Health worker roles in providing **safe abortion care and post-abortion contraception**

Executive summary

World Health Organization

Health worker roles in providing **safe abortion care and post-abortion contraception**

Executive summary

World Health Organization

Acknowledgements

The guideline was developed by the Department of Reproductive Health and Research, World Health Organization.

We acknowledge the many staff and consultants to the Department who contributed towards this effort. We thank the staff of the Norwegian Knowledge Centre for the Health Services, Oslo, Norway, for their work in evidence synthesis and assessment, and the Norwegian Agency for Development Cooperation for supporting the staff's time to work on this project.

We are also deeply grateful to the members of the Guideline Development Group and the external peer reviewers.

A complete list of contributors and their specific roles can be found in Annex A: Contributors to the guideline.

Editing, design and layout by Green Ink (greenink.co.uk)

Cover design by J. Petitpierre

WHO/RHR/15.15

Contents

Acronyms and abbreviations v

Executive summary 1

- Rationale for this guideline 3
- Process of guideline development 4
- Overview of recommendations 4
- Research needs 11
- Update and review 11

Tasks and health workers considered in the guideline 12

Acronyms and abbreviations

AN	auxiliary nurse
ANM	auxiliary nurse midwife
CERQual	Confidence in the Evidence from Reviews of Qualitative Research
CINAHL	Cumulative Index to Nursing and Allied Health Literature
DECIDE	Developing and Evaluating Communication Strategies to Support Informed Decisions and Practice Based on Evidence
D&E	dilatation and evacuation
DOI	declaration of interest
Embase	Excerpta Medica database
EmOC	emergency obstetric care
EtD	Evidence to Decision
EVA	electric vacuum aspiration
FIGO	Fédération Internationale de Gynécologie et d'Obstétrique (International Federation of Gynecology and Obstetrics)
GDG	Guideline Development Group
GRADE	Grading of Recommendations Assessment, Development and Evaluation
IM	intramuscular
IUD	intrauterine device
IV	intravenous
LILACS	Literatura Latinoamericana y del Caribe en Ciencias de la Salud
MA	medical abortion
MNH	maternal and newborn health
MVA	manual vacuum aspiration
NGO	nongovernmental organization
PAHO	Pan American Health Organization
PICO	population, intervention, comparator, outcome
RHL	WHO Reproductive Health Library
UNFPA	United Nations Population Fund
USA	United States of America
WHO	World Health Organization

Executive summary

Tasks and health workers

Executive summary

Moving beyond specialist doctors to involve a wider range of health workers is an increasingly important public health strategy. Planned and regulated task shifting and task sharing can ensure a rational optimization of the available health workforce, address health system shortages of specialized health-care professionals, improve equity in access to health care and increase the acceptability of health services for those receiving them.

Rationale for this guideline

Although safe, simple and effective evidence-based interventions exist, nearly 22 million unsafe abortions take place every year; these continue to contribute significantly to the global burden of maternal mortality and morbidity.

Among the many barriers that limit access to safe abortion care, the lack of trained providers is one of the most critical. It is estimated that the global deficit of skilled health-care professionals will reach 12.9 million by 2035. Such shortages are especially critical in regions of the world that also have a high burden of unsafe abortion and related mortality. Additionally, most countries, including many high-income ones, have subnational disparities in the availability of a skilled health workforce, with shortages being particularly high in rural areas or within the public sector.

Policy and regulatory barriers, stigma or the unwillingness of some health-care professionals to provide care may further limit the availability of safe abortion and post-abortion care providers in many contexts. This leaves particular subpopulations of women – for example, rural, less educated, poor, adolescent or unmarried women – at risk of unsafe abortion.

Although in many contexts abortion-related care provision is limited to specialist doctors, many of the evidence-based interventions for safe abortion and post-abortion care, particularly those in early pregnancy, can be provided on an outpatient basis at the primary care level. The emergence of medical abortion (i.e. non-surgical abortion using medications) as a safe and effective option has resulted in the further simplification of the appropriate standards and health worker skills required for safe abortion provision, making it possible to consider expanding the roles of a much wider range of health workers in the provision of safe abortion.

