The impact of unequal gender relations on the sexual and reproductive health of low income adolescents and young adults in three Brazilian cities

Alessandra Sampaio Chacham¹
André Junqueira Caetano²
Andréa Branco Simões³

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In this paper we present results from a survey entitled: "Projects and trajectories reproductive, scholars and professionals of young men and women between 15 and 29 years old in Minas Gerais: The role of teenage motherhood and fatherhood⁴" (META, 2011). Using date from this survey we discuss here how unequal gender interactions influence the sexual and reproductive behavior of impoverished adolescents and young adults living in middle sized cities in the state of Minas Gerais, Brazil. Our goal is to understand how young women's autonomy inside relationships relates to their reproductive and sexual health and empower them, thus reducing their susceptibility to unwanted pregnancies and STIs/HIV infections.

INTRODUCTION

In Brazil, the persistence of unequal gender relations between men and women make difficult for women to negotiate the timing of sex and condom use and consequently to prevent getting pregnant and/or being infected. Thus, fundamental to the development of new approaches for understanding sexual and reproductive health is, first to understand the role of gender inequalities in constructing the social conditions that result in increased susceptibility for women, especially for young women. Central to the prevention of the spread of the disease is the issue of women's sexual autonomy: No amount of education can protect a woman from exposure to the virus if she cannot negotiate safe sex. If she lacks autonomy she will not feel empowered enough to refuse

¹ Associated Professor, Pontificia Universidade Católica de Minas Gerais.

² Associated Professor, Pontificia Universidade Católica de Minas Gerais.

³ Associated Professor, Pontificia Universidade Católica de Minas Gerais.

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sex or demand the use of condoms. Therefore, lack of autonomy in the sphere of sexuality then, poses a risk to women's sexual health.

In our study we sought to analyze which factors related to young women's more or less autonomous behavior are more or less linked to pregnancy susceptibility and STI/HIV among poor young women living in three different urban areas in the state of Minas Gerais, located in the southeast region of Brazil. If gender inequality affects women's autonomy and therefore, her sexual and reproductive health, it also affects men's capacity to protect them when reinforces behaviors that maker harder for a young men to lead a healthy sexual life with his partner, such as rejecting condoms or refusing to share the responsibility with the use of contraceptives methods. In order to explore those questions we developed a cross-sectional survey, utilizing a structured questionnaire comprising both closed and open-ended questions. We examined the prevalence of more traditional forms of gender interactions and adherence to stereotypical gender behavior regarding women's and men's sexuality, their role inside the family, in domestic division of labor, in economic decision making, in child related decision making, in mobility and access to social resources, control over economic resources and freedom from threat. The challenge confronted here was to build indicators of the different dimensions of autonomy in women's lives that make sense in the context of lives of young women and men living in urban areas of Brazil and investigate how the levels of autonomy affect, negatively or positively, the sexual and reproductive behavior of adolescents and young men and women from different social contexts.

LITERATURE REVIEW

As defined by Mason (1997:159), gender system refers to "the socially constructed expectations for male and female behavior that are found (in variable form) in every know society". A gender system's expectations prescribe a division of labor and responsibilities between women and men and grant different rights and obligations to them. They also create inequality between the sexes in power, autonomy, and well-being, typically to the disadvantage of females (Mason, 1997). The concept of gender, incorporating the dimensions of power, exposes the asymmetries and the hierarchies (hierarchies in which women occupy a subordinate position) in the relations between men and women.

Unequal gender relations between men and women tend to make difficult, if not impossible sometimes, for women to negotiate the use of condoms and to prevent HIV infection. Numerous studies have pointed out that the negotiation of safer sex through condom use is rendered problematic not only by the negative connotations associated with the method, but also by cultural attitudes toward female sexuality. Women who want to practice safer sex may not be able to do so because they are afraid of being considered immoral and untrusting and also because of being afraid of reprisals in the form of anger and rejection (Gage, 2000). Negotiating condom use is even more problematic when a woman is totally or mostly economically dependent on their partner and sex is one of few bargaining tools they have.

Young women and girls are in a particularly vulnerable position, given their economic vulnerability, especially when they have unplanned pregnancies and/or an early marriage. In Brazil, both teen pregnancy and early marriage are more common in poor rural areas and urban slums (Ministério da Saúde, 2006). In this context, the ability of adolescent girls to negotiate whether sex will occur and whether condoms and contraceptives will be used may be further reduced. In many instances, the threat of male violence can also contribute to the pressure on teenage girls to agree with unsafe sexual practices. In addition to that, the presence of traditional gender roles and expectations reinforce, especially among females, the notion of romantic love, as Giffen (1998:284) comments: "for many women, unprotected sex means trust and intimacy while the use of a condom symbolizes multiple partners, and lack of trust and intimacy." In Brazil, adolescents, both male and female, tend to reproduce traditional gender roles and to present a conservative approach in relation to sexual matters. The masculine model to be emulated is based on the capacity to provide for a family and to be sexually potent having sex with multiple partners, while the female model is based on maternity, with sexual attractiveness and romantic love as ideals. Sexual autonomy can be further reduced in this context.

Autonomy has been defined as: "The degree of women's access to, and control over, material resources (including food, income, land and other forms of wealth) and to social resources (including knowledge, power and prestige) with the family, community and society at large" (Jejeebhoy, 2000: 205). The concept of autonomy relates to the extent women exercise control over their own lives within the family in which they live (Jejeebhoy, 2000). Based on this definition, Jejeebhoy (2000) created five dimensions of autonomy and selected indicators for each of them. They are: economic and child-

related decision-making; mobility; freedom from threat from husband/partner; access to economic/social resources; and control over economic resources. In regard specifically to the reproductive and sexual sphere autonomy means, according to Sen and Batliwala (2000), whether a woman/girl can safely determine when and with whom she will engage in sexual relations, sexual health, regulate her fertility and safe childbirth. Lack of autonomy in the sphere of sexuality can consequently be considered a risk to women's sexual health.

In our study we use some of those indicators proposed to analyze which autonomy factors are linked to young women's vulnerability to unplanned pregnancies and to HIV/STIs (sexually transmitted infections) among lower class young men and women living in the three different middle sized urban areas located in the state of Minas Gerais, Brazil. The challenge we confronted was to build indicators of different dimensions of young women's lives that make sense within the social and cultural context of adolescents and young women from lower economic strata living in urban areas in Brazil.

Results from two previous researches with adolescents and young women living in Belo Horizonte (Minas Gerais State Capital) were used to guide us in this process. The first survey was done in 2005 with 352 young women living a slum in Belo Horizonte (Chacham et al. 2007) and the second one was with over 700 young women living in middle class neighborhoods and slums (favelas) located in the central-south region of Belo Horizonte (Brazil) in 2008 (Chacham et al., 2010). In these researches we sought to build indicators of women's autonomy as a way to measure the impact of gender inequality. The results showed an association of higher level of autonomy in different spheres with a lower level of vulnerability in young women's sexual and reproductive trajectories. Results that inspired us to continue this line of work, but including now in our research, male adolescents and young adults aged 15 to 29 years old, besides females in the same age groups, living in middle sized cities located in different parts of Minas Gerais State, in an effort to understand how sexism and gender inequality intersects with sexual and reproductive health of both men and women, in different social contexts.

