Original article

Induced and unsafe abortion 20 years after the International Conference on Population and Development, Cairo, 94: prevalence and sociodemographic characteristics. Favela México 70, São Vicente, São Paulo, Brazil☆

CrossMark

Tássia Ferreira Santos*, Carmen Fusco, Rebeca de Souza e Silva

Department of Preventive Medicine, Escola Paulista de Medicina, Universidade Federal de São Paulo (UNIFESP), São Paulo, SP, Brazil

A B S T R A C T

Objective: This research aimed at calculating the prevalence of women with induced and unsafe abortion and spontaneous abortion as well as the sociodemographic characteristics associated to them in a low income population.

Method: It consists of a cross-sectional study, with a random sample of women in fertile age from 15 to 49 years of age, living in *Favela México 70*, in São Vicente-SP, performed in the last quarter of 2008. The method used for the analysis of the data was the Multiple Multinomial Logistic Regression in order to determine the main independent variables associated to the occurrence of induced abortion, with CI = 95% and *p* < 0.05. The statistical analyses were performed with the help of the SPSS software, version 17.0.

Results: Among the 860 women from 15 to 49 years of age living in this community, it was observed a median of 2 pregnancies for women without abortions and, for women who reported induced abortion, 51 women, a median of 4 pregnancies. It was also observed a mean of 2.53 live born children/women in the studied population. In the final Multiple Multinomial Logistic Regression model, there remained the following categorized independent variables: "number of live born children > 2″ (OR = 4.0), showing that women with 2 or more children have a 4-time-higher chance of inducing an abortion and "accepting abortion by lack of economic conditions" (OR = 11.5), which indicates that women without economic conditions of continuing pregnancy and/or raising one more child present an 11.5-time-higher chance of inducing an abortion.

Conclusions: It may be concluded that, by lack of an efficient contraception system and family planning, women with low income up to now, after 20 years of the International Conference on Population and Development, Cairo, 1994, resort to induced and unsafe

Aborto induzido e inseguro 20 anos após a Conferência Internacional de População e Desenvolvimento, Cairo, 94: Prevalência e características sociodemográficas. Favela México 70, São Vicente, São Paulo, Brasil

R E S U M O

Palavras-chave:
Aborto induzido
Taxa de abortos
Aborto criminoso
Fatores socieconômicos

Objetivo: Calcular a prevalência de mulheres com aborto provocado e inseguro e de aborto espontâneo, bem como as características sociodemográficas a eles associadas em uma população de baixa renda.

Método: Estudo transversal, com amostra aleatória de mulheres em idade fértil de 15 a 49 anos, residentes na Favela México 70, em São Vicente (SP), efetuada no último trimestre de 2008. O método usado para a análise dos dados foi a regressão logística multinomial múltipla para determinar as principais variáveis independentes associadas à ocorrência de aborto provocado, com IC = 95% e p < 0,05. As análises estatísticas foram feitas com o auxílio do programa SPSS versão 17.0.

Resultados: Entre as 860 mulheres de 15 a 49 anos residentes nessa comunidade observou-se mediana de duas gestações para as sem aborto. Para as que declararam aborto provocado, 51, uma mediana de quatro gestações. Foi observada ainda média de 2,53 filhos nascidos vivos/mulher na população em estudo. No modelo final de regressão logística multinomial múltipla permaneceram as seguintes variáveis independentes categorizadas: "número de filhos nascidos vivos > 2″ (OR = 4,0), mostra que as mulheres com dois ou mais filhos apresentam uma chance quatro vezes maior de provocar um aborto; e "aceitação do aborto por falta de condições econômicas" (OR = 11,5), indica que as mulheres sem condições econômicas de prosseguir na gestação e/ou criar mais um filho apresentam chance 11,5 vezes maior de provocar um aborto.

Conclusões: Por falta de um sistema eficaz de contracepção e de planejamento familiar, mulheres de baixa renda ainda hoje, após 20 anos da International Conference on Population and Development, Cairo, 1994, recorrem ao aborto provocado e inseguro para a diminuição da própria fecundidade e do tamanho da família, frente a uma gestação inesperada, não pretendida ou inoportuna.

