

Clinical course in women undergoing termination of pregnancy within the legal time limit in French-speaking Switzerland

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Summary

BACKGROUND: In 2002, Swiss citizens voted to accept new laws legalising the termination of pregnancy (TOP) up to 12th week of pregnancy. As a result the cantons formulated rules of implementation. Health institutions then had to modify their procedures and practices.

QUESTIONS UNDER STUDY/PRINCIPLES: One of the objectives of these changes was to simplify the clinical course for women who decide to terminate a pregnancy. Have the various health institutions in French-speaking Switzerland attained this goal? Are there differences between cantons? Are there any other differences, and if so, which ones?

METHODS: Comparative study of cantonal rules of implementation. Study by questionnaire of what happened to 281 women having undergone a TOP in French-speaking Switzerland. Quantitative and qualitative method.

RESULTS: The comparative legal study of the six cantonal rules of implementation showed differences between cantons.

The clinical course for women are defined by four quantifiable facts: 1) the number of days to wait between the woman's decision (first step) and TOP; 2) the number of appointments attended before TOP; 3) the method of TOP; 4) the cost of TOP. On average, the waiting time was 12 days and the number of appointments was 3. The average cost of TOP was 1360 CHF. The differences, sometimes quite large, are explained by the size of the institutions (large university hospitals; average-sized, non-university hospitals; private doctors' offices).

CONCLUSIONS: The cantonal rules of implementation and the size of the health care institutions play an important role in these courses for women in French-speaking Switzerland.

Key words: termination of pregnancy; law reform; time span; women's clinical course; medical costs

Introduction

In June 2002, Swiss citizens voted by a 72% majority to accept new laws in the Criminal Code (Articles 119–120), which legalised the termination of pregnancy (TOP) up to 12 weeks of amenorrhoea (WA), as is the case in 22 other European countries [1].

Compared to the previous situation, the main modifications introduced by the legalisation of TOP are the following: the decision belongs to the woman who signs a TOP request. She no longer has to consult two doctors (elimination of second opinion). The doctor must ensure her consent. The time limit is set at 12 WA. The woman receives and signs an official informational document. Women under age 16 must visit a specialised consultation centre for minors. Following the passing of this law, the clinical course of women requesting TOP is supposed to be simpler.

Following this vote, each canton had to devise rules of implementation. Public hospitals now had the obligation to ensure women's access to TOP, and had to adapt their practices to this law, as did private clinics and doctors who wished to perform TOP in their office.

During the 2000s, other important changes came into play: the commercialisation of emergency contraception pills; the reorganisation of public hospitals; the introduction of a medical TOP method (Mifégyne, RU486).

The question of abortion laws and their implementation has been the subject of many research studies. We name those of the USPDA (Swiss Union to Decriminalise Abortion) [2] in Switzerland, of Inserm, Bajos et al. [3] or Mignot [4–5] in France, and of the Alan Guttmacher Institute [6], Henshaw et al. [7], and Finer et al. [8–9] in the United States. The study design and the construction of the questionnaire addressing the courses of women having undergone a TOP draws a lot from the work of the group of the Alan Guttmacher Institute [6–9]. This should allow comparing our results with different population sets.

As it was a matter of enforcing law reform which applied to all of Switzerland, the problem of this study referred to the classic theoretical model of sociologist Max Weber [10]. The new articles of the Swiss Criminal Code about TOP constitute a new legal norm, elaborated as rationally as possible and resulting from a political compromise. Our study aims to compare this norm with the reality of its implementation by the cantons and the health professionals, knowing that there is always a difference between the letter of the law and the practice. The question of the cost of a TOP was also a subject of our investigations; cost being a possible obstacle for the more destitute women. These discrepancies were analysed from the following data: the rules of implementation of the 6 French-speaking cantons; the courses of women interviewed by questionnaire; the cantons and the size of the institutions where they obtained the TOP.

