# Knowledge and attitudes towards abortion among medical students at the University of Buenos Aires, Argentina



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### **Abstract**

# Background

In Argentina abortion is considered a crime, but still an estimated 500,000 abortions occur every year. Abortion can be punished with up to 4 years in prison for the woman undergoing the abortion or for the performers of the abortion. There are different interpretations of what are the exceptions form punishable abortion. From our understanding of the law, abortion is not punishable when the pregnancy has occurred after rape, or if the pregnancy puts the mother's life at risk, her mental health at risk or if it poses a risk of progression of prior disease. The complications of illegal and unsafe abortions are the leading cause of maternal mortality in Argentina.

### Purpose

We wanted to investigate the Argentinian final year medical student's knowledge and attitudes towards abortion and compare their results with the results of the first year students who were questioned the year before.

### Methods

An anonymous questionnaire regarding sexual and reproductive health was handed out to 457 medical students at their final year at the University of Buenos Aires. The data was plotted and processed in SPSS. We compared our results with the results of a previous study of students in their first year of the medical school at the same university. In the comparison we used Pad Software to make a Fishers exact test to calculate the two tailed P-values.

### Results

More than 90% (n: 423) of the final year students believe that abortion is not punishable under some circumstances while 4,2 % (n:19) thought that abortion is illegal in every case. In terms of attitude 31,5 % (n:144) of the students answered that abortion should always be legal, while more than half (n:263) of the students believed that abortion should be legal under some circumstances. Still 4,6 % (n:21) think that it should always be illegal. When compared with the results of the survey of the first year students we found that there is a significant higher level of knowledge and more students have pro-abortion opinion among the final year students. But still most final year medical students do not possess complete knowledge about the abortion law.

# **Conclusion**

As unsafe abortion is one of the main causes for maternal mortality in Argentina it is important to secure legal abortion to those entitled to it. Physicians' lack of knowledge of the law and how to act when a woman requests abortion, is one of the major obstacles that can prevent a woman from getting safe abortion and making her turn to an unsafe option. Our conclusion is that the medial students today have inadequate knowledge of the present abortion law. Thus measures have to be taken by the Faculty of Medicine of University of Buenos Aires to ensure that the students do not end up as physicians without knowledge of which patients who are entitled to legal abortion.

### **Introduction:**

This assignment is a part of the medical education at the University of Oslo. During our study we need to write student thesis on an optional topic within health science.

We have been supervised by Babill Stray-Pedersen, professor in obstetrics and gynecology at Oslo University Hospital, Rikshospitalet. She had a cooperation project with the University of Buenos Aires regarding the knowledge and attitude of the Argentinean medical students towards family planning and abortion law.

The project included many aspects of both family planning and abortion but we focused mainly on the abortion issue. A similar project with the same cooperation was done one year earlier, the only difference being that the study was conducted on first year students while we questioned the final year's students. Having the results from both the first and final year students gave us the opportunity for comparing the results to see if the students' knowledge improved and attitudes changed during their 5 years in medical school at the University of Buenos Aires.

We spent a month in Buenos Aires during the summer of 2012 taking part in the administration of the survey together with the Argentinian group led by gynecologist Belén Provenzano Castro.

### **Problem statement**

In Argentina abortion is considered a crime, but still an estimated 500,000 abortions occur every year, constituting approximately 40 per cent of all pregnancies. The consequence of these illegal and unsafe abortions is the leading cause of maternal mortality. Exceptions for when abortion is punishable is if a woman becomes pregnant after being raped, if the mothers health is at risk, if the mothers mental health is at risk, or if the pregnancy poses a risk of progression of prior disease. But though these exceptions are included in guidelines handed out by the government, the knowledge among physicians and the many different versions of guidelines between different provinces and also sometimes complete lack of guidelines, can make it difficult for the pregnant woman to get answers and if she does, these answers might not be correct.

Women in Argentina are legally entitled to health services such as contraception, voluntary sterilization, legal abortion and post-abortion care. However, Human Right watch and the World Health Organization (WHO) have pointed out multiple barriers that prevent women in Argentina from making independent decisions about their health and life related to reproduction. Human Right Watch states that the main problem is that the laws and policies made to benefit women, such as the legal exceptions to the general criminalization of abortion, often go unimplemented(1).

We believe that increased knowledge among the future doctors is of key importance to improve the current situation for women in Argentina.

In this study we looked at knowledge and attitudes towards abortion among the final year medical students. Further we also compared the knowledge and attitudes among the first and final year students. Though these are not the same students, still there is reason to believe that a comparison can give an indication on how the topic is covered during the medical education and whether changes should be introduced to better make the students prepared for future work.

# **Background**

# Maternal mortality and unsafe abortion

### Worldwide

Maternal mortality is a worldwide problem, causing 287 000 deaths per year, yielding a ratio of 260 maternal deaths per 100 000 live births(2).

The main causes of maternal mortality are complications in relation to pregnancy and childbirth. 80% are related to severe bleeding, infections, pre-eclampsia/eclampsia and unsafe abortion(3). Unsafe abortion is by the WHO defined as "a procedure for terminating an unintended pregnancy carried out either by persons lacking the necessary skills or in an environment that does not conform to minimal medical standards or both".

Unsafe abortion has been described as "one of the most neglected sexual and reproductive health problems in the world today", and is a major public health problem throughout many developing countries. Unsafe abortion alone counts for about 13% of maternal deaths worldwide and is thereby the main cause (4). In 2003 the WHO estimated that among 42 million terminated pregnancies 20 million where done unsafely. The total number of unsafe abortions is rising. This seems to be due to an increased number of fertile women rather than an increase in the ratio, which remains stable at about 14 unsafe abortion per 1000 women aged 15-44 in the last 10 years (5). Most of these women are from developing countries. As a result of these unsafe abortions, 5 million women suffer severe complications like hemorrhage and sepsis as well as illness and lifelong disability. In addition, unsafe abortions causes about 50 000 or more maternal deaths and leaves 220 000 children without their mother (5).

### Latin America

In Latin America and the Caribbean, approximately 4.2 million abortions where conducted in 2008, almost three-fourths of them in South America. Virtually all these procedures were illegal and many unsafe (6). Numbers from 2003 show that the estimated annual rate of unsafe abortion in Latin America was 29 per 1,000 women aged 15–44, whereas the rate of safe procedures was one per 1.000(7).

The majority of Latin American countries maintain highly restrictive abortion laws. About 7

of the 34 countries and territories in Latin America do not permit abortion for any reason. (8). Cuba, Guyana, Puerto Rico and Uruguay offer abortion on demand and so does Mexico City, unlike the rest of Mexico(9).

The figure shows rates of unsafe abortion in some selected regions(9).



