HARM REDUCTION OF UNSAFE ABORTION IN LATIN AMERICA

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ABSTRACT

Unsafe abortion is one of the major causes of maternal morbidity and mortality in the developing world. Most unsafe abortions occur where abortion is legally restricted. Like many Latin American countries, Argentina prohibits abortion in most circumstances, and maternal mortality from unsafe abortion is high. While spending three months in Buenos Aires, I met an organization called *Socorristas en Red* (Network of Helpers). This is an organization that provides women seeking illegal abortions with information about safely using misoprostol to induce medical abortions. In my presentation I will discuss how *Socorristas en Red* has decreased the harm of unsafe abortion in Argentina by providing women seeking illegal abortions with information on misoprostol as a safer alternative.

TABLE OF CONTENTS

List of Figures……..4

Acknowledgements……..5

Dedication……....6

Introduction……..7

Family Planning in Argentina……13

Unsafe Abortion and Harm Reduction……..16

The *Socorristas en Red* Harm Reduction Model……...22

Harm Reduction in the Information Age……...28

Conclusion……...3

Reflection…….....3

Bibliography…….…….36

LIST OF FIGURES

Page

1. Unsafe Abortion Rates Globally……..8

2. Results of the Uruguay Model……...21

3. Flier produced by the *Socorristas en Red*……..…26

4. Sticker produced by the *Socorristas en Red*……..…31

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DEDICATION

To the *Socorristas en Red*

And to all who fight for our right to choose.

Introduction

Every 11 minutes, a woman dies from an unsafe abortion.[1] The WHO defines an unsafe abortion as "a procedure for terminating an unintended pregnancy either by individuals without the necessary skills or in an environment that does not conform to

minimum medical standards, or both."[2] In 2000, the United Nations established the Millennium Development Goals, specifying eight objectives to accomplish by 2015. Among these objectives, the UN lists a 75% reduction in maternal mortality between 1990 and 2015.[3] The WHO describes unsafe abortion as one of the leading causes of maternal morbidity and mortality. It also states that unsafe abortion is a preventable cause of maternal death. Yet the majority of countries in the developing world continue to have high rates of unsafe abortion.

In its 2014 factsheet on maternal mortality, the World Health Organization says that the main causes of maternal deaths globally are haemorrhage, sepsis due to childbirth, preeclampsia, complications from delivery, and unsafe abortion.[4] Indeed, the most recent study performed by the WHO estimates that 21.6 million unsafe abortions were performed in 2008 alone. 21.2 million of these occurred in developing countries. This study estimated that 47,000 women die from complications of unsafe abortion each year, accoutning for 13% of all maternal deaths. [5] 5 million women suffer from long term complications from unsafe abortions. Complications can include death from hemorrhage, infection, sepsis, or necrotic bowel.[6] Infertility, recto-vaginal fistulas, and bowel resections cause significant morbidity. Loss of productivity and psychological damage can also result from unsafe abortions.[7]

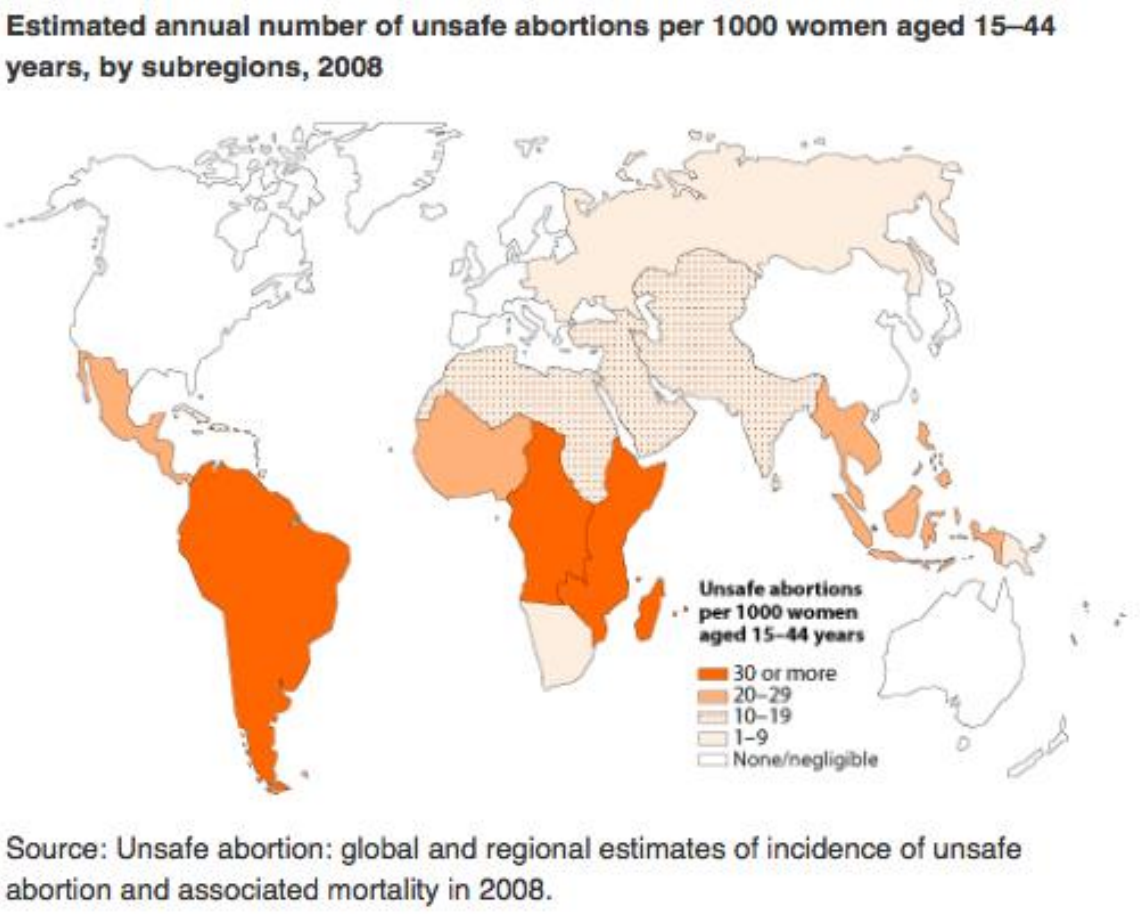

Figure 1. Unsafe Abortion Rates Globally[8]

A major reason that women choose to have abortions is unintended pregnancy.[9] It is estimated that in 2008, 41% of all pregnancies worldwide were unintended. Nearly half of these pregnancies ended in abortion. [10] Lack of access to sex education and to contraception is a known cause of unintended pregnancy.[11,12] It seems plausible that increasing access to these two entities can alleviate unintended pregnancies and decrease abortion rates.

The increased availability of family planning and sex education has, indeed, been shown to decrease induced abortion rates.[13] However, no contraceptive method can provide 100% prevention of pregnancy.[14] Because of this, women will inevitably become pregnant without intention, and may therefore opt to have abortions. Fortunately,

abortions performed in a controlled environment by a well-trained medical professional are extremely safe.[15] However, in regions where abortion is either illegal or unavailable, accessing safe abortion care becomes significantly more difficult.

Evidence shows that unsafe abortion occurs disproportionately in the developing world. In fact, the WHO reports that 98% of all unsafe abortions occur in lesser-developed countries.[16] One proposed reason for this is that lesser-developed countries often have more restrictive abortion laws.[17,18] In countries where abortion is restricted or forbidden by law, women who want an abortion may not have access to this service in a safe, medically-controlled environment.

Another reason for the disproportionate number of unsafe abortions in the developing world is lack of resources. As a result of insufficient funds, inability to access a clinic, or inadequate knowledge of the law, women experience unsafe abortions. India, for example, has liberal abortion laws yet high rates of unsafe abortion. Many women in rural or marginalized communities do not have the resources to access safe abortion care and may therefor attempt to terminate their pregnancies through other means.[19] This is done either by attempts to self-induce an abortion, or by seeking the help of an unqualified individual.