© 2015 Sociedade Brasileira de Reprodução Humana. Publicado por Elsevier Editora Ltda. Todos os direitos reservados.

Introduction

Two are the remarkable commemorative events related to abortion and maternal mortality in the years 2014–2015: Cairo + 20 and Millennium Development Goals. The first one regards the International Conference on Population and Development (ICPD) held in Cairo, 1994, whose Programme of Action legitimized the concept of Reproductive Rights, recognized by 179 countries. The ICPD also established the definition of Reproductive Health and its implications, covering themes such as abortion, Maternal Health and morbidity and mortality associated to Reproduction, among others. Twenty years after the ICPD held in Cairo, the abortion situation in Brazil remains practically the same.[1]

In 2000, the United Nations (UN), while analyzing global issues, established a plan of goals, detailed by indicators, which should be achieved until the year of 2015, known as the Millennium Development Goals (MDG). The proposed goal#5, to improve maternal health, presents target#6: to reduce by three quarters the maternal mortality ratio (MMR). Even with the decrease in maternal mortality in Brazil by 21% in 2011, referred by the Ministry of Health in 2012,[2] the country is yet far from achieving the proposed goal.[3] The maternal mortality indicator currently reports 64 maternal deaths for 100 thousand live births (64/100.000 lb),[4] considering at least 8% of them are caused by unsafe abortion (UA). Thus, it is fundamentally important to keep track of the trends to induced abortion (IA), whether safe or unsafe, in order to assess maternal health and the progress toward goal #5, target #6, of Millennium development on reducing MMR and achieving universal access to reproductive health.[5]

Unsafe abortion is defined as a "procedure for terminating an unintended pregnancy either by people lacking the necessary professional skills or in an environment lacking the minimal medical standards, or both".[6]

The incidence and prevalence of IA, safe and especially unsafe ones, vary worldwide according to more restrictive or

permissive laws on abortion in the countries. In countries whose laws are more restrictive, such as in Brazil, most abortions are performed illegally and/or under risky conditions, being therefore unsafe, increasing maternal morbidity and mortality. Officially, the UA is responsible for 70,000 deaths per year worldwide, or 13% of total maternal deaths.[6] It is observed that these deaths are considered preventable, since UA, as it is known, is a serious public health matter. Most deaths by abortion in Brazil are among Young, poor, black women with low school education, denoting high inequity rate in health.[7,8] Moreover, women in disadvantaged social circumstances present higher probability of experiencing an unintended pregnancy, and therefore to induce abortion, than women with better financial and social resources.[9]

In Brazil, abortion is the 5th cause of maternal mortality, and it may also be included among the two causes immediately ahead of it – hemorrhagic syndromes and postpartum infections, which would make it the 3rd or 4th cause. The Criminal Code of 1940 admitted abortion in only two cases: – (I) if there is no other means of saving the mother's life and (II) if the pregnancy is the result of a rape, to which it was added, in 2012, approved by the *Supremo Tribunal Federal* (STF), the interruption of pregnancy of anencephalic fetuses, also called therapeutic anticipation of labor.[10]

The Law on Family Planning, Law 9263/96,[11] was considered a significant breakthrough in Brazil as for the sexual and reproductive rights of Brazilian men and women. In article 9th, it states that "in order to exercise the right for family planning all scientifically accepted methods of conception and contraception techniques, and which do not put at risk the life and health of people, will be offered, ensuring the freedom of choice". Despite the law's ensuring that "family planning is a right of every citizen", the implementation of such services, their distribution and operation are far from satisfactory, not even being viable, mostly, which contributes to the great number of unintended, unplanned or inappropriate pregnancies that may result in IA.