While shortages of all skilled health-care professionals exist, the deficits and subnational imbalances are the greatest for physicians. The 2013 World Health Organization (WHO) report on the global health workforce highlights the fact that advanced practitioners, midwives, nurses and auxiliaries are still insufficiently used in many settings. Involving such health workers makes it more likely that services will be available to women when they need them.

While WHO's 2012 publication *Safe abortion: technical and policy guidance for health systems* highlighted that abortion care can be safely provided by properly trained health-care providers, including non-physician providers who are trained in basic clinical procedures related to reproductive health, it did not provide specific recommendations with respect to different types of health workers or the tasks for which task shifting and task sharing are appropriate. There are no other global guidelines that provide such guidance, though some recommendations related to task shifting in contraceptive provision have been included in the *OptimizeMNH* recommendations, published in 2012. This guideline therefore aims to fill this gap with evidence-based recommendations on the safety, effectiveness, feasibility and acceptability of involving a range of health workers in the delivery of recommended and effective interventions for providing safe abortion and post-abortion care, including post-abortion contraception.

The guideline will be useful for policy-makers, implementers of national and subnational programmes, nongovernmental organizations and professional societies involved in the planning and management of such care. While policy and regulatory environments for safe abortion care may vary, abortion is legal at least to save the life of the woman in almost all countries, more than two thirds of countries have one or more additional grounds for legal abortion, and the provision of care for complications is always legal. Thus, the possibility of improving access to safe abortion or post-abortion care, or both, by expanding health worker roles exists in most contexts. The range of safe and effective options recommended here can facilitate evidence-based decision-making and adaptation to the context of local health workforce dynamics, resources and public health needs.

Process of guideline development

The guideline was developed according to the principles set out in the *WHO handbook for guideline development* and under the oversight of the Guidelines Review Committee of WHO. The core team at WHO (the Steering Group) was complemented by a team of experts on evidence synthesis from the Norwegian Knowledge Centre, Oslo, and by a multidisciplinary group of external technical experts who constituted the Guideline Development Group (GDG).

The tasks and health worker categories were defined based on insights from regional technical consultations and input from experts. Questions were developed in the population, intervention, comparator, outcome (PICO) format and priority outcomes (safety, effectiveness, satisfaction, acceptability and feasibility) were defined. A systematic search was conducted, review of the evidence was undertaken, and 36 studies that looked at effectiveness and 204 qualitative studies were included in the evidence base. Data came from both high-resource as well as low-resource settings. The certainty of the evidence on safety, effectiveness and satisfaction was assessed using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach. Confidence in the qualitative findings on acceptability and feasibility were assessed using the Confidence in the Evidence from Reviews of Qualitative Research (CERQual) approach.

Recommendations were finalized in consultation with the GDG and using explicit Evidence to Decision (EtD) frameworks that considered benefits, harms, feasibility and acceptability, as well as resource use from the perspectives of women, the health system and health workers. Declarations of interest (DOIs) were managed according to standard procedures; no conflicts of interest were identified.

External peer reviewers, unconnected to the guideline development process, reviewed and critically appraised the draft guideline prior to its finalization.

Overview of recommendations

Recommendations have been made for tasks related to safe abortion care (including post-abortion contraception) and the management of complications of abortion (also known as post-abortion care in some settings and provided as part of emergency obstetric care). Only clinical interventions that have been recommended as safe and effective according to current WHO technical guidance (i.e. *Safe abortion: technical and policy guidance for health systems*) are included. The tasks are outlined in Table 1.

The range of types of health workers considered for the various tasks was broad-based and included specialist doctors (obstetrics and gynaecology), doctors not specialized in obstetrics and gynaecology, associate clinicians, midwives, nurses, auxiliary nurses (ANs) and auxiliary nurse midwives (ANMs), doctors of complementary systems of medicine (a significant portion of the workforce in some regions), pharmacists, pharmacy workers and lay health workers. Explanation of the categorization with illustrative examples can be found in Table 2.

One of the following types of recommendations has been made for each task and health worker combination:

Recommendation category	Symbol	Explanation
Recommended		The benefits of implementing this option outweigh the possible harms. This option can be implemented, including at scale.
Recommended in specific circumstances		The benefits of implementing this option outweigh the possible harms in specific circumstances. The specific circumstances are outlined for each recommendation. This option can be implemented under these specific circumstances.
Recommended in the context of rigorous research		There are important uncertainties about this option (related to benefits, harms, acceptability and feasibility) and appropriate, well designed and rigorous research is needed to address these uncertainties.
Recommended against		This option should not be implemented.