Methods of unsafe abortion include ingesting quinine, laundry detergent, bleach, or tea made of livestock feces; placing potassium permanganate tablets in the vagina or into the cervical os; insertion of sticks, roots, rubber catheters, knitting needles, coat hangers and animal bones into the uterus; abdominal massage, pummeling, and lifting of heavy weights. Unsafe abortion methods also include clandestine surgical procedures

such as a dilation and curettage performed by an unqualified individual in an unhygienic environment.[20,21]

The consequences of unsafe abortions reverberate beyond the destroyed life or health of the individual woman. It is estimated that 220,000 children are left motherless each year because of unsafe abortion.[22] In addition, the financial burden placed upon health systems by easily preventable infections and injuries adds unnecessary strain to a developing country's already precarious heath infrastructure. It is estimated that unsafe abortions cost $342 million in 2009.[23]

In the developing world, particularly in Latin America, women have begun to use misoprostol tablets to induce a medical abortion rather than seeking clandestine surgical methods. Misoprostol may be dangerous if it is not dosed and administered correctly. However, when provided with accurate information about the use of misoprostol, women may obtain illegal medical abortions at lower risk to their life and health. In fact, one study in Brazil found a significant decrease in complications amongst women who used misoprostol rather than clandestine surgical methods.[24] Though illicit misoprostol use is not an ideal method of pregnancy termination, medical abortion using misoprostol has fewer dangerous side effects and has long provided a safer alternative to women in regions with restrictive abortion laws. [25]

Misoprostol, a synthetic prostaglandin E1 analogue, is prescribed in non-obstetric settings for the prevention of NSAID-induced gastric ulcers. In obstetrics, it is used off-label for cervical ripening, induction of labor, and for the treatment of uterine atony. [26] In the United States, misoprostol is used along with mifepristone for inducing first-trimester medical abortions. This method has a 95-99% efficacy up to 9 weeks. [27]

Mifepristone is not available in several regions around the world. It is registered in only 5 countries in Africa and 2 Latin American Countries, Mexico and Guyana. [28] Misoprostol, however, is widely available and relatively inexpensive in many countries of the developing world.[29] Also, the comparatively lax regulations of pharmaceuticals in many developing countries make the drug available to women without a prescription.[30] Misoprostol alone can be used to induce a medical abortion, though it has slightly lower success rates (84-85%).[31] Though it is not the "gold standard," properly dosed misoprostol-only medical abortions are considered a safe and effective means of pregnancy termination up to 9 weeks.[32]

During my 3-month stay in Argentina, I became aware of the trend of women using misoprostol through an organization called *Socorristas en Red* (Network of Rescuers). Abortion is illegal in most circumstances in Argentina, and many women who find themselves with unintended pregnancies attempt to terminate their pregnancies illegally.[33] *Socorristas en Red* is an organization of lay volunteers who provide women seeking illegal abortions with information about accessing misoprostol. They do not provide the misoprostol to women seeking abortions, as this would be illegal. However, they provide information about the dosage and administration of misoprostol, as well as harmful side effects. They give women information about accessing emergency and post-abortion care. Due to the vast number of women seeking illegal abortions, members of this group of activists devote an enormous amount of time to the organization. I was fortunate to become privy to their work in helping women seeking illegal abortions.

My experience with *Socorristas en Red* moved me deeply. Their work clearly does not provide an ideal method of care for the women they attempt to serve. However,

the activists see their work as worthwhile because they give women another option besides seeking a dangerous clandestine abortion. They see their work as an effective means of harm reduction. Because of the high numbers of unsafe abortion in Argentina and throughout Latin America, I feel that this belief deserves investigation.

In this paper, I will discuss the possible harm reducing effect of organizations like *Socorristas en Red*. Focusing mainly on Argentina, I will investigate the effects of misoprostol information provision on maternal morbidity and mortality. First, to give context to my investigation, I will briefly discuss the history of contraception and abortion in Argentina. I will discuss the current laws surrounding abortion in Argentina.

Second, I will describe the concept of harm reduction in the context of unsafe abortion. This will include a description of the physical, psychosocial, and legal risks that women with unintended pregnancies face when seeking clandestine abortion procedures. Using a Uruguay-based initiative called "The Uruguay Model" as an example, I will shed light on the positive outcomes possible with a properly executed harm reduction initiative using misoprostol information. Third, I will give an in-depth description of the methods used by *Socorristas en Red* to decrease the danger posed to women who seek to illegally terminate a pregnancy.

Last, I will describe the means by which organizations such as *Socorristas en Red* are changing through the Internet as they use telemedicine to reach women throughout the world. Included in the discussion are other Argentina-based initiatives such as *Aborto con Pastillas* (Abortion with Pills) as well as global initiatives like *Women on Web*. I will discuss how current technology allows an amplification of the current harm reduction, and how it may benefit women in other regions of Latin America and beyond.

Unsafe abortion is a preventable contributor to loss of life and destruction of health in developing countries. Because it affects only women, it is considered by human rights organizations to be a form of gender-based violence.[34] The discussion surrounding abortion inevitably involves sexuality, reproduction, and gender roles, all of which are deeply influenced by religion, politics, and other sociological forces. Though germane to the conversation, these topics are beyond the scope of this paper.

However, for the reasons mentioned above, it is imperative that unsafe abortion be discussed in a global health and public health context. According to the WHO, "It is likely that the numbers of unsafe abortions will continue to increase unless women's access to safe abortion and contraception – and support to empower women (including their freedom to decide whether and when to have a child) – are put in place and further strengthened."[35] We as health care providers must investigate ways to reduce the harm caused by unsafe abortions.

Family Planning in Argentina

Argentina has a unique and complex political history compared to its neighboring countries. Its history of contraception and abortion regulations is equally unique. In 1974, the Argentine government under the dictator Juan Perón banned the sale of contraceptives as well as the provision of information or services relating to voluntary birth control. This ban continued throughout the seven-year military dictatorship from 1976-1983.[36] In 1983, the military junta relinquished power. Yet the birth control ban remained in place until

1985, when Argentina ratified the CEDAW (Convention on the Elimination of All forms of Discrimination against Women). [37]

Even after the ban was lifted, contraception continued to be inaccessible to Argentine women. The 1980's and 1990's brought advances in women's status in the country. For example, in 1994 a constitutional amendment gave women the right to equal opportunity in political participation guaranteed by positive measures. [38] Though this brought some advancement in women's rights, it did not translate into improvement of reproductive rights.

One reason for Argentina's lack of progress in women's reproductive rights may be attributed to the country's stringent natalist philosophy. This viewpoint, which holds increased population as a means of gaining and maintaining political power, historically sets Argentina apart from the rest of South America. In 1995, politicians used the phrase "to rule is to populate," to justify limitations on family planning.[39] Presumably, the meaning of this type of statement is that Argentina's robust population growth will allow the country to defend itself against outside forces, and to grow as a political and economic stronghold in South America. This mindset, along with strong governmental ties to the Catholic Church, stifled governmental support of any increase in family planning services. In 1996, Argentina was the only country in South America that did not provide public support of any kind for access to contraception.[40]

In 2002 the congress passed the National Law on Sexual Health and Responsible Procreation. The main goals of this law were to guarantee all Argentine citizens access to sexual health information, as well as access to contraceptive methods and related health services.[41] Despite opposition from the Catholic Church and conservative legislators, the

law was put into effect. In 2003, the Argentine government placed reproductive and sexual health on its political agenda for the first time in the country's history. [42]

In contrast to contraception, abortion remains a crime under most circumstances. Throughout Argentina's history, the law has experienced multiple changes from complete prohibition of abortion to allowance of abortion under strict circumstances. Today the law permits abortion in the case of rape of an intellectually disabled woman, or if the life or health of any woman is threatened by the pregnancy. Minors 14 years and younger can receive an abortion for the above listed reasons, but must be accompanied by at least one parent. If a parent cannot be present, a guardian or caretaker will suffice. [43]

Despite the government's recent focus upon contraception and sex education, multiple barriers to contraception still exist, and women in Argentina continue to suffer from high rates of unintended pregnancies. [44] Consequently, a large number of women seek illegal abortions and unsafe abortion continues to cause maternal mortality. A Human Rights Watch investigation in 2004 estimated that 500,000 illegal abortions occur in Argentina annually, constituting 40 percent of all pregnancies. This same study found that unsafe abortion causes nearly 30 percent of maternal deaths. [45]

Women seeking clandestine abortions in Argentina risk their freedom as well as their health. Under Argentine law, simply making the decision to undergo an abortion is a crime. Those accused may be imprisoned for one to four years. In 2002 and 2003, nine women were convicted and sentenced for having consented to have an abortion or for having an abortion. Four of these women were younger than twenty-one years old. [46]

Empowering women, increasing the availability and affordability of birth control, and providing accurate sex education would help lower the number of unintended

pregnancies, and therefore lower the number of abortions. Yet an immediate solution must also be considered. Finding a means of harm reduction of clandestine abortions is a more immediate approach that could lower the number of deaths and injuries suffered by Argentine women seeking clandestine abortions.

