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

## Web Supplement 3

## Annexes 27-40: Evidence base for acceptability and feasibility

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This document is a supplement to the guideline which is available at: <a href="http://www.who.int/reproductivehealth/publications/unsafe\_abortion-task-shifting/en/">http://www.who.int/reproductivehealth/publications/unsafe\_abortion-task-shifting/en/</a>

# ANNEX 27. PERCEPTIONS OF AND EXPERIENCES WITH SELF-ADMINISTRATION OF MEDICAL ABORTION

Colvin C, Wainwright M, Swartz A, Leon N.

#### **OBJECTIVE**

The review's objective was to identify, appraise and synthesize qualitative research evidence on the factors affecting the self-administration of medical abortion during the first trimester of pregnancy.

#### **METHODS**

We searched the following electronic databases for eligible studies: Ovid MEDLINE In-Process & Other Non-Indexed Citations and Medline, CINAHL, Global Health (CAB), Popline, and WHO Global Health Library. When searching Medline and CINAHL, we made use of their filter for qualitative studies, choosing the "specificity" alternative for Medline and the "Qualitative – Best balance" alternative for CINAHL. We included any studies in English, Spanish, Portuguese, and French that met our inclusion criteria. Of studies that met our inclusion criteria, five are in Portuguese and the remainder are in English. In addition to the electronic searches, we contacted experts in our review Advisory Committee, searched reference lists of included studies, as well as key quantitative studies of self-administration, and searched websites for "grey literature".

When deciding whether or not to include a study in the review, we considered "task shifting" in this context to be the process of handing elements of decision-making, administration and management of the medical abortion process over to women themselves or to health professionals other than physicians. From the user perspective, this involves medical abortion at home for part or all of the procedure. From the health professional perspective, we were interested in their experiences of providing care in situations where women were responsible for self-administration of misoprostol, or their attitudes and opinions regarding the potential option for this in the future. From the partner/family member perspective, we were interested in the experience of accompanying the person throughout the process of medical abortion at home.

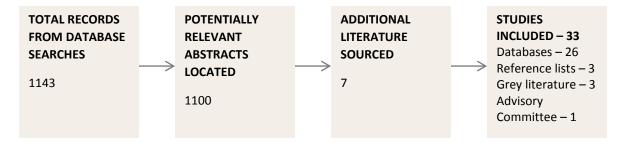
#### Emergent inclusion criteria:

- 1. The research sought perspectives (users, providers, family members, etc.) and experiences concerning home administration of misoprostol, alternative forms of follow-up (either none, or phone, etc.), or alternative forms of counselling for home administration (e.g. from lay health workers, pharmacists).
- 2. Studies which follow the standard of care but which include data specifically relevant to the acceptability/feasibility of future home administration of misoprostol.
- 3. A less likely scenario, but which would also meet our criteria, would be home administration of mifepristone, or alternative forms of counselling for mifepristone—misoprostol abortions.
- 4. First trimester abortions.
- 5. The research methods include qualitative approaches and qualitative modes of reporting and analysis. This includes mixed-methods studies so long as they meet the above criteria.

- 6. Medical abortion in contexts of illegality can be included if they squarely meet criteria No. 1. These are considered indirect evidence and data extracted from them has to speak to the issue of home administration of misoprostol.
- 7. Ideally the research participants will be people who have experienced medical abortion with home administration but studies with prospective users (women/men of reproductive age) can also be included if relevant to home administration.

All potential study abstracts were read and assessed independently by at least two authors. Disagreements about inclusion were resolved via discussion. We assessed the quality of included studies at the beginning of the review and then made use of the CERQual (Confidence in the Evidence from Review of Qualitative research) approach at the end to assess our confidence in each review finding. We developed a data extraction table initially informed by the SURE framework (The SURE Collaboration 2011). Our final data extraction framework focused on four topic areas related to the issues of feasibility and acceptability of self-administration of medical abortion. These were: (a) technical knowledge, comprehension and communication, (b) motivations for/acceptability of home use, (c) the process and pragmatics of home use, and (d) the experiences of and relationship contexts for home use. We analysed and synthesized our qualitative evidence using the framework thematic synthesis approach<sup>1</sup> and summarized these findings in a Summary of Qualitative Findings table.

#### STUDY SELECTION FLOW DIAGRAM



#### DEFINING THE SCOPE OF "SELF-ADMINISTRATION" FOR THE REVIEW

The current WHO guideline for medical abortion allow for the option of women to receive misoprostol from a health-care provider and self-administer it at home if she has received the appropriate counselling from the provider, taken mifepristone at the clinic, and has access to follow-up and emergency care as needed. In many settings, however, the organization of care for medical abortion remains one based around three clinic visits: a first visit to initiate the abortion process, receive counselling and take mifepristone; a second visit 2–3 days later to take the misoprostol; and a follow-up visit 1–2 weeks later to confirm completion of the abortion.

Since many settings have not yet fully incorporated the home use of misoprostol (the second visit noted above) into their abortion care protocols, and since we found very few studies in which task shifting of medical abortion was being pushed beyond the current WHO guideline option for home use, we have elected to use a definition of self-administration that includes any

<sup>&</sup>lt;sup>1</sup> Thomas J, Harden A. Methods for the thematic synthesis of qualitative research in systematic reviews. BMC Med Res Methodol. 2008;8:45.

shift away from the "three visit" model described above in order to maximize both the amount and the relevance of evidence reviewed.

#### **RESULTS**

Our search revealed no studies that report on the self-administration of mifepristone at home or on self-administration without a scheduled follow-up visit or phone call, although a few studies include information on the opinions of different stakeholders about these possibilities. There were some studies that examined the use of telemedicine and website-based options for counselling and/or follow-up care, but none that examined a formal model where women assessed their eligibility, procured and administered the drugs, managed the process, and determined completion without the required involvement of trained providers.

Studies of medical abortion in "restricted" contexts where abortion is illegal did necessarily describe this more extensive type of self-administration. Although the experience and process of self-administration in these contexts is very different than what one would expect in any formal model of self-administration in a legal context, we have included these studies in the review since they provide an indirect form of evidence about experiences of self-administration of medical abortion with very little formal health-care provider involvement.

#### GENERAL PERCEPTIONS OF SELF-ADMINISTRATION OF MEDICAL ABORTION

Physicians and nurses offering mifepristone—misoprostol or misoprostol-alone medical abortion were generally positive about women's ability to self-administer misoprostol at home. Doing so required a longer initial consultation and required that providers become comfortable with relinquishing control over the administration and identification of adverse reactions to the drug. Comfort came with experience of the method and observing its efficacy and low-rates of serious complications. Physicians' personal beliefs regarding the importance of the woman's education level, her prior experiences with abortion, miscarriage, or birth, her ability to withstand potentially prolonged bleeding, her household's distance from health-care facilities, and her ability to afford medical versus surgical abortion shaped their willingness to offer medical abortion, and more specifically, self-administration of misoprostol.

In the studies published on the topic, when specified, all protocols included a follow-up visit. Some studies found that providers describe compliance with follow-up as being low because of the efficacy and safety of the drug. When discussing the potential to task shift counselling and prescription of medical abortion, those already providing abortion were concerned about other providers' levels of knowledge, the ability to provide follow-up in case of complication, and the general attitude to abortion and concern that women could be mistreated by providers who are against abortion or who might refer to tertiary-level-care facilities that would stigmatize women.

In a number of contexts misoprostol for early medical abortion falls within the category of "menstrual regulation" and is understood as one of many treatments for the local illness category of "late menses". However, while use of misoprostol for this purpose is perceived as both more efficacious and less dangerous than other methods available, significant concerns are still present for many women about the effects of the drugs.

#### PREPARATION FOR SELF-ADMINISTRATION

When comparing studies from countries where women self-administer misoprostol with no, or very informal counselling, versus studies from countries with formal counselling delivered by trained providers, differences in comfort, confidence, and general experience are observed. Women who receive counselling on how to take misoprostol, and are prepared mentally for the wide variability of potential experiences of pain, cramping and bleeding report being comfortable with the process despite these effects of the abortion regimen, and describe making arrangements for their comfort and support at home. Women who aren't counselled by trained providers were found to be taking variable and often inappropriate doses, were afraid of dying, did not know what to expect or when to seek help, might go to emergency as soon as bleeding begins, and may distrust the quality or authenticity of the medication.

#### LOGISTICAL CONSIDERATIONS OF SELF-ADMINISTRATION

Women who self-administered misoprostol at home chose the method because it reduced the number of visits to the clinic, thus saving time and resources spent on transportation, missing work, childcare, and reducing the likelihood of raising suspicion among neighbours about multiple clinic visits. It also increased women's control over the time of symptom-onset, thus avoiding the unpleasantness and anxiety produced when symptoms begin while en route home from the clinic. Generally, when women receive counselling about how to take misoprostol at home they comply with dosage and timing and report few complications. Telephone support is highly valued and is used when needed. Practical difficulties with the administration of misoprostol vary by the route of administration. Women may find vaginal administration difficult. Some women may also dislike the taste of oral misoprostol and this may be made worse because of morning sickness – this can influence whether the woman keeps the misoprostol in her cheek long enough.

#### ISSUES OF ACCESS, CHOICE AND CONTROL IN SELF-ADMINISTRATION

Women want the freedom to choose between surgical and medical abortion, and want to be able to choose between self-administration and clinical administration of misoprostol. Some women may also prefer to expel the products of conception in clinic. Much depends on the relative comfort of the home versus the clinic for managing the bleeding associated with medical abortion. Control is of utmost importance, especially in relation to maintaining privacy. What in one cultural context may protect privacy may in another impede it. Equally, within a particular social and cultural context, what for one woman may increase privacy may for another decrease it. For example, a pharmacy may be a more private space for acquiring drugs for medical abortion for a woman who is marginalized because of being unmarried or poor than a hospital. Going to the hospital two or three times may in some cases decrease privacy (by requiring multiple visits), or increase it (by providing a space for women to experience the medical abortion outside the view of their husbands and in-laws).

Cost can also shape decisions to self-administer. Even in contexts where medical abortion is legally available for prescription through physicians, the cost of seeing a physician may be unaffordable and drive women to try to acquire the drugs through pharmacists directly without a prescription. Pharmacists in some contexts will prescribe remedies for pregnancy termination and "menstrual regulation" on the basis of their cost and their perception of the client's economic level. In these cases women may not be given the chance to choose. How

pharmacists identify themselves on a spectrum of business person to allied health-care provider, and how they are perceived by the wider society in relation to this spectrum, will shape both their interest in prescribing and counselling women, and other health professionals' and women's trust in their knowledge, the quality of their drugs, and the accuracy of their prescriptions.

In contexts where medical abortion is legally restricted or the drugs are only available with prescription, pharmacists are cautious. They represent a difficult group to study because their ambiguous position makes sharing their actual practices with researchers risky. For this reason research on pharmacist behaviours has often been carried out overtly through "mystery-client" research methods. When access to medical abortion through pharmacists with or without prescriptions is possible, concerns arise among women around men's easy access to it and potential to coerce women to use it, and around young women's ability to access it indiscriminately, potentially in substitution of birth control.

#### MEANING AND EXPERIENCE DURING SELF-ADMINISTRATION

For health professionals, the self-administration of misoprostol and expulsion at home can help to distance themselves from a practice to which they may morally object. For women, selfadministration can represent a welcomed increase in involvement with the process. Some women report self-insertion of misoprostol as an act that reinforced their ownership over the decision to abort. Reducing contact with the clinic meant that the experience could be demedicalized and shaped into what many women perceived as a more "natural" process of inducing a miscarriage. Having privacy in that moment can help create space for the assertion of control and for allowing personal forms of grief and mourning. Self-administration at home can also facilitate male involvement in the abortion experience. Studies that looked at both men and women's experiences of going through medical abortion at home found that both believed men should receive more counselling as they can be overly anxious about levels of pain. amount of bleeding, and length of the process. One element of medical abortion at home is being able to monitor blood loss. Studies from wide-ranging cultural contexts report differences in comfort engaging with the products of conception and suggest that comfort with this may vary not just individually but culturally. Some seemed to observe and inspect them in great detail, while others feared what they would see and the emotions this would arouse.

## SUMMARY OF QUALITATIVE FINDINGS TABLE

Su	mmary statement	Certainty in the evidence*	Studies		
Ge	General perceptions of self-administration of medical abortion				
1.	Providers were generally approving of the concept of self-administration if initiation of medical abortion was supported by trained providers, and believed that it could be done feasibly, effectively and safely. Even in restricted contexts, some offered support for women self-administering by providing clinical advice and counselling and noting likely sources. They were not, however, generally supportive of over-the-counter access to medical abortion drugs.	High	Acharya and Kalyanwala 2012; Alam et al. 2013; Cohen et al. 2005; Ellertson et al. 1999; Espinoza et al. 2004; Fiol et al. 2012; Ganatra et al. 2005; Grindlay et al. 2013; Mitchell et al. 2010; Nanda et al. 2010; Nations et al. 1997; Pheterson and Azize 2005; Sherris et al. 2005; Simonds et al. 1998		
2.	Women were also generally approving of the concept of self-administration. They often reported some degree of anxiety at the beginning of the process but reported relief at the end of the process and a strong sense of satisfaction with the choice to self-administer.	High	Alam et al. 2013; Fielding et al. 2010; Ganatra et al. 2010; Kero et al. 2009; Mitchell et al. 2010		
3.	<ul> <li>Perceptions among providers about which kinds of health workers should be able to provide medical abortion drugs to women for self-administration depends on:</li> <li>perceptions of the strength of the drugs and hence the expertise in anatomy and physiology needed to explain their full effects;</li> <li>a provider's training in appropriate counselling for abortion;</li> <li>a provider's knowledge of abortion-friendly emergency departments to refer women to in the case of complications; and</li> <li>a client's experience, and therefore trust, of different health workers.</li> </ul>	Medium	Ellertson 1999; Sri and Ravindran 2012; Cohen 2005		
4.	Women's perceptions of the acceptability of shifting the counselling and follow-up visit components of medical abortion away from direct contact with trained providers depended on the standard of care and their prior experiences with medical abortion as well as local notions of medical hierarchy, abortion taboos and stigma, and perceptions around the strength, danger and complexity of the drugs.	Medium	Ganatra et al. 2010; Gipson et al. 2011; Pheterson and Azize 2005;		

Summary statement		Certainty in the evidence*	Studies
5.	In some contexts, the use of misoprostol at home for early medical abortion falls within existing interpretive frameworks and practices of "menstrual regulation" and is understood as one of many treatments for the local illness category of "late menses". This language is sometimes shared by health professionals/pharmacists as well.	Medium	Nations et al. 1997; Sherris et al. 2005; Pheterson and Azize 2005; Grossman et al. 2010
6.	Providers' perceptions about what kinds of women are appropriate candidates for self-administration of medical abortion are shaped by their ideas about the relative importance of previous experience of labour, abortion or miscarriage, and travel distance from health-care facilities.	Low	Kero et al. 2009
7.	Self-administration allowed providers to practice a form of legal distancing in restricted contexts, and moral distancing in legal contexts. For some providers, this increased the acceptability of self-administration as an option.	Low	Arilha 2012; Bury et al. 2021; Simonds et al. 1998
Pre	eparation for self-administration		
8.	Most women reported some form of anxiety, uncertainty, or ambivalence, sometimes to do with the decision to terminate the pregnancy, but more often in relation to the pending process and experience of the medical abortion.	High	Alam et al. 2013; Fielding et al. 2010; Harvey et al. 2002; Ganatra et al. 2010; Grossman et al. 2010; Kero et al. 2009; Mitchell et al. 2010; Ramos et al. (undated)
9.	Effective counselling by trained providers during the first step of the medical abortion that offered women a sense of confidence, being prepared, having a choice, and being in control was important in building the acceptability among women of medical abortion.	Medium	Fielding et al. 2002; Kero et al. 2009; Kero et al. 2010; Simonds et al. 1998;
10.	Women and providers both felt that critical aspects of the educational component of counselling included preparing women on the possible side-effects of medical abortion and potential complications. Critical components of the psychosocial component of counselling included preparing women on the wide degree of variability in individual women's physical experiences of medical abortion, the practical and physical difficulties of managing the expulsion process at home, and the fact that most women reported anxiety during the beginning of the medical abortion process but relief at its conclusion.	High	Cohen et al. 2005; Fielding et al. 2002; Ganatra et al. 2010; Kero et al. 2009; Nanda et al. 2010; Sherris et al. 2005

Summary statement	Certainty	Studies
	in the evidence*	
Providing adequate counselling was seen as time consuming for health professionals and written materials for patients are underutilized.	Medium	Alam et al. 2013; Cohen et al. 2005; Fielding et al. 2013; Fiol et al. 2012; Mitchell et al. 2010
12. In restricted contexts where women self-administer misoprostol and seek advice from friends, family, older women, websites, pharmacists, informal and sometimes even GPs without expertise in abortion, the information they receive is usually inadequate leading to: the dosage, route and intervals varying tremendously; women not knowing what to expect, not trusting the quality of the medication, not knowing how long it is meant to take, being afraid of dying, and not knowing in which situations to seek help (help may be sought immediately when bleeding begins for fear of haemorrhage, or seeking help can be delayed dangerously), which can lead to complications requiring tertiary level care.	Medium	Espinoza. 2004; Gipson 2011; Grossman et al. 2010; Barbosa and Arilha, 1993a; Diniz and Madeiro; Sherris et al., 2005; Souza et al; Arilha 2009; Elul et al. 2000; Nanda et al. 2006
Women can sometimes confuse self-administration of misoprostol for medical abortion with emergency contraception and oral contraceptives.	Low	Bury et al. 2012; Sherris et al. 2005; Simmonds et al. 1998
Logistical considerations of self-administration		
14. Women were drawn to self-administration for a number of practical reasons including lower costs, ease of scheduling, reduced transport needs, ability to manage stigma, and quicker termination of pregnancy. In general, women found efforts to reduce the logistical demands of medical abortion via telemedicine and website-based forms of counselling to be acceptable. A few women, however, noted that they preferred more direct engagement with trained providers and the clinic context for reasons of privacy, ease and security.	High	Acharya and Kalyanwala 2012; Arilha 2012; Ganatra et al. 2010; Grindlay et al. 2013; Grossman 2013; Nanda et al. 2010; Ramos (undated); Subha Sri and Ravindran 2012
15. Women who self-administer value the sense of control over the process, the timing of the onset of symptoms (in contrast to being anxious about symptoms starting on the way home from clinic), the ability to plan for bleeding around work and caring duties, maximize comfort and make arrangements to be accompanied or, in fewer cases, choose to be alone with telephone support.	Medium	Lohr 2010; Fielding 2002; Elul et al. 2000; Kero et al. 2009

Summary statement	Certainty in the evidence*	Studies
16. When women were counselled by trained providers in the use of misoprostol at home, providers trusted women's ability to comply with dosage and timing requirements, women felt confident and reported uncomplicated abortions for the most part, and women called hotlines or consulted providers when the abortion process did not proceed as expected.	Medium	Alam et al. 2013; Elul et al. 2000; Makenzius et al. 2013; Grossman 2013; Ganatra et al. 2005; Grossman 2013; Arilha 2012; Cohen 2005; Fiol et al. 2012; Pheterson and Azize 2005; Ramos (undated)
17. Less commonly reported issues with taking misoprostol at home included keeping oral misoprostol in the cheek long enough, developing abrasions, feeling nauseous from the taste of misoprostol, taking the misoprostol earlier than indicated, having difficulty administering the misoprostol vaginally and worrying about whether the medication was taken properly.	Low	Alam et al. 2013; Mitchell et al. 2010
18. There are reports of misunderstandings and inconsistencies regarding the prescription and use of pain killers as part of the counselling for home use, including staff not providing pain medication, or women not taking them because of fear that it would stop the abortion process.	Low	Acharya and Kalyanwala 2012; Ramos (undated)
Issues of access, choice and control in self-administration		
19. Feeling like she has a choice in the decision to self- administer medical abortion (as compared to having it managed in a clinic context) may be an important element of acceptability for women.	Medium	Ganatra et al. 2010; Grindlay et al. 2013; Harvey et al. 2002; Kero et al. 2009; Lohr et al. 2010
20. Numerous social, economic and cultural factors, including concerns around privacy, cost, convenience, comfort and perceptions of medical care, affect the degree to which self-administration of misoprostol is the preferred method of abortion for individual women. Women express a desire to be able to choose the method of abortion that fits their context and circumstances.	High	Sri and Ravindran 2012; Mitchell et al. 2010; Ganatra 2010; Gipson et al. 2011
21. Providers were optimistic that self-administration could help increase access to abortion services for younger women whose age often represented a barrier to access. There were concerns among some older women, however, that increasing access would incentivize the use of abortion as a form of routine family planning for younger women.	Low	Fielding et al. 2002; Subha Sri and Ravindran 2012

Summary statement	Certainty in the evidence*	Studies
22. There were some concerns among women and providers around the potential unintended consequences of increasing access to medical abortion through self-administration with respect to women's autonomy over their sexual and reproductive health decision-making. Specifically, there were concerns that increased access to misoprostol, especially via pharmacists, with or without prescription, could increase men's involvement in and control over abortion (either in a restrictive or a coercive fashion) and increase pressure for sex-selective abortions.	Low	Cohen et al. 2005; Makenzius et al. 2013; Nanda et al. 2010; Subha Sri and Ravindran 2012
23. Pharmacists are a common used source of information about pregnancy termination, but in contexts where abortion is legally restricted, pharmacists fear legal repercussions. Nonetheless, some will take the risk and counsel women about how to take misoprostol and what to expect (often based on inadequate training and knowledge), and in some cases may even distribute the misoprostol.	Medium	Diniz and Madeiro; Ganatra, 2005; Sherris et al. 2005; Cohen 2005
24. There is distrust, however, among women and providers in pharmacists' ability to properly counsel and administer medical abortion. Distrust arises from their perception of pharmacists as businesspeople, as not holding adequate knowledge, and of being incapable or uninterested in providing follow-up in the case of complications. Distrust also stems from a sense that pharmacies and pharmacists are poorly regulated and controlled thus augmenting the potential for unequal treatment options/prices for clients and counterfeit or poor quality/"weak" drugs.	High	Alam et al. 2013; Sherris et al, 2005; Pheterson and Azize 2005; Sri and Ravindran 2012; Diniz and Madeiro; Ganatra, 2005; Cohen 2005; Ganatra et al. 2010
25. Cost is an important factor shaping choices for home administration from the perspective of both women themselves and physicians and pharmacists. Women may go directly to a pharmacist without going to the physician first to save costs. They may also choose to only use misoprostol (instead of misoprostol and mifepristone) to save costs. Providers and policymakers felt that medical abortion is generally less expensive than surgical abortion (meaning less profitable for providers) and that pharmacists make judgments about the purchasing power of their clients when recommending which treatment to take to end pregnancy.	Medium	Espinoza, 2004; Ganatra et al., 2005; Nanda et al., 2006; Acharya and Kalyanwala 2012

Meaning and experience during self-administration				
26. Self-administration allowed for a new range of meanings and experiences of abortion to emerge, increasing the acceptability of self-administration. These included the sense that it is more "natural", less about "killing", less clinical/medicalized, allows one to be more "in control", allows for grief and other alternative moral-emotional interpretations, and is similar to menstrual regulation.	High	Fielding et al. 2012; Grossman et al. 2010; Harvey et al. 2002; Kero et al. 2009 and 2010; Nations et al. 1997; Ramos (undated); Simonds et al. 1998		
27. Male partners were sometimes involved in supporting women during medical abortions at home. Both men and women expressed a desire for more counselling of men about the process of medical abortion itself (e.g. what to expect with respect to pain, bleeding, side-effects, length of the process) and what role they could play supporting their partners.	High	Kero et al. 2010; Mekenzius et al. 2013; Elul et al., 2000		
28. Women describe different levels of comfort engaging with the products of conception. Many were curious to see, but some worried about what they would see while others held the products of conception and inspected them more closely. Comfort with seeing blood and clots may depend on the individual as well as the social context and make it more or less easy for women to describe the appearance of their bleeding and identify the passing of the fetus as well as shape their preferences for what to do with the products of conception.	Medium	Ganatra et al. 2010; Kero et al. 2009; Simonds et al. 1998		

#### **FULL LIST OF ALL INCLUDED STUDIES**

- Acharya, R, Kalyanwala, S. Knowledge, attitudes, and practices of certified providers of medical abortion: evidence from Bihar and Maharashtra, India. International Journal of Gynaecology and Obstetrics. 2012. 118 Suppl 1: p. S40-6.
- Alam, A, et al. Acceptability and feasibility of mifepristone-misoprostol for menstrual regulation in Bangladesh. International Perspectives on Sexual & Reproductive Health. 2013. 39(2): p. 79-87.
- Arilha, MM. Misoprostol: pathways, mediation and social networks for access to abortion using medication in the context of illegality in the State of Sao Paulo. Aborto: saude das mulheres., 2012. 17: p. 1785-1794.
- Barbosa, RM, Arilha M. The Brazilian experience with Cytotec. Studies in Family Planning. 1993. 24(4): p. 236-40.
- Bury, L, et al. Hidden realities: what women do when they want to terminate an unwanted pregnancy in Bolivia. Special Issue: Expanding access to medical abortion: Perspectives of women and providers in developing countries. Int J Gynecol Obstet. 2012;118: p. S4-S9.
- Cohen, J, et al. Reaching women with instructions on misoprostol use in a Latin American country. Reproductive Health Matters. 2005. 13(26): p. 84-92.
- Dantas, LCN, Diniz NMF, Couto TM. Percepção dos homens sobre o processo de abortamento Perception of men on the abortion process. Rev. RENE. 12: p. 342-350.
- Diniz D, Madeiro A. Cytotec e aborto: a polícia, os vendedores e as mulheres Cytotec and abortion: the police, the vendors and women. Ciênc saúde coletiva. 2011. 17: p. 1795-1804.
- Ellertson, C, et al. Providing mifepristone-misoprostol medical abortion: the view from the clinic. J Am Med Womens Assoc. 1999. 54(2): p. 91-6.
- Elul, B, et al. In-depth interviews with medical abortion clients: thoughts on the method and home administration of misoprostol. Journal of the American Medical Women's Association. 2000. 55(3 Suppl): p. 169-72.
- Espinoza H, Abuabara K, Ellertson C. Physicians' knowledge and opinions about medication abortion in four Latin American and Caribbean region countries. Contraception. 2004. 70, 127-133.
- Fielding, SL, Edmunds E, Schaff EA. Having an abortion using mifepristone and home misoprostol: a qualitative analysis of women's experiences. Perspectives on Sexual and Reproductive Health, 2002. 34(1): p. 34-40.
- Fiol, V, et al. Improving care of women at risk of unsafe abortion: implementing a risk-reduction model at the Uruguayan-Brazilian border. International Journal of Gynaecology and

