanding scope of practice

7. How precise are the results?

HINT: Look at the confidence intervals, if given

Comments: The results show precisely the abortion laws in different countries. It also shows educational barriers and the need for research.

Section C: Will the results help locally?

8. Can the results be applied to the local population?

Yes	<input type="checkbox"/>
Can't Tell	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- the patients covered by the review could be sufficiently different to your population to cause concern
- your local setting is likely to differ much from that of the review

Comments: There are results concerning individual countries. So the results can be applied to that country, but not generalised and applied in other countries and health settings.

9. Were all important outcomes considered?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- there is other information you would like to have seen

Comments: The results of all included studies fitted into the three main themes.

10. Are the benefits worth the harms and costs?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- even if this is not addressed by the review, what do you think?

Comments: Since the review shows gaps in practice and research it is valuable. Besides, it shows educational and political barriers, that are important to look at.

## CASP Checklist: 10 questions to help you make sense of a **Systematic Review**

**How to use this appraisal tool:** Three broad issues need to be considered when appraising a systematic review study:

- ▶ Are the results of the study valid? (Section A)
- ▶ What are the results? (Section B)
- ▶ Will the results help locally? (Section C)

The 10 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is “yes”, it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a “yes”, “no” or “can’t tell” to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

**About:** These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

**Referencing:** we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Systematic Review) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

©CASP this work is licensed under the Creative Commons Attribution – Non-Commercial-Share A like. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/3.0/> [www.casp-uk.net](http://www.casp-uk.net)



Paper for appraisal and reference: **Access to and sustainability of abortion services: a system**

Section A: Are the results of the review valid?

1. Did the review address a clearly focused question?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: An issue can be 'focused' In terms of

- the population studied
- the intervention given
- the outcome considered

Comments: Determine the factors that help or hinder accessibility and sustainability of abortion services in England (qualitative review) and strategies that improve these factors, and/or other factors identified by stakeholders (quantitative review)

2. Did the authors look for the right type of papers?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: 'The best sort of studies' would

- address the review's question
- have an appropriate study design (usually RCTs for papers evaluating interventions)

Comments: published in English, after 2001 up to November 2018, conducted in OECD countries, qualitative studies reporting views of patients and/or staff on factors that help or hinder the accessibility and sustainability of a safe abortion service, or randomized or non-randomized studies that compared strategies to improve factors identified by the qualitative review and/or stakeholders -> they searched for evidence from comparable settings and high quantitative and qualitative evidence

Is it worth continuing?

3. Do you think all the important, relevant studies were included?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Look for

- which bibliographic databases were used
- follow up from reference lists
- personal contact with experts
- unpublished as well as published studies
- non-English language studies

Comments: the search was broad in different databases and for different quantitative as well as qualitative evidence, the search is limited by articles published in English, since most of the relevant literature in the field is in English it has probably no impact on the outcome

4. Did the review's authors do enough to assess quality of the included studies?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies' results ("All that glisters is not gold" Merchant of Venice – Act II Scene 7)

Comments: qualitative evidence: GRADE and CERQual  
quantitative evidence: Review Manager 5.3 and GRADE

5. If the results of the review have been combined, was it reasonable to do so?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- results were similar from study to study
- results of all the included studies are clearly displayed
- results of different studies are similar
- reasons for any variations in results are discussed

Comments: for the qualitative evidence it was reasonable to do a thematic analysis, for the quantitative analysis details of intervention, comparison arms and relevant outcome data were extracted and evidence from RCTs and non-randomized studies was analysed separately

## Section B: What are the results?

6. What are the overall results of the review?

HINT: Consider

- If you are clear about the review's 'bottom line' results
- what these are (numerically if appropriate)
- how were the results expressed (NNT, odds ratio etc.)

