# Does the liberalisation of abortion laws increase the number of abortions?

The case study of Spain

ROSANA PEIRÓ, CONCHA COLOMER, CARLOS ALVAREZ-DARDET, JOHN R. ASHTON \*

Background: Over the course of the 1980s a public debate on abortion took place in Spain culminating in a more permissive social climate and, in 1985, the partial decriminalisation of abortion. Before this, women were forced to abort illegally or abroad in countries which had decriminalised abortions. The aim of this study is to present jointly the evolution of abortions in Spanish women in England and Wales between 1974 and 1995, The Netherlands between 1980 and 1995 and Spain since the start of the register in 1987 through to 1995 and to compare trends both before and after the law in Spain. Methods: Incidence rates were calculated in each of the countries studied and the slopes of the curves for 1974-1984 and 1987-1995 were compared. Data were obtained from reports published by the offices of abortion surveillance in England and Wales, The Netherlands and Spain. Results: The rates increased constantly throughout the study period. From 1974 to 1985, a total of 204,736 Spanish women aborted in England and Wales and The Netherlands. After the law was passed, 34,895 Spanish women had abortions in those countries over the period 1986-1995. During 1987-1995, 340,214 Spanish women terminated their pregnancies in Spain. The regression coefficients before and after the passing of the law were  $\beta = 0.3538$ (0.307-0.400) and  $\beta$  = 0.319 (0.243-0.394) respectively; no difference was observed. Conclusions: During the study period a significant proportion of reproductive-aged SpanIsh women had abortions in England and Wales and The Netherlands. Decriminalisation has had no observed effect on the trends in abortion, but rather it has benefited Spanish women by making abortion available locally and, therefore, reducing the inequalities implied by lack of access to proper health care services. These data demonstrate the impact of the liberalisation of abortion on the trends of procedures performed in other countries.

Keywords: health policies, induced abortion, women's health

f L hat abortion is a social need is endorsed by the fact that abortions have been practised continuously throughout the ages regardless of setting. Over time and throughout cultures, women have responded in different ways to this regrettable need: self-help practices, alternative medicine or clandestine professional practice. Abortion is practised in both developed as well as developing societies. 1-3 Antiabortion laws denying health services that respond to this health problem have forced women in search of proper services to travel to other countries where laws are more permissive.4 Women unable to travel must undergo clandestine abortions, in some cases self-induced or carried out by unqualified people in inadequate surroundings, consequently, with great impact on their health in terms of mortality and morbidity.5-7

In Spain, apart from pioneer legalisation in 1938 during the civil war which was ended by Franco's dictatorship, there was no law for legalising abortion until July 1985.

This was the result of several years of democracy and a socialist government. The law developed in Spain decriminalised the practice of abortion in three circumstances: when it is presumed that the foetus could be born with serious physical or mental defects, the pregnancy is the result of rape or the pregnant woman's life or her physical or mental health is at serious risk.

Until then, Spanish women had to abort in other countries where abortion was legalised or in Spain in a clandestine way. Women who could afford to travel mainly went to the UK and The Netherlands because, although France had had an abortion law since 1975, the conditions of their procedures made access difficult for Spanish women. In fact, for an abortion in France, a foreign women has to be resident in the country for at least 3 months before the abortion and a further 1 week for reflection.8

Those women who could not afford the option of travel abroad made use of local resources of differing levels of quality, sometimes risking their health or even their lives. It is impossible to ascertain how many women aborted in Spain during the period when abortion was illegal because no register existed. It is known that 195,993 Spanish women underwent abortions in England and Wales between 1974 and 1988.9

<sup>\*</sup> R. Peiró<sup>1</sup>, C. Colomer<sup>2</sup>, C. Alvarez-Dardet<sup>3</sup>, J.R. Ashton<sup>4</sup>

