Distribution Agreement

In presenting this thesis or dissertation as a partial fulfillment of the requirements for an advanced degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis or dissertation in whole or in part in all forms of media, now or hereafter known, including display on the world wide web. I understand that I may select some access restrictions as part of the online submission of this thesis or dissertation. I retain all ownership rights to the copyright of the thesis or dissertation. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

Signature:	
Kaitlyn Stanhope	Date

Physician Opinions Toward Legal Abortion in Bogotá, Colombia: Barriers and Facilitators, 2014

By Kaitlyn Stanhope Master of Public Health

Department of Global Health

Committee Chair

Committee Member

Physician Opinions Toward Legal Abortion in Bogotá, Colombia: Barriers and Facilitators, 2014

By Kaitlyn Stanhope

Bachelor of Arts Brown University 2009

Committee Chair: Dr. Roger Rochat

Committee Member: Dr. Dawn Comeau

An abstract of
A thesis submitted to Faculty of the
Rollins School of Public Health of Emory University
in partial fulfillment of the requirements for the degree of
Master of Public Health
in Hubert Department of Global Health
2015

Abstract

Physician Opinions Toward Legal Abortion in Bogotá, Colombia: Barriers and Facilitators, 2014

By Kaitlyn Stanhope Master of Public Health

Background: Since the Colombian Constitutional Court decriminalized abortion in selected situations in 2006, the number of illegal, clandestine abortions has remained, endangering women's health and contributing to maternal mortality and morbidity.

Goal: The goal of this project is to understand the factors influencing physician's option on abortion provision in different clinical cases in Bogotá, Colombia.

Methodology: The research team conducted twelve qualitative key informant interviews with advocates, doctors and program directors in Bogotá, Colombia. Researchers then conducted quantitative surveys with a cluster probability sample of doctors working in public hospitals in Bogotá. Researchers then conducted a thematic analysis of the key informant interviews and descriptive analysis using SAS.

Results: Key informants described ignorance of the law, lack of abortion inclusion in medical school curriculum, and cultural barriers as key physician-side barriers to legal abortion. In the survey, 34% of respondents had performed an abortion and 51% had referred for an abortion (n=49). In a predictive model for belief toward legal abortion, male sex (OR: 0.04, 95% CI: 0.01, 0.20) and self-reported religiosity (OR: 0.36 95% CI: 0.18, 0.698) were inversely associated with believing abortion should always be legal. Having seen an abortion complication was not predictive of believing abortion should always be legal (OR: 2.09 95% CI: 0.56, 7.84).

Discussion: Though respondents reported a variety of options and knowledge regarding abortion techniques and the legal framework for abortion, many physician side barriers to accessing legal abortion remain.

Physician Opinions Toward Legal Abortion in Bogotá, Colombia: Barriers and Facilitators, 2014

By Kaitlyn Stanhope

Bachelor of Arts Brown University 2009

Committee Chair: Dr. Roger Rochat

Committee Member: Dr. Dawn Comeau

A thesis submitted to Faculty of the Rollins School of Public Health of Emory University in partial fulfillment of the requirements for the degree of Master of Public Health in Hubert Department of Global Health 2015

Acknowledgements

I would like to thank my fellow researchers, Chelsey Brack, Lauren Fink and Kalie Richardson as well as our mentors for data collection, Roger Rochat, Oscar Bernal and Cristina Villarreal. Thank to all of the participants in our study, the hospital administrators for allowing us access, and the friends and colleagues who helped orient us to the Colombian medical and transportation systems.

Table of Contents

INTRODUCTION	1
Problem Statement	
PURPOSE STATEMENT	3
SIGNIFICANCE	3
LITERATURE REVIEW	4
ABORTION LEGALIZATION AND PUBLIC HEALTH	
ABORTION AND HUMAN RIGHTS	
ABORTION IN LATIN AMERICA	
DECRIMINALIZATION OF ABORTION IN COLOMBIA	
ESTIMATES OF ABORTION INCIDENCE IN COLOMBIA	
BARRIERS TO LEGAL ABORTION IN COLOMBIA	
Physician Attitudes towards Abortion	
CONSCIENTIOUS OBJECTION TO ABORTION	
DELAYS IN ACCESSING ABORTION CARE	
CHARACTERISTICS OF COLOMBIAN WOMEN WHO SEEK ABORTIONS	
METHODS OF ABORTION	20
METHODS	22
Population	22
QUALITATIVE DATA	23
PROCEDURES AND SAMPLING.	23
QUALITATIVE DATA ANALYSIS.	24
QUANTITATIVE DATA	
Procedures and Sampling.	25
QUANTITATIVE DATA ANALYSIS.	26
ETHICAL APPROVAL	27
RESULTS	28
QUALITATIVE RESULTS	28
Ignorance of the Law	
Legal Barriers	
Gestational Age	
Medical Education	
Cultural Barriers	
Survey Results	34
STRENGTHS AND LIMITATIONS	42
DISCUSSION	44
RESOURCE LIST:	49
ADDENDIV.	Fo

Introduction

Problem Statement

Abortion remains highly stigmatized in Latin American and is illegal or highly restricted in many countries. Despite this, the incidence of abortion remains high in Latin America. In countries where access to legal abortion is limited, incidence of clandestine, illegal abortion continues and is frequently unsafe. Clandestine abortion is more likely to be unsafe, unsanitary and may be a traumatic experience for the patient. Unsafe abortion currently accounts for an estimated 13% of maternal mortality globally (Fawcus, 2008) and 12% of maternal mortality in Latin America, higher than any other region worldwide (Khan, Wojdyla, Say, Gulmezoglu, & Van Look, 2006). Past research has shown that widening access to legal abortion diminishes complications and maternal mortality from unsafe abortion, though the number of total abortions usually remains stable (David A. Grimes et al.; Sedgh et al., 2012). This makes legal access to abortion an essential public health priority, regardless of political stance on the issue of abortion.

In 2006, the Colombian Constitutional Court decriminalized abortion in Colombia in four cases: in the case of a risk to a woman's health, a risk to a woman's life, fetal malformation incompatible with life, and rape or incest. The Court based the decriminalization on constitutionally defined women's right, as well as a range of international human's right treaties that Colombia had signed (Cook, Erdman, & Dickens, 2007).

The case represented a paradigm shift for the medical system, as abortion previously was considered a crime and is now considered a legally protected human right. Before the decriminalization of abortion in Colombia, several studies had estimated the prevalence of clandestine or illegal abortion to be high (Prada, Biddlecom, & Singh, 2011; S. Singh & Wulf, 1994). Two years after this case, it appeared that few women were accessing legal abortion services and rates of clandestine abortion remained high (Prada et al., 2011). This suggests that there are many existing barriers to accessing legal abortion in Colombia.

The structure of the Colombian law contributes to many barriers. The Court sentence¹ requires a woman to go through complicated processes to qualify for a legal abortion. In the case of rape, the woman is required to file a formal complaint against her attacker. In the case of a risk to the woman's life or health or fetal malformation, the attending physician serves as the gatekeeper to abortion services. The physician must determine whether the pregnancy as a risk to the woman's social, mental or physical health or the fetal malformation is incompatible with life or not before referring a woman to or performing an abortion. As the sentence does not define either of these categories explicitly, it gives individual doctors great power in promoting or denying access to legal abortion in Bogotá. It is necessary to understand the social, political and personal factors determining physician's attitudes and opinions towards abortion to increase access to safe abortion in Colombia.

_

¹ I will use "sentence" throughout to refer to the C-355/2006 Constitutional Court Ruling to match the Spanish *sentencia* and highlight that it is not a policy or law.

Purpose Statement

What are the factors influencing physician's opinion on abortion provision in different clinical cases in Bogotá, Colombia?

Specific Objectives:

- Determine factors influencing a doctor's opinion on access to legal abortion in a random sample of doctors in public hospitals in Bogotá.
- 2. Determine factors influencing a doctor's opinion on access to legal abortion under a range of clinical conditions.

Significance

Studies of past transitions have shown that a decriminalization or legalization of abortion reduces mortality and complications from abortion. However, this reduction is only possible if women are able to access legal abortion services. In Colombia, the implementation of abortion decriminalization has been slow. A better understanding of the barriers to legal abortion will both aid in future interventions and legislation and regulation of abortion in Colombia.

Documenting the factors influencing physician's attitudes towards abortion will facilitate interventions and training for physicians. Interventions and trainings will allow a smoother implementation of the decriminalization, as the current sentence gives physicians a unique role in allowing or denying women legal abortion.

Literature Review

Abortion Legalization and Public Health

Induced abortion is not inherently dangerous or risky. When performed in clinical settings, by a trained professional, in the first trimester using standard techniques, abortion is far less risky than carrying a pregnancy to term (Edwards, 1999; Rowlands, 2011). However, in settings where access to clinical procedures is legally restricted and/or socially stigmatized, women often resort to clandestine abortion procedures (D. A. Grimes et al., 2006). Clandestine abortion often, though not always, overlaps with unsafe abortion. The World Health Organization (WHO) defines unsafe abortion as an abortion performed by somebody without adequate skills (including the woman herself) and/or outside of an environment conforming to minimal medical standards (WHO, 2008). Where abortion is clandestine, there is no way to regulate the service or report quality to patients, even if it is performed by trained medical professionals (Berer, 2000).

By definition, it is very difficult to pinpoint the percentage of clandestine abortions that are unsafe or from which deaths occur. Unsafe abortion has a varying estimated case fatality rate by region, ranging, in 2008, from an estimated 460 deaths per 100,000 unsafe abortions in Africa to 20 deaths per 100,000 unsafe abortions in South America (WHO, 2008). Unsafe abortion is a major contributor to maternal mortality and morbidity globally. The WHO estimated that in 2008, unsafe abortion caused 13% of maternal deaths (WHO, 2008). A further estimated 20-50% of women experience complications after undergoing an unsafe abortion (D. A. Grimes et al., 2006). The most common complications from unsafe abortions are sepsis, hemorrhage, peritonitis and trauma to the cervix or uterus (D. A. Grimes et al., 2006).

On a national level, demand for abortion stems from several factors, including ideal number of children, presence of unintended pregnancy, contraceptive prevalence rate and types of available and use of contraception. Though increased use of effective contraception in a given area will reduce demand for abortion, the incidence will never be zero (Fawcus, 2008; Marston, 2003). In countries with high abortion rates, the contraceptive prevalence is generally low (WHO, 2008). Overall, about 75% of abortions could be prevented if unmet need for family planning were fully addressed (WHO, 2008). Demand for abortion is considered independent of the legal status of abortion (K. Singh & Ratnam, 1998). Abortion rates appear to be lower in regions with liberal abortion laws (Sedgh et al., 2012).

Countries with highly restrictive abortion laws usually show high rates of maternal mortality and morbidity due to abortion (Berer, 2000; WHO, 2008). Historically, making abortion legally available upon request has decreased maternal mortality from unsafe abortion while not affecting the overall incidence of abortion (Healy, Otsea, & Benson, 2006; Myers & Seif, 2010; K. Singh & Ratnam, 1998). In Romania, for example, abortion related mortality fell by 67% in one year after the legalization of abortion on demand in 1989 (K. Singh & Ratnam, 1998). This decrease depends on the process of legalization and implementation of the law. For example, in Ghana, policy-makers changed a restrictive abortion law to allow for abortion in the case of risk to mental or physical health, rape or fetal malformation in 1985. However, ten years later, the number of unsafe abortions in Ghana had not decreased due to provider bias and unwillingness to provide abortions or treat women for complications (Berer, 2000). Further, in countries where services are not available or distributed throughout the country, clandestine, unsafe

abortions continue after legalization (Fredrick, 2007; WHO, 2008). An example of this is India, where, despite legal access to abortion since 1971, official estimate 2/3 of abortions are clandestine due to lack of knowledge about the law and scarcity of trained providers (WHO, 2008).

Unsafe abortions result in high financial costs for the medical system. These financial costs include emergency care, blood transfusions and long term care for complications (Berer, 2000). In countries where abortion is illegal or highly restricted, women with complications from a clandestine abortion may delay seeking care. This may result in more severe complications, higher costs and, potentially, death (Berer, 2000). In South America the estimated rate of hospital admissions for induced abortion was 8 per 1000 women of reproductive age in 2005 (S. Singh, 2006).

Unsafe abortions result in morbidity and mortality for women as well as high costs. Prevention strategies include contraception and prevention of unwanted pregnancies, legalization of abortion, improving access to misoprostol, provision of safe, affordable abortion services, training physicians in safe abortion provision, and post-abortion counseling and contraceptive use (Faúndes, 2012; Fredrick, 2007; Hyman, Blanchard, Coeytaux, Grossman, & Teixeira, 2013).

Abortion and Human Rights

In countries with highly restrictive abortion laws, legal barriers and punitive measurements place undue burden on women who are poor and uneducated. Women seeking abortions in these highly restricted environments face risk of imprisonment, social stigma and violations of medical confidentiality (Kane, 2013). In a review of police, health and criminal justice systems of Bolivia, Brazil and Argentina, researchers found that women arrested or imprisoned for seeking an illegal abortion were

disproportionately poor or of a low social strata. Further, these were also subject to mistreatment and human rights abuses by the health and criminal justice system (Kane, 2013).