### Argentina

In Argentina the maternal mortality ratio in 2011 was 30 per 100 000 live births, which was a decrease from 44 in 2010. The main cause for this high mortality were induced abortion complications counting for respectively 24% in 2011 and 20.5% in 2010 (10). In 2008 WHO estimated a ratio of 70 maternal deaths per 100 000 live births in Argentina, three times higher than in neighboring Chile and Uruguay (5). The official US site for Millennium Development Goals presents equal numbers: 77 per 100 000 live births in 2010 gradually increasing from 60 per100 000 in 1995. This ratio is not classified as a highmortality rate, but is elevated when compared with other national indicators such as low birth rate, high coverage of prenatal care and high percentage of institutional deliveries(11).

In Argentina the estimated number of abortions per year is between 372000 and 522000(12). Different numbers are presented in the literature, but they all vary around 400-500 000, representing about 40% of all pregnancies(13, 14).

There is no official register and the numbers need to be calculated from patients hospitalized because of complications, and other relevant indicators. The most recent numbers are more accurate but there might be significant under registration especially for maternal deaths (15). There are also analysts that suggest that some groups, including "Ministerio de Salud", are presenting false, exaggerated numbers to promote decriminalization of abortion(16).

# Legal status of abortion in Argentina

As all South American countries, except for Guyana and Uruguay, abortion is not legally available simply on request. Argentina's Penal Code, Codigo Penal de la Nación Argentina, of 1921 criminalizes abortion in articles 85, 86, 87 and 88.

**Article 85.** - Whoever causes an abortion shall be punished:

1º With confinement or imprisonment of three to ten years, if carried out with the consent of the woman. This penalty may be increased to fifteen years, if the act is followed by the death of the woman.

2º With confinement or imprisonment of one to four years, if carried out with the consent of the woman. The maximum penalty shall be increased to six years if the act is followed by the death of the woman.

**Article 86.** - Physicians, surgeons, midwives, or pharmacists who abuse their science or art to cause an abortion or cooperate in causing it shall be liable to the penalties established in the preceding article and, in addition, shall suffer from special disqualification for double the period to which they are sentenced.

Abortion practiced by a licensed physician with the consent of the pregnant woman is not punishable:

1º If it was carried out for the purpose of *preventing danger to the life or health of the mother* and if this danger cannot be prevented by other means;

2º If the pregnancy arises from rape or indecent assault committed against a woman who is an idiot or insane. In this case, the consent of her legal representative shall be required for the abortion.

**Article 87.** - Whoever, through violence, causes an abortion without having had the intention of causing it shall be punished with six months' to two years' imprisonment if the pregnancy of the patient is well known or evident.

**Article 88.** - A woman who causes her own abortion or consents to another causing it shall be punished with one to four years' imprisonment. The woman's attempt is not punishable(17)

During dictatorship (1976-1983) the penal code was changed increasing restrictions on abortion. With the reinstatement of a democratic government in 1983 they returned to the 1921 wording.

Article 86 1º allow abortion if the pregnancy pose danger to the life or health of the mother. This "health exception", unspecified as it is, has been subject of different interpretations, some saying that a woman's life must be in imminent danger for the health exception to apply, others pointing to the definition of health from the World Health Organization (WHO) saying that the health exception can be used for any risk of an adverse effect(18). WHO also include mental health in the definition of health.(19)

The use of the word "mother" implies that the pregnant woman is by the law considered a mother from the time of fertilization.

In a study executed in Argentina in 1998 three out of ten physicians thought abortion was completely illegal(20). The a lack of knowledge of the law and fear of legal prosecution among health care professionals, have resulted in them sometimes demanding that the patient get a judicial authorization before preforming the procedure. Getting a verdict from the court might take a considerable amount of time and require economic resources(21). The United Nations Human Rights Committee addressed this in their Concluding Observations of the Argentine State in 2000: "...the Committee is concerned that the criminalization of abortion deters medical professionals from providing this procedure without judicial order, even when they are permitted to do so by law, inter alia when there are clear health risks for the mother or when pregnancy results from rape of mentally disabled women." The Committee came with the following recommendation: "...in cases where abortion procedures may lawfully be performed, all obstacles to obtaining them should be removed(22)."

In the Concluding Observations conducted in March 2010, the Committee expressed its concern "at the restrictive legislation of abortion contained in Article 86 of the Penal Code, and by the inconsistent interpretation by the courts of the causes of non-punishment contained therein." It recommended the State to "amend its legislation so that it effectively helps women to avoid undesired pregnancies, and so that they don't have to resort to illegal abortions that could endanger their lives." It also noted that the State should "adopt measures for the training of judges and health personnel on the scope" of the mentioned article(23).

Compared to the number of abortions performed in Argentina, there are few women or providers who are prosecuted for abortion, and of these very few get a conviction. Centro de Estado y Sociedad (CEDES) report 417 cases of women or providers found guilty for the

crime of illegal abortion from 1990 to 2008(24). The judicial records do not specify whether the individuals where sentenced to prison, to probation or if they were only fined. Compared to the number of judicial investigations registered, very few ended up in trail. In the city of Buenos Aires in the period from 2006-2012, 445 investigations were registered; fourteen of these went to trail, from which only two ended with convictions. And in Cordoba none of the investigations from 2006-2011 ended with convictions(24).

Most of the ones convicted under the abortion legislation are midwifes. In 2002-2008 based on national level data, the health-care professionals represented 80% of the total number of convictions, most of these were nurses and midwives(24). The low number of women convicted for undergoing an abortion is due to the "Navitas Frías" case followed by most judges in Argentina. Even though Art. 277 in the penal code criminalize government employees for not reporting a crime they find out about(17), women are protected from being reported through "Navitas Frías". In the "Natividad Frías" case from 1966 the Criminal Federal Chamber ruled that if a medical professional assists a woman who has had an abortion, the report of the crime does not implicate the woman, but it does implicate prepetrators, co-prepetrators, instigators and accessories(25). Medical professionals are protected by professional secrecy according to Art. 177 of the National Criminal Procedure Code(25).

# Latest developments

In October 2007, the Argentine Ministry of Health, published the Technical Guide for comprehensive care of non-punishable abortions. This guide makes an interpretation of non-punishable abortions including the WHO definition of health as a "state of complete physical, mental and social wellbeing and not merely the absence of disease". It establishes the procedure for the doctor to determining whether the woman is entitled to abortion, i.e. if the woman's mental health is at risk, the doctor is to consult with a psychologist. In addition it declares that any imposition of additional requirements is considered a violation to women's right to legal abortion. "The state is obliged to guarantee the exercise of that right," says the guide, and adds that the hospitals "have the legal obligation to carry out the procedure, and are not required to call for judicial intervention and/or authorisation" before acting, this even in cases of under-age girls(26).

In 2010 the guide was updated in order to explain in which cases a court order was not necessary to perform an abortion. The guide now stated that in the case of a woman seeking abortion after becoming pregnant as a result of rape, it is only necessary with an affidavit, and that she should not be demanded any other additional documentation or approval(27). The legitimacy of this document became unclear when the Health Minister, Juan Manzur denied signing it(28), but in 2012 Argentina reported that more than half of the provinces used the guide or considered it as a reference to prepare their own(29).

