# Reproductive intentions of women who experienced high fertility in a major urban center'

# Intenções reprodutivas de mulheres que vivenciam regime de alta fecundidade em um grande centro urbano

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#### Resumo

Neste estudo quantitativo e de base populacional objetivou-se identificar as intenções reprodutivas de mulheres com cinco ou mais filhos, residentes em Curitiba, Paraná. Foram entrevistadas 441 mulheres em seus domicílios entre os anos de 2006 a 2008. Calcularam-se frequências, e o teste t de Student e o coeficiente de Spearman para algumas variáveis. Para análise das perguntas abertas utilizou-se a análise de conteúdo e se elaboraram tabelas com as categorias e as respectivas frequências. O estudo revelou que para 51% das mulheres o número ideal de filhos seria dois; 10% tiveram o número de filhos que desejavam. Em 113 casos (40,4%) o marido preferia ter um número maior de filhos do que as mulheres. Identificaram-se dificuldades na definição e na conquista da fecundidade desejada, falhas na assistência à saúde reprodutiva e desigualdades sociais e de gênero. O monitoramento pelos gestores de saúde dos diferenciais de fecundidade é necessário para o alcance da justiça social e a garantia dos direitos humanos, sexuais e reprodutivos, no Brasil.

**Palavras-chave:** Comportamento reprodutivo; Controle da fecundidade; Contracepção; Direitos reprodutivos.

#### **Abstract**

This quantitative and population-based study aimed to identify reproductive intentions of women with five or more children living in Curitiba, Paraná. 441 women were interviewed in their homes between the years 2006 to 2008. Frequencies were calculated, as well as Student's t test and Spearman coefficient for some variables. To analyse the open questions it was used content analysis and worked out tables with categories, their frequencies and percentages. The study revealed that for 51% of women the ideal number of children would have been two children: 10% had the number of children they wanted. In 113 cases (40.4%) the husbands would rather have a larger number of children than women. Difficulties were identified in the definition and achievement of desired fertility, besides failures in reproductive health care and social and gender inequalities. Health managers should monitor the differentials in fertility rates in order to pursue social justice and ensure human rights, as well as sexual and reproductive rights in Brazil.

**Keywords**: Reproductive Behavior; Fecundity Control; Contraception; Reproductive Rights.

#### Introduction

For several decades, fertility rates have been below the replacement rate of 2.1 offspring per woman in most urban areas of Brazil. However, differences in fertility rate and their underlying factors need to be addressed to ensure the sexual and reproductive rights of the population (Berquó e Cavenaghi, 2004, 2006; OPAS, 2005).

Against this background, studies by Berquó and Cavenagui (2004, 2006) reported a decrease in the percentage of women aged 15 to 49 years who raised five or more children (regarded as a high fertility regime) in Brazil between 1991 and 2004, in addition to an increase in the proportion of women with fertility rates below the replacement rate. Notably, these studies also indicated that the decrease in fertility rates varied among the sociodemographic segments of the population and that distinct fertility regimes were prevalent in Brazil.

In 1991, 11.1% women lived in a high fertility regime, and this percentage decreased to 4.1% in 2004, accounting for two million women in the reproductive age group against approximately four million women back in 1991. On the other hand, the proportion of women who lived in a low fertility regime increased from 45.3% in 1991 to 53.6% in 2004, which means that 26.2 million women in the reproductive age group had a maximum of two children in 2004, against 16.6 million women back in 1991 (Berquó and Cavenaghi, 2006).

The decision on family size is complex and involves individual and social perspectives and values, but it is also influenced by economic issues and restricted access to reproductive health services and social protection measures (IBGE, 2005).

Researchers have reported the occurrence of political and management barriers that restrict the elaboration of the Policy for Integral Attention to Women's Health and the implementation of reproductive health care in Brazil, including lack of resources, limited health care coverage, disparities in the quality of and access to reproductive health services, unfamiliarity and disrespect for legal issues, and difficulties to integrate distinct public administration sectors in relation to the decentralized health system (Schor et al., 2000; Costa et al., 2006; Osis et al., 2006).

Mapping the profile of these women can enable the establishment of efficient programs and policies aimed to guarantee reproductive rights and reproductive health access to individuals who want to control their fertility or require reproductive health care. Importantly, studies on fertility patterns can help elaborate public policies in the fields of demography, economics, human health, and, particularly, sexual and reproductive rights.