Two qualitative studies by in-depth interviews [11] completed the study by questionnaire, one study on the points of view of women having had complicated courses, the other on the points of view of health professionals (gynaecologists, nurses, midwives and sexual and reproductive health counsellors (family planning counsellors)), concerning the change in procedures and daily practices. This material allowed us to go a step further in the analysis, as has been shown by many studies in this domain [3, 12–13] including our own previous studies [14–19].

The results presented in this article focus on the clinical course for women who decided to have a TOP. The results concerning the points of view of health professionals will be the subject of another article.

Material and methods

The study protocol was accepted by the Ethics Committee of the Geneva University Hospitals (June 2005), the Intercantonal Ethics Committee of Jura, Fribourg, Neuchâtel (September 2005), the Valais Cantonal Commission for Medical Ethics (October 2005), and the Ethics Committee for clinical research of the faculty of biology and medicine at the University of Lausanne (Vaud) (November 2005).

The study started in January 2006. The comparative legal study of the cantonal rules of implementation was done in 2008. These cantons are very different with regard to the ratio between their size, population, and number and size of public hospitals, and in the number of TOPs [20]. In order to try to avoid the potential impact of these differences on the variations in the rate of participation, our objective was to interview women in the most public hospitals possible of the six French-speaking cantons.

The recruitment of women was carried out in 2006 and 2007, mainly by sexual and reproductive health counsellors, before or after TOP. This mode of recruitment introduced a bias. Therefore this study is not representative.

Women's participation was voluntary. The criteria for inclusion were: 1) to have had a TOP within the 12 week time limit; 2) to speak sufficient French or another language spoken by the interviewers. The women received an information sheet and signed a consent form at every stage of the study. Anonymity and confidentiality were guaranteed.

The methodology of the study of women's clinical course is quantitative and qualitative. The questionnaire on these courses, about 30 minutes long, was filled in face-to-face with the interviewer. It contained 53 open or closed questions. It was structured in three parts: 1) identification (place, date); 2) course description and commentary (with specific questions for minors); 3) socio-demographic questions.

The questionnaires were entered on File Maker Pro and then transferred to SPSS. Statistical analyses were performed using the SPSS package programme. Discrete variables were compared with the χ^2 exact test. A p value <0.05 was considered statistically significant.

Results

Comparative legal study

The comparative legal study of the six cantonal rules of implementation showed that all the public hospitals having an obstetrics / gynaecology and surgery department were authorised, indeed obligated, to perform TOP, and did so. Certain cantons authorised private doctors to perform TOP in authorised hospitals. Until 2008, only one canton authorised private gynaecologists to perform TOP in his/her office. Since then, four more cantons have authorised this too. In public hospitals, TOPs were performed under direct responsibility of a doctor certified by the Swiss Medical Association (FMH). In private institutions, they were performed by FMH-certified doctors.

In all cantons except one, Family Planning Centres were appointed specialised consultation centres, to which minors under age 16 must be referred. Doctors' invocation of the conscience clause, i.e. «the right of a doctor not to act against his moral sense» (inferred from the freedom of conscience and of beliefs figuring in article 15 of the Constitution), to refuse performing a TOP constitutes one of the problems sometimes rendering the enforcement of the new articles of the Criminal Code difficult.

Questionnaires

The majority of the 281 women filling out the questionnaire were 18 and over (89%). The average age was 26 years old. Our cross-section of women was younger than the body of women having had TOP in the 6 cantons of French-speaking Switzerland: 71% under 30 years old, as opposed to 58% in the whole population [20]. The majority were single (71%), with no children (66%). Half had a profession (52%), a third were still students (36%), a minority were housewives or without a profession (11%). Nearly half had no revenue (47%). More than half held Swiss nationality (59%) (table 1). The foreigners (41%) were divided into 36 nationalities, coming from Europe (21%), South and Central America (9%), Sub-Saharan Africa (6%), and others (5%).