RESEARCH DESIGN AND METHODS

In order to collect data we did a survey that took place in three middle sized cities located in the State of Minas Gerais in the southeast region of Brazil. Although Minas Gerais is the second most populated state in the country and one of the most developed, it presents a sharp contrast between the richer south region of the state and the poorer north, mirroring Brazil's own inequalities. Minas Gerais' state capital, Belo Horizonte, is the sixth largest city in the country with 2,377,000 inhabitants but its metropolitan area is the third largest with a population of almost 5 million people in 2010.

The cities selected as research sites are located in different regions of the state in order to reflect their diversity. Teófilo Otoni is located in the north with approximately 135,000 inhabitants in 2010. Teófilo Otoni is known for being a center of extraction and commerce of precious stones. Varginha is in the south and had a population of 123,000 in 2010. It is in the center of large coffee plantations. Both cities are important regional centers attracting a lot of migrants from neighbor areas seeking work. Teófilo Otoni IDH is calculated to be 0.74 below the IDH calculated for Minas Gerais: 0.80. Varginha's IDH however is higher than state average, being calculated as being 0.82. Betim is located in the middle of the state and belongs to the metropolitan area of Belo Horizonte. The city had 377,000 inhabitants in 2010 and was the third largest city in metropolitan area and it is a very important industrial area that attracts migrant workers from all over the state. It is a very rich city but also very unequal with a IDH of 0.77, below state average and also much inferior to the capital Belo Horizonte's IDH of 0.86.

We selected those three cities to research given the fact that, our previous surveys and other large studies on adolescents reproductive health (especially on teenage pregnancy) were all done in state capitals with almost no study done in smaller cities outside metropolitan areas. Also, data coming from the PNAD (National Household Survey) and the DHS is only disaggregated by state level or in the case of PNADs, for the metropolitan area, so we do not have much information of what is going on in these smaller urban areas regarding young people reproductive health. As more recent data shows a decrease in the rates of teenage pregnancy around the country as a whole, the persistence of much higher levels of teenage pregnancy in the impoverished peripheries of urban areas

In order to be able to apply a more extensive and detailed questionnaire that would allow us to obtain the more substantive and "qualitative" data we were looking for, we opted for a non-probabilistic sample size of 450 interviews with young women between 15 and 29 years of ages, 150 in each town and 300 interviews with young men in the same age group, 100 in each town. In each city we interviewed 50 women and 34 men aged from 15 to 19, 50 women and 34 men between 20 and 24 years old and 50women and 33 men between 25 and 29 years old. We selected twenty census sectors (divisions with 300 households each utilized in Brazilian census) with a household income of one minimum wage per capita or less. We interviewed young women and men in different sectors to avoid interviewing people in the same family. So, for each city, in ten of selected sectors we interviewed 15 young women and in the other ten sectors we interviewed 10 young men for sector. The interviewers would knock on a house, ask about the presence of members in the right age group and do the interview in case the subject agreed. If not, they would skip the next house (again, to avoid another interview in the same family) and ask for potential candidates in the following home. The interviews were conducted within the months of June and July of 2011.

Our questionnaire was modeled after a questionnaire utilized in previous survey we did with young women living in Belo Horizonte (Chacham et al, 2010). In that research we also used some indicators of autonomy to measure young woman's susceptibility to HIV/AIDS. In our questionnaire the following questions were utilized as indicators of the different dimensions of autonomy:

| Autonomy | Indicators used in the study |
|---|---|
| Sexuality | If she: wanted to have her first sexual relationship; talked to partner about how to avoid pregnancy before first sexual intercourse; enjoys having sex; decides together with her partner about contraceptive use; finds hard to propose the use of condom; if partner ever refused to use condoms; if able to avoid or interrupt a sexual relationship if she wanted. |
| Mobility and access to social resources | The number of places a woman can go alone: to health centers, community centers, relatives' and/or friends' houses, shopping centers or to another city; if she has any leisure activity; if she has access to TV, radio and books; if the women has the house keys; curfew hours; if she can go out with friends, with any kind of clothes she wants to wear and if she can wear makeup. |
| Authority related with the decision on child care / share of domestic work | If has the power to decide issues related to discipline, child care, schooling, who takes care of children, who is the main responsible for domestic work and childcare; number of hours dedicated to domestic labor and who is responsible for each domestic task. |

| Control over economic resources | If has paid work and to control over how her own money is spent and how household money is spent; if she does not work outside home, if she has money for personal and household expenses; if she is free to buy objects for personal use and gifts; if she has a bank account |
|--|--|
| Freedom from control and violence from a partner | Whether she fears and/or is exposed to physical, emotional or sexual violence and abuse from a partner or other relative; if she has ever seen her mother being victim of domestic violence; if she feels she can avoid a sexual intercourse or interrupt if she wants; if she can safely demand the use of condoms. |

The answers from both the closed and open-ended questions were coded, entered into a database and analyzed using the Statistical Program for Social Sciences (SPSS 16.0). The statistic test chi-square was performed and correlations were accepted upon an approximate significance level of 0.05 or below.

RESEARCH RESULTS

Respondents Social and Economic Characteristics

The analysis of our social and economic data showed that the adolescents and young adults interviewed in different regions of the state presented a very heterogeneous picture regarding their social and economic conditions when we compare the residents from middle sized cities located in the south (Varginha), north (Teófilo Otoni) and in the metropolitan area (Betim). As it was expected, respondent from Teófilo Otoni (located in the poorer northeast region of the state) presented the lower income levels among the three groups. Male respondents consistently declared higher income levels than females in the three cities. Among Teófilo Otoni female respondents declared a household monthly income of 640 dollars in average. For male respondents the equivalent amount reached 708 dollars higher than females respondents but below the average of males respondents in the other cities. With a median number of four people in each household (for both male and female respondents), that level of income means a daily income of four dollars per capita, just above the UN poverty level of two dollar a day per capita. In contrast, respondents from Betim and Varginha declared higher household incomes, over two minimum wages in average. Since all cities had the same median number of residents per household, four, this means that income levels were substantially higher in Varginha and Betim than in Teófilo Otoni.

Another sharp difference was in the composition of households found in each group. Most respondents (33%) lived in households headed by their father, although

males were much more likely to be living in female headed households then the female respondents. Not surprisingly, we found an association with lower income and female headed household (data not shown). Among young women, those living in Teófilo Otoni were much more likely to live in female headed households: 21% declared their mothers were the head of household and 8% declared they were the household heads. These were the poorest households in our sample. Males respondents in Teófilo Otoni were the most likely to declare to be the head of household themselves (30% of them) while females from Betim were much more likely to live with a partner and to declare their partner was the household head (30% of them were living with a partner at the time of the interview).