Comments: qualitative eight themes: service level barriers; financial barriers; logistical barriers; personal barriers; legal and policy barriers; privacy and confidentiality concerns; training and education; community prescribing and telemedicine introduce greater flexibility  
quantitative: satisfaction was better and women were seen sooner when care was led by nurses or midwives compared with physician-led services, women were seen sooner when they could self-refer and clinicians

7. How precise are the results?

HINT: Look at the confidence intervals, if given

Comments: the analysis has been presented transparently leading to the assumption, that the results were presented in a valid and precise manner

Section C: Will the results help locally?

8. Can the results be applied to the local population?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- the patients covered by the review could be sufficiently different to your population to cause concern
- your local setting is likely to differ much from that of the review

Comments: They can help to better understand the potential of the inclusion of midwives in abortion care. The application of the results depends on the views and experiences of the women seeking abortion care which differs in health settings and cultures.

9. Were all important outcomes considered?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- there is other information you would like to have seen

Comments: As the intervention, comparison and outcome themes were very broad, it is likely, that they showed all important outcomes.

10. Are the benefits worth the harms and costs?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- even if this is not addressed by the review, what do you think?

Comments: The benefits are probably worth the harms and costs. The costs are not transparent, but it is likely, that the benefits of the study giving new ideas on how midwives can be included outweigh the harms and costs.

### CASP Randomised Controlled Trial Standard Checklist:

11 questions to help you make sense of a randomised controlled trial (RCT)

**Main issues for consideration:** Several aspects need to be considered when appraising a randomised controlled trial:

- ┆ Is the basic study design valid for a randomised controlled trial? (Section A)
- ┆ Was the study methodologically sound? (Section B)
- ┆ What are the results? (Section C)
- ┆ Will the results help locally? (Section D)

The 11 questions in the checklist are designed to help you think about these aspects systematically.

**How to use this appraisal tool:** The first three questions (Section A) are screening questions about the validity of the basic study design and can be answered quickly. If, in light of your responses to Section A, you think the study design is valid, continue to Section B to assess whether the study was methodologically sound and if it is worth continuing with the appraisal by answering the remaining questions in Sections C and D.

Record 'Yes', 'No' or 'Can't tell' in response to the questions. Prompts below all but one of the questions highlight the issues it is important to consider. Record the reasons for your answers in the space provided. As CASP checklists were designed to be used as educational/teaching tools in a workshop setting, we do not recommend using a scoring system.

**About CASP Checklists:** The CASP RCT checklist was originally based on JAMA Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL and Cook DJ), and piloted with healthcare practitioners. This version has been updated taking into account the CONSORT 2010 guideline (<http://www.consort-statement.org/consort-2010>, accessed 16 September 2020).

**Citation:** CASP recommends using the Harvard style, i.e. *Critical Appraisal Skills Programme (2020). CASP (insert name of checklist i.e. Randomised Controlled Trial) Checklist. [online] Available at: insert URL. Accessed: insert date accessed.*

©CASP this work is licensed under the Creative Commons Attribution – Non-Commercial- Share A like. To view a copy of this licence, visit <https://creativecommons.org/licenses/by-sa/4.0/>