- Obstetrics: the official organ of the International Federation of Gynaecology and Obstetrics. 2012. 118 Suppl 1: p. S21-7.
- Ganatra, B, et al. Understanding women's experiences with medical abortion: In-depth interviews with women in two Indian clinics. Glob Public Health. 2010. 5(4): p. 335-47.
- Ganatra, B, Manning V, Pallipamulla SP. Medical abortion in Bihar and Jharkhand: a study of service providers, chemists, women and men. 2005, New Delhi, India, Ipas, 2005. p 56.
- Gipson, JD, Hirz AE, Avila JL. Perceptions and practices of illegal abortion among urban young adults in the Philippines: a qualitative study. Studies in Family Planning. 2011. 42(4): 261-72.
- Grindlay, K, Lane K, Grossman D. Women's and providers' experiences with medical abortion provided through telemedicine: a qualitative study. Women's Health Issues. 2013. 23(2): p. e117-22.
- Grossman, D. Evaluation of a harm-reduction model of service delivery for women with unintended pregnancies in Peru. Oakland (CA): Ibis Reproductive Health; 2013.
- Grossman, D, et al. Self-induction of abortion among women in the United States. Reproductive Health Matters. 2010. 18(36): p. 136-146.
- Harvey, SM, Beckman LJ, Branch MR. The relationship of contextual factors to women's perceptions of medical abortion. Health Care for Women International. 2002. 23(6-7): p. 654-665.
- Kero, A, Lalos A, Wulff M. Home abortion experiences of male involvement. The European Journal of Contraception & Reproductive Health Care. 2010. 15(4): p. 264-70.
- Kero, A, Wulff M, Lalos A. Home abortion implies radical changes for women. The European Journal of Contraception & Reproductive Health Care. 2009. 14(5): p. 324-33.
- Lohr, PA, et al. Women's opinions on the home management of early medical abortion in the UK. The Journal of Family Planning and Reproductive Health Care/Faculty of Family Planning & Reproductive Health Care, Royal College of Obstetricians & Gynaecologists. 2010. 36(1): 21-5.
- Makenzius, M, et al. Autonomy and dependence experiences of home abortion, contraception and prevention. Scandinavian Journal of Caring Sciences. 2013. 27(3): p. 569-579.
- Mitchell, EMH, et al. Choosing early pregnancy termination methods in Urban Mozambique. Social Science & Medicine. (1982), 2010. 71(1): p. 62-70.
- Nanda, P, et al. Exploring the transformative potential of medical abortion for women in India. New Delhi, India: International Center for Research on Women; 2010.
- Nations, MK, et al. Women's hidden transcripts about abortion in Brazil. Social Science and Medicine. 1997. 44: p. 1833-45.
- Pheterson G, Azize Y. Abortion practice in the northeast Caribbean: "Just write down stomach pain". Reproductive Health Matters. 2005. 13(26): p. 44-53.

- Ramos, S, Romero M, Aizenberg L. Women's experiences with the use of medical abortion in a legally restricted context: the case of Argentina. Buenos Aires, Argentina: Center for the Study of State and Society (CEDES); undated.
- Sherris, J, et al. Misoprostol use in developing countries: results from a multicountry study. International Journal of Gynaecology and Obstetrics. 2005. 88(1): p. 76-81.
- Simonds, W, et al. Abortion, revised: participants in the U.S. clinical trials evaluate mifepristone. Social Science and Medicine. 1998. 46: p. 1313-23.
- Souza, ZCSd.N. et al. Trajetória de mulheres em situação de aborto provocado no discurso sobre clandestinidade Trajectory of women that performed a provoked abortion contained in the discourse of a clandestine procedure Trayectoria de mujeres en situación de aborto provocado contenidos en el discurso sobre clandestinidad. Acta paul enferm. 2010. 23: p. 732-736.
- Sri BS, Ravindran TK. Medical abortion: understanding perspectives of rural and marginalized women from rural South India. International Journal of Gynaecology and Obstetrics. 2012. 118 Suppl 1: p. S33-9.

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ANNEX 28. BARRIERS AND FACILITATORS TO THE PROVISION OF ABORTION CARE SERVICES BY PHYSICIANS, MID-LEVEL PROVIDERS, PHARMACISTS AND LAY HEALTH WORKERS: A MULTICOUNTRY CASE STUDY SYNTHESIS

Glenton C, Sorhaindo A, Lewin S.

#### **OBJECTIVE**

To identify factors affecting the implementation of abortion care at scale in low- and middle-income countries through task shifting.

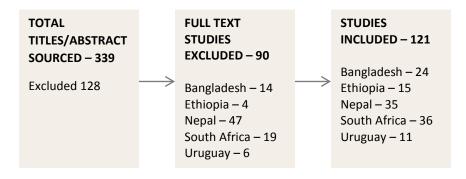
#### **MFTHODS**

We conducted a synthesis of reports and studies of existing large-scale programmes of task shifting for the delivery of abortion care. Given the resource-intensive nature of the data collection and analysis we limited our selection to five country programmes: Bangladesh, Ethiopia, Nepal, South Africa and Uruguay. We purposively selected programmes that: (a) covered a variety of providers involved in abortion care (lay health workers, nurses and midwives, other mid-level providers, non-specialist physicians, pharmacists and pharmacy workers); (b) covered countries in Africa, Asia and Latin America; (c) operated at a national or sub-national scale; (d) had been running for at least five years; and (e) had sufficient documentation available in English or Spanish.

We initially searched the following electronic databases for eligible studies: Ovid MEDLINE In-Process & Other Non-Indexed Citations, Ovid MEDLINE Daily, Ovid MEDLINE and Ovid OLDMEDLINE 1946 to present. This search produced 339 studies. Additionally, we gathered evaluation reports and studies using "snowball techniques" via key informants and references lists and searched internet search engines. We included both published and "grey" literature in both English and Spanish. Of the studies that met our inclusion criteria, six were in Spanish and the remainder were in English.

In addition, we interviewed or received written responses from 13 key informants who had worked with or evaluated each programme. Relevant studies, reports and interview transcripts were then analysed, with a specific focus on factors affecting the implementation of the programmes. This analysis was informed by a checklist for identifying factors affecting the implementation of a policy option (the SURE checklist). The study's initial findings were presented, via email, to key informants and their feedback informed further analysis. Finally, the themes within each category were summarized in a Summary of Qualitative Findings table.

#### STUDY SELECTION FLOW DIAGRAM



#### RESULTS

We examined five programmes delivering abortion care or menstrual regulation services in Bangladesh, Ethiopia, Nepal, South Africa and Uruguay. For each programme we examined a wide range of reports and studies. Some of these did not explicitly describe their data collection methods. In others, several qualitative and quantitative methodologies were applied.

Factors that appeared to influence the implementation of these programmes are summarized below.

# ACCEPTABILITY ISSUES: RESISTANCE TO AND SUPPORT OF ABORTION CARE SERVICES ON MORAL OR RELIGIOUS GROUNDS

A main barrier to the provision of abortion care services among physicians, mid-level providers and pharmacists was resistance because of religious or moral beliefs, although this varied greatly from country to country. Resistance on religious or moral grounds appeared to be widespread in South Africa and was also common in Ethiopia and Uruguay, but was far less commonly reported in Bangladesh and Nepal.

In addition to more general moral or religious concerns, some nurses perceived a contradiction between their professional pledge to preserve life and their role as carers of mothers and children on the one hand, and their involvement with abortion on the other. Health-care providers were also concerned that women would use safe abortion as a form of contraception. Health-care providers felt particularly uncomfortable about providing second trimester abortions because of the emotional burden of dealing with the fetus.

While resistance to abortion provision on moral or religious grounds was far less commonly reported in Nepal and Bangladesh, physicians and nurses in Nepal were concerned about the (illegal) use of abortion for sex selective purposes, while in Bangladesh, some providers became more resistant later in their career as they began to consider the "afterlife".

Many physicians and mid-level providers in these countries were, however, supportive of abortion care services. These providers referred to their concerns about or experiences with unsafe abortion and saw safe abortion as an opportunity to improve women's rights and women's health, although this did not always imply that they were willing to provide these services themselves. Physicians and mid-level providers also often found abortion more legitimate if it was due to rape, incest, foetal abnormalities or serious illness and, in some cases, economic hardship.

In settings where resistance to abortion provision on moral or religious grounds was common, this led to a number of problems for the running of abortion programmes, including:

- widespread use of conscientious objection, both within and outside legal conditions, leading to a shortage of health-care providers available to meet the demand for services;
- poor treatment of women by abortion care providers;
- health-care providers avoiding abortion training because of the associated stigma; and

• abortion care providers experiencing feelings of rejection, stigma and negative comments because of their work.

A number of factors appeared to exacerbate or lessen these problems:

- Rules guiding health-care providers' right to conscientiously object were sometimes poorly
  understood by health-care providers, systems were not in place to ensure their enforcement,
  and health-care providers had not been consulted when these rules were developed.
- Values clarification workshops were commonly used to increase support for abortion provision, but these were not always mandatory, and became less common over time.
- Abortion care providers emphasized the importance of emotional support, both at regular intervals and immediately after a difficult emotional experience, either from colleagues, managers, psychologists or priests. However, this type of support was sometimes lacking
- For second trimester abortions, abortion care providers suggested that the emotional burden
  of dealing with the fetus could be lessened if the health-care provider was not expected to
  work alone.
- Some health-care providers called for a clearer physical separation between labour wards and abortion services.
- Some health-care providers emphasized the importance of good access to family planning services alongside abortion services.
- Some midwives became more supportive over time, possibly because abortion service
  delivery has become a part of their pre-service training and they now considered it to be part
  of their job.
- Health-care providers often preferred medical abortion to surgical abortion because it was regarded as creating a wider distance between the provider and the abortion process (although they also preferred it because it was regarded as simpler to perform or was preferred by clients).

## ACCEPTABILITY ISSUES: RESISTANCE TO AND SUPPORT OF ABORTION CARE PROVISION BY NEW GROUPS OF HEALTH-CARE PROVIDERS

Health-care providers voiced a number of other reasons for resistance to providing abortion care other than moral or religious beliefs, including:

- resistance among abortion care providers because this represented an increase in their workload and because these additional tasks and their additional training and certification did not lead to additional pay;
- resistance among health-care providers because of a lack of consultation about the change in abortion legislation; and
- resistance among physicians to delegating tasks to midwives because they did not feel that
  they were qualified to provide certain tasks, including the prescription of misoprostol, and
  concern among facility managers that nurses would be unable to manage severe
  complications.

However, health-care providers and others also offered reasons why mid-level providers should provide abortion care:

- Some mid-level providers were keen to acquire new skills and expand their scope of practice.
- Some facility managers supported the delivery of abortions by nurses because they
  regarded it as equal to doctors, and believed that it could increase continuity of services,
  lessen the burden of work on doctors, increased retention of nurses and increase patient
  satisfaction.

#### ACCEPTABILITY ISSUES: WOMEN'S VIEWS OF HEALTH-CARE PROVIDERS

- Despite reports of poor treatment of women by providers, women tended to be satisfied with abortion care services.
- Women appreciated the provision of pregnancy tests through lay health workers, referring to the low cost, local availability, and privacy afforded by this group of health-care providers.
- Women sometimes preferred to go to pharmacies for information and for medical abortion because of convenience, anonymity and price.

## FEASIBILITY ISSUES: ACCESS TO TRAINING, SUPERVISION, MONITORING, REFERRAL SYSTEMS AND SUPPLIES

Other potential barriers to the provision of abortion care services are tied to the ability of the health system to train, supervise and monitor providers. Some of these barriers reflected general weaknesses of the health systems in these countries or the fact that a move to new health-care providers also implied a move to lower-level facilities. These types of barriers were most commonly reported in Nepal, but were also referred to in Bangladesh, Ethiopia and South Africa:

- Knowledge about abortion legislation and services among health-care providers varied and
  was often lacking, sometimes creating barriers to access. Health-care providers' levels of
  knowledge about abortion legislation and services appears to have been influenced by their
  levels of training, their access to information, and the extent to which abortion was openly
  discussed.
- In most settings, pharmacists commonly provided medical abortion drugs, although sometimes illegally, but often had incorrect knowledge about medical abortion. Pharmacists providing medication for abortion outside of the law also wanted to improve their ability to offer women correct information.
- Abortion care providers complained of not enough training, poor quality training and a lack
  of training materials and called for additional training in clinical assessment, management of
  complications and counselling.
- Training was made difficult by the fact that abortion care was not always part of the curriculum in medical, nursing or midwifery schools.
- Health-care providers working in facilities with staff shortages had difficulties getting work release to attend training.
- Health-care providers receiving in-service training at lower-level facilities sometimes had access to an insufficient number of cases.

- Health-care facilities used as in-service training centres sometimes found the dual demands
  of training and regular service provision too demanding.
- Supervision and support of abortion care providers was sometimes lacking.
- Systems to monitor abortion care delivery did not always work adequately.
- Referral systems did not always function adequately, for instance because of a shortage of abortion care providers specifically and a lack of a strong and well established referral system in general.
- Written systems of referral were difficult to use for lay health workers with low literacy levels.
- Access to supplies was sometimes problematic, particularly for abortion care providers, including lay health workers, working at primary level and in peripheral areas.

# FEASIBILITY ISSUES: COLLABORATION WITH THE PRIVATE SECTOR, NON-GOVERNMENTAL ORGANIZATIONS AND DONORS

In some settings, collaboration with the private sector and non-governmental organizations
increased the capacity to include mid-level providers in abortion provision in terms of
resources and training. In Ethiopia and Nepal, however, the Helms Amendment has
prevented mid-level providers and lay health workers from using USA-funded equipment
and from incorporating safe abortion messages into their counselling services.

#### OTHER FACTORS

- In South Africa, curricula and training materials for midwives were developed in broad consultation with relevant training institutions, health departments, practising midwives and reproductive rights organizations.
- In Nepal, the facility accreditation process has deliberately been kept simple in order to begin abortion services quickly without experiencing bureaucratic delays.

## SUMMARY OF QUALITATIVE FINDINGS TABLE

Su	mmary statement	Setting where finding came from	Studies that finding was based on
1.	Resistance on personal grounds, such as religious or moral beliefs, appeared to be common among physicians, mid-level providers, and pharmacists in Ethiopia, South Africa and Uruguay, and led to problems delivering abortion services, but appeared to be far less common in Bangladesh, and was not reported in the data from Nepal. We do not have data regarding resistance among lay health workers in any of the five countries so are not able to report any findings.	Bangladesh, Ethiopia, South Africa, Uruguay,	Two quantitative studies and five key informant interviews
2.	Some nurses perceived a contradiction between their pledge to preserve life and their role as carers on the one hand, and their involvement with abortion on the other. Some of these nurses argued for a clearer physical separation between deliveries and abortions in clinical environments.	South Africa	Three qualitative studies
3.	Some health-care providers were concerned that women would use safe abortion as a form of contraception and emphasized the importance of family planning services.	Ethiopia, Nepal, South Africa	One quantitative study, six qualitative studies and one non- research-based report
4.	Some health-care providers, including physicians and midwives, felt particularly uncomfortable about being involved in the provision of second trimester abortions, partly because of the emotional burden of dealing with the fetus. This resistance was seen in programmes using both medical abortion and D&E.	Ethiopia, South Africa	Two qualitative studies, one key informant interview and one non-research-based report
5.	In Nepal, physicians and nurses were concerned about the (illegal) use of abortion for sex selection and have also been sceptical to the provision of second trimester abortions in <i>private</i> hospitals because they were concerned that this would encourage the performance of sex-selective abortions.	Nepal	One qualitative study and one key informant interview
6.	Many physicians and mid-level providers were also supportive of abortion care services, referring to their concerns about or experiences with unsafe abortion and viewing safe abortion as an opportunity to improve women's rights and women's health. However, this did not always imply that they were willing to provide these services themselves.	Ethiopia, Nepal, South Africa, Uruguay	Four quantitative and five qualitative studies
7.	Physicians and mid-level providers often found abortion more legitimate if it was due to rape, incest, foetal abnormalities or serious illness, and women seeking abortions for these reasons were more likely to receive sympathy and support from providers. Some health-care providers also regarded abortion as legitimate if it was due to economic hardship.	Ethiopia, South Africa, Uruguay	Three quantitative and three qualitative studies

Summary statement	Setting where finding came from	Studies that finding was based on
8. Health-care providers in some countries have the opportunity to conscientiously object to providing abortion services, but this applies only to the actual abortion procedure. However, health-care providers sometimes used conscientious objection to beyond its legal limits. In some cases, nurses as well as non-nursing staff such as cleaners and administrative personnel sometimes refused to take part in any type of abortion care. Factors that appeared to worsen this lack of compliance included the fact that health-care providers poorly understood these rules, systems were not in place to ensure their enforcement, and health-care providers had not been consulted when these rules were developed.	South Africa, Uruguay	Three qualitative studies and one non-research-based report
<ol> <li>Health-care providers sometimes demonstrated their resistance to providing abortions through their poor treatment of the women seeking abortions.</li> </ol>	South Africa	Four qualitative studies and one key informant interview
<ol> <li>Abortion care providers sometimes expressed negative judgments about the women seeking abortions.</li> </ol>	Bangladesh, Ethiopia, Nepal	Three qualitative studies and one key informant interview
11. Health-care providers sometimes avoided abortion training because of the associated stigma of being identified as a provider. Other abortion care providers described feelings of rejection, stigma and negative comments because of their work.	Bangladesh, South Africa	One quantitative study, three qualitative studies and two key informant interviews
12. Values clarification workshops have commonly been used to increase support for abortion provision among health-care providers, but were not always mandatory, and were often primarily used at the initiation of services.	Bangladesh, Ethiopia, South Africa, Nepal	One qualitative study, two quantitative studies, four key informant interviews and two non-research-based reports
13. Abortion care providers, particularly in South Africa, emphasized the importance of emotional support, both at regular intervals as well as during or after difficult emotional experiences, such as dealing with the fetus after second trimester abortions. This support could come from colleagues, managers, psychologists or priests. However, this support was sometimes described as lacking.	Bangladesh, Ethiopia, South Africa	Two quantitative studies, four qualitative studies, two key informant interviews and one non-research-based report
14. In Ethiopia, midwives have become more supportive over time, possibly because abortion service delivery has become a part of their pre-service training and they now considered it to be part of their job.	Ethiopia	One key informant interview

Summary statement	Setting where finding came from	Studies that finding was based on
15. Health-care providers often preferred medical abortion to surgical abortion because it created a wider distance between the provider and the abortion process.	Ethiopia, South Africa,	Two key informant interviews
16. Some health-care providers preferred medical abortion to surgical abortion because it was regarded as simpler to perform or was preferred by clients. However, some physicians placed more trust in surgical abortion.	Ethiopia, Nepal	One qualitative study and two key informant interviews
17. Health-care providers were sometimes resistant to performing abortion care services because the additional training, certification or tasks did not lead to additional pay.	Nepal, South Africa	Two key informant interviews and one non-research-based report
The provision of abortion care services often represented an increase in health-care providers' workload.	Ethiopia, South Africa	One qualitative study, one mixed methods study and five key informant interviews
19. Some nurses were displeased that they were not consulted before the change in abortion legislation.	South Africa	One qualitative study
20. Some physicians were reluctant to delegate tasks to midwives because they do not feel mid-level providers are qualified to provide certain tasks, including the prescription of misoprostol. Some facility managers were concerned about nurses' inability to manage severe complications.	Nepal, Uruguay	One key informant interview and one quantitative study
21. Some mid-level providers were willing to deliver abortion services because they were keen to acquire new skills and expand their scope of practice.	Ethiopia, Nepal, South Africa	Two qualitative studies and one key informant interview
22. In Nepal, the majority of facility managers supported the use of nurses to provide manual vacuum aspiration and other abortion care services in the first trimester, regarding nurses' services as equal to doctors. They also indicated that nurse-delivered abortion care could lead to increased continuity of services, less burden of work on doctors, increased retention of nurses and increased patient satisfaction.	Nepal	One quantitative study
23. Women tended to be satisfied with the abortion care services they received and did not indicate any preference for specific health-care providers. However, in Uruguay, the introduction of mid-level providers was an adjustment for the population as these had previously only been used for non-clinical parts of the abortion service such as information and counselling.	Ethiopia, Nepal, Uruguay	Three quantitative studies and one key informant interview
24. Women reported being satisfied with the care they received from lay health workers, including the provision of pregnancy tests, referring to the low cost, local availability, and privacy afforded by these health-care providers.	Ethiopia, Nepal	One mixed methods study and one qualitative study

Sur	mmary statement	Setting where finding came from	Studies that finding was based on
25.	Pharmacists were a common source of consultation about abortion and women sometimes preferred to go to pharmacists for information and for medical abortion because of convenience, anonymity and price.	Nepal	One quantitative and one qualitative study
26.	Health-care providers' knowledge about abortion legislation and the services that are available to women varied and was often lacking, sometimes creating barriers to access.	Bangladesh, Ethiopia, Nepal, South Africa	Seven quantitative studies, two qualitative studies, one key informant interview and one non-research-based report
27.	Health-care providers' levels of knowledge may have been influenced by their levels of training, information access, and the extent to which abortion was openly discussed in their community.	Bangladesh, Uruguay	Three key informant interviews
28.	Pharmacists and pharmacy workers commonly provided medical abortion drugs, either by prescription from health-care providers, through over-the-counter sales, or illegally.	Bangladesh, Ethiopia, Nepal, South Africa, Uruguay	Three quantitative studies and three key informant interviews
29.	Pharmacists and pharmacy workers often had incorrect knowledge about medical abortion.	Bangladesh, Nepal	Four quantitative studies and one qualitative study
30.	Some pharmacists felt stigmatized for providing medication for abortion outside of the law and wanted to be able to offer correct information to women.	Uruguay	One key informant interview
31.	Abortion care providers were reported as having insufficient training, training of poor quality and a lack of training materials.	Ethiopia, Nepal, South Africa	Four quantitative studies, one qualitative study, one key informant interview and two non-research-based reports
32.	Abortion care providers called for additional training in clinical assessment, management of complications and counselling.	Nepal, South Africa	One quantitative and one qualitative study
33.	Training of abortion care providers was sometimes made difficult by the fact that abortion care was not part of curricula in medical, nursing or midwifery schools, or that it was not allotted enough time.	Bangladesh, Ethiopia, Nepal, South Africa, Uruguay	Three qualitative studies, two key informant interviews and four non-research-based reports

Summary statement	Setting where finding came from	Studies that finding was based on
34. Health-care providers (including lay health workers) working in facilities with staff shortages sometimes experienced difficulties getting work release to attend training.	Ethiopia, Nepal, South Africa	One quantitative study, one qualitative study, one mixed methods study, one key informant interview and one non-research-based report
35. Where health-care facilities were used as in-service training centres, the dual demands of training and regular service provision was often too demanding.	Nepal	Two non-research- based reports
36. Supervision and support was emphasized as important by midwives, nurses and facility managers, but was sometimes lacking, for instance because of distances and competing responsibilities.	Bangladesh, Nepal, South Africa	Two quantitative studies and two key informant interviews
37. While systems to monitor abortion care delivery had usually been developed, these systems did not always work adequately.	Bangladesh, Ethiopia, Nepal, Uruguay	One mixed methods study, three key informant interviews and two non- research-based reports
38. Referral systems did not always function adequately. Reasons for this included a shortage of abortion care providers specifically and a lack of a strong and well established referral system in general.	Bangladesh, Ethiopia, Nepal, South Africa	Three key informant interviews
39. Lay health workers sometimes found that the services for referring women were not there. The use of existing referral systems by lay health workers was also made difficult by their often low literacy levels, making written systems of referral complicated.	Nepal	One mixed methods study
40. Access to drugs and supplies was sometimes problematic, particularly for abortion care providers, including lay health workers, working at primary level and in peripheral areas.	Ethiopia, Bangladesh, Nepal	One quantitative study, one mixed methods study, two key informant interviews and two non-research-based reports

Summary statement	Setting where finding came from	Studies that finding was based on
41. In some settings, collaboration with the private sector and NGOs increased capacity to include mid-level providers in abortion provision in terms of resources and training.	Bangladesh, Nepal	One quantitative study, one key informant interview and one non-research-based report
42. In some countries the position of key funders regarding abortion provision has impact on the delivery of abortion services. Specifically, the Helms Amendment has prevented mid-level providers and lay health workers from using USA-funded MVA instruments and from incorporating safe abortion messages into their counselling services.	Ethiopia, Nepal	Four non-research- based reports
43. In Nepal, the facility accreditation process was deliberately kept simple in order to begin abortion services quickly without experiencing bureaucratic delays.	Nepal	Two non-research- based reports
44. In South Africa, curricula and training materials for midwives were developed in broad consultation with relevant training institutions, health departments, practicing midwives and reproductive rights organizations.	South Africa	One quantitative study

#### **FULL LIST OF ALL INCLUDED STUDIES**

- \_\_\_\_\_ (1980). Bangladesh: Menstrual regulation performed by paramedics found safe. International Family Planning Perspectives. 6(4):151-152.
- Abdella A, Fetters T, Benson J, Pearson E, Gebrehiwot Y, Andersen K, et al. (2013). Meeting the need for safe abortion care in Ethiopia: results of a national assessment in 2008. Global Public Health. 8(4);417-434.
- Abdi J, Gebremariam MB. Health providers' perception towards safe abortion service at selected health facilities in Addis Ababa. Afr J Reprod Health. 2011;15(1):31-36.
- Adriasola G. 2012. Aborto: el modelo de asesoramiento. Rev Med Urug. 28(1):58-65.
- Akhter HH. Menstrual regulation among adolescents in Bangladesh: risks and experiences. In: Towards adulthood: exploring the sexual and reproductive health of adolescents in South Asia. Bott S, Jejeebhoy S, Shah I, Puri C, editors. Geneva: World Health Organization, Department of Reproductive Health and Research; 2003:123-126.
- Alemayehu T, Otsea K, GebreMikael A, Dagnew S, Healy J, Benson J. 2009. Abortion care improvements in Tigray, Ethiopia: using the Safe Abortion Care (SAC) approach to monitor the availability, utilization and quality of services. Chapel Hill (NC): Ipas.
- Amin et al. (1988) Menstrual regulation in Bangladesh: an evaluation of training and service programs. Int J Gynecol Obstet. 27:265-271.
- Amin R, et al. (1989). Menstrual regulation training and service programs in Bangladesh: results from a national survey. Studies in Family Planning. 20(2):102-106.
- Andersen K, Ganatra B, Stucke S, Basnett B, Karki YB, Thapa K. A prospective study of complications from comprehensive abortion care services in Nepal. BMC Publ Health. 2012;12:9.
- Andersen K, Singh A, Shrestha MK, Shah M, Pearson E, Hessini L. Early pregnancy detection by female community health volunteers in Nepal facilitated referral for appropriate reproductive health services. Glob Health Sci Pract. 2013;1(3):372-81. doi:10.9745/GHSP-D-12-00026.
- Banfi-Vique, et al. 2011. The politics of reproductive health rights in Uruguay: Why the Presidential veto to the right to abortion is illegitimate. Revista de Direito Sanitário, Sao Paolo. 12(2):178-205.
- Barometer. Implementation of the new South African abortion law: a six month overview from hospital reports. Reproductive Health Matters. 1998;6:145-58.
- Basnet I, Clapham S, Shakya G, McCall M. Evolution of the post-abortion care program in Nepal: the contribution of a national Safe Motherhood Project. Int J Gynaecol Obstet. 2004;86(1):98-108; discussion 85.
- Basnett I, Shrestha MK, Shah M, Pearson E, Thapa K, Andersen KL. Evaluation of nurse providers of comprehensive abortion care using MVA in Nepal. J Nepal Health Res Counc. 2012;10(1):5-9.