Therefore, the present study aims to identify the reproductive intentions of women who currently live in a high fertility regime in Curitiba in the State of Parana.

# Methodology

This is a cross-sectional and population-based study of women from a large urban center in southern Brazil. This research was financed by the São Paulo research foundation (FAPESP) and was approved by the Research Ethics Committee of the Faculty of Public Health at the University of Sao Paulo (FSP-USP), being a part of a research project titled "Intentions and reproductive behavior of women experiencing high fertility in a large urban center" as a PhD thesis approved by the FSP-USP (Soares, 2009).

According to data from the Ministry of Health's National Information System for Childbirth (Sinasc/MS), of a total of 160,000 women who gave birth to live children in 2005, approximately 6,000 had five or more siblings and approximately 12% (720 mothers) resided in Curitiba, Parana (Soares, 2009).

The target population for this study comprised women who lived in Curitiba and delivered their fifth or subsequent child in 2005 according to the Declaration of Live Births (DNV) obtained from the Sinasc/MS database. This equalled 723 women, of whom 441 agreed to participate in the study.

For data collection, interviews were conducted in households using semi-structured questionnaires with close and open questions and recorded by interviewers. The analysis of inquiries on reproductive intentions considered the number of live births and the sociodemographic characteristics of the women.

Quantitative data were expressed as absolute numbers and relative frequencies (percentages) and by calculating the average, standard deviation, Student's t test, and Spearman's coefficient of correlation for some variables. We used the computational software Statistica version 8.o.

For the analysis of open questions, we selected the content analysis technique proposed by Bardin (2009). For contextualization purposes, interviewers recorded women's speeches in writing and without any editing, following which words or key ideas related to each question were selected. Subsequently, word frequencies were assessed through automatic location in Excel software and served as the basis for the creation of a classification system for text elements, at first by word differentiation and subsequently by regrouping according to similarity. This enabled the quantification of the identified categories (Bardin, 2009). We elaborated tables with categories and their respective frequencies and percentages in addition to original speeches by some interviewees to exemplify the responses included in a few categories.

#### Results

The interviewees resided in 9 of the 75 neighborhoods in Curitiba and were selected if they had migrated from inner cities in the State and resided in Curitiba for over 10 years, belonged to a family with many siblings, had an average age of 35 years, had completed five years of schooling, were Catholic and Caucasian, had been married more than once, had a living spouse at the time of the study, worked in a low-paying job with an average income of R\$ 600, and had to provide for seven or more family members (Soares, 2009).

We identified the reproductive preferences of women with high fertility by questioning them about the ideal number of children. The questions included the following: "How many children would you like to raise considering your current living conditions?" and "If you could relive your life and things happened as you intended, how many children would you raise?"

Analysis of their answers revealed that the ideal number of children was two for 51% interviewees after considering their living conditions at the time of the study, whereas 17% and 14.2% preferred giving birth to one and three children, respectively,

and 5% preferred to remain childless. Notably, 15.4% respondents with 9 children and 11.1% with 10 children mentioned that the ideal situation would be to remain childless. We also verified that only 10% women actually raised the number of children they intended (five or more) to raise in their current living conditions (Table 1).

Moreover, the average number of children raised was 6.1 ± 1.6, while the average number of children they preferred to raise in their living conditions was

2.4 ± 1.9; the difference was statistically significant (p < 0.001, Student's t test). Notably, married women preferred an average of 2.9 children compared with an average of 2.0 children preferred by single, divorced, and widowed women.

If the interviewees could experience better living conditions, they preferred to raise an average of 2.9 ± 2.1 children compared with an average of 2.4 ± 1.9 children in their current living situation; however, this difference was not statistically significant.