**Study and citation:** .....

**Section A: Is the basic study design valid for a randomised controlled trial?**

<p><b>1. Did the study address a clearly focused research question?</b> <i>CONSIDER:</i> Was the study designed to assess the outcomes of an intervention? Is the research question 'focused' in terms of:</p> <ul style="list-style-type: none"> <li>• Population studied</li> <li>• Intervention given</li> <li>• Comparator chosen</li> <li>• Outcomes measured?</li> </ul>	<p>Yes                      No                      Can't tell  <input checked="" type="checkbox"/>                      <input type="checkbox"/>                      <input type="checkbox"/>  P: women with symptoms and signs of incomplete abortion and a uterine size of 13-18 weeks of gestation  I: misoprostol treatment by midwives  C: misoprostol treatment by physicians  O: primary: complete abortion without any surgical intervention within 24h of treatment intention</p>
<p><b>2. Was the assignment of participants to interventions randomised?</b> <i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>• How was randomisation carried out? Was the method appropriate?</li> <li>• Was randomisation sufficient to eliminate systematic bias?</li> <li>• Was the allocation sequence concealed from investigators and participants?</li> </ul>	<p>Yes                      No                      Can't tell  <input checked="" type="checkbox"/>                      <input type="checkbox"/>                      <input type="checkbox"/>  An independent statistician made a computer-generated blocked randomisation list stratified for each study site with a 1:1 ratio for physicians versus midwives in random blocks of four to 12, Block sizes were not disclosed to the research assistants to ensure concealment, allocation concealed from research assistants, visits of study coordinators once every 2 weeks, cross-checking of all protocols for completeness and accuracy before data entry</p>
<p><b>3. Were all participants who entered the study accounted for at its conclusion?</b> <i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>• Were losses to follow-up and exclusions after randomisation accounted for?</li> <li>• Were participants analysed in the study groups to which they were randomised (intention-to-treat analysis)?</li> <li>• Was the study stopped early? If so, what was the reason?</li> </ul>	<p>Yes                      No                      Can't tell  <input checked="" type="checkbox"/>                      <input type="checkbox"/>                      <input type="checkbox"/>  transparent inclusion and exclusion of participants at all stages of the study in the trial profile, all participants, that received the intervention were included in intention-to-treat-analysis</p>

**Section B: Was the study methodologically sound?**

<p><b>4.</b></p> <ul style="list-style-type: none"> <li>• Were the participants 'blind' to intervention they were given?</li> <li>• Were the investigators 'blind' to the intervention they were giving to participants?</li> <li>• Were the people assessing/analysing outcome/s 'blinded'?</li> </ul>	<p>Yes                      No                      Can't tell  <input type="checkbox"/>                      <input type="checkbox"/>                      <input checked="" type="checkbox"/>  <input type="checkbox"/>                      <input checked="" type="checkbox"/>                      <input type="checkbox"/>  <input checked="" type="checkbox"/>                      <input type="checkbox"/>                      <input type="checkbox"/></p>
<p><b>5. Were the study groups similar at the start of the randomised controlled trial?</b> <i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>• Were the baseline characteristics of each study group (e.g. age, sex, socio-economic group) clearly set out?</li> <li>• Were there any differences between the study groups that could affect the outcome/s?</li> </ul>	<p>Yes                      No                      Can't tell  <input checked="" type="checkbox"/>                      <input type="checkbox"/>                      <input type="checkbox"/>  all met the inclusion criteria, Data Safety Monitoring Board performed an interim analysis and there were no significant differences between both groups</p>

<p><b>6. Apart from the experimental intervention, did each study group receive the same level of care (that is, were they treated equally)?</b></p> <p><i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>• Was there a clearly defined study protocol?</li> <li>• If any additional interventions were given (e.g. tests or treatments), were they similar between the study groups?</li> <li>• Were the follow-up intervals the same for each study group?</li> </ul>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Can't tell <input type="checkbox"/></p> <p>the treatment protocol was the same for midwives and physicians</p>
---	---

**Section C: What are the results?**

<p><b>7. Were the effects of intervention reported comprehensively?</b></p> <p><i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>• Was a power calculation undertaken?</li> <li>• What outcomes were measured, and were they clearly specified?</li> <li>• How were the results expressed? For binary outcomes, were relative and absolute effects reported?</li> <li>• Were the results reported for each outcome in each study group at each follow-up interval?</li> <li>• Was there any missing or incomplete data?</li> <li>• Was there differential drop-out between the study groups that could affect the results?</li> <li>• Were potential sources of bias identified?</li> <li>• Which statistical tests were used?</li> <li>• Were p values reported?</li> </ul>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Can't tell <input type="checkbox"/></p> <p>Outcomes measured: 1) complete abortion without any surgical intervention within 24h of treatment initiation -&gt; clinical assessment; 2) time from induction to completion of abortion and total dose of misoprostol given, excessive vaginal bleeding, abdominal pain and its intensity, unscheduled visits, need for additional medical treatment, misoprostol side-effects, sepsis, hospitalisation for more than 48h, blood transfusion, disability or incapacity, life-threatening sepsis, death  statistical tests used: <math>\chi^2</math> test, Student's t-test, Wilcoxon rank-sum test  p-value of 0,05 or less considered statistically significant</p>
<p><b>8. Was the precision of the estimate of the intervention or treatment effect reported?</b></p> <p><i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>• Were confidence intervals (CIs) reported?</li> </ul>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Can't tell <input type="checkbox"/></p> <p>difference range of -5% to 5%, 95% CI</p>
<p><b>9. Do the benefits of the experimental intervention outweigh the harms and costs?</b></p> <p><i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>• What was the size of the intervention or treatment effect?</li> <li>• Were harms or unintended effects reported for each study group?</li> <li>• Was a cost-effectiveness analysis undertaken? (Cost-effectiveness analysis allows a comparison to be made between different interventions used in the care of the same condition or problem.)</li> </ul>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Can't tell <input type="checkbox"/></p> <p>all participants needed the intervention, it was safely performed by both professions</p>