Unsafe Abortion and Harm Reduction

Unsafe abortion causes harm to women for multiple reasons. First, women face the physical danger of undergoing a potentially dangerous procedure or ingesting potentially toxic substances. Though safe when performed by a skilled provider in a controlled setting, surgical abortion performed by an untrained provider in an unhygienic setting can lead to hemorrhage and infection. These methods can result in hemorrhage from placental perforation, uterine perforation, infection, and incomplete abortion. [47] Poisoning by drinking harmful substances, or incomplete abortion from taking inadequate amounts of misoprostol, can also lead to severe complications both for the woman and for her future child. Misoprostol, when not taken correctly, may cause severe birth defects. [48]

In addition to experiencing physical suffering, women who undergo clandestine abortions can suffer psychiatric complications such as anxiety, depression, and lowered self-esteem.[49] A lack of appropriate psychosocial support, which arises from the stigmatization of abortion, is a possible cause of this. Strict condemnation from religion, conservative perceptions of women's roles as mothers, and intolerance of female autonomy may contribute to the stigmatization of abortion.

Indeed, women who choose to terminate their pregnancies can face harsh discrimination and inhumane treatment at the hands of healthcare workers.[50] Reports include the following: being made to wait for long periods while bleeding before seeing a health care provider; being refused pain medication and anesthesia for surgical procedures such as dilation and curettage; and being insulted or accused of murder by health care providers.[51] Women seeking clandestine abortions are generally young, poor, and uneducated, which adds to their defenselessness.[52]

Inhumane treatment at the hands of healthcare workers results in unnecessary damage, both physically and psychological. Yet the repercussions of this treatment extend beyond the immediate injury and mistreatment of women. Women who have complications after seeking a clandestine abortion may be reluctant to seek care out of fear of legal repercussions or maltreatment. Thus, women may suffer and die in their homes from easily treated complications. [53] Furthermore, women who are afraid to seek post-abortion care will not be counseled about proper use of birth control to avoid future unintended pregnancies. This can cause women to have a higher risk of repeat unplanned pregnancies, and thus a higher risk of seeking a clandestine abortion.[54]

Because unsafe abortion results in the loss of life and health of thousands of women in Argentina, an effective harm reduction initiative must be taken into account. Harm reduction, by definition, is "an evidence-based public health and human rights framework that prioritizes strategies to reduce harm and preserve health in situations where policies and practices prohibit, stigmatize and drive common human activities underground."[55] Harm reduction was first introduced in the context of IV drug use, where

needle cleaning, needle exchange, and safe injection centers were used successfully to decrease the transmission of HIV and other blood-borne pathogens.[56]

Three principles guide harm reduction initiatives: neutrality, humanism, and pragmatism. Harm reduction initiatives do not focus on the legality or morality of a behavior. Rather, they remain neutral in order to focus on reducing damage to health caused by an activity. With the principle of humanism, harm reduction acknowledges that all people, regardless of their moral or legal standing, have the right to health. Pragmatism acknowledges that people will choose to engage in a harmful activity regardless of stigma or illegality. Evidence-based assessment on harm reducing strategies, not moral precepts, guides the harm reduction initiative.[57]

Using the principles of harm reduction, groups of activists and health workers may work to increase the availability of information about misoprostol. Though limited information is currently available, preliminary studies show that misoprostol use may increase the safety of clandestine abortions. A study published by the International Federation of Gynecology and Obstetrics estimated that in conditions of high mortality rates a 20% use misoprostol would result in a 15% reduction in mortality. If 60% of abortions were performed with misoprostol, there would be a 49% reduction in maternal mortality.[58] This study demonstrates hypothetical mortality decrease by comparing maternal mortality of unsafe abortion at baseline to maternal mortality of medical abortion using misoprostol. Moreover, data gathered from smaller studies performed where harm reduction initiative were implemented points towards meaningful harm reduction, showing that further investigations would strengthen the hypothesis of this study.

Perhaps one of the most striking examples of harm reduction of unsafe abortion through misoprostol information has occurred in Uruguay in what is known as "The Uruguay Model." In 2006, a Uruguayan non-profit organization called *Iniciativas Sanitarias* (Health Initiatives) instigated a harm and risk reduction campaign. The purpose of this campaign was to decrease the negative health outcomes experienced by women seeking illegal abortions in their country. [59]

Until recently, abortion was illegal in Uruguay under most circumstances. Unsafe abortion was a major cause of maternal morbidity and mortality.[60] Seeing this problem, *Iniciativas Sanitarias* initiated a model in which women were given information about obtaining misoprostol but were not actually given the medication itself. Reproductive health care centers were established in various communities with the help of the Uruguay Ministry of Public Health. Teams of health professionals were trained in pre and post abortion counseling, and were educated on the need to care for women with unintended pregnancies.[61] The health teams were given tools to spread information in their communities about sexual and reproductive health services offered by the harm reduction initiative. Websites, radio, and other forms of media were also used to disseminate information. [62]

Women with unintended pregnancies were given pre abortion counseling that included confirmation of pregnancy and gestational age by ultrasound, evaluation of possible pathologies, and explanation of possible options (carrying to term, adoption, pregnancy termination). If women wished to terminate, they were given information about proper doses and appropriate methods of misoprostol administration. They are also given information about safe procedures in countries where abortion is legal, and unsafe

methods that they should avoid. Those who chose to terminate their pregnancies were provided with post abortion counseling that included psychological support, vacuum aspiration for incomplete abortions, and contraceptive counseling. [63]

This harm reduction model was implemented in eight health centers throughout Uruguay, covering 62% of the population. Maternal mortality indicators as well as severe morbidity indicators were measured for the entire country. All deaths of women of reproductive ages were screened in order to find the cause of death. ICU admissions screening, hysterectomy screening, and D&C's screenings were also performed to identify cases of abortion-related morbidity. Pre and post abortion clinic visits were documented for future analysis. [64]

Immediately after implementation of the harm reduction initiative, there was a significant decrease in the number of deaths due to unsafe abortion. By 2010, there were no recorded deaths from unsafe abortion in the participating hospitals. [65] Due to the success of the model, the Uruguay government ruled that all reproductive health clinics be required by law to provide pre and post abortion counseling to any women with an unintended pregnancy. [66]

Figure 4. Evolution of maternal mortality associated with unsafe abortion in Uruguay and at the Pereira Rossell Hospital Center in the 2001-2010 period.