Taken into account the illegality of induced abortions and their consequent clandestinity, which eventually lead to unsafe abortions, it is suitable, in Brazil, to have studies clarifying the conditions of this occurrence, especially in populations in poverty situation such as *favelas (slums)*. The present study aims at deepening the analysis on the occurrence of induced (and/or unsafe) abortion, at estimating the prevalence of women undergone induced and spontaneous abortion among women in fertile age (15–49 years of age), living in *Favela México 70*, São Vicente, SP, Brazil, as well as at best characterizing this health hazard (IA) and identifying the sociodemographic characteristics associated with it.

Method

A cross-sectional survey was carried out with all women 15–59 years of age living in a favela (slum), *Favela México 70* in São Vicente, SP, in the last quarter of 2008. 860 women, living there, were interviewed with the collaboration of the *Companhia de Desenvolvimento Habitacional e Urbano* (CDHU).

The interviews were conducted directly, in the household of the interviewee, by interviewers previously trained specifically for the use of the research instrument. A structured questionnaire consisting of 55 diverse questions on sociodemographic characteristics (SDC) and reproductive health of this population was used.

The dependent variable Abortion was categorized in: induced abortion (IA), spontaneous abortion (SA) and no abortion (NA). The independent variables used were: age at the time of the interview, divided into five-year age groups (15–20; 20–25; 25–30; 30–35; 35–40; 40–45; 45–50); paid work activity (yes or no), family income (divided into: up to 0.5 minimum wage (MW), from 0.5 to 1 MW, from 1 to 1.5 MW, from 1.5 to 2 MW; from 2 to 2.5 MW, from 2.5 to 3.5 MW, from 3.5 to 7 MW, from 7 to 10 MW, above 10 MW and "does not know or refuses to answer"); schooling (illiterate, incomplete/complete elementary school, incomplete/complete junior high school, incomplete/complete high school, and incomplete/complete college education); marital status (single, married/living together, separated or divorced and widow); the use, or not, of contraceptive(s) (pill or IUD, sterilization, ineffective (or poorly effective) methods and the use of no contraceptive method), number of live births and abortion acceptance (yes; if yes, in which case; no and does not want to answer).

This project, derived from *Edital 22* financed by the *Conselho Nacional de Desenvolvimento Científico e Tecnológico* (CNPq), was developed by the department of Preventive Health of the *Universidade Federal de São Paulo* (UNIFESP) in 2008 and approved by the Research and Ethics Committee of the same institution, under the number 1927/09. No conflict of interests was detected.

The data were summarized by descriptive measures adequate to the variable type: number and percentage for the qualitative variables, mean and standard deviation for the quantitative ones.

The prevalence of women undergone abortion was assessed through univariate and multiple multinomial logistic regression to identify which characteristics are more strongly associated to induced and spontaneous abortion, using the "no abortion" variable as a reference, for 2 groups, one with the total of women (TW) and another one with the total of women with previous pregnancy (TWP), selecting variables through the stepwise backward method.

Throughout the analysis, we used a significance level of 5% ($p < 0.05$) and confidence interval of 95% (CI = 95%).

Results

The research presented here regards a population of 860 women aged, at the time of the interview, between 15 and 59 years old. 51 of them reported induced abortion (IA) and 150 of them spontaneous abortion (SA), resulting in the following prevalences: IA – 5.9% and SA – 17.4% (TW) and IA – 6.9% and SA – 20.4% (TWP). The IA may all be considered unsafe (UA) according to the definition of the WHO.[6]

The results are presented in 5 tables, where Table 1 presents the sociodemographic profile of this total of women according to the following variables: age range, family income, pay