The right to accessing safe abortion and contraceptive services is built from several international human rights treaties. First, in 1994, the International Conference on Population and Development held that all women should have access to quality postabortion care without delays, whether or not abortion was legal in that country. The Programme of Action also states that in countries where abortion is legal, services should be safe (Faúndes, Rao, & Briozzo, 2009). International human rights law also guarantees the right for a woman to freely decide the number and spacing of her children and to be free from interference with privacy and family (Walsh, Møllmann, & Heimburger, 2008). However, not all signatory countries have adopted these recommendations and in many countries with partially restricted abortion (in which abortion is legal under some circumstances) access to safe abortion is severely limited for women qualifying for legal abortion (Faúndes et al., 2009).

Abortion in Latin America

In Latin America, access to abortion is generally legally restricted or banned, though the past two decades have seen important policy shifts. The Dominican Republic, Nicaragua and El Salvador have changed their constitutions or penal codes to eliminate legal abortion in all cases, including when necessary to save the woman's life (Kulczycki, 2011). Mexico City legalized abortion under any circumstances up to 12 weeks of gestation in 2007, and abortion laws vary in restrictiveness across the country (Becker & Olavarrieta, 2013). In Uruguay, the medical intervention *Iniciatives Sanitarias* first implemented a harm-reduction model, which focused on counseling women on how to

have safe abortions (Briozzo et al., 2006). After the success of this model, in 2013, lawmakers legalized abortion in Uruguay up to 12 weeks gestation under any circumstances (Fraser, 2014). Despite the increased restrictions in Central America and the Caribbean, the trend in South America appears to be towards increasing access to abortion through both legalization and harm-reduction models (Fraser, 2014). In 2008, an estimated 31 unsafe abortions occurred for every 1000 women of reproductive age in Latin America and the Caribbean (WHO, 2008).

Decriminalization of Abortion in Colombia

In 2006, the Colombia Constitutional Court decriminalized abortion in cases of rape or incest, fetal malformation incompatible with life and risk to the health or life of the mother. The Court based this decision on international human rights treaties ratified by Colombia and Colombia's 1991 Constitution, which guarantees a woman's right to heath and the right to determine freely the number and spacing of children ("Decision C-355/2006," 2006). The decision not only guarantees a woman's right to abortion services but, by recognizing the right to abortion in these cases as part of the right to health, gives the public health system the obligation to provide abortion services (Dalen, 2013). The Court did not provide legal regulations or guidelines for the implementation of these services, but, instead, left this to the legislature and executive branches of Colombia's government (Cook et al., 2007). The Ministry of Health produced a normative document for abortion services in 2006, Decreto 4444. However, the Council of State (Consejo de Estado) declared this document null the same year. Since that document was declared null, there have been no national norms regulating the implementation of the Court sentence (Chaparro, 2013).

There have, however, been several court cases reaffirming the right to an abortion under the circumstances provided by C-355/2006 as well as other cases defining related issues, such as the right to conscientious objection (Amado, Calderon Garcia, Cristancho, Salas, & Hauzeur, 2010; Chaparro, 2013).

Estimates of Abortion Incidence in Colombia

There are limited data on the incidence of clandestine and legal abortion before and since the 2006 decriminalization of abortion in Colombia. Before, few measurements of the incidence and prevalence of abortion existed. Measuring the incidence of clandestine abortion is difficult and we rely on varying flawed research methodologies to produce estimates. In a 2013 systematic review, Gerdts discusses current methodologies of estimating maternal mortality due to unsafe abortion, evaluating study quality along with design, diagnostic procedures for cause of death, how abortion was defined as induced or spontaneous, completeness of methods reporting and risk of bias (Gerdts, Vohra, & Ahern, 2013). Of the 36 studies that met the inclusion criteria, no study was considered of "excellent" quality. The authors assigned a "very good" rating to ten studies, which used multiple data sources, an internationally standard definition for abortion, and were generally prospective in nature. The six studies that received a rating of "fair" were a mix of methods, but generally did not account for misclassification or underreport due to stigma or bias. The 20 studies which received a rating of "poor" (14) or "very poor" (6) were generally facility based, did not provide a standard definition for abortion and did not discuss or account for potential bias (Gerdts et al., 2013). Though this review focuses on measurement of unsafe abortion-related mortality, similar standards apply to estimates of unsafe abortion incidence or morbidity.

The estimates of clandestine abortion incidence in Colombia were based on differing research methodologies and vary greatly in magnitude and quality (see table 1).

Table 1: Estimates of Abortion in Colombia, 1989-2012

Year of Estimation	Methodology	Sample Size	Geographic Area	Absolute Number of Abortions	Life time Abortion Prevalence Estimate (women reporting one or more abortions ever)	Abortion Rate	Authors
1989	Abortions Complications Estimation and Survey of Providers		National			34 abortions per 1000 women of reproductive age	(S. Singh & Wulf, 1994)
2001	Cross-sectional self-report	514 sex workers	Bogotá		53.4% of participants reported at least one lifetime abortion		(Bautista et al., 2008)
2003	Cross-sectional self-report probability sample	2101 age group?	Usme, Ciudad Bolivar, Santa Fe		4.15% lifetime prevalence of abortion		(Mosquera Becerra, 2003)
2006	Not provided	Unclear— national estimate	National		22.9% of Colombian women have had at least one lifetime abortion		(Secretaria de Salud, 2006)
2008	Abortions Complications Estimation and Survey of Providers	300 heath facilities	National	400,400 annually		39 abortions per 1000 women of reproductive age	(Prada et al., 2011)
2008	Used national registries from Chile and Spain to estimate Colombian incidence	N/A	National	10,270—number of abortion hospitalizations 21,978 abortions—based on Spain			(Koch, 2012)
2009	Statistics provided by Ministry of Social Protection	N/A	National	646 legal abortions performed since 2006			(Dalen, 2011)
2009	Procurador de la Nación—unknown	N/A	National	38,000 annual clandestine abortions			(Hoyos Castañeda, 2010)

One methodology is a cross-sectional population-based survey. Abortion is a sensitive topic and was illegal and punishable by a prison sentence through 2006 in Colombia. In settings where abortion is stigmatized and subject to punitive measures, self-report is subject to bias and unreliable (Gerdts et al., 2013; Rossier, 2003). In a cross-sectional study of a convenience sample of 514 female sex workers in Bogotá in 2001, 53.4% of participants reported at least one lifetime abortion (Bautista et al., 2008). In 2003, an NGO carried out a cross-sectional study of women in Bogotá and two suburbs to determine lifetime prevalence of abortion and associated characteristics. The study sampled using a cluster probability sample with neighborhoods as the primary sampling unit and houses as the secondary sampling unit. The response rate was 92.3% and total sample size was 2,101. In this study, 3.71% of participants reported having had at least one abortion (Mosquera Becerra, 2003). A report from the Secretary of Health in Bogotá in 2006 estimated that 22.9% of Colombian women had had at least one induced abortion in their lifetime (Secretaria de Salud, 2006). We have not found a provided description of the methods used to calculate this lifetime prevalence.

Estimates since the decriminalization suggest the number of clandestine abortions continues to be high while the number of legal abortions is low. In 2008, Prada et al. conducted a national study to estimate numbers of clandestine abortion. The study involved two parts: a health facilities survey of a randomly selected number of health facilities and a survey of professionals. Researchers used the facility-based survey to estimate the number of post-abortion complications treated. They then separated spontaneous abortions using clinical data to estimate the percentage of spontaneous abortion for each region. The team used results from the survey of health professionals to produce multipliers: estimates of the ratio of abortion complications seen to total clandestine abortions in each region. This allowed the team to produce low, medium and high

estimates of the numbers of clandestine abortions in the country. The medium estimate of the number of clandestine abortions was 400,400. The number of complications from induced abortion reported in the survey was 93,336. The health facilities report produced an estimate of 322 legal abortions in 2008 (Prada et al., 2011). The methodology produced this and one other estimate in 1989, a rate of 34 per 1000 women of reproductive age (Prada et al., 2011; S. Singh & Wulf, 1994).

Some debate the validity of the Prada estimates. One paper used Spanish and Chilean vital statistics to estimates rates of abortion, miscarriage (spontaneous abortion) and abortion hospitalization and apply them to Colombia's population. This paper estimated 10,270 annual hospitalizations due to induced abortion and 21,978 annual induced abortions, implying that 47% were hospitalized (Koch, 2012). This method may produce an over or underestimate. These estimates are much lower than other estimates, including official Colombian government estimates. The office of the *Procurador* or Defender of Human Rights, a national office similar to the US Attorney General, estimated that 38,000 clandestine abortions occurred in 2013 (Dalen, 2013).

Rossier's 2003 review considering the different techniques for measuring clandestine abortion offers a framework to understand the bias inherent in each methodology. The estimates, discussed above by Prada and colleagues in 2008 and Singh and colleagues in 1989 both use an abortion complication estimation rate. The survey of providers is likely to overestimate the complication rate of illegal abortions, thus underestimating the overall clandestine abortion rate(Rossier, 2003). However, both Prada's and Singh's estimates take into account both expert opinion as well as complication-based data in order to produce the multipliers. Using several sources of data for multipliers offers a more accurate estimate than only one (Rossier, 2003).

Considering the available information and using Rossier's criteria for bias, the 2008 estimate by Prada is likely to be the best available estimate. Further, though each of these methodologies is flawed, but each estimates clandestine abortion incidence to be much higher than legal abortion incidence. The discrepancy between the numbers of clandestine and legal abortions suggests that women face significant barriers in obtaining legal abortions.

Barriers to Legal Abortion in Colombia

A report by Dejusticia, a human rights organization based in Colombia, suggests that structural, cultural, physical and financial barriers exist for Colombian women seeking legal abortion services (Dalen, 2013). These barriers may prevent a woman from receiving services, delay her access to those services or impact the quality of services received (Dalen, 2013). Structural barriers include uneven distribution services across the country and bureaucratic barriers (Amado et al., 2010).

In a case series analysis of 36 women denied access to legal abortion between May 2006 and April 2008, 18 of the women were denied access to abortion because of invented bureaucratic requirements, such as permissions or proofs not required by the Court decision (Amado et al., 2010).

Ignorance of the legal status of abortion is a key barrier to accessing legal abortion since the decriminalization of abortion in 2006 (Moloney, 2009). Since the *Consejo de Estado* declared the normative document, Decreto 4444, null, some confusion has existed over the legal status of abortion. The legal status is only defined through jurisprudence, not through any norms or laws (Chaparro, 2013). In 2013, the *Superintendencia de Salud*, a government body responsible for overseeing the health system, published "Circular 03 de 2013." This document defines the legal requirements and obligations of health providers regarding abortion services. It did not define new requirements; it only restated and summarized requirements as defined by the Constitutional

Court. However, the extent to which these regulations are known or enforced has not been evaluated (Chaparro, 2013).

Religion is a well-documented social determinant of health and religious influences on policy and laws often differ from their influence on adherents' behavior. Religious influence on accessing legal abortion in Colombia has not been well documented. Nearly all (90%) Colombians identify as Catholic (Central Intelligence Agency, 2014). The official stance of the Catholic church is that abortion is an immoral act under any circumstance (Jones, 2004). However, in a 2004 survey by the Latin American organization *Católicas por El Derecho a Decidir*, researchers found that 48% of Colombian Catholics surveyed believe abortion should be legal in some circumstances and 37% believe that a woman can be a good Catholic after having an abortion. Finally, 81% of Catholics surveyed believed that the woman and/or her partner should make the decision about having an abortion, not the physician or the church (Catholics for Free Choice and Catolicas por el Derecho a Decidir, 2004).

Available data suggest that the many barriers to accessing legal abortion have increased the cost of abortion care. In a 2012 study comparing the cost of post-abortion care of complications to the cost of legal abortions, Prada and colleagues found that, in Colombia legal abortions are more expensive. The median cost of post-abortion care was \$141 per patient. The cost of direct abortion care varied from \$45 at private, specialty facilities to \$189-\$213 at tertiary and secondary public facilities (Prada, Maddow-Zimet, & Juarez, 2013).

Physician Attitudes towards Abortion

Physician attitudes can act as a facilitator or barrier to the implementation of a liberalized abortion law. In Indonesia and Zambia, physician attitudes obstructed implementation of safe abortion services after liberalization (Berer, 2000). However, physicians can also act as patient advocates and agents of change, through providing accurate information on contraceptive options

and abortion to patients and advocating for the inclusion of abortion-related training in medical education (Gasman, Blandon, & Crane, 2006). In many Latin American countries, physician advocacy through professional organizations has been essential to guaranteeing abortion rights or shifting policy towards wider access to legal abortion (Gasman et al., 2006).

Different global studies suggest that physician and medical student attitudes toward abortion vary by legal status of abortion in the country, circumstances of the pregnancy/reason for the abortion, religiosity, knowledge of the law, gender, and age of the provider (Dayananda, Walker, Atienzo, & Haider, 2012; Rosenberg et al., 1981; Silva, Billings, Garcia, & Lara, 2009; Sjostrom, Essen, Syden, Gemzell-Danielsson, & Klingberg-Allvin, 2014).