In relation to marital status, over a third of young women living in all three cities were married or living in a stable union at the moment of the interview (36%). Males were much less likely to be married than females in the same age group, only 21% of them were living with a partner at the time of the interview. Females respondents from Betim were more likely to be married or living with a partner at the time of the interview than respondents in Teófilo Otoni and Varginha. Males from Teófilo Otoni were more likely to be living with a partner (25%) than young men living in other cities. Females were also more likely to have ever been married than males in the same age group. Over 50% of the females respondents in the three cities had been married or lived with a partner at least once in their lives compared to 27.5% of men. Although the numbers were close in all three cities, young women and men living in Teófilo Otoni were more likely to have ever been married than the others respondents.

As expected, given Brazil and Minas Gerais color/racial spatial distribution (more blacks live in the north and more whites live in the southeast/south regions), a higher proportion of young women and men living in Varginha declared to be white (38%), since the city is located in the south, closer to São Paulo State. Black and brown respondents in Varginha had a lower income than their white counterparts. Teófilo Otoni had a higher number of young women declaring to be black or brown (86%) and in Betim a higher number of male respondents declared to black or brown (also 86%) but in general the number of those declaring to be white or black is very similar in both cities and income did not vary much across color lines in this cities.

TABLE 1
Social and economic characteristics of adolescents and young women and men interviewed in Betim, Teófilo Otoni and Varginha, Brazil 2011

| Socio-economic FEMALES MALES | | | | | | | | | | |
|------------------------------------|-------------|-----------------------|----------------|--------------|----------|-----------------------|-----------------------|----------|--|--|
| Socio-economic | | | | | (n=300) | | | | | |
| and demographic | | ` ` | 450) | | | ` | | | | |
| characteristics | Betim | Teófilo | Vargi- | Total | Betim | Teófilo | Vargi- | Total | | |
| | (n=150) | Oton i (n=150) | nha (n=150) | (n=450) | (n=100) | Oton i (n=100) | nha (n=100) | (n=300) | | |
| Monthly family income ¹ | (11 100) | (11 150) | (11 150) | (11 150) | (11 100) | (11 100) | (11 100) | (11 300) | | |
| Up to 400 dollars | 14.7 | 26.0 | 7.3 | 16.0 | 3.0 | 10.0 | 4.0 | 5.7 | | |
| From 400 to 800 dollars | 30.0 | 34.0 | 22.7 | 28.9 | 20.0 | 36.0 | 25.0 | 27.0 | | |
| From 800 to 1200 dollars | 26.7 | 24.0 | 31.3 | 27.3 | 26.0 | 30.0 | 26.0 | 27.3 | | |
| From 1200 dollars and up | 28.7 | 16.0 | 38.7 | 28.4 | 51.0 | 24.0 | 45.0 | 40.0 | | |
| Head of household ¹ | 20.7 | 10.0 | 50.7 | 20.1 | 51.0 | 21.0 | 10.0 | 10.0 | | |
| Father | 30.7 | 32.0 | 37.3 | 33.3 | 48.0 | 38.0 | 54.0 | 46.7 | | |
| Mother | 15.3 | 20.7 | 19.3 | 18.4 | 12.0 | 8.0 | 18.0 | 12.7 | | |
| Husband/wife | 30.7 | 26.0 | 28.0 | 28.2 | 3.0 | 2.0 | 0.0 | 1.6 | | |
| Respondent | 11.3 | 8.0 | 6.7 | 8.7 | 23.0 | 30.0 | 16.0 | 23.0 | | |
| Stepfather | 2.0 | 0.7 | 3.3 | 2.0 | 1.0 | 1.0 | 1.0 | 1.0 | | |
| Other relative/other | 10.0 | 12.7 | 5.3 | 9.3 | 13.0 | 21.0 | 11.0 | 15.0 | | |
| Marital/status ¹ | 10.0 | 12.7 | 3.3 | 7.5 | 15.0 | 21.0 | 11.0 | 13.0 | | |
| Married/united | 39.3 | 34.7 | 36.0 | 36.6 | 21.0 | 25.0 | 17.0 | 21.0 | | |
| Single/separated | 60.7 | 65.3 | 64.0 | 63.4 | 79.0 | 75.0 | 83.0 | 79.0 | | |
| Ever been married ¹ | 00.7 | 05.5 | 04.0 | 05.4 | 77.0 | 75.0 | 05.0 | 77.0 | | |
| Yes | 51.3 | 56.0 | 53.3 | 53.6 | 28.0 | 31.0 | 24.0 | 27.6 | | |
| No | 48.7 | 44.0 | 46.7 | 46.4 | 72.0 | 69.0 | 76.0 | 72.4 | | |
| Race (color) | 40.7 | 44.0 | 40.7 | 40.4 | 72.0 | 09.0 | 70.0 | 72.4 | | |
| White | 19.6 | 12.7 | 41.1 | 21.0 | 20.0 | 22.0 | 32.0 | 24.7 | | |
| Black | 25.0 | 24.7 | 23.3 | 24.3 | 28.0 | 20.0 | 20.0 | 24.7 | | |
| Brown | 52.7 | 60.7 | 34.2 | 49.2 | 48.0 | 57.0 | 46.0 | 50.3 | | |
| Asian | 2.0 | 0.0 | 0.7 | 1.3 | 2.0 | 1.0 | 1.0 | 1.3 | | |
| Indigenous | 0.7 | 2.0 | 0.7 | 1.3 | 2.0 | 0.0 | 1.0 | 1.0 | | |
| Religion ¹ | 0.7 | 2.0 | 0.7 | 1./ | 2.0 | 0.0 | 1.0 | 1.0 | | |
| Catholic | 31.3 | 49.3 | 67.1 | 49.2 | 39.0 | 47.0 | 75.0 | 53.7 | | |
| Pentecostal/protestant | 47.3 | 39.3 | 26.8 | 49.2 37.9 | 27.0 | 36.0 | 10.0 | 24.4 | | |
| Afro Brazilian/spiritualist | 1.3 | 1.3 | 1.3 | 1.3 | 2.0 | 1.0 | 0.0 | 1.0 | | |
| None | 20.0 | 8.0 | 4.0 | 1.3 | 29.0 | 15.0 | 14.0 | 1.0 | | |
| Other | 0.0 | 2.0 | 0.7 | 0.9 | 3.0 | 1.0 | 1.0 | 19.3 | | |
| Still in school | 0.0 | 2.0 | 0.7 | 0.9 | 3.0 | 1.0 | 1.0 | 1./ | | |
| Yes | 35.3 | 42.7 | 38.0 | 38.6 | 39.0 | 44.0 | 33.0 | 38.7 | | |
| No | 64.7 | 57.3 | 64.0 | 61.4 | 61.0 | 56.0 | 67.0 | 61.3 | | |
| Schooling level | 04.7 | 31.3 | 04.0 | 01.4 | 01.0 | 30.0 | 07.0 | 01.5 | | |
| Up to 5° grade | 10.0 | 9.3 | 10.0 | 9.8 | 12.1 | 12.0 | 9.0 | 11.0 | | |
| 6° to 8° grade | 27.3 | 25.3 | 26.7 | 26.4 | 24.2 | 28.0 | 28.0 | 26.8 | | |
| Uncompleted high school | 24.7 | 32.0 | 22.0 | 26.2 | 26.3 | 23.0 | 31.0 | 26.8 | | |
| Completed high school | 33.3 | 25.3 | 35.3 | 31.3 | 29.3 | 32.0 | 24.0 | 28.4 | | |
| College | 4.7 | 8.0 | 6.0 | 6.2 | 8.1 | 5.0 | 8.0 | 7.0 | | |
| Why left school? ¹ | 4.7 | 0.0 | 0.0 | 0.2 | 0.1 | 3.0 | 8.0 | 7.0 | | |
| Graduated high school | 24.0 | 19.6 | 34.0 | 25.9 | 20.0 | 7.7 | 25.4 | 18.0 | | |
| To work | 10.4 | 19.0 | 11.7 | 11.0 | 28.6 | 47.7 | 33.8 | 36.4 | | |
| Pregnancy/childcare | 24.0 | 16.3 | 13.8 | 18.1 | 1.4 | 1.5 | 0.0 | 1.0 | | |
| Did not like school | 15.6 | 14.1 | 18.1 | 16.0 | 17.1 | 16.9 | 12.7 | 15.5 | | |
| | 8.3 | 14.1 | 8.5 | 12.1 | 17.1 | 9.2 | 11.3 | 13.3 | | |
| No/poor access to school Others | 8.3 17.7 | 19.6 19.6 | 8.5 13.8 | 17.0 | 15.7 | 9.2 16.9 | 16.9 | 17.0 | | |
| | 1/./ | 19.0 | 13.8 | 1 / .U | 1/.1 | 10.9 | 10.9 | 1 / .0 | | |
| Work outside home ¹ | | | | _ | | | | | | |
| No | 49.6 | 48.6 | 41.3 | 46.5 | 26.1 | 21.2 | 17.0 | 21.1 | | |
| Yes | 50.4 | 51.4 | 58.7 | 53.5 | 73.9 | 78.8 | 83.0 | 78.9 | | |