Section D: Will the results help locally?

<p><b>10. Can the results be applied to your local population/in your context?</b></p> <p><i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>• Are the study participants similar to the people in your care?</li> <li>• Would any differences between your population and the study participants alter the outcomes reported in the study?</li> <li>• Are the outcomes important to your population?</li> <li>• Are there any outcomes you would have wanted information on that have not been studied or reported?</li> <li>• Are there any limitations of the study that would affect your decision?</li> </ul>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> Can't tell <input checked="" type="checkbox"/></p> <p>With a global perspective it is not possible to tell, that results can be applied to all countries and settings, the valuable results can be taken into consideration when changing abortion policies in other countries especially in countries with similar health system and population</p>
<p><b>11. Would the experimental intervention provide greater value to the people in your care than any of the existing interventions?</b></p> <p><i>CONSIDER:</i></p> <ul style="list-style-type: none"> <li>• What resources are needed to introduce this intervention taking into account time, finances, and skills development or training needs?</li> <li>• Are you able to disinvest resources in one or more existing interventions in order to be able to re-invest in the new intervention?</li> </ul>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Can't tell <input type="checkbox"/></p> <p>midwives providing abortion care can increase the access to safe abortions globally, midwives need accurate training and support when providing abortion related services</p>

**APPRAISAL SUMMARY:** Record key points from your critical appraisal in this box. What is your conclusion about the paper? Would you use it to change your practice or to recommend changes to care/interventions used by your organisation? Could you judiciously implement this intervention without delay?

The validity of the study is high, as the quality is very good. The development and process of the study as well as the analysis of the data are described transparently. The clinical relevance is high, as the involvement of midwives in abortion care can improve access to abortion care. The transferability is higher or lower depending on the comparability of the setting. Above all, the study can serve as an inspiration for other countries seeking to improve abortion care. Strengths of the study include the transparent representation of the included participants for the intention-to-treat analysis and the per-protocol analysis. Limitations include the fact that although the midwives all took a preparatory course to provide abortion care, the level of basic training varied from 18 months to 4 years.

## CASP Checklist: 10 questions to help you make sense of a **Systematic Review**

**How to use this appraisal tool:** Three broad issues need to be considered when appraising a systematic review study:

- ▶ Are the results of the study valid? (Section A)
- ▶ What are the results? (Section B)
- ▶ Will the results help locally? (Section C)

The 10 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is “yes”, it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a “yes”, “no” or “can’t tell” to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

**About:** These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

**Referencing:** we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Systematic Review) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

©CASP this work is licensed under the Creative Commons Attribution – Non-Commercial-Share A like. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/3.0/> [www.casp-uk.net](http://www.casp-uk.net)



Paper for appraisal and reference: **Experiences of midwives and nurses when implementing**

Section A: Are the results of the review valid?