- Berger M. (2009) Provision of abortion by mid-level providers: international policy, practice and perspectives. Reproductive Health Matters. 87: 58-63
- Berer M. (2009). Provision of abortion by mid-level providers: international policy, practice and perspectives. Bulletin of the World Health Organization. 87(1):58-63.
- Bhandari A, et al. (2008) Experiences of abortion in Nepal and menstrual regulation in Bangladesh: a gender analysis. Gender & Development. 16(2): 257-272.
- Bhandari A, et al. (2011). Reducing maternal mortality in Nepal. BJOG: An International Journal of Obstetrics & Gynaecology. 118 Suppl 2:26-30.
- Bhatia S, et al. (1980). Assessing menstrual regulation performed by paramedics in rural Bangladesh. Studies in Family Planning. 11(6):213-218.
- Bhuiya A, et al. (2001). Ordeal of women for induced abortion in a rural area of Bangladesh. Journal of Health, Population & Nutrition. 19(4):281-290.
- Bhuiyan SN, Burkhart MC. (1982) Maternal and public health benefits of menstrual regulation in Chittagong. Int J Gyneaecol Obstet. 20:105-109.
- Botes A. (2000). Critical thinking by nurses on ethical issues like the termination of pregnancies. Curationis. 23(3):26-31.
- Briozzo L, et al. 2002. El aborto en condiciones de riesgo emergente sanitario en la mortalidad materna en Uruguay. Rev Med Urug. 18:4-13.
- Briozzo L, Vidiella G, Rodríguez F, Gorgoroso M, Faúndes A, Pons JE. 2006. A risk reduction strategy to prevent maternal death associated with unsafe abortion. Int J Obstet Gynecol. 95(2):221-6.
- Chaudary P. Making abortion safer in Nepal: contribution of Nepal Society of Obstetricians and Gynecologists (NESOG) in the success story. South Asian Federation of Obstetrics and Gynecology. 2009;1(1):53-55.
- Center for Research on Environment Health and Population Activities (CREHPA). BCC strategy development for accessing safe abortion care in Nepal: a formative needs assessment. Kathmandu, Nepal: CREHPA; 2005.
- CREHPA. 2009. Evaluation of pilot medical abortion initiatives in six districts of Nepal: an endline survey. Report submitted to Population Services International. Kathmandu, Nepal: CREHPA: 2009.
- CREHPA. Cross-border abortions: perceptions of private pharmacists and medicine sellers. Kathmandu, Nepal: CREHPA; 2010 (unpublished).
- CREHPA. Abortion seeking behavior of Nepalese women living in Border Settlements. A paper presented at the dissemination meeting of Situation of Reproductive Health Care along the Border organized by CREHPA. Kathmandu, Nepal: CREHPA and Safe Abortion Action Fund; 2010.
- Clapham S, Basnet I, Pathak LR, McCall M. Averting maternal death and disability. The evolution of a quality of care approach for improving emergency obstetric care in rural hospitals in Nepal. International Journal of Gynecology and Obstetrics. 2004;86:86–97.

- Cooper D, Morriner C, Orner P, et al. Ten years of democracy in South Africa: documenting transformation in reproductive health policy and status. Reproductive Health Matters 2004;24(12):70-85.
- Cooper D, et al. (2005). Medical abortion: the possibilities for introduction in the public sector in South Africa. Reproductive Health Matters. 13(26):35-43.
- Cóppola F. 2013. Interrupción voluntaria del embarazo y objeción de conciencia en Uruguay. Rev Med Urug. 29(1):43-46.
- Department of Health, Republic of South Africa. An evaluation of the Implementation of the Choice on Termination of Pregnancy Act. 2000.
- de Roubaix, M. (2007). Ten years hence has the South African choice on Termination of Pregnancy Act, Act 92 of 1996, realised its aims? A moral-critical evaluation. Medicine & Law. 26(1):145-177.
- Dickson-Tetteh K, Billings DL (2002). Abortion care services provided by registered midwives in South Africa. International Family Planning Perspectives. 28(3):144-150.
- Dixon-Mueller R. (1988). Innovations in reproductive health care: menstrual regulation policies and programs in Bangladesh. Studies in Family Planning. 19(3):129-140.
- Engelbrecht MC, et al. (2000). The implementation of the Choice on Termination of Pregnancy Act: some empirical findings. Curationis. 23(2):4-14.
- Family Health Department. Technical and procedural guidelines for safe abortion services in Ethiopia, June 2006, Addis Ababa.
- Bird C, editor. Women's right to choose: partnerships for safe abortion in Nepal. Kathmandu; Family Health Division, Ministry of Health, His Majesty's Government of Nepal, CREHPA, FWLD, Ipas, PATH: 2005.
- Ferede Alemu F. 2010. Minors' awareness about the new abortion law and access to safe abortion services In: Ethiopia: the case of Marie Stopes International Ethiopia Centers in Addis Ababa. W Koster, editor. University of Amsterdam, Amsterdam Masters in Medical Anthropology.
- Fiol V, et al. 2012 Improving care of women at risk of unsafe abortion: Implementing a risk reduction model at the Uruguayan-Brazilian border. Int J of Gyn Ob. 118:S21-S27.
- Ganatra B, Johnston HB (2002). Reducing abortion-related mortality in South Asia. JAMWA. 57:159-164.
- Gmeiner, AC, et al. (2000). Support for nurses directly involved with women who chose to terminate a pregnancy. Curationis. 23(1):70-78.
- Guttmacher S, et al. (1998). A case study of the 1996 Choice of Termination of Pregnancy Act. International Family Planning Perspectives. 24(4):191-194.
- Harries J, et al. (2014). Conscientious objection and its impact on abortion service provision in South Africa: a qualitative study. Reproductive Health. 11(1):1-12.
- Harries J, Orner P, Gabriel M, Mitchell E. Delays in seeking an abortion until the second trimester: a qualitative study in South Africa. Reproductive Health. 2007;4:7.

- Harries J, et al. (2009). Health care providers' attitudes towards termination of pregnancy: a qualitative study in South Africa. BMC Public Health. 9(296).
- Harries J, et al. (2012). The challenges of offering public second trimester abortion services in South Africa: health care providers' perspectives. Journal of Biosocial Science. 44(2):197-208.
- Harrison A, et al. (2000). Barriers to implementing South Africa's termination of pregnancy act in rural KwaZulu/Natal. Health Policy and Planning. 15(4):424-431.
- Hena IA et al. (2013) Introducing medical MR in Bangladesh. Population Council & Marie Stopes International.
- Henderson JT, Puri M, Blum M, Harper CC, Rana A, Gurung G, et al. Effects of abortion legalization in Nepal, 2001-2010. PLoS One. 2013;8(5):e64775. doi:10.1371/journal.pone.0064775.
- Holcombe SJ, Berhe A, Amsale C. (2014). Professional mission and personal beliefs: Ethiopian midwives' role in expanding access to abortion services in the wake of legal reform. Paper presented at the 2014 Population Association of America Annual Meeting, Boston (MA), 1-3 May 2014 (<a href="http://paa2014.princeton.edu/papers/141135">http://paa2014.princeton.edu/papers/141135</a>).
- Hossain A, Maddow-Zimet I, Singh S, Remez L. (2012). Menstrual regulation, unsafe abortion, and maternal health in Bangladesh. Issues Brief (Alan Guttmacher Inst)(3):1-8.
- Huda FA, et al. (2014) Availability and provision of misoprostol for menstrual regulation among pharmacies in Bangladesh via mystery client survey. International Journal of Gynecology and Obstetrics. 124:164-168.
- Hyman A, Baird TL, Basnett I. Establishing second trimester abortion services: experiences in Nepal, Viet Nam and South Africa. Reproductive Health Matters. 2008;16:135-144.\*\*\*
- Ipas, IHCAR (2002) Deciding women's lives are worth saving: Expanding the role of midlevel providers in safe abortion care. Chapel Hill (NC): Ipas.
- Ipas. Expanding the provider base for abortion care: Findings and recommendations from an assessment of pre-service training needs and opportunities in Bangladesh.
- Ipas, 2008. Tools for progressive policy change. Lessons learned from Ethiopia's abortion law reform.
- IPAS. 2013. Programs integrating abortion and contraceptive services expand women's reproductive health options in Ethiopia (<a href="http://www.ipas.org/en/News/2013/November/Programs-integrating-abortion-and-contraceptive-services-expand-women-s-reproductive-healt.aspx">http://www.ipas.org/en/News/2013/November/Programs-integrating-abortion-and-contraceptive-services-expand-women-s-reproductive-healt.aspx</a>).
- Ipas. The impact of US foreign policy on safe abortion in Nepal. Chapel Hill (NC); 2010.
- Jewkes RK, et al. (2005). Why are women still aborting outside designated facilities in metropolitan South Africa? BJOG: An International Journal of Obstetrics & Gynaecology. 112(9):1236-1242.
- Johnston HB, et al. (2012) Quality and efficiency of care for complications of unsafe abortion: A case study from Bangladesh. International Journal of Gynecology and Obstetics. 118(supplement 2):S141-S147.

- Karki C, Ojha M, Rayamajhi RT. Baseline survey on functioning of abortion services in government approved CAC centers in three pilot districts of Nepal. Kathmandu Univ Med J. 2009;7(25):31-9.
- Karki C, Pokharel H, Kushwaha A, Manandhar D, Bracken H, Winikoff B. Acceptability and feasibility of medical abortion in Nepal. Int J Gynecology and Obstetrics. 2009;106:39-42.
- KC NP, Basnett I, Sharma SK, Bhusal CL, Parajuli RR, Andersen KL. Increasing access to safe abortion services through auxiliary nurse midwives trained as skilled birth attendants. Kathmandu Univ Med J. 2011;9(36):260-6.
- Kawonga, M., et al. (2008). Integrating medical abortion into safe abortion services: experience from three pilot sites in South Africa. Journal of Family Planning and Reproductive Health Care. 34(3):159-164.
- Lakew et al.; Ethiopian Society of Obstetricians and Gynecologists. 2002. KAP Study on Abortion among Ethiopian Health Workers.
- The Leitner Center. 2010. Exporting confusion: U.S. foreign policy as an obstacle to the implementation of Ethiopia's liberalized abortion law.
- London S. (2014) Many Bangladeshi pharmacies do not provide accurate information on how to use misoprostol. International Perspectives on Sexual and Reproductive Health. 40(1):47.
- Maine et al. (1996) Why did maternal mortality decline in Matlab? Studies in Family Planning. 27(4):179-187.
- Mamabolo LRC, Tjallinks JE. (2010). Experiences of registered nurses at one community health centre near Pretoria providing termination of pregnancy services. Africa Journal of Nursing & Midwifery. 12(1):73-86.
- Mayers PM, et al. (2005). Experiences of registered midwives assisting with termination of pregnancies at a tertiary level hospital. Health SA Gesondheid. 10(1):15-25.
- Mhlanga RE. (2003). Abortion: developments and impact in South Africa. British Medical Bulletin. 67:115-126.
- Ministerio de Salud Publica. La Ley Nº 18.987 de 22 de octubre 2012. Montevideo, Uruguay.
- Ministerio de Salud Publica. Manual de Procediminetos para el manejo sanitaria de la interrupcion voluntaria del embarazo. Segun Ley 18987 del 17.10.2012.
- Mitchell EMH, Trueman K, Gabriel M, Fine A, Manentsa N. (2004). Accelerating the pace of progress in South Africa: an evaluation of the impact of Values Clarification Workshops on termination of pregnancy access in Limpopo Province. Johannesburg, South Africa: Ipas.
- Ministry of Health and Population, World Health Organization, Center for Research on Environment Health and Population Activities (CREHPA). Unsafe abortion: Nepal country profile. Kathmandu: Ministry of Health and Population, Government of Nepal; 2006.
- Mokgethi NE, et al. (2006). Professional nurses' attitudes towards providing termination of pregnancy services in a tertiary hospital in the north west province of South Africa. Curationis. 29(1):32-39.

- Möller A, Öfverstedt S, Siwe K. Proud, not yet satisfied: the experiences of abortion service providers in the Kathmandu Valley, Nepal. Sex Reprod Healthc. 2012;3(4):135-40. doi:10.1016/j.srhc.2012.10.003. Epub 2012 Nov 10.
- Morroni C, Myer L, Tibazarwa K. Knowledge of the abortion legislation among South African women: a cross-sectional study. Reproductive Health. 2006;3:7.
- Ngo TD, et al. 2013 Call centre to address women's need when using misoprostol for menstrual regulation in Bangladesh: a harm reduction approach. MSI presentation. IWAC; 2013.
- Nursing Update. July 2000. Doctors and nurses reluctant to perform legal abortions.
- Nursing Update. April 2003. Abortion Nurses position.
- Obaidallah M, et al. (1981) Induced abortion in rural Bangladesh (mortality levels and physicians attitudes). Rural Demography. 8(1):91-120.
- Orner et al. 2010. A qualitative exploration of HIV-positive pregnant women's decision-making regarding abortion in Cape Town, South Africa.
- Otsea K, Tesfaye S. 2007. Monitoring safe abortion care service provision in Tigray, Ethiopia. Chapel Hill (NC): Ipas.
- PAHO. 2012. Changing relationships in the health care context: the Uruguayan model for reducing the risk and harm of unsafe abortions.
- Poggenpoel M, Myburgh C, Gmeiner A. 1998. One voice regarding the legalisation of abortion. Nurses who experience discomfort. Curationis.1998;21(3):2-7.
- Potgieter C, Andrews G (2004). South African nurses' accounts for choosing to be termination of pregnancy providers. Health SA Gesondheid. 9(2):20-30.
- Puri M, Lamichhane P, Harken T, Blum M, Harper CC, et al. (2012) Sometimes they used to whisper in our ears: health care workers' perceptions of the effects of abortion legalization in Nepal. BMC Public Health. 12(1):297.
- Puri M, Regmi S, Tamang T, Shrestha P. Road map to scaling up: translation operations research study's results into actions for expanding medical abortion services in rural health facilities in Nepal. Health Research Policy and Systems. 2014;12:24.
- Regmi K, Madison J. Ensuring patient satisfaction with second-trimester abortion in resource-poor settings. Int J Gynaecol Obstet. 2010;108(1):44-7. doi:10.1016/j.ijgo.2009.08.005.
- Rocha M. 2009. Aborto y parlamento: un estudio sobre Brasil, Uruguay y Argentina. R Bras Est Pop. 26(2):219-236.
- Rosselló. 1994. Servicios asistenciales bsicos de salud reproductive en la atencion materno infantil en Uruguay. Arch Pediatr Uruguay. 65(3):57.
- Samandari G, Wolf M, Basnett I, Hyman A, Andersen K (2012) Implementation of legal abortion in Nepal: a model for rapid scale-up of high-quality care. Reprod Health. 9:7.
- Shakya G, Kishore S, Bird C, Barak J. Abortion law reform in Nepal: women's right to life and health. Reproductive Health Matters. 2004;12(24 Suppl):75-84.
- Singh M, Jha R. Abortion legalized: challenges ahead. Kathmandu Univ Med J. 2007;5(1):95-7.

- Singh A et al. (1997) Health professionals' perceptions about induced abortion in South Central and Southeast Asia. International Family Planning Perspectives. 23(2): 59-72.
- Singh S, Fetters T, Gebreselassie H, Abdella A, Gebrehiwot Y, Kumbi S, Audam S. The estimated incidence of induced abortion In Ethiopia, 2008. International Perspectives on Sexual and Reproductive Health. 2010;36(1):16–25.
- Stevens M, Xaba M. Choice on termination of pregnancy act 1996: commentary. Reproductive Health Matters. 1997;9:116-20.
- Tamang A, Tamang J. Availability and acceptability of medical abortion in Nepal: health care providers' perspectives. Reproductive Health Matters. 2005;13(26):110-9.
- Tamang A, Tuladhar S, Tamang J, Ganatra B, Dulal B. Factors associated with choice of medical or surgical abortion among women in Nepal. Int J Gynaecol Obstet. 2012;118 Suppl 1:S52-6. doi:10.1016/j.ijgo.2012.05.011.
- Tamang A, Puri M, Lama K, Shrestha P. (2014). Can pharmacy workers in Nepal provide the correct information about mifepristone and misoprostol use to women seeking medication for an induced abortion? (Submitted for publication).
- Thapa K, Karki Y, Bista KP. Myths and misconceptions about abortion among marginalized underserved community. J Nepal Med Assoc. 2009;48(176):276-80.
- Thapa S, Malla K, Basnett I. Safe abortion services in Nepal: initial years of availability and utilization. World Health Popul. 2010;11(3):55-68.
- Thapa S: Abortion law in Nepal: the road to reform. Reproductive Health Matters. 2004;12(Suppl):85-94.
- Trueman KA, Magwentshu M. Abortion in a progressive legal environment: the need for vigilance in protecting and promoting access to safe abortion services in South Africa. Am J Pub Health. 2013;103(3):397-399.
- Tsegay A. Knowledge, attitude and practice of public health practitioners towards safe abortion care services in Tigray regional state, Ethiopia. Department of Public Health and Clinical Medicine, Umea University, Sweden; 2011.
- Tuladhar H, Risal A. Level of awareness about legalization of abortion in Nepal: a study at Nepal Medical College Teaching Hospital. Nepal Med Coll J. 2010;12(2):76-80.
- Turner KL, Hyman AG, Gabriel MC. Clarifying values and transforming attitudes to improve access to second trimester abortion. Reproductive Health Matters. 2008;16(31 Suppl):108-16.
- Turner KL, Hyman AG, Gabriel MC. Clarifying values and transforming attitudes to improve access to second trimester abortion. Reproductive Health Matters. 2008;16(31 Suppl):108-16. doi:10.1016/S0968-8080(08)31389-5.
- Varkey, SJ. (2000). Viewpoint. Abortion services in South Africa: available yet not accessible to all. International Family Planning Perspectives. 26(2): 87-88.
- Varkey SJ, Fonn S. How far are we? Assessing the implementation of abortion services: a review of literature and work-in-progress. Durban, South Africa: Health Systems Trust; 2000.

- Varkey SJ, Fonn S, Ketlhapile M. The role of advocacy in implementing the South African Abortion Law. Reproductive Health Matters. 2000;8(16).
- Vlassoff M et al. Menstrual regulation and postabortion care in Bangladesh: factors associated with access to and quality of services. New York (NY): Guttmacher Institute; 2012 (<a href="http://www.guttmacher.org/pubs/Bangladesh-MR.pdf">http://www.guttmacher.org/pubs/Bangladesh-MR.pdf</a>).
- Warriner et al. 2011. Can midlevel health-care providers administer early medical abortion as safely and effectively as doctors? A randomized controlled equivalence trial in Nepal. Lancet. 2011;377(9772):1155-61. doi:10.1016/S0140-6736(10)62229-5.
- Yirga A. Status of safe abortion service utilization and levels of satisfaction in selected public health facilities of SNNPR, Ethiopia, 2008/09. Thesis Research Submitted to the School of Graduate Studies, Addis Ababa University in Partial Fulfillment of the Degree of Masters of Public Health, July 2009, Addis Ababa.

# ANNEX 29. FACTORS AFFECTING THE IMPLEMENTATION OF TASK SHIFTING FOR ABORTION CARE: QUALITATIVE EVIDENCE SYNTHESIS

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#### BACKGROUND

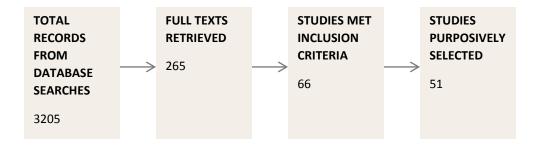
A wide range of providers are involved in delivering abortion care in many settings, and there is growing interest in how task shifting and sharing can be used to improve women's access to abortion services, including post-abortion care. To inform recommendations and decisions about which cadres can deliver different elements of abortion care, and to inform the implementation of task shifting initiatives, we need a better understanding of the acceptability and feasibility of task shifting and sharing from the perspectives of health-care providers, health care managers, women and other stakeholders.

#### **OBJECTIVES**

To explore the factors affecting the implementation of task shifting for abortion care.

#### **SEARCH METHODS**

We searched Ovid MEDLINE In-Process & Other Non-Indexed Citations, Ovid MEDLINE Daily, Ovid MEDLINE and Ovid OLDMEDLINE (searched 20 May 2014); CINAHL, EBSCO (searched 23 May 2014); Global Health (searched 23 May 2014); Popline (searched 23 May 2014); and the WHO Global Library (searched 24 May 2014). We also searched the reference lists of included studies. The initial search of electronic databases resulted in 3205 titles.



#### **SELECTION CRITERIA**

We included studies that used both qualitative methods for data collection and qualitative methods for data analysis, and that explored the experiences and attitudes of stakeholders towards task shifting and/or health service delivery for abortion and post-abortion care. Mixed method studies with a qualitative component were also included. Eligible participants included health workers, women and their families, policy makers, programme managers, or any others involved in or affected by programmes involving task shifting for abortion care in any country. We included studies of programmes delivered in any health-care setting (community, primary care, and higher levels of care); that involve task shifting and/or service delivery for abortion care; and that used any of the following types of health workers: lay health workers, auxiliary nurses, nurses, midwives, associate clinicians, doctors of alternate medicine, pharmacists or pharmacy workers. We defined abortion care as any care related to: surgical abortion, medical

abortion, management of incomplete abortions and common complications, counselling and information in relation to abortion and abortion care delivery, and contraceptive provision and contraceptive information in the context of post-abortion care. We excluded studies of self-administration by women of abortion medication at home, with follow-up from the health system (addressed in a separate review) and emergency contraception.

### DATA COLLECTION AND ANALYSIS

We identified factors affecting the implementation of task shifting for abortion care using a thematic synthesis approach. For each included study, data was extracted by one review author and checked by a second review author. The methodological limitations of each study was assessed by one review author using a standard tool and checked by a second review author. The initial analysis was conducted by one review author and this formed the basis for discussion of the findings among the team. We then assessed confidence in each of the review findings using the CERQual (Confidence in the Evidence from Review of Qualitative research) approach.