Source: META Survey, Brazil, 2011. ¹ Correlations with p-value= or <0.05

Another significant point of differentiation among the respondents is in the predominance of those who declared to belong to an evangelical (Pentecostal) or protestant religion, strong presence especially among females who lived in Betim (49%). Young men and women from Varginha and Teófilo Otoni were more likely to be catholic, indicating the persistence of Catholic Church influences in the countryside and smaller urban areas, although the growth of Pentecostals in these areas is perceptible. In Varginha, catholic respondents are still the majority (around 70%) whereas in Teófilo Otoni, Catholics were less than 50% among our respondents. In Betim (located in a metropolitan area) we also found a higher number of those who declared not to follow any religion especially among males (29%).

In relation to educational levels, only 38% of the respondents both males and females were still in school. No significant differences were found in the level of schooling of males and females. The median years of schooling were 10 for both groups in all three cities and although females were slightly more likely to had finished high school than males (31% versus 28%) we found a slight higher of males with at least some college education. One unexpected finding was that educational levels in Teófilo Otoni, the poorest city in our study, were about the same than in the other cities. We even found a higher percentage of young women going to college in Teófilo Otoni than in Betim and Varginha, although it was a very small number and the different was not significant. These results also indicate that high school is the limit of schooling for lower income youth even for those living in a huge metropolitan area such as the case in Betim. College or even going to a technical school does not appear to be a viable alternative to most of them. Only 24% of those who were not studying at the moment of the interview had plans to go back and the most common reason to leave school is that to have graduated from high school (25%) for females and the second one for males (18%). The most common reason to leave school was to work for males (36%) and for females the second most common reason was because they got pregnant or had to take care of their children (18%), reason that practically no male declared. However, a significant proportion of them, male or females (around 28%) declared they dropped out of school because they did not like to study nor had a difficult access to school; data that appoints to the low quality of education offered by the public schools in Brazil, in general, what certainly hampers access to a higher level of education.

Male respondents were much more likely to have a paid job at the moment of the interview than females. Wages in average were higher for males than for females, with

male respondents from Betim declaring a higher income than those in Varginha and Teófilo Otoni (data not shown). The overwhelming majority of the respondents (both male and female) declared they had complete control over how to spend their own money. More women than men declared they did not contributed to household expenses but a similar number were responsible for over half of their household expenses (data not shown).

Other significant between men and women is the number of women concentrated in the service sector (around 77%) and in domestic services (12% of them). Men were much more likely to hold jobs in the industrial sector and in construction (38%) although most of them are in the service sector (60%), especially in Teófilo Otoni (80%), where they do have a very low number of jobs in the industrial sector (6%). Inside every kind of sector, men declared higher wages when compared to women (data not show).

This concentration of women in the service sector is worrisome considering that in general, these occupations demand a low level of qualification and training, are poorly paid, have low job stability, precarious access to social and labor benefits and remote chances for professional mobility. Considering that over a third of them had already a high school diploma what constitutes a higher educational level than most have in Brazil (seven years of schooling is the national average), this precarious level of inception in the labor market indicates the limitation of this educational degree to promote a more qualified inclusion in the labor market, especially for young women.

Finally, women were much more likely to declare they did housework (94%) than men (65%). The difference among the numbers of hours they spent with housework was striking: 17 hours a week versus 6 hours for men. What is even more interesting is that among women who are mothers and did not work outside home spent a much higher number of hours with housework (27 hours) than those who work outside home (14 hours). Among men, the number of hours they spend with housework every week does not vary, it is always around 6, even if they are have children or do not work outside home.

Sexual and reproductive behavior and their social and economic determinants

In TABLE 2 we present data relative to sexual and reproductive behavior of adolescent and young women interviewed, according place of residence. According to

our data, the proportion of respondents who ever had sex is practically the same for both females and males (77% versus 81%). In Teófilo Otoni we found a higher proportion of females who never had sex and in Varginha a higher proportion of males.

Age of sexual initiation was very similar in all the three cities: female respondents had their sexual initiation when they were around 16 years old in average and males around 15 years old. Pre-marital sex is the norm for both male and females, however for most females (74%) the first intercourse occurred in the context of a stable relationship with a boyfriend or fiancée, while over half of men declared their first sexual experience were with a friend or acquaintance and a very small percentage with sex workers what used to be more common in Brazil.

The prevalence of condom use in the first intercourse was similar for both males and females in all cities, around 72%. Among females we observed a significant decrease of condom use in the last intercourse compared to first, with 40% declaring condom use in their last intercourse. The decrease in condom use coincides with young women entrance in stable relationships, marital or not, in which those condoms use is replaced by other contraceptive methods. Among men, we found a much smaller decrease of condom use from the first to the last intercourse what can be attributed to the fact men were less likely to be in a stable relationship and are also more likely to have casual sex.