On March 13, 2012 the Supreme Court of Argentina rendered a decision in the case of an abortion preformed on a 15-year-old girl without any disabilities, who became pregnant after being raped by her stepfather. The pregnancy was terminated in 2010 after the Supreme Court of the Province of Chubut stated that abortion was permissible in the cases of rape. The decision was appealed to The National Supreme Court, which unanimously

upheld the verdict from the provincial Supreme Court, determining that prior judicial authorization was unnecessary for abortion after rape(30).

With this decision, the Supreme Court settled longstanding confusion over the interpretation of article 86, stating abortion is legal in all cases of rape, not only if the woman victim of rape is mentally challenged or demented.

The Supreme Court urged the provincial governments to adopt protocols to ensure access to legal abortions. Since the Supreme Court ruling, the adoption of protocols has failed or been delayed in several provinces, amongst them Cordoba and Buenos Aires. In May 2013 in the province of Cordoba a local court declared the abortion protocol unconstitutional, and thus limiting the possibility of having an abortion for victims of sexual abuse to clinics under the National University of Cordoba which are regulated by national legislation(31). In Buenos Aires Mayor Mauricio Macri vetoed the abortion law. The veto was later deemed unconstitutional(32).

As of March 2013, only 5 out of Argentina's 23 provinces had implemented the necessary protocols to meet the Supreme Court's ruling, 8 provinces had partly accepted the ruling or accepted it with restrictions. Ten provinces had still not accepted it(33).

### **Politics**

Since the return to democracy in 1983, no president has openly supported change of the abortion legislation.

Carlos Menem (1989-1999) was a strong supporter of the Church's position on abortion, declaring 25 March the Day of the Unborn Child. The date is the Catholic Holy Day of the Annunciation.

Dr. Ginés González García, Health Minister under Néstor Kirchner (2003-2007), publicly announced his support for legalization of abortion. Kirchner did not comment on García´s opinion, but stated that he would not change abortion law during his term. In October 2007, during his last days in office, Dr. García approved the Technical Guide for comprehensive care of non-punishable abortions. In the guidebook they acknowledge that "for many decades" women have been prevented from exercising their right, enshrined in the criminal code, "to have access to an abortion in authorised circumstances.(34)"

Cristina Fernández de Kirchner (2007-present) stated her position against abortion during the presidential campaign in 2007, but also said: "I do not think that the ones advocating for decriminalization of abortion are in favour of abortion: that would be a simplification" (35). Recognising the complexity of the issue.

In the Argentine Chamber of Deputies in 2011, 50 out of the 257 deputies, many which from Front for Victory (Cristina Krichner's party), formed a proposal to the Penal Code Reform Committee saying "every woman has the right to decide the voluntary interruption during the first 12 weeks of the pregnancy." Thus, to enable abortion without any authority or medical professional getting involved in making the decision(28). In 2012 Cristina Kirchner asked the Penal Code Reform Committee not to include abortion legislation to the reform(36).

In 2010 Kirchner also told the Minister of Health, Juan Manzur, to backtrack on a resolution in support of the update of the Technical Guide for Comprehensive Legal Abortion Care. The update stated that in the case of abortion after rape, it is sufficient only to submit an affidavit(28).

# Religion and abortion

92% of the Argentine population consider themselves Roman Catholic, but only 20% state that they are practicing Catholics(37). The others are Protestant 2%, Jewish 0.5%, Muslims 1%, Agnostics 4%(38). Although Argentineans who consider themselves religious have increased, have the church attendance has been on a decline the past 25 years (34).

The Catholic Church is against abortion in every case, saying: "Human life must be respected and protected absolutely from the moment of conception. From the first moment of his existence, a human being must be recognized as having the rights of a person - among which is the inviolable right of every innocent being to life(39)."

On the Religion and State Score developed by the Bar Ilan University in Israel, Argentina score 30.0 on a scale from 0 to 100, where a lower score means less integration and greater separation of religion and state. The average score in South America is 15.8, and worldwide it is 24.4(40).

A survey conducted by Belden Russonello Strategists LLX for Catholics for Choice on 1002 Argentinians in 2011, show that the majority of the people asked (63%) think that catholic politicians do not have a religious obligation to vote according to the opinion of catholic bishops and 70% do not think that Catholics have an obligation to vote against candidates who support abortion(41).

When compared Catholics to non-Catholics, Catholics are more in favour of legalization of abortion before 12 weeks (47% to 38%)(41).

Among the Catholics, the ones who attend church less frequently are most in favour of abortion. Of the ones who attend church one or more times a week only 25% support legalization of abortion before 12 weeks, but amongst those who attend church only on special occasions or never respectively 54% and 58% are in favour(41).

70% of the questioned supported a flexibilization from the Catholic Church on the issue of abortion, 16% were against it(26).

# Public opinion and views on abortion

In 2011 34% of Argentinians said they knew someone who had had an abortion (41). We have looked at six studies done on the views on abortion of the general population from 1994 to 2011. They show support of abortion being legal after rape, not just if the victim is mentally disabled. This shows that the ruling from the Supreme Court legalizing abortion after rape has support in the general population.

The support of abortion if the mother's health is at risk, it being physical, mental or life threatening, is also substantial. Also if the fetus has malformations incompatible with life, a majority of the people asked think abortion should be allowed.

As shown in the table beneath, the results show that support has grown from the 90s to the 2000s, and then stabilized. The number of people who think the woman should be allowed to have an abortion simply because she doesn't want the child, has grown, but the majority still do not support this.

The 2004 study done on 1591 participants is the only one that was done on a national level. The other studies were conducted in the city of Buenos Aires and Greater Buenos Aires. The 2006 study also included Córdoba, Rosario and Mendoza. On all but one question asked, the

national study has lower numbers in support of abortion, indicating that outside Buenos Aires and the bigger cities, they have a more restrictive view on abortion.

**Table 1**Public opinion of abortion (percentage) reported in six studies performed in the period 1994 to 2011

Year	1994	2003(42)	2004(42)	2004(43)	2006(26)	2011 <b>(41)</b>
Number of participants	200	303	300	1591	500	1002
Support of abortion if:						
Rape	75%	81%	86%	76%	82%	80%
Fetal malformations incompatible with life	49%	84%	84%	69%	83%	Na
Mothers life is at risk	46%	81%	84%	65%	83%	81%
Mothers physical health is at risk	Na	72%	78%	60%	79%	Na
Mothers mental health is at risk	49%	58%	72%	60%	79%	Na
Difficult socio-economic situation	29%	29%	39%	22%	44%	Na
If the mother does not want child	6%	28%	34%	19%	37%	45%

The 2011 study showed that among the interviewed there are no significant differences in how men and woman answered, nor was there much difference in between the different age groups(41).