<sup>1</sup> Public Health Centre of Alzira, Spain

<sup>2</sup> Valencian School of Health Studies (EVES), Spain

<sup>3</sup> Department of Public Health, University of Alicante, Spain

<sup>4</sup> Director of Public Health, NHS Executive, Birchwood, UK

Correspondence: Rosana Peiró, RN MPH, Public Health Centre of Alzira,

C/ Pau s/n. Alzira 46 600, Valencia, Spain, tel +34 96 240 2071,

<sup>190</sup> fax +34 96 240 3342, e-mail. peiro\_ros@gva.es

At the beginning of the 1980s, when the law to legalise abortion became the centre of public debate, the media, organised groups and political parties against its promulgation argued that making abortion more accessible in lawful and medically safe conditions would bring about an increase in the number of abortions carried out. The same kinds of argument have been heard in other countries in similar public debates. As far as we know, the impact of abortion decriminalisation on trends in abortions has not been described so far. We have taken advantage of the process in Europe where countries such as England and The Netherlands decriminalised abortion earlier than others like Spain and developed registries of enormous value in tracing the abortion experiences of Spanish women.

The general aim of this line of research is to document how different abortion policies affect women's lives and health. Ideally it should start by accessing data on clandestine abortions carried out in Spain as well as abortions carried out in other countries. However, here we present data on abortions among Spanish women receiving the service in England and Wales and The Netherlands and also data from Spain since the decriminalisation up to the present time.

The objectives of this paper are

- to describe the evolution of abortion rates of Spanish women in England, The Netherlands and Spain during 1974–1995 and
- to compare the trends before and after the passing of the law in order to assess the impact of abortion decriminalisation on the number of operations.

## MATERIAL AND METHODS

Study population

Data on all induced abortions among non-resident Spanish women in England and Wales from 1974 to 1995, in The Netherlands from 1980 to 1995 and those performed in Spain from 1987 to 1995 were used. The information was obtained from three sources.

- The Office of Population, Censuses and Surveys<sup>10</sup> and the Office for National Statistics<sup>11</sup> annual series of 'abortion statistics' in England and Wales.
- The Stimezo, <sup>12</sup> that is a professional association founded in 1970 that carried out abortions during the time that abortion was unlawful in The Netherlands; they established an information system in 1973 showing data for Spanish women from 1980 to 1984. The data from 1985 to 1995 were obtained from the annual reports of The Netherlands national abortion register. <sup>13–15</sup>
- The number of abortions performed in Spain was obtained from the Ministry of Health's abortion register, <sup>16</sup> which started to publish abortion statistics in 1987.

In the routine statistics of abortion published by the Office of Population, Censuses and Surveys and the Office for National Statistics in England and Wales and by Stimezo and the Ministry of Health in The Netherlands the dates are presented desegregated by non-residents and country of origin. The registration systems used contain data based on compulsory reporting of

abortions carried out in both public as well as private centres.

Population data for the denominators were obtained from the population projections produced by the Spanish National Statistics Office<sup>17</sup> and the Ministry of Health.<sup>18</sup>

### Data analysis

Incidence rates of abortions carried out were calculated separately in each of the three countries. The total annual rate of abortions was calculated by adding the abortions carried out among Spanish women in each country for each year. All rates refer to 1000 Spanish women of reproductive age (15–44 years).

In order to compare the rise in the rates of abortion before (1974–1984) and after (1987–1995) the decriminalisation law, a simple linear regression was performed which calculated its slope with confidence intervals for both periods. The years 1985 and 1986 were ignored in this trends analysis because the registration system had not been set up and the data are known to be incomplete.

## **RESULTS**

Table 1 shows the absolute number of abortions and the abortion rates carried out in each of the countries studied (Spain, The Netherlands and England and Wales). From 1974 to 1985, 204,736 non-resident Spanish women were registered as having abortions in England and Wales and The Netherlands. During the period 1986-1995 the number of non-resident Spanish women terminating their pregnancies in these countries fell considerably; nevertheless 34,895 women (24,817 in England and Wales and 10,078 in The Netherlands) did so. The number of abortions carried out in Spain since decriminalisation has shown a constant increase, rising from 16,766 in 1987 to 49,387 in 1995. Thus, 340,214 women have benefited from the possibility of aborting in their place of residence rather than having to travel abroad to do so. The annual abortion rates in Spain increased from 1.99 in 1987 to 5.53 in 1995 per 1000 reproductive-age woman.