Though little is known about the attitudes of Colombian physicians toward abortion, several studies about the attitudes of physicians in Mexico City after legalization offer some insight into the Latin American context. One year after the 2007 legalization of first-trimester abortion on demand in Mexico City, Contreras and colleagues conducted in-depth interviews with nurses and doctors at public hospitals to determine opinions and experiences of providers. The providers in favor of the law described the right to privacy, the right to voluntary motherhood and a belief that the law would lower maternal mortality as factors influencing their favorable view of the law. Many expressed worries about whether the law would make women less likely to use contraception or about the young age of some patients. Many providers expressed anxiety at the rapid legal shift and some hospitals instituted additional requirements (besides those in the Mexican law) for patients at their hospital to protect the hospital from potential legal repercussions. Personnel also described a lack of supplies, staff and infrastructure for abortion services in public hospitals. Some of the doctors in the sample described

discrimination and negative comments towards women seeking abortions and gynecologists (Contreras, van Dijk, Sanchez, & Smith, 2011).

In a cross-sectional survey of physicians attending the annual meeting of the Colegio Mexicano de Especialistas en Ginecología y Obstetricia (COMEGO, Mexican College of Specialists in Gynecology and Obstetrics), researchers interviewed 424 physicians from across the country. The majority responded that abortion should be legal in cases of rape (84%), risk to the life of the mother (89%) and in case of fetal anomalies (84%). Only 19% of medication abortion providers correctly answered a free-response question about a dose regime for abortion and 87% said they would like more training. Among physicians who did not currently provide abortion, 49% reported desiring more training on medical abortion and 26.8% on surgical abortion (Dayananda et al., 2012).

In Colombia, physician judgment has a unique role in allowing or denying women access to legal abortion services. The Colombian Court did not specifically define what constitutes a risk to health or a fetal malformation incompatible with life in the 2006 decision. As the right to health is guaranteed in the Colombian Constitution, a physician should err on the side of accepting on good faith a woman's assertion that an unwanted pregnancy is a risk to her life or health (Amado et al., 2010). However, it is often considered that physicians must decide whether an unwanted pregnancy is a risk to the patient's life or health. This has caused wide variation in the interpretation and application of the Court decision (Amado et al., 2010; Dalen, 2013). The "health exception," the provision allowing abortion in the case of a risk to a woman's health, has the potential to broaden access to legal abortion. Through training providers on the health exception, advocates for wider access to abortion in Colombia have developed clinics in which legal abortion is available essentially on demand. However, this wide access is exceptional and it

appears that most Colombian clinics offer abortion only under limited circumstances if at all (Gonzalez Velez, 2012).

Physician attitudes also impact the experience of women seeking abortion services or treatment for post-abortion complications. Researchers have documented abusive language and harsh treatment towards women seeking care for abortion complications in Latin America (Berer, 2000). In Gabon, researchers documented that women diagnosed with post-abortion complications faced longer wait times than women with other pregnancy complications, leading to negative outcomes (Mayi-Tsonga et al., 2009).

In countries with long-standing legal abortion, stigma remains an important problem. In a cross-sectional survey of a nationally representative sample of 3000 Catholics in Mexico, researchers found that most people (61%) had stigmatizing attitudes towards abortion on a standard stigma index, even though almost all (80%) favored legal abortion at least in some circumstances (McMurtrie, Garcia, Wilson, Diaz-Olavarrieta, & Fawcett, 2012).

We found no published evidence of how physician attitudes, specifically, may act as a facilitator or barrier to abortion access in Bogotá, Colombia or how they impact women's experiences during abortion services. The only study if which we are aware is Chaparro and colleagues 2013 qualitative exploration of knowledge of the Court sentence among Colombian physicians (Chaparro, 2013).

Conscientious Objection to Abortion

The 2006 Court ruling also provided for conscientious objection by physicians.

Additional Court rulings further delineated this ruling (Dalen, 2013). In Colombia, a conscientious objector to abortion is an individual physician who objects to the provision of abortion for moral or religious reasons, under all circumstances and at any gestational age

(Dalen, 2013). Conscientious objectors have a legal obligation to refer patients to a competent physician who does provide abortion and to declare themselves to the Ethics Committee at the clinic or hospital where they work in writing (Dalen, 2013; Hoyos Castañeda, 2010). Institutions, such as hospitals, insurance companies, or universities, may not object. Non-physician health providers, such as nurses, anesthesiologists or pharmacists, may not object. Institutions, such as hospitals or universities, may not object as an entire institution (Chaparro, 2013; Hoyos Castañeda, 2010). In situations where a woman's right to access legal abortion and a physician's right to conscientious objection are in conflict, the physician has a responsibility to provide abortion. However, it is unclear whether this is true in practice in Colombia (Cook, Olaya, & Dickens, 2009).

Delays in Accessing Abortion Care

Delays in accessing abortion care are both a medical and legal issue. Abortion is a safer and less complicated procedure when it is performed at earlier gestational ages (Berer, 2000; Healy et al., 2006). Legal requirements such as parental or spousal consent, an official police complaint or the permission of a medical committee act as barriers to accessing safe, timely abortion care (Berer, 2000). Colombia lacks research on barriers that delay women in seeking abortion care.

Characteristics of Colombian Women Who Seek Abortions

Available data suggests that women from a wide variety of backgrounds and for many reasons seek abortions in Colombia, despite limited data available since the 2006 decriminalization. Estimated rates and numbers of abortion in Colombia appear to have increased during the past decades. In 1989, Prada and colleagues estimated a rate of 36 abortions per 1000 women of reproductive age. The same team estimated a rate of 39 abortions per 1000

women in 2008 (Prada et al., 2011). In a 2012 clinic-based, cohort study of 300 women seeking legal abortion in Bogotá, researchers found that the majority of women were middle-income (51%) and single (78%). The study used venue-based sampling. The mean age was 25.5 years old. Almost half were paid for work (49%) and another 24% were students (DePineres, Baum, & Grossman, 2014). In a 2007 cross-sectional study of women received post-abortion care for an incomplete induced abortion, 95% of women reported not having finished high school. In this study, 80% were either married or living with their partners and 63% were economically dependent on their partner. The mean age was 24 years old (Gomez-Sanchez, Escandon, & Gaitan-Duarte, 2007).

Methods of Abortion

WHO guidelines call for using manual vacuum aspiration (MVA) or medication methods for first trimester abortions (World Health Organization, 2012). These techniques are considered safer than dilation and curettage (D&C). Medication abortions are very low-risk when performed in the first trimester. Research suggests that medication abortion can allow women more agency in their abortion in areas with restricted abortion laws (Hyman et al., 2013). However, in countries where abortion has been illegal or restricted for many years, physicians may not be aware of or experienced in medication or MVA techniques (Berer, 2000). We lack any published studies on what medical and nursing schools teach on abortion in Colombia.

In Colombia, physicians in public hospitals generally rely on D&C for legal abortions, requiring anesthesia and, often, an overnight stay (Prada et al., 2013). The cost of performing abortions in high-level hospitals is higher than the cost of performing a medication or MVA abortion in a primary level clinic or other ambulatory care setting.

The limited existing evidence in Colombia shows that medication and MVA are acceptable methods for safe abortion. In a 2007 cross-sectional study of 26199 women receiving

post-abortion care in 13 Colombia hospitals, researchers found that 40% of doctors used MVA for post-abortion care, and 60% used curettage. The number of uterine perforations was higher in the group undergoing curettage, though this was not statistically significant (Chi=2.16, p=0.14). Further, physicians reported higher satisfaction with MVA (Gomez-Sanchez et al., 2007). In prospective cohort study of 300 women receiving abortion services in Bogotá, researchers showed that MVA was acceptable as a technique in terms of pain or emotional distress (DePineres et al., 2014).

A review of the literature shows that the information available on attitudes towards abortion in Colombia is limited to few studies. In addition, insight into the physician attitudes towards abortion provision is lacking as well. It is vital to address this gap in research in order to better understand the process of implementing the 2006 Court Decision to permit abortion in three circumstances, ensure access to an important and constitutionally protected medical service, and increase access to safe abortion.

Methods

Population

These data are part of a larger mixed methods study conducted by a team of interdisciplinary researchers. In total, the team conducted 54 interviews with key informants, patients, conscientious objectors² and lawyers. This analysis is of key informant interviews (n=11) and survey data (n=49). See table 2 for sample characteristics.

Table 2: Qualitative Interview Sample Characteristics

Sample	n	Description/inclusion criteria	Recruitment and
			Sampling
Survey	49	-Currently practicing in a public	Recruited through 2-
participants		hospital in Bogotá	stage cluster
		-Practicing in family planning,	sampling
		women's health or gynecology	
Interviews	12	-Considered (by colleagues or	-Recruited through
with Key		published literature) as a leader	snowball and
informants		in the field of abortion,	purposive sampling
		women's health, advocacy or	
		bioethics	
		-Over age 18	
*Not used for analysis presented in this thesis			
Interviews	18	-Received an abortion in past 6	-Recruited through
with Patients*		months	gate-keepers
		-Over age 18	
Interviews	18	-Self-identifies as a	-Recruited through

² Refer to Conscientious Objection, p. 18 for definition in Colombian context

with		conscientious objector to the	snowball sampling
Conscientious		provision of abortion	
Objectors*			
Interviews	7	-Currently practicing law in	
with		Bogotá	
Lawyers*		-Recruited through snowball	
		sampling	

Qualitative Data

Procedures and Sampling.

We recruited 12 key informants for qualitative interviews through a snowball sampling method. Snowball sampling is appropriate for hard-to-define or rare populations and involves asking initial participants if they know anyone else who meets inclusion criteria and then asking them to help the investigator contact this person for an interview (Hennick, 2011). The sample began with the executive director of a women's health clinic. At the end of each interview, we asked the participant: "Who else should we interview to understand the issue of abortion in Bogotá?" Upon receiving names, we contacted participants either by phone call or email, explained our project and invited them to participate in an interview.

We conducted face-to-face interviews in Spanish using a semi-structured interview guide. The guide was tailored to the respondent based on the work place and background of the participant (see appendix A for sample guide). The interviews lasted between 30 minutes and one hour and where conducted in private spaces at the participant's work. The research team was bilingual. We recorded interviews and a Colombian transcriptionist transcribed interviews in Spanish. We uploaded transcripts into MAXQDA 11 and analyzed them in Spanish using memos to develop themes (Udo Kuckartz Berlin, 2011).

Qualitative Data Analysis.

As is typical in qualitative research, data collection and data analysis happen simultaneously (Hennick, 2011). Analysis of the key informant interviews used a modified grounded theory approach. Grounded theory is considered a circular process in which researchers systematically revisit data and observations to create a framework for the processes or experiences (Hennick, 2011). In this case, we used emergent themes from the transcripts to describe the attitudes and perspectives presented about barriers to accessing abortion and develop concepts to explore further in the surveys. We read five of the transcripts and conducted preliminary coding before developing a codebook and standard definitions for each code. We then re-read and, when necessary, re-coded each transcript to ensure standardization. We did all coding and analysis in Spanish and the quotes used to present results are translated into English (see appendix C for list of translated and Spanish quotes).

We first coded the transcripts using deductive codes based on the research question and interview guide. Some examples of deductive codes are: financial barriers referring to any cost or price of services that delay or prevent women in accessing an abortion, religion, referring to descriptions of beliefs or fears about spiritual rules regarding abortion.

Several distinct and unexpected themes emerged from the interviews and we developed these into inductive codes. Examples of these include: medical training, referring to descriptions of curricula or coursework in medical schools that facilitated, prevented or otherwise affected provision of quality abortion services, and conscientious objection "no debido" or "that should not be done," referring to doctors that conscientiously objected to provision of abortion in a manner inconsistent with the legal boundaries for conscientious objection.

Quantitative Data

Procedures and Sampling.

The research team developed the survey instrument based on past opinion surveys and information from our key informant interviews (see appendix B for survey instrument). There is not a fixed number or list of doctors working in public hospitals at any given time in Bogotá. For that reason, we applied a two-stage random cluster sampling technique. In cluster sampling, aggregate clusters of elements are identified on the sampling frame as opposed to individual elements (Heeringa, 2010). In this case, a sampling frame of hospitals was available without information on individual providers. First, we randomly selected 10 hospitals of the 22 eligible public hospitals in Bogotá using an online random number generator (Random.org, 2014). Each hospital has between 1 and 18 locations, referred to as points of attention. With the sample of 10, we randomly sampled 2 points of attention for each hospital. We were able to sample 9 hospital-level clusters and a total of 18 locations. See figure 1 for full sampling process. Administrative obstacles prevented us from sampling the tenth hospital.

We visited each hospital and, with approval of hospital administrators, invited all eligible providers present on one shift to participate. Providers were eligible to participate in the survey if they were medical doctors working in women's health or family

Figure 1: Sampling process



specialization, can permit a woman access to a legal abortion in Colombia (Dalen, 2013).