The TOPs were carried out in 17 health care institutions in 6 French-speaking cantons. A majority were done in public hospitals (90%), and a minority in doctors' offices or private clinics (10%). The majority of questionnaires were filled out in 3 cantons: Vaud (43%), Genève (32%), and Neuchâtel (17%). The cantons of Fribourg, Valais and Jura

only represent 8% of the total. The size of the women's samples responding to the questionnaire in three out of the six cantons did not allow us to carry out a valid statistical analysis.

The majority of women had taken a home pregnancy test (71%) before consulting a health care institution. Half the TOPs were performed up to 7 WA (52%), and the other half up to 12 WA (46%). Half were performed with the medical method (46%), the other half with the surgical method (54%). For the majority of the women (80%), it was their first TOP. The women who had undergone more than one TOP (N = 53) were a very heterogeneous group, having undergone a TOP over 27 years (between 1980 and 2007), and with only half of the group having undergone a TOP before 2002 and thus able to evaluate the change in procedures. Furthermore, 14 women had undergone a TOP outside Switzerland; and 6 women had a TOP after 12 WA.

Women's clinical courses were defined by the following data: 1) the number of days' wait between the women's personal decision (defined by the date of the first approach to professionals to request a TOP) and the TOP; 2) the number of appointments they attended (defined by the

number of times the women had to travel); 3) the method of TOP used. In addition to questions concerning their courses, the questionnaire had questions concerning 4) the decision and the women's information; 5) their point of view on their course; 6) the cost of the TOP.

This data was subjected to multiple statistical analyses. The only variable, that was pertinent and sometimes significant, was the size of the health care institution where the TOPs were performed. This variable distinguishes large university hospitals, average-sized, non-university hospitals and private doctors' offices. Note that because of the bias in recruitment mentioned above, our results only indicate tendencies of reality in French-speaking Switzerland.

Results

1) Concerning the number of days' wait, the minimum courses filling legal requirements fall between 1 and 2 days' wait for women over 16, and between 3 and 4 days' wait for minors, depending on the method of TOP used. Our results show that the actual waits varied between 1 and 49 days. On average, the wait was 12 days. Within a 1 to 7 day wait, 73% of women consulting a private doctor had

Table 1: Study sample characteristics.

Age	N = 281	%
Under 16 years old	7	2.5
16–17 years old	23	8.2
18–19 years old	42	14.9
20–24 years old	63	22.4
25–29 years old	64	22.8
30–39 years old	68	24.2
40 and over	11	3.9
Missing response	3	1.1
Total	281	100
Civil Status		
Single	199	70.8
Married + Civil Partnership	44	15.7
Separated, divorced, widowed, other	38	13.5
Children		
No children	186	66.2
One or more children	93	33.1
Missing response	2	0.7
Professions		
Highly-qualified professions	7	2.5
Other independents	9	3.2
Intellectual or managerial professions	11	3.9
Intermediary Professions	12	4.3
Qualified, non-manual: employees	33	11.7
Qualified, manual: workers	23	8.2
Non qualified workers	51	18.1
Various and without a profession (housewives)	30	10.7
Students (apprentice, high school student, university student)	101	35.9
Missing response	4	1.4
Economic Status		
Part-time salaried	66	23.5
Full-time salaried	64	22.8
Unemployment, pension (disability, widow)	14	5.0
No revenue	132	47.0
Missing response	5	1.8
Nationality		
Swiss	165	58.7
Foreign	115	40.9
Missing	1	0.4

their TOP, as opposed to 57% of women consulting in a non-university hospital and 25% of women consulting in a large, university hospital (table 2).

2) In terms of the number of appointments, the minimum course filling legal requirements falls between 2 and 4 appointments for women over 16 and between 3 and 5 appointments for women under 16, depending on the method of TOP used. If a medical TOP is performed, the strongly recommended post-TOP appointment is included in this number. Our results show that in reality, the number of appointments prior to a TOP varies between 1 and 8. The average number of appointments was 3. Out of women who consulted a private doctor, 52% attended 1 or 2 appointments prior to the TOP, as opposed to 43% who consulted an average-sized, non university hospital, and 38% who consulted a large university hospital. These differences are not significant. This is explained by a detailed analysis of data which showed that the differences between the two large university hospitals balance out when they are placed in the same category, one having a tendency to multiply the appointments before TOP, the other not.