### **MAIN RESULTS**

66 studies met our inclusion criteria. Because of the large number of eligible studies, we used purposive sampling to select studies that had rich data and more closely addressed the review question. We also attempted to ensure a good representation of studies from low- and middle-income countries and studies that considered abortion at a range of gestations, used a range of abortion methods and providers, considered different aspects of the abortion process and covered a range of health care delivery settings. Based on this purposive sampling, we included 51 studies from two low-income, 33 middle-income and 16 high-income countries. The included studies considered a wide range of providers, including specialist doctors, doctors, midwives, nurses, pharmacists, pharmacy workers and lay health workers, and a wide range of abortion tasks, including medical abortion, surgical abortion, post-abortion care and post-abortion contraception.

Doctors, midwives and nurses varied in their willingness to become involved in abortion care. Some nurses and midwives refused any involvement because of views regarding professional roles, women's roles, and religious beliefs. Other doctors and midwives did not approve of induced abortion but agreed that it was preferable to unsafe abortions. Other providers saw abortion as justifiable under specific circumstances, such as to save a woman's life. Some nurses and midwives were willing to be involved in abortion care because they wished to widen their skills and roles; provide comprehensive care to women; expand abortion access; had experienced the effects of unsafe abortion; or supported women's right to choose. Some midwives also noted that they would view abortion as a work task if it was legal.

Where nurses and midwives accepted women's right to choose, they strived to show support and empathy and to minimize the woman's distress and shame. Where providers rejected abortion, they sometimes treated service users poorly. In several settings, nurses and midwives reported that they were stigmatized by other providers and some experienced feelings of isolation and burnout. Their work was more difficult where adequate support systems were not in place and they sometimes used emotional distancing to cope with their work.

Providers, including doctors, were generally confident in the ability of mid-level providers such as midwives and nurses to perform medical abortions. Attitudes to task sharing for post-abortion care were generally positive and it was felt that this increased efficiency. All participants agreed

that midwives were key actors in post-abortion care, particularly since doctors were commonly absent. Midwives felt that the quality of care they provided was as good as that provided by the doctors, and doctors generally agreed.

Service users' experiences of health services ranged from care that met their expectations to mistreatment and abuse. Some preferred care from nurses or midwives rather than doctors, as the former were seen as more supportive, and some preferred female health workers. Anonymity was an important concern for some women, and they therefore preferred to seek care at a facility where it was less likely that they would be recognized.

In relation to feasibility, key human resource issues across settings included insufficient numbers of providers; inadequately trained providers, including lack of skills in providing psychological support to women; lack of support and incentives for providers undertaking additional roles; negative attitudes among other providers; and problems of confidentiality within the health system. Providers noted a number of health systems challenges to introducing medical abortion, including a lack of clinical guidelines; a lack of drugs in hospitals and additional costs for patients (if they had to purchase the drugs privately). Also, medical abortion was seen to need more patient counselling than surgical abortion. In addition, medical abortion was seen to have impacts for human resources and women of the number of contacts needed between the women and the health services and the need for follow-up.

### CONCLUSIONS

Task shifting for different aspects of abortion care may be acceptable and feasible in a range of settings where providers' needs for training, support and appropriate clinical resources are addressed; where the health system functions to support cadres with lower levels of training in undertaking these tasks; and where these services are delivered in ways that meet women's needs.

## SUMMARY OF QUALITATIVE FINDINGS TABLE

### A. Health-care providers

### Involvement in abortion care delivery

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
Nurses' and midwives' views on their involvemen	t in abortion care	delivery <sup>2</sup>	
Nurses and midwives varied in their willingness to become involved in abortion care, as described below.	No assessment	No assessment	Not applicable
2. Some nurses and midwives in low- and middle-income settings where abortion was legal and where access was restricted refused any involvement with women who had had or wanted an abortion. Reasons for this included that they felt that they had chosen nursing because they wanted to preserve life; their religious beliefs; their view that women who had an abortion were rejecting their identities as mothers and women; fear of being stigmatized by colleagues or their community; and that they were working in a context in which induced abortion was not legal.	Moderate	Four studies (Brazil – restricted, 3 Ghana – legal, South Africa x 3 – legal) with minor to significant methodological limitations. Fairly thick data. Reasonable level of coherence.	Aniteye 2013, Harries 2009, Mortari 2012, Poggenpoel 1998, Walker 1998

<sup>&</sup>lt;sup>2</sup> A number of studies did not clearly separate findings related to midwives and nurses.

<sup>3</sup> This refers to women's access to abortion in these settings, at the time of the study where possible.

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
3. Some nurses and midwives in high- and middle-income settings where abortion was legal were willing to be involved in abortion care and cited professional, personal and "legal" reasons for this. Professional reasons included their own empowerment as providers; opportunities to broaden their skills and take on new roles; providing comprehensive care to women, of which termination of pregnancy should be a part; and expanding abortion access. Personal reasons included experiences with the effects of unsafe abortion; their views about women's empowerment, rights and freedom to choose; a view that a safe abortion was better than an unsafe abortion or unwanted pregnancy; and seeing abortion care as part of their career trajectory. Some midwives also noted that they would view abortion as a work task if it was legal, and would then not feel compromised in conducting it.	Professional reasons: Low Personal reasons: Moderate Legal reasons: very low	Professional reasons: two studies (South Africa – legal, USA – legal) with minor methodological limitations. Fairly thick data from two settings. Good coherence. Personal reasons: four studies (South Africa – legal, United Kingdom x2 - legal, USA – legal) with minor methodological limitations. Fairly thick data from several settings. Reasonable level of coherence. Legal reasons: one study (Uganda – restricted) with minor methodological limitations. Thin data from one setting. Coherence could not be assessed.	Harries 2009, Freedman 2014, Gallagher 2010, Harries 2009, Nicholson 2011, Paul 2014

Fin	ding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
4.	Some nurses and midwives in one low- (abortion access restricted) and one middle- income (abortion legal) country saw abortion as being justifiable under specific circumstances, such as rape or to save a woman's life. In these situations, they did not consider the procedure to be an abortion.	Low	Two studies (South Africa – legal, Uganda – restricted) with minor to significant methodological limitations. Fairly thick data, good coherence.	Harrison 2000, Paul 2014
5.	Some nurses and midwives in high- and middle-income settings where abortion was legal and where access was restricted expressed confusion regarding their roles and responsibilities in relation to abortion care. They saw their professional role as being responsible for saving lives and helping to achieve healthy mothers and infants. Delivering abortion care seemed to question this foundation for their profession and therefore created emotional conflicts for them. In some settings, religious beliefs contributed to these concerns.	Moderate	Four studies (Brazil – restricted, Japan – legal, South Africa – legal, United Kingdom – legal) with mainly minor methodological limitations. Fairly thick data. Reasonable level of coherence.	Harrison 2000, Gallagher 2010, Mizuno 2011, Mortari 2012
Do	ctors' views on their involvement in abortion ca	are delivery		1
6.	In one high-income setting, doctors noted that they were not ambivalent about performing abortions. However, they felt frustration when women had repeat abortions and noted the importance of ensuring that women made a well thought through decision. Specialist doctors also noted that abortion evoked strong feelings in them from which they needed to shield themselves.	Low	One study (Sweden – legal) with minor methodological limitations. Fairly thick data. Coherence could not be assessed as only one contributing study.	Lindström 2011

Fin	ding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
7.	In one low-income setting, doctors appeared to be less openly judgemental than midwives and other mid-level providers towards women seeking an abortion, although the reasons for this were not clear. These doctors noted though that they were reluctant to support access to abortion publicly as they were concerned about the stigma attached to this.	Very low	One study (Ghana – legal) with significant methodological limitations. Thin data. Coherence could not be assessed as only one contributing study.	Aniteye 2013
Lay	health workers' views on their involvement in	abortion care de	livery	
8.	In several middle-income country settings, lay health workers were involved, either formally or informally, in referring women who wanted an abortion, or who needed post-abortion care, to the formal health services.	Moderate	Three studies (India – legal, Mexico – restricted, Pakistan – restricted) with minor methodological limitations. Thin data. Reasonable coherence.	Azmat 2012, Casteneda 2003, Ramachandar 2002
9.	The position of lay health workers may be undermined if senior health-care providers, such as specialist doctors, refuse to perform an abortion on a patient referred by the lay health worker, if post-abortion complications occur or if the specialist doctors are abusive to lay health workers.	Very low	One study (India – legal) with minor to significant methodological limitations. Thin data. Coherence could not be assessed.	Ramachandar 2002
10.	Concern about being labelled an abortionist may result in lay health workers providing only minimal treatment and referral for women with post-abortion complications.	Low	One study (Mexico – restricted) with minor methodological limitations. Thin data. Coherence could not be assessed.	Casteneda 2003

Pharmacists' and pharmacy workers' views on their involvement in medical abortion delivery				
Most professional providers in one middle-income country setting where abortion was legal indicated that they were not in favour of over-the-counter sales of drugs for medical abortion.	Low	Two studies (India x2 – legal) with minor to significant methodological limitations. Fairly thin data. Extent of coherence unclear due to limited data.	Ganatra 2005, Ramachandar 2005	
12. Most pharmacy shop owners in one middle-income country setting where abortion was legal said that they only sold abortion medication with a prescription. However, a few admitted to selling drugs over the counter or not always adhering to relevant regulations. Doctors in this setting noted that the drugs were available widely without a prescription and that this would probably increase as the drugs became better known.	Low	Two studies (India x2 – legal) with minor to significant methodological limitations. Fairly thin data. Extent of coherence unclear due to limited data.	Ganatra 2005, Ramachandar 2005	
13. Pharmacists in one middle-income country setting where abortion was legal thought that their current knowledge of drugs for medical abortion was inadequate and wanted to learn more about all aspects of these drugs. Pharmacists also noted that if they did not have a drug that a customer had been prescribed or requested, they would substitute a drug of equivalent cost. Their view was that clients did not have a clear understanding of different drugs and their effectiveness, but did know that the drugs have similar purposes. Providers in several other middle-income settings where abortion access is largely restricted expressed concern regarding pharmacies dispensing drugs without adequate advice or follow-up.	Low	Two studies (Honduras – restricted, India – legal, Mexico – restricted, Nicaragua – restricted, Puerto Rico – legal) with minor methodological limitations. Fairly thin data. Extent of coherence unclear due to limited data.	Espinoza 2004, Ganatra 2005	

# Views on involvement in abortion care delivery – studies including several cadres and/or where it was not clear which cadre expressed a particular view

Finding	CERQual assessment of	Explanation of CERQual assessment	Contributing studies
14. Some providers had conflicting feelings about abortion care delivery. In two low- and middle-income settings where abortion access is restricted, midwives and doctors did not approve of induced abortion but were also concerned about women suffering unsafe abortions, and agreed that abortion was acceptable under specific (strict) circumstances. In one high-income setting where abortion was legal, some professionals suggested that doing a termination of pregnancy was a "necessary evil" and that it was a difficult procedure to do morally and emotionally.	Moderate  Moderate	Two studies (Mexico – restricted, Uganda – restricted) with minor and one study (Switzerland – legal) with significant methodological limitations. Fairly thick data. Reasonable level of coherence.	Diaz Spanish 2012, Paul 2014, Perrin 2012
15. Professionals in one setting where abortion access was restricted noted that they should not involve their personal beliefs in their work, although some doctors had decided to participate in abortion care delivery for personal reasons.	Very low	One study (Brazil – restricted) with minor to significant methodological limitations. Fairly thin data. Coherence could not be assessed as only one contributing study.	Soares 2003
Providers noted that they did not want to be recognized by others as conducting abortions because of the stigma attached.	Low	One study (South Africa – legal) with minor and one study (Brazil – restricted) with minor to significant methodological limitations. Fairly thick data. Reasonable level of coherence.	Harries 2009, Soares 2003
17. Attitudes towards the delivery of post-abortion care varied. In one low-income setting where abortion access was restricted, most providers were positive towards post-abortion care and saw it as necessary. They did not view it as resulting in blame or sin for the provider as she had not been involved in conducting the abortion (Paul 2014). In another low-income setting where abortion was legal, treating post-abortion patients was seen as a low priority compared to other patients in the hospital.	Low	Two studies (Ghana - legal, Uganda - restricted) with minor methodological limitations. Thin data from a limited number of settings. Extent of coherence unclear due to limited data.	Schwandt 2013

18. In one study in a low-income county where	Very low	One study	Paul 2014
abortion access was restricted, health-care		(Uganda –	
providers thought that more experienced doctors		restricted) with	
and midwives tended to have more liberal views		minor	
on abortion.		methodological	
		limitations. Fairly	
		thin data.	
		Coherence could	
		not be assessed	
		as only one	
		contributing study.	

### **Medical abortion**

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
Providers' views and values regarding medical ab	ortion		
19. Providers in a number of settings, mostly where abortion was legal, saw medical abortion as having a number of benefits for women. These included that it offered an additional method (to surgical abortion); that some women would find it less invasive and more acceptable; that it would give women more ability to control the process; and, because medical abortion could be carried out by women themselves, it could be used more discreetly and therefore with fewer potential legal consequences.	Moderate	One study with significant (South Africa – legal), one study with minor to significant (South Africa – legal), and other studies with minor methodological limitations (Mexico – restricted, Switzerland – legal, United Kingdom – legal). Fairly thin data. Extent of coherence unclear due to limited data.	Cooper 2005, Diaz Spanish 2012, Kawonga 2008, Lipp 2008, Perrin 2012
20. In one middle- and one high-income setting where abortion was legal, some providers expressed concerns about medical abortion in relation to women and health services. These concerns included the number of visits women needed to make to a health-care facility; that the process took several days; loss to follow-up; and that access for some women may be limited where there is a gestational age limit on the use of medical abortion.	Low	Two studies (South Africa – legal, Switzerland – legal) with significant methodological limitations. Fairly thin data. Extent of coherence unclear due to limited data.	Kawonga 2008, Perrin 2012

Finding	CERQual assessment	Explanation of CERQual	Contributing studies	
	of	assessment	Studies	
	confidence			
21. Some providers in one middle- and one high- income setting where abortion was legal felt that medical abortion was only suitable for some women. These providers said that they did not offer medical abortion if the woman: expressed indecision, as they were worried that she might change her mind between the first and second doses; might have difficulty understanding what was involved; had mental health issues or social instability; might not be able to afford the cost; or was seen to be less likely to comply (including with follow-up), due to distance from the clinic or low educational levels.	Moderate	Two studies (Switzerland – legal, India – legal) with significant and one study with minor methodological limitations (Sweden – legal). Fairly thin data. Extent of coherence unclear due to limited data.	Lindström 2011, Perrin 2012, Ramachandar 2005	
22. Some providers, including counsellors, nurses and midwives, in high-income settings felt that medical abortion required more emotional care for women and that providers needed to be able to meet the emotional and informational needs of women. This closer involvement in medical abortion was seen to have emotional impacts for mid-level providers. Midwives and nurses noted the importance of staying in contact with the woman during the procedure.	Low	Four studies (Sweden – legal, United Kingdom (2) – legal, USA – legal) with minor methodological limitations. Finding A: fairly thin data. Findings B and C: thin data. Reasonable level of coherence.	Beckman 2002, Lipp 2008, Lindström 2011	
23. In one study in a high-income setting where abortion was legal, providers noted that experiencing the pain and bleeding of a medical abortion might reduce the number of woman requesting a repeat abortion.	Very low	One study (United Kingdom – legal) with minor methodological limitations. Thin data from one setting. Coherence could not be assessed as only one contributing study.	Lipp 2008	
Providers' views on the delivery of medical abortion services				
24. Some providers in a middle-income setting where abortion is legal saw medical abortion as having a number of benefits for health services. These included that it was safe and effective; would reduce the load on services; and be easier from a conscience perspective.	Low	Two studies (South Africa x2 – legal) with minor to significant methodological limitations. Thin data. Reasonable level of coherence, but studies from one setting only.	Cooper 2005, Kawonga 2008	

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
25. Providers in one middle- and one low-income setting expressed concerns about the side-effects of the drugs and post-abortion bleeding. However, some doctors and midwives did not have a good sense of normal post-medical abortion bleeding.	Low	One study (Uganda – restricted) with minor and one study (India – legal) significant methodological limitations. Fairly thin data. Reasonable level of coherence.	Paul 2014, Ramachandar 2005
26. Providers in one low-income setting where abortion access was restricted noted a number of health systems challenges to the introduction of medical abortion: lack of knowledge among providers: a lack of clinical guidelines; a lack of drugs in hospitals and costs for patients (if they had to purchase the drugs privately). Also, providers in one older study (1999) from a high-income setting felt that medical abortion needed more patient counselling than surgical abortion; ultrasound dating; the administration of drugs within a facility; and observation of women and access to facilities such as a bathroom.	Low	One study (Uganda – restricted) with minor and one (USA – legal) with significant methodological limitations. Thin data. Extent of coherence unclear due to limited data.	Joffe 1999, Paul 2014
27. Providers in one high-income setting where abortion was legal had different views on whether medical abortion should be provided in facilities that did not also offer surgical abortion. Most providers felt that this was appropriate if there was good access to appropriate emergency care, including surgical abortion, elsewhere. A few providers felt that facilities that provided medical abortion should also be able to provide surgical abortion to ensure safety, continuity of care and more acceptable care for women.	Very low	One study (USA – legal) with minor methodological limitations. Fairly thin data. Coherence could not be assessed as only one contributing study.	Beckman 2002
28. Midwives and nurses in one setting suggested that women choosing a medical abortion may require more "hands on" involvement and emotional support than women having a surgical abortion, because of medical abortion's longer duration, the greater involvement of women in it and women's contact with the products of conception.	Low	One study (United Kingdom – legal) with minor methodological limitations. Fairly thick data. Coherence could not be assessed as only one contributing study.	Lipp 2008

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
29. The quality of information on medical abortion available to health workers and the public was seen as poor in studies conducted in several low- and middle-income countries where access to abortion care is largely restricted. Providers in these settings expressed concern regarding the potential misuse of the drugs used for abortion, including pharmacies dispensing the drugs without adequate advice or follow-up. Some health-care providers and managers thought that more information should be available to the public but others expressed concern about this leading to the misuse of the drugs or thought that information should be targeted to health-care providers.	Very low	Two studies (Brazil – restricted, Honduras – restricted, Mexico – restricted, Nicaragua – restricted, Puerto Rico – legal, Uganda – restricted) with minor methodological limitations. Fairly thin data. Extent of coherence unclear due to limited data.	Carvalho 2014, Espinoza 2004

# MVA: Providers' views and experiences

Finding	CERQual assessment of	Explanation of CERQual assessment	Contributing studies
30. There were differing views on the effectiveness of MVA. In one low-income setting where abortion access is restricted, midwives trained in MVA for post-abortion care found it effective. In this setting, midwives with experience provided MVA even if they had not had specific training, and called for a doctor in more complex cases. Most doctors also supported MVA, but still preferred to perform D&C where they were undertaking a procedure. The reasons for this were not specified. In a second, older study in a setting where abortion is legal, specialist doctors, doctors and doctors of alternative medicine in both the public and private sectors believed that MVA was not effective, and preferred D&C.	Low	Two studies (India – legal, Uganda – restricted) with minor methodological limitations. Thin data from two settings. Extent of coherence unclear due to limited data.	Elul 2004, Paul 2014

# Post-abortion contraception

Finding	CERQual assessment of	Explanation of CERQual assessment	Contributing studies
	confidence	uoooooiiiciit	
31. Abortion service providers may lack the time or training, or be perceived by service users to lack the time, to provide adequate contraceptive counselling to women. Consequently, women were not adequately informed about contraception. It was suggested that additional follow-up or emphasis was required to reinforce information on contraceptives specifically.	Low	Two studies (Brazil – restricted, United Kingdom – legal) with minor methodological limitations. Fairly thin data from two settings. Extent of coherence unclear due to limited data.	Kumar 2004, Carneiro 2013
32. Where there is a lack of clarity on who is responsible for post-abortion contraceptive counselling and provision, this is often inadequately provided as each health-care provider assumes that the next person will do it.	Very low	One study (United Kingdom – legal) with minor methodological limitations. Thin data from one setting. Coherence could not be assessed as only one contributing study.	Kumar 2004

# Nurses' and midwives' views and experiences of providing abortion care

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
33. Some nurses in middle- and high-income countries, providing both first and second trimester abortion care, felt that they needed to accept women's decisions regarding abortion unconditionally and provide care without judgement, regardless of who the women were and their reasons for having an abortion.	Moderate	Three studies (all United Kingdom – legal) with minor and one study (Brazil – restricted) with significant methodological limitations. Fairly thick data from two settings. Reasonable level of coherence.	Gallagher 2010, Lipp 2011, Nicholson 2011, Strefling 2013
34. Nurses in both settings where abortion is legal and where access is restricted noted the difficulties of accepting women's decisions unconditionally. Situations where this was challenged included when termination of pregnancy was used as a form of contraception, with repeated or late terminations of pregnancy	Moderate	Three studies (Brazil – restricted, United Kingdom x2 – legal) with minor methodological limitations. Fairly	Lipp 2011, Mortari 2012, Nicholson 2010

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
and with women who had received fertility treatment.		thick data from two settings. Reasonable level of coherence.	
35. For some nurses and midwives in both settings where abortion is legal and where access is restricted, the idea of conducting both early and late abortions made them feel uncomfortable and angry. This was in part due to moral and religious conflicts and also because some felt that they had to perform abortions because there were no other staff willing to do this. Some nurses and midwives were indifferent to or did not show empathy to women with unplanned and unwanted pregnancies, and treated them differently to other patients.		Two studies (South Africa x2 – legal) with minor and two (Brazil – restricted, South Africa – legal) with minor to significant limitations. Finding A: fairly thick data from one setting; Finding B: fairly thick data from two settings. Reasonable level of coherence.	Mayers 2005, Poggenpoel 1998, Strefling 2013, Walker 1998
36. Dealing with the fetus during and after delivery was seen by nurses and midwives in several studies as particularly challenging emotionally, especially for terminations later in pregnancy. They were usually able to suppress their discomfort. However, these feelings sometimes emerged when confronted with difficult situations such as the delivery of a live fetus.	Moderate	Five studies (Japan – legal, South Africa x2 – legal, United Kingdom x2 – legal) with minor methodological limitations. Fairly thick data from several settings, with good coherence.	Gallagher 2010, Mayers 2005, Mizuno 2011, Nicholson 2011, Poggenpoel 1998
37. Providers' views on participating in abortions at later gestations varied. In one study, nurses found it difficult to reconcile their support for women's choices with abortion at later gestations and had developed strategies to cope with this, including not being present during the actual abortion procedure. In another study, midwives saw second trimester abortions as part of their professional duty to women, even though this work was difficult emotionally and in terms of their personal values.	Low	Two studies (Japan – legal, United Kingdom – legal) with minor methodological limitations. Fairly thick data but some variation across study findings with no compelling explanation.	Gallagher 2010, Mizuno 2011
38. Nurses and midwives in settings where abortion is legal reported that their role in abortion services was seen as controversial, or that they were stigmatized by other staff for providing abortion series. As a consequence, some providers experienced feelings of isolation and	Moderate	Two studies (South Africa – legal, United Kingdom – legal) with minor methodological	Gallagher 2010, Harries 2009

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
burnout.	Confidence	limitations. Fairly thick data but from a limited number of settings. Reasonable level of coherence.	
39. Some nurses and midwives working in a setting that provided abortion up to 20 weeks saw the provision of psychological care as being a key aspect of their role, as well as ensuring that women were informed and certain of their decision.	Low	One study (United Kingdom – legal) with minor methodological limitations. Thick data. Coherence could not be assessed as only one contributing study.	Nicholson 2010

# Providers' coping mechanisms for working in abortion care

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
40. In several settings where abortion is legal, nurses and midwives providing both first and second trimester abortion care talked about choosing not to become emotionally involved with patients and engaging in emotional distancing from the point of admission. They described 'turning their minds off' during specific situations, such as when dealing with the fetus in later abortions, and keeping emotions under control in order to help women.	Moderate	Four studies (South Africa – legal, Sweden – legal, United Kingdom x2 – legal) with minor methodological limitations. Fairly thick data. Variation across study findings with no compelling explanation.	Lindström 2011, Lipp 2011, Mayers 2005, Nicholson 2011
41. In one setting where second trimester abortion care was provided, midwives noted that their emotional disengagement meant they performed tasks mechanically to distance themselves from women, and some midwives were observed to behave harshly towards women. In another setting providing first trimester abortion care there were no signs of disengagement or acute emotional distress among nurses.	Low	Two studies (South Africa – legal, United Kingdom – legal) with minor methodological limitations. Thin data. Variation across study findings with no compelling explanation.	Lipp 2011, Mayers 2005

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
42. Midwives in one setting providing second trimester abortion rationalized their involvement in abortion care by noting that the choice of an abortion was the responsibility of the woman, and that therefore they could not be held responsible. They were just carrying out the woman's request.	Low	One study (South Africa – legal) with minor methodological limitations. Thin data. Coherence could not be assessed as only one contributing study.	Mayers 2005

## B. Relations between users and providers

## Midwives' and nurses' perspectives on their interactions with service users

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
Where midwives and nurses accepted women's ri	ght to choose		
43. Nurses felt that the nurse–patient relationship could be difficult in the context of abortion and that some patients expected nurses to be judgemental. Nurses noted the need to be careful in the language used with women when discussing the abortion procedure, so as to minimize their distress and shame and reduce stigma.	Moderate	Two studies (United Kingdom x2 – legal) with minor methodological limitations. Thick data and good coherence.	Gallagher 2010, Nicholson 2010
44. Midwives and nurses in one setting where abortion is legal noted that their role was to facilitate decision-making by the woman rather than to assume that an abortion was the preferred option or to advocate for a specific decision. They saw themselves as striving towards a woman-centred service, and noted that the woman's particular circumstances at the time, especially their relationship with others, usually led them to seek an abortion and shaped their decision.	Moderate	Three studies (United Kingdom x3 – legal) with minor methodological limitations. Fairly thick data and good coherence.	Gallagher 2010, Lipp 2008, Nicholson 2010
45. Midwives and nurses in both settings where abortion is legal and where access is restricted noted that their expertise allowed them to offer appropriate and timely advice on options available to women, and that this advice was delivered in a supportive and empathic way. They saw this as leading in most cases to a timely decision by the woman.	Low	One study (Mexico – restricted) with significant and one study (United Kingdom – legal) with minor methodological limitations. Fairly thin data. Reasonable level of coherence.	Diaz 2012b, Lipp 2008