The most remarkable difference among males and females was the prevalence of pregnancy and teenage pregnancy. Almost half (47%) of the female respondents got pregnant at least once and a third of them before they were 20 year old. The prevalence of teenage pregnancy was higher among respondents who lived in Betim (34%) and lower among respondents from Teófilo Otoni (26%). Males were much less likely to declare they ever had gotten a partner pregnant, only 22% declared that experience and they were even less likely of doing it during adolescence: only 9% of them declared getting a partner pregnant before they were 20 years old. Female were also much more likely to have experienced a pregnancy with 15 years of age or younger than males (18.5% versus 1.6%).

However a much higher proportion of males declared their partners' pregnancy was planned than females: 52% compared to 29% (for teenage pregnancies only). Planned or not, only 33% of young women and 25% of young men declared they were using a contraceptive method at the time of first pregnancy. Over 44% of women and 37% of men declared they forget to use a contraceptive or had a problem with the

method, what indicate that young people are not doing a consistent use of contraceptive methods and they tend not to do a systematic use of condom after they have their sexual initiation.

TABLE 2
Characteristics of sexual and reproductive behavior of adolescents, young women and interviewed in Betim. Teófilo Otoni and Varginha. Brazil 2011

| interviewed in Betim, Teófilo Otoni and Varginha, Brazil 2011 | | | | | | | | |
|---|---------------|---------|---------|---------|---------|---------|---------|---------|
| Characteristics of | FEMALES MALES | | | | | | | |
| Sexual and | | (n=4 | 450) | | | , | 300) | |
| Reproductive Behavior | Betim | Teófilo | Vargi- | Total | Betim | Teófilo | Vargi- | Total |
| Reproductive Benavior | | Otoni | nha | | | Otoni | nha | |
| | (n=150) | (n=150) | (n=150) | (n=450) | (n=100) | (n=100) | (n=100) | (n=300) |
| Sexual experience | | | | | | | | |
| Had sex | 78.0 | 75.3 | 77.3 | 76.9 | 83.0 | 83.7 | 75.5 | 80.7 |
| Never had sex | 22.0 | 24.7 | 22.7 | 23.1 | 17.0 | 16.3 | 24.5 | 19.3 |
| Median age at first | | | | | | | | |
| intercourse | 16.5 | 16.8 | 16.3 | 16.5 | 15.4 | 15.4 | 15.5 | 15.4 |
| Age at 1° sexual | | | | | | | | |
| intercourse ¹ | | | | | | | | |
| Up to 15 years old | 42.2 | 33.3 | 43.5 | 39.8 | 57.8 | 54.8 | 50.7 | 54.5 |
| Between 16 to 18 years old | 47.4 | 56.8 | 47.0 | 50.3 | 31.3 | 41.7 | 41.3 | 38.0 |
| 19 years or older | 10.3 | 9.9 | 9.6 | 9.9 | 10.8 | 3.6 | 8.0 | 7.4 |
| Partner at first intercourse ¹ | | | | | | | | |
| Husband/wife | 10.3 | 6.2 | 7.8 | 8.1 | 3.7 | 3.6 | 1.3 | 2.9 |
| Boyfriend/girlfriend/fiancé | 72.6 | 77.9 | 70.7 | 74.1 | 35.4 | 24.1 | 33.3 | 30.8 |
| Friend | 12.1 | 11.6 | 12.1 | 12.0 | 20.7 | 32.5 | 33.3 | 28.8 |
| Acquaintance/stranger | 1.8 | 0.9 | 3.5 | 2.1 | 23.1 | 24.1 | 25.3 | 24.2 |
| Relative/neighbor | 0 | 0 | 1.8 | 0.6 | 9.8 | 9.4 | 5.3 | 8.4 |
| Other/sex worker | 2.6 | 2.7 | 4.3 | 3.2 | 7.3 | 6.0 | 1.3 | 5.0 |
| Prevalence of condom use | | | | | | | | |
| at first sexual intercourse | 72.6 | 72.3 | 72.2 | 72.4 | 79.5 | 71.4 | 66.7 | 72.7 |
| | | | | | | | | |
| Prevalence of condom use | 26.0 | 10.5 | 40.0 | 40.2 | (2.0 | 50.5 | 60.2 | 64.0 |
| at last intercourse | 36.8 | 42.5 | 42.2 | 40.2 | 63.9 | 59.5 | 69.3 | 64.0 |
| Ever been pregnent/get a | 50.0 | 45.4 | 45.4 | 46.8 | 22.0 | 25.0 | 19.0 | 22.3 |
| Ever been pregnant/got a | 30.0 | 43.4 | 43.4 | 40.8 | 22.0 | 23.0 | 19.0 | 22.3 |
| partner pregnant | | | | | | | | |
| Sexual experience and age | | | | | | | | |
| at first pregnancy ¹ | | | | | | | | |
| Pregnancy before 19 | 34.0 | 26.7 | 30.7 | 30.4 | 10.0 | 11.0 | 6.0 | 9.1 |
| Pregnancy after 19 | 16.0 | 18.7 | 14.7 | 16.4 | 12.0 | 14.0 | 13.0 | 13.2 |
| Had sex / no pregnancy | 28.0 | 30.0 | 32.0 | 30.0 | 61.0 | 59.0 | 57.0 | 58.4 |
| Never had sex | 22.0 | 24.7 | 22.7 | 23.1 | 17.0 | 16.0 | 24.0 | 19.3 |
| Age at first pregnancy ¹ | 22.0 | 24.7 | 22.1 | 23.1 | 17.0 | 10.0 | 24.0 | 19.5 |
| Up to 15 years old | 21.3 | 13.6 | 20.6 | 18.5 | 4.8 | 0.0 | 0.0 | 1.6 |
| Between 16 to 18 years old | 46.7 | 45.6 | 47.1 | 46.4 | 42.9 | 47.8 | 33.4 | 41.2 |
| 19 years or older | 32.0 | 41.2 | 32.4 | 35.1 | 52.3 | 52.2 | 66.6 | 57.2 |
| Median age at first | 32.0 | 41.2 | 32.4 | 33.1 | 32.3 | 34.2 | 00.0 | 31.2 |
| pregnancy | 19.0 | 18.0 | 17.0 | 18.5 | 19.5 | 20.3 | 21.6 | 20.4 |
| Age at first child ¹ | 19.0 | 10.0 | 17.0 | 10.5 | 19.5 | 20.3 | 21.0 | 20.4 |
| Had child before 19 | 26.0 | 26.0 | 25.3 | 25.8 | 10.0 | 10.0 | 5.0 | 8.3 |
| Had child after 19 | 21.3 | 18.7 | 14.0 | 18.0 | 11.0 | 10.0 | 10.0 | 10.3 |
| Never had a child | 30.7 | 30.7 | 38.0 | 33.1 | 62.0 | 64.0 | 61.0 | 62.3 |
| Never had sex | 22.0 | 24.7 | 22.7 | 23.1 | 17.0 | 16.0 | 24.0 | 19.0 |
| Median age when first child | 22.0 | 47.1 | 44.1 | 43.1 | 1 / .0 | 10.0 | 4.0 | 17.0 |
| was born | 18.0 | 19.0 | 17.0 | 18.5 | 20.0 | 19.5 | 22.0 | 20.0 |
| 11 40 00111 | 10.0 | 17.0 | 17.0 | 10.5 | 20.0 | 17.5 | 22.0 | 20.0 |

Source: META Survey, Brazil, 2011.