Table 1 – Sociodemographic data of the evaluated women, Favela México 70, 2008.				
Characteristics	Total of women (n = 860)	% 100.00	Total of women who got pregnant (n = 735)	% 100.00
Age				
15–20	71	8.3	38	5.2
20–25	117	13.3	102	13.9
25–35	339	39.4	304	41.3
35–40	138	16.0	118	16.1
40–45	112	13.0	101	13.7
45–50	83	9.7	72	9.8
Paid activity				
Yes, with CLT/working register	179	20.8	150	20.4
Autonomous: personal activity, usual activity, without hierarchy	23	2.7	21	2.9
Intern, student	6	0.7	2	0.3
Temporary job: with a maximum three-month contract	19	2.2	12	1.6
Casual/eventual work: providing occasional services, without continuity relationship	207	24.1	189	25.7
Owner	10	1.2	9	1.2
Does not work	416	48.4	352	47.9
Income				
Refusal/does not know	8	0.9	7	1.0
From 0 MW to 1 and ½ MW	587	68.3	507	68.9
1 and ½ MW to 2 and ½ MW	175	20.3	148	20.1
2 and ½ MW to 3 and ½ MW	73	8.5	60	8.2
>than 3 and ½ MW	17	1.9	13	1.8
School education				
Illiterate/Does not know how to read and write up to complete Elementary School	479	55.7	451	61.4
Incomplete High School up to complete College degree	381	44.3	284	38.7
Marital status				
Single	182	21.2	101	13.7
Married or living together	599	69.7	555	75.6
Separated or widow	79	9.2	79	10.7
Contraceptive				
Pill or IUD	292	34.0	255	34.7
Elective sterilization	104	12.1	104	14.1
Not effective contraceptive method	239	27.8	209	28.4
Does not use	225	26.2	167	22.7
Induced abortion				
Does not accept	315	36.6	257	35.0
Accepts in some situations or always accepts	545	63.4	478	65.0
Live borns				
None	158	18.4	33	4.5
One	221	25.7	221	30.1
More than 2	481	55.9	481	65.5

work activity, schooling, current marital status, acceptance of induced abortion, number of live births and current use, or non-use, of contraceptive methods.

For the total of women (TW), as for their age at time of the interview, it is observed that the distribution of these women was not uniform, suggesting under-representation in the age ranges corresponding to young women. The mean current age for the total of women, in the studied population, was 32.4 years of age and the one from the total of women with a history of previous pregnancy (TWP) was 33.0 years of age with higher percentage of women in the current age range of 25–35 years old for both groups (39.4% and 41.3%).

Still in Table 1, in relation to paid work activities, the answers were similar for both TW and TWP, considering that about 50% of women worked and 50% did not so. The family income reported by most TW group – 68.3% – and most TWP group – 68.9% – was of up to 0.5–1.5 minimum wages. As for schooling, 55.7% of the TW group and 61.4% of the TWP group reported having, up until the time of the interview, (complete) Junior High level.

When questioned about their marital status, the same answer was obtained by both groups studied: most interviewed women reported being married and/or consensually in a relationship – 69.7% and 75.6% respectively.

Table 2 – Univariate analysis of the variables (SDC) associated to the IA and SA for the TW group.

TW variables	Categories (1)/(0)	IA		SA	
		OR	p	OR	p
Number of live births	2 or more/not having more than 1LB	5.167	<0.001	2.043	<0.001
Abortion acceptance	Accepted by lack of economical conditions/not accepted	11.845	<0.001	1.703	0.075
School education	Up to incomplete elementary school/up to complete college degree	3.169	<0.001	1.860	0.001
Abortion acceptance	Yes, if single, alone, or not having the partner's support/not accepted	11.20	<0.001	1.18	0.611
Abortion acceptance	Yes. If there are already many children/not accepted	12.71	<0.001	1.46	0.248
Age (years)	0 = < 35/1 = > 35	2.67	0.003	2.00	<0.001
Income	≤484.97/>484.97	1.917	0.027	1.164	0.412
Marital status	Single. Separated. Widows and united/married	1.447	0.329	1.628	0.043
Use of contraceptive method	Not efficient method or no use of any method/Pill. IUD and elective sterilization	1.095	0.757	0.831	0.305

Reference category: women with no abortions.

For the variable contraceptive method, the highest proportion of women is among the ones who used poorly effective or "not effective" contraceptive methods (27.8% and 28.4%), and among the ones who declared not using any contraceptive methods (26.2% and 22.7%) totaling 54% (TW) and 51.1% (TWP).

As for the number of live born children, 18.4% of the total of women and 4.5% of the total of women with previous pregnancies reported not having children; 25.7% and 30.1% of them reported having only one child and 55.9% (TW) and 65.5% (TWP), most of them, two or more children.