Table 1 - Proportional distribution (%) of women with high fertility in Curitiba (2005) by the number of children born alive, ideal number of children preferred in the current living condition and in an improved living condition, and marital status

Ideal number of children preferred in the current							
living condition						≥ 10	Total
0	5,7	3,0	5,2	-	15,4	11,1	5,1
I	16,7	18,2	13,8	18,8	23,1	16,7	17,0
2	49,0	59,6	48,3	62,5	7,7	38,9	50,7
3	15,2	9,1	24,1	3,1	23,1	11,1	14,2
4	1,9	1,0	1,7	3,1	7,7	-	1,9
5	9,5	-	3,4	3,1	-	-	5,3
6	1,0	9,1	-	-	-	-	2,6
7	0,5	-	1,7	-	7,7	-	0,7
8	-	-	-	6,3	-	-	0,5
9	-	-	-	-	7,7	-	0,2
10	0,5	-	1,7	3,1	7,7	22,2	1,9
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Number of women	210	99	58	32	13	18	430
Ideal number of children preferred in an improved liv	ving condition	1					
Total number of women	210	99	58	32	13	18	430
Average	2,3	2,2	2,4	2,7	3,5	3,7	2,4
SD	1,5	1,4	2,0	2,4	3,7	4,1	1,9
Married women or those with partners	160	77	40	20	6	13	316
Average	2,4	2,3	2,7	2,8	5,3	4,6	2,6
SD	1,5	1,5	2,4	2,7	4,8	4,5	2,1
Single, divorced, or widowed women	49	21	18	12	7	4	Ш
Average	2,0	1,9	1,9	2,6	2,0	1,5	2,0
SD	1,4	0,7	0,9	2,0	1,4	1,3	1,3

With regard to socioeconomic variables, the average number of children increased as the age of the women increased, from 1.4 to 3.4 children in current living conditions and from 2.6 to 3.3 in improved living conditions, including better employment, greater income, and home ownership (Table 2). Also, the average ideal number of children in any given condition increased with the level of education and contradicted the actual number of children raised.

Interestingly, the ideal number of children preferred by evangelical women was greater than that preferred by Catholics, and after considering race and skin color, Caucasian women in better social classes preferred more children compared with black women.

The average ideal number of children preferred by working women with a better income was greater than that preferred by unemployed women or those with a low income. However, the ideal number of children was lower than the actual number of children effectively raised for all studied categories. The data also indicated that women in better living conditions would have more children than those in worse living conditions.

As revealed by the interviewees, wives and husbands/partners agreed on the ideal number of children only in 79 cases (28.2% of valid responses). In 113 cases (40.4%), the number of children preferred by the husbands exceeded that preferred by their spouses in their current living conditions, and in 88 cases (31.4%), the expectations of wives exceeded that of their husbands.

The estimated Spearman coefficient of correlation for the number of children preferred by the women compared with that preferred by their husbands in their current living conditions was 0.31; we would like to emphasize that these were women's opinions in relation to their partners' preferences (Table 3).

# Motivation and fertility planning

To identify women's motivation for conception, we classified the answers to open questions. This classification revealed that the reason for having the actual number of children was carelessness or indifference for 52.5% women, while 18% women reported failure in contraceptive methods and an additional 4.1% reported ignorance about the ade-

quate use of contraceptive methods at the beginning of their sexual life.

Corroborating these quantitative data, only 13.6% interviewees reported that they had planned their parenting activities either consciously or under the influence of new marital conditions. A few respondents reported being influenced by religious beliefs (Table 4).

Women who wished to have more children reported that:

I've always wanted to have many kids, but I wish I could provide them with more. Nowadays, it's very difficult to raise children.

We plan according to the will of God, for religious reasons, knowing that raising a family is sacred, and the words I have received at church encourage me.

I came from a large family and I've always enjoyed having the house full.

When questioned about the role of their partners in choosing the number of children, 41% responded they had a negative influence through violence, alcoholism, lack of communication and cooperation. Additionally, partners from new marital unions demanded having children of their own, as revealed by the following speeches:

My husband wanted lots of kids, but he was an alcoholic and tried to spank us, and we would fight if we didn't fulfill his wishes.

My husband was violent and not at all concerned as to whether we'd like to have sex as a couple, he did want it and no questions asked.

He did not want to use condoms and would not cooperate.

The detachment of male partners from conception issues was confirmed when 129 (36%) women reported that they were not aware of their partners' opinions regarding parenting choices or when the husbands declared that the wives were fully responsible for conception issues or were indifferent altogether. Only 43% male partners were satisfied with the number of children they had, while another 13% considered the number of children as high (Table 5).

With an aim to evaluate the relationship of mothers with their children, we asked mothers to comment on the advantages and disadvantages of their

Table 2 - Distribution of women with high fertility, by the average number of children born alive, ideal number of children in the current living condition and an improved living condition according to demographic characteristics. Curitiba, 2005.