1. Did the review address a clearly focused question?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: An issue can be 'focused' In terms of

- the population studied
- the intervention given
- the outcome considered

Comments: Exploring midwives and nurses experiences related to abortion policy implementation to provide helpful information to prevent policy failure

2. Did the authors look for the right type of papers?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: 'The best sort of studies' would

- address the review's question
- have an appropriate study design (usually RCTs for papers evaluating interventions)

Comments: electronic search strategy and the screening of the reference lists of all selected studies, eight medical and social sciences databases, not limit in study setting, age or method

Is it worth continuing?

3. Do you think all the important, relevant studies were included?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Look for

- which bibliographic databases were used
- follow up from reference lists
- personal contact with experts
- unpublished as well as published studies
- non-English language studies

Comments: It seems, that all the relevant papers were included, since the search was very broad in different global and regional databases. Many abstracts were screened and they also screened the reference lists of the included studies.

4. Did the review's authors do enough to assess quality of the included studies?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies' results ("All that glisters is not gold" Merchant of Venice – Act II Scene 7)

Comments: Study quality was appraised using the Mixed Method Appraisal Tool version 2018

5. If the results of the review have been combined, was it reasonable to do so?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- results were similar from study to study
- results of all the included studies are clearly displayed
- results of different studies are similar
- reasons for any variations in results are discussed

Comments: It was reasonable to combine the results, because they all fit in the three main themes.

Section B: What are the results?

6. What are the overall results of the review?

HINT: Consider

- If you are clear about the review's 'bottom line' results
- what these are (numerically if appropriate)
- how were the results expressed (NNT, odds ratio etc.)

Comments: the superordinate themes: belief of many midwives and nurses, that fetuses are sentient beings; preferences and expectations about abortion care; midwives' and nurses' experiences with other team members.

7. How precise are the results?

HINT: Look at the confidence intervals, if given

Comments: The results are precise, as it is transparent which studies contributed to which themes.

Section C: Will the results help locally?

8. Can the results be applied to the local population?

Yes	<input type="checkbox"/>
Can't Tell	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- the patients covered by the review could be sufficiently different to your population to cause concern
- your local setting is likely to differ much from that of the review

Comments: Abortion care is quite different in every setting and country. So some of the results might be applicable for different local settings and others don't.

9. Were all important outcomes considered?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- there is other information you would like to have seen

Comments: Results of all studies were compared and grouped so that all important outcomes could be included.

10. Are the benefits worth the harms and costs?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- even if this is not addressed by the review, what do you think?

Comments: The benefits are worth the harms and costs, since it is a summary on all studies found on the experiences of nurses and midwives with implementing abortion policies. This data is important for further policy development and abortion practices.

## CASP Checklist: 10 questions to help you make sense of a **Systematic Review**

**How to use this appraisal tool:** Three broad issues need to be considered when appraising a systematic review study:

- ▶ Are the results of the study valid? (Section A)
- ▶ What are the results? (Section B)
- ▶ Will the results help locally? (Section C)

The 10 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is “yes”, it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a “yes”, “no” or “can’t tell” to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

**About:** These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

**Referencing:** we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Systematic Review) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

©CASP this work is licensed under the Creative Commons Attribution – Non-Commercial-Share A like. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/3.0/> [www.casp-uk.net](http://www.casp-uk.net)

Paper for appraisal and reference: **No. 360-Induced Abortion: Surgical Abortion and Second**

Section A: Are the results of the review valid?

1. Did the review address a clearly focused question?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: An issue can be 'focused' In terms of

- the population studied
- the intervention given
- the outcome considered

Comments: Objective to review evidence relating to the provision of surgical induced abortion and second trimester medical abortion, including pre- and postprocedural care

2. Did the authors look for the right type of papers?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: 'The best sort of studies' would

- address the review's question
- have an appropriate study design (usually RCTs for papers evaluating interventions)

Comments: systematic reviews, randomized controlled trials, clinical trials and observational studies

Is it worth continuing?