Tables 2 and 3 present the results of the univariate analyses. For the total of women (TW), the characteristics significantly associated to the occurrence of IA, were: family income equal or lower than 1 MW, school education lower than incomplete Junior High; having more than 2 live born children; accepting abortion by lack of economic conditions and current age over 35 years old (note, however, that women induced their 1st abortion at ages between 14 and 37 years old: 51% of them between 14 and 21; 55% until 22, 62.7% until 24). As for the AS, the variables presenting significant associations were: current age, school education, marital status, and number of live births, in the same categories.

In Table 3 (TWP), for IA, there are significant associations in: family income equal to or lower than 1 MW, current age equal or over 35 years old, schooling lower than incomplete Junior High, having more than 2 live born children; poorly effective contraceptive method or no use of contraceptive and acceptance of abortion by lack of economic conditions. In relation to the SA, the following associations were significant: current age equal to or higher than 35 years old, low schooling and not-married marital status.

Tables 4 and 5 present the final models of MMLR adjusted by age. After stepwise removal of the variables that lost significance, 3 variables remained that were statistically significant for the total group of women (TW), of which the 3 remained in the group of women with a history of pregnancy (TWP) (Tables 4 and 5). For the IA, there remained in the final model for the TW group: "acceptance of abortion by lack of economic conditions" (OR = 11.45; p < 0.001) and having a "number of LB children > two" (OR = 4.01; p = 0.001). In relation to SA, there remained the variable "single or not-married marital status"

Table 3 – Univariate analysis of the variables (SDC) associated to the IA and AS for the TWP group.

TWP variables	Categories (1)/(0)	IA		SA	
		OR	p	OR	p
Abortion acceptance	Accepted by lack of economical conditions/not accepted	10.98	<0.001	1.58	0.135
Abortion acceptance	Yes, if single, alone or not having the partner's support/not accepted	11.36	<0.001	1.20	0.594
Abortion acceptance	Yes. If there are already many children/not accepted	10.72	<0.001	1.24	0.524
School education	Up to incomplete elementary school/up to complete college degree	2.43	0.004	1.42	0.055
Number of live births	2 or more/not having more than 1LB	3.16	0.004	1.25	0.025
Income	≤484.97/>484.97	1.78	0.005	1.08	0.674
Current age	0 = < 35/1 = > 35 y	2.47	0.006	1.86	0.002
Use of contraceptive method	Not efficient method or no use of any method/Pill. IUD and elective sterilization	1.27	0.042	0.096	0.840
Marital status	Single. Separated. Widows and united/married	1.70	0.160	1.92	0.007

Reference category: women with no abortions.

Table 4 – Multiple analysis of the variables (SDC) associated to the IA and AS for the TW group – Favela México 70 – 2008.

Abortion_3Cat	p	OR	95% confidence interval for Exp(B)	
			Lower bound	Upper bound
SA				
Accepted IA by lack of economical conditions	0.111	1.624	0.894	2.952
LB > 2	0.004	1.796	1.202	2.684
Single	0.010	1.887	1.164	3.059
Age	0.007	1.032	1.009	1.055
IA				
Accepted IA by lack of economical conditions	0.000	11.454	5.945	22.066
LB > 2	0.001	4.012	1.758	9.158
Single	0.208	1.669	0.752	3.703
Age	0.010	1.054	1.013	1.098

Reference category: women with no abortions.

(OR = 1.89; p = 0.010) and the variable "live born > 2" (OR = 1.79; p = 0.004) (Table 4). In the final model for TWP, Table 5, for IA there remained the variables: "acceptance of abortion by lack of economic conditions" (OR = 10.60; p < 0.001) and "number of children higher than 2" (OR = 2.46; p = 0.036). The variable "marital status, single" remained significant for SA (OR = 2.07; p = 0.003) (Table 5).