3) In our study, 54% of the women had a surgical TOP under general anaesthesia, and 46% had a medical TOP (with a 3% failure rate). Only one woman had a surgical TOP with local anaesthesia. We noted that large university hospitals perform more surgical TOP (67%), whereas average-sized, non university hospitals and private doctors' offices perform more medical TOP (56% and 81.5% respectively, significant difference $p \leq 0.000$). The large university hospitals perform fewer TOP between 4 and 7 WA (39%) than the average-sized, non university hospitals (63.5%) and private practices (92%). This information is linked to the previous finding, a medical TOP only being possible up to the 7th WA. (Significant difference $p \leq 0.000$). Because of the 7 WA time limit, 64% of the women who had medical TOP waited only 1 to 7 days between their decision and the TOP, as opposed to 23% of the women who had surgical TOP (table 3).

There were fewer appointments before a TOP if it was a medical TOP (57% of women attended 1 or 2 appointments) than if it was a surgical TOP (28% of women attended 1 or 2 appointments) (significant difference $p \leq 0.000$).

4) Two-thirds of the women (67%) decided on their own to have a TOP. Three-fourths (73%) felt free to consult the professional of her choice and to ask all the questions she wished (93%). The majority of the women (84%) remembered signing one or more documents, often considered a formality (57%). One-third of the women (35%) consider that the informational documents are useful.

5) The points of view of the women on their courses are interesting. A majority of the women (87%) considered the process to obtain a TOP was simple. But 43% found the

wait before the TOP long, as opposed to 34% who found it adequate and 19% who found it short. When we cross this subjective perception with the objective timing, it appears that those who found the wait long had to wait 13 days on average, those who found it adequate had to wait 11 days, and those who found it short had to wait 9 days (significant difference $p \leq 0.008$). The span between the perception of a long wait and a short wait is only 4 days.

6) The question of the cost of TOP was broached by asking the women to estimate their costs, according to their bills, if possible. As opposed to the preceding questions which nearly all the women answered ($n = 281$), only a third of the women ($n = 97$) could furnish precise information. The following results were calculated according to that information.

The cost of a TOP varied between 400 and 3500 CHF. The average cost was 1360 CHF. The costs differ depending on the method of TOP used. A successful medical TOP was less expensive (average cost 1076 CHF) than surgical TOP with general anaesthesia (average cost 1490 CHF). An unsuccessful medical TOP, followed by a surgical TOP with general anaesthesia, was the most expensive (2312 CHF) (significant differences $p = 0.002$; ANOVA $p = 0.02$).

The cost varies depending on the size of the health care institution. The average cost of a TOP in a private doctors' office varied between 400 CHF and 1270 CHF (average: 620 CHF); in an average-sized, non university hospital it varied between 592 CHF and 2550 CHF (average: 1247 CHF); and in a university hospital it varied between 693 CHF and 3500 CHF (average: 1529 CHF) (table 4).

An analysis comparing these averages shows that the differences are mostly between TOP performed in doctors' private offices and in hospitals (ANOVA $p < 0.005$). An analysis comparing the average costs of only medical TOP shows that the difference is more significant between private doctors and large university hospitals ($p = 0.003$) than between private doctors and average-sized, non university hospitals ($p = 0.028$). Finally, an analysis of correlations shows that, the variables taken into account, (number of WA at the time of the TOP; number of days' wait between the decision and the TOP; the number of appointments before the TOP; and the cost of the TOP) a coherent ensemble is formed, defining the practices of these institutions.

TOP are reimbursed by health insurance. The majority of the women had insurance ($n = 257$, 91.5%). But, most of these women being young and healthy, they had high deductibles and therefore paid themselves. It was the case of 63% of the women who answered the questions about cost. A minority of women did not have insurance (8.5%). A few women received funding from charitable foundations.