The survey was a self-administered paper survey. The researcher explained the survey to the provider, invited them to participate, and then conducted an oral informed consent procedure. To maintain privacy, the providers were not asked to sign or note their name anywhere. Once the provider agreed to the consent, the researcher allowed them time to complete the survey in private. The survey took between 15-25 minutes to complete.

To achieve a high response rate, the researcher asked the physician to name a time during the shift that was most convenient to the physician and waited until then. Response rates per hospital varied between 60-100% by hospital with an overall response rate of 94%. Thus, our total sample size was 49 doctors. We double-entered survey data using Epi Info, then reconciled survey data using the transcripts to check and correct errors (Centers for Disease Control and Prevention, 2008).

Quantitative Data Analysis.

Before analysis of the survey data, we used weighting to account for the complex sampling scheme (see appendix D for a complete list of weights). Each participant received a weight based on both the primary sampling unit (PSU), or larger hospital and secondary sampling unit (specific clinic or point of attention). We created a logistic regression model to identify predictors of a favorable attitude towards abortion legalization. To create our model, we used backwards selection beginning with variables relating to experience (medical education, years working as a physician, having ever witnessed an abortion complication) and demographic variables (age, sex, religion, religiosity). To account for the small sample size, we used the bootstrapping method of variance estimation to provide more accurate estimates.

Ethical Approval

This project was approved by the Institutional Review Board of Emory University in the United States (IRB00073234) and by the Ethics Research Committee of *Universidad de los Andes* in Colombia (Acta 352).

At the beginning of each interview, the team conducted a written informed consent, informing participants that they could choose to end the interview or not respond at any time and emphasizing that their participation was entirely voluntary. All data was stored on password-protected devices and will be destroyed after the analysis is complete. In analysis, we have deidentified all transcripts and use pseudonyms to refer to participants and workplaces throughout the analysis.

Results

Qualitative Results

The interviews with key informants focused on gaining an understanding of the environment and context around abortion in Colombia, in terms of clinical procedures, logistics for patients and public debate. We also asked all respondents about their perspectives on barriers to accessing legal abortion for women and provision of legal abortion for physicians. This analysis focuses on barriers and particularly barriers affecting physician provision. Table 3 describes the characteristics of each respondent.

Table 3: Description of Key Informants

Respondent (pseudonym)	Description of Organization	
Minerva	Progressive Catholic NGO	
Dr. Priam	Bioethics, Conservative University in Bogotá	
Thalia	Legal organization that support's women's access to reproductive	
	rights	
Diana	International NGO specializing in abortion access through the right	
	to health in Latin America	
Calliope	Advocacy organization focused on expanding access to	
	reproductive rights through judiciary system	
Dr. Perseus	Bioethicist and medical doctor at Catholic University in Bogotá	
Dr. Danae	Conscientious Objector to abortion, medical doctor and bioethics	
	doctoral student	
Portia	Abortion clinic in Bogotá	
Erata	City program supporting women's rights	
Clio	National women's health clinic	
Hector	National women's health clinic	
Athena	Women's health clinic network in Colombia	
Dr. Odysseus	Large public hospital	

Ignorance of the Law.

Many respondents discussed ignorance of the law as an important barrier to provision of legal abortion in Colombia. The idea of ignorance of the law was consistent across informants, though the participants described the reasons for this ignorance and dimensions differently. Dr.

Odysseus described this as the primary barrier for legally eligible women to access abortion in Bogotá, saying,

"It's ignorance... if you don't know your rights you don't exercise them. The doctors and health professionals do not know about the interruption of pregnancy [abortion]. They also don't know that it's legal, also they don't know the causes [under which abortion is permitted according to C-355/2006], also they don't know about women's autonomy."

This ignorance takes the form of:

1. Complete ignorance of the legal shift (believing that abortion was still a criminal act under all circumstances)

As Hector describes, "Many women that arrive at the clinic to ask for an abortion, [they] do not know that it's a right and come and ask with fear, "Is it really legal or not?""

Participants who expressed discomfort or disagreement with abortion or legal abortion also described ignorance of legal requirements, particularly in cases of conscientious objection.

Dr. Danae explained, "there is ignorance of what rights doctors have and in which moments they can use conscientious objection and which not."

2. Ignorance of the extent of the legal provisions (believing that the right to health was only applicable in extreme cases of risk to physical health or that further evidence was required in the case of a rape)

As Hector says, "the right to health is understood as though the patient has to be on the point of death, this is the general concept that the medical population has in Colombia. So there is a misunderstanding of the actual reach of the sentence, which impedes providing services in an adequate manner." Hector and others explained that the Constitutional Court, when asked of the decision, referred to the World Health Organization definition of health, which encompasses mental health as well as well being.

3. Misunderstanding of the legal requirements for abortion (believing that a woman needed multiple permissions for an abortion or partner consent)

One reason for this ignorance is the lack of regulation by the Ministry of Health or Superintendent of Health. While the court decision provides the grounds for legal abortion, the legislative or executive ministries have struck down every regulation. This creates confusion among providers and patients. As Minerva describes: "So, people felt misinformed, they thought that since the decree was struck down, abortion was illegal again, but it wasn't like that, the Court sentence continues to exist, independent of whether there is or is not regulation."

Legal Barriers.

In general, informants described few true legal barriers to legal abortion provision.

However, participants described the necessity for expansion or better enforcing laws, particularly surrounding conscientious objection³ and the requirement to provide care.

According to Calliope,

"Effectively, after years, we are eight years after the implementation of that sentence [C-355/2006], a strong legal framework has been achieved. A legal framework that covers all aspects, to achieve a voluntary interruption of pregnancy." She goes on to explain "Not all insurance companies and institution actual guarantee that right [to abortion under the three cases] and it's necessary to apply sanctions, a little to generate the idea that this isn't a favor that they are doing for women, but, instead, a legal obligation and guaranteed right."

Many women who face barriers to legal abortion are unwilling or unable to file charges against the providers, insurance companies⁴ or institutions due to concerns around privacy. "In addition to the judicial and medical work, we need to insist on filing charges, on filing charges against those cases [violations of the right to legal abortion] and to conduct strong advocacy, so that the State will truly follow through and guarantee the rights of women," said Minerva.

⁻

³ See "Conscientious Objection to Abortion" p. 18 for description of Colombian context

⁴ Under Colombia's universal health system, 90% of citizens are enrolled in either a subsidized paid health plan, managed by an *Entidad Promotora de Salud* (EPS) (Giedion & Uribe, 2009), similar to a US insurance company and translated as insurance company throughout this paper.

Gestational Age.

Respondents offer mixed perspectives on the influence of gestational age on the provision of legal abortions. The sentence does not specify any gestational age limits. However, private clinics are able to set limits based on the ability of their providers and equipment. Two of the main private clinics in Bogotá had age limits of 12 and 14 weeks (at the time of data collection, one was in the process of expanding to 20 weeks), respectively, and refer women to public hospitals after this time point.

"One of the most important barriers is the topic of gestational age. When women arrive with a very advanced pregnancy and, though the norms in Colombia say there is no gestational age limit in practical life that's not true. And so, there comes once again the need to intervene, because even in a public abortion clinic, they attend until the 12th or 15th week and with difficulties." -- Thalia

Portia, the manager of the clinic mentioned above explained, explained further:

"These limits have to do with the techniques used to carry out the procedure. Here in Colombia, we have not implemented the protocol of dilation and extraction. In this sense, when the fetus is totally viable and there is no risk to the life of the mother, well, let's say that there isn't a doctor or professional who has decided to do the procedure in those cases."

Dr. Danae, a conscientious objector to abortion also mentions this potential discomfort to doctors that Portia alludes to:

"When one analyzes abortion, she begins to realize the gaps [in sentence C-355/2006]. For example, it seems like a huge gap to me that there is no mention of gestational age, it's not the same to think of a fetus with the possibility of life as one without one, it's not the same to abort a baby in week eight."

The respondents suggest that advanced gestational age is a barrier to seeking adequate care and that without legal support, it is extremely difficult for women to find a provider and insurance reimbursement beyond the limits at which the main abortion clinics attend. In addition, doctors may be uncomfortable or unprepared to perform abortions at advanced gestational ages. The

reluctance to perform abortions at advanced gestational ages may be tied to the lack of abortion management training in medical school curriculums.

Medical Education.

According to these interviews, abortion is not present in any medical school curriculum in Colombia, except one. Among respondents, the consensus appeared to be that abortion was taught mostly in the context of managing incomplete abortions or miscarriages and primarily through techniques like curettage rather than medical abortion or MVA. The difference in perspectives came in whether training like this was adequate or whether training specifically in inducing abortions using medicine or vacuum aspiration was necessary.

As Dr. Perseus, a bioethicist at a Catholic university explains:

"Let's say that if a student is trained to manage an incomplete abortion, a miscarriage, well, obviously she's trained to do an induced abortion, it's not a big difference and what there is to do, the care, let's say the antibiotics, the mechanics of asepsis and all the care is the same...Sure, whoever wants can use this to do induced abortion, a voluntary interruption of pregnancy, well, this technique will work, because it's the same, but here we're not going to teach it for that reason."

Thalia, a lawyer and advocate, spoke to this manner of thinking,

"It's [abortion training] not within the syllabus, it doesn't exist within the curriculum...And what this means for interruption at early [gestational] ages... it's that they still use curettage or dilation... when there is a possibility of using much cheaper, less invasive, safer techniques, but because of resistance by doctors to train and change their traditional manner of training, well, they've said no."

Hector further explained, referring specifically to medical abortion, "The use of misoprostol is also not adequately known by doctors, because they aren't trained to interrupt pregnancies. I think that technical ignorance is also a barrier to providing services."

A number of key informants repeated this disagreement and one said that only one university in the country was currently providing training in the manual vacuum aspiration and medication abortion techniques. Two respondents mentioned training provided by NGOs in safer, less invasive abortion techniques such as MVA and medication abortion.

Cultural Barriers.

Respondents described a number of cultural beliefs and practices that impact both abortion provision and quality of care. Respondents described anecdotes in which entire hospitals refuse to provide abortion and in which hospital staff and doctors treat women badly and attempt to dissuade them from their decision.

In some cases, respondents described the physical quality of care as being substandard. "Another barrier is the health services, there are hospitals and institutions that offer the health service, but not in the best way, even today, they subject women to cruel and inhumane treatments, when there are methods, techniques of practicing abortion in the most simple, most humane and most hygienic way." – Minerva

Others, however, described stigmatizing practices on the part of hospital staff.

"Then there are some obstacles that come from the perspective of those personal beliefs of many people who attend that woman and who try to impose those personal beliefs, over her personal beliefs. There are cases, for example, when they call the religious staff that is in the hospital to convince the woman not to abort. There are cases when the social workers tell them that what you are doing is a sin, you are going to go to hell, that type of practice."—Calliope

It is unclear whether the roots of these practices lie in religion, cultural norms or elsewhere. As Dr. Priam, a bioethicist and conscientious objector to abortion stated that opposition to abortion does not necessarily stem from religious belief but rather from an ethical perspective.

"Our [pro-life activists and conscientious objectors] position is a position in favor of life, which is compatible with any religion, including atheists. In fact, for example, we find that many of the critiques of the conscientious objectors, in the comments made against conscientious objection, it's said that it was because of reasons of conscientious that we object to abortion. That's not true. There exist people who are atheists, agnostics, who are also conscientious objectors, who are not in favor of abortion, because we respect human life."

Most of the barriers mentioned by the key informants and described here relate to unfamiliarity with the Court decision, the regulatory and legal framework for abortion and abortion itself. In the surveys, we attempt to tease out how this ignorance is perceived by doctors working in public hospitals.

Survey Results

In July 2014, we surveyed 49 doctors at nine public hospitals in the Bogotá network. A tenth hospital was unable to participate due to logistic constraints. Physicians were eligible to participate if they worked in women's health or family planning and were scheduled to work during the shift chosen to survey that particular cluster (point of attention). In the sample, 39% (19) were gynecologists and 61% (30) were general practitioners. Among respondents, 47% identified themselves as male sex. Roughly two-thirds of the sample (63%) reported attending a private medical school. Almost half (49%) of the sample reported being less than 35 years of age.

Almost two-thirds of the sample had never performed an abortion (66%) though just over half (51%) had referred a patient for an abortion. Further, 81% stated that they would refer a patient for an abortion though only 36% would themselves prescribe misoprostol, the drug used in medication abortions in Colombia. See table 4 for full sample characteristics.