Sociodemographic characteristics	n	Average number of children born alive	Average ideal number of children preferred in the current living condition	Average ideal number of children preferred in an improved living condition
Age (in years)				
< 25	9	5,4 ± 0,7	1,4 ± 0,5	2,6 ± 2,1
25 — 29	62	5,6 ± 0,9	2,2 $\pm$ 1,5	2,5 ± 1,9
30 - 34	142	5,8 ± 1,0	2,2 ± 1,4	2,8 ± 1,7
35 - 39	132	6,3 ± 1,9	$2,5 \pm 1,8$	$2,9 \pm 2,2$
40 — 44	86	$6,7 \pm 2,1$	$2,9 \pm 2,7$	$3,3 \pm 2,6$
≥ 45 years	10	$7,6 \pm 2,0$	$3.4 \pm 3.5$	3,0 ± 3,4
p value *		< 0,001	0,107	0,409
Years of schooling				
< 1 year	23	7,5 ± 2,6	$2,6 \pm 2,8$	3,0 ± 3,0
ı — 4 years	184	$6,4\pm1,8$	2,3 ± 1,8	2,8 ± 2,2
5 – 8 years	189	5,9 ± 1,2	$2,3 \pm 1,8$	2,8 ± 1,9
9 — 11 years	40	5,6 ± 1,1	$3,2\pm2,I$	$3,3\pm2,1$
≥ 12 years a	5	5,6 ± 0,9	4,0 ± 1,8	5,6 ± 0,9
p value *		0,002	0,012	0,012
Religion				
Roman Catholic	229	6,2 ± 1,6	2,3 ± 1,9	2,8 ± 2,1
Evangelical	142	6,1 ± 1,7	2,8 ± 2,1	$3,2\pm2,I$
None	54	6,0 ± 1,4	1,9 ± 1,2	$2.8 \pm 2.4$
Others	П	5,9 ± 1,5	2,7 ± 1,7	2,5 ± 1,8
p value *		0,792	< 0,001	0,033
Race/Skin color				
Caucasian	260	6,0 ± 1,5	2,5 ± 1,8	3,1 ± 2,1
Parda	133	6,4 ± 1,8	$2,3 \pm 2,0$	2,7 ± 2,0
Black	36	6,4 ± 1,7	2,3 ± 2,1	$2,4 \pm 2,5$
Indian/Asian	4	5,8 ± 0,5	$2,3 \pm 0,5$	2,5 ± 1,0
p value *		0,164	0,191	0,025
Currently working				
Yes	208	6,3 ± 1,9	2,6 ± 2,1	3,0 ± 2,3
No	232	6,0 ± 1,4	2,3 ± 1,7	2,8 ± 2,0
p value **		0,519	0,243	0,172
Income (in R\$)				
< 100	9	5,9 ± 0,8	2,0 ± 1,3	2,0 ± 1,2
100 — 400	162	6,3 ± 1,7	2,3 ± 1,9	2,8 ± 2,0
401 — 600	116	6,1 ± 1,5	2,3 ± 1,5	2,7 ± 2,0
601 — 1000	95	6,2 ± 1,9	2,6 $\pm$ 2,2	3,2 ± 2,5
> 1000	46	5,7 ± 1,2	$3,2 \pm 2,0$	3,4 ± 2,0
~ value *		0,126	0,002	0,036
p value *		-,		-,-5-

Results expressed as average standard deviation

<sup>(\*)</sup> Kruskal-Wallis nonparametric test, p < 0,05

<sup>(\*\*)</sup> Student's t test for independent samples, p < 0.05

<sup>(</sup>a ) For statistical analysis, it was incorporated into the 9—11-year-old group

Table 3 - Distribution of women with high fertility in Curitiba (2005) by number of children that husbands/partners preferred to have and the ideal number of children that the women preferred to have

Number of children that			Nu	mber of	children	that hus	bands/pa	artners p	referred t	to have		
women preferred to have	0	- 1	2	3	4	5	6	7	8	9	10	Total
0	3	ı	3	2							3	12
1	П	14	15	1	2	2					2	47
2	21	22	41	Ш	2	15	8	2	1	1	12	136
3	4	2	8	9	6	4	4	1	1		6	45
4	1		1		1		1		1			5
5	4		5	2		5		1	1		1	19
6				1			3		1		2	7
7					1							1
8				1					1			2
9												0
10	ı	I				ı				1	2	6
Total	45	40	73	27	12	27	16	4	6	2	28	280

conception choices. After content classification, the categories obtained in relation to the advantages were as follows: companionship, happiness, care, love, and the excitement that they bring or the gratification to have their help at home. However, 18% reported no advantages or benefits of child rearing.