Table 2: Size of institution / number of days wait between women's decisions and TOP.

Size of institutions/ No. of days' wait between women's decisions and TOP	1 to 7 days		8 to 14 days		15 to 49 days		Total	
	N	%	N	%	N	%	N	%
Large University Hospitals	37	25.3	57	39.0	52	35.6	146	100
Average-sized, non university hospitals	59	57.3	31	30.1	13	12.6	103	100
Private doctors' offices	19	73.1	6	23.1	1	3.8	26	100
Total	115	41.8	94	34.2	66	24	275	100

N = 275 Missing: N = 6; $\chi^2 = 42.06$ ($p \leq 0.000$)

Discussion

Since 2002, legalisation of TOP has had more important effects on the cantons, which were once considered “restrictive” than on those that were considered “liberal”. Women now have access to TOP in all the public hospitals in French-speaking Switzerland, or at least in one hospital per canton, when they operate in networks. For TOP up to 12 WA, the poorly named “abortion tourism” has nearly disappeared. We also noted that these changes did not provoke an increase in TOP, and that the number of TOP has remained stable, or indeed decreased [20].

But as Ketting has remarked [21], the legislative framework does not directly influence the rate of TOP. It depends more on a “family planning culture”, the quality of sexual education, the available contraceptive methods, reliable contraceptive methods being distributed free of charge and being distributed directly after a TOP, thereby reducing recurrences.

However our analysis of the different cantonal legal frameworks in French-speaking Switzerland show that they did have an impact on women’s courses because of the widening of the offer to practice TOP in private doctors’ offices (in only one canton until 2008, in five out of six in 2010). Private doctors see women more quickly, offer them the choice between TOP methods more often, summon them to fewer appointments and send them lower bills. Note that in 2009, the number of doctors practising TOP in their offices in Switzerland was low: 3 in French-speaking Switzerland, 3 in Italian-speaking Switzerland and 21 in German-speaking Switzerland [2].

Take the example of the French law from July 2001 whose objective, amongst others, was to stretch the legal time limit for TOP to 14 WA. Mignot [5] notes that to pass a law does not resolve the question of applying it. “Doctors’ invocation of conscience clauses, increased waiting time, opposition to practicing TOP on minors without parental consent...” were the principal difficulties discovered (report by “pressure group to enforce the law of July 2001,” cited by Mignot).

The analysis of rules of implementation in French-speaking Switzerland illustrate this problem when it raises the question of the designation of specialised consultation centres for minors: in 5 cantons, Family Planning Centres see the

young women, whereas in the 6th canton, they are sent to a child psychiatrist, which considerably modifies the symbolic sense of the consultation. Indeed, sending these young women to a Family Planning Centre reinforces contraceptive use and reiterates to them their capacity, or not, to plan pregnancies, whereas sending them to a psychiatrist implies doubt in their judgment capacities, in their sexual “normality” and in their mental health. Sending the young women to a psychiatrist can also reinforce an idea that having a TOP can leave serious psychological scars. These two types of consultations, offered with the intention of helping young women make a decision, of protecting them and of supporting them whether they continue with the pregnancy or not, can in fact reinforce as well as diminish their feelings of guilt. In other words, these consultations can be iatrogenic or salutary.

Our study has obvious limits: it is not representative and the recruitment of women by Family Planning Centres introduced a bias. Our population is younger than the reality: in our study, 48% of women are between 15 and 24 years of age, as opposed to only 36% of all women having TOP in French-speaking Switzerland (Federal Statistical Office, Switzerland (OFS) 2006–2007). Despite this bias, certain indicators used in our study, which can play an important role in women’s clinical courses, give results very close to those of the OFS. Two examples: in our study, 94% of the women had their TOP in their resident canton, as opposed to 95% in French-speaking Switzerland (OFS 2007); in our study, surgical TOP made up 54%, as opposed to 54% in 2006 and 51% in 2007 in French-speaking Switzerland [20]. Nevertheless, our study indicates only tendencies at one given time. Since 2008, there have been significant changes in some cantons and medical institutions.