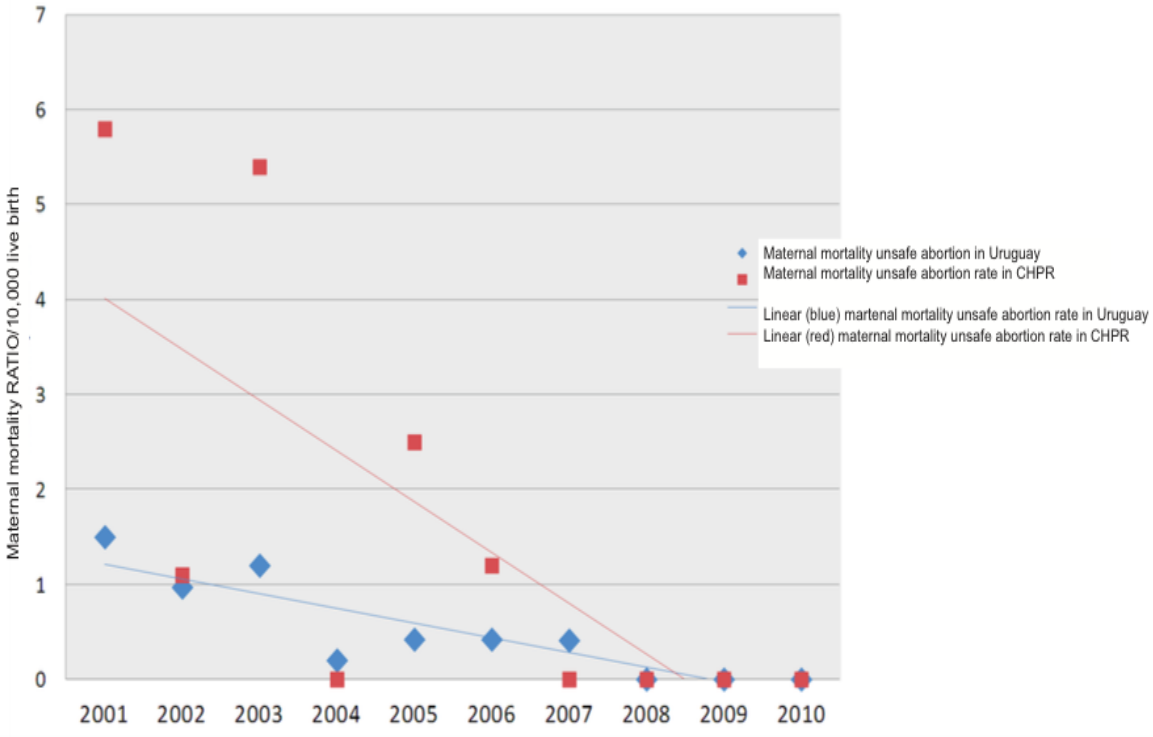

Figure 2. Results of the Uruguay Model[67]

The success of this model indicates that similar harm-reduction initiatives may be implemented in other countries in order to significantly decrease the morbidity and mortality that results from unsafe abortion. Initiatives in Argentina such as *Socorristas en Red* may work similarly to provide a viable alternative to women with unintended pregnancies who risk their lives and health to obtain a clandestine abortion.

The Socorristas en Red Harm Reduction Model

In their own words, *Socorristas en Red* is "a feminist network of Argentinian groups that inform and accompany women who choose abortion, and to do so with misoprostol. The network took its current name in February 2013, during its third meeting session in the city of Córdoba."[68] The organization has members in over 16 cities and regions in Argentina. Members of the organization provide women who seek to terminate their pregnancies with information of the safe use of misoprostol, as well as emotional support during and after the abortion. They maintain a hotline that women can call to have questions and concerns answered. Through this, women are informed about possible dangerous side effects and advised to seek emergency care when appropriate. The *Socorristas* work to maintain a network of physicians and clinics who are in agreement with their initiative, and who will offer emergency care and post abortion care to women who used misoprostol to abort. [69]

During one of my personal encounters with leaders of the *Socorristas en Red*, I learned the process by which lay volunteers become pre and post abortion counselors. Volunteers become members, or "*Socorristas*," by attending workshops, where they are trained in pre and post abortion counseling and the safe use of misoprostol They are trained using evidence-based protocol available through websites by organizations such as the WHO, the International Consortium for Medical Abortion, and FLASOG (Latin American Federation of OB/GYN Societies).[70] The volunteers learn the signs and symptoms of possible dangerous reactions to the misoprostol, as well as signs of

incomplete abortion. They are informed of the appropriate referral locations where women can to seek emergency and post abortion care. [71]

Socorristas en Red publicizes through fliers, pamphlets, stickers, and radio broadcasts. They maintain a website that, along with information about their organization, provides information on the safe use of misoprostol. This website also provides links to webpages of similar Latin American and international organizations such as *Aborto Con Pastillas,* CLACAI *(Consorcio Latinoamericano Contra el Aborto Inseguro)*, and *Women on Web* where women and their allies can seek support. [72]

During my interview with two leaders of *Socorristas en Red*, I learned of the process experienced by women seeking information about misoprostol. When a woman contacts the organization asking for information about medical abortion, the *Socorristas* offer to meet in a public place for a face-to-face consultation. In addition, they provide information via phone if the woman does not wish to meet in person. Currently, *Socorristas en Red* is gathering data about the women who use their services in each region order to produce a country wide systemization of their services. [73]

In the following paragraphs, I will describe the services provided by *Socorristas en Red*, and argue the harm reducing effects of these services. The website of *Socorristas en Red* contains information available to any person with access to the Internet, and will be my main source in describing the services. However, it is important to note that *Socorristas en Red* operates through person-to-person encounters, as well as through phone encounters. Therefore, their services also reach the population of women who do not have access to a private computer with Internet. This is an important aspect of the *Socorristas en Red* since women who are more at risk of having unsafe abortions

(marginalized, poor, uneducated, and living in rural areas) are less likely to have access to a computer or a device with Internet. [74]

The model embodied by *Socorristas en Red* produces harm reduction in multiple ways. First, it informs women of the option of misoprostol. Rather than seeking an unskilled provider, attempting to perform an abortion at home with an unsterile household object, or ingesting harmful substances, women are able to abort using a relatively safe, easy-to-use medication.

Reports show that women often prefer a medical abortion method because they perceive it as more natural, less painful, and more like a period regulation or birth control. Women also report that they prefer medical abortion over surgical because it is cheaper, and it allows them to terminate their pregnancy in the privacy of their own home.[75] Thus, medical abortions with misoprostol provide a meaningful means of harm reduction by reducing the number of women seeking dangerous surgical methods. It may also reduce psychological harm by preventing possible PTSD, anxiety, and depression caused by undergoing a painful procedure at the hands of a stranger.

Second, *Socorristas en Red* provides a harm reducing effect by encouraging women to seek misoprostol from legitimate providers such as local pharmacists. It discourages women from seeking medications from unscrupulous sellers such as websites and black-market venders. Women often attempt to obtain pills from flea markets, or buy injections that are marketed as mifepristone by unscrupulous venders.[76] These actions may not only fail to end the pregnancy, they could have significant health consequences for the women. *Socorristas en Red,* with the collaboration of other feminist activist groups, provides women with information about generic and brand names for

misoprostol, descriptions of pills and pill packaging, and warnings signs of fake or dangerous drugs.[77] By providing this information, *Socorristas* are preventing women from taking toxic substances or dangerous medications in their attempt to induce an abortion.

Third, the *Socorristas* explain in simple terms the mechanism by which misoprostol causes an abortion. They inform women of the maximum gestational age that misoprostol can be used. Their website gives instructions on calculating gestational age, and it informs women of their right to an ultrasound to confirm gestational age. It explains the adequate dosing and appropriate methods of administration of misoprostol, giving step-by-step instructions on oral, buccal, and vaginal administration. It describes potential side effects, and gives instructions on substances to avoid while taking misoprostol (alcohol, tobacco, marijuana). Women can read about the signs and symptoms of incomplete abortion, as well as warning signs that may necessitate emergency medical attention. They are advised to seek medical treatment if they believe that their abortion was not complete, and they are advised not to use misoprostol if they have any contraindications listed on the website. [78] Information of this kind is powerful in reducing risk and harm of women seeking clandestine abortions. It creates a close simulation of an actual medical encounter, despite the absence of a "flesh-and-blood" doctor or health care professional.