More important than the disadvantages, we identified difficulties associated with raising a large family, and the most important were financial difficulties and expenses associated with schooling and health care, followed by safety, violence and drug abuse concerns, and uncertainties about the future and aspects related to their children's behavior (disobedience, rebellion, and fights among siblings). However, 6.4% reported no disadvantages of raising many children.

Below are the speeches of some mothers commenting on the advantages and benefits of a large family:

We learn with them and learn to deal with our differences.

It helps us gain solidarity and personal values. We learn to care for others.

We have happy moments with a full house even if it is disorganized, and there is always a joy to come home and have beautiful faces expecting you, to cherish and love.

Its good to have children, what is not good is having limited resources to raise them. We have even experienced hunger.

I am never alone, and I hope the children will take care of me in my old age, when I will no longer be able to work.

These speeches highlight some of the benefits of child rearing, such as the knowledge that children can contribute to the family and the prospect of being cared for and helped financially in old age.

Other less frequent categories identified that could help us in understanding the issues that affect child-rearing decisions were logistical difficulties and the time dedicated to children, increased workload and tiredness, decreased physical space and less freedom, and lack of involvement of partners in child rearing. Some speeches related to these issues are presented below.

Logistical difficulties and time dedicated to children:

When we wish to go out, we are unable to take them all.

We don't have enough time for all of them; with only two kids, we probably would have more time.

Increased workload and tiredness:

The disadvantage is that the house is always disor-

Table 4 - Distribution of the number and proportion (%) of women with high fertility in Curitiba (2005) by the alleged reasons for having the current number of children, advantages and disadvantages of having more children, and outsiders' views in relation to the number of children

Item	N	%
Alleged reasons for raising the actual number of children		
Carelessness	183	44,5
Intentional	56	13,6
Indifference	33	8,0
Conceived even with the use of contraception	28	6,8
Problems with birth control pills	24	5,8
New marital condition	22	5,4
Incorrect use of birth control pills	21	5,1
gnorance about contraceptive methods	17	4,1
Religious beliefs (Plan of God)	16	3,9
Others	9	2,2
Husband's wishes	2	0,5
Advantages of having more children		
Companionship, full house	160	36,3
Happiness, care, love, and excitement	135	30,6
There are no advantages	78	17,7
Gratification in raising children	68	15,4
Prospect of having help at home, insurance policy	33	7,5
Others	26	5,9
Disadvantages of having more children		
Expenses and financial difficulties	206	46,7
Education (schooling expenses and difficulties in educating)	96	21,8
Concerns with lack of safety, violence, drug abuse, and the future	53	12,0
There are no disadvantages	28	6,4
Children disobedience or rebellion	24	5,4
Health (healthcare problems/SUS, purchase of medication)	17	3,9
No one to care for the children while parents are at work for work	14	3,2
ight among siblings	13	3,0
Others	32	7,3
Outsiders' opinions on the number of children		
Criticized or believed that the number was high	144	32,7
Did not give their comments	135	30,6
Regarded the high-fertility women as irrational	116	26,3
Prejudice from family, neighbors, and jokes	54	12,2
Asked high-fertility women to look for medical treatment	14	3,2
Considered high-fertility women to be courageous	24	5,4
Admired their attitude	9	2,0

Note: \*percentages were calculated in relation to the total number of women (441).

Table 5 - Number and proportion (%) of women in Curitiba (2005) under the influence of husbands/partners with regard to the number of children and husband's opinion about the number of children

Partner had an influence	N	%
No	184	51,83
Yes	146	41,13
One partner did and the other did not	25	7,04
Husband or partner's opinion		
He accepts/regards as normal/its blessingbllessingblessing	62	17,32
good	92	25,70
She does not know his opinion	129	36,03
Indifferent	14	3,91
The spouse is solely responsible for it	13	3,63
Children are worrisome	9	2,51
He thinks the number is high	39	10,89
Total*	358	100,00

\*Note: Twenty-three women were blank, did not have an answer, or gave invalid responses.

ganized, there are lots of clothes to be washed, and a lot of food to be prepared and dishes to be done.