In the 2006 study they also asked what they think a woman would do if she got pregnant with an unwanted child. 56% said that the woman would have an abortion, this number is significantly higher among the interviewed from lower socioeconomic background. 27% said she would keep the baby, and 10% said she would give the baby up for adoption(26).

# Health care professionals on abortion

In September 2010 the Buenos Aires National Academy of Medicine issued a statement saying: "Contrary to some recent demonstrations in favour of legalizing abortion, the National Academy of Medicine wants to remember basic principles of medical science and practice that apply for all professionals in the country. Argentina's public health needs proposals that ensure and protect the mother and child, the life of the woman and the unborn child. The medical obligation is to save both, nothing good can accrue to society when you choose death as a solution. "The unborn child is, scientifically and biologically, a human being whose existence begins at conception." "The Hippocratic oath defend life as an inalienable condition from conception. The National Academy of Medicine calls to all physicians in the country to maintain fidelity what they one day pledged under oath(44)."

The academy coordinates research and is consulted on medical matters by government departments, judges, public health officials and the media(45).

We looked at two studies done on the opinion on abortion among health care professionals. The 1998 study was done the views of 467 obstetrican-gyneacologists in public hospitals in Buenos Aires(20). In the second study conducted in 2010, 149 clinical care providers (most of whom were physicians, but also some nurses and physiotherapists) answered a questionnaire on abortion(46).

Both studies show support of abortion beyond current legislation. When comparing the two studies the support of abortion is higher in the 2010 study on all the questions that were asked to both the groups, indicating that the Argentinian health care professionals may have become more in favour of a less restrictive abortion legislation. The results also indicate that health care professionals have less restrictive views on abortion than the general population. The results are shown in the table below.

**Table 2**Health care professionals' opinion of abortion (percentage) reported in two studies performed in 1998 and 2010.

Support of abortion if:	1998 - study	<b>2010 - study</b>
Threat to the life or health of the woman	86,7%	Na
Risk to the woman's mental health	Na	77,2%
Rape or incest	83,3%	89,3%
Congenital defects	82,2%	95,3%
Autonomous decision of the woman	38,5%	47,7%
Difficult socio-economic situation	32,3%	40,9%

# Maintenance of current health service and abortion rights in Argentina

Women in Argentina are legally entitled to health services such as contraception, voluntary sterilization, legal abortion and post-abortion care. But organizations like the WHO and Human Rights Watch have shown concern regarding maintenance of these rights. According to a report made by Human Right Watch in 2005, there are multiple barriers that prevent women in Argentina from making independent decisions about their health and lives related to reproduction. Among the restriction they mentioned are inaccurate, incomplete or entirely absent information, domestic and sexual violence, and economic restrains that the government was not adequately addressing (47). Five years later, in 2010 Human Right Watch reported that little had changed since the last report. Their rights continue to be denied and their suffering is routinely ignored. Human Right Watch states that the main problem is that the laws and policies made to benefit women, such as the legal exceptions to the general criminalization of abortion, often go unimplemented. They also state that the National Health Ministry do not gather, analyze or publish comprehensive data on key issues such as illegal health care charges, complaints of arbitrary denial of care or abusive behavior by medical personnel (1).

The same issue has been addressed by other organizations as well. In 2010 The United Nations Committee on the Elimination of Discrimination against Women (CEDAW) reported that the access to sexual and reproductive health care services remains a significant problem for Argentinean women. The Committee also expressed their concern about the high pregnancy rate among adolescent girls and about high maternal mortality, often caused by illegal abortion. The Committee further urged that Argentina should review the existing legislation that criminalizes abortion, with serious consequences for the health and lives of women(48).

# Family planning: other measures to affect the abortion ratio

The amount of abortions performed, safe and unsafe, is a direct consequence of the number of unwanted pregnancies. Family planning is an important measure to decrease the abortion ratio and thus maternal mortality.

The likelihood of premarital sexual activity occurring is increasing. The trends in all of Latin-America go toward increasing or steady rates of adolescent fertility and high rates of unwanted pregnancy. To prevent unwanted pregnancies, knowledge about safe sexual behavior and the sexual rights are getting more important than earlier. In a study where 1645 adolescent mothers from Argentina where questioned, 5% said they had had an abortion and 40-70% would have preferred to postpone pregnancy. Other concerns in relation to early pregnancy was subsequent problems including having to leave school to perform domestic chores, take care of the child, increasing difficulties accessing work, interruption of personal development, and limitations on future opportunities(49).

In general the people of Argentina have knowledge about contraception, especially the pill but also the condom and the intrauterine device (IUD). The knowledge about contraception positively correlates with the educational level and economic situation. A national study conducted on more than 5000 women in Argentina found that 75% of the people asked used some kind of contraception. 10 % used less effective methods than condom or the pill and. among those who did not use any type of contraception only 25% wanted to get pregnant. Women with lower education and socioeconomic status were overrepresented in these two groups. The reason for not using any type of contraception was mainly that the partner did not wish to use it, they did not have the knowledge or it was difficult to obtain (50).

### **Emergency Contraception**

Another contraception method is the Emergency contraception (EC), also known as "the morning after pill". EC is a well know and documented "second chance" to prevent unwanted abortion.

The progestogen only and the oestrogen/progestogen pill work primarily by preventing or delaying ovulation. Taken within 72 hours of unprotected intercourse, the methods reduce the risk of pregnancy with about 90% (51).

In Argentina the distribution of EC is not legally recognized except in protocols and informative guides. Timely access to emergency contraception (EC) can contribute to reducing the number of unwanted pregnancies, and ultimately, the number of unsafe abortions and maternal fatalities (52, 53).

In Buenos Aires non-abortive contraception is legal(54). Although there have been concerns regarding the mechanisms of action of EC, direct laboratory evidence supports the hypothesis that it work primarily by delaying ovulation. Thereby it is to be counted as non-abortive since

it prevents ovulation without disrupting an implanted pregnancy (55, 56). Among some groups the use of EC has been believed to be equal to abortion and by this should be illegal(57). Studies have shown that there is a need to intervene in providing the population and the health sector with information on EC, its mechanism and accessibility, and the "grey areas" that hinder an adequate distinction between regular contraception, EC and abortion(58). Another study found that only one out of two know that EC is accessible prescription free directly from a pharmacist. Many also find it difficult to seek help because of judgmental attitudes or they do not want to use EC because they think it is equal to abortion. The availability and information on EC varies in the different regions of the country, for example in Buenos Aires EC is available for free at all public hospitals, but this is not the case in many smaller places.(12).

# **Abortion; Performance and complications**

Abortion preformed at hospitals or with professional guidance is either surgical or medical abortion. First trimester suction curettage is the safest method for surgical pregnancy termination and has low rates of morbidity and mortality, major complications reported down to 2 percent. (59, 60). With medical abortion a combination of prescription hormones which can include for example mifepristone, methotrexate, misoprostol, prostaglandins or a combination of these are given to the pregnant women by an authorized doctor. (61).