Now let’s compare our results concerning the size of the medical institutions, women’s waiting time before the first appointment, the number of appointments before TOP and the costs of TOP with some American studies.

In a study carried out in the USA in 2001 on access to TOP at 1819 medical institutions performing TOP (603 hospitals, 447 abortion clinics and 769 other types of institutions, non-hospital and medical offices), Henshaw [7] notes that 95% of TOPs were performed in non-hospital institutions, abortion clinics and other types of institution. His study focuses on two obstacles in access to TOP: the necessary

Table 3: Number of days between the woman’s decision and the TOP / method of TOP.

No. of days between the woman’s decision and TOP / Methods of TOP	1 to 7 days		8 to 14 days		15 to 21 days		22 to 49 days		Total	
	N	%	N	%	N	%	N	%	N	%
Surgical	34	23.0	57	38.5	36	24.3	21	14.2	148	100
Medical	81	63.8	37	29.1	7	5.5	2	1.6	127	100
Total	115	41.8	94	34.2	43	15.6	23	8.4	275	100

$\chi^2 = 57.45$ ($p \leq 0.000$)

ANOVA: average significant difference of 7 days ($p \leq 0.000$) between the surgical TOP (average = 15.25) and the medical TOP (average = 8.39) $f = 55.628$ ($p \leq 0.000$)

Table 4: Size of institution / cost of TOP.

Size of institution / Cost of TOP in CHF	400–999 CHF		1000–1499 CHF		1500–3500 CHF		Total	
	N	%	N	%	N	%	N	%
Large University Hospitals	7	11.3	19	30.6	36	58.1	62	100
Average-sized, non university hospitals	4	23.5	7	41.2	6	35.3	17	100
Private doctors’ offices	15	83.3	3	16.7	–	–	18	100
Total	26	26.8	29	29.9	42	43.3	97	100

$\chi^2 = 40.05$ ($p \leq 0.000$)

travel distance and the cost. In the U.S., one fourth of women travel 80 km or more to get a TOP, and of those, 8% travel 160 km or more. This obstacle becomes even more important if there are several appointments. This is probably why 59–60% of abortions are performed with only one appointment, in those states not requiring the patient's presence at each appointment. The possibility to have a TOP in one appointment has a strong correlation with the number of TOP performed by these institutions (abortion clinics doing over 5000 abortions per year). The percentage of undecided women at first contact is evaluated at a maximum of 7%.

This information sheds light on the relationship between travel distance and the number of appointments. One can wonder if the larger number of appointments discovered in our study on French-speaking Switzerland (59% of TOP after 3 or more appointments) is related to the greater proximity between the institutions performing TOP and women's homes. One can also wonder if the "corporate culture" of the institutions or of the cantons considers that women are undecided about a termination at first contact, and that it is important to provide them time to think, for example with several appointments, rather than to evaluate indecision case by case. This practise often has the consequence of passing the 7 WA limit, and therefore removing the choice of TOP methods.

The Henshaw study [7] describes a wider range of costs (minimum \$150, maximum \$4000, or from 1 to 26) than those, which we found in French-speaking Switzerland (400 to 3500 CHF, or from 1 to 7). Clients of abortion clinics and other institutions pay about the same sum (between \$367 and \$372) whereas those of private doctors' offices pay more (\$471). The majority of them (76%) pay themselves, whether or not they are covered by various insurances. In French-speaking Switzerland, the situation is identical, but to a lesser degree (63%). Another interesting finding is that in the U.S., medical TOP (which only requires one appointment during which the woman gets the first dose of medication, the second dose being taken at home) is more expensive than surgical TOP (most often performed under local anaesthesia). The main reason is that the bill for a medical TOP also includes the cost for a surgical abortion in case of failure. This amount also covers explanations and advice, longer than for a surgical TOP, follow-up by telephone, and the post-TOP appointment.