Discussion

Several studies have demonstrated remarkable relations between poverty and higher fertility rates, unintended pregnancies, unsafe abortions and difficult "ideal" access to contraception.[12]

In Brazil, the number of unintended pregnancies is around 60% or more. Each unintended or inopportune pregnancy may result in an induced abortion (IA) or, in countries with restrictive laws such as in Brazil, especially in populations in poverty conditions, an illegal and unsafe abortion. The family income of the target population in this study justifies a greater influence of this social determinant on such outcome. Women's option in this study in relation to "IA by lack of economic conditions" is fully justified by the tightening situations caused by socioeconomic difficulties faced by them.

The unintended pregnancies are strongly influenced by access or use, or non-use, of effective contraception methods.[9] Several studies demonstrated a positive correlation between the use of contraceptives and the degree of instruction of the woman, allowing more educated women to choose the most effective ones; the less educated women, on the other hand, have more difficulties in obtaining the appropriate knowledge on sexual and reproductive health and/or family planning.[8,9] Women with a higher schooling degree have, besides more acquired knowledge, more autonomy and greater choice capacity.[8,9]

In the studied population, as it was seen, more than half the women with IA report the use of ineffective, or poorly effective, contraceptives, or does not use any contraceptive, leading to an expressive total of women without protection to a unintended or inopportune pregnancy.[9]

Women who are sexually active but not using contraception are considered to have an "unmet need" for family planning if they do not want to have a child within 2 years".[9]

The "family planning" established by Law (Law 9263/96) does not satisfy the necessary demand of contraceptive that the Brazilian population, specially users of the *Sistema Único de Saúde* (SUS), do not yet have regular access to contraceptives.[13] In Brazil, the National Policy of Family Planning (*Política Nacional de Planejamento Familiar*) was created in 2007 and

Table 5 – Multiple analysis of the variables (SDC) associated to the IA and AS for the TWP group – Favela México 70 – 2008.

Abortion_3Cat	p	OR	95% confidence interval for Exp(B)	
			Lower bound	Upper bound
SA				
Accepted IA by lack of economical conditions	0.218	1.465	0.798	2.688
LB > 2	0.961	1.011	0.662	1.543
Single	0.003	2.075	1.279	3.367
Age	0.002	1.039	1.015	1.065
IA				
Accepted IA by lack of economical conditions	0.000	10.603	5.492	20.471
LB > 2	0.036	2.465	1.061	5.725
Single	0.166	1.751	0.792	3.868
Age	0.008	1.057	1.015	1.102

Reference category: women with no abortions.

expanded in 2009, providing a greater access to definitive contraception methods, such as tubal ligation and vasectomy, as well as condoms and other kinds of contraceptives.[14] Women who have access to contraceptives many times lack the possibility of option on the method, or drug to be taken, which is more appropriate and effective, especially in the *Sistema Único de Saúde* (SUS). In other occasions, the flaw is in the lack of adequate information, by multidisciplinary team, as required by the technical rules of assistance on family planning by the Ministry of Health,[13] specially for less educated women.[15]

With the inadequate or irregular use of contraceptives, with the use of ineffective contraceptives, or without the use of any contraceptive method, women in fertile age end up having more children than they wished for.

The number of live born children is another important variable to the determination of an IA/UA. The mean of children per woman in the studied population was 2.53. Several studies[1,16] address this matter as one of the main reasons leading women into choosing to induce an abortion, especially among low-income women, without access to family planning services. Thus, the higher the number of unintended children, the higher the chance of IA occurrence[1,8,9] the OR about 4 times higher for women with live born children in the studied population, corroborates this fact. In São Paulo, in 2002, the fertility rate was 1.88 children per woman, a number below the level of replacement[17] reaching 1.7 in 2012. Once more it is evident the use of IA as a fertility control, as previously demonstrated in other researches.[8,9,18]

The sociodemographic characteristic "marital status" consists of one of the possible defining ones of occurrence or not of induced abortion face the existence of unplanned pregnancy.[8] In the studied population, however, the OR around 2 for the variable "single", as presented in Results, indicates an expressive "omission of answer" of IA from women who reported SA, considering that usually married women are more likely to have natural abortions over single ones. The "omission of answer" is one of the characteristics of the IA as a response to the restrictive laws which punish women who cause it.[19]