All of the recommendations assume that the assigned health workers will receive task-specific training prior to implementation. The implementation of these recommendations also requires functioning mechanisms for monitoring, supervision and referral.

The recommendations are applicable in both high- and low-resource settings. They provide a range of options of types of health workers who can perform the specific task safely and effectively. The options are intended to be inclusive and do not imply either a preference for or an exclusion of any particular type of provider. The choice of a specific health worker for a specific task will depend upon the needs and conditions of the local context.

Management of abortion and post-abortion care in the first trimester

	Lay health workers	Pharmacy workers	Pharma-cists	Doctors of comple-mentary systems of medicine	Auxiliary nurses/ ANMs	Nurses	Midwives	Associate/ advanced associate clinicians	Non-specialist doctors	Specialist doctors
Vacuum aspiration for induced abortion	✗ **	✗ **	✗ **	✓	✓	✓	✓	✓	✓ *	✓ *
Vacuum aspiration for management of uncomplicated incomplete abortion/ miscarriage	✗ **	✗ **	✗ **	✓	✓	✓	✓	✓	✓ *	✓ *
Medical abortion in the first trimester	Recom-mendation for subtasks (see below)	✗	Recom-mendation for subtasks (see below)	✓	✓	✓	✓	✓	✓ *	✓ *
Management of uncomplicated incomplete abortion/ miscarriage with misoprostol	R ✓	✗	✗	✓	✓	✓	✓	✓	✓ *	✓ *

* considered within typical scope of practice; evidence not assessed.
** considered outside of typical scope of practice; evidence not assessed.

Subtasks for medical abortion in the first trimester: No recommendation is made on the independent provision of medical abortion in the first trimester for pharmacists or lay health workers, but recommendations are made for subtasks as follows:

Subtasks for medical abortion in the first trimester

	Lay health workers	Pharmacists
Assessing eligibility for medical abortion		
Administering the medications and managing the process and common side-effects independently		
Assessing completion of the procedure and the need for further clinic-based follow-up		

Management of abortion and post-abortion care beyond 12 weeks

	Lay health workers	Pharmacy workers	Pharma-cists	Doctors of comple-mentary systems of medicine	Auxiliary nurses/ ANMs	Nurses	Midwives	Associate/ advanced associate clinicians	Non-specialist doctors	Specialist doctors
Dilatation and evacuation	✗**	✗**	✗**	✗	✗**	✗**	✗**	✓R	✓	✓*
Cervical priming (osmotic dilators)	✗**	✗**	✗**	✗	✗	✓	✓	✓	✓*	✓*
Cervical priming (medications)	✗	✗	✗	✓	✓	✓	✓	✓	✓*	✓*
Medical abortion > 12 weeks	✗**	✗**	✗**	✗	✗	✓	✓	✓	✓	✓*

Management of non-life-threatening complications

	Lay health workers	Pharmacy workers	Pharma-cists	Doctors of comple-mentary systems of medicine	Auxiliary nurses/ ANMs	Nurses	Midwives	Associate/ advanced associate clinicians	Non-specialist doctors	Specialist doctors
Initial management of post-abortion infection	✗**	✗**	✗**	✓	✓	✓	✓	✓	✓*	✓*
Initial management of post-abortion haemorrhage	✗**	✗**	✗**	✓	✓	✓	✓	✓	✓*	✓*

* considered within typical scope of practice; evidence not assessed.
** considered outside of typical scope of practice; evidence not assessed.

Provision of post-abortion contraception

	Lay health workers	Pharmacy workers	Pharma-cists	Doctors of comple-mentary systems of medicine	Auxiliary nurses/ ANMs	Nurses	Midwives	Associate/ advanced associate clinicians	Non-specialist doctors	Specialist doctors
Insertion/ removal of intrauterine devices (IUDs)	✗	✗	✗	✓	✓ (for ANMs) ✓R (for auxiliary nurses)	✓	✓	✓*	✓*	✓*
Insertion/ removal of implants	✓R	✗	✗	✓	✓	✓	✓	✓*	✓*	✓*
Initiation/ continuation of injectable contraceptives	✓	✓	✓	✓	✓	✓*	✓*	✓*	✓*	✓*
Tubal ligation	✗**	✗**	✗**	✗**	✗	✓R	✓R	✓*	✓*	✓*

* considered within typical scope of practice; evidence not assessed.
** considered outside of typical scope of practice; evidence not assessed.