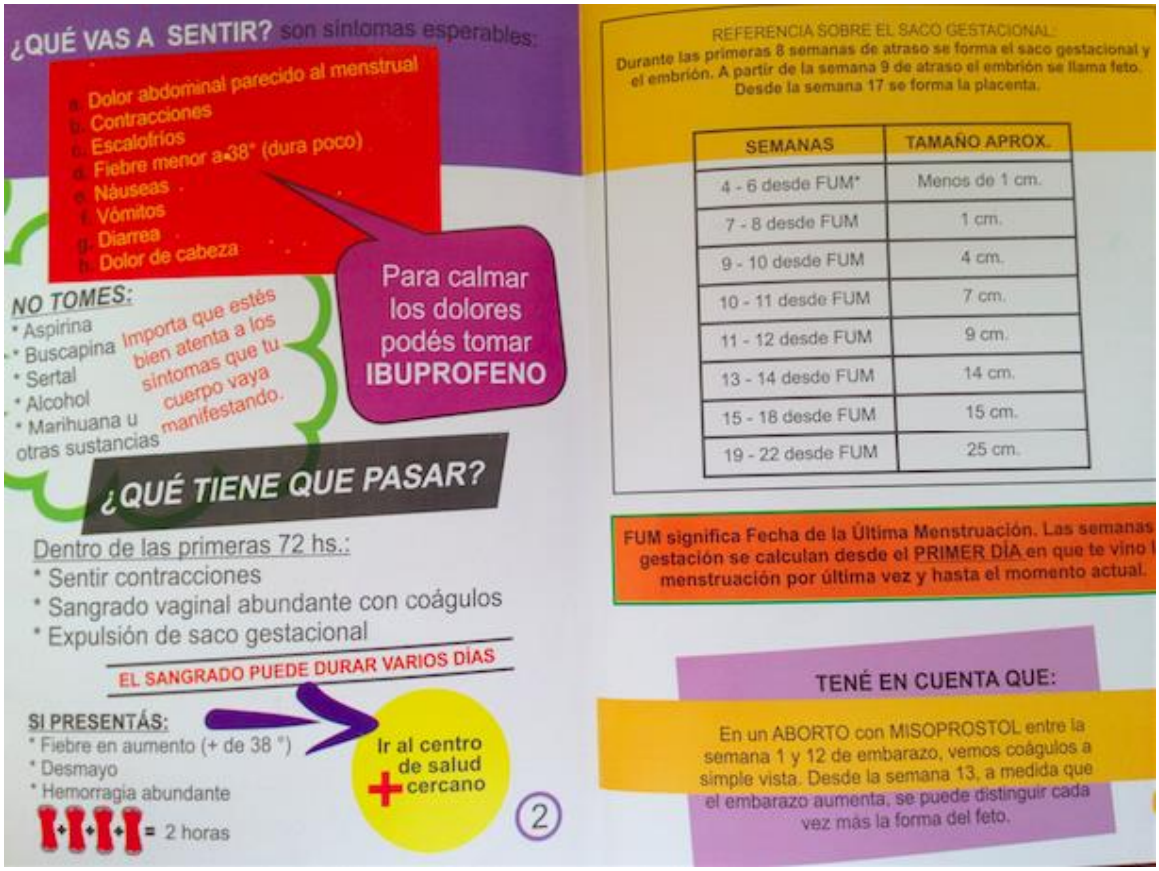

Figure 3. An example of a *Socorristas en Red* flier explaining the side effects of misoprostol, appropriate medication to take for pain during the abortion process, signs and symptoms that require emergency care, gestation sac sizes per week of gestation, and a description of products of conception.

Last, *Socorristas en Red* reduces the harm caused by unsafe abortion by providing women with a network of doctors and clinics where they may safely receive post abortion or emergency care.[79] By providing this sense of security, they encourage women to seek emergency care when needed, decreasing the risk of injury and death from untreated complications. By giving women a safe place to receive post-abortion care, they encourage women to seek appropriate follow-up care, such as ultrasounds and antibiotics, when needed. They also give women the means to make the crucial next step towards avoiding another unintended pregnancy—contraception counseling and management.

Women using this method of pregnancy termination face multiple risks that should not be minimized by harm-reduction initiatives. An inability to calculate

gestational age or intentional underestimation of gestation age may lead a woman to take misoprostol in the second or third trimester, increasing her risk of uterine rupture.[80] Despite attempts to educate women on the appearance of pills and packaging, it is possible that they may experience an unintentional ingestion of toxic substances. As mentioned earlier, incomplete abortion can lead to serious negative outcomes both for the woman and her fetus. Also, women with limited education or medical care may not be aware that they have certain conditions that preclude the safe use of misoprostol.[81]

These risks should not be underestimated or ignored by those wishing to reduce the harm of unsafe abortion. Though it seeks to minimize negative outcomes associated with a certain behavior, harm reduction by its definition does offer a completely safe health care delivery model. However, evidence produced by multiple studies of misoprostol-based harm reduction initiatives indicates a decrease in overall negative outcomes of unsafe abortions, particularly when women are well informed of the abortion process. [82, 83, 84]

In summary, *Socorristas en Red* currently delivers a viable harm reduction initiative through multiple avenues. They provide women seeking a clandestine abortion with an alternative to dangerous and harmful surgical procedures. They disseminate information about safely obtaining and using misoprostol, contraindications to misoprostol use, and gestational limitations. They provide women with counseling and support before, during, and after the abortion process in order to insure their physical safety and their emotional wellbeing. They encourage women to seek post abortion care, thus decreasing possible complications after the abortion was completed. Most importantly, they provide women with a means of receiving birth control and

contraceptive counseling. Thus, they help to prevent future unintended pregnancies and possibly unsafe abortions.

A powerful prospective study to quantify the harm reduction achieved by *Socorristas en Red* has yet to be performed. However, I argue that for the above-stated reasons these methods warrant such a study. It would be useful to determine and describe a causal relationship between *Socorrista en Red's* services and a significant reduction in unsafe abortion-related maternal morbidity/mortality. Through such a study, the global medical community may be better informed on the possible benefits or drawbacks of similar harm reduction initiatives.

Ideally, the same harm reduction initiative could be used to provide women information about contraception, appropriate condom use, and methods such as periodic abstinence to avoid future undesired pregnancies. Though these options may be limited by the constraints of their political, cultural, or financial situations, an effective harm reduction initiative that addresses all aspects of fertility control may provide a feasible, humanitarian alternative to unsafe abortion.

Harm Reduction of Unsafe Abortion in the Information Age

Harm reduction initiatives aimed at decreasing morbidity and mortality of unsafe abortions have existed for over a decade. Since the birth of the Internet and the rise of social networking, these initiatives have enjoyed significant expansion. For example, the International Consortium for Medical Abortion (ICMA), which began in 2002, was established in order to form an international network to disseminate information about the

safe use of medical abortion.[85] This organization has been used by *Socorristas en Red*, as well as other initiatives worldwide, as a reference for information about safe medical abortion care.[86]

Another unique example of a harm reduction initiative turned internet-based information network is the Dutch organization *Women On Waves.* This organization began in 1999 when a Dutch physician decided to sail a ship to deliver misoprostol to the coasts of various countries where abortion was illegal.[87] *Women on Waves* gave rise to a multi-national web-based organization called *Women On Web*. *Women On Web* has, in turn, collaborated with Argentina-based organizations like *Lesbianas y Feministas por la Despenalización del Aborto* (Lesbians and Feminists for the Decriminalization of Abortion) to create a hotline for women seeking clandestine abortions.[88] Both *Women on Web* and *Lesbianas y Feministas por la Despenalización del Abort* were used to inform the mission and methods used by *Socorristas en Red*. [89]

The methods used by *Women on Web*, *Socorristas en Red*, and *Aborto con Pastillas* by definition fall under the umbrella of telemedicine. According to the WHO, telemedicine is:

> The delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities.[90]

The rise of telemedicine in the harm reduction initiatives of women's

reproductive justice activists will logically lead to a decrease in unsafe abortion rates for multiple reasons. Activists can access accurate information from legitimate sources about the use of misoprostol. Under-trained health care providers and lay people alike can access up to date medical knowledge about appropriate dosages, administration, and follow up care for medical abortion. Using websites and social media platforms such as Facebook and Twitter, they can more easily communicate this information to women seeking illegal abortions. Moreover, women in countries where no harm reduction initiative exists may use on-line organizations based in other countries to form their own harm reduction initiatives, as seen with *Socorristas en Red's* use of ICMA and *Women on Web*. Thus, the use of the Internet for communication allows women and their advocates to overcome significant geographical and political barriers that may have been insurmountable in the pre-internet age.[91]

A significant limitation of the internet-based harm reduction initiatives is that they may not reach the populations that have limited opportunity or ability to use computers and other internet-accessing devices. The poor, uneducated, rural, or otherwise marginalized women of a country are often the ones unable to access the Internet, and they are also the ones most affected by unsafe abortion.[92] This is, indeed, a legitimate concern. However, further investigation of the power of harm reduction organizations' outreach to these communities must be performed in order to define methods of overcoming this barrier. Optimistically, activists who form harm reduction groups will actively disperse information garnered from reliable Internet sources to these disadvantaged women. *Socorristas en Red*, as mentioned above, provides a prime example of an organization performing this task. As mentioned earlier, they use non-

computerized methods such as fliers, cellphone conversations, and face-to-face meetings to give women the resources they need to safely end a pregnancy using misoprostol. In addition to information about misoprostol, the websites, fliers, and stickers also provide information on safe sex and emergency contraception. [93]

Figure 4. A sticker produced by the *Socorristas en Red* encouraging the use of condoms to prevent pregnancy, emergency contraception to prevent pregnancy if condoms fail, and misoprostol if an unintended pregnancy occurs. Stickers like these are often placed in public spaces such as bathroom stall doors.