Misoprostol alone or in combination with mifepristone is also used for illegal abortion. It is considered safe, simple, effective, noninvasive, and does not require hospitalization or highly trained providers. The use has expanded in several countries, including Latin America and has shown to improve abortion safety (39, 62) (63, 64). The Latin American Federation of Obstetrics and gynecology society has developed a manual that provides user guidelines. Misoprostol is provided in Argentina for treatment of gastric ulcers, but can be hard to obtain Nevertheless, women, mostly of relatively high socioeconomic status, are able to obtain illegal abortions from trained personnel in sanitary conditions(65).

For those that cannot obtain these medications there are other abortifacients used and drugs not indicated for abortion but known to result in miscarriage or uterine contraction. Some of these are known to cause severe complications. Other methods include trying to break the amniotic sac with a sharp object, inserting a solid object, or pumping toxic mixtures into the body(5).

Safety with unsafe abortion has improved but still there are many who get long-term complications including infertility and chronic pain, while many more suffer short-term illness such as small infections. Deaths due to unsafe abortion are mainly caused by severe infections or bleeding, or due to organ damage(5). There is a lack of pre and post-information in relation to illegal abortion, and many that experience complications seek adequate help too late or not at all. In addition to lack of knowledge, social stigma and fear for imprisonment or abuse is important factors for not seeking help. (15) (14, 66). The cases reported, and the basic for the statistics, are the cases with severe complications in addition to the abortion deaths. There is reason to believe that this is just the tip of the iceberg and that the number of women suffering after an abortion are much higher(5).

# **Medical education in Argentina**

In 1821 Argentina's first medical school was founded at the University of Buenos Aires. In 2006 Argentina had 29 medical schools, 10 public and 19 private universities. The medical education is a six-year program with three preclinical years, two clinical years and one year with internships(67). In Argentina there are 3,2 physicians per 1000 inhabitants(68).

### Medical education and abortion

According to the curriculum at the University of Buenos Aires Faculty of Medicine, the students are lectured about "The abortion as a reality in Argentina, consequences of abortion, septic abortion and the risk abortion poses to life and future fertility of women" (69). Other than that there is no more specific information on what the medical students will learn about the subject, and according to the students we cooperated with and our partners at the University of Buenos Aires, the information the students get largely depends on the specific professor teaching them.

A report made by Latin American Federation of Obstetrics and Gynaecology Societies (FLASOG) in 2010 suggests that sexual and reproductive rights, which are parts of the human rights, gets a stronger position in the curricula of the medical education in the countries of Latin America(70).

# The project

Our project arises from the initiative of the work of the interdisciplinary team of Centro de Capacitación en Programas de Salud (CEPAPS), which is a team consisting of professionals from Medicine, Public Health, Psychiatry, Political Science, Nutrition and Statistics. CEPAPS develop their activities through a volunteer program with students from all careers at the Faculty of Medicine. Asociación Médica Argentina de Anticoncepción (A.M.A.D.A) and La Sociedad Argentina de Ginecología Infanto Juventil, two organizations working with the subjects of the project, participate in the project by supporting activities of promotion and prevention in sexual health of the young university students.

# **Objectives**

The general objective of the main project was to promote policies by the Extensión Universitaria y Bienestar estudiantil based on scientific investigation for the development of healthy practices in the field of sexual and reproductive health.

The first project was performed in 2011 where first year medical students were answering a questionnaire about their knowledge and attitude towards abortion and family planning. Our project is similar to the previous project, but now the participating students are in their final year of medical school.

Our objectives are:

- Identify and describe the knowledge and attitudes towards abortion among the final year medical students at the Faculty of Medicine.
- Look for differences in knowledge and attitudes toward abortion between the first year and the final year students to identify whether there is a need for better covering of the subject during the medical education.

The questionnaire includes questions from different fields of reproductive and sexual health. We focused on abortion regarding legislation, human right issues and the health consequences of unsafe abortion as we find this is an important and interesting field. Having the results from both the first and the final year students, we could now compare and see if there was any difference between these groups regarding their knowledge and their opinion on abortion. Even though this is not the same group of students, there has not been made changes to the curriculum over the past years, thus we believe a comparison can give an adequate picture of the changes in knowledge and attitudes during their education.

Relevant questions that we wanted to answer were: Do the medical students, in the final year have enough knowledge about the abortion law? Do the medical students think abortion should be legal? Which exceptions from the law do they support? And do their opinions and knowledge change during the six years at the university?

# **Methods**

# Study area

Our fieldwork was performed in August 2012 at the Faculty of Medicine at the University of Buenos Aires. The fieldwork lasted for four weeks, all of which we spent at Centro de Salud de San Telmo, a public center of health. Here we attended consultations and examinations of women with gynecological problems and health issues such as; sexual transmitted infections, pregnancies, contraception, illegal abortions etc. The last week we handed out the questionnaire to students from the University of Buenos Aires Faculty of Medicine.

# Study design

To investigate the knowledge, opinions and attitudes a questionnaire consisting of 67 questions was used. The questions were divided in different areas:

- Knowledge and information: background information about the student participating in the study, where they gained their knowledge and information on sexual health, knowledge about contraceptives, sexual transmittable diseases, abortion and abortion law.
- Practice and perceptions: the sexual practice of the student
- The health system: the students' experience with the health system, especially when it comes to sexual and reproductive health.
- Opinions and experiences: opinions and experiences regarding contraceptives, abortion, abortion law and sexual abuse.

The questionnaire is attached in the appendix.

# Study population

The study population consists of the final year students at the Faculty of Medicine, University of Buenos Aires. During spring semester 2012, 1800 students were attending their final year at the Faculty of Medicine in the following disciplines: medicine (1359 students), nutrition (122 students), nursing (33 students), speech therapy (18 students), physical therapy (113 students), midwife (48 students) and radiology (107students).

To be representative the study had to include all the different careers/topics. Using stratified sampling a number of students, proportional to the total population, was elected from each topic (strata). Some students were doing more than one topic. These were elected to one strata using simple random selection. To get a representative number of participating students the number of students included was calculated out of this formula:

$$n \ge 1.96^2 \frac{\displaystyle\sum_h W_h S_h^2}{c^2}$$

Where:

W=N/G

G= Size of the career

N=Size of the population=3.737

c = Margin of error = 0.05

Z= 95% confidence interval=1,96

S= expected deviation=0,65

Using this method the final number of students necessarily to get a representative sample was at least 591 students, divided on the different disciplines as follow:

**Table 3**Number of students in each discipline

Disciplines of medicine	Number of students:
Medicine	438
Obstetrics	15
Physical therapy	37
Speech therapy	6
Nursing	20
Nutrition	40
Radiology	35
Total:	591

As seen, 438 medical students were required according to the medical statistics for our study. These students were selected from different classes in a random process creating the final sample.

In this assignment we were investigating the knowledge and attitudes of the medical students and therefore it will only include results that reflected the knowledge and attitudes of the students in the career of medicine.