Pre- and post-abortion counselling

	Lay health workers	Pharmacy workers	Pharma-cists	Doctors of comple-mentary systems of medicine	Auxiliary nurses/ ANMs	Nurses	Midwives	Associate/ advanced associate clinicians	Non-specialist doctors	Specialist doctors
Pre- and post-abortion counselling	✓	✗	✗	✓	✓	✓	✓	✓	✓*	✓*

Provision of information on safe abortion

	Lay health workers	Pharmacy workers	Pharma-cists	Doctors of comple-mentary systems of medicine	Auxiliary nurses/ ANMs	Nurses	Midwives	Associate/ advanced associate clinicians	Non-specialist doctors	Specialist doctors
Information on safe providers/ laws	✓	✓	✓	✓*	✓*	✓*	✓*	✓*	✓*	✓*

* considered within typical scope of practice; evidence not assessed.

Women themselves have a role to play in managing their own health and this constitutes another important component of task sharing within health systems. Therefore, the following recommendations were made related to self-assessment and self-management approaches in contexts where the woman has access to appropriate information and to health services should she need or want them at any stage of the process.

Role of self-management approaches

	Self
Medical abortion in the first trimester	No recommendation for overall task – recommendations for specific components as below
Self-assessing eligibility	
Managing the mifepristone and misoprostol medication without direct supervision of a health-care provider	
Self-assessing completeness of the abortion process	
Self-administering injectable contraception	

Research needs

The safety, effectiveness and feasibility of task sharing by health workers located outside of health-care facilities (i.e. in communities) or in pharmacies are important research areas for the future. Also critical is implementation research to identify effective strategies to implement task shifting at scale in national and subnational programmes.

Update and review

The recommendations in this guideline will be reviewed and updated in 2018.

Tasks and health workers considered in the guideline

Only tasks that have already been recommended as safe and effective in *Safe abortion: technical and policy guidance for health systems (3)* have been included.

The main task has been split into subtasks in some instances where it is clinically feasible for the subtasks to be performed as discrete and independent activities by different health workers, possibly at different locations or different time points.

Self-management and self-assessment approaches are included for some of the tasks as women themselves have an important role to play in the management of their own care. Such approaches can be empowering for women and also represent a way of optimizing available health workforce resources and sharing of tasks.

Table 1. Tasks and subtasks considered in the guideline

Specific tasks included in the scope of the guideline
Management of abortion and post-abortion care in the first trimester • Vacuum aspiration for induced abortion • Vacuum aspiration for the management of incomplete abortion • Medical abortion with mifepristone + misoprostol or misoprostol alone, including the subtasks of: – assessment of eligibility – administration of medications and management of the process – assessment of abortion completeness • Medical management of incomplete abortion with misoprostol • Self-management of components of medical abortion
Management of abortion and post-abortion care beyond 12 weeks • Dilatation and evacuation (D&E) for induced abortion, including specific subtasks as follows: – cervical priming with osmotic dilators – cervical priming with medications • Medical abortion with mifepristone + misoprostol or misoprostol alone
Recognizing and managing non-life-threatening complications • Initial management of non-life-threatening post-abortion infection • Initial management of non-life-threatening post-abortion haemorrhage
Counselling and information provision • Provision of general information on safe providers, laws, contraception options • Pre- and post-abortion counselling
Post-abortion contraception provision • Insertion and removal of IUDs • Insertion and removal of implants • Initiation and continuation of injectable contraceptives • Tubal ligation (female sterilization)

The health worker types considered in the guideline are described in Table 2. The descriptions draw on a variety of sources including definitions used in the *OptimizeMNH* task-shifting guideline *(6)* and other WHO publications *(7–12)*.

Descriptions have been adapted to be generic enough to apply across settings. They are indicative and illustrative and are not intended to substitute formal definitions of professional bodies or those used in specific countries and are not official WHO definitions.