46. Midwives felt that their expectations of women's	Low	One study (South	Mayers 2005
behaviour were seldom met. Rather than being sad about their loss and appreciative towards providers, women were apathetic, disinterested or very demanding, and never thanked providers or showed any regard for their feelings. They expected midwives to do the procedure because it was the women's right to have an abortion, but showed a lack of responsibility, for example by refusing to consider contraception. Midwives sometimes felt hopeless and frustrated in relation to the cycle of no contraception, unwanted pregnancy	Low	Africa – legal) with minor methodological limitations. Fairly thick data from one setting. Coherence could not be assessed as only one contributing study.	Mayers 2000
and termination of pregnancy.  47. Providers' attitudes towards women related in part to the reason for the abortion. In one study, young, unmarried women seeking post-abortion care were particularly singled out for negative, judgemental comments from doctors and nurses. In another study, midwives noted that they felt more empathetic towards women admitted for "necessary" terminations, for example as a result of a rape.	Moderate	Two studies (Ghana – legal, South Africa – legal) with minor methodological limitations. Fairly thick data from a limited number of settings. Reasonable level of coherence.	Mayers 2005, Schwandt 2013
48. In one study, midwives suggested that women's rudeness towards staff was a consequence of their fear, which in turn related to inadequate preparation and information provision.	Low	One study (South Africa – legal) with minor methodological limitations. Fairly thick data from one setting. Coherence could not be assessed as only one contributing study.	Mayers 2005
49. Midwives felt that they had not been adequately trained and prepared to provide counselling and support. They felt that they were expected to take on this role, but avoided it, in part by minimizing contact with the women during the abortion procedure.	Low	One study (South Africa – legal) with minor methodological limitations. Fairly thick data from one setting. Coherence could not be assessed as only one contributing study.	Mayers 2005

Where midwives and nurses did not accept women's right to choose:				
50. In some settings where abortion was legal, many providers were against abortion and this impacted on their relations with service users. In South Africa, many nurses expressed anger and hostility to women who requested an abortion, seeing them as irresponsible and careless and in some cases as murderers. Informed by their attitudes towards abortion, their religious beliefs and their experience of the complications of unsafe abortion, some nurses in Ghana tried to persuade women not to have an abortion. Women's responsibility was a key issue, and for nurses was tied to their expectations of women as mothers – they therefore saw women who requested an abortion as irresponsible and denying their womanhood.	High	Three studies (Ghana – legal, India – legal, South Africa – legal) with minor and one with minor to significant (South Africa – legal) methodological limitations. Fairly thick data and good coherence.	Poggenpoel 1998, Ramachandar 2002, Schwandt 2013, Walker 1996	
51. Because of their negative and hostile feelings towards women seeking an abortion, some nurses tried to limit face-to-face contact with this group to the minimum needed for clinical care.	Low	One study (South Africa – legal) with minor methodological limitations. Fairly thin data from one setting. Coherence could not be assessed as only one contributing study.	Poggenpoel 1998	

# Service users' views on their interactions with health-care providers and the health services

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
Users' interactions with health-care providers:			
52. Users across a range of settings reported mixed experiences of their interactions with service providers. Some women experienced service providers who were supportive, positive and informative including for post-abortion care. Other women experienced service providers who provided some support, but were largely cold and negative, and made women feel ashamed and sad, or focused on clinical care but did not provide emotional support. Some women reported being verbally abused, or feeling intimidated by a doctor's cross-examination.	Moderate (for finding of mixed experiences)	Six studies (Brazil x3 – restricted, Pakistan – restricted, Sweden – legal, USA – legal) with minor methodological limitations. Fairly thick data from a number of settings. Variation across study findings with no compelling explanation.	Alex 2004, Azmat 2012, Bazotti 2009, Carvalho 2014, Carneiro 2013, Kimport 2012

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
53. The extent to which providers were supportive was seen as important to service users. In two studies, recipients expressed a preference for care from a nurse or midwife rather than a doctor, as the former were seen as more supportive and compassionate. In one study, it was noted that some providers supported women's decision to have an abortion while others attempted to dissuade them.	Low	Three studies (Brazil – restricted, Ghana – legal, USA – legal) with minor to significant methodological limitations. Fairly thin data, reasonable level of coherence.	Ghana MOH 1997, Kimport 2012, Pedrosa 2000
54. In one setting where abortion was only available under restricted circumstances, participants felt that they needed to tell the truth to specialist doctors and nurses to obtain their cooperation, because they were afraid of being punished if they were later found to have lied about having an abortion or feared that their symptoms would worsen if they did not have access to treatment that was appropriate for their health problem.	Very low	One study (Brazil) with only minor methodological limitations. Very limited data from one setting.	Carneiro 2013
55. Service users in a setting where abortion was only available under restricted circumstances felt that providers treated them poorly after finding out that they had had an induced abortion. Some nurses noted that the health services did not provide adequate care because induced abortion was illegal.	Low	Two studies (Brazil x2) with minor methodological limitations. Fairly thin data from one setting. Extent of coherence unclear due to limited data	Carvalho 2014, Morari 2012
56. Some women indicated that their spouses or other family members preferred for them to see a female health worker, as this was seen as safer for women. Few women expressed concern about the sex of the health worker.	Very low	One study (India - legal) with minor methodological limitations. Thin data from one setting. Coherence could not be assessed as only one contributing study.	Elul 2004

Users' interactions with the health services			
57. Users across a range of settings, including where abortion was legal and were abortion access was restricted, reported mixed experiences of health services for abortion and post-abortion care. In some settings, services met women's expectations and they received adequate information. In other settings, women seeking abortions in government facilities were mistreated or treated abusively by specialist doctors and nurses and many women preferred not to use government facilities if they could afford private care, or did not seek health care at all. In one setting, women reported that they did not react to mistreatment from specialist doctors and nurses to avoid further punishment or loss of access to services.	Low	Six studies (Brazil x 3 – restricted, India x2 – legal, Nepal – legal), four with minor limitations and two with minor to significant, or significant, methodological limitations. Fairly thin data. Variation across study findings with no compelling explanation.	Bazotti 2009, Carneiro 2013, Carvalho 2014, Elul 2004, Puri 2014, Ramachandar 2002
58. Anonymity was an important concern for some women, and they therefore preferred to seek care at a facility where it was less likely that they would be recognized.	Very low	One study (Ghana – legal) with minor to significant methodological limitations. Thin data from one setting. Coherence could not be assessed as only one contributing study.	Ghana MOH 1997
59. Some participants noted differential levels of access to abortion methods by socioeconomic group. In several settings, wealthier women were more likely to be able to access a medical abortion from a private physician. In two settings, poor rural women were seen as more likely to use traditional abortion methods while poor urban women accessed surgical abortion through clandestine clinics.	Low	One study (Honduras – restricted, Mexico – restricted, Nicaragua – restricted, Puerto Rico – legal) with minor methodological limitations. Fairly thin data from four settings. Reasonable level of coherence.	Espinoza 2004

Information provision to users:			
60. Women across a range of middle- and high- income settings reported not always receiving adequate information from providers. In one setting, women noted that they did not always receive adequate information on what constituted normal and abnormal bleeding in the context of a medical abortion. In other settings, it was noted that not all providers discussed contraception or provided adequate information on this.	Moderate	Five studies (Brazil x3 – restricted, India – legal, United Kingdom - legal) with minor methodological limitations, apart from one with significant limitations. Fairly thin data. Reasonable level of coherence.	Carneiro 2013, Carvalho 2014, Kumar 2004, Pedrosa 2000, Ramachandar 2005
61. In one setting, women noted that the overall amount of information provided in the context of abortion care was large and that it was difficult to retain all of it. In another setting, nurses felt that women were not adequately informed about contraception.	Low	Two studies (South Africa – legal, United Kingdom – legal) with minor methodological limitations. Thin data from two settings. Extent of coherence unclear due to limited data.	Kumar 2004, Poggenpoel 1998
Interactions between service users and pharr	nacists		
62. Both women and men in one middle-income country setting purchased drugs from pharmacists to induce abortion, with about half of purchases in this setting being made by men. Domestic workers, female friends and local traditional birth attendants sometimes also purchased drugs on behalf of women. Where men purchased drugs, this was sometimes because of women's limited mobility in the community.	Low	One study (India – legal) with minor methodological limitations. Thin data from one setting. Coherence could not be assessed as only one contributing study.	Ganatra 2005
63. Pharmacists' drug recommendations in one middle-income country setting seemed to depend on their assessment of whether the woman was pregnant, and the duration of the pregnancy; their beliefs regarding the efficacy of different types of drugs, including Ayurvedic drugs, hormonal drugs and those intended to induce abortion; the customer's ability to pay, with richer people being offered more expensive drugs; and whether or not the pharmacist knew the customer personally. For people they knew personally, they were more likely to provide mifepristone—misoprostol without a prescription.	Low	One study (India – legal) with minor methodological limitations. Thin data from one setting. Coherence could not be assessed as only one contributing study.	Ganatra 2005

64. In addition to asking the pharmacist to provide an appropriate medicine to induce abortion, some men also asked for advice on the right doctor to consult for an abortion. Poorer customers were more likely to consult the pharmacist directly, without having visited a doctor.	Low	One study (India – legal) with minor methodological limitations. Thin data from one setting. Coherence could not be assessed as only one contributing study.	Ganatra 2005
65. Pharmacists in one middle-income country setting had varying views on the efficacy of different types of drugs to induce abortion.	Low	One study (India – legal) with minor methodological limitations. Thin data from one setting. Coherence could not be assessed as only one contributing study.	Ganatra 2005

# C. Relations among health-care providers Inter-professional relations

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
66. In one study, specialist doctors did not seem to be aware of midwives' and nurses' responsibilities in relation to abortion care, and there seemed to be little discussion of this among these professionals.	Low	One study (Sweden – legal) with minor methodological limitations. Fairly thin data from one setting. Coherence could not be assessed as only one contributing study.	Lindström 2011
67. In one middle-income country study, nurses had very negative views of other providers who performed abortions.	Low	South Africa – legal) with minor methodological limitations. Fairly thin data from one setting. Coherence could not be assessed as only one contributing study.	Poggenpoel 1998
68. In two middle-income settings, including one where abortion access is restricted and one where abortion is legal, lay health workers reported that when they accompanied women to a health-care facility, providers sometimes ignored them or treated them as if they were not qualified to provide any care to women. This made them feel ostracized and made contact with the formal health system uncomfortable and difficult for them.	Low	One study (Mexico – restricted) with minor and one (India – legal) with minor to significant methodological limitations. Fairly thin data. Reasonable level of coherence.	Casteneda 2003, Ramachandar 2002

# Providers' support needs

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
69. Feeling that they worked alone and had sole responsibility contributed to negative feelings among nurses and midwives, while having another person present was helpful. Some avoided discussing the topic of abortion with others because it was difficult or stigmatized.	Low	Two studies (Japan - legal, South Africa – legal) with minor methodological limitations. Fairly thin data. Reasonable level of coherence.	Mayers 2005, Mizuno 2011
70. Midwives reported that working with colleagues, and sharing their experiences with colleagues, provided outlets for their emotions regarding the delivery of abortion care. These interactions and team support also acted as a source of support and helped them to cope with their role. This was related to being able to discuss their experiences with others who understood these and with whom they could talk openly.	Moderate	Three studies (South Africa - legal, United Kingdom x2 – legal) with minor methodological limitations. Fairly thick data. Reasonable level of coherence.	Gallagher 2010, Mayers 2005, Nicholson 2011
71. Support from colleagues did not always meet midwives' perceived needs. Also, as termination of pregnancy became more of a routine procedure for midwives, there was less sharing of experiences with colleagues and so midwives felt less supported.	Low	One study (South Africa – legal) with minor methodological limitations. Fairly thin data. Coherence could not be assessed as only one contributing study.	Mayers 2005
72. Midwives noted that obtaining support from colleagues made them vulnerable as they needed to build up relationships again if they moved to a different ward or facility.	Low	One study (South Africa – legal) with minor methodological limitations. Fairly thin data. Coherence could not be assessed as only one contributing study.	Mayers 2005
73. Some midwives received support from their partner, but had concerns about over-burdening their partner or knew that their partner did not support their involvement in the delivery of abortion care. Other midwives hid their feelings from their partners in order not to have disagreements at home.	Low	One study (South Africa – legal) with minor methodological limitations. Fairly thin data. Coherence could not be assessed as only one contributing study.	Mayers 2005

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
74. Midwives and nurses in several settings felt that their work was made more difficult because support systems for them, including emotional support from managers, were either absent or not functioning well. They also felt that they were not adequately prepared to fulfil their duties and that their needs were not adequately considered.	High	Four studies (Canada – legal, South Africa x2 – legal, United Kingdom – legal) with minor methodological limitations. Fairly thick data. Reasonable level of coherence.	Mayers 2005, Nicholson 2011, Parker 2014, Poggenpoel 1998

# D. Health systems factors Providers' views on the organization of abortion care delivery

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
75. There were divergent views among providers and service users regarding whether abortion clinics should be housed in separate facilities. Some nurses and midwives, as well as some service users, in both middle- and high-income settings felt that abortion clinics should be separate from facilities conducting routine deliveries. For providers, this was because putting these services together meant that neither patient group had the right environment, and midwives were confused about their role. Some service users also evaluated mixed spaces negatively. It was suggested that dedicated centres for termination of pregnancy could create a more supportive environment for both service users and providers and help to deal with the negative attitudes of some providers. In other settings, service users noted the importance of anonymity, and preferred to seek care at a general facility, such as a hospital where it was unlikely that they would be recognized. Where standalone facilities for abortion care have been targeted by antiabortion protesters, service users noted that this was very distressing for them.	Moderate	Five studies (Brazil – restricted, Japan – legal, South Africa x2 – legal, USA – legal) with minor and one study (Ghana – legal) with minor to significant methodological limitations. Fairly thick data. Reasonable level of coherence.	Carneiro 2013, Ghana MOH 1997, Harries 2009, Kimport 2012, Mizuno 2011, Poggenpoel 1998
76. There were divergent views on the level of care at which abortion services should be offered. Providers working in primary level clinics felt that abortion services, particularly MVA, should not be referred to the primary level, due to insufficient infrastructure and human resources. Providers working in hospitals believed that abortion services could be decentralized to clinics to offer women specialized services and reduce the workload in hospitals. In one study, some doctors and midwives felt that it would be important for midwives in public health centres and private maternity homes to provide abortion services, as this would facilitate women's access. However, other providers felt that community-based midwives should not perform uterine evacuations.	Moderate	One study with significant (Ghana – legal) and one (Mexico – restricted) with minor to significant methodological limitations. Fairly thick data. Reasonable level of coherence.	Diaz Spanish 2012, Ghana MOH 1997

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
77. Continuity of abortion care was raised in several high-income settings. In one study, some providers felt that continuity of abortion care was important for women, and that one provider should be able to care for each woman throughout her contact with the health services for an abortion. These providers suggested that continuity would include the provider being able to provide further treatment themselves if a medical abortion was incomplete or resulted in complications. In another study, nurses felt that one of the benefits of a nurse led service was greater continuity of care for users.	Low	Two studies (United Kingdom – legal, USA – legal) with minor methodological limitations. Fairly thin data. Reasonable level of coherence.	Beckman 2002, Nicholson 2010
78. In settings where abortion is legal, tensions were noted between a publicly funded health-care facility's obligation to ensure access to legal termination of pregnancy and the 'conscience' clause in abortion legislation, in which professionals could refuse to do terminations of pregnancy. Professionals had different views on this issue: some professionals felt that all professionals should respect the law, which allows women to choose a termination of pregnancy. Other professionals felt that their colleagues did have the right to invoke the conscience clause and that providers staffing termination of pregnancy clinics should do so on a voluntary basis.	Low	One study (South Africa – legal) with minor and one (Switzerland – legal) with significant methodological limitations. Fairly thick data. Reasonable level of coherence.	Perrin 2012, Poggenpoel 1998

# Providers' views on task shifting for abortion care

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
79. In three studies from low- and high-income settings, a range of providers, including doctors, were confident in the ability of mid-level providers such as midwives and nurses to perform medical abortions. They saw midwives as having closely related training. Specialist doctors in a fourth study also noted that they might feel that their skills were less needed in relation to medical abortion, compared to surgical abortion, and may therefore hand responsibility for these over to non-specialists. This was seen in another study which showed increased nurses' involvement.	Moderate	Four studies (Sweden – legal, Uganda – restricted, United Kingdom – legal, USA – legal) with minor and one (USA – legal) with significant methodological limitations. Fairly thin data. Reasonable level of coherence.	Beckman 2002, Joffe 1999, Lindström 2011, Lipp 2011, Paul 2014

80. In one middle-income setting, professional providers felt that drugs for medical abortion should be restricted to professionals as qualified as themselves while some non-professional providers noted that this would reduce access and increase costs for patients.	Low	One study (India – legal) with minor methodological limitations. Thin data from one setting. Coherence could not be assessed as only one contributing study.	Ganatra 2005
81. Specialist doctors in one high-income setting noted that they might become "deskilled" if most medical abortion were conducted by mid-level providers such as nurses.	Low	One study (Sweden – legal) with minor methodological limitations. Fairly thin data. Coherence could not be assessed as only one contributing study.	Lindström 2011
82. Attitudes to task sharing for post-abortion care were generally positive and it was felt that this increased efficiency. The extent to which this had been implemented varied across hospitals. All participants agreed that midwives were key actors in post-abortion care, particularly since doctors were commonly absent. Midwives felt that the quality of care they provided was as good as doctors, and doctors generally agreed. However, doctors had differing views regarding whether midwives should provide post-abortion care autonomously.	Low	One study (Uganda – restricted) with minor methodological limitations. Fairly thick data. Coherence could not be assessed as only one contributing study.	Paul 2014
83. Auxiliary nurse midwives in Nepal felt confident about providing medical abortion independently, and requested training in MVA and in the management of abortion complications.	Very low	One study (Nepal – legal) with significant methodological limitations. Fairly thin data. Coherence could not be assessed as only one contributing study.	Puri 2014

# Training needs for delivery of abortion care

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
84. Inadequate staff training was seen as a barrier in several settings where abortion is legal and where access is restricted, and related to ambivalence about providing abortion services.	Moderate	Three studies (Brazil – restricted, Japan – legal, Mexico – legal) with minor, one	Barbosa 2013, Cooper 2005, Diaz Spanish

		study (South Africa – legal) with minor to significant and one study (South Africa – legal) with significant methodological limitations. Fairly thin data. Reasonable level of coherence.	2012, Kawonga 2008, Mizuno 2011
85. In one setting, the available training was sporadic, and it was difficult for nurses who wished to be trained to be released for their clinic duties for this.	Very low	One study (South Africa – legal) with minor methodological limitations. Thin data and coherence could not be assessed as only one contributing study.	Harries 2009
86. Attending training could be stigmatizing, as it was seen to signify a pro-choice stance.	Very low	One study (South Africa – legal) with minor methodological limitations. Thin data and coherence could not be assessed as only one contributing study.	Harries 2009
87. In two high-income settings, providers noted that they could only focus on the patient's needs once they became proficient with the technical aspects of undertaking an abortion. Competency with termination of pregnancy procedures was seen to give strength and security to nurses and midwives, which in turn made it easier to communicate effectively with patients.	Moderate	Two studies (Sweden – legal, USA – legal) with minor methodological limitations. Fairly thick data. Reasonable level of coherence.	Freedman 2014, Andersson 2014
88. One study highlighted the different ways in which providers came to experience confidence in new tasks related to abortion care. This study suggested that training programmes and support need to accommodate these different ways of learning.		One study (USA – legal) with minor methodological limitations. Fairly thick data. Coherence could not be assessed as only one contributing study.	Freedman 2014

# Barriers and challenges to the delivery of abortion care

Finding	CERQual assessment of confidence	Explanation of CERQual assessment	Contributing studies
89. Health service infrastructure, including too few facilities offering the service.	Low	Two studies (South African x2 – legal) with minor to significant methodological limitations. Fairly thin data from one setting. Extent of coherence unclear due to limited data.	Cooper 2005, Kawonga 2008
90. In two settings where abortion is legal, providers felt that inadequate human resources contributed to the stress of conducting abortions and impacted on their ability to delivery adequate care.	Low	Two studies (Canada – legal, India – legal) with minor to significant methodological limitations. Fairly thin data but reasonable level of coherence.	Ramachandar 2002, Parker 2014
91. Human resource issues across settings included insufficient staff; inadequately trained staff, including lack of skills in providing psychological support to women; lack of support and incentives for staff; negative attitudes among other providers; problems of confidentiality within the health system; and the range of women's needs.	Moderate	Seven studies (Brazil restricted, Canada – legal, India – legal, Japan – legal, Mexico – restricted, South Africa x2 – legal), some with minor and some with significant methodological limitations. Fairly thick data with reasonable level of coherence.	Barbosa 2013, Cooper 2005, Diaz Spanish 2012, Kawonga 2008, Mizuno 2011, Parker 2014, Ramachandar 2002

# Other

contributing study.
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### **FULL LIST OF ALL INCLUDED STUDIES**

- Alex L, Hammarstrom A. Women's experiences in connection with induced abortion a feminist perspective. Scandinavian Journal of Caring Sciences. 2004;18(2):160-168.
- Andersson I-M, Gemzell-Danielsson K, Christensson K. Caring for women undergoing second-trimester medical termination of pregnancy. Contraception. 2014;89(5):460-465.
- Aniteye P, Mayhew SH. Shaping legal abortion provision in Ghana: using policy theory to understand provider-related obstacles to policy implementation. Health Research Policy and Systems. 2011;11:23.
- Azmat SK, Shaikh BT, Mustafa G, Hameed W, Bilgrami M. Delivering post-abortion care through a community-based reproductive health volunteer programme in Pakistan. Journal of Biosocial Science. 2012;44(6):719-731.
- Barbosa ASSdF, Bobato JAC, Mariutti MG. Representação dos profissionais da saúde pública sobre o aborto e as formas de cuidado e acolhimento [Testimonies of public health professionals on abortion and forms of care and embracement]. Revista da SPAGESP. 2012;13(2):44-55.
- Bazotti KDV, Stumm EMF, Kirchner RM. Ser cuidada por profissionais da saúde: percepções e sentimentos de mulheres que sofreram abortamento [Receiving care from health professionals: perceptions and feelings of women who have undergone abortion]. Texto Contexto Enferm. 2009;18(1):147-154.
- Beckman LJ, Harvey SM, Satre SJ. The delivery of medical abortion services: the views of experienced providers. Women's health issues: official publication of the Jacobs Institute of Women's Health. 2002;12(2):103-112.
- Carneiro MF, Iriart JAB, de Souza Menezes GM. "Largada sozinha, mas tudo bem": paradoxos da experiência de mulheres na hospitalização por abortamento provocado em Salvador, Bahia, Brasil ["Left alone, but that's okay": paradoxes of the experience of women hospitalized due to induced abortion in Salvador, Bahia, Brazil]. Interface Comun Saúde Educ. 2013;17(45):405-418.
- Carvalho SM, Paes GO. Integralidade do cuidado em enfermagem para a mulher que vivenciou o aborto inseguro Integralidad del cuidado en enfermeria para la mujer que realizo el aborto inseguro [Integrality of nursing care provided to women who have experiencing experienced an unsafe abortion]. Esc Anna Nery Rev Enferm. 2014;18(1):130-135.
- Castaneda X, Billings DL, Blanco J. Abortion beliefs and practices among midwives (parteras) in a rural Mexican township. Women & Health. 2003;37(2):73-87.
- Contreras X, van Dijk MG, Sanchez T, Smith PS. Experiences and opinions of health-care professionals regarding legal abortion in Mexico City: a qualitative study. Studies in Family Planning. 2011;42(3):183-190.
- Cooper D, Dickson K, Blanchard K, Cullingworth L, Mavimbela N, Mollendorf Cv, et al. Medical abortion: the possibilities for introduction in the public sector in South Africa. Reproductive Health Matters. 2005;13(26):35-43.
- Da Silva Soares MC, de Oliveira Freitas VE, Cunha ARR, Almeida JLS, Souto CMRM, Dantas RA. Nursing practices regarding attention to women in situation of abortion [Portuguese]. Revista da Rede de Enfermagem do Nordeste. 2012;13(1):140-146.