Table 4: Characteristics of the Sample, n=49

	Frequency	Percent
	(n)	(%)
Socio demographic Characteristics		
Physician Age		
≤25	4	9
26-35	19	40
36-45	15	32
46-55	7	15
>56	2	4
Gynecologist	19	39
Male sex	22	47
Private Medical School Education	29	63
Experience		
Years Practicing Medicine		
<5	13	28
5-10	12	26
11-20	13	28
21-30	8	17
≥31	1	2
Has performed an abortion ever	16	34
Has ever seen an abortion complication	36	77
Would refer a patient for an abortion	38	80
Has referred a patient for an abortion	24	51
Would prescribe misoprostol	17	36
Has prescribed misoprostol	14	30
Believe abortion is a medical service and should be legal in all circumstances	6	13

The survey asked respondents to rate their own knowledge of three abortion techniques: dilation and curettage, manual vacuum aspiration and medical abortion. The scale ranged from "I know nothing about that technique" to "I know a lot and I even have practical experience with that technique." All of the scores are skewed towards high knowledge ratings. Physicians report the most knowledge of medical abortion, with 88% (41) reported having practical or theoretical knowledge. The second most knowledgeable area was dilation and curettage, with 72% (34) of physicians reporting practical or theoretical knowledge. For manual vacuum aspiration, 58% (27)

of physicians reported practical or theoretical knowledge. Further, for manual vacuum aspiration, 13% (6) of physicians reported no knowledge at all of the technique compared to 2% (1) for dilation and curettage and medical abortion. See table 5 for full description.

Table 5: Self-rated knowledge about abortion techniques

	I know nothing about that technique % (n)	I know a little but I don't know how to perform that technique % (n)	I know some and I know how to perform that technique in theory % (n)	I know a lot and I even have practical experience with that technique % (n)
Dilation and Curettage	2% (1)	26% (12)	38% (18)	34% (16)
Manual Vacuum Aspiration	13% (6)	28% (13)	43% (20)	15% (7)
Medical Abortion	2% (1)	11% (5)	45% (21)	43% (20)

We created a logistic regression model to determine factors related to a favorable attitude towards abortion legalization. A success was counted as believing that abortion should be legal all of the time. Of the participants, 13% (n=6) believed that abortion is a medical service and should be legal all of the time. We considered experience and certain demographic variables as potential predictors of interest. See table 6 for all potential predictors of interest stratified by option towards abortion legalization. Before data collection or analysis, we hypothesized that having experience with abortion complications would make doctors more likely to support

legalizing abortion. After backwards elimination, religiosity and male sex remained in the model. However, having witnessed or attended a woman suffering from a complication from an unsafe abortion was an a priori predictor of interest. Although it was not significant, we kept complication in the model to consider the relationship. There was no evidence of collinearity between variables

Table 6: Experience Indicators Stratified by Opinion Towards Legal Abortion

	Total N=49	Believed that abortion should be legal in all circumstances %(n)	Believed that abortion should be legal in some circumstances %(n)	Believed that abortion should be illegal in all circumstances. % (n)
Catholic Religion	73% (32)	16% (5)	81% (26)	3% (1)
Ever seen an abortion	77% (36)*	14% (5)	78% (28)	8% (3)
Ever performed an abortion	34% (16)*	19% (3)	81% (13)	0% (0)
Ever seen an abortion complication	77% (36)*	11% (4)	83% (30)	6% (2)
Religion is very important to daily life	49% (23)*	9% (2)	74% (17)	17% (4)
Male	47% (22)*	5% (1)	82% (18)	14% (3)
Female	53% (25)*	20% (5)	76% (19(4% (1)
Attended a public university	30% (14)	21% (3)	57% (8)	21% (3)
Attended a private university	63% (29)	7% (2)	90% (26)	3% (1)
≤35 years of age	49% (23)	17% (4)	78% (18)	4% (1)

^{*}Out of 47 total

Respondents who identified religion being very important to their daily lives had 66% lower odds (OR=.36 (95% CI= 0.18, 0.61)) of having a favorable opinion towards legal abortion. Further, respondents who identified their sex as male had 97% lower odds of having a favorable opinion towards abortion legalization (OR=0.04 (95% CI= 0.01, 0.20)). Respondents who reported witnessing an abortion complication were not significantly more likely to support legal abortion (OR=2.09 (95% CI=0.56, 7.84). See table 7 for unadjusted and adjusted odds ratios.

Our hypothesis, based on key informant interviews, was that doctors with experience of abortion complications would be more likely to support legal abortion. Our data does not support that hypothesis.

Table 7: Adjusted Odds Ratios, n=47

Variable	Bivariate Ana	lysis	Multiv	variate Analysis
	OR (95% CI)	P-value	Adjusted	P-value
			OR (95%	
			CI)	
Male sex	0.03 (0.006, 0.180)	.11	0.04 (0.01, 0.20)	<0.001
Religiosity (Responded that religion was "Very important" to their daily life)	0.55 (0.23, 1.29)	.25	0.36 (0.18, 0.698)	<0.001
Reported ever seeing an abortion complication	3.38 (1.11, 10.29)	0.0323	2.09(0.56, 7.84)	0.28

The survey asked respondents to read a series of scenarios carefully and decide whether the patient in question should be permitted to access abortion services or not. Before the scenarios, respondents answered whether, in their personal opinion, abortion should be legal under all circumstances, under some circumstances or illegal all of the time. The favorable responses and full scenarios are presented in the table below with responses about abortion opinion (see table 8).

The majority of respondents reported believing that abortion should be legal in some circumstances (n=37, 79%). Of the six (13%) who believed that abortion should be legal in all circumstances, one believed that in the scenario with a pregnant 15-year old, the patient should not be allowed to access abortion. Of the four (9%) who believed that abortion should be illegal

under all circumstances, one believed that the patient with breast cancer should be allowed to access abortion services.

Table 8: Physician Responses to Hypothetical Scenarios in Which Women Desired an Abortion, n=46

Scenario	Should be allowed to access abortion %(n)	Should be allow Among those who believe abortion should be legal under all circumstances, n=6	Among those who believe abortion should be legal in some circumstances n=37	rtion %(n) Among those who believe abortion should be illegal under all circumstances n=4
A 21-year old woman in her third year of college just learned she is 12-weeks pregnant. Her birth control method failed, though she is sure she used it correctly. She is the first person in her town that has been able to attend college. She feels very anxious, depressed and sad when she thinks about continuing the pregnancy.	39% (18)	100% (6)	32% (12)	0 (3)
A 25-year old woman is 12 weeks pregnant. She has two children less than four years of age and lives with a man that frequently physically abuses her. He is against abortion, but she does not want to bring another child into the world under the conditions of physical abuse, especially as this will cause her further economic dependence on her partner. Her depression has worsened significantly since she discovered she was pregnant.	65%(30)	100% (6)	65% (24)	0 (3)
A 28-year old woman is 12-weeks pregnant. Her partner left her after learning she was pregnant. Her pregnancy is unwanted and has caused her a lot of worry and desperation. Two weeks ago, she tried to commit suicide. Her family is watching her because they are worried she will try again if she continues the pregnancy.	71%(32)*	100% (6)	72% (26)	0(3)
A woman has breast cancer and is 12 weeks pregnant. She cannot undergo chemotherapy without ending the pregnancy. If she doesn't receive chemotherapy, there is a high probability that she will die.	96% (44)	100% (6)	100% (37)	33% (1)
A 15 year old girl is 12-weeks pregnant. Before having sex, she had never received any orientation or information about family planning or reproductive health Having a child at this age is not within her life plans.	38% (17)*	83% (5)	33% (12)	0(3)

^{*}Of 45 responses

Strengths and Limitations

The primary strength of this study is in the mixed methodology used to explore barriers to abortion in Bogotá. The key informant interviews allowed us to create a culturally relevant and appropriate survey, as well as offer information that the survey did not reveal. The survey allowed us to explore and begin to test some of the generalizations that key informants made about medical education and physician knowledge of the law. The survey used a complex but probability based sampling scheme, allowing generalization to physicians in public hospitals in Bogotá. If we had had access to more information about the sampling frame of public hospitals before designing the sampling scheme, we would have been able to change the selection probability of hospitals appropriately and better collect information on the larger hospitals that see a higher quantity of patients seeking abortion.

This study also has several weaknesses. As it was a pilot study, the sample was small and limited to Bogotá, which is likely to be fundamentally different than other parts of Colombia. Bogotá is the capital of Colombia, an urban center and the home of several major universities. It is likely that doctors in Bogotá may have greater access to information and trainings on the subject due to their location. The complexity of the sampling scheme will increased the standard errors for the estimates compared to data from a simple random sample (Heeringa, 2010). This is compounded by the small sample size. The small number of clusters (9) results in a small number of degrees of freedom and increases the confidence interval size.

Abortion is a sensitive and political issue. Interviewing key informants at work may have influenced how they discussed barriers, though the interviewers took

precautions to prevent this. For the survey sample, physicians completed the survey in their place of work, which may have influenced responses or decreased the amount of time they spent considering questions.

Three respondents abstained from answering any of the scenarios. There were also two missing responses to the questions about ever referring or ever providing abortions. These missing responses may be for reasons related to the nature of the question or may be missing at random. However, in a small sample, it impacts the data quality.

Finally, we did not ask survey respondents whether they were conscientious objectors or not. This was a conscious decision, as we did not wish to possess information about potential illegal action (objecting to provide abortion and also not referring for abortion). However, this is likely to have some association with abortion opinion.

Discussion

Eight years after the Colombian Constitutional Court legalized abortion in three circumstances, many barriers to legal abortion in Bogotá, Colombia remain. In interviews with key informants, participants reported a range of barriers to legal abortion, focusing on patients' ignorance of the law and physicians lack of experience. The physicians in our sample reported broad knowledge of the law but diverse opinions on when abortion should be allowed and whether abortion should be legal in any circumstance.

In our small sample, we saw that demographic characteristics, religiosity and male sex, showed a stronger association with opinion on abortion legalization than experience with abortion complications, length of time practicing medicine or religious affiliation. A discussion of causation is outside the scope of this paper. These associations, however, suggests a need for targeted messages or trainings for specific groups in reducing stigma and providing abortion services.

Respondents generally reported consistencies in anti-legal abortion or pro-legal abortion opinions. When contrasting opinions toward legal abortion in general with access to abortion in specific circumstances, there were two crossovers. One of the physicians who responded that abortion should be illegal in all cases responded that the woman with cancer should be allowed to access abortion. Additionally, one of the physicians who believed that abortion should be legal in all cases believed that the 15-year old girl with an unwanted pregnancy should not be allowed to access abortion. These differences suggest nuanced views towards abortion as well as potential stigma and judgment towards different motivations for abortion. Research previously conducted in

other settings has shown that stigma can lead to mistreatment and delays in care for women seeking abortion (Mayi-Tsonga et al., 2009). Abortion-related stigma warrants further exploration in Colombia.

Our survey showed the majority of physicians in our sample reported knowledge of the law and the circumstances under which abortion was legal in Colombia. This differs from the qualitative findings by Chaparro and colleagues, who found low knowledge of the law among Colombia physicians interviewed in several cities across Colombia (Chaparro, 2013). This discrepancy may also highlight the difference between Bogotá and other cities.

Our surveyed results showed that self-reported knowledge of the abortion techniques differed by method. A higher proportion of physicians reported lower knowledge of manual vacuum aspiration (MVA) than of dilation and curettage or medication abortion. This is consistent with our key informant interviews, many of who described a gap in medical education. In Prada and colleagues´ study of cost of abortion in Colombia, the use of D&C was more common than MVA in Colombia, resulting in higher costs for abortion and higher risk of complication (Prada et al., 2013).

Physicians in Colombia hold a unique position of power in abortion provision. Not only are they responsible for managing a woman's care; many interpret their role as a gatekeeper for abortion service. The C-355/2006 sentence requires that, in order for a woman to access a legal abortion in the case of risk to her health or life, a physician must certify the existence of said risk. In many cases physicians interpret that they must decide whether a woman should be allowed to access a legal abortion, though this is not the intent of the law (Amado et al., 2010; Dalen, 2013). In the key informant interviews,

participants described how physician opinion limits access and impacts quality of care. This is consistent with published studies from other contexts where abortion access is restricted (Berer, 2000; Mayi-Tsonga et al., 2009).

In the survey, physician opinion towards legal abortion was not related to experience managing abortion complications. This suggests that physicians may be using personal beliefs and not medical experience to inform their patient care. It warrants further exploration in future qualitative and quantitative studies

The lack of a clear regulation for abortion provision appears to have contributed to both ignorance and administrative barriers. Both perspectives of key informants described general ignorance about the law. Among professionals working in abortion and the informants opposed to abortion, participants mentioned that confusion about the law and lack of regulation led to difficulties in providing abortion and practicing medicine. Informants stressed that the entirety of regulations is based on jurisprudence, court decisions, rather than law or regulation from the Ministry of Health. In fact, several of the regulatory statutes have been struck down by one branch of the executive government (Dalen, 2011, 2013). Finally, doctors and hospitals are facing a paradigm shift in which a practice that was entirely illegal is now a health service guaranteed by the State. All of these factors lead to confusion and administrative delays.

One unexplored factor influencing provider and institutional ignorance or confusion surrounding the law was the office of the *Procurador*. The *Procurador* is a position in the executive branch of the government, translated as "Defender of Rights" or "Ombudsman" responsible for sanctioning government offices or officials for violations of rights or the law. Several respondents described this office as a barrier to the

implementation of the law as well as a contributing factor to ignorance surrounding the law.