¹ Correlations with p-value= or <0.05

Although, the percentage of teenage pregnancies was much higher em Betim (34%) than in Teófilo Otoni (26%), the proportion of women who had their first child before they were 20 years old was the same (26%). The proportion of teenage mothers in Varginha was also similar (25%) and smaller than the proportion of those who got pregnant before 20 years old (31%). The disparity between those numbers is explained by the fact that in Betim and Varginha we had a higher number of young women who were pregnant at the moment of the interview and also a higher proportion of young women who got pregnant at 19 and had their children at 20. Since the numbers are small these differences can be attributed to chance.

We did not find significant differences in the sexual and reproductive trajectories among the young women interviewed in the three cities. Although we found a small (non-significant) tendency among young women and men from Teófilo Otoni to postpone sexual initiation and pregnancy, probable a consequence of a more conservative social context, the rates of sexual activity, condom use, pre-marital sex and age at first intercourse and first pregnancy were very close, with Betim, located in metropolitan area with lots of *favelas* (slums) presenting the higher rates of teenage pregnancy. Results that are consistent with the findings of other researches in Brazil (Heilborn *et al.*, 2006) and America Latina (Rodriguez, 2008) that point to high rates of teenage pregnancy prevalent in the impoverished suburbs of metropolitan areas.

When we compared teenage pregnancy rates for females among age groups, we found higher rates among 20 to 24 years old than among 25 to 29 years old, in all three cities (data not show). The rates among 15 to 19 were the smallest but it is not possible to say it if the rates are declined since they are still exposed to the risk.

In TABLE 3 we present the social and economic characteristics of young women and men interviewed according their sexual and reproductive experience. We compared the social and economic characteristics of men and women divided in four groups: those who got pregnant (or had gotten a partner pregnant) before 20 year old, after they were 20 year old, those who had sex and never experienced a pregnancy and those who never had sex. We had to eschew the disaggregation by cities presented in the tables above to avoid excessively small numbers in some cells.

Both male and females respondents who experience a teenage pregnancy were more likely to be living in households with lower income levels. However, this association of low income with teenage pregnancy is more pronounced among females: 25% of young women who have gotten pregnant as adolescents were living in households with average income of one minimum wage or less. They were also more likely to be living with a partner and to have ever been married than respondents who never got pregnant. However, young women who got pregnant after they were 19 year old were also almost as likely to have ever been married or to be living with a partner at the moment of the interview. Marriage and procreation seem to be strongly associated among them, although not necessarily in that order. Yet, among young men, those who got a partner pregnant as teenagers were slightly less likely to be married and to be the head of household themselves then young men who got a partner pregnant after they were 19 year old.

As we found in our other surveys (Chacham et al., 2007, 2010) race and religion were not associated to the likelihood of a teenage pregnancy among the young men and women interviewed. The only exceptions were in Varginha where the poorer, black respondents were more likely to have experienced a teenage pregnancy and Teófilo Otoni where evangelical young women were less likely to declare a teenage pregnancy and more likely to have gotten pregnant after they were 19 years old and to be married what indicates that the influence of religious affiliation is stronger in a more conservative region such as Teófilo Otoni when compared to the other cities researched.

In relation to schooling levels, both male and female respondents who had pregnancies before 19 years old were less likely to have completed high school and to go to college. They had less than 9 years of schooling in average compared to almost eleven for the other respondents (for both men and women, data not shown). It did not vary by city. The effects of a pregnancy after 19 years old over income and education are not so pronounced as of a pregnancy before 20 year of age although the best levels of education belong to those who have never experienced a pregnancy. Those who experienced a teenage pregnancy were also more likely to be out of school and to have left school because of the pregnancy or to take care of a child, number especially higher among men, who declared they needed to leave school in order to work to support their child.

Young women who got pregnant before 20 years old were less likely to be working outside home, but young men who were teenage when got a partner pregnant were more likely to be working at the time of the interview. Both men and women who experienced a teenage pregnancy were more likely to start working younger than those who had a child after 20 years of age or never had a child (data not shown). Women

who experienced a teenage pregnancy declared a lower wage in average than women who never got pregnant or got pregnant after they were 19 years old.

TABLE 3

Social and economic characteristics of adolescents, young women and men interviewed in Betim, Teófilo

Otoni and Varginha by sexual experience and age at first pregnancy, Brazil 2011.