- Diaz Olavarrieta C, Garcia SG, Arangure A, Cravioto V, Villalobos A, AbiSamra R, et al. Women's experiences of and perspectives on abortion at public facilities in Mexico City three years following decriminalization. (Special Issue: Expanding access to medical abortion: Perspectives of women and providers in developing countries.). International Journal of Gynecology & Obstetrics. 2012;118 (Suppl. 1):S15-S20.
- Diaz-Olavarrieta C, Cravioto VM, Villalobos A, Deeb-Sossa N, Garcia L, Garcia SG. Mexico City's Legal Abortion Program: health workers' experiences. Revista Panamericana de Salud Publica/Pan American Journal of Public Health. 2012;32(6):399-404.
- Elul B, Bracken H, Verma S, Ved R, Singhi R. Unwanted pregnancy and induced abortion in Rajasthan, India: a qualitative exploration. New Delhi, India: Population Council; 2004.
- Espinoza H, Abuabara K, Ellertson C. Physicians' knowledge and opinions about medication abortion in four Latin American and Caribbean region countries. Contraception. 2004;70(2):127-133.
- Freedman L, Levi A. How clinicians develop confidence in their competence in performing aspiration abortion. Qualitative Health Research. 2014;24(1):78-89.
- Gallagher K, Porock D, Edgley A. The concept of 'nursing' in the abortion services. Journal of Advanced Nursing. 2010;66(4):849-857.
- Ganatra B, Hirve S. Induced abortions among adolescent women in rural Maharashtra, India. Reproductive Health Matters. 2002;10(19):76-85.
- Ganatra B, Manning V, Pallipamulla SP. Medical abortion in Bihar and Jharkhand: a study of service providers, chemists, women and men. New Delhi, India: IPAS; 2005.
- Ghanaian Ministry of Health, Ghana Registered Midwives Association, IPAS M. Training non-physician providers to improve postabortion care. Baseline assessment of postabortion care services in four districts of Eastern Region, Ghana. Accra, Ghana: Ministry of Health; 1997.
- Harries J, Lince N, Constant D, Hargey A, Grossman D. The challenges of offering public second trimester abortion services in South Africa: health care providers' perspectives. Journal of Biosocial Science. 2012;44(2):197-208.
- Harries J, Stinson K, Orner P. Health care providers' attitudes towards termination of pregnancy: a qualitative study in South Africa. BMC Public Health. 2009;9(296).
- Harrison A, Montgomery E, Lurie M, Wilkinson D. Barriers to implementing South Africa's termination of pregnancy act in rural KwaZulu/Natal. Health Policy and Planning. 2000;15(4):424-431.
- Joffe C. Reactions to medical abortion among providers of surgical abortion: an early snapshot. Family Planning Perspectives. 1999, 35-38.
- Kawonga M, Blanchard K, Cooper D, Cullingworth L, Dickson K, Harrison T, et al. Integrating medical abortion into safe abortion services: experience from three pilot sites in South Africa. The Journal of Family Planning and Reproductive Health Care. 2008;34(3):159-164.
- Kimport K, Cockrill K, Weitz TA. Analyzing the impacts of abortion clinic structures and processes: a qualitative analysis of women's negative experience of abortion clinics. Contraception. 2012;85(2):204-10.

- Kumar U, Baraitser P, Morton S, Massil H. Peri-abortion contraception: a qualitative study of users' experiences. The Journal of Family Planning and Reproductive Health Care. 2004;30(1):55-56.
- Lakshmi R, Pelto PJ. Medical abortion in rural Tamil Nadu, South India: a quiet transformation. Reproductive Health Matters. 2005;13(26):54-64.
- Lindstrom M, Wulff M, Dahlgren L, Lalos A. Experiences of working with induced abortion: focus group discussions with gynaecologists and midwives/nurses. Scandinavian Journal of Caring Sciences. 2011;25(3):542-548.
- Lipp A. A review of termination of pregnancy: prevalent health care professional attitudes and ways of influencing them. Journal of Clinical Nursing. 2008;17(13):1683-1688.
- Lipp A. Self-preservation in abortion care: a grounded theory study. Journal of Clinical Nursing. 2011;20(5/6):892-900.
- Mayers PM, Parkes B, Green B, Turner J. Experiences of registered midwives assisting with termination of pregnancies at a tertiary level hospital. Health SA Gesondheid. 2005;10(1):15-25.
- Mizuno M. Confusion and ethical issues surrounding the role of Japanese midwives in childbirth and abortion: a qualitative study. Nursing & Health Sciences. 2011;13(4):502-506.
- Möller A, Öfverstedt S, Siwe K. Proud, not yet satisfied: the experiences of abortion service providers in the Kathmandu Valley, Nepal. Sexual & Reproductive Health-care. 2012;3(4):135-140.
- Mortari CLH, Martini JG, Vargas MA. Nurses' representations regarding the care of women experiencing unsafe abortion [Portuguese]. Revista da Escola de Enfermagem da USP. 2012;46(4):914-921.
- Nicholson J, Slade P, Fletcher J. Termination of pregnancy services: experiences of gynaecological nurses. Journal of Advanced Nursing. 2010;66(10):2245-2256.
- Parker A, Swanson H, Frunchak V. Needs of labor and delivery nurses caring for women undergoing pregnancy termination. J Obstet Gynecol Neonatal Nurs. 2014;43(4):478-87
- Paul M, Gemzell-Danielsson K, Kiggundu C, Namugenyi R, Klingberg-Allvin M. Barriers and facilitators in the provision of post-abortion care at district level in central Uganda a qualitative study focusing on task sharing between physicians and midwives. BMC Health Services Research. 2014;14:28.
- Pedrosa IL, Garcia TR. Não vou esquecer nunca!: a experiência feminina com o abortamento provocado [I will never forget!: a woman experience with provoked abortion]. Rev Latinoam Enferm. 2000, 8.6: 50-8.
- Perrin E, Berthoud M, Pott M, Vera AGT, Bianchi-Demicheli F. Views of health-care professionals dealing with legal termination of pregnancy up to 12 WA in French-speaking Switzerland. Swiss Medical Weekly. 2012;142:w13584.
- Poggenpoel M, Myburgh CP, Gmeiner AC. One voice regarding the legalisation of abortion. Nurses who experience discomfort. Curationis. 1998;21(3):2-7.
- Potgieter C, Andrews G. South African nurses' accounts for choosing to be termination of pregnancy providers. Health SA Gesondheid. 2004;9(2):20-30.

- Puri M, Lamichhane P, Harken T, Blum M, Harper CC, Darney PD, Henderson JT. "Sometimes they used to whisper in our ears": health care workers' perceptions of the effects of abortion legalization in Nepal. BMC Public Health. 2012;12:297.
- Ramachandar L, Pelto PJ. The role of village health nurses in mediating abortions in rural Tamil Nadu, India. Reproductive Health Matters. 2002;10(19):64-75.
- Ramachandar L, Pelto PJ. Medical abortion in rural Tamil Nadu, South India: a quiet transformation. Reproductive Health Matters. 2005;13(26):54-64.
- Schwandt HM, Creanga AA, Adanu RMK, Danso KA, Agbenyega T, Hindin MJ. Pathways to unsafe abortion in Ghana: the role of male partners, women and health care providers. Contraception. 2013;88(4):509-517.
- Soares GS. Profissionais de saude frente ao aborto legal no Brasil: desafios, conflitos e significados [Health professionals and legal abortion in Brazil: challenges, conflicts, and meanings]. Cad Saúde Pública. 2003;19 Suppl 2:S399-406.
- Strefling IdSS, Lunardi Filho WD, da Costa Kerber NP, Soares MC, de Oliveira Gomes VL, de Vargas E. Cuidado integral e aconselhamento reprodutivo a mulher que abortou: percepcoes da enfermagem [Comprehensive care in abortion and reproductive counseling to the woman who miscarried: perceptions of nursing]. Esc Anna Nery Rev Enferm. 2013;17(4):698-704.
- Walker L. "My work is to help the woman who wants to have a child, not the woman who wants to have an abortion" Discourses of patriarchy and power among African nurses in South Africa. African Studies. 1996;55(2):43-67.

ANNEX 30. A SYSTEMATIC REVIEW OF BARRIERS AND FACILITATORS TO THE EFFECTIVENESS AND IMPLEMENTATION OF DOCTOR-NURSE SUBSTITUTION PROGRAMMES (RASHIDIAN 2012)

Rashidian A, Karimi-Shahanjarini A, Shakibazadeh E, Glenton C, Noyes J, Lewin S, Colvin CJ. A systematic review of barriers and facilitators to the effectiveness and implementation of doctor–nurse substitution programmes.

#### **BACKGROUND**

Doctor–nurse substitution may contribute to addressing doctor shortages and reducing doctors' workloads and human resource costs. A systematic review of effectiveness studies has concluded that nurse-led care was as effective as doctor-led care. This finding highlights the need to examine how these initiatives are implemented and what factors may explain their effects. We explored the factors affecting the implementation of initiatives to substitute doctors with nurses for maternal and child health. In our review we focused on studies of nurses taking on the roles that are traditionally conducted by doctors in areas of maternal and child care, including substituting doctors with nurses or expanding nurses' roles.

### **METHODS**

Studies included in this review could use any type of qualitative method for data collection and come from low-, middle-, or high-income countries.

Studies conducted in hospitals, clinics, and communities were included as long as nurses were a central part of the reorganization of tasks under review. Study participants included nurses, physician assistants, doctors and midwives, as well as patients, community members, policymakers, programme managers and other stakeholders.

To identify eligible studies, we searched the CINAHL and PubMed databases, contacted experts in the field, scanned the reference lists of relevant studies and conducted forward citation searches for key articles in the Social Science Citation Index and Science Citation Index databases, and "related article" searches in the PubMed.

Independent assessment of the eligibility of studies was conducted and discrepancies were discussed and resolved. Quality of the included studies was appraised. The analysis broadly followed a thematic analysis approach, informed by the framework approach used for the analysis of policy-related qualitative data (Ritchie and Spencer, 1994). A total of 83 26 titles and abstracts were assessed. 18 papers (relevant to fifteen distinct qualitative studies) were included in this review: 15 were based in five high-income countries and three were based in two low- and middle-income countries.

#### **RESULTS**

Recipients regarded nurses as more accessible than doctors, describing them as providers who listened and cared. Still the recipients had mixed views about the expansion of nurses' tasks. Recipients from low- and middle-income countries were generally not positive, but

this may have been a reflection of the difficult circumstances under which the nurses operated. Recipients in high-income countries were mainly positive towards nurses taking on advanced roles. This in a way also reflected the views of the nurses, as nurses in high-income countries were generally satisfied with their roles, while nurses in low- and middle-income countries were generally dissatisfied. In low-income countries, nurses' limited access to medicines and equipment and/or the high burden of care may be the main reasons for recipients' dissatisfaction with the care delivered by nurses. For tasks that were more 'medical' in nature (e.g. physical examinations), most recipients preferred doctors over nurses. For tasks that were considered to be sensitive (e.g. pelvic exams), patients sometimes preferred (female) nurses, although views varied.

Doctors welcomed the contribution of nurses where it reduced doctors' workloads: they welcomed the nurses taking over 'repetitive tasks' (e.g. taking pap smears), conducting preventive and health promotion, and in certain settings they were satisfied with nurses' prescribing roles. They were generally satisfied with the contribution of nurses to maternal and child health care, although certain limitations and concerns were raised. The attitudes of doctors towards nurses appeared to have improved over time. The key to doctors' acceptance of advanced care provided by nurses was the degree to which these nurses were experienced. Experience was a main reason for developing trust and respect between doctors and nurses. Where provision of care by nurses could potentially reduce doctors' earnings (e.g. where fee for service payment is dominant), doctors were more likely to resent substitution.

Nurses' main motivation for providing advanced care and substituting for doctors was recognition and self-satisfaction with these new roles. Nurses in low- and middle-income countries working in close proximity to doctors were more likely to have difficulty in providing care to recipients as recipients were more likely to ask to see a doctor. Some studies reported that nurses in substitution roles felt they were underutilized.

Doctors and nurses disagreed as to the aims of doctor–nurse substitution. While nurses saw substitution as a way of strengthening and expanding the role of the nurse, doctors saw it as a way of replacing and supporting doctors, and as a way of creating a bridge between doctors and nurses. Nurses and doctors noted that formal procedures for communication (e.g. agreed, routine meeting times) may help to improve collaboration and resolve conflicts. Doctors noted that it is important to clarify the level of responsibility of each member of the team and agree on the boundaries of care so as to avoid confusion and disorder in the provision of care. In some of the studies, the degree to which nurses could work independently from doctors was linked to the legal and regulatory framework of nursing practice in these countries. Multidisciplinary training opportunities promoted respect and trust between doctors and nurses.

Task shifting improved recipients' physical access to care as well as the speed of this access. However, recipients of care were concerned about the technical quality of care provided by nurses in low- and middle-income countries. Nurse–doctor substitution was partly used in USA as a response to a lack of female doctors and a demand for female

providers among recipients. The credibility of the nursing profession in a country affects the success of doctor–nurse substitution.

Nurses may be unprepared or not adequately trained when they are given advanced and substitution roles. Nurses taking on clinical tasks in low- and middle-income countries are often not adequately supervised. Some nurses taking on substitution roles in the United Kingdom resented being supervised by doctors.

An increase in nurse autonomy could produce negative reactions among other professions, including midwives. Some doctors preferred to retain the final responsibility for patient care, even if specific tasks were undertaken by nurses (e.g. nurse prescribing). Nurses should be provided with similar financial coverage to doctors for liability when taking on substitution roles, otherwise this may negatively affect the service.

In different countries, several nurse substitution programmes appeared to lack overall leadership insights as they were more focused on the programme development processes than the overall contribution of the programme to health services.

### SUMMARY OF QUALITATIVE FINDINGS TABLE

Su	mmary statement	Certainty in the evidence	Explanation of certainty of evidence assessment
Fa	ctors affecting the views of recipients of care about t	he programn	ne
1.	Recipients regarded nurses as more accessible than doctors, describing them as providers who listened and cared.	Moderate certainty	Three studies from varying settings. The studies were of mixed quality.
2.	Recipients have mixed views about the expansion of nurses' tasks. Recipients from low- and middle-income countries (LMICs) were generally not positive, but this may have been a reflection of the difficult circumstances under which the nurses operated. Recipients in high-income countries (HICs) were mainly positive towards nurses taking on advanced roles.	Low certainty	Only two studies from LMICs of moderate quality. The findings vary across studies.
3.	For tasks that were more "medical" in nature (e.g. physical examinations), most recipients preferred doctors over nurses. For tasks that were considered to be sensitive (e.g. pelvic exams), patients sometimes preferred (female) nurses, although views varied.	Low certainty	Only two studies of moderate to low quality from the USA and Hong Kong.
4.	In low-income countries, nurses' limited access to medicines and equipment and/or the high burden of care may be the main reasons for recipients' dissatisfaction with the care delivered by nurses.	Low certainty	Only two studies of moderate quality, each referring to different findings.
5.	In low-income countries, recipients were not aware of the range of services that nurses were supposed to provide, resulting in a reduced expressed recipients' demand for such services.	Low certainty	Only one study of moderate quality.
Fa	ctors influencing doctors' views about the programm	ne	
6.	Doctors welcomed the contribution of nurses where it reduced doctors' workloads.	Moderate certainty	Three studies of moderate to high quality from Canada, the United Kingdom and USA in primary and maternity care settings. The finding is likely to be transferrable to LMICs.
7.	Doctors were generally satisfied with the contribution of nurses to maternal and child health care, although certain limitations and concerns were raised. The attitudes of doctors towards nurses appeared to have improved over time.	Low certainty	Five studies of moderate quality, all from HICs.

Su	mmary statement	Certainty in the evidence	Explanation of certainty of evidence assessment
8.	Doctors welcomed the transfer of certain repetitive tasks to nurses (e.g. taking pap smears) and nurses in one study seemed to be happy with these tasks. Nurses may be willing to provide preventive and health promotional care that is not usually prioritized by doctors.	Low certainty	One study from Canada and one from the USA, both of moderate quality.
9.	Doctors felt that nurse prescribing improved the continuity of care that patients received.	Low certainty	One moderate to high quality study from the United Kingdom.
10.	Key to doctors' acceptance of advanced care provided by nurses was the degree to which these nurses were experienced. Experience was a main reason for developing trust and respect between doctors and nurses.	Low certainty	Two studies of moderate quality from the United Kingdom and USA.
Fac	ctors influencing nurses' views about the programm	е	
11.	Nurses' main motivation for providing advanced care and substituting for doctors was recognition and self-satisfaction with these new roles.	Moderate certainty	Five studies of moderate to high quality from HICs, all suggesting the same finding.
12.	Nurses in HICs were generally satisfied with their roles, while nurses in LMICs were generally dissatisfied.	Low certainty	Difficult to extrapolate this finding to other setting, due to variation in settings and findings.
13.	Nurses in LMICs working in close proximity to doctors were more likely to have difficulty in providing care to recipients as recipients were more likely to ask to see a doctor.	Low certainty	Only one study of moderate quality from Yemen
14.	Nurses in substitution roles felt they were underutilized.	Low certainty	Two studies of moderate quality from HICs.
Nu	rse-doctor relationships		
15.	Nurses and doctors noted that formal procedures for communication (e.g. agreed routine meeting times) may help to improve collaboration and resolve conflicts.	Moderate certainty	Three studies of moderate quality from Canada, South Africa and the United Kingdom noted this.
16.	Doctors' views were an important factor in the success of substitution roles, as nurses were closely collaborating with doctors.	Low certainty	Reported in two studies in Australia and the USA. The finding seems to be context specific.

Summary statement	Certainty in the evidence	Explanation of certainty of evidence assessment	
17. Doctors and nurses disagree as to the aims of doctor– nurse substitution. While nurses saw substitution as a way of strengthening and expanding the role of the nurse, doctors saw it as a way of replacing and supporting doctors, and as a way of creating a bridge between doctors and nurses	Low certainty	Two moderate quality studies from Canada. The argument appears to be more relevant in settings where other professionals are also collaborating, e.g. maternity care where midwives are present.	
18. In HICs, the degree to which nurses could work independently from doctors was linked to the legal and regulatory framework of nursing practice in these countries.	Low certainty	The findings vary by study. No mention of the issue in LMIC papers.	
19. Multidisciplinary training opportunities promoted respect and trust between doctors and nurses.	Low certainty	Reported in one moderate quality study from Canada. The view was expressed both by nurses and doctors.	
20. Doctors noted that it is important to clarify the level of responsibility of each member of the team and agree on the boundaries of care so as to avoid confusion and disorder in the provision of care.	Low certainty	Two studies of moderate quality from Canada and the United Kingdom.	
Accessibility and quality of care			
21. Task shifting improved recipients' physical access to care as well as the speed of this access.	Moderate certainty	Five studies in HICs and one study in Yemen noted this finding.	
22. Nurses with expanded roles spent more time with patients than doctors conducting the same task. Nurses in expanded roles spent more time with patients in the USA, than doctors providing similar tasks; but not so in South Africa.	Low certainty	Few studies, and the findings seem to vary according to the setting.	
23. Recipients showed concerns about the technical quality of care provided by nurses in LMICs.	Low certainty	Reported in two studies of moderate quality. The specific conditions of the two study settings diminish the likelihood that these findings can be generalized.	
Financial resources			
24. Where provision of care by nurses could potentially reduce doctors' earnings (e.g. where fee for service payment is dominant), doctors were more likely to resent substitution.	Low certainty	Indirect findings from four different studies in HICs.	

Summary statement	Certainty in the evidence	Explanation of certainty of evidence assessment
25. A severe lack of financial resources undermined the impact of nurse–doctor substitution in LMICs, as it resulted in nurses being ill-equipped to deliver the tasks.	Low certainty	Indirect findings from two LMIC studies.
Human resource issues		
26. The credibility of the nursing profession in a country affects the success of doctor–nurse substitution.	Low certainty	Reported only in one moderate quality study from Canada.
27. Nurse–doctor substitution was partly used in USA as a response to a lack of female doctors and a demand for female providers among recipients.	Low certainty	Reported only in one moderate quality study from the USA.
Training (formal and hands-on) and supervision issues		
28. Nurses may be unprepared or not adequately trained when they are given advanced and substitution roles.	Low certainty	Three different studies from HICs suggested this might be the case.
29. Nurses taking on clinical tasks in LMICs are often not adequately supervised.	Low certainty	Reported in two LMIC studies of moderate quality.
30. Some nurses taking on substitution roles resented being supervised by doctors, as it reflected professional boundaries in that country.	Low certainty	Reported in only one study from the United Kingdom.
31. It is important to provide formal opportunities for interaction among nurses providing maternal and child health care and other relevant areas of care. This was mentioned as nurses in expanded roles sometimes felt lonely in their responsibilities.	Low certainty	Reported in a moderate- quality study in Yemen and a low-quality study in Australia.
Allocation of authority and accountability		
32. An increase in nurse autonomy could negatively affect other professions or produce negative reactions among these professions, including midwives, as they felt their traditional boundaries of care have been eroded.	Low certainty	Two studies of moderate quality from Canada and the United Kingdom mentioning different aspects.
33. Some doctors preferred to retain the final responsibility for patient care, even if specific tasks were undertaken by nurses (e.g. nurse prescribing).	Low certainty	The views of doctors varied in the study that reported this. It is also a context specific finding.
34. Nurses should be provided with similar financial coverage to doctors for liability when taking on substitution roles, otherwise this may negatively affect the service.	Low certainty	Reported in only one study from Canada.

Summary statement	Certainty in the evidence	Explanation of certainty of evidence assessment
Leadership and management		
35. Nurse substitution programmes lack overall leadership insights as they are more focused on the programme development processes than the overall contribution of the programme to the health services.	Low certainty	Two studies from HIC and one study from South Africa. Moderate quality.

ANNEX 31. AN ANALYSIS OF LARGE-SCALE PROGRAMMES FOR SCALING UP HUMAN RESOURCES FOR HEALTH TO DELIVER CONTRACEPTIVES IN LOW- AND MIDDLE-INCOME COUNTRIES (POLUS 2012)

Polus S. An analysis of large scale programmes for scaling up human resources for health to deliver contraceptives in low- and middle-income countries. 2012 (http://www.ncbi.nlm.nih.gov/books/NBK148512/bin/annex7-m22.pdf).

#### **BACKGROUND**

The high unmet need for family planning and human resources for health shortages in many low- and middle-income countries (LMICs) have led, in many settings, to a reorganization of the health workforce and to optimize or expand health worker roles (sometimes referred to as "task shifting"). This review aims to identify barriers and enablers to the implementation of large-scale programmes to optimize health workers' tasks and roles in areas that have limited access to family planning services. We defined large-scale programmes as those that were national, or at least state-wide for very populous countries; public-sector or publicly funded; and that had been implemented preferably for five years or more.

#### **METHODS**

We identified potentially eligible programmes through relevant agencies and experts. We purposively selected programmes that provided a sufficient level of documentation and that represented variations in geographic location and in type of contraceptive. For each selected programme, we gathered evaluation reports and other documents through key informants and by searching electronic databases and websites. Analysis of the relevant reports was informed by a checklist for identifying factors affecting the implementation of a policy option (the SURE checklist).

#### **RESULTS**

We included five programmes: (1) the family planning programme in Bangladesh (mainly oral contraceptives, condoms, injectables); (2) the depot medroxyprogesterone acetate (DMPA) programme in Madagascar; (3) the DMPA programme in Uganda; (4) the Implanon (contraceptive implant) programme in Ethiopia; and (5) the intrauterine device (IUD) programme in Honduras. In Ethiopia, Madagascar and Uganda lay health workers (LHWs) were used to deliver these contraceptive methods. In Bangladesh a mix of health workers, including a number of different kinds of lay health workers, were used. In Honduras auxiliary nurses were used. In Ethiopia, Madagascar and Uganda, an additional contraceptive had been introduced to an already existing family planning programme.

#### **RECIPIENTS**

Generally, recipients regarded the community-based distribution of contraceptives as increasing convenience. However, factors that appeared to represent barriers to contraceptive uptake among recipients included suspicion mostly of side-effects, as well as religious and traditional beliefs

Female health workers were generally preferred for contraceptive delivery by recipients, most of whom were also female.

#### HEALTH WORKERS AND SUPERVISORS

The health workers mostly regarded their new tasks with satisfaction and pride. However, in some situations they felt overworked because of lack of time and resource constraints. They also noted that they would feel more appreciated if they were reimbursed for the full range of activities that they undertook, including tasks such as travelling to the health centre.

Training policies for health workers did not always consider all aspects of contraceptive method delivery, e.g. the removal of implants, or ensure the availability of sufficient 'hands on' practice. Training was regarded as more useful where it was adapted to the relevant sub-culture and local language.

Health workers considered the provision of counselling on side-effects and the completion of administrative tasks to be difficult activities.

Health workers imposed their own criteria for the provision of contraception to clients. These criteria included the client's age and marital status and, for women, whether they had their husband's approval or whether they were menstruating during implant or injectable provision (which was used as a method of checking whether women were pregnant.

The use of non-clinical supervisors who live closer to the health workers may enable more regular and effective supervision.

#### **HEALTH SYSTEM**

To respond to the high demand in communities for other services outside the LHWs' scope of work, back-up systems with regular visits from the health centre supporting the LHWs are needed.

Service delivery at community level seemed to be limited by weak referral systems.

Several programmes suggested shifting the responsibility for contraceptive commodities from central to district levels, to avoid stock-outs.

The implementation of family planning programmes seemed to be eased where publicly and privately funded programmes shared the same procurement or training systems, as this facilitated organizational and monetary efforts and sustainability of the privately funded programmes.

One report stressed that political will at both central and district level was essential.

# ANNEX 32. THE EFFECTS, SAFETY AND ACCEPTABILITY OF COMPACT, PRE-FILLED, AUTODISABLE INJECTION DEVICES WHEN DELIVERED BY LAY HEALTH WORKERS (GLENTON, KHANNA 2013)

Glenton C, Khanna R, Morgan C, Nilsen ES. The effects, safety and acceptability of compact pre-filled, auto disable injection devices when delivered by lay health workers. Tropical Medicine and International Health. 2013;18(8):1002–16.