In a Worldwide Review on induced abortion,[20] including countries where the abortion is legal and countries where it is restricted by Law, developed and developing countries, published in 2001, the authors concluded: "In more than half of the analyzed countries, married women have a larger proportion of abortions than unmarried women. Once pregnant, however, unmarried women are more likely than married women to choose abortion".[20]

Single women and/or the ones who do not have the support of their partner, in this research, also showed greater acceptance to induced abortion when compared to married ones. These data corroborate the ones from another study carried out in a *Favela* in the outskirts of São Paulo, SP, in which the participation from the partner was questioned, both during pregnancy and its outcomes, including the decisions concerning it (planning, unwanted pregnancies, interruption or not of the pregnancy) where it was observed a rather high rate (86%) of women being abandoned by their partner specifically in IA cases.[18]

Finally, in relation to the age at the moment of the interview, the distribution of interviewed women was not uniform, with apparent sub-representation of proportion of interviewees within age ranges considered as young women. However, when computed the frequency of abortions per age it was noticeable that women had their first abortion in early age ranges, therefore when they were young, reinforcing the data of the specialized literature.

Conclusions

From the 860 interviewed women, living in *Favela México 70*, aged between 15 and 49 years old, 51 of them report at least one IA and 150 reported SA. The IA may all be considered unsafe (UA) according to the definition by the WHO.

The categorized variables corresponding to the main sociodemographic characteristics (SDC) studied, which presented statistically significant associations in the final model for the occurrence of IA, were: number of live born children over 2 and acceptance of abortion by lack of economic conditions.

For the SA, the variable marital status "single" remains in the final model of the MMLR, suggesting possible answer omissions. Other variables corresponding to the SDC relevant to the kind of studied population and which presented statistically significant associations in the univariate analysis, such as, low income, low schooling, unmet needs for contraceptives and lack of support by the partner also proved to be important in the IA/UA process.

It may be concluded that, by lack of an efficient contraception system and family planning, low income women still resort to induced and unsafe abortion in order to diminish their own fertility and family size, in face of an unintended, unexpected, unwanted or inopportune pregnancy.

Final consideration

It is expected that this article, among others, will contribute to the fulfilling of the Goals and Targets of the International Conference on Population and Development (ICPD, Cairo, 1994) to beyond 2014.

Conflicts of interest

The authors declare no conflicts of interest.

REFERENCES

1. Fusco CL [tese] Aborto Inseguro: determinantes sociais e iniquidades em saúde em uma população vulnerável Favela Inajar de Souza, São Paulo, SP, Brasil. São Paulo: Universidade Federal de São Paulo; 2011.
2. Laboissière P. Mortalidade materna no Brasil teve queda de 21% de 2010 para 2011 [Internet]. Brasília: Empresa Brasil de Comunicação S/A; 2012 May 25 [citado 2014 Nov 5]. Disponível em: http://agenciabrasil.ebc.com.br/noticia/2012-05-25/mortalidade-materna-no-brasil-teve-queda-de-21-de-2010-para-2011.
3. United Nations. The millennium development goals report: 2005 [Internet]. New York: United Nations; c2005 [citado 2014 Nov 6]. 43 p. Disponível em: http://unstats.un.org/unsd/mi/pdf/MDG%20Book.pdf.

4. Programa das Nações Unidas para o Desenvolvimento [Internet]. Brasília: Programa das Nações Unidas para o Desenvolvimento; c2012. Mortalidade materna cai 55% no Brasil, de acordo com relatório ODM; 2014 Sep 29 [cited 2014 Nov 8]. Available from: http://www.pnud.org.br/Noticia.aspx?id=3933.

5. Sedgh G, Singh S, Shah IH, Ahman E, Henshaw SK, Bankole A. Induced abortion: incidence and trends worldwide from 1995 to 2008. Lancet. 2012;379:625–32.