| Socio-economic and demographic | n and Varginha | FEMA (n=4 | ALES | . p | <u> </u> | MA | ALES =300) | |
|--|----------------------------------|--------------------------------|------------------------------|-----------------------------|----------------------------------|---------------------------------|----------------------------|----------------------------|
| characteristics | Pregnant before 20 (n=137) | Pregnant after 19 (n=74) | Never pregnant (n=135) | Never had sex (n=104) | Pregnancy before 20 (n=27) | Pregnancy after 19 (n=39) | No pregnancy (n=173) | Never had sex (n=57) |
| Monthly family income ¹ | | | | | | | | |
| Up to 400 dollars | 25.5 | 17.6 | 8.9 | 11.5 | 3.7 | 5.1 | 5.2 | 7.0 |
| 400 to 800 dollars | 29.9 | 28.4 | 31.1 | 25.0 | 59.6 | 41.0 | 23.7 | 28.1 |
| 800 to 1200 dollars | 24.1 | 31.1 | 23.7 | 33.7 | 33.3 | 15.4 | 28.3 | 28.1 |
| 1200 dollars & up | 20.4 | 23.0 | 36.3 | 29.8 | 33.3 | 38.5 | 42.8 | 36.8 |
| Head of household ¹ | | | | | | | | |
| Respondent | 13.1 | 17.6 | 5.2 | 1.0 | 55.6 | 64.1 | 15.6 | 1.8 |
| Husband/wife | 53.3 | 47.3 | 14.1 | 0.0 | 7.4 | 10.2 | 1.7 | 0.0 |
| Father | 15.3 | 14.9 | 43.7 | 56.7 | 18.5 | 17.9 | 50.9 | 66.7 |
| Mother | 11.7 | 16.2 | 23.0 | 23.1 | 0.0 | 2.6 | 16.2 | 15.8 |
| Stepfather | 2.2 | 1.4 | 0.0 | 3.8 | 0.0 | 0.0 | 1.7 | 0.0 |
| Other relative Marital/status ¹ | 4.4 | 2.7 | 13.3 | 15.4 | 18.5 | 5.2 | 13.9 | 15.7 |
| Single/separated | 33.6 | 33.8 | 81.5 | 100.0 | 37.0 | 28.2 | 90.2 | 100.0 |
| Married/united | 66.4 | 66.2 | 18.5 | 0.0 | 63.0 | 71.8 | 9.8 | 0.0 |
| Race (color) | | | | | | | | |
| White | 21.5 | 27.0 | 28.0 | 21.4 | 25.9 | 28.2 | 21.4 | 31.6 |
| Black | 28.1 | 27.0 | 20.5 | 22.3 | 22.2 | 15.4 | 23.7 | 26.3 |
| Brown | 48.1 | 43.2 | 50.0 | 54.4 | 51.9 | 53.8 | 53.2 | 36.8 |
| Asian | 0.7 | 1.4 | 0.8 | 1.0 | 0.0 | 0.0 | 1.2 | 3.5 |
| Indigenous | 1.5 | 1.4 | 0.8 | 1.0 | 0.0 | 2.6 | 0.6 | 1.8 |
| Religion | | | | | | | | |
| Catholic | 44.1 | 51.4 | 58.5 | 42.3 | 51.9 | 48.7 | 57.8 | 45.6 |
| Protestant/Pentecostal | 39.7 | 45.1 | 39.4 | 47.1 | 29.6 | 23.1 | 20.6 | 37.8 |
| Spiritualist/other | 1.5 | 2.8 | 1.4 | 2.9 | 0.0 | 2.6 | 1.8 | 7.2 |
| None | 14.0 | 10.8 | 9.6 | 7.7 | 18.5 | 25.6 | 20.8 | 10.5 |
| Schooling level ¹ | | | | | | | | |
| Up to 5 ^a grade | 16.8 | 9.5 | 5.2 | 6.7 | 22.2 | 10.3 | 10.5 | 7.0 |
| 6° to 9° grade | 40.1 | 10.8 | 16.3 | 32.7 | 25.9 | 17.9 | 23.3 | 42.1 |
| Some high school | 20.4 | 20.3 | 26.7 | 37.5 | 25.9 | 30.9 | 22.1 | 38.6 |
| High school | 20.4 | 55.4 | 40.7 | 16.3 | 25.9 | 35.9 | 33.7 | 10.5 |
| College | 2.2 | 4.1 | 11.1 | 6.7 | 0.0 | 5.1 | 10.5 | 1.8 |
| Still in school ¹ | | ••• | | 0.7 | 0.0 | 0.1 | 10.0 | 1.0 |
| Yes | 16.1 | 5.4 | 45.9 | 79.8 | 11.1 | 2.6 | 35.8 | 86.0 |
| No | 83.9 | 94.6 | 54.1 | 20.2 | 88.9 | 97.4 | 64.2 | 14.0 |
| Why left school? 1 | | | | | | ,,,, | | |
| Graduated high school | 11.0 | 26.9 | 36.0 | 44.8 | 23.1 | 7.9 | 16.8 | 37.5 |
| To work | 9.0 | 13.4 | 12.8 | 6.9 | 3.8 | 10.5 | 23.7 | 12.5 |
| Pregnancy/take care of children | | 19.4 | 0.0 | 0.0 | 61.5 | 52.6 | 29.0 | 0.0 |
| Did not like school | 23.0 | 11.9 | 12.8 | 10.3 | 3.8 | 2.6 | 0.0 | 0.0 |
| No/poor access to school | 3.0 | 19.4 | 16.3 | 13.8 | 0.0 | 15.8 | 17.6 | 25.0 |
| Others | 16.0 | 9.0 | 22.1 | 24.1 | 7.7 | 10.5 | 13.0 | 25.0 |
| Work outside home 1 | | | | | | | | |
| No | 57.6 | 46.4 | 41.4 | 32.1 | 3.7 | 15.4 | 23.2 | 32.3 |
| Yes | 42.4 | 53.6 | 58.6 | 67.9 | 96.3 | 84.6 | 76.8 | 67.7 |

Source: META Survey, Brazil, 2011. ¹ Correlations with p-value= or <0.05 ² Correlations with p-value= or >0.05

For men however there is almost no difference between wages declared by young men who have ever got a partner pregnant. Although they have less years of schooling, young men who got a partner pregnant before they were 20 year old received approximately the same amount that men who got a partner pregnant after they were 20 year old. Both earned more than young men who never got a partner pregnant, who tended to earn less and work fewer hours a week. The reverse was true for females: young women who had a teenage pregnancy earned less and worked fewer hours than the other female respondents. No significant distinctions were found when comparing by cities (data not show).

Gender inequality, autonomy indicators and sexual and reproductive behavior

After presenting and discussing data related to the social and economical characteristics associated with respondents' sexual and reproductive behaviors we shall pass to the discussion of the main point of our article: the analysis of the relationship between autonomy indicators and sexual and reproductive behavior. In TABLE 4 we present data referring to respondents' sexual and reproductive experience disaggregated in a variable with three categories: "had sex and got pregnant before 19 years old", "had sex and got pregnant after 19 years old", "had sex and never got pregnant". We crossed this variable with other five variables we considered that were strong indicators of young women's degree of autonomy in relation to gender inequality: the freedom from control and violence by a partner: "if she has ever been forbidden to wear some type of clothing by a partner", "if she has ever been forbidden to have contact with some friend(s) by a partner", "if she had had a determined hour to arrive home told by a partner ", "if she has ever been forbidden to go somewhere by a partner", "if she was ever suffered physical violence by a partner" (Chacham at al., 2007; Chacham et al., 2010).

In order to compare the impact of gender inequality on males respondents sexual and reproductive behavior __ due to the fact that our main hypothesis here is that gender inequality negatively affect both young men and women's sexual and reproductive health by lessen the probability of condom use and increasing the chances of an unplanned pregnancy__ we also present in TABLE 4 data referring to males respondents' sexual and reproductive experience disaggregated in a variable with three categories: "had sex and got a partner pregnant before he was 19 years old", "had sex

and got a partner pregnant after he was 19 years old", "had sex and never got a partner pregnant". For both males and females we eliminated the virgins since they were much less likely to be in a long term relationship. We crossed this variable with other five variables we considered that were indicators of men's degree of control and violence towards a partner: "if he has ever forbidden a partner to wear some type of clothing", "if he ever forbid a partner to have contact with some friend(s)", "if he has ever set a determined hour to a partner to arrive home", "if he has ever forbid a partner to go somewhere", "if he has ever been physical violent with a partner". Finally, for males we also included "if he has ever suffered physical violence by a partner".

Analyzing the data presented in the table, we can observe that among our female respondents, having a partner who is violent or tries to exercise some kind of control over them is strongly related to have ever been pregnant, especially among those who got pregnant before they were 20 year old. Respondents who got pregnant as teenagers were almost twice more likely to have suffer physical or sexual violence from a partner. Those who got pregnant after they were 19 years old were less likely to suffer from controlling and violent behavior from a partner than those who had gotten pregnant during adolescence but, when compared to those who had sex but never got pregnant, they were more likely to have ever suffered control and violence from a partner.