#### **ABSTRACT**

#### **OBJECTIVES**

To systematically assess (i) the effects and safety, and (ii) the acceptability of using lay health workers (LHWs) to deliver vaccines and medicines to mothers and children through compact pre-filled auto-disable devices (CPADs).

#### **METHODS**

We searched electronic databases and grey literature. For the systematic review of effects and safety, we sought randomized and non-randomized controlled trials, controlled beforeafter studies and interrupted time series studies. For the systematic review of acceptability, we sought qualitative studies. Two researchers independently carried out data extraction, study quality assessment and thematic analysis of the qualitative data.

#### **RESULTS**

No studies met our criteria for the review exploring the effects and safety of using LHWs to deliver CPADs. For the acceptability review, six qualitative studies assessed the acceptability of using LHWs to deliver hepatitis B vaccine, tetanus toxoid vaccine, gentamicin or oxytocin using Uniject devices. All studies took place in low- or middle-income countries and explored the perceptions of community members, LHWs, supervisors, health professionals or programme managers. Most of the studies were of low quality. Recipients generally accepted the intervention. Most health professionals were confident that LHWs could deliver the intervention with sufficient training and supervision, but some had problems delivering supervision. The LHWs perceived Uniject as effective and important and were motivated by positive responses from the community. However, some LHWs feared the consequences if harm should come to recipients.

#### **CONCLUSIONS**

Evidence of the effects and safety of using CPADs delivered by LHWs is lacking. Evidence regarding acceptability suggests that this intervention may be acceptable although LHWs may feel vulnerable to blame.

ANNEX 33. BARRIERS AND FACILITATORS TO THE IMPLEMENTATION OF LAY HEALTH WORKER PROGRAMMES TO IMPROVE ACCESS TO MATERNAL AND CHILD HEALTH: QUALITATIVE EVIDENCE SYNTHESIS (GLENTON, COLVIN 2013)

Glenton C, Colvin CJ, Carlsen B, Swartz A, Lewin S, Noyes J, Rashidian A. Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: qualitative evidence synthesis. Cochrane Database of Systematic Reviews. 2013;(10):CD010414. doi:10.1002/14651858.CD010414.pub2.

#### **ABSTRACT**

#### **BACKGROUND**

Lay health workers (LHWs) perform functions related to health-care delivery, receive some level of training, but have no formal professional or paraprofessional certificate or tertiary education degree. They provide care for a range of issues, including maternal and child health. For LHW programmes to be effective, we need a better understanding of the factors that influence their success and sustainability. This review addresses these issues through a synthesis of qualitative evidence and was carried out alongside the Cochrane review of the effectiveness of LHWs for maternal and child health.

#### **OBJECTIVES**

The overall aim of the review is to explore factors affecting the implementation of LHW programmes for maternal and child health.

#### **SEARCH METHODS**

We searched Medline, OvidSP (searched 21 December 2011); Ovid MEDLINE In-Process & Other Non-Indexed Citations, OvidSP (searched 21 December 2011); CINAHL, EBSCO (searched 21 December 2011); British Nursing Index and Archive, OvidSP (searched 13 May 2011). We searched reference lists of included studies, contacted experts in the field, and included studies that were carried out alongside the trials from the LHW effectiveness review.

#### **SELECTION CRITERIA**

Studies that used qualitative methods for data collection and analysis and that focused on the experiences and attitudes of stakeholders regarding LHW programmes for maternal or child health in a primary or community health-care setting.

#### DATA COLLECTION AND ANALYSIS

We identified barriers and facilitators to LHW programme implementation using the framework thematic synthesis approach. Two review authors independently assessed study quality using a standard tool. We assessed the certainty of the review findings using the CerQual approach, an approach that we developed alongside this and related qualitative syntheses. We integrated our findings with the outcome measures included in the review of LHW programme effectiveness in a logic model. Finally, we identified hypotheses for subgroup analyses in future updates of the review of effectiveness.

#### MAIN RESULTS

We included 53 studies primarily describing the experiences of LHWs, programme recipients, and other health workers. LHWs in high-income countries (HICs) mainly offered promotion, counselling and support. In low- and middle-income countries (LMICs), LHWs offered similar services but sometimes also distributed supplements, contraceptives and other products, and diagnosed and treated children with

common childhood diseases. Some LHWs were trained to manage uncomplicated labour and to refer women with pregnancy or labour complications.

Many of the findings were based on studies from multiple settings, but with some methodological limitations. These findings were assessed as being of moderate certainty. Some findings were based on one or two studies and had some methodological limitations. These were assessed have low certainty.

Barriers and facilitators were mainly tied to programme acceptability, appropriateness and credibility; and health system constraints. Programme recipients were generally positive to the programmes, appreciating the LHWs' skills and the similarities they saw between themselves and the LHWs. However, some recipients were concerned about confidentiality when receiving home visits. Others saw LHW services as not relevant or not sufficient, particularly when LHWs only offered promotional services. LHWs and recipients emphasized the importance of trust, respect, kindness and empathy. However, LHWs sometimes found it difficult to manage emotional relationships and boundaries with recipients. Some LHWs feared blame if care was not successful. Others felt demotivated when their services were not appreciated. Support from health systems and community leaders could give LHWs credibility, at least if the health systems and community leaders had authority and respect. Active support from family members was also important.

Health professionals often appreciated the LHWs' contributions in reducing their workload and for their communication skills and commitment. However, some health professionals thought that LHWs added to their workload and feared a loss of authority.

LHWs were motivated by factors including altruism, social recognition, knowledge gain and career development. Some unsalaried LHWs wanted regular payment, while others were concerned that payment might threaten their social status or lead recipients to question their motives. Some salaried LHWs were dissatisfied with their pay levels. Others were frustrated when payment differed across regions or institutions. Some LHWs stated that they had few opportunities to voice complaints.

LHWs described insufficient, poor quality, irrelevant and inflexible training programmes, calling for more training in counselling and communication and in topics outside their current role, including common health problems and domestic problems. LHWs and supervisors complained about supervisors' lack of skills, time and transportation. Some LHWs appreciated the opportunity to share experiences with fellow LHWs.

In some studies, LHWs were traditional birth attendants (TBAs) who had received additional training. Some health professionals were concerned that these LHWs were over-confident about their ability to manage danger signs. LHWs and recipients pointed to other problems, including women's reluctance to be referred after bad experiences with health professionals, fear of caesarean sections, lack of transport, and cost. Some LHWs were reluctant to refer women on because of poor co-operation with health professionals.

We organized these findings and the outcome measures included in the review of LHW programme effectiveness in a logic model. Here we proposed six chains of events where specific programme components lead to specific intermediate or long-term outcomes, and where specific moderators positively or negatively affect this process. We suggest how future updates of the LHW effectiveness review could explore whether the presence of these components influences programme success.

#### **AUTHORS' CONCLUSIONS**

Rather than being seen as a lesser-trained health worker, LHWs may represent a different and sometimes preferred type of health worker. The close relationship between LHWs and recipients is a programme strength. However, programme planners must consider how to achieve the benefits of closeness while minimizing the potential drawbacks. Other important facilitators may include the

development of services that recipients perceive as relevant; regular and visible support from the health system and the community; and appropriate training, supervision and incentives.

### SUMMARY OF QUALITATIVE FINDINGS TABLE

Sur	Summary		Explanation of certainty in the evidence assessment
	gramme acceptability, appropriateness and fe e lay health worker–recipient relationship	easibility:	
1.	Both programme recipients and LHWs emphasized the importance of trust, respect, kindness and empathy in the LHW-recipient relationship.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
2.	Recipients appreciated the similarities they saw between themselves and the LHWs.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
3.	Some LHWs expressed an appreciation of the community-based nature of the programmes, which allowed them a certain amount of flexibility in their working hours.	Low certainty	The studies were of moderate quality. However, the finding is only from two studies in Nepal and Uganda.
4.	LHWs were compared favourably with health professionals, whom recipients often regarded as less accessible, less friendly, more intimidating, and less respectful.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
5.	Some recipients who had easy access to doctors indicated a preference for these health professionals.	Low certainty	The studies were of moderate quality.  However, the finding is only from two studies in Thailand and Bangladesh.
6.	LHWs reported difficulties in managing emotional relationships and boundaries with recipients.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
7.	Some recipients were concerned that home visits from LHWs might lead the LHWs to observe and share personal information or might lead neighbours to think recipients were HIV-positive.	Low certainty	The studies were of moderate quality. However, the finding is only from three studies in South Africa and the USA.
8.	LHWs, particularly those working in urban settings, reported difficulties maintaining personal safety when working in dangerous settings or at night.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings, although predominantly in urban areas.
9.	In some settings, gender norms meant that female LHWs could not easily move within their community to fulfil their responsibilities.	Low certainty	The studies were of moderate quality. However, the finding is only from two studies in Bangladesh.
10.	Some LHWs feared the burden of responsibility and blame if interventions delivered to other community members were unsuccessful.	Low certainty	The studies were of moderate quality. However, the finding is only from two studies in Kenya and Nepal.
	gramme acceptability, appropriateness and fe e lay health worker-recipient relationship II	easibility:	
	Some recipients failed to utilize LHW services because of concerns about intervention safety or a lack of understanding about the programme or the benefits of the intervention.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
12.	Some recipients failed to utilize LHW services because they could not afford these services.	Low certainty	The studies were of moderate quality. However, the finding is only from one study in Zambia.

Summary	Certainty in the evidence	Explanation of certainty in the evidence assessment
13. Recipients sometimes perceived LHW services as not relevant to their needs or not sufficient, particularly when services focused on promotional activities.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
14. Recipients' and LHWs' perceptions of the LHW services as not relevant or not sufficient could lead to feelings of impotence and demotivation among the LHWs. LHWs who primarily offered promotional and counselling services sometimes expressed a need to offer "real health-care" in order to better respond to the expressed needs of the community.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
15. Recipients expressed confidence in the knowledge and skills of the LHWs and saw them as a useful source of information.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
16. LHW credibility was believed by different stakeholders to be heightened through visible ties to the health system. These ties were emphasized through, for example, LHWs' possession of equipment and their ability to refer directly to clinics.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
17. Visible ties to the health system could enhance LHW credibility, but not always. In one study where community members had little respect for health professionals, LHWs attempted to disassociate themselves by emphasizing their status as unpaid volunteers. In another study, LHW credibility was questioned because they received payment.	Low certainty	The studies were of moderate quality. However, the finding is only from two studies in Nepal and South Africa.
18. LHW credibility and acceptance was believed to be strengthened through the active support and participation of community leaders and community structures. However, the success of this type of involvement was seen as useful primarily where community leaders had authority and respect.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings, although primarily in LMIC countries.
<ol> <li>LHW credibility and acceptance was believed to be strengthened through the active support and participation of family members involved in health decision-making.</li> </ol>	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
20. Female LHWs and male family members sometimes found it embarrassing to communicate about family planning or HIV counselling.	Low certainty	The studies were of moderate quality. However, the finding is only from three studies in Pakistan, South Africa and USA.

Programme acceptability, appropriateness and feasibility: The lay health worker-health professional relationship				
21. Where LHWs described good relationships with health professionals, they referred to these relationships as being respectful, supportive and egalitarian, and where LHWs were regarded as possessing complementary and valuable skills.	Low certainty	The studies were of moderate quality. However, the finding is only from three studies in Canada, Nicaragua and South Africa.		
22. In studies where health professionals expressed appreciation of LHWs, they emphasized the LHWs' contribution to the health professionals' busy workload; their skills in communicating with the target population and their knowledge and experience of the issues at hand; and their commitment and dedication to their patients and the community.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.		
23. In studies describing poor relationships between LHWs and health professionals, LHWs were regarded as unequal, subservient, not part of the organization, and LHWs complained of arrogance and lack of respect from health professionals.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.		
24. In a few studies, health professionals described problems with working with LHWs. These health professionals pointed to the tension between being expected to function as partners, supervisors and evaluators, added workloads, and fear that they would lose authority.	Low certainty	The studies were of moderate quality. However, the finding was only from a few studies and settings.		
25. Some studies suggested that the closer the collaboration was between the health professional and the LHW, the better the relationship was likely to be.	Low certainty	The studies were of moderate quality. However, the finding is only from three studies in Papua New Guinea, South Africa and United Kingdom.		
Lay health worker motivation and incentives				
26. LHWs were driven by a wide range of interconnected motives, both intrinsic and extrinsic, including altruism and social engagement, social status and recognition, knowledge and skills gain, career development, and a general sense of empowerment. These motives were seen across a range of settings although the issue of social recognition appeared to be less common in HIC settings, where LHWs were often not from the same neighbourhood as their clients.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.		

27. Some unsalaried LHWs expressed a strong wish for regular payment.	Low certainty	The studies were of moderate quality. However, the finding was only from two studies in Kenya and Uganda.
28. Some salaried LHWs were dissatisfied with their wages, believing that it did not reflect their abilities, their level of responsibility or their increase in skills as they acquired further training and education.	Low certainty	The studies were of moderate quality. However, the finding was only from four studies in Canada, South Africa, United Kingdom and USA.
29. Some volunteer LHWs and other stakeholders expressed concern that payment would change the dynamics of the LHW–client relationship, threaten the LHWs' social status or lead recipients to question the LHWs' motives for delivering services. Some stakeholders underlined the importance of understanding what LHW motivations are in each context and the necessity of ensuring that the expectations of LHWs, programme managers and policy makers are in alignment.	Low certainty	The studies were of moderate quality. However, the finding was only from three studies in Australia, Nepal and South Africa.
30. Changes in tasks could influence expectations regarding incentives. For instance, while some LHWs were willing to work as volunteers when tasks could be done at their leisure, activities that demanded that they were present during labour and birth implied irregular and unpredictable working conditions, and led to demands for monetary incentives.	Low certainty	The studies were of moderate quality. However, the finding was only from one study in Nepal.
31. While regular salaries were not part of many programmes, other monetary and non-monetary incentives, including payment to cover out-of-pocket expenses and "work tools" such as bicycles, uniforms or ID badges, were greatly appreciated by LHWs.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
32. Some LHWs who received payment through selling drugs and supplements encountered problems including an inflated idea of the profit they would be making; people buying drugs on credit purchase basis or being reluctant to buy drugs because of their perception that the LHWs got the drugs for free; and competition from other vendors.	Low certainty	The studies were of moderate quality. However, the finding was only from two studies in Bangladesh and Kenya.
33. Some LHWs referred to frustration when payment differed from region to region or across different types of institutions.	Low certainty	The studies were of moderate quality. However, the finding was only from two studies in Ethiopia and Nepal.

34. Some LHWs and other stakeholders complained that there were few systems in place through which they could voice their individual or collective complaints about incentives or other issues.	Low certainty	The studies were of moderate quality. However, the finding was only from two studies in Iran and Nepal.
Lay health worker training, supervision and work	ing conditio	ons
35. LHWs highlighted aspects of training that they saw as positive including the use of practical demonstrations, picture cards and frequent refresher training.	Low certainty	The studies were of moderate quality. However, the finding was only from three studies in Ethiopia, Gambia and South Africa.
36. In general, however, LHWs highlighted a number of weaknesses with current training, including schedules not flexible enough to respond to LHW turnover, poor quality and irrelevant training programmes and unskilled trainers.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
37. LHWs asked for more training in counselling and communication, a task which is often central to the role of the LHWs, but which they often found to be complex to perform.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
38. Some LHWs wanted training in topics outside of their current role, including common health problems, birth complications, sexual abuse and domestic violence, substance abuse and housing difficulties. These requests appeared to reflect the LHWs' need to respond to the expressed needs of the community and to the circumstances they were confronted with in their work.	Low certainty	The studies were of moderate quality. However, the finding was only from four studies in Honduras, Thailand and USA.
39. Supervision was seen as important by programme staff and LHWs for quality of intervention delivery, and as an opportunity to give and receive support, guidance and continued training; assess skills; and address ongoing challenges. Despite this acknowledgement of the importance of supervision, however, the studies pointed to a number of problems including supervisors' lack of time, large distances, lack of transportation and lack of skills.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.

40.	A small number of studies described supervision that was perceived to be good. Here, supervisors displayed respect to the LHW; had a good understanding of the LHW's working conditions and personal circumstances; provided emotional and technical support; and carried out plentiful field visits.	Low certainty	The studies were of moderate quality. However, the finding was only from a small number of studies and settings.
41.	In addition to formal supervision, some LHWs also appreciated the opportunity to share experiences with other LHWs	Low certainty	The studies were of moderate quality. However, the finding was only from two studies in Australia and the USA.
42.	Both LHWs and supervisors in a number of studies expressed concern about the LHWs' workload and the distances they had to cover, and LHWs sometimes found it difficult to carry out all of their tasks because of this.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
43.	A few studies, mostly in LMICs, referred to poor working conditions, including inadequate lighting and small, dirty rooms, lack of supplies, too much paperwork, and high staff turnover.	Low certainty	The studies were of moderate quality. However, the finding was only from a small number of studies and settings.
Pat	ient flow processes		
44.	LHWs in a number of studies were trained to refer patients with complications on to health professionals. However, health professionals in one study were concerned that trained TBAs were over-confident about their ability to manage danger signs or lacked the knowledge to recognize such signs. Overconfidence was also suggested by authors of another study as a reason for poor compliance among LHWs who were meant to refer children with malaria on.	Low certainty	The studies were of moderate quality. However, the finding was only from two studies in Gambia and Malawi.
45.	The LHWs themselves and their recipients pointed to different factors that made referral difficult to those highlighted by health professionals. Some trained TBAs and recipients pointed out that referral was made difficult by a lack of health professionals to refer patients to.	Low certainty	The studies were of moderate quality. However, the findings were only from two studies in Honduras and Pakistan.
46.	LHWs also pointed to clients' own reluctance to access care, partly due to bad experiences with health professionals, fear of caesarean sections, and concerns over cost.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.

47.	Trained TBAs in some studies were also reluctant to refer women on because of the poor treatment and lack of cooperation the TBAs themselves experienced from health professionals.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
48.	Other obstacles to referral were logistical factors, particularly the lack of transport necessary to move the woman to the clinic, but also lack of money to pay for transport or a telephone with which to call an ambulance.	Moderate certainty	In general, the studies were of moderate quality, and the finding was seen across several studies and settings.
49.	In two studies, where LHWs were not TBAs, patients accompanied by LHWs were given preferential treatment by clinic staff.	Low certainty	The studies were of moderate quality. However, the findings were only from two studies in Kenya and Nicaragua.
Ser	vice integration		
50.	Some studies suggest that LHW programmes could be strengthened by a stronger integration into other services.	Low certainty	The studies were of moderate quality. However, the finding was only from a small number of studies and settings.
Soc	cial and cultural conditions		
51.	Some studies described how social conditions, societal beliefs and values influenced LHW programme initiation, implementation or acceptance. Examples of this included differences in community organization and cohesion, proximity to town and gender roles.	Low certainty	The studies were of moderate quality. However, the finding was only from a small number of studies and settings.

# ANNEX 34. A SYSTEMATIC REVIEW OF QUALITATIVE EVIDENCE ON BARRIERS AND FACILITATORS TO THE IMPLEMENTATION OF TASK-SHIFTING IN MIDWIFERY SERVICES (COLVIN 2013)

Colvin CJ, de Heer J, Winterton L, Mellenkamp M, Glenton C, Noyes J, Lewin S, Rashidian A. A systematic review of qualitative evidence on barriers and facilitators to the implementation of task-shifting in midwifery service. Midwifery. 2013;29(10):1211-21.

#### **ABSTRACT**

#### **OBJECTIVE**

To synthesize qualitative research on task shifting to and from midwives to identify barriers and facilitators to successful implementation.

#### DESIGN

Systematic review of qualitative evidence using a 4-stage narrative synthesis approach. We searched the CINAHL, Medline and the Social Science Citation Index databases. Study quality was assessed and evidence was synthesized using a theory-informed comparative case-study approach.

Setting: Midwifery services in any setting in low-, middle- and high-income countries.

Participants: Midwives, nurses, doctors, patients, community members, policymakers, programme managers, community health workers, doulas, traditional birth attendants (TBAs) and other stakeholders.

Interventions: Task shifting to and from midwives.

#### **FINDINGS**

Thirty-seven studies were included. Findings were organized under three broad themes: (1) challenges in defining and defending the midwifery model of care during task shifting, (2) training, supervision and support challenges in midwifery task shifting, and (3) team work and task shifting.

### KEY CONCLUSIONS

This is the first review to report implementation factors associated with midwifery task shifting and optimization. Though task shifting may serve as a powerful means to address the crisis in human resources for maternal and newborn health, it is also a complex intervention that generally requires careful planning, implementation and ongoing supervision and support to ensure optimal and safe impact. The unique character and history of the midwifery model of care often makes these challenges even greater.

#### IMPLICATIONS FOR PRACTICE

Evidence from the review fed into the World Health Organization's guideline: Recommendations for optimizing health worker roles to improve access to key maternal and newborn health interventions through task shifting. It is appropriate to consider task-shifting interventions to ensure wider access to safe midwifery care globally. Legal protections and liabilities and the regulatory framework for task shifting should be designed to accommodate new task shifted practices.

### SUMMARY OF QUALITATIVE FINDINGS TABLE

Su	mmary statement	Confidence in the evidence*	Explanation of confidence in the evidence assessment	
	Factors that affect midwifery task shifting programme acceptability, appropriateness and credibility: Defining and defending the model			
1.	While there were significant variations across the studies in terms of the work that midwives actually do, one of the most consistent findings was the existence of a clear distinction between "midwifery" and "biomedical" models of care.  Midwifery models were said to emphasize holistic, continuous, woman-centred care that treated pregnancy and delivery as normal physiological processes. Biomedical models were said to prioritize technological intervention, clinical expertise, and the involvement of a variety of medical staff who perceived pregnancy and delivery as a time of risk and unconfidence.	Moderate confidence	In general, the studies were moderately well done. The finding was seen across many studies and settings.	
2.	Tension between these two models of care was a frequent theme in the studies and conflicts between midwives and other medical professionals around these models had a significant impact on the acceptability and success of initiatives to shift tasks to or from midwives. Task shifting that increased the ability of midwives to provide more holistic or continuous care was readily accepted by midwives and mothers alike. However, task-shifting initiatives that increased the focus on technological interventions and/or increased the involvement of others in either the clinical care or the emotional support of the mother ended up putting pressure on the midwifery model of care.	Moderate confidence	In general, the studies were moderately well done. The finding was seen across several studies and settings.	
3.	In high-income countries, initiatives to shift tasks to or from midwives were generally driven by demands for greater efficiency and effectiveness, more clinical support of mothers requiring "high-dependency care" and the provision of obstetric care in more decentralized or community-based forms. In low- and middle-income countries, task shifting was usually driven by a need to cover major service gaps in the health system and increase access to obstetric care.	Moderate confidence	In general, the studies were moderately well done. The finding was seen across several studies and settings.	
4.	Several studies described "ad hoc" forms of task shifting due to chronic under-staffing, poor outcomes, and unclear divisions of roles and responsibilities among staff. These ad hoc forms of task shifting were generally appropriate responses to immediate needs but took place without proper planning or official sanction.	Moderate confidence	In general, the studies were moderately well done. The finding was seen across several studies and settings.	

Summary statement		Confidence in the evidence*	Explanation of confidence in the evidence assessment
5.	Task shifting that involved midwives in neonatal examinations and care was generally well-received by mothers and midwives and perceived to be a natural extension of the midwives' holistic relationship to the mother. There were, nonetheless, trade-offs in this for midwives involving increased workload, uncertain liability and fear of missing rare abnormalities.	Moderate confidence	In general, the studies were moderately well done. The finding was seen across several studies and settings, although predominantly in high-income countries.
6.	Midwives frequently had ambivalent, and at times, directly conflictual relationships with doulas, traditional birth attendants (TBAs) and other birth supporters. The division of roles between midwives and these other health workers was often ambiguous or contested. The presence of doulas or TBAs tended to shift the relationship between mother and midwife, often in a more medical direction.	Moderate confidence	In general, the studies were moderately well done. The finding was seen across several studies and settings.
7.	Midwife-led care was generally highly acceptable to both mothers and medical staff, especially in contexts that had not historically offered woman-centred, midwifery models of obstetric care. Cultural barriers or lack of trust in the health system could, however, lead to a preference among mothers for doulas or TBAs as the primary birth supporter.	Moderate confidence	The studies were moderately well done. The finding was seen across several studies and settings.
8.	Doulas and TBAs were well received by midwives when there were significant cultural or linguistic barriers between midwives and mothers and these additional birth supporters could act as mediators.	Low confidence	In general, the studies were moderately well done. The finding was in two studies from Sweden.
9.	Doctors often knew little about the skills or training of midwives and doctors not involved directly in midwifery task-shifting programmes tended to be sceptical about the extension of midwifery roles in obstetric care. Doctors actively involved in midwifery tended to have better attitudes towards and relationships with midwives.	Low confidence	In general, the studies were moderately well done. The finding was in several studies and settings but few of them focused on doctor perception as a key research question.
Fac	Factors that affect training, supervision and support in midwifery task shifting		
10.	Midwives and their supervisors and trainers generally felt midwives had no problem learning new medical information and practicing new clinical techniques as part of task shifting. This finding emerged in studies of task shifting involving neonatal care, genetic screening, abortion care, life-saving, advanced newborn resuscitation, and critical illness management.	Moderate confidence	In general, the studies were moderately well done. The finding was seen across several studies and settings.