3. Do you think all the important, relevant studies were included?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Look for

- which bibliographic databases were used
- follow up from reference lists
- personal contact with experts
- unpublished as well as published studies
- non-English language studies

Comments: PubMed, Medline and Cochrane Database searched, various key words, English and French literature

4. Did the review's authors do enough to assess quality of the included studies?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies' results ("All that glisters is not gold" Merchant of Venice – Act II Scene 7)

Comments: GRADE methodology framework was used to assess quality

5. If the results of the review have been combined, was it reasonable to do so?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- results were similar from study to study
- results of all the included studies are clearly displayed
- results of different studies are similar
- reasons for any variations in results are discussed

Comments: It was reasonable to combine the results, as this lead to an overview of evidence for different practice recommendations.

Section B: What are the results?

6. What are the overall results of the review?

HINT: Consider

- If you are clear about the review's 'bottom line' results
- what these are (numerically if appropriate)
- how were the results expressed (NNT, odds ratio etc.)

Comments: Induced Abortion is safe and effective. The benefits of induced abortion outweigh the potential harms and costs.

7. How precise are the results?

HINT: Look at the confidence intervals, if given

Comments: The results are very precise as the guideline is conducted for clinical practice.

Section C: Will the results help locally?

8. Can the results be applied to the local population?

Yes	<input type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>

HINT: Consider whether

- the patients covered by the review could be sufficiently different to your population to cause concern
- your local setting is likely to differ much from that of the review

Comments: The guideline was developed for clinical practice in Canada. Still the results can be used for considerations of practice recommendations in other countries as well.

9. Were all important outcomes considered?

Yes	<input type="checkbox"/>
Can't Tell	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- there is other information you would like to have seen

Comments: Because the search terms were broad, it is likely that many important results were considered. Since abortion care is a complex topic and varies from setting to setting it is possible, that important outcomes were not considered.

10. Are the benefits worth the harms and costs?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- even if this is not addressed by the review, what do you think?

Comments: The authors state that the benefits outweigh the potential harms and cost. There might be right since evidence-based guidelines are important for practical work especially when it comes to stigmatised tasks. Besides, this guideline is intended to be used by different professions and therefore supports interdisciplinary work and good interface management.

## CASP Checklist: 10 questions to help you make sense of a **Systematic Review**

**How to use this appraisal tool:** Three broad issues need to be considered when appraising a systematic review study:

- ▶ Are the results of the study valid? (Section A)
- ▶ What are the results? (Section B)
- ▶ Will the results help locally? (Section C)

The 10 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is “yes”, it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a “yes”, “no” or “can’t tell” to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

**About:** These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

**Referencing:** we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Systematic Review) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

©CASP this work is licensed under the Creative Commons Attribution – Non-Commercial-Share A like. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/3.0/> [www.casp-uk.net](http://www.casp-uk.net)



Paper for appraisal and reference: Midwifery care for late termination of pregnancy: Integrati

Section A: Are the results of the review valid?

1. Did the review address a clearly focused question?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: An issue can be 'focused' In terms of

- the population studied
- the intervention given
- the outcome considered

Comments: examine the research on midwifery care for late termination of pregnancy and identify support strategies and interventions available to midwives in this role

2. Did the authors look for the right type of papers?

Yes	<input type="checkbox"/>
Can't Tell	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

HINT: 'The best sort of studies' would

- address the review's question
- have an appropriate study design (usually RCTs for papers evaluating interventions)

Comments: The review authors explained, why they decided to make a broad search and showed which study types they included. They chose to include experimental and non-experimental studies, since there is not much evidence on the topic and also because they wanted a broad understanding of the phenomenon. The process is understandable and still it's hard to tell, wether they chose the right or wrong type of papers.

Is it worth continuing?

3. Do you think all the important, relevant studies were included?

Yes	<input type="checkbox"/>
Can't Tell	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

HINT: Look for

- which bibliographic databases were used
- follow up from reference lists
- personal contact with experts
- unpublished as well as published studies
- non-English language studies

Comments: Since the search was not systematic, it's not sure, wether they chose the relevant papers or not. They searched in 6 databases and also in the reference lists of the papers included. So there might be a lot of relevant records included.