This information suggests several explanatory hypotheses concerning our results. It might not be just the size of the institution *per se* that would justify the higher costs, as shown in a report from Neuchâtel in 2008 [22], but also other factors like their history, their specialisation (abortion clinics in the U.S.), their internal organisation, their didactic obligation (university hospitals), as well as the education and the practical experience of the doctors and teams of health care workers. Contrary to the U.S., where surgical TOP performed under local anaesthesia are common before and after 7 WA, they seem rare in Switzerland and do not figure in the statistics of the OFS. Yet it is an important alternative method not only for women but for doctors. Cost fixing is also different: in the U.S., the risk of medical TOP failure is incorporated into the cost and is shared by all women preferring this method, whereas in French-

speaking Switzerland this cost is entirely covered by the rare, unlucky women. Finally, one can wonder if the introduction of billing by DRG (Diagnosis Related Groups) on January 1st 2012 in Switzerland will cause these price gaps to disappear.

An investigation led by Finer et al. in 2004 [9] on 615 women having had TOP (all methods of abortion, up to 12 WA and beyond) in 11 large health care institutions, completed by 38 in-depth interviews, analysed the duration of different stages and the reasons for delays in obtaining TOP in the U.S. The investigation noted that it takes women 33 days on average to suspect a pregnancy, 4 days to confirm it, and 0 days to decide to have a TOP. On average, there are 2 days between their decision and their first step to reach an institution, which performs TOP. Between this first step and the TOP, the average time span is 7 days. It takes minors one week more than adults to suspect they are pregnant. More than half the women (58%) said they would have wanted to have their TOP earlier. The most frequent reason for this delay was the time needed to organise the requirements for a TOP. The principle requirements are, in decreasing order: finding the money to pay for the TOP or figuring out if insurance will cover it; getting an appointment; finding out where to get it done; finding a nearby hospital; getting parental consent; respecting the obligatory legal waiting time. Low-income women were often held back twice as long by these difficulties.

Regarding the time span between the woman's personal decision and the TOP, identical variable in the two studies, we note that the average time span was longer in French-speaking Switzerland (12 days) than in the U.S. (7 days). But this number does correspond to the time span reported by women consulting private doctors in French-speaking Switzerland: three-quarters of those women obtained their TOP within 1 to 7 days. This information refers back to the discussion of the size of the institutions, highlighting differences in departmental or cantonal corporate cultures. An example of this is to consider whether women's requests for TOP are emergencies, or not. If it is understandable that a TOP is objectively not considered an emergency, in comparison to situations in which patients' lives are in danger, it is subjectively considered an emergency by many women and health care workers. Sensitive to the rapid growth of the embryo, they consider it less morally difficult to terminate the pregnancy as early as possible. Quicker access to TOP is also possible in Switzerland. If we refer to the percentages of medical TOP by canton to evaluate the speed of treating these women, differences of cantonal "culture", or politics appear clearly: in 2006, the percentages of medical TOP varied between 39% and 90%; in 2007 they varied between 43% and 88%, depending on the French-speaking canton [20]. According to the geographical divisions drawn by the OFS that divide Switzerland into six regions, we notice again in 2009 that the Lake Geneva region (Vaud, Valais and Geneva) employed medical TOP less often (48%) than in the Mittelland region (Bern, Fribourg, Solothurn, Neuchâtel and Jura) (69%). The Lake Geneva region was the only one of the six regions to administer a smaller percentage of medical TOP than the national average (60%), even if it does tend to increase regularly [20].

In conclusion, as Henshaw [7] showed, there are other obstacles to obtaining a TOP, which are harder to objectivise. Lack of information pertaining to abortion's legality, lack of information on places to get it done and the requirements, disinformation and intimidating campaigns by opponents, and opposition from partners, family member and friends are some of those obstacles. For minors, the idea of informing their parents, or indeed asking their permission, is perceived as dangerous by many of them.