The kids are of similar age, so they make me very tired.

Lack of physical space and less freedom:

I get a bit stuck with them and I have no freedom.

Mothers become careless and lose their youth and freedom.

Lack of commitment from the husband/partner:

My husband does not help in anything and is very detached from the family.

My spouse did not accept the first child.

To assess social perceptions on the high fertility of women, we inquired about outsiders' remarks on the number of children these mothers had; 33% respondents criticized the number of children, and 26% mothers were considered irrational and also suffered discrimination by means of prejudiced jokes. Another 31% had never been criticized, and only 7% were considered courageous or admired for their parenting decisions (Table 4).

Below are outsiders' comments on women with many children:

This woman only serves to conceive. People discriminate them a lot.

They say I'm irrational because it's tough to raise many children.

People joke by asking if there isn't a TV set at home.

#### Discussion and Conclusions

These results indicated the difficulties in the definition and achievement of the desired fertility by women in areas of high fertility rates in Brazil.

The questions on reproductive intentions used in this study, similar to those in the questionnaire employed by the National Research on Demography and Health (PNDS) and other demographic studies, need to be interpreted cautiously because they put high-fertility women in a delicate situation, increasing the risk of social rejection (Brasil, 2009; Campbell, 1986).

The responses of interviewees made it clear that most women raised more children than they really wanted. It also confirmed that some women intended to have a large family.

When questioned about the role of their partners in defining the size of the family, many women acknowledged that men exerted a negative influence on child-rearing through the use of violence, alcoholism, drug abuse, or indifference or put pressure on new partners to have children of their own, even when these mothers already had the desired number of children. These factors revealed gender inequalities in terms of parenting.

Religious issues still exert an influence on women to raise more children, as reported by an interviewee:

God has granted me eight kids, and he gives love that way, and that serves as a guarantee that I can have another child or that I can face another cesarean delivery (she has had five of them). God has been very good to me, with my life... and it's by the word of God.

This interviewee, even with health risks from previous cesarean deliveries, stated that she would continue conceiving through her faith, if that was God's will, and under the influence of a church that encourages couples not to limit the number of children or use contraceptive methods.

Guimarães (2005) argues that nowadays, religion has lost its importance in modern society, considering that the dessacralization process has set forth other values, habits, lifestyles, opinions, and attitudes influenced by the globalization process. This change of values is unprecedented in history. However, the author reports that some members of popular and middle classes, particularly women, search for a more holistic and religious approach towards life.

This is explained by the connection of religious beliefs with characteristics considered to be of feminine nature, such as emotions, sensibility, and affection, and also by the fact that religion assures the essence of the female when it comes to birth, growth, and protection of life and family. Religions attempt to reassure self-esteem through the valorization of spiritual gifts in opposition to material riches; that way, the religious conversion of women would be easier and does not demand a radical change in their lifestyle (Guimarães, 2005).

In the group studied, approximately 4% women claimed that the number of children born was defined by God's plan, demonstrating that beliefs and religion may have influenced fertility control in a small group of women.

In this study, we also identified that high fertility seemed to have been a choice planned with autonomy and self-determination by the majority of women interviewed, and in this context, social factors and subjective issues have affected their desire to limit the number of children.

We should also emphasize that professionals, managers, and politicians should consider these results before blaming the decision of women, particularly the poorer ones, for having several children because it was evident that other factors interfered with the formation of offspring, including the attitude of spouses, inefficiencies in health services, and religious beliefs.

Women with more offspring are acknowledged with surprise and contempt by society; four decades ago, these same women would have been praised while childless women would have been criticized (IPPUC, 2007).

The PNDS 2006 (Brasil, 2009) identified that 80% of childless Brazilian women wanted to have children, but this percentage dropped to 45% among childbearing women, confirming the tendency to maintain a low fertility rate of approximately one to two children per woman. Another trend observed in many developed countries and, recently, in Brazil, which has been attracting attention, is the growing number of women and couples who do not want children, designated dinks (double income, no kids)². These couples have a good economic status and a double income, but they voluntarily decide not to have children (Brasil, 2009; IPEA, 2008). PNAD 2006 estimates indicated that approximately 10% women in Brazil did not wish to have children (Brasil, 2009).