"And then comes the obstacle that we're having right now and it has a proper name and it's the fact that there is a public functionary with a lot of power in the entire State [government], to send incorrect messages about abortion, to give instructions and generate fear in other public functionaries in the country, so that they don't guarantee the right to abort. It's the *Procurador General de la Nación*. That is definitely another huge obstacle." -- Calliope

Participants alluded to the theme of the influence of the Procurador in several interviews. However, this theme was not fully developed in the interviews and is outside the scope of physician-side barriers. Thus, the theme of the Procurador and the office's specific role in facilitating or blocking abortion access is not developed here. However, this should be considered in future research as a potentially important topic.

In order to open access to legal abortion and decrease the incidence of unsafe abortion, policymakers in the Colombia Ministry of Health must encourage a uniform regulation of the 2006 Court sentence. Further, the Ministry of Health must ensure that doctors have the resources and training to interpret the sentence, provide quality care, and understand their legal obligations to patients. There is an existing evidence-based model for this type of training. Gonzalez-Velez and colleagues conducted an evaluation of trainings in Colombia and other countries on the application of the health exception to expand abortion access. Physicians who had participated in the trainings showed better understanding of the law and higher respect for women's autonomy in making this decision (Gonzalez Velez, 2012). This model could be applied to groups of existing physicians or incorporated into medical school curriculums.

Both the key informants in our sample and demographic characteristics suggest that Bogotá is a unique area of Colombia. Thus, doctors in the Bogotá public hospital system are likely to have a distinct perspective from doctors practicing in other parts of the country, due to greater access to information, universities and trainings. Further national research is necessary to understand physician opinion around abortion throughout Colombia.

We would have liked to triangulate qualitative and quantitative data but the nature of samples did not allow for this. Future research should consider a qualitative exploration of themes from survey results such as the range of favorable opinions to abortion in different scenarios. We believe that the data from this pilot study will allow future researchers to design a better study to explore the determinants of physician actions around abortion provision in Bogotá, Colombia. The results may also suggest directions for exploration of this issue in Colombia outside of Bogotá.

Resource List:

- Amado, E. D., Calderon Garcia, M. C., Cristancho, K. R., Salas, E. P., & Hauzeur, E. B. (2010). Obstacles and challenges following the partial decriminalisation of abortion in Colombia. *Reprod Health Matters*, *18*(36), 118-126. doi: 10.1016/s0968-8080(10)36531-1
- Bautista, C. T., Mejia, A., Leal, L., Ayala, C., Sanchez, J. L., & Montano, S. M. (2008). Prevalence of lifetime abortion and methods of contraception among female sex workers in Bogota, Colombia. *Contraception*, 77(3), 209-213. doi: 10.1016/j.contraception.2007.11.013
- Becker, D., & Olavarrieta, C. D. (2013). Decriminalization of Abortion in Mexico City: The Effects on Women's Reproductive Rights (Vol. 103, pp. 1202-e1204): American Public Health Association.
- Berer, M. (2000). Making abortions safe: a matter of good public health policy and practice. *Bull World Health Organ*, 78(5), 580-592.
- Briozzo, L., Vidiella, G., Rodriguez, F., Gorgoroso, M., Faundes, A., & Pons, J. E. (2006). A risk reduction strategy to prevent maternal deaths associated with unsafe abortion. *Int J Gynaecol Obstet*, 95(2), 221-226. doi: 10.1016/j.ijgo.2006.07.013
- Catholics for Free Choice and Catolicas por el Derecho a Decidir. (2004). A long way from the Vatican: Catholic attitudes towards reproductive rights church-state and related issues in Bolivia, Colombia and Mexico: Catholics for a free choice and Catolicas por el Derecho a Decidir
- . *Conscience*, 25(2).
- Centers for Disease Control and Prevention, C. (2008). Epi Info 7. Atlanta, GA Centers for Disease Control and Prevention Retrieved from http://wwwn.cdc.gov/epiinfo/index.htm
- Central Intelligence Agency, C. (2014, September 10, 2013). The World Factbook: Colombia. *The World Factbook*. Retrieved December 6, 2014
- , 2014, from https://www.cia.gov/library/publications/the-world-factbook/geos/co.html
- Chaparro, N. G., C. Guzmán, D. Rojas, S. Sandoval, N. (2013). Lejos del derecho. La interrupción voluntaria del embarazo en el Sistema General de Seguridad Social en Salud. Bogotá, Colombia: Centro de Estudios de Derecho, Justicia y Sociedad, Dejusticia.
- Contreras, X., van Dijk, M. G., Sanchez, T., & Smith, P. S. (2011). Experiences and opinions of health-care professionals regarding legal abortion in Mexico City: a qualitative study. *Stud Fam Plann*, 42(3), 183-190.
- Cook, R. J., Erdman, J. N., & Dickens, B. M. (2007). Achieving transparency in implementing abortion laws. *Int J Gynaecol Obstet*, *99*(2), 157-161. doi: 10.1016/j.ijgo.2007.07.002
- Cook, R. J., Olaya, M. A., & Dickens, B. M. (2009). Healthcare responsibilities and conscientious objection. *Int J Gynaecol Obstet*, *104*(3), 249-252. doi: 10.1016/j.ijgo.2008.10.023

- Dalen, A. (2011). El aborto en Colombia: cambios legales y transformaciones sociales. (Master of Gender Studies), Universidad Nacional de Colombia, Bogotá, Colombia. Retrieved from http://www.bdigital.unal.edu.co/4876/#sthash.0G1im9Gz.dpuf
- Dalen, A. (2013). La Implementación de la Despenalización Parcial del Aborto en Colombia. Bogotá, Colombia: Dejustica.
- Dayananda, I., Walker, D., Atienzo, E. E., & Haider, S. (2012). Abortion practice in Mexico: a survey of health care providers. *Contraception*, 85(3), 304-310. doi: 10.1016/j.contraception.2011.07.011
- Decision C-355/2006 (2006).
- DePineres, T., Baum, S., & Grossman, D. (2014). Acceptability and clinical outcomes of first- and second-trimester surgical abortion by suction aspiration in Colombia. *Contraception*, 90(3), 242-248. doi: 10.1016/j.contraception.2014.05.002
- Edwards, J. D., Philip D. Paul, Maureen. . (1999). Chapter 9: Surgical Abortion in the First Trimester *A Clinician's Guide to Medical and Surgical Abortion* Churchill Livingstone.
- Faúndes, A. (2012). Strategies for the prevention of unsafe abortion. *International Journal of Gynecology & Obstetrics*, 119, Supplement 1(0), S68-S71. doi: http://dx.doi.org/10.1016/j.ijgo.2012.03.021
- Faúndes, A., Rao, K., & Briozzo, L. (2009). Right to protection from unsafe abortion and postabortion care. *International Journal of Gynecology & Obstetrics*, 106(2), 164-167. doi: http://dx.doi.org/10.1016/j.ijgo.2009.03.032
- Fawcus, S. R. (2008). Maternal mortality and unsafe abortion. *Best Pract Res Clin Obstet Gynaecol*, 22(3), 533-548. doi: 10.1016/j.bpobgyn.2007.10.006
- Fraser, B. (2014). Tide begins to turn on abortion access in South America. *Lancet*, 383(9935), 2113-2114.
- Fredrick, B. (2007). Eliminating unsafe abortion worldwide. *Lancet*, *370*(9595), 1295-1297. doi: 10.1016/s0140-6736(07)61556-6
- Gasman, N., Blandon, M. M., & Crane, B. B. (2006). Abortion, social inequity, and women's health: Obstetrician-gynecologists as agents of change. *International Journal of Gynecology & Obstetrics*, *94*(3), 310-316. doi: http://dx.doi.org/10.1016/j.ijgo.2006.04.018
- Gerdts, C., Vohra, D., & Ahern, J. (2013). Measuring unsafe abortion-related mortality: a systematic review of the existing methods. *PLoS One*, 8(1), e53346. doi: 10.1371/journal.pone.0053346
- Giedion, U., & Uribe, M. V. (2009). Colombia's universal health insurance system. *Health Aff (Millwood)*, 28(3), 853-863. doi: 10.1377/hlthaff.28.3.853
- Gomez-Sanchez, P. I., Escandon, I., & Gaitan-Duarte, H. (2007). [Evaluating postabortion care in 13 Colombian hospitals]. *Rev Salud Publica (Bogota)*, 9(2), 241-252.
- Gonzalez Velez, A. C. (2012). "The health exception": a means of expanding access to legal abortion. *Reprod Health Matters*, 20(40), 22-29. doi: 10.1016/s0968-8080(12)40668-1
- Grimes, D. A., Benson, J., Singh, S., Romero, M., Ganatra, B., Okonofua, F. E., & Shah, I. H. Unsafe abortion: the preventable pandemic. *The Lancet*, *368*(9550), 1908-1919. doi: http://dx.doi.org/10.1016/S0140-6736(06)69481-6

- Grimes, D. A., Benson, J., Singh, S., Romero, M., Ganatra, B., Okonofua, F. E., & Shah, I. H. (2006). Unsafe abortion: the preventable pandemic. *Lancet*, *368*(9550), 1908-1919. doi: 10.1016/s0140-6736(06)69481-6
- Healy, J., Otsea, K., & Benson, J. (2006). Counting abortions so that abortion counts: Indicators for monitoring the availability and use of abortion care services. *Int J Gynaecol Obstet*, 95(2), 209-220. doi: 10.1016/j.ijgo.2006.08.002
- Heeringa, S. W., BT; Berglund, PA. (2010). *Applied Survey Data Analysis*. Boca Raton, FL: Chapman & Hall.
- Hennick, M., Hutter, I, Bailey, A. . (2011). *Qualitative research methods* Thousand Oaks, CA: SAGE Publications Ltd.
- Hoyos Castañeda, I. M. (2010). Informe a La Sentence C-355. Bogotá, Colombia: Procuraduría General de la Nación.
- 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(2), 128-130. doi: 10.1016/j.contraception.2012.10.020
- Jones, D. A. (2004). *Soul of the Embryo: Christianity and the Human Embryo*: Bloomsbury Publishing.
- Kane, G. G., B. Skuster, P. (2013). When Abortion Is a Crime: The threat to vulnerable women in Latin America (pp. 28). Chapel Hill, NC: Ipas.
- Khan, K. S., Wojdyla, D., Say, L., Gulmezoglu, A. M., & Van Look, P. F. (2006). WHO analysis of causes of maternal death: a systematic review. *Lancet*, *367*(9516), 1066-1074. doi: 10.1016/s0140-6736(06)68397-9
- Koch, E. (2012). [Overestimation of induced abortion in Colombia and other Latin American countries]. *Ginecol Obstet Mex*, 80(6), 442-443.
- Kulczycki, A. (2011). Abortion in Latin America: changes in practice, growing conflict, and recent policy developments. *Stud Fam Plann*, 42(3), 199-220.
- Marston, C. C., J. (2003). Relationships between Contraception and Abortion: A Review of the Evidence. *International Family Planning Perspectives*, 29(1), 6-13.
- Mayi-Tsonga, S., Oksana, L., Ndombi, I., Diallo, T., de Sousa, M. H., & Faundes, A. (2009). Delay in the provision of adequate care to women who died from abortion-related complications in the principal maternity hospital of Gabon. *Reprod Health Matters*, *17*(34), 65-70. doi: 10.1016/s0968-8080(09)34465-1
- McMurtrie, S. M., Garcia, S. G., Wilson, K. S., Diaz-Olavarrieta, C., & Fawcett, G. M. (2012). Public opinion about abortion-related stigma among Mexican Catholics and implications for unsafe abortion. *Int J Gynaecol Obstet, 118 Suppl 2*, S160-166. doi: 10.1016/s0020-7292(12)60016-2
- Moloney, A. (2009). Unsafe abortions common in Colombia despite law change. *The Lancet*, *373*(9663), 534.
- Mosquera Becerra, Y. L., DI; Castro, L; Gomez G, OL. (2003). Prevalencia de Aborto Inducido y Embarazo No Planeado en las Localidades de Santa Fe,Usme Y Ciudad Bolívar de la Ciudad de Bogotá", *Investigaciones en Seguridad Social y Salud*. Bogotá, Colombia: Fundacion para La Educación y el Desarrollo Social.
- Myers, J. E., & Seif, M. W. (2010). Global perspective of legal abortion Trends analysis and accessibility. *Best Pract Res Clin Obstet Gynaecol*, *24*(4), 457-466. doi: 10.1016/j.bpobgyn.2010.04.002