Conclusion

Global health initiatives aimed at decreasing maternal morbidity and mortality cannot be considered complete without addressing the issue of unsafe abortion. Multiple factors lead to unsafe abortion, including lack of sex education and family planning, lack of access to legal abortion services, and stigma surrounding pregnancy termination. Providing women with the information and tools needed control their fertility must be front and center of any undertaking seeking to decrease induced abortions. This includes educating women about culturally suitable contraceptive methods including long acting reversible contraceptives, barrier methods, hormonal methods, and periodic abstinence. It also includes providing a woman with the family planning method of her choice and empowering her to use the method correctly. Unintended pregnancies may occur despite

correct use of family planning, and therefore women will always desire abortion services to some extent. One of the most significant causes of unsafe abortion is the implementation of highly restrictive laws limiting access to abortion services.[94] As health care professionals, we are not equipped to challenge the legal codes of other countries. Yet as advocates for women's health around the globe, we must investigate viable methods of decreasing the maternal morbidity and mortality caused by unsafe abortions.

Reflection

Through the International Medical Education Program, I was given the opportunity to live for 9 months in Paris, France, and 3 months in Buenos Aires, Argentina. During my first 3 months in Paris, I rotated at the Port Royal Maternity Hospital. During this rotation, I acted as a French medical student on the high-risk OB floor. This involved helping the midwives perform non-stress tests, presenting patients at morning rounds, and taking 24-hour call on labor and delivery. This rotation was a challenge, as I was not yet confident in medical French. However, the attendings, medical students, residents, and nurses were quite understanding of my difficulties. This rotation taught me humility, as I was dependent on the kindness and patience of other medical students and residents. I was amazed by the generosity and helpfulness of the French students, doctors, and nurses that I met on my rotation. I hope to show the same level of empathy toward my future coworkers.

During the second three months in Paris, I rotated in the ER at Cochin Hospital. There I was also held to the standards of a French third year medical student. I was expected to interview, examine, and work up patients on my own. I ordered X-Rays and performed EKG's. I presented my findings to an attending, and I was told whether to discharge the patient, consult another service, or admit the patient. I was expected to complete the discharge, the consult, and the admit process on my own. This rotation was a challenge due to language barriers, cultural differences, and educational expectations far above those placed upon me during my training in Texas. However, I feel that my medical knowledge grew along with my confidence in my decision-making skills.

In the spring, I spent another 3 months completing a research rotation at Port Royal Maternity Hospital. I helped an OB/GYN resident gather data for a retrospective cohort study to describe the obstetric and perinatal outcomes of twin pregnancies conceived through various methods (oocyte donation, in vitro fertilization with autologous oocyte, and spontaneous conception). This experience taught me a great deal about pathologies associated with twin pregnancies. It also sparked a significant interest in research design and biostatistics.

For the last 3 months of my year abroad, I lived in the Congreso barrio of Buenos Aires. I rotated with the Department of Dermatology at Hospital Argerich in La Boca, one of the poorest areas of the city. As a public hospital, Argerich sees patients from all socio-economical backgrounds. Many patients have very little access to health care, and some have never seen a health care provider.

After spending time in the Dermatology department, I decided to explore the Department of Obstetrics and Gynecology. The attendings and residents welcomed me with open arms and were excited to have a foreign medical student learning about their system of health care delivery. I spent most of my time observing their outpatient gynecology clinics. I rotated through their family planning clinic, their colposcopy clinic, and their pediatric/adolescent gynecology clinic.

Since I wished to remain sensitive to the views of my hosts at Hospital Argerich, I did not discuss the issue of abortion with other health care professionals. Through a web-based search, however, I was able to contact members of the *Socorristas en Red*. They were excited to discover that an American medical student was interested in learning about their organization. They invited me to their meetings and workshops. I attended a

radio broadcast hosted by a progressive radio station where leaders of the *Socorristas en Red* explained their mission to the public. I also attended a gathering where *Socorristas en Red* from other regions of Argentina met with those of Buenos Aires to share experiences and discuss future initiatives.

The leaders of *Socorristas en Red* were eager to meet with me personally to learn more about my thesis idea. They explained the workings of the organization to me and shared with me their personal experiences as activists. They even gave me books that they had written about their struggles for reproductive justice in Argentina.

During my time in Buenos Aires, I had the opportunity to see two disparate aspects of women's reproductive health in Argentina. I witnessed the experiences of health care workers providing governmentally supported services. I also observed reproductive justice advocates attempting to provide a service that health care professionals are not allowed to provide. This opened my eyes to the concept of harm reduction as a global health initiative in the context of women's reproductive health.

The International Medical Education Program allowed me to experience health care models that differ drastically from my own. It allowed me to contrast the experiences of women living in France, where abortion and contraception are legal and readily available, with those in Argentina. It also introduced me to the idea that lay people can influence health outcomes where the law prevents doctors from providing certain services to their patients. Considering the vast influence of my own government's policies on women's health care in the US, I know that I have much to learn from the *Socorristas en Red* as a future OB/GYN.

Bibliography

1. World Health Organization. (2014). Preventing Unsafe Abortion. *Sexual and Reproductive Health*. Retrieved November 9, 2014, from http://www.who.int/reproductivehealth/topics/unsafe_abortion/magnitude/en/
2. World Health Organization. (2014). Preventing Unsafe Abortion. Sexual and Reproductive Health. Retrieved November 9, 2014, from <http://www.who.int/reproductivehealth/topics/unsafe_abortion/magnitude/en>.
3. United Nations. *We Can End Poverty: Millennium Development Goals and Beyond 2015 Fact Sheet.* Retrieved November 9, 2014, from http://www.un.org/millenniumgoals/pdf/Goal_5_fs.pdf
4. WHO Media Centre. (2014, May). Maternal mortality fact sheet no. 348. Retrieved December 11, 2014, from http://www.who.int/mediacentre/factsheets/fs348/en/
5. Department of Reproductive Health and Research, World Health Organization. (2011). *Unsafe abortion: Global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008. Sixth edition.* Retrieved December 11, 2014, from http://www.who.int/reproductivehealth/publications/unsafe_abortion/9789241501118/en/
6. Grimes, D.A., Benson, J., Singh, S., Romero, M., Ganatra, B., Okonofua, F.E., Shah, I.H. (2006, October). Unsafe abortion: the preventable pandemic. *WHO Department of Reproductive Health and Research.* Retrieved 12 December, 2014, from http://www.who.int/reproductivehealth/publications/general/lancet_4.pdf
7. Lisa B Haddad, Nawal M. Nour. *Unsafe Abortion: Unnecessary Maternal Mortality.* Women's Health in the Developing World. Reviews in Obstetrics and Gynecology Vol. 2 No. 2 2009.
8. Department of Reproductive Health and Research, World Health Organization. (2011). *Unsafe abortion: Global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008. Sixth edition.* Retrieved February 11, 2015, from http://www.who.int/reproductivehealth/publications/unsafe_abortion/9789241501118/en/
9. Guttmacher Institute, WHO. (2012, January). *In Brief: Facts on Induced Abortion Worldwide.* Retrieved 12 December, 2014, from http://www.guttmacher.org/pubs/fb_IAW.pdf
10. Singh, S., Sedgh, G., Hussain, R. (2010). Unintended Pregnancy: Worldwide Levels, Trends, and Outcomes. *Studies in Family Planning. 41*(4), 241-250.
11. Forrest, J.D. Epidemiology of unintended pregnancy and contraceptive use. (1994). *American Journal of Obstetrics and Gynecology. 170*(5). 1485-1489.
12. Department of Reproductive Health and Research et al.
13. Singh, S. et al.
14. Department of Reproductive Health and Research et al.
15. Raymond E.G., Grimes D.A. (2012). The comparative safety of legal induced abortion and childbirth in the United States. *Obstetrics and Gynecology. 119* (2 pt 1). 215-219.