The data in *table 1* also show a fall in the absolute numbers of abortions and abortion rates carried out in England and Wales and The Netherlands since 1984, that is before the law in Spain was passed.

Figure 1 shows that the total abortion rate among Spanish women increased during the study period with the exception of 1984 where it started to fall and a 2-year period in the middle of the study period, when a large reduction took place. This period covers the year 1985 prior to decriminalisation (the law was promulgated in July 1985) and 1986 in which abortion was lawful. However, the information system had not yet been established and no data are available. From 1987 onwards the overall rate increased annually, rising from 2.99 in 1987 to 5.56 in 1995 per 1000 reproductive-age woman.

With regard to the linear regression analysis, the results for the first period were  $\beta$  = 0.3538 (0.307–0.400) and for the second period they were  $\beta$  = 0.319 (0.243–0.394). Since the confidence intervals overlap, no differences were found between the slopes. Therefore, we cannot

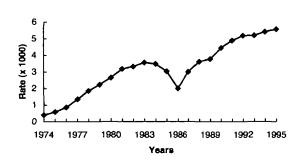


Figure 1 Rate of abortions per 1000 Spanish reproductive-aged women registered in England and Wales, The Netherlands and Spain 1974–1995. For 1974–1984  $\beta$  = 0.3538 (0.307–0.400) and for 1987–1995  $\beta$  = 0.3319 (0.243–0.394)

assert that the annual increase in the abortion rate has been greater since decriminalisation.

#### DISCUSSION

During the study period, approximately 240,000 Spanish women obtained abortions in England and Wales and The Netherlands, presumably travelling there for that purpose. Since 1974 the growth in abortion rates in Spanish women has been constant. There was no difference in the increasing of the total abortion rate

when comparing the trends before and after the abortion law was passed in Spain.

The past decades have witnessed a trend in the process of legalising abortion in several countries and in a variety of legal forms. 19-21 In Spain's case, the first legal abortions were carried out at the end of 1985 (the law was passed in July 1985). However, as shown in figure 1, the fall in abortions carried out abroad during 1984 began before abortion was legalised in Spain. Nothing indicates that the number of abortions actually fell. It seems more likely that abortions took place illegally in Spain, perhaps due to the emerging permissive social climate with regard to abortion. Over this period few groups of professionals had organised themselves in order to make it possible for women to abort in safer and more hygienic conditions albeit unlawfully. The family planning clinics where these abortions were carried out and their employees were persecuted and prosecuted for their practice whereas medical colleges and specialists faculties did not offer a response to this health problem.

This situation was unlike that of other countries where a permissive social climate and the support and organisation of health professionals responded to women's needs more efficiently whilst receiving endorsement themselves. In Belgium, their abortion law was passed in 1990, after 20 years of a strong political debate; nevertheless, at the same time, health professionals set up a sort of 'illegal reform programme' which provided abortion facilities and an information system.<sup>22</sup> There were some similarities

Table 1 Number and rates per 1,000 reproductive-aged Spanish women who aborted in Spain, England and Wales and The Netherlands 1974–1995