- Prada, E., Biddlecom, A., & Singh, S. (2011). Induced abortion in Colombia: new estimates and change between 1989 and 2008. *Int Perspect Sex Reprod Health*, *37*(3), 114-124. doi: 10.1363/3711411
- Prada, E., Maddow-Zimet, I., & Juarez, F. (2013). The cost of postabortion care and legal abortion in Colombia. *Int Perspect Sex Reprod Health*, *39*(3), 114-123. doi: 10.1363/3911413
- Random.org. (2014, 2014). True Random Number Service. Retrieved 6/24/2014, 2014, from random.org/integers
- Rosenberg, M. J., Rochat, R. W., Jabeen, S., Measham, A. R., Obaidullah, M., & Khan, A. R. (1981). Attitudes of rural Bangladesh physicians toward abortion. *Stud Fam Plann*, *12*(8-9), 318-321.
- Rossier, C. (2003). Estimating induced abortion rates: a review. *Stud Fam Plann*, 34(2), 87-102.
- Rowlands, S. (2011). Misinformation on abortion. *Eur J Contracept Reprod Health Care*, *16*(4), 233-240. doi: 10.3109/13625187.2011.570883
- Secretaria de Salud, B. (2006). Aborto Inducido Un Problem de Salud Pública. Bogotá, Colombia: Secreataria de Salud, Alcaldia Mayor de Bogotá.
- Sedgh, G., Singh, S., Shah, I. H., Ahman, E., Henshaw, S. K., & Bankole, A. (2012). Induced abortion: incidence and trends worldwide from 1995 to 2008. *Lancet*, *379*(9816), 625-632. doi: 10.1016/s0140-6736(11)61786-8
- Silva, M., Billings, D. L., Garcia, S. G., & Lara, D. (2009). Physicians' agreement with and willingness to provide abortion services in the case of pregnancy from rape in Mexico. *Contraception*, 79(1), 56-64. doi: 10.1016/j.contraception.2008.07.016
- Singh, K., & Ratnam, S. S. (1998). The influence of abortion legislation on maternal mortality. *Int J Gynaecol Obstet, 63 Suppl 1*, S123-129.
- Singh, S. (2006). Hospital admissions resulting from unsafe abortion: estimates from 13 developing countries. *The Lancet*, *368*(9550), 1887-1892.
- Singh, S., & Wulf, D. (1994). Estimated levels of induced abortion in six Latin American countries. *International Family Planning Perspectives*, 4-13.
- Sjostrom, S., Essen, B., Syden, F., Gemzell-Danielsson, K., & Klingberg-Allvin, M. (2014). Medical students' attitudes and perceptions on abortion: a cross-sectional survey among medical interns in Maharastra, India. *Contraception*, 90(1), 42-46. doi: 10.1016/j.contraception.2014.02.005
- Udo Kuckartz Berlin. (2011). MAXQDA 11 Berlin: Udo Kuckartz
- Walsh, J., Møllmann, M., & Heimburger, A. (2008). Abortion and human rights: Examples from Latin America. *IDS bulletin*, 39(3), 28-39.
- WHO, W. H. O. (2008). Unsafe abortion: global and regional estimates of the incidence of unsafe abortion and associated mortality
- in 2008. (Vol. 6). Geneva, Switzerland: World Health Organization.
- World Health Organization, W. (2012). Safe abortion: technical and policy guidance 2nd edition.

Appendices:

Appendix A: Sample Interview Guide

Para el doctor Odysseus:

Descríbanos su trabajo y responsabilidades actuales.con respecto a la IVE.

¿Cómo llegó usted a este trabajo?

¿Cómo era su capacitación en el tema?

¿Qué son las barreras que enfrentan mujeres con un embarazo no deseado en Bogotá?

¿Qué es la política del distrito con respecto a la objeción de conciencia de los proveedores?

Prueba: quien tiene derecho de objeción? como/cuando necesitan anunciar su objeción? sus responsabilidades (remitir), la realidad (remiten o no?)

¿Qué deben ser los próximos pasos del Ministerio de Salud para asegurar el acceso al aborto seguro y legal? de otros actores?

¿Cómo podemos acercarnos a otros hospitales para poder hacer encuestas con médicos ginecólogos y que trabajan en planificación familiar?

¿Debemos traer una carta de presentación? a que horas sería lo mejor?

¿Alguna recomendación de como acercar a los médicos/gerentes?

For Dr. Odysseus:

Describe your job and current responsibilities regarding abortion.

How did you come to do this job?

What was your training in the topic?

What are the barriers that women face with an unwanted pregnancy in Bogotá?

What is the district policy regarding conscientious objection of providers?

Probe: Who has the right to conscientious objection? How and when do they need to announce their objection? What are their responsibilies (i.e., to refer?)? In reality? What should the next steps of the Ministry of Health be to assure access to safe and legal abortion? What about other actors?

How can we come to other hospitals to carry out surveys with gynecologists and doctors who work in family planning?

Should we bring a letter of presentation? At what hours would be best?

Any recommendation for approaching the doctors? their managers?

Appendix B: Survey Instrument

Introducción y Resumen de Investigación

Gracias por su interés en nuestro proyecto de investigación. Quisiéramos compartir todo lo que Ud. necesita saber antes de que Ud. tome su decisión de participar o no participar en este proyecto de investigación. Su participación es completamente voluntaria. Si Ud. decide participar, , tenga presente que Ud. puede cambiar de parecer y retirarse del mismo en cualquier momento.

- 1) El propósito de este proyecto de investigación es explorar las experiencias y actitudes que los proveedores Colombianos (médicos gineceo-obstetras, y enfermeras) tienen sobre la interrupción voluntario del embarazo (aborto) (IVE).
- 2) Este proyecto de investigación se encuentra financiado por Emory University Global Health Institute.
- 3) Esta encuesta tomará en promedio 15 minutos para completarse en su totalidad.
- 4) Si Ud. decide participar, se le pedirá que conteste algunas preguntas sobre sus experiencias y actitudes profesionales con respecto a la interrupción voluntaria del embarazo.
- Algunas preguntas pueden ser sensibles o incómodas de contestar por Ud. durante la encuesta.
- **6)** Este proyecto de investigación tiene como objetivo beneficiar a las mujeres Colombianas en el futuro.
- 7) Su privacidad es muy importante para nosotras. El grupo de investigación no va a solicitarle, ni vamos a grabar su nombre en ningún momento. Sus respuestas no estarán vinculadas de ningún modo con su nombre o información de contacto. Tomaremos todas las medidas necesarias para evitar que alguien diferente al grupo de investigación pueda conocer sobre su participación en este proyecto de investigación.

Información de Contacto

Si Ud. tiene alguna pregunta acerca de este proyecto de investigación, el papel que Ud. va a desempeñar, sus derechos como participante en este estudio, o si Ud. tiene preguntas, inquietudes o quejas, Ud. puede contactar a:

Kaitlyn Stanhope Kaitlyn.keirsey.stanhope@emory.edu (001) 404-556-0169

Emory Institutional Review Board: 01-1-404-712-0720 o llamada gratuita al: 1-877-503-9797 o por correo electrónico irb@emory.edu

Gracias por decidir participar en este proyecto. Su tiempo y perspectiva es muy valiosa para nosotros. Para llenar la encuesta, tiene dos opciones:

 Puede imprimir la encuesta, llenarlo, y escanear la encuesta con 	
esceaneador o un app (por ejemplo: CamScanner para Android o Genius Scan).

2. Puede llenarla en el mismo documento, resaltando las respuesta.

Por ejemplo:

¿Qué universidad asiste?

Emory University

Brown University

Universidad de los Andes

University of Georgia

Sección I

Información Demográfica

1. ¿Cuántos años cumplidos tiene Ud.? _____

Menor de 25

26-35

36-45

46-55

Mayor de 56

2. ¿Cual es su sexo?

Masculino

Femenino

Prefiero no responder

3. ¿En qué tipo de institución hizo su carrera medical? *Por favor, selecciona todas que aplican.*

Universidad privada colombiana

Universidad pública colombiana

Universidad religiosa colombiana

Universidad fuera de Colombia

Otra, por favor especifique _____

4. ¿Cuánto tiempo lleva Ud., ejerciendo medicina?

Menos que 5

5-10

11-20

21-30

31 o más

5. ¿Cual es su título profesional?

Médico

Ginecologo-Obstetra

Enfermera(o)

Otro, por fàvor especifica _____

6. ¿Ud. pertenece a algún grupo religioso?

Sí

No

Prefiero no responder

7. ¿.Qué religión profesa?

Católico

Evangélico

Otra, por favor especifique _____

8. ¿Qué tan importante es su religión para Ud. en su vida cotidiana?

Muy importante

Algo importante

Neutral

No tan importante

No soy religioso

Sección II

Sus Experiencias

Las siguientes preguntas son sobre sus experiencias como Profesional de la Salud de las mujeres. Interrupción voluntaria del Embarazo (IVE) será utilizado para referir a un servicio clínica mientras un aborto inducido refiere a cualquier terminación del embarazo, por métodos clínicos u otros.

1. ¿Alguna vez Ud. ha recibido y/o atendido a alguna mujer que haya tenido complicaciones relacionadas con un aborto inducido?

Sí

No

Prefiero no responder

2. ¿Alguna vez usted ha realizado una interrupción voluntaria del embarazo (IVE)?

Sí

No

Prefiero no responder

3. ¿Alguna vez usted ha visto una IVE?

Sí

No

Prefiero no responder

4. ¿En la actualidad, en su lugar de trabajo, ofrecen el servicio de "interrupción voluntaria del embarazo" (IVE)?

Sí

No

Prefiero no responder

Si la respuesta es no o prefiero no responder, salte a pregunta 6.

5. ¿En cuáles circunstancias ofrecen el servicio de IVE? *Marque todas que aplican.*Por causa de violación o incesto

Por riesgo a la vida de la mujer Por riesgo a la salud de la mujer En caso de feto incompatible con la vida

6. ¿Alguna vez Ud. ha remitido a alguna mujer al servicio de IVE?

Sí

No

Prefiero no responder

7. ¿Ud. remitiría una paciente a algún proveedor que ofrezca el servicio de IVE si la paciente lo solicita?

Sí

No

Prefiero no responder

8. Evalúe su conocimiento sobre el aborto por dilatación y curetaje.

No sé nada sobre el aborto por dilatación y curetaje

Sé algo sobre el aborto por dilatación y curetaje, pero no sé como hacer uno Sé algo sobre el aborto por dilatación y curetaje, y sé cómo hacer uno en teoría

Sé mucho sobre el aborto por dilatación y curetaje, incluso experiencia práctica

9. Evalúe su conocimiento sobre el aborto por aspiración.

No sé nada sobre el aborto por aspiración

Sé algo sobre el aborto por aspiración, pero no sé como hacer uno

Sé algo sobre el aborto por aspiración, y sé cómo hacer uno en teoría

Sé mucho sobre el aborto por aspiración, incluso experiencia práctica

10. Evalúe su conocimiento del aborto farmacológico.

No sé nada sobre el aborto farmacológico

Sé algo sobre el aborto farmacológico, pero no sé como hacer uno

Sé algo sobre el aborto farmacológico y sé cómo administrar uno en teoría

Sé mucho sobre el aborto farmacológico incluso experiencia práctica

11. ¿Qué medicamento se usa para un aborto farmacológico?

12. ¿Sabe usted donde se puede adquirir algún medicamento para interrumpir un embarazo?

Sí

No

Prefiero no responder

13. ¿Ud. le recetaría a una mujer algún medicamento para interrumpir el embarazo?

Sí

No

Prefiero no responder

14. ¿Ud. le ha recetado a una mujer algún medicamento para interrumpir un embarazo?

Sí

No

Prefiero no responder

15. ¿Asistiría Ud. a un programa de capacitación cuyo currículo incluye el aborto?

Sí

No

Ya estoy capacitado(a) en el tema

Prefiero no responder

Sección III

Sus Actitudes y Perspectivas

Las siguientes preguntas son sobre sus actitudes y perspectivas relacionadas con la IVE.

1. ¿Ud. esta de acuerdo con cual de los siguientes oraciones?

El aborto es un servicio médico y debe ser legal a una mujer que desea realizarlo.

El aborto debe ser legal en algunas circunstancias.

El aborto debe ser ilegal bajo todas circunstancias.

Por favor, lea detenidamente los siguientes casos clínico y marque con una "X" si la paciente debe acceder al servicio del aborto o no:

2. Una mujer de 21 años cursando tercer año de universidad, se acaba de enterar que tiene 12 semanas de embarazo. Su método anticonceptivo falló, aunque está segura que lo usó correctamente. Ella es la primera persona de su pueblo que ha podido asistir a la universidad. Se siente muy angustiada, deprimida y triste al pensar en continuar el embarazo.

Sí, debe acceder al servicio de aborto

No, no debe acceder al servicio de aborto

3. Una mujer de 25 años tiene 12 semanas de embarazo. Tiene dos hijos menores de cuatro años y vive con un hombre que con frecuencia la maltrata físicamente. Él está en contra del aborto, pero ella no quiere traer al mundo a otro hijo debido a estas condiciones de maltrato físico; especialmente porque le va a ocasionar mayor dependencia económica de su pareja. Su depresión ha empeorado significativamente desde que descubrió que está embarazada.

Sí, debe acceder al servicio de aborto

No, no debe acceder al servicio de aborto

4. Una mujer de 28 años tiene 12 semanas de embarazo. Su pareja se dejó después de aprender que estaba embarazada. El embarazo es no deseado y ha generado mucha preocupación y desesperación en la mujer. Hace dos semanas, intentó suicidarse. Su familia le está vigilando porque están preocupados que se intentará otra vez si continua el embarazo.

Sí, debe acceder al servicio de aborto

No, no debe acceder al servicio de aborto

5. Una mujer tiene cáncer de las mamas y 12 semanas de embarazo. No puede hacer el quimioterapia sin terminar el embarazo. Si no recibe quimioterapia, hay alta probabilidad que se muere.