# Collecting the data

After having calculated the number of the study population and randomly selected the number of students from different disciplines a table was made with information about time and location for the different classes that were selected. Together with several medical students from the faculty and the leaders of the project we visited the classes with the survey. It was given a short introduction by the leaders of the project. The questionnaire was handed out to the students and they were given 20 minutes to fill it out.

### Data analysis

The data from the questionnaire was plotted by the team of Argentinean medical students. The information was plotted and processed in the Statistical Package for the Social Sciences, SPSS 15 by the statistic department at the faculty of medicine at the University of Buenos Aires. For our statistically analyses we used the Graph Pad Software to make a Fishers exact test to calculate a two tailed P-value. Findings with two- sided P values < 0.05 were considered statistically significant.

# **Comparison**

In 2011 a similar survey was performed among first year students. In our paper we compare some of the results from this previous survey with the results from our survey of final year students. Though the students in the two surveys are not the same, the results can give an indication of changes in attitudes and knowledge from entering to finishing medical school. We also looked for possible differences in knowledge and attitudes between the male and female students of the final year.

# **Ethics**

The students were orally informed that the survey would remain strictly confidential and anonymous, The data is protected and covered by statistical confidentiality as required by Article 10, Law number 17.622.

Regarding ethics this information was sufficient for University of Buenos Aires and no further ethical clearance was sought.

### **Results**

### Background information on the final year students

A total of 457 students in their final year were studied. 317 (69,4%) were female and 140 (30,6%) male.

The majority of the students were from Argentina (96,5%) and the remaining part mostly from the neighboring Latin America countries.

In terms of civil status most of the students were single (83,4%) were as about 11% were in a relationship and only 4% were married. 4,6% of the students had children.

**Table 4**The sex and nationality of the participants.

Country	Number	Number	
	Female	Male	
Argentina	305	136	
Bolivia	2	0	
Brazil	2	0	
Chile	1	0	
Peru	2	2	
Uruguay	0	1	
Other	5	1	
Total:	317	140	

### **Knowledge of the Argentinean abortion law**

The students were asked if they knew the legal status of abortion according to today's law, and later what they believe the legal status should be. Both these questions had a following question to specify exceptions if the answer to the first question were "not punishable under some circumstances".

The results are presented as follow:

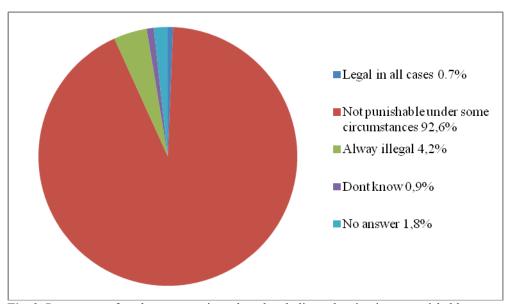


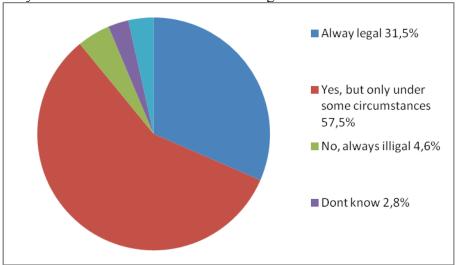
Fig. 2. Percentage of students answering when they believe abortion is not punishable.

Out of the 457 students 92,6 % knew that abortion is not punishable under some circumstances, 4,2% of the students thought that it is always illegal.

The students that knew that abortion is not punishable under some circumstances were further asked to identify in which cases this applies. Among the correct exceptions that are included in the law 62,8% managed to identify that abortion is legal when the pregnancy is a result of rape, 84,9% that abortion is legal when the woman's life is at risk, 82,7% when a mentally retarded woman becomes pregnant due to rape, 24,7% when the mother has a disease that can be worsen during pregnancy and at last when the woman is at psychological risk 12,7%. Even though not an exception in today's law as many as 54,9% also included when the fetus has malformations incompatible with extra uterine life. Details are listed in table 1 in appendix.

# Attitudes towards the abortion law





**Fig. 3.** Personal opinion among the final year students on whether they think abortion should be legal.

31,5% of the students believed that abortion should always be legal and 4,6% that it should always be illegal. More than half of the students, 57,5% believed that it should be like to day, legal under some circumstances. Altogether just under 90% of the student's supports today's law or a more liberal solution.

Like with the students assumptions about the law those who believe that abortion should be legal under certain circumstances was asked to specify this. 71,6% answered that abortion should be legal when the pregnancy is a result of rape, 72,9% when the woman's life is at risk, 69,1% when a mentally retarded woman becomes pregnant due to a rape and 72,4% when the fetus has malformations incompatible with extra uterine life. The latter are not included in today's legislation but has as we can see, broad support among the students. The two options that today is included with the extended implementation of health, when the mother has a disease that can be worsen during pregnancy and when the woman is at psychological risk has support among just under half of the students (44,6% and 38,3).

One of the most liberal option, if the mother for any reason which to terminate pregnancy before 12<sup>th</sup> week of gestation, was selected by as many as 25,4%, suggestive of a considerable support for a more liberal legislation. The rest of the options are listed in table 2.

# **Comparing sexes**

Looking for differences in knowledge between sexes we did not find anything. All had the same knowledge (P values ranged between 0,2 and 0,6), see details in table 3 in appendix. When we looked for differences between the sexes in terms of attitude we did still not find any statistically significant difference as shown in table 3. It was only at the option "If the woman, whatever reason, wants to terminate the pregnancy no matter what gestational age" were we can see a tendency towards that the male students are a bit more liberal, with 12 % that selected this option against 6% among the female students (P=0,06).

# **Comparison between first and final year students**

Using the results from the survey conducted on the medical students from the University of Buenos Aires in 2011 and 2012 we have compared the results to the ones of the final year students(71).

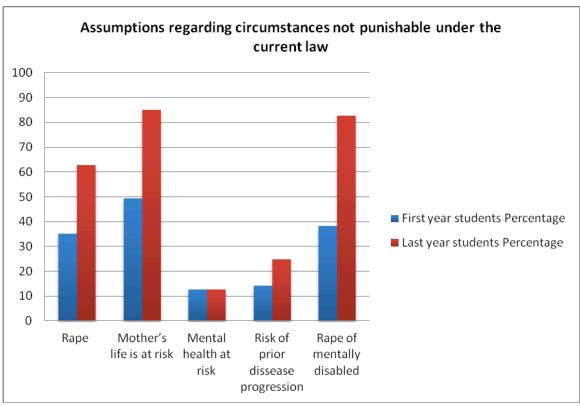
### **Knowledge of the current legal situation**

Of the first year students 52.2% and 92.6% of the final year students answered correctly that abortion under some circumstances is not penalized. This gives a statistically significant difference in between the groups (P-value <0,0001). The ones not giving the right answer dropped from 47,8% till 7,6% from first to the final year students.