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References

- Boland R, Katzive L. Developments in Laws on Induced Abortion: 1998–2007. *International Family Planning Perspectives*, 2008;34(3):110–20.
- USPDA: www.svss-uspda.ch/fr/facts/ruadr.htm et www.svss-uspda.ch/fr/facts/prevenir.htm
- Bajos N, Ferrand M et l'équipe GINE. De la contraception à l'avortement. *Sociologie des grossesses non prévues*. Editions INSERM, collection Questions en santé publique, Paris, 2002.
- Mignot S. IVG: une loi qui a du mal à passer. *Profession Sage-Femme*, n.86, 2002/06: 4–8.
- Mignot S. Mieux appliquer la loi de juillet 2001. *Profession Sage-Femme*, n.95, 2003/05: 16–18.
- Alan Guttmacher Institute: www.guttmacher.org/sections/abortion.php
- Henshaw SK, Finer LB. The Accessibility of Abortion Services in the United States, 2001. *Perspect Sexual Reprod Health*. 2003;35(1):16–24.
- Finer LB, Henshaw SK, Jones RK, Keating A. (Alan Guttmacher Institut & Physicians for Reproductive Choice and Health, PRCH) An Overview of Abortion in the United States. Presentation of January 2003.
- Finer LB, Frohvirth LF, Dauphinee LA, Singh S, Moore AM. Timing of steps and reasons for delays in obtaining abortions in the United States. *Contraception*. 2006;74(4):334–44.
- Weber M. *Essais sur la théorie de la science*. Ed. Plon, Press Pocket, Paris, 1992.
- Pope C, Ziebland S, Mays N. Qualitative research in health care: Analysing qualitative data. *BMJ*. 2000;320:114–6.
- Boltanski L. *La condition fœtale. Une sociologie de l'engendrement et de l'avortement*. Paris: NRF Gallimard, 2004.
- Finer LB, et al. Reasons US women have abortions: quantitative and qualitative perspectives. *Perspect Sex Reprod Health*. 2005;37:110–8.
- Bianchi-Demicheli F, Perrin E, Dupanloup A, Dumont P, Bonnet J, Berthoud M, et al. Contraceptive counselling and social representations: a qualitative study. *Swiss Med Wkly*. 2006;136:127–34. www.smw.ch
- Bianchi-Demicheli F, Perrin E, Bianchi PG, Dumont P, Lüdicke F, Campana A. Contraceptive practice before and after termination of pregnancy: a prospective study. *Contraception*. 2003;67:107–13.
- Bianchi-Demicheli F, Perrin E, Lüdicke F, Bianchi PG, Chatton D, Campana A. Termination of pregnancy and women's sexuality. In *Gynecol Obstet Invest*. 2002;53(1):48–53.
- Bianchi-Demicheli F, Perrin E, Lüdicke F, Campana A. Contraception and sexuality after induced abortion: a comparison between Lugano and Geneva. *Swiss Med Wkly*. 2001;131:515–20. www.smw.ch
- Bianchi-Demicheli F, Perrin E, Lüdicke F, Bianchi PG, Fert D, Bonvallat F, et al. Sexuality, partner relations and contraceptive practice after termination of pregnancy. *J Psychosom Obstet & Gynecol*. 2001;22:83–90.
- Bianchi-Demicheli F, Kulier R, Perrin E, Campana A. Induced Abortion and Psychosexuality. *J Psychosom Obstet & Gynaecol*. 2000;21:213–7.
- Office fédéral de la statistique, OFS: www.interruptio.bfs.admin.ch
- Résumé de la conférence du Dr Evert Ketting, Berne, 28.03 1998: <http://www.svss-uspda.ch/fr/facts/prevenir.htm>
- Réorganisation des activités médicales entre les sites de soins aigus somatiques. Rapport d'étude. Hôpital neuchâtelois, 7 janvier 2008.