Sí, debe acceder al servicio de aborto

No, no debe acceder al servicio de aborto

6. Una niña de 15 años está con 12 semanas de un embarazo no deseado. Antes de tener relaciones sexuales, no había recibido ninguna orientación o información sobre planificación o salud reproductiva. Tener un hijo a esa edad no está dentro de su proyecto de vida.

Sí, debe acceder al servicio de aborto

No, no debe acceder al servicio de aborto

Sección IV Conocimiento

Las siguientes preguntas son sobre su conocimiento de la sentencia C-355 de 2006.

1. ¿Ud. conoce la sentencia C-355 de 2006 que despenalizó el aborto en Colombia?

Sí

No

Prefiero no responder

Si responde no, salta al fin de la encuesta

2. ¿Ud. que opina con respecto a la sentencia C-355/2006?

Es justo

A veces es justo

Debe incluir bajo todas las circunstancias a el embarazo no deseado

No estoy de acuerdo con C-355/2006

Ha llegado al final de la encuesta

Gracias!

Muchisimas gracias a Ud. por compartir sus sentimientos y actitudes con respecto al tema del aborto. Si usted tiene alguna duda o pregunta, se puede contactar a nuestro equipo de investigación.

Appendix C: Translated Quotations

Speaker	Spanish	English
Dr. Odysseus, p.28 Hector, p.28	Es el desconocimiento Si a ti como ciudadano no te conoces tus derechos, no los ejerces. Los médicos y el personal de salud también desconocen la interrupción del embarazo. También desconocen que está siendo legal, también desconocen los causales, también desconocen la autonomía de la mujer	It's ignorance if you don't know your rights you don't exercise them. The doctors and health professionals do not know about the interruption of pregnancy [abortion]. They also don't know that it's legal, also they don't know the causes [under which abortion is permitted according to C-355/2006], also they don't know about women's autonomy.
Dr. Danae, p.28	a [clinic name] a solicitar un aborto, no saben que es un derecho y vienen y preguntan como con temor y ¿será que sí es ilegal o no? Hay un desconocimiento a qué derechos tienen los	the clinic to ask for an abortion, [they] do not know that it's a right and come and ask with fear, '"Is it really legal or not?"" There is ignorance of what rights doctors have and in
	médicos y de tener conciencia en qué momento si pueden y en qué momento no.	which moments they can use conscientious objection and which not."
Hector, p.28	La causal salud, es entendida a que tiene que estarse muriendo la paciente para poder solicitar una interrupción legal, ese es el concepto general que tiene la población médica por lo menos en Colombia, entonces hay un desconocimiento del alcance real de la sentencia, que impide prestar los servicios de la manera más adecuada.	The right to health is understood as though the patient has to be on the point of death, this is the general concept that the medical population has in Colombia. So there is a misunderstanding of the actual reach of the sentence, which impedes providing services in an adequate manner.
Minerva, p.29	Entonces, la gente se sintió desinformada, creyeron que como se caía ese decreto, ya el aborto volvía a estar	So, people felt misinformed, they thought that since the decree was struck down, abortion was illegal again,

	penalizado, pero no era así, la sentencia de la Corte sigue vigente, independientemente de que haya o no hay reglamentación	but it wasn't like that, the Court sentence continues to exist, independent of whether there is or is not regulation.
Calliope, p.29	Es que efectivamente a lo largo de los años, ya llevamos ocho años de implementar esa sentencia, se ha logrado un marco legal muy fuerte. Un marco legal donde se cubren todos los aspectos, para lograr una interrupción voluntaria del embarazo. Muchas aseguradoras e instituciones no necesariamente garantizan ese derecho y es necesario que haya sanciones un poco para generar la idea de que esto no es un favor que ese está haciendo a las mujeres, sino una obligación legal y la garantía a un derecho.	Effectively, after years, we are eight years after the implementation of that sentence [C-355/2006], a strong legal framework has been achieved. A legal framework that covers all aspects, to achieve a voluntary interruption of pregnancy." She goes on to explain "Not all insurance companies and institution actual guarantee that right [to abortion under the three cases] and it's necessary to apply sanctions, a little to generate the idea that this isn't a favor that they are doing for women, but, instead, a legal obligation and guaranteed right.
Minerva, p.29	Además de lo jurídico y además de lo médico, tenemos que insistir en la denuncia, en denunciar estos casos y hacer una incidencia muy fuerte, para que el Estado realmente se comprometa con la garantía de los derechos a las mujeres	In addition to the judicial and medical work, we need to insist on filing charges, on filing charges against those cases [violations of the right to legal abortion] and to conduct strong advocacy, so that the State will truly follow through and guarantee the rights of women
Thalia, p.30	Una de las barreras más importantes, es el tema de la edad gestacional. Cuando las mujeres llegan con el embarazo muy avanzado y aunque la norma en Colombia diga que no hay límite de edad gestacional	One of the most important barriers is the topic of gestational age. When women arrive with a very advanced pregnancy and, though the norms in Colombia say there is no gestational age limit in

	en la vida práctica no es cierto. Y entonces, allí viene de nuevo la necesidad de intervenir, porque incluso el Centro Amigable, tiene un límite de semanas, ellos atienden hasta la semana doce o quince y con muchas dificultades, donde hay que intervenir. Entonces, ese es el sentido del acompañamiento.	practical life that's not true. And so, there comes once again the need to intervene, because even in a public abortion clinic, they attend until the 12th or 15th week and with difficulties
Portia, p.30	Esos límites tienen que ver con la técnica que se utiliza para realizar el procedimiento. Nosotros aquí en Colombia, no hemos implementado el protocolo de inducción de daño fetal. En ese sentido, cuando el feto es totalmente viable y no hay compromiso de la vida de la mujer, pues digamos que no hay un médico o un profesional que haya decidido hacer ese procedimiento en esos casos.	These limits have to do with the techniques used to carry out the procedure. Here in Colombia, we have not implemented the protocol of dilation and extraction. In this sense, when the fetus is totally viable and there is no risk to the life of the mother, well, let's say that there isn't a doctor or professional who has decided to do the procedure in those cases.
Dr. Danae, p.30	Uno analiza el aborto y se empieza a da cuenta de los vacios. Por ejemplo, a mi parece un vacio muy grande que no se haga mención sobre la edad gestacional, no es lo mismo pensar en un feto que tiene una posibilidad de vida en uno que no la tiene, no es lo mismo abortar un feto en la semana ocho.	When one analyzes abortion, she begins to realize the gaps [in sentence C-355/2006]. For example, it seems like a huge gap to me that there is no mention of gestational age, it's not the same to think of a fetus with the possibility of life as one without on, it's not the same to abort a baby in week eight.
Dr. Perseus, p.31	Digamos que permite si una muchacha o un estudiante si está capacitado para manejar el aborto incompleto, espontaneo, pues	Let's say that if a student is trained to manage an incomplete abortion, a miscarriage, well, obviously she's trained to do an induced abortion, it's not a

	alariamanta astéit-1	his different on 1 1 - 4 1-
	obviamente está capacitado	big different and what there is to do, the care, let's say the antibiotics, the mechanics of asepsis and all the care is the sameSure,
	para hacer un aborto	
	inducido, no es muy grande	
	la diferencia y lo que hay	
	que hacer, los cuidados,	whoever wants can use this
	digamos el antibiótico, los	to do induced abortion, a
	mecánicos de asepsia todo el	voluntary interruption of
	manejo es lo mismo	pregnancy, well, this
	Claro, el que lo quiera usar	technique will work, because it's the same, but
	en otra parte para practicar	here we're not going to
	un aborto inducido, una	teach it for that reason.
	interrupción voluntaria del	
	embarazo, pues esa técnica	
	le sirve, porque es la misma,	
	pero aquí no se la van a	
	enseñar para ese fin.	
Thalia, p.31	No está dentro del pensum,	It's [abortion training] not
111a11a, p.31	dentro del curriculum no	within the syllabus, it
	existeLo que implican los	doesn't exist within the
	métodos de interrupción en	curriculumAnd what this
	las edades tempranas, cómo	means for interruption at
	se hace hoy por hoy en	early [gestational] ages
	general en Colombia y es	it's that they still use
	que para embarazos muy	curettage or dilation when
	chiquitos, todavía se utiliza	there is a possibility of
	el curretage, se utiliza la	using much cheaper, less
	dilatación cuando hay la	invasive, safer techniques,
	posibilidad de utilizar técnicas mucho más	but because of resistance by doctors to train and change
	económicas, menos	their traditional manner of
	invasivas, más seguras, pero	training, well, they've said
	por una resistencia de los	no."
	médicos a entrenarse y a	
	cambiar como su manera	
	tradicional en la que los	
	prepararon, pues entonces	
II . 21	decían que no.—	
Hector, p.31	La formulación de	The use of misoprostol is
	misoprostol, tampoco es conocida adecuadamente	also not adequately known
	por los médicos, porque no	by doctors, because they aren't trained to interrupt
	se les forma para	pregnancies. I think that
	interrumpir abortos. Yo creo	technical ignorance is also a
L		

	que el desconocimiento técnico, también es una barrera para la prestación de servicios.	barrier to providing services.
Minerva, p.32	Otra barrera, son los servicios de salud, hay hospitales y hay instituciones que prestan el servicio en salud, pero no lo hacen de la mejor manera, todavía, se someten a las mujeres a tratos crueles e inhumanos, cuando hay métodos, técnicas de practicarse el aborto de la manera más sencilla, más humana y más higiénica.	Another barrier is the health services, there are hospitals and institutions that offer the health service, but not in the best way, even today, they subject women to cruel and inhumane treatments, when there are methods, techniques of practicing abortion in the most simple, most humane and most hygienic way.
Calliope, p.32	Luego hay unos obstáculos que vienen como desde el punto de vista de esas creencias personales de muchas personas que atienden a esta mujer y que tratan de imponer esas creencias personales, sobre las creencias personales de ella. Hay casos donde por ejemplo llaman al personal religioso que esté en el hospital, para que convenza a la mujer de que no aborte, hay casos donde las trabajadoras sociales les dicen que lo que usted está haciendo es un pecado, se va air par el infierno, ese tipo de prácticas.	Then there are some obstacles that come from the perspective of those personal beliefs of many people who attend that woman and who try to impose those personal beliefs, over her personal beliefs. There are cases, for example, when they call the religious staff that is in the hospital to convince the woman not to abort. There are cases when the social workers tell them that what you are doing is a sin, you are going to go to hell, that type of practice.
Dr. Priam, p.32	La posición nuestra, es una posición favorable a la vida, que es compatible con cualquier religión, incluso por ateos. De hecho, por ejemplo, encontramos que muchas de las críticas a los objetores de conciencia, en	Our [pro-life activists and conscientious objectors] position, is a position in favor of life, which is compatible with any religion, including atheists. In fact, for example, we find that many of the critiques of

	1.	
	los comentarios que se	the conscientious objectors,
	hacían en relación en contra	in the comments made
	de la objeción de conciencia,	against conscientious
	se decía que era por razones	objection, it's said that it
	de conciencia que	was because of reasons of
	objetábamos en conciencia	conscientious that we object
	el aborto y no es cierta.	to abortion. That's not true.
	Existen personas ateas,	There exist people who are
	agnósticas, que también son	atheists, agnostics, who are
	objetores de conciencia, que	also conscientious objectors,
	no son favorables al aborto,	who are not in favor of
	porque respetamos la vida	abortion, because we
	humana.	respect human life.
Calliope, p.46	Y luego viene el obstáculo	And then comes the
	que estamos teniendo en	obstacle that we're having
	este momento y tiene	right now and it has a
	nombre propio y es el hecho	proper name and it's the fact
	de que hay un funcionario	that there is a public
	público con alto poder en	functionary with a lot of
	todo el Estado, para mandar	power in the entire State
	mensajes equivocados sobre	[government], to send
	el aborto, para dar	incorrect messages about
	instrucciones y generar	abortion, to give
	miedo en los demás	instructions and generate
	funcionarios públicos del	fear in other public
	País, para que no garanticen	functionaries in the country,
	el derecho al aborto y es	so that they don't guarantee
	Procurador General de la	the right to abort. It's the
	Nación. Es como otro gran	Procurador General de la
	obstáculo definitivamente	Nación. That is definitely
		another huge obstacle.

Appendix D: Complete Weights for Survey Respondents

Weight	Weight	Est. Weight	Total
for	for Clinic	for	Weight
Hospital		participants	
2.20	1.00	4.50	9.90
2.20	1.00	5.43	11.94
2.20	1.00	2.64	5.80
2.20	3.00	1.00	6.60
2.20	3.00	1.67	11.00
2.20	1.00	1.00	2.20
2.20	1.00	1.00	2.20
2.20	10.00	1.00	22.00
2.20	10.00	1.00	22.00
2.20	4.00	1.00	8.80
2.20	4.00	1.50	13.20
2.20	1.00	8.00	17.60
2.20	4.50	1.00	9.90
2.20	4.50	1.00	9.90