Table 2. Health worker category descriptions

Broad category	Illustrative description for the purpose of the tasks covered in this guideline	Examples
Specialist doctor	For the purpose of this guideline, specialization refers to postgraduate clinical training and specialization in obstetrics and gynaecology.	Gynaecologist, obstetrician
Non-specialist doctor	For the purpose of this guideline, this refers to a medical doctor who holds a university-level degree in basic medical education with or without further training in general practice or family medicine, but not in obstetrics and gynaecology.	Family doctor, general practitioner, medical doctor
Advanced associate and associate clinician	For the purpose of this guideline, this refers to a professional clinician with basic competencies to diagnose and manage common medical and surgical conditions and also to perform some types of surgery. Training can vary by country, but generally requires 3–4 years post-secondary education in an established higher education institution. The clinician is registered and his or her practice is regulated by a national or subnational regulatory authority.	Assistant medical officer, clinical officer, medical licentiate practitioner, health officer, physician assistant, surgical technician, non-physician clinician, medical assistant, nurse practitioner
Midwife	For the purpose of this guideline, this refers to a person who has been registered by a state midwifery or similar regulatory authority and has been trained in the essential competencies for midwifery practice. Training typically lasts 3 or more years in nursing or midwifery school and leads to a university degree or the equivalent. A registered midwife has the full range of midwifery skills.	Registered midwife, midwife, community midwife, nurse-midwife
Nurse	For the purpose of this guideline, this refers to a person who has been legally authorized (registered) to practice after examination by a state board of nurse examiners or similar regulatory authority. Education includes 3 or more years in nursing school, and leads to a university or postgraduate university degree or the equivalent.	Registered nurse, clinical nurse specialist, licensed nurse, BSc nurse
Auxiliary nurse midwife and auxiliary nurse	For the purpose of this guideline, an auxiliary nurse is someone trained in basic nursing skills but not in nursing decision-making. An auxiliary nurse midwife has basic nursing skills and some midwifery competencies but is not fully qualified as a midwife. The level of training may vary from a few months to 2–3 years. A period of on-the-job training may be included, and sometimes formalized in apprenticeships.	Auxiliary midwife, auxiliary nurse, ANMs, family welfare visitor

Table 2 (continued)

Broad category	Illustrative description for the purpose of the tasks covered in this guideline	Examples
Doctor of complementary systems of medicine	For the purpose of this guideline, this refers to a professional of traditional and complementary systems of medicine (non-allopathic physician) whose training includes a 4- or 5-year university degree that teaches the study of human anatomy, physiology, management of normal labour and the pharmacology of modern medicines used in obstetrics and gynaecology, in addition to their systems of medicine. For the purpose of this guideline, these doctors are included with reference to the provision of elements of abortion-related care as per conventional medical practice.	Ayush doctor, Ayurvedic physician, non-allopathic physician
Pharmacist	For the purpose of this guideline, this refers to a health practitioner who dispenses medicinal products. A pharmacist can counsel on the proper use and adverse effects of drugs and medicines following prescriptions issued by medical doctors/health professionals. Education includes university-level training in theoretical and practical pharmacy, pharmaceutical chemistry or a related field.	Pharmacist (USA), chemist (United Kingdom and the Commonwealth), clinical pharmacist, community pharmacist
Pharmacy worker	For the purpose of this guideline, this refers to technicians and assistants who perform a variety of tasks associated with dispensing medicinal products under the guidance of a pharmacist. They inventory, prepare and store medications and other pharmaceutical compounds and supplies, and may dispense medicines and drugs to clients and instruct on their use as prescribed by health professionals. Technicians typically receive 2–3 years training in a pharmaceutical school, with an award not equivalent to a university degree. Assistants have usually been through 2–3 years of secondary school with a subsequent period of on-the-job training or apprenticeship.	Pharmacy assistant, pharmacy technician dispenser, pharmacist aide, dispensary assistant
Lay health worker	For the purpose of this guideline, this refers to a person who performs functions related to health-care delivery/ information provision and was trained in some way in the context of the task, but has received no formal professional or paraprofessional certificate or tertiary education degree.	Community health worker, village health worker, female community health volunteer

World Health Organization

For more information, please contact:
Department of Reproductive Health and Research
World Health Organization
Avenue Appia 20, CH-1211 Geneva 27, Switzerland
Fax: +41 22 791 4171
E-mail: reproductivehealth@who.int

www.who.int/reproductivehealth