6. World Health Organization. Unsafe abortion: global and regional estimates of the incidence of unsafe abortion and associated mortality in 2008 [Internet]. 6th ed. Geneva: World Health Organization; c2011 [citado 2014 Nov 6]. 56 p. Disponível em: http://whqlibdoc.who.int/publications/2011/9789241501118_eng.pdf?ua=1.

7. Adesse L. O ponto crítico do aborto. J Ciênc [Internet]. 2012 [citado 2012 Jul 25]. Disponível em: http://www.jornaldaciencia.org.br/Detalhe.jsp?id=82958.

8. Fusco CL, Silva Rde S, Andreoni S. Aborto inseguro: determinantes sociais e iniquidades em saúde em uma população vulnerável, São Paulo, Brasil. Cad Saude Publica. 2012;28:709–19.

9. Malarcher S, Olson LG, Hearst N. Unintended pregnancy and pregnancy outcome: equity and social determinants. In: Blas E, Kurup AS, editors. Equity, social determinants and public health programmes. Geneva: World Health Organization; 2010. p. 177–97.

10. Código Penal: Decreto lei n. 1.004, de 21 de outubro de 1969. 4a ed. São Paulo: Saraiva; 1971.

11. Brasil. Congresso Nacional. Lei no. 9.263, de 12 de janeiro de 1996. Regula o § 7° do art. 226 da Constituição Federal, que trata do planejamento familiar, estabelece penalidades e dá outras providências. Diário Oficial da República Federativa do Brasil [Internet]. 1996 Jan 15 [citado 2014 Nov 8]. Disponível em: http://www.planalto.gov.br/ccivil_03/Leis/L9263.htm.

12. Channon AA, Falkingham J, Matthews Z. Sexual and reproductive health and poverty. In: Malarcher S, editor. Social determinants of sexual and reproductive health: informing future research and programme implementation [Internet]. Geneva: World Health Organization; c2010 [cited 2014 Nov 8]. p. 73–91. Available from: http://www.who.int/social_determinants/tools/WHO_SocialDeterminantsSexualHealth_2010.pdf.

13. Brasil. Ministério da Saúde. Secretaria de Políticas de Saúde. Área Técnica de Saúde da Mulher. Assistência em planejamento familiar: manual técnico [Internet]. 4a ed. Brasília: Ministério da Saúde (BR); 2002 [citado 2014 Nov 6]. 150 p. (Série A. Normas e Manuais Técnicos; no. 40). Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/0102assistencia1.pdf.

14. Portal Brasil. Planejamento familiar [Internet]. 2011 Sep 6 [citado 2014 Nov 7]. Disponível em: http://www.brasil.gov.br/saude/2011/09/planejamento-familiar.

15. Souza MG, Fusco CL, Andreoni SA, de Souza e Silva R. Prevalência e características sociodemográficas de mulheres com aborto provocado em uma amostra da população da cidade de São Paulo, Brasil. Rev Bras Epidemiol. 2014;17:297–312.

16. de Souza Silva R. O aborto provocado frente à contracepção e o declínio da fecundidade na Cidade de São Paulo. Rev Saúde Pública. 2005;1:9–29.

17. Yazaki LM. Fecundidade da mulher paulista abaixo do nível de reposição. Estud Av. 2003;17:65–86.

18. Fusco CL [dissertação] Aborto inseguro: frequência e características sociodemográficas associadas, em uma população vulnerável: Favela Inajar de Souza, São Paulo. São Paulo: Universidade Federal de São Paulo; 2006.

19. de Souza e Silva R, Andreoni S. Aborto induzido: uma comparação entre mulheres casadas e solteiras residentes na cidade de São Paulo em 2008. Cien Saude Colet. 2012;17:1725–33.

20. Bankole A, Singh S, Haas T. Características de mulheres que obtêm aborto induzido: uma revisão a nível mundial. Perpect Int Planej Fam [Internet]; 2001 [citado 2014 Nov 7];Spec:10-9. Disponível em: https://www.guttmacher.org/pubs/journals/2701001P.pdf.