4. Did the review's authors do enough to assess quality of the included studies?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies' results ("All that glisters is not gold" Merchant of Venice – Act II Scene 7)

**Comments:** They assessed quality with the JBI Critical Appraisal tool. No studies were excluded because of poor quality. The reason is, that there were not many relevant studies. So studies were included no matter the quality.

5. If the results of the review have been combined, was it reasonable to do so?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- results were similar from study to study
- results of all the included studies are clearly displayed
- results of different studies are similar
- reasons for any variations in results are discussed

**Comments:** It was reasonable to combine the results, since themes overlapped. In combining the results, the authors could collect similar concepts and group them in themes.

Section B: What are the results?

6. What are the overall results of the review?

HINT: Consider

- If you are clear about the review's 'bottom line' results
- what these are (numerically if appropriate)
- how were the results expressed (NNT, odds ratio etc.)

**Comments:** The results are expressed in themes. The authors included results of qualitative and quantitative research. The three themes are: positive aspects, negative aspects and carers need care.

7. How precise are the results?

HINT: Look at the confidence intervals, if given

Comments: They show, which aspects impact midwives more than others. There were more negative than positive aspects. It is transparent, which aspect is underlined by which studies.

Section C: Will the results help locally?

8. Can the results be applied to the local population?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- the patients covered by the review could be sufficiently different to your population to cause concern
- your local setting is likely to differ much from that of the review

Comments: Results from 13 countries of different continents were included, that means, that results can be generalised to a certain amount. The results might not be applicable to all midwives in the world, but they might be taken into consideration when talking with local midwives.

9. Were all important outcomes considered?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider whether

- there is other information you would like to have seen

Comments: Since all authors read the full studies, it is likely that all important outcomes were considered.

10. Are the benefits worth the harms and costs?

Yes	<input checked="" type="checkbox"/>
Can't Tell	<input type="checkbox"/>
No	<input type="checkbox"/>

HINT: Consider

- even if this is not addressed by the review, what do you think?

Comments: The biggest benefit of the study is, that it summarizes the evidence on midwives caring for late termination of pregnancy. It shows the need for support and further research on the topic.

## Eidesstattliche Erklärung

Hiermit versichere ich, Helen von Kalben, geboren am [REDACTED], dass ich die vorliegende Bachelorarbeit mit dem Titel „*The role of midwives in the provision of safe abortion care – a systematic review*“ selbstständig und ohne fremde Hilfe, insbesondere ohne entgeltliche Hilfe von Vermittlungs- und Beratungsdiensten sowie ohne die Anwendung von KI-Sprachmodellen wie z.B. Chat-GPT, angefertigt und keine anderen als die von mir angegebenen Quellen und Hilfsmittel benutzt habe. Alle wörtlichen oder sinngemäßen Entlehnungen aus anderen Arbeiten sind an den betreffenden Stellen als solche kenntlich gemacht und im entsprechenden Verzeichnis aufgeführt, das gilt insbesondere auch für alle Informationen aus Internetquellen. Ich erkläre zudem, dass ich die an der Medizinischen Fakultät Hamburg geltende „Satzung zur Sicherung guter wissenschaftlicher Praxis und zur Vermeidung wissenschaftlichen Fehlverhaltens an der Universität Hamburg“ in der jeweils gültigen Fassung eingehalten habe.

Des Weiteren versichere ich, dass ich die vorliegende Bachelorarbeit vorher nicht in dieser oder ähnlicher Form in einem anderen Prüfungsverfahren dieser oder einer anderen Fakultät bzw. Hochschule eingereicht habe.

Ich erkläre mich einverstanden, dass meine Bachelorarbeit zum Zweck der Plagiatsprüfung gespeichert und von meiner/-m Erst- und Zweitprüfenden mit einer gängigen Software zur Erkennung von Plagiaten überprüft werden kann.

Ich erkläre mich einverstanden, dass oben genannte Bachelorarbeit oder Teile davon von der Medizinischen Fakultät der Universität Hamburg oder von der HAW Hamburg veröffentlicht werden.

Hamburg, 16.11.2023,

[REDACTED]