	Spain		England and Wales		The Netherlands		Total	
Years	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1974		-	2,978	0.40			2,978	0.40
1975	_	_	4,393	0.59	_	_	4,393	0.59
1976	_	_	6,397	0.85	_	_	6,397	0.85
1977	_	_	10,187	1.35	_	_	10,187	1.35
1978	_	_	14,015	1.85	_	-	14,015	1.85
1979	_	_	17,061	2.23	_	_	17,061	2.23
1980	_	_	18,342	2.38	2,000	0.26	20,342	2.64
1981	-	_	20,454	2.65	4,000	0.52	24,454	3.17
1982	_	_	21,415	2.75	4,300	0.55	25,715	3.31
1983	_	_	22,002	2.80	5,800	0.74	27,802	3.55
1984	-	_	20,060	2.54	7,300	0.93	27,360	3.47
1985	_	_	17,688	2.22	6,344	0.80	24,032	3.02
1986	_	-	11,935	1.44	4,581	0.55	16,516	1.99
1987	16,766	1.99	5,878	0.70	2,524	0.30	25,168	2.99
1988	26,069	3.07	3,188	0.37	1,406	0.17	30,663	3.61
1989	30,552	3.56	1,332	0.15	572	0.07	32,456	3.77
1990	37,231	4.30	886	0.10	313	0.04	38,430	4.43
1991	41,910	4.79	604	0.07	229	0.03	42,743	4.88
1992	44,962	5.11	464	0.05	134	0.02	45,560	5.17
1993	45,505	5.13	317	0.04	47	0.01	45,869	5.18
1994	47,832	5.37	127	0.01	30	0.00	47,989	5.39
1995	49,387	5.53	86	0.01	242	0.03	49,715	5.56
Total	340,214	-	199,809	-	39,822	-	579,845	_

with the situation in The Netherlands; Stimezo performed abortions from 1971 and the law was passed in different steps from 1980 to 1984, although the existing social climate before the law was passed meant that thousands of women from Spain and other countries travelled there in order to have an abortion performed.<sup>5</sup> It is impossible to know how many illegal abortions were practised in Spain during this time and we do not know of published studies on mortality or morbidity associated with this practice during its unlawful years. However, according to reports made to the Office of the Spanish Public Prosecutor,<sup>23</sup> a fall in self-induced abortions and those carried out by unauthorised persons was detected. These data are probably only the tip of the iceberg, since it was only in those cases where there was a serious health problem that a judicial report would be made to the Public Prosecutor.

Nowadays, the law does not cover all women's needs. The majority of the abortions performed in Spain at the present time are because the pregnant woman's mental health is at serious risk 16 and this has to be certified by a psychiatrist. Some authorised doctors and clinics continue to be prosecuted for practising abortion for this reason, giving rise to discussion about the appropriateness of diagnosis. This has given rise to problems concerning confidentiality when using these services. This may explain why 34,895 Spanish women have obtained induced abortion in England and Wales and The Netherlands since decriminalisation.

Abortion is a phenomenon linked to different aspects of health policies. One of these is access to family planning services. Limited access gives rise to an increase in the number of legal abortions when abortion services are available and an increase in the number of underground abortions when they are not. The case of Romania reflects this problem with an increase in maternal mortality<sup>24,25</sup> and also applies to China where abortion is used as a contraceptive.<sup>26</sup>

Contraceptives were legalised in Spain in 1978 and since 1985 there has been a national health service which provides family planning services to all Spanish women. However, this in itself is not enough. In countries where abortion has been legalised but has also been accompanied by greater promotion of unwanted pregnancy prevention activities the results have been different. In the USA, the number of abortions increased during the years immediately following decriminalisation and subsequently declined and stabilised. 27,28 This phenomenon also applies to Europe in countries such as the UK and France<sup>29</sup> where the number of abortions per 1,000 live births remains stable. In countries such as Finland or Denmark, over recent years there has been a decline in the number of legal abortions for every 1,000 live births.<sup>29</sup> Spanish figures on abortion have not risen to levels such as those mentioned in the above countries. The Spanish experience is closer to the situation in Greece<sup>29</sup> where there has also been a continual increase in the abortion rate since decriminalisation but where the levels have not reached those of other European countries.

Although the abortion rate in Spain is following an upward trend, there was no difference in growth during the second study period (1987–1995) when compared to those that took place during the first study period (1975–1984) when women were forced to travel to other countries. Basically, the impact of the abortion decriminalisation law has been to improve conditions under which abortions are practised and, therefore, women's health and well being.