**Table 5**Knowledge among first year and final year students on when abortion is legal.

	First year students	Final year students	
	Percentage (Number)	Percentage (Number)	P-value
Legal in all cases	0,7 (3)	0,7 (3)	1
Under some	52,2 (237)	92,6 (423)	< 0,0001
circumstances is it not			
penalized			
It is always penalized	26,4 (120)	4,2 (19)	< 0,0001
I do not know	17,2 (78)	0,9 (4)	< 0,0001

Apart from the exception of where the woman is at psychological risk if the pregnancy continues, the final year students answered correctly significantly higher on all of the exceptions for when abortion not is punishable.

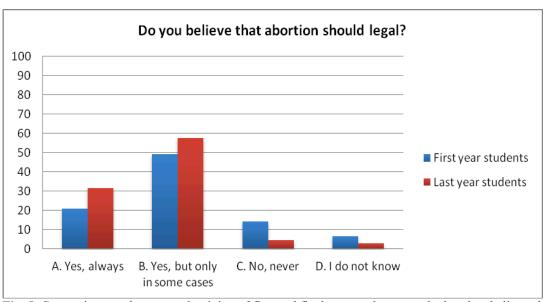


**Fig. 4.** Comparison of the assumptions among first and final year students regarding circumstances not punishable under the current law.

Although the final year students were able to get more of the exceptions right, 54.9% wrongly answered that abortion of a foetus having malformations incompatible with life is not penalized. Only 23.8% of the first year students got this wrong.

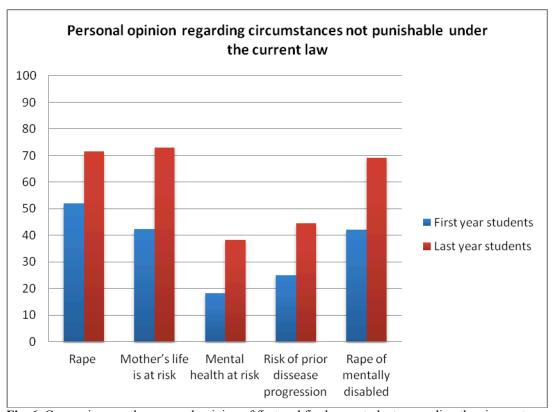
### Personal opinion on legality of abortion

On the question of whether they the students think abortion should be legal 89.0% of the final year students answered always or in some cases, among first year students only 69.8% gave the same answer, which is significantly lower (P-value <0.0001). Whereas the first year students answered this question negatively significantly higher (P-value <0.0001).

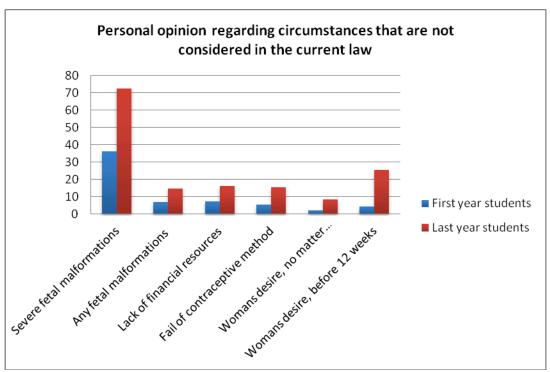


**Fig. 5.** Comparison on the personal opinion of first and final year students on whether they believe abortion should be legal.

When asked specifically under which circumstances they think abortion should not punishable the final year students also answered positively significantly higher on all options given in the survey. The difference between first and final year students opinion on each of the options given in this part is greater than on the first question of whether the student think abortion in general should be legal.



**Fig. 6.** Comparison on the personal opinion of first and final year students regarding the circumstances they believe abortion should not be punishable under the current law.



**Fig. 7.** Comparison on the personal opinion of first and final year students regarding circumstances they believe abortion should not be punishable that are not considered in the current law.

### **Discussion**

We have presented a comparison between two groups of medical school students, the first group was in there first year when questioned, and the second group was in their final year. As the curriculum at Faculty of Medicine at the University of Buenos Aires has not been altered over the past years, we believe that these two groups can be compared to reflect how knowledge and attitudes change during their years in medical school.

There is a significantly higher knowledge on the abortion jurisdiction among the final year students compared to the first year students, but still 7,6% of the final year students did not know that abortion is legal in some circumstances. When specifying the circumstances when abortion is not punishable, the final year students had a significantly higher score than the first year students in 4 out of 5 questions. Still the knowledge that abortion is not punished if continuation of pregnancy imposes psychological risk for the mother was not significantly higher among the final year students, where only 12.7% managed to identify this. Also in the four exceptions where they scored significantly higher, the ones who did not answer correctly varied from 15.1-75.3%. A majority of final year students wrongly believed that abortion of a foetus with malformations incompatible life is one of the exceptions that are not penalized.

This shows that although a significant increase in correct answers were observed, the majority of the students in the final year of medical school do not know the exact abortion laws in Argentina.

The lack of knowledge on the legislation among doctors has been addressed as one of the reasons for women not getting access to legal abortion or this being delayed. In Colombia in 2008 they also saw a significant rise in the numbers of safe abortions after training of health professionals focusing on the understanding of the health exception in the abortion law(18). Thus the importance of ensuring that physicians possess the right information on this subject is a key to securing legal abortion to those entitled to it, and hindering that they turn to potentially unsafe options outside the care of health professionals. A woman that has a right to terminate her pregnancy, and wish to do so should be able to receive this help without fighting and without being met with a judgmental attitude, but with respect as any other patient.

It should be expected that the medical schools in Argentina would provide its' students with sufficient education and testing to make sure that they do not go in to professional life not knowing who may not and who may have access to legal abortion. Regardless of doctors opinion it is a common procedure and unsafe abortion is one of the main causes for maternal mortality in Argentina.

The pro-abortion opinion of medical school students though increasing substantially from the first to the final year students is still not higher than the general population, and it is lower than health care professionals. Results from the first year students show that if they had met someone who had terminated their pregnancy their opinion pro-abortion increased. This, the increased support during medical school and the even higher positive opinion on abortion among health care professionals indicate that the more experienced they are in meeting women who may be wanting or needing an abortion, the more positive they get to increase women's rights to abortion. We would like to know more about how the opinion of medical school students and physicians affect their attitude and handling of women requesting information on abortion.

Although protocols and knowledge on abortion among health care professionals is an important measure to secure that women who are entitled to legal abortion do not turn to unsafe options, family planning is still the easiest and most affordable way of preventing maternal mortality. Today a high number of sexually active couples, not wanting to become parents do not use any contraception and one out of two do not know that emergency contraception is available for free at any pharmacist.

Even though family planning devices are free of charge, securing that women have easy access to contraception and that they possess information on how to obtain it and the correct use, also have to be a main goal in improving women's health.