16. Department of Reproductive Health and Research, World Health Organization. (2011). *Unsafe abortion: Global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008. Sixth edition.* Retrieved December 11, 2014, from http://www.who.int/reproductivehealth/publications/unsafe_abortion/9789241501118/en/
17. World Health Organization. *Safe and unsafe induced abortion: Global and regional levels in 2008, and trends during 1995-2008.* Information Sheet. WHO Department of Reproductive Health and Research. 2012. Retrieved December 7, 2014. http://apps.who.int/iris/bitstream/10665/75174/1/WHO_RHR_12.02_eng.pdf
18. Sedgh, G., Singh, S., Shah, I.H., Ahman, E., Henshaw, S.kK., Bankole, A. (2012, February). Induced abortion: incidence and trends worldwide from 1995 to 2008. *The Lancet. 279* (9816), 625-635.
19. Malhotra, A., Nyblade, L., Parasuraman, S., MacQuarrie, K., Kashyap, N. Sunayana, W. (2003). Realizing Reproductive Choice and Rights: Abortion and Contraception in India. *International Center for Research on Women.* Retrieved November 9, 2014, from http://www.icrw.org/docs/RCA_India_Report_0303.pdf.
20. Grimes, D.A., et al. Retrieved 12 December, 2014, from http://www.who.int/reproductivehealth/publications/general/lancet_4.pdf
21. Ankomah A, Aloo-Obunga C, Chu M, Manlagnit A. Unsafe Abortions: Methods used and characteristics of patients attending hospitals in Nairobi, Lima, and Manila. Health Care for Women International January 1, 1997, Vol. 18, Issue 1.
22. Vlassoff, M., Singh, S., Darroch, J.E., Carbone, E., Bernstein, S. (2004, December). Assessing Costs and Benefits of Sexual and Reproductive Health Interventions Occasional Report No. 11. *The Alan Guttmacher Institute.* Retreived December 7, 2014, from http://www.guttmacher.org/pubs/2004/12/20/or11.pdf
23. Vlassoff M. et al.
24. Costa, S.H. (1998). Commercial availability of misoprostol and induced abortion in Brazil. International Journal of Gynecology and Obstetrics. Suppl. 1. 131-139.
25. Zamberlin, N., Romero, M., Ramos, S. (2012). Latin American women's experiences with medical abortion in settings where abortion is legally restricted. *Reproductive Health*. *9* (34). Retrieved November 24, 2014, from http://www.reproductive-health-journal.com/content/9/1/34
26. Cytotec (Misoprostol) Prescribing information (drug label). Retrieved November 24, 2014 from http://www.accessdata.fda.gov/drugsatfda_docs/label/2002/19268slr037.pdf
27. The American College of Obstetrics and Gynecologists Practice Bulletin. "Medical management of abortion." Number 143, March 2014.
28.Winikoff, Beverly; Sheldon, Wendy. Guttmachter Institute. "Use of Medicines Changing the Face of Abortion." International Perspectives on Sexual and Reproductive Health. Volume 38, Number 3, September 2012. http://www.guttmacher.org/pubs/journals/3816412.html
29. Gynuity Health Projects. (2013, June). Map of Misoprostol Approvals. Retrieved December 12, 2014, from Gynuity website: http://gynuity.org/resources/info/map-of-misoprostol-approval-en/

30. Sherris, J. Bingham, A., Burns, M.A., Girvin, S., Westly, E., Gomez, P.I. (2005). Misoprostol use in developing countries: results from a multicountry study. *International Journal of Gynecology and Obstetrics, 88.* 76-81.
31. American College of Obstetricians and Gynecologists, Society of Family Planning. (2014, March). Practice Bulletin: Medical Management of First Trimester Abortions. Retrieved December 12, 2014, from the American Congress of Obstetricians and Gynecologists website: http://www.acog.org/Resources-And-Publications/Practice-Bulletins/Committee-on-Practice-Bulletins-Gynecology/Medical-Management-of-First-Trimester-Abortion
32. WHO. (2014, June). Clinical practice handbook for Safe abortion. Retrieved December 12, 2014, from the World Health Organization Sexual and reproductive health website:
http://apps.who.int/iris/bitstream/10665/97415/1/9789241548717_eng.pdf?ua=1
33. Human Rights Watch. (2005, June). *Decisions Denied: Women's Access to Contraceptives and Abortion in Argentina.* Retrieved 8 November, 2014, from http://www.hrw.org/reports/2005/06/14/decisions-denied
34. Erdman, J. N. (2012, July). Access to information on safe abortion: a harm reduction and human rights approach. *International Journal of Obstetrics and Gynecology, 118* (1). 83-86.
35. Department of Reproductive Health and Research et al. Retrieved December 11, 2014.
36. Cesilini, S. Gherardi, N. (2003). *Los Límites de la Ley: La Salud Reproductiva en la Argentina [The Limits of the Law: Reproductive Health in Argentina].* The World Bank. Retrieved November 24, 2014, from
http://documents.worldbank.org/curated/en/2003/01/7718295/los-limites-de-la-ley-la-salud-reproductiva-en-la-argentina
37. United Nations Treaty Collection. *Convention on the Elimination of All Forms of Discrimination Against Women.* [Data file]. Retrieved November 24, 2014, from https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-8&chapter=4&lang=en.#EndDec
38. Political Database of the Americas. (2008). *1994 Constitution of the Republic of Argentina, section 37.* [Datafile] Retrieved November 24, 2014, from
http://pdba.georgetown.edu/Constitutions/Argentina/argen94_e.html#firstpartch2.
39. Novick, S. (2002). *Democracia y fecundidad: políticas relacionadas con la salud reproductiva y la anticoncepción. Argentina 1983-2001* Retrieved November 24, 2014, from the Universidad de Buenos Aires, Instituto de Investigaciones Gino Germani, Facultad de Ciencias Sociales:
http://www.iigg.fsoc.uba.ar/pobmigra/archivos/democracia.pdf.
40. Population Division Department of Economic and Social Affairs United Nations Secretariat. (2003, April). *Fertility, Contraception, and Population Policies*. Retrieved November 24, 2014, from
http://www.un.org/esa/population/publications/contraception2003/Web-final-text.pdf