In the current historical process towards a Europe without borders it is necessary to predict the impact that different abortion policies may have on women in different countries, since abortion continues to take place regardless of its legal status. The potential outcome, as already mentioned, is an increase in maternal morbidity and mortality or requires women to travel abroad to seek services. Until recently Spain could be considered as an 'exporter' of women in search of abortion in safe and hygienic conditions, but even in 1995 336 women from other countries had received abortion services while in Spain. <sup>16</sup>

The European Union, must explore mechanisms for reducing the harm these journeys imply for the health of European women through the subsidiarity principle. The current situation suggests inequality in triplicate. First, for the women themselves. Although all are European citizens, access to abortion services is unequal given the varying legal status of abortion in individual countries of origin. In addition, inequality is brought about by socioeconomic level, enabling or preventing women from travelling abroad. Finally, there are inequalities with regard to the responses of health services and professionals towards abortion as opposed to other health problems less influenced or affected by the legal situation. Policies for coping with this situation of unequal access for European women should be developed.

This study has certain limitations. It is likely that abortion has been under-reported since decriminalisation in Spain.<sup>30</sup> It would be helpful if information were available relating to clandestine abortions which may have taken place immediately following decriminalisation in order to present a more precise description of this phenomenon. There is a potential bias in the pre-law abortion rates due to the non-existence of information about how many illegal abortions were performed during this period. Nevertheless, this information would increase the rates in the pre-law period, further supporting our hypothesis of no effect of abortion laws on the trends in operations. Nevertheless, we could conclude that the existence of proper health services does not 'cause' an increase in the trend of number of abortions but rather potentially improves the quality of the settings in which abortion takes place. We also reiterate the fact that abortion took place regardless of the existence or absence of these services. Abortion is an issue with political, religious and moral influences where, from a legal perspective, new arguments and counter-arguments are constantly being introduced in an effort to restrict its practice. 31 From a public health perspective, we consider that it should be addressed the same as any other health problem with great impact on mortality, morbidity and inequality in access to services. Consequently, it is important to contribute as much evidence as possible about the impact of different abortion policies on women's health so that decision makers and the public will have a more solid base of information at their disposal.

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#### REFERENCES

- Miller K, Rosenfield A. Population and women's reproductive health: an international perspective. Annu Rev Public Health 1996:17:359-82.
- Sims P. Abortion as a public health problem in Zambia. J Public Health Med 1996;18(2):232-3.
- Okojie CE. Gender Inequalities of health in the Third World. Soc Sci Med 1994;39(9):1237-47.
- Munday D, Francome C, Savage W. Twenty one years of legal abortion. BMJ 1989;298:1231-4.
- Rosenfield A. Maternal mortality in developing countries: an ongoing but neglected 'epidemic'. JAMA 1989;262:376-9.
- American Medical Association, Council on Scientific Affairs. Induced termination of pregnancy before and after Roe v Wade: trends in the mortality and morbidity of women. JAMA 1992;268:3231-9.
- Szmoisz S, Vuegen SE, Plaza AS, et al. Argentina: risk factors and maternal mortality in La Matanza, province of Buenos Aires, 1990. World Health Stat O 1995:48:4-7.
- Application de l'article L162-11 du code de la santé publique et determinant les conditions d'application aux femmes etrangères de la loi nº 75-17 du 17 janvier 1975 relative a l'interruption volontaire de la grossesse (Bill that determines the conditions of the abortion law applied at the foreign women in France). Decret N 75-354. 15 May 1975.
- Peiró R, Colomer C, Ashton J, Alvarez-Dardet C. Abortos inducidos en Inglaterra y Gales (1974-1988) (Induced termination of pregnancy in England and Wales (1974-1988)). Gac Sanit 1994:8:57-62.
- Office of Population Censuses and Surveys. Abortion statistics 1974-1993, London: HMSO.
- Office for National Statistics. Abortion statistics 1994-1995. London: HMSO.
- Ketting E, Leseman P. Abortus en Anticonceptie 1983/1984. Jaarverslag van de permanente registratie abortus (Abortion and contraception, Annual reports of the permanent abortion registration). Utrecht: Stimezo-Onderzoek, 1986.
- Anonimo. Jaarverlagen van de geneeskundige hoofinspecteur van de Volksgezondheid (Annual reports of the medical head-inspector of public-health). Rijswijk: Ministerie van Welzijn Voksgezondheid en Cultuur, 1990.