The 2006 PNAD also showed that women who are better educated have fewer children than desired (Brasil, 2009). The average ideal number of children preferred by women with 12 or more years of schooling was 2.2, whereas the observed rate was 1.0 child. The unmet desire of motherhood is a phenomenon that has only attracted recent attention, and yet it is little explored by researchers and public policy makers.

For Wolf (2006), integration of work and motherhood, particularly for more educated women, looks less promising. Global economy changes in the past 50 years have imposed barriers to motherhood, and it appears that the world has reversed the authoritarianism of the past and that women no longer accept previously imposed rules such as raising a family. Wolf (2006) also showed that gender equality at work is only possible when women forgo motherhood, because the more skilled they are, the more time will need to be dedicated to work and the increased responsibilities, thus postponing the decision of starting a family and characterizing a strict regime of the lack of motherhood for better educated women.

Unfortunately, public policies and research are still focused on the need for contraception, not on the demands of unmet motherhood. This affects highly educated women, those who require assisted reproduction and treatments to conceive, or those carrying HIV and other diseases, with an aim to sa-

tisfy their desire for motherhood as well as ensure safe labor and delivery. These paradoxes have shown the diversity and complexity of issues related to human reproduction.

Only approximately 10% women wanted the number of children they already had, i.e., five or more. Their motives involved desires and hopes prior to marriage/union, maternal instinct, fondness for children and large families, or familiarity with large households.

Women's comments on the advantages of having many children included personal satisfaction, contentment, the prospect of learning with children, solidarity and coexistence with differences, and the opportunity of companionship and being cared for in the future. The disadvantages were related to financial issues, education, health, and safety of child-rearing.

These issues raise the question of whether women would be willing to raise two or three children again through governmental and social support against motherhood-related problems.

Women who wished to have fewer children than they actually did reported fertility-related problems or unfamiliarity with contraceptive methods, exposing flaws in sexual and reproductive healthcare programs, particularly family planning. Previous works have already reported on some of these flaws (Costa et al., 2006; Osis et al., 2006; Tavares et al., 2007).

The existence of high-fertility groups is partially determined by social inequalities and limited access to contraception, and the latter is related to the lack of contraceptive supplies in municipal health facilities, which are dependent on rather unpredictable shipments from the Ministry of Health. In practice, maternal and child-related actions are the primary focus of municipal health measures; family-planning programs are not considered priority or even essential for primary health care (Nagahama, 2009).

Studies in Africa have indicated that the main factors contributing to the maintenance of high fertility in African countries are the social approval of high-fertility women and of men with large families as a sign of wealth or influence, pressure from family members, preference for male children, objections to contraception, the prospect of sending children away so they can bring back financial provisions, the

traditional perception of children as an insurance policy for aging parents, the lack of alternative recreation, and poverty (Pirotta and Schor, 2004).

Even if cultural and developmental differences between African countries and Brazil are considered, we found that Brazilian women cited some of the same factors. We also observed how the Brazilian reality in Curitiba in relation to reproductive issues combines the fertility-related features of developed and developing countries.

Despite improvements in policies related to women's health and reproductive health, particularly family planning, persisting inequalities need to be addressed by professionals and health managers with an aim to decrease social inequalities in health affecting women and their families in Brazil (Brasil, 2005). Data from the United Nations warned that approximately 215 million women worldwide did not have their family planning needs satisfied using modern methods, resulting in 22 to 53 million unwanted pregnancies, 25 million induced abortions, and 7 million miscarriages (UN, 2004).

The Economic and Social Council of the United Nations (UN, 2004) has indicated that the requirements to accelerate universal access to sexual and reproductive health comprise immediate actions from all levels of government, with adequate funding, strong political will, bold and creative planning, and participation of various social elements, including the population. Other elements that are essential to this process include the incorporation of reproductive rights as a national priority; focus on human rights to promote gender equality; multisectorial actions intended to formulate policies and programs for sexual and reproductive health; social inclusion of vulnerable groups to promote social justice and decrease economic, social, and cultural inequalities; and response to the needs and realities of adolescents. It also engenders strengthening of the health systems through professional training; product logistics, including high-quality contraceptives; and improvements in resource management, including reproductive health resources.

Therefore, the continuous analysis of fertility levels and sexual and reproductive health indicators and their effects on the development process should be considered by managers and health professionals in order to guarantee social justice and human, reproductive, and sexual rights for the entire population.

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