There seem to be distance between the leadership and the people on the abortion issue. The Argentinean Catholics show support more flexibilization on the abortion issue from the Church, but the Church still says it is against abortion in any case. The National Academy of Medicine goes against legalization of abortion, but surveys done on health care providers show that they support it. And although no president have given support to legalizing abortion the general population has increased its support of a more liberal abortion legislation and a majority think abortion should be allowed beyond what the current law allows.

In Argentina about 40% of all pregnancies end in abortion, the majority are unsafe abortions with possible severe complications. This is an issue that cannot be overseen, no matter personal opinion. The literature identifies a lack of knowledge about those measures that can be implemented, both among healthcare professionals and the general population. There is a great potential in preventing unwanted pregnancies and securing access to abortion for those entitled to it. Contraception is free of charge, but this has little value if the information it does not reach out to the people in need of it. There are exceptions when abortion can be performed legally and safely, but both physicians and patients are often uncertain of when this can be performed.

We suggest increased focus on the matter in primary school and in medical school. There should also be arranged courses for healthcare professionals. Public awareness campaigns and easy access points for family planning devices should also be implemented as measures to lower the numbers of abortion and maternal mortality.

More direct attention is needed to improve the situation, and the efforts need to be put on both family planning and the access to not punishable abortion.

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71. Brodahl A HMJ. Medical Student Thesis: Knowledge and attitudes towards abortion among the first year medical students at the University of Buenos Aires, Argentina. 2012.	

# Appendix

Table 1a: Knowledge on the present Argentinean abortion law.

Question 1: In Argentina, abortion is									
	First year students Last year stu								
	Numbers	Percentage							
A. Legal in all cases	3	0,7	3	0,7					
B. Under certain circumstances it is not penalized	237	52,2	423	92,6					
C. It's always penalized	120	26,4	19	4,2					
D. I do not know	78	17,2	4	0,9					
Annulled	3	0,7							
No answer	13	2,9	8	1,8					
Total	454	100	457	100,2					

Table 1b:

Question 2: Do you know in w	hich cases it	is not penaliz	ed?	
	First year students		Last year students	
	Numbers	Percentage	Numbers	Percentage
A. If the pregnancy is the result of a rape	160	35,2	287	62,8
B. When the foetus has malformations incompatible with extra uterine life	108	23,8	251	54,9
C. When the foetus has a malformation of any kind	21	4,6	2	0,4
D. When the woman's life is at risk if the pregnancy continues	224	49,3	388	84,9
E. When the woman is at psychological risk if the pregnancy continues	57	12,6	58	12,7
F. When the mother has a disease that can be worsen with pregnancy	65	14,3	113	24,7
G. When a mentally retarded woman becomes pregnant due to rape	174	38,3	378	82,7
H. When a woman and her family lack financial resources to raise a child	7	1,5	2	0,4
I. If the woman got pregnant because her birth control method failed	4	0,9		
J. If the woman, whatever reason, wants to terminate the pregnancy no matter what gestational age	3	0,7		
K. If the woman, whatever reason, wants to terminate the pregnancy before week 12	8	1,8	7	1,5
L. None of the above M. I do not know	1 7	0,2 1,5	7	0

Table 2a. Attitudes towards the abortion law

Question 3: Do you believe that abortion should be legal in the country? First year students Last year students Numbers Percentage Numbers Percentage 94 20,7 144 A. Yes, always 31,5 B. Yes, but only in some cases 223 263 49,1 57,5 C. No, never 14,1 21 64 4,6 6,6 D. I do not know 30 13 2,8 Annulled 0,4 No answer 41 9 16 3,5 454 100 99,9 Total 457

Table 2b:

Question 4: In which cases do you think it should be legal?							
	Numbers	Percentage	Numbers	Percentage			
A. If the pregnancy is the result of a rape	236	52	327	71.6%			
B. When the foetus has malformations incompatible with extra uterine life	165	36,3	331	72.4%			
C. When the foetus has a malformation of any kind	31	6,8	67	14.7%			
D. When the woman's life is at risk if the pregnancy continues	192	42,3	333	72.9%			
E. When the woman is at psychological risk if the pregnancy continues	83	18,3	175	38.3%			
F. When the mother has a disease that can be worsen with pregnancy	114	25,1	204	44.6%			
G. When a mentally retarded woman becomes pregnant due to rape	191	42,1	316	69.1%			
H. When a woman and her family lack financial resources to raise a child	33	7,3	74	16.2%			
I. If the woman got pregnant because her birth control method failed	24	5,3	70	15.3%			
J. If the woman, whatever reason, wants to terminate the pregnancy no matter what gestational age	10	2,2	38	8.3%			
K. If the woman, whatever reason, wants to terminate the pregnancy before week 12	19	4,2	116	25.4%			
L. None of the above M. I do not know	5 12	1,1 2,6	4 3	0,9 0,7			

**Tabel 3: Comparison between sexes** 

# Diferences between sexes in knowledge about the abortion law

Question 1: In Argentin	Fisher's exact test				
	Female Male tw			two-tailed P value	
A. Legal in all cases	1	0,32 %	2 1,43 %		0,22
B. Under certain circumstances it is not					
penalized	297	93,69 %	126	90,00 %	0,18
C. It's always penalized	15	4,73 %	4	2,86 %	0,45
D. I do not know	2	0,63 %	2	1,43 %	0,59

# Diferenses between sexes in attitudes on abortion - some selected questions

Question 3: Do you believe that abortion	Fisher's exact test				
	Female Ma			lale	two-tailed P value
A. Yes, always	106	33,4 %	38 27,1 %		0,19
B. Yes, but only in some cases	180	56,8 %	83	59,3 %	0,68
C. No, never	15	4,7 %	6	4,3 %	1,00
D. I do not know	8	2,5 %	5	3,6 %	0,55

Question 4: In which cases do you think it should be legal?					Fisher's exact test
	Female		Male		two-tailed P value
A. If the pregnancy is the result of a rape	228	71,9 %	99	70,7 %	0,82
B. When the foetus has malformations					
incompatible with extra uterine life	226	71,3 %	105	75,0 %	0,43
C. When the foetus has a malformation of					
any kind	45	14,2 %	22	15,7 %	0,67
D. When the woman's life is at risk if the					
pregnancy continues	228	71,9 %	105	75,0 %	0,57
E. When the woman is at psychological risk					
if the pregnancy continues	125	39,4 %	50	35,7 %	0,47
F. When the mother has a disease that can be					
worsen with pregnancy	142	44,8 %	62	44,3 %	1
G. When a mentally retarded woman					
becomes pregnant due to rape	217	68,5 %	99	70,7 %	0,66
H. When a woman and her family lack					
financial resources to raise a child	52	16,4 %	22	15,7 %	0,89
I. If the woman got pregnant because her					
birth control method failed	48	15,1 %	22	15,7 %	0,89
J. If the woman, whatever reason, wants to					
terminate the pregnancy no matter what					
gestational age	21	6,6 %	17	12,1 %	0,065
K. If the woman, whatever reason, wants to					
terminate the pregnancy before week 12	86	27,1 %	30	21,4 %	0,24