- Anonimo, Jaarrapportage van de inspectie voor de gezondheidszorg (Annual report of the inspection of healthcare). Rijswijk: Ministerie van Volksgezondheid, Welzijn, Sport, 1993.
- 15 Anonimo. Inspectie voor de gezondheidszorg (Annual report of the inspection of healthcare). Jaarrapportage 1995. Rijswijk: Ministerie van Volksgezondheid, Welzijn, Sport, 1996.
- Dirección General de Salud Pública, Interrupción voluntaria del embarazo, 1995 (Voluntary termination of pregnancy, 1995). Madrid: Ministerio de Sanidad y Consumo, 1996.
- 17 Instituto Nacional de Estadística. Proyección de la Población Española para el periodo 1980-2010: resultados por Comunidades Autónomas Tomo II (Projection of the Spanish population for the period 1980-2010: results by Autonomous Communities volume II). Madrid: INE, 1988.
- Servicio de Vigilancia Epidemiológica. Proyecciones de Población 1900-1990 (Population projections 1900-1990). Madrid: Ministerio de Sanidad y Consumo, 1990.
- Cook RJ. Dickens BM, Bliss LE. International developments in abortion law from 1988 to 1998. Am J Public Health 1999;89:579-86.
- Cook RJ. Dickens BM. International developments in 20 abortion laws: 1977-1988, Am J Public Health 1988;78:1305-11.
- Tietze C. Leyes y Políticas de aborto. Informe Mundial sobre el aborto (Abortion laws and policies. World abortion report). Madrid: Ministerio de Cultura, Instituto de la Mujer, 1987.
- Humblet PC, Vekemans M, Buekens P, Developments in abortion policy in a context of illegality: the Belgian case from 1971 until 1990. Eur J Public Health 1996;4:288-93.
- Anonimo. Incidencias en la aplicación jurisdiccional de la ley (Incidences in the jurisdictional application of the law). In: Estudio sobre las diferentes circunstancias concurrentes en la aplicación de la legislación vigente en materia de interrupción voluntaria del embarazo y su incidencia en la realidad social (Study on the different concurrent circumstances in the application of operative legislation in the matter of voluntary termination of pregnancy and its incidence on social reality). Madrid: Informe al Congreso de los Diputados, Ministerio de Relaciones con las Cortes y la Secretaria del Gobierno, 1991:15-8.
- Johnson BR, Horga M, Andronache L. Contraception and abortion in Romania. Lancet 1993;341:875-8.
- Johnson BR, Horga M, Andronache L. Women's perspectives on abortion in Romania. Soc Sci Med 1996;42:521-30.
- Rigdon S. Abortion law and practice in China: an overview with comparison to the United States. Soc Sci Med 1996;42:543-60.
- Koonin LM, Smith JC, Ramick M, Lawson HW. Abortion surveillance: United States, 1989. MMWR CDC Surveill Summ 1992;41(5):1-33.
- Koonin LM, Strauss LT, Chrisman CE, Montalbano MA, Bartlett LA, Smith JC. Abortion surveillance: United States, 1996. MMWR 1999;48(SS04):1-42.
- World Health Organization. Health for all indicators: database on line. Available at:
- http://www.who.dk/mainframe.htlm. Accessed June 9, 1997.
- Rodriguez C, Sendra JM, Regidor E, Gutierrez Jl, Iñigo J. Propuesta de un método para estimar la subnotificación del aborto inducido practicado en España (Proposal of a method for estimating under-reporting of induced abortion conducted in Spain). Gac Sanit 1994;8:63-70.
- Annas GJ. Partial-birth abortion, Congress and the Constitution. N Engl J Med 1998;339:279-83.

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