Summary statement	Confidence in the evidence*	Explanation of confidence in the evidence assessment
11. Ongoing support and clinical supervision were seen to be critical for sustaining effective changes in practice but this kind of support and supervision was generally insufficient in task shifting programmes.	Moderate confidence	In general, the studies were moderately well done. The finding was seen across several studies and settings.
12. Poor planning around and integration of new skills and roles into existing models and protocols for obstetric care can be a significant barrier to task shifting to and from midwives. Auxiliary nurses, for example, could be trained to identify and manage postpartum bleeding, but if other staff did not know this or allow them to perform this function, the task would not be effectively shifted.	Moderate confidence	In general, the studies were moderately well done. The finding was seen across several studies and settings.
13. Task shifting often induced changes in the personal meanings, habits and identities of midwives and other medical and lay health staff. Even when the midwifery model of care was not under threat, changes in practice sometimes challenged entrenched habits, hierarchical relationships, and deeply personal meanings attached to the work health workers did.	Moderate confidence	In general, the studies were moderately well done. The finding was seen across several studies and settings.
14. Task shifting that involved "upskilling" midwives often entailed a number of advantages including increased status and promotion opportunities, a sense of achievement and clinical confidence, heightened job satisfaction from being able to help sicker or a greater number of people, improved overall practice and skills, and improvements in quality and continuity of care for mothers.	Moderate confidence	In general, the studies were moderately well done. The finding was seen across several studies and settings.
15. Midwife concerns around "upskilling" included poor clinical support and supervision, inadequate training, haphazard implementation of new programmes and working relationships, insufficient educational preparation, increased workload, less continuity of care, fear of liability and an unclear regulatory environment.	Moderate confidence	In general, the studies were moderately well done. The finding was seen across several studies and settings.
16. Upskilling could also threaten concepts, practices and relationships embedded in the midwifery model of care when it (i) involved the anticipation of abnormality (as in genetic screening), (ii) required midwives to ensure that mothers behaved a certain way and met certain medical targets to keep their health conditions under control (as in gestational diabetes), (iii) perceived pregnancy as a medical problem (as in abortion services) or (iv) required midwives to move beyond obstetric care (as in programmes to shift family planning and sexual health tasks to midwives).	Moderate confidence	In general, the studies were moderately well done. The finding was seen across several studies and settings.

Summary statement	Confidence	Explanation of
	in the	confidence in the
	evidence*	evidence
		assessment
17. Midwives, their supervisors and researchers sometimes felt	Low confidence	In general, the studies
that the short-term acquisition of new skills or knowledge did	Confidence	were moderately well done. However, the
not always translate into more effective clinical judgement or		finding is only from
decision-making in the long-term. Midwives could be		three studies in
trained, for example, in the diagnosis of obstetric		Angola, the Dominican
emergencies, but equipping them to handle these		Republic and
emergencies was a much more complicated task.		Indonesia.
18. The nature of midwifery training may affect the ability of	Low	In general, the studies
midwives to take on more complex tasks. Midwives trained	confidence	were moderately well
in the 'direct route' to midwifery, bypassing conventional		done. However, the finding is only from
nurse training, were found in one study to be significantly		one study in the
less confident in handling sick pregnant women.		United Kingdom.
19. Midwives' previous clinical experience may affect their	Low	The studies were
ability to take on more complex tasks. Midwives with more	confidence	moderately well done.
experience were more confident in managing the care of		However, the finding is
sick pregnant women.		only from two studies
		in the United Kingdom.
Factors that affect teamwork and task shifting: navigating the	e inter-profess	sional terrain
20. The distinction between the roles and responsibilities of	Moderate	In general, the studies
midwives and other health professionals is often unclear,	confidence	were moderately well
either because doctors or nurses have asked them to take		done. The finding was
on new tasks on an ad hoc basis, because of critical service		seen across several studies and settings.
gaps and emergency situations, or because the division of		studies and settings.
labour in 'shared care' models is intentionally fluid.		
21. Lack of clarity around job descriptions, forms of	Moderate	In general, the studies
performance assessment, and the policy and legal contexts	confidence	were moderately well
for midwifery work were a significant concern to midwives		done. The finding was
involved in task shifting. Midwives were confused and		seen across several
frustrated by poorly worded and communicated policies,		studies and settings.
lack of specificity in nursing policies with respect to		
midwives, pressure from doctors to either do more or less		
than the law allows, and ambiguous criteria that allow		
midwives to perform certain procedures if they 'feel capable'		
to do them.		
22. Unmanaged differences in social status and power between	Moderate	In general, the studies
doctors, nurses, midwives, TBAs and others could lead to	confidence	were moderately well
poor working relationships, weak communication and 'turf		done. The finding was
battles' between various medical and lay staff.		
·	Moderate	ŭ
1	Commutation	
1		seen across several
midwives and doctors.		studies and settings.
22. Unmanaged differences in social status and power between doctors, nurses, midwives, TBAs and others could lead to poor working relationships, weak communication and 'turf		were moderately well done. The finding was seen across several studies and settings. In general, the studies were moderately well done. The finding was seen across several

Summary statement	Confidence in the evidence*	Explanation of confidence in the evidence assessment
24. Medical staff expressed anxiety around liability and accountability when tasks were "shifted down" but overall responsibility for care remained at a higher level. This was true for task shifting from doctors or nurses to midwives as well as from midwives to nurses, doulas or TBAs.	Moderate confidence	In general, the studies were moderately well done. The finding was seen across several studies and settings.
25. Effective communication and coordination were often reported to be difficult in team-based obstetric care models, even in contexts with smooth inter-professional relationships. The reasons for this did not appear to be specific to midwifery but related to more generic health systems challenges. Challenges in communication and coordination were also found in team midwifery programmes where midwives had to work together. In this case, the reasons cited involved the threat team midwifery approaches posed to the individualist model of holistic midwifery care between one midwife and one woman.	Moderate confidence	In general, the studies were moderately well done. The finding was seen across several studies and settings.
26. Midwife roles have changed dramatically in some countries in the last 20 years. These changes have often been uncoordinated and poorly communicated, have strained midwives emotionally and physically, and have tended to increase pressure on midwifery's model of relationship-based, woman-centred care by bringing the work of midwives increasingly into team-based, bureaucratic and technocratic environments.	Low confidence	In general, the studies were moderately well done. However, the finding is only from three studies in Guatemala, Sweden and the United Kingdom.
27. Communicating and coordinating in obstetric services that straddled the line between normality and abnormality also proved challenging for teams, especially when the mother was neither acutely sick nor completely well. For example, in one study, women considered too sick for the regular maternity ward were often not considered sick enough for high-dependency or intensive care and sometimes found themselves shunted back and forth between services.	Low confidence	The studies were moderately well done. However, the finding was only from two studies in the United Kingdom.

# ANNEX 35. HOME-BASED ADMINISTRATION OF SAYANA® PRESS: REVIEW AND ASSESSMENT OF NEEDS IN LOW-RESOURCE SETTINGS (KEITH 2014)

Keith B, Wood S, Tifft S, Hutchings J. Home-based administration of Sayana® Press: review and assessment of needs in low-resource settings. Contraception. 2014;89(5):344-51.

#### **ABSTRACT**

A new presentation of the subcutaneous (SC) injectable contraceptive depot medroxyprogesterone acetate (DMPA) increases the possibilities for home and self-administration of this popular contraceptive method. Sayana Press is DMPA-SC in the prefilled Uniject injection system and consists of one dose that provides three months of contraceptive protection. Studies indicate that lay caregiver and self-injection of various medications, including other injectable presentations of DMPA-SC, are acceptable and effective. Introduction of Sayana Press in developing countries could extend injectable contraceptive delivery safely and effectively beyond the clinic and, eventually, into the home, allowing lay caregiver or self-administration. Research needs for low-resource settings include assessing the acceptability and feasibility of self-injection with Sayana Press. Feasibility studies necessary for implementing a sustainable home-based delivery programme include assessment of training, health systems, policies, infrastructure needs and programmatic considerations to optimize women's ability to manage their self-injection schedule.

#### **ANNEX 36. UNTRAINED PHARMACY WORKER PRACTICES**

Sneeringer RK, Billings DL, Ganatra B, Baird TL. Roles of pharmacists in expanding access to safe and effective medical abortion in developing countries: a review of the literature. J Public Health Poli. 2012;33(2):218-29.

#### **ABSTRACT**

Unsafe abortion continues to be a major contributor to maternal mortality and morbidity around the world. This article examines the role of pharmacists in expanding women's access to safe medical abortion in Latin America, Africa and Asia. Available research shows that although pharmacists and pharmacy workers often sell abortion medications to women, accurate information about how to use the medications safely and effectively is rarely offered. No publication covered effective interventions by pharmacists to expand access to medical abortion, but lessons can be learned from successful interventions with other reproductive health services. To better serve women, increasing awareness and improving training for pharmacists and pharmacy workers about unsafe abortion – and medications that can safely induce abortion – are needed.

#### **SUMMARY OF FINDINGS:**

Adapted from Sneeringer et al. and updated to June 2014 (Ganatra 2014).

	Thoma	Restrictive setting <sup>a</sup>	Liberal setting b
	Theme	Country	State/country
1.	Pharmacists/pharmacy workers do not have correct information about how to use the medications (mode of administration, dosage, side-effects, gestational limits)	Mexico <sup>1-3</sup> Dominican Republic <sup>5</sup> Argentina <sup>6</sup> Nigeria <sup>8</sup> Kenya <sup>9</sup> Zambia <sup>14</sup> Bangladesh <sup>m,15</sup>	Bihar and Jharkhand, India <sup>c, 4</sup> Tamil Nadu, India <sup>7</sup>
2.	Pharmacists/pharmacy workers are uncomfortable in helping customers with information or procurement of misoprostol/ abortifacients	Mexico <sup>10</sup> Nigeria <sup>8</sup> Kenya <sup>9</sup>	_
3.	Pharmacists/pharmacy workers offer to sell misoprostol/mifepristone to customer	Zambia <sup>14</sup> Bangladesh <sup>15</sup> Mexico <sup>1</sup>	_
4.	Pharmacists/pharmacy workers often do not request a prescription to sell the medication	Mexico <sup>1-3</sup> Dominican Republic <sup>5</sup> Argentina <sup>6</sup> Nigeria <sup>8</sup> Kenya <sup>9</sup> Zambia <sup>k, 14</sup>	Bihar and Jharkhand, India <sup>d, 4</sup>
5.	Pharmacists/pharmacy workers suggest and sell ineffective medicines as abortifacients	Mexico <sup>2,3</sup> Kenya <sup>9</sup> Bangladesh <sup>i, 15</sup>	Bihar and Jharkhand, India <sup>4</sup> Nepal <sup>d, 11</sup>

	Theme	Restrictive setting <sup>a</sup>	Liberal setting b
6.	Pharmacists/pharmacy workers unwilling to stock misoprostol and/or mifepristone in pharmacies	Mexico <sup>e, 1-3</sup> Kenya <sup>f,9</sup>	Nepal <sup>11</sup> Tamil Nadu, India <sup>7</sup> Bihar and Jharkhand, India <sup>4</sup>
7.	Medical abortion medications are restricted to authorized sites	Brazil <sup>9, 12</sup>	Viet Nam h, 13, 16
8.	Pharmacists/pharmacy workers referred customer to health-care facility or pharmacy for drugs	Bangladesh <sup>i,15</sup> Zambia <sup>14</sup>	Viet Nam h, 16
9.	Pharmacists/pharmacy workers did not provide advice of where to go in case of complication	Bangladesh <sup>15</sup> Mexico <sup>1</sup> Zambia <sup>14</sup>	

<sup>&</sup>lt;sup>a</sup> Restrictive settings are where countries prohibit abortion entirely or have few exceptions to a broad prohibition, which include saving the life of the woman or pregnancy results from rape.

<sup>&</sup>lt;sup>b</sup> Liberal settings are where countries permit abortion under any circumstance without legal penalties incurred on the woman who aborts or the provider offering abortion services.

<sup>&</sup>lt;sup>c</sup> In India, the Drug Controller approved the manufacture and sale of mifepristone in 2002.

<sup>&</sup>lt;sup>d</sup> In India and Nepal, mifepristone and misoprostol may be sold by prescription in chemist shops.

<sup>&</sup>lt;sup>e</sup> Pharmacists/pharmacy workers were willing to stock medications.

f Pharmacists/pharmacy workers were unwilling to stock medications.

<sup>&</sup>lt;sup>g</sup> In Brazil, only hospitals may purchase misoprostol.

<sup>&</sup>lt;sup>h</sup> Viet Nam limits mifepristone sales to pharmacies authorized by government (usually affiliated with hospitals).

<sup>&</sup>lt;sup>1</sup>Bangladesh, some pharmacy workers offer other medicines.

# ANNEX 37. CERQUAL (CONFIDENCE IN THE EVIDENCE FROM REVIEWS OF QUALITATIVE RESEARCH)

### GRADES OF EVIDENCE<sup>4</sup>

High confidence	It is highly likely that the review finding is a reasonable representation
	of the phenomenon of interest
Moderate	It is likely that the review finding is a reasonable representation of the
confidence	phenomenon of interest
<b>Low confidence</b> It is possible that the review finding is a reasonable representation	
	the phenomenon of interest
Very low	It is not clear whether the review finding is a reasonable
confidence	representation of the phenomenon of interest

Our confidence is an assessment of the extent to which the review finding is a reasonable representation of the phenomenon of interest (i.e. the phenomenon of interest is unlikely to be substantially different from the research finding). By "substantially different", we mean different enough that it might change how the finding influences a decision.

<sup>&</sup>lt;sup>4</sup> From: Munthe-Kaas, et al. Assessing how much confidence to place in findings from qualitative evidence syntheses: a new version of the CERQual tool. Presentation at the Cochrane Colloquium, Hyderabad. 21–25 September 2014.

#### ANNEX 38. SEARCH STRATEGY PERCEPTIONS OF AND EXPERIENCES WITH SELF-ADMINISTRATION OF MEDICAL ABORTION

Colvin C, Wainwright M, Swartz A, Leon N.

#### Task shifting and self-administered abortion

- 1. Ovid MEDLINE In-Process & Other Non-Indexed Citations, Ovid MEDLINE Daily, Ovid MEDLINE and Ovid OLDMEDLINE 1946 to present Searched 16 June 2014
- 1. exp Abortifacient Agents/
- 2. (abortifacient\* OR RU486 OR "RU 486" OR Cytotec OR Carboprost OR Dinoprost\* OR Methotrexate OR Misoprostol OR Trichosanthin OR Mifepristone OR Sulprostone OR Gameprost OR Meteneprost OR Lilopristone OR Onapristone OR Epostane OR Mifegyne).ti,ab.
- 3. or/1-2
- 4. (abortion\* OR (pregnanc\* and terminat\*) OR miscarriage\* OR unintended pregnanc\* OR unwanted pregnanc\* OR abORtifacient OR ((menstruat\* OR menstrual) and regulat\*) OR ((delayed OR suspended) and menstruat\*)).tw. OR (menstruation/ and (delayed OR suspended OR regulat\*).tw.)
- 5. abortion, induced/ or abortion, eugenic/ or abortion, legal/ or abortion, therapeutic/ or pregnancy reduction, multifetal/
- 6. abortion, spontaneous/ or abortion, habitual/ or abortion, incomplete/ or abortion, missed/ or abortion, septic/ or abortion, threatened/ or embryo loss/ or abortion, criminal/
- 7. or/4-6
- 8. self-administration/ or self medication/ or self-assessment/ or self-care/ or consumer participation/ or patient participation/ or patient preference/ or patient satisfaction/
- 9. ((patient\* or home or woman or women or self) adj3 (induc\* or use\* or administ\* or manag\* or treat\*)).ti,ab.
- 10. ((patient\* or women) adj3 (monitor\* or manag\* or adjust\* or test\* or participat\* or telemedicine or internet or online or Web or Web-based)).ti,ab.
- 11. exp Internet/
- 12. or/8-11
- 13. 3 and 7 and 12
- 14. limit 13 to "qualitative (maximizes sensitivity)" [380 hits]
- \*Some additional abortifacient terms derived from: Thoai D Ngo, Min Hae Park, Haleema Shakur, Caroline Free. Comparative effectiveness, safety and acceptability of medical abortion at home and in a clinic: a systematic review. Bulletin of the World Health Organization. 2011;89:360-370. doi:10.2471/BLT.10.08404

Searches were adapted for CINAHL (EBSCO), Popline, WHO Global Health Library, Global Health.

# ANNEX 39. SEARCH STRATEGY BARRIERS AND FACILITATORS TO THE PROVISION OF ABORTION CARE SERVICES BY PHYSICIANS, MID-LEVEL PROVIDERS, PHARMACISTS AND LAY HEALTH WORKERS: A COUNTRY CASE STUDY

Glenton C, Sorhaindo A, Lewin S.

## Ovid MEDLINE In-Process & Other Non-Indexed Citations, Ovid MEDLINE Daily, Ovid MEDLINE and Ovid OLDMEDLINE 1946 to present – Searched 25 May 2014

- 1. (abortion\* or (pregnanc\* and terminat\*) or miscarriage\* or unintended pregnanc\* or unwanted pregnanc\* or abortifacient or ((menstruat\* or menstrual) and regulat\*) or ((delayed or suspended) and menstruat\*)).tw. or (menstruation/ and (delayed or suspended or regulat\*).tw.)
- 2. exp Abortifacient Agents/ or Vacuum Curettage/
- 3. abortion, induced/ or abortion, eugenic/ or abortion, legal/ or abortion, therapeutic/ or pregnancy reduction, multifetal/
- 4. abortion, spontaneous/ or abortion, habitual/ or abortion, incomplete/ or abortion, missed/ or abortion, septic/ or abortion, threatened/ or embryo loss/
- 5. or/1-4
- 6. midwifery/ or nurses / or nurse clinicians/ or nurse midwives/ or nurse practitioners/ or family nurse practitioners/ or nurses, community health/ or nurses, international/ or nurses, male/ or nurses, public health/ or nursing staff/ or nurses aides/ or students, nursing/
- 7. allied health personnel/ or community health workers/ or emergency medical technicians/ or home health aides/ or operating room technicians/ or pharmacists' aides/ or physician assistants/ or caregivers/ or hospital auxiliaries/ or pharmacists/
- 8. Health Services, Indigenous/ or Medicine, Traditional/ or Integrative Medicine/ or Complementary Therapies/ or Herbal Medicine/ or Chiropractic/
- 9. medicine, traditional/ or medicine, african traditional/ or exp medicine, arabic/ or medicine, ayurvedic/ or exp medicine, east asian traditional/ or shamanism/
- 10. exp complementary therapies/ or acupuncture therapy/ or herbal medicine/ or chiropractic/
- 11. (nurse\* or nursing auxiliar\* or nursing assistant\* or midwife\* or midwives).tw.
- 12. (paraprofessional\* or paramedic\* or paramedical or allied health personnel or allied health worker\* or support worker\* or home health aide\* or trained volunteer\* or ((trained or lay or community or village or maternal or rural) adj3 (health volunteer\* or health worker\* or health-care worker\* or health care worker\* or nutrition worker\* or health agent\* or health guide\* or health visitor\* or health advocate\* or health promoter\*)) or treatment supporter\* or TBA\* or shasthyo sebika or agente communitario de saude or visitador\* or women group leader\* or accompagnateur\* or saksham sahaya or anganwadi worker\* or behvarz or brigadistas or lady health worker\* or trained mother\* or community drug distributor\* or (lay adj (volunteer\* or worker\* or visitor\* or attendant\* or aide\* or support\* or person\* or helper\* or caregiver\* or consultant\* or assistant\* or staff))).tw.

- 13. (clinical officer\* or physician assistant\* or medical assistant\* or clinical associate\* or health officer\* or non-physician clinician\* or non-professional clinician\* or surgical technician\* or non-clinician\* or non-specialist doctor\* or medical technician\* or medical licentiate practitioner\* or assistant medical officer\* or non-clinician\* or non-specialist doctor\*).tw.
- 14. ((indigenous or traditional or integrative or complementary or herbal or ayurved\* or homeopath\* or acupunctur\* or herbal\* or folk or chinese or african or korean or mongolian or tibetan or asian or eastern or oriental or ayush or alternative or naturopath\* or siddha or tuina or unani or osteopath\*) adj (medicine or therap\* or healer\* or healing or practitioner\* or provider\*)).tw.
- 15. (pharmacy or pharmacies or pharmacist\* or (dispensary adj (assistant\* or technician\* or intern\*)) or chemist or chemists or ((community or service\*) adj3 pharmaceutical)).tw.
- 16. (task shifting or task-shifting or task sharing or task-sharing or tasksharing).tw.
- 17. or/6-16
- 18. 5 and 17
- 19. (nepal\* or bangladesh\* or south africa\* or ethiopia\* or uruguay\*).ti,ab,cp.
- 20. ethiopia/ or south africa/ or uruguay/ or bangladesh/ or nepal/
- 21. 19 or 20
- 22. 18 and 21

Search strategy was adapted for Global Health, CINAHL (EBSCO), Popline and the WHO Global Health Library – Searched 25 May 2014.

## ANNEX 40. SEARCH STRATEGTY FACTORS AFFECTING THE IMPLEMENTATION OF TASK SHIFTING FOR ABORTION CARE: QUALITATIVE EVIDENCE SYNTHESIS

Lewin S, Glenton C, Munthe-Kaas H, Owolabi O, Pileggi V, Sorhaindo A, Sporstøl Fønhus M.

## 1. Ovid MEDLINE In-Process & Other Non-Indexed Citations, Ovid MEDLINE Daily, Ovid MEDLINE and Ovid OLDMEDLINE 1946 to present – Searched 20 May 2014

- 1. (abortion\* or (pregnanc\* and terminat\*) or miscarriage\* or unintended pregnanc\* or unwanted pregnanc\* or abortifacient or ((menstruat\* or menstrual) and regulat\*) or ((delayed or suspended) and menstruat\*)).tw. or (menstruation/ and (delayed or suspended or regulat\*).tw.)
- 2. exp Abortifacient Agents/ or Vacuum Curettage/
- 3. abortion, induced/ or abortion, eugenic/ or abortion, legal/ or abortion, therapeutic/ or pregnancy reduction, multifetal/
- 4. abortion, spontaneous/ or abortion, habitual/ or abortion, incomplete/ or abortion, missed/ or abortion, septic/ or abortion, threatened/ or embryo loss/
- 5. or/1-4
- 6. midwifery/ or nurses/ or nurse anesthetists/ or nurse clinicians/ or nurse midwives/ or nurse practitioners/ or family nurse practitioners/ or nurses, community health/ or nurses, international/ or nurses, male/ or nurses, public health/ or nursing staff/ or nursing staff, hospital/ or nurses aides/ or students, nursing/
- 7. allied health personnel/ or community health workers/ or emergency medical technicians/ or home health aides/ or operating room technicians/ or pharmacists' aides/ or physician assistants/ or caregivers/ or hospital auxiliaries/ or pharmacists/
- 8. Health Services, Indigenous/ or Medicine, Traditional/ or Integrative Medicine/ or Complementary Therapies/ or Herbal Medicine/ or Chiropractic/
- 9. medicine, traditional/ or medicine, african traditional/ or exp medicine, arabic/ or medicine, ayurvedic/ or exp medicine, east asian traditional/ or shamanism/
- 10. exp complementary therapies/ or acupuncture therapy/ or herbal medicine/ or chiropractic/
- 11. (nurse\* or nursing auxiliar\* or nursing assistant\* or midwife\* or midwives).tw.
- 12. (paraprofessional\* or paramedic\* or paramedical or allied health personnel or allied health worker\* or support worker\* or home health aide\* or trained volunteer\* or ((trained or lay or community or village or maternal or rural) adj3 (health volunteer\* or health worker\* or health-care worker\* or health care worker\* or nutrition worker\* or health agent\* or health guide\* or health visitor\* or health advocate\* or health promoter\*)) or treatment supporter\* or birth attendant\* or TBA\* or shasthyo sebika or agente communitario de saude or visitador\* or women group leader\* or accompagnateur\* or saksham sahaya or anganwadi worker\* or behvarz or brigadistas or lady health worker\* or trained mother\* or community drug distributor\* or (lay adj (volunteer\* or worker\* or visitor\* or attendant\* or aide\* or support\* or person\* or helper\* or caregiver\* or consultant\* or assistant\* or staff))).tw.

- 13. (clinical officer\* or physician assistant\* or medical assistant\* or clinical associate\* or health officer\* or non-physician clinician\* or non-professional clinician\* or surgical technician\* or non-clinician\* or non-specialist doctor\* or medical technician\* or medical licentiate practitioner\* or assistant medical officer\* or non-clinician\* or non-specialist doctor\*).tw.
- 14. ((indigenous or traditional or integrative or complementary or herbal or ayurved\* or homeopath\* or acupunctur\* or herbal\* or folk or chinese or african or korean or mongolian or tibetan or asian or eastern or oriental or ayush or alternative or naturopath\* or siddha or tuina or unani or osteopath\*) adj (medicine or therap\* or healer\* or healing or practitioner\* or provider\*)).tw.
- 15. (pharmacy or pharmacies or pharmacist\* or (dispensary adj (assistant\* or technician\* or intern\*)) or chemist or chemists or ((community or service\*) adj3 pharmaceutical)).tw.
- 16. (task shifting or task-shifting or task sharing or task-sharing or tasksharing).tw.
- 17. or/6-16
- 18. 5 and 17
- 19. limit 18 to "qualitative (maximizes sensitivity)" [1412 hits]
- 20. limit 18 to "qualitative (maximizes specificity)" [110 hits]
- 21. limit 18 to "qualitative (best balance of sensitivity and specificity)" [664 hits]

Search strategy was adapted for CINAHL, Global Health, Popline and the WHO Global Health Library.