41. Ministerio de Salud Presidencia de la Nación. (2003). *Programa Nacional de Salud Sexual y Procreación Responsible.* Retrieved November 24, 2014, from http://www.msal.gov.ar/saludsexual/ley.php
42. Cesilini, S. et al. Retrieved November 24, 2014, from http://documents.worldbank.org/curated/en/2003/01/7718295/los-limites-de-la-ley-la-salud-reproductiva-en-la-argentina
43. Ministerio de Salud Presidencia de la Nación. (2010, June). *Guía técnica para la atención integral de los abortos no punibles .* Retrieved November 8, 2014, from http://www.msal.gov.ar/saludsexual/pdf/Guia-tecnica-web.pdf
44. Human Rights Watch et al. Retrieved 8 November, 2014, from http://www.hrw.org/reports/2005/06/14/decisions-denied
45. Human Rights Watch et al. Retrieved 8 November, 2014, from http://www.hrw.org/reports/2005/06/14/decisions-denied
46. Human Rights Watch et al. Retrieved 8 November, 2014, from http://www.hrw.org/reports/2005/06/14/decisions-denied
47. Warriner, I., Shah, K., Iqbal, H. *Preventing Unsafe Abortion and Its Consequences: Priorities for Research and Action*. Guttmacher Institute. http://www.guttmacher.org/pubs/2006/07/10/PreventingUnsafeAbortion.pdf. (Retrieved on November 24, 2014).
48. Cytotec (Misoprostol) Prescribing information (drug label). Retrieved November 24, 2014 from http://www.accessdata.fda.gov/drugsatfda_docs/label/2002/19268slr037.pdf.
49. Palma, Y. Lince, E. Raya, R. (2003). Priorities for Research and Action in Latin America and the Caribbean. In *Preventing Unsafe Abortion and its Consequences: Priorities for Research and Action* (chap. 9). Retrieved December 14, 2014, from http://www.guttmacher.org/pubs/2006/07/10/PreventingUnsafeAbortion.pdf
50. Singh, S., Wulf, D., Hussain, R., Bankole, A., Sedgh, G. Abortion Worldwide: A Decade of Uneven Progress. Retrieved December 14, 2014, from http://www.guttmacher.org/pubs/Abortion-Worldwide.pdf
51. Steel, S., Chiarotti, S. (2004). With Everything Exposed: Cruelty in Post-Abortion Care in Rosario, Argentina. *Reproductive Health Matters, 12.* 39-46.
52. Grimes, D.A. et al.
53. Singh, S., Prada, E., Kestler, E. (2006, September). Induced Abortion and Unintended Pregnancy in Guatemala. *International Family Planning Perspectives, 32* (3). Retrieved November 24, 2014 from: http://www.guttmacher.org/pubs/journals/3213606.html
54. Faúndes, A. (2012). Strategies for the prevention of unsafe abortion. *International Journal of Gynecology and Obstetrics, 119.* (68-71).
55. Single, Eric. (1995, July). Defining harm reduction. *Drug and Alcohol Review, 14* (3), 287-290.
56. Hyman, A., Blanchard, K., Coeytaux, F., Grossman, D., Teixeira, A., (2013). Misoprostol in women's hands: a harm reduction strategy for unsafe abortion. *Contraception, 87*, 128-130.
57. Erdman, J. et al.

58. Harper, C.C., Blanchard, K. Grossman, D. Henderson, J.T., Darney, P.D. (2007). Reducing maternal mortality due to elective abortion: Potential impact of misoprostol in low resource settings. *International Journal of Gynecology and Obstetrics, 98,* 66-69.
59. Fiol, V., Briozzo L., Labandera, A., Recchi, V., Piñeyro, M. (2012). Improving care of women at risk of unsafe abortion: Implementing a risk-reduction model at the Uruguayan-Brazilian border. *International Journal of Gynecology and Obstetrics, 118*, 21-27.
60. Briozzo, L., Vidiella, G., Rodríguez, F., Gorgoroso, M., Faúndes, A., Pons. J.E. (2006). Averting maternal death and disability: A risk reduction strategy to prevent maternal deaths associated with unsafe abortion*. International Journal of Gynecology and Obstetrics, 95,* 221-226.
61. Fiol, V. et al.
62. *Changing relationships in the healthcare context: the Uruguayan model for reducing the risk and harm of unsafe abortions.* (2012). Pan American Health Organization Regional Office of the World Health Organization.
63. Briozzo, L. et al.
64. Pan American Health Organization.
65. Pan American Health Organization.
66. United Nations Population Fund (2011, April). *Eliminating Maternal Deaths from Unsafe Abortion in Uruguay.* Retrieved February 10, 2015, from http://www.unfpa.org/news/eliminating-maternal-deaths-unsafe-abortion-uruguay
67. Pan American Health Organization.
68. Chaher, S. (2014, April). *Socorristas en Red: Relatos de feministas que abortamos.* Retrieved November 26, 2014 from http://www.comunicarigualdad.com.ar/socorristas-en-red-2/
69. Socorristas en Red. (2014). *Declaración de la 3era. Reunion plenaria national de socorristas en red (feministas que abortamos).* Retrieved November 26, 2014, from http://socorristasenred.blogspot.com/2014/08/declaracion-de-la-3era-reunion-plenaria.html
70. *¿Qué es la línea más información menos riesgos (011) 156-664-7070?* Retrieved December 15, 2014, from http://abortoconpastillas.info/¿quienes-somos/
71. F. Rabiosa, & R, Zurbriggen, personal interview, June 18, 2014.
72. Socorristas en Red. Retrieved November 26, 2014, from http://socorristasenred.blogspot.com
73. Socorristas en Red. Retrieved November 26, 2014, from http://socorristasenred.blogspot.com
74. Ravindran, T. & Nair, M. (2008). Commentary on 'Using telemedicine for termination of pregnancy using mifepristone and misoprostol in settings where there is no access to safe services'. A perspective from reproductive rights advocates. British Journal of Obstetrics and Gynecology. doi: 10.111/j.1471-0528.2008.01787.x.
75. Zamberlin, N. et al.
76. Grimes, D. et al.

77. Lesbianas y Feministas por la Descriminalización del Aborto .(2012). ¿Cómo y dónde consigo misoprostol? In *Todo lo que querés saber sobre cómo hacerse un aborto con pastillas* (chap. 5). Retrieved November 26, 2014, from http://abortoconpastillas.info/wp-content/uploads/2013/03/manual-liviano-2013.pdf
78. ¿Cómo hacerse un aborto con pastillas? Instructivo interactive paso a paso. Retrieved November 26, 2014 from http://sincloset09.wix.com/aborto-misoprostol
79. Socorristas en Red. (2014). *Declaración de la 3era. Reunion plenaria national de socorristas en red (feministas que abortamos).* Retrieved November 26, 2014, from http://socorristasenred.blogspot.com/2014/08/declaracion-de-la-3era-reunion-plenaria.html
80. Cytotec (Misoprostol) Prescribing information (drug label). Retrieved November 24, 2014 from http://www.accessdata.fda.gov/drugsatfda_docs/label/2002/19268slr037.pdf
81. Gomperts, R.J., Jelinska, K., Davies, S., Gemzell-Danielsson, K., Kleiverda, G. (2008). Using telemedicine for termination with mifepristone and misoprostol where there is no access to safe services. *British Journal of Obstetrics and Gynecology.* Retrieved November 26, 2014, from DOI: 10.111/j.1471-0528.2008.01787.x.
82. Miller, S., Lehman, T., Campbell, M., Hemmerling, A., Anderson, S.B., Rodriguez, H., Conzalez, W.V., Cordero, M., Calderon, V. (2005, September). Misoprostol and decline in abortion-related morbidity in Santo Domingo, Dominican Republic: a temporal association. *British Journal of Obstetrics and Gynecology, 112,*1291-1296.
83. Harper, C.C. et al.
84. Fiol, V. et al.
85. International Consortium for Medical Abortion: Background. Retrieved on December 7, 2014, from http://www.medicalabortionconsortium.org/background.html
86 Socorristas en Red. "¿Te interesa tener más información?" In *¿Cómo hacerse un aborto con pastillas? Instructivo interactivo paso a paso* (chap. 10). Retrieved December 7, 2014. http://sincloset09.wix.com/aborto-misoprostol#!10/c271.
87. Women on Waves. *10 Years of Women on Waves (2009)!* Retrieved on December 7, 2014, from https://www.womenonwaves.org/en/page/649/10-years-of-women-on-waves-2009
88. Women on Waves. *Argentina clinics and associations.* Retrieved December 7, 2014, from https://www.womenonwaves.org/en/page/4935/argentina-clinics-and-associations
89. Socorristas en Red. ¿Te interesa tener más información? In *¿Cómo hacerse un aborto con pastillas? Instructivo interactivo paso a paso* (chap. 10). Retrieved December 7, 2014. http://sincloset09.wix.com/aborto-misoprostol#!10/c271.
90. World Health Organization. (2010). *Telemedicine: Opportunities and developments in member states, 2.* Retrieved December 7, 2014, from http://www.who.int/goe/publications/goe_telemedicine_2010.pdf
91. Gompers, R.J. et al. Retrieved November 26, 2014, from DOI: 10.111/j.1471-0528.2008.01787.x.

92. Ravindran, T. & Nair, M. (2008). Commentary on 'Using telemedicine for termination of pregnancy using mifepristone and misoprostol in settings where there is no access to safe services'. A perspective from reproductive rights advocates. British Journal of Obstetrics and Gynecology. doi: 10.111/j.1471-0528.2008.01787.x.
93. Rabiosa, F. & Zurbriggen, R. Personal interview. June 18, 2014.
94. Grimes, D. et al.