Respondents who never had sex or had sex and have never gotten pregnant were much less exposed to control and violence from a partner than those who ever got pregnant. Of course, the former were also much less likely to ever been married/united than young women who ever had children (18.5% vs. 66%). However, the probability of being subjected to violence and control was more strongly associated to have ever been pregnant, especially as teenager, than to marital status. Although married women were more likely to be subjected to control and violence from a partner, young women who got pregnant as teenagers, if ever married or not, were more significantly more likely to ever been victims of physical abuse and controlling behavior such as having a partner setting a time for her to arrive home and forbidden to wear some kinds of clothes than young women in the other categories (data not shown).

Given that respondents who never got pregnant and those who got pregnant after they were 19 year old were less likely to have suffered control and/or violence from a partner than the respondents who had sex and got pregnant before 19 years old, married or not, we can conclude there is a association between lower levels of autonomy regarding freedom of violence and control by a partner and early start of young

women's reproductive lives. Having a violent and controlling partner seems to be conductive to an earlier pregnancy, independently of the fact of the young women is married or not, what suggests that is not only an early marriage itself that propitiates violence but that is violence is associated with less autonomy and inequality inside a relationship, what ends up associated with less control for a young women over her sexuality and reproduction and increased chances of unplanned pregnancies.

TABLE 4
Sexual and reproductive behavior of adolescents, young women and men interviewed in Betim, Teófilo
Otoni and Varginha by selected autonomy indicators, Brazil 2011.

| | | FEMALES | | , | MALES | |
|---|-----------|----------|----------|-----------|-----------|-----------|
| Indicators of freedom from | | (n=346) | | | (n=243) | |
| violence and control | Pregnant | Pregnant | Never | Pregnancy | Pregnancy | No |
| | before 20 | after 19 | pregnant | before 20 | after 19 | pregnancy |
| E C 1'11 4 1'. 1 . C | (n=137) | (n=74) | (n=135) | (n=27) | (n=39) | (n=173) |
| Ever forbidden to wear some kind of clothes/Ever forbid partner 1,2 | | | | | | |
| NO | 65.0 | 71.6 | 73.1 | 44.4 | 71.1 | 84.6 |
| YES | 35.0 | 28.4 | 26.9 | 55.6 | 28.9 | 15.4 |
| Ever forbidden to contact friend(s)/Ever | | | | | | |
| forbid partner ¹ | 66.4 | 50.01 | 75.6 | 77.0 | 0.4.2 | 00.5 |
| NO | 66.4 | 58.01 | 75.6 | 77.8 | 84.2 | 88.5 |
| YES | 33.6 | 41.9 | 24.4 | 22.2 | 15.8 | 11.5 |
| Has time limit to get home/ Ever set time | | | | | | |
| limit for a partner 1,2 | 70.8 | 78.4 | 83.0 | 85.2 | 73.7 | 89.0 |
| NO | 29.2 | 21.6 | 17.0 | 14.8 | 26.3 | 11.0 |
| YES | -> | 21.0 | 17.0 | 10 | -0.5 | 11.0 |
| Ever forbidden to go somewhere/Ever | | | | | | |
| forbid a partner ¹ | | | | | | |
| NO | 63.5 | 56.8 | 72.4 | 70.4 | 73.7 | 81.1 |
| YES | 36.5 | 43.2 | 27.6 | 29.6 | 26.3 | 18.9 |
| Ever been victim of physical violence by a | | | | | | |
| partner ^{1,2} | | | | | | |
| NO | 81.2 | 89.2 | 96.8 | 61.5 | 84.6 | 88.7 |
| YES | 18.2 | 10.8 | 3.2 | 38.5 | 15.4 | 11.3 |
| Ever been victim of sexual violence by a | | | | | | |
| partner ¹ | | | | | | |
| NO | 89.7 | 94.4 | 98.4 | _ | _ | _ |
| YES | 10.3 | 5.6 | 1.6 | | | |
| Ever hit a partner ² | | | | | | |
| NO | | | | 80.8 | 82.1 | 93.9 |
| YES | | _ | | 19.2 | 17.9 | 6.1 |
| Ever forced a partner to have sex against | | | | | | |
| her will | | | | | | |
| | | _ | | 96.3 | 94.7 | 96.6 |
| | | | | 3.7 | 5.3 | 3.4 |

Source: META Survey, Brazil, 2011. ¹ Correlations with p-value= or <0.05 for females ² Correlations with p-value= or >0.05 for males.

For young men, this findings reinforce the results found for young women: a young men who declared ever having a controlling of violent behavior towards a partner is far more likely to have gotten a partner pregnant when he was a teenager, especially if the partner was a teenage herself (data not shown). The findings were very symmetrical, male respondents who were teenagers when they got a partner pregnant were more

likely to declare to have ever controlled a partner clothes', set an hour for her to be home and ever hit a partner, the same kind of controlling that were significantly more likely for young women who got pregnant as teenagers to declare they were subjected to from a partner. It is also a very interesting finding that young men who got a partner pregnant as teenagers were much more likely to have been victims of physical violence by a partner than respondents in other categories. Although none declared they needed medical attention or denounced their partners, it is a strong indicative of that teenage pregnancy also affects males. It was not statistically significant but we could also observe a tendency for those were teenagers when they got a partner pregnant to have witnessed their mothers to be victim of violence from their fathers or stepfathers.

Similar findings can be observed in TABLE 5 where we present correlations between some selected indicators of autonomy in the sexual sphere with the sexual and reproductive behavior of the respondents who declared they ever had sex for both male and female respondents. The indicators of sexual autonomy were selected based on the results of other surveys (Chacham at al., 2007; Chacham et al., 2010). They are: "age at first intercourse", "if wanted first intercourse", "desired first intercourse", "talked with partner about contraception before first intercourse", "a partner ever refused to use a condom", "felt it was the right age to have first intercourse", "used condom at first intercourse", "used condom at last intercourse", "felt safe enough during last intercourse to stop it to demand to partner to use a condom", and "feel comfortable to refuse intercourse if a partner to refuse to use a condom".

For male the equivalent questions were: "age at first intercourse", "if wanted first intercourse", "desired first intercourse", "talked with partner about contraception before first intercourse", "a partner ever refused to use a condom", "felt it was the right age to have first intercourse", "used condom at first intercourse", "used condom at last intercourse", "ever refused to use a condom", "would stop intercourse to put a condom if partner demanded", and "would refuse intercourse if a partner refused a condom".

Among the variables listed above, the only one that showed a strong relationship with teenage pregnancy for both male and females was age at first intercourse: sexual initiation until 15 year of age increased significantly respondents' probability of experiencing a pregnancy before 20 years of age. This is not only an effect of a longer period of exposure: young women who got pregnant during adolescence had their first sexual experience in average around 15.2 years of age and got pregnant with 16.6 years old, a little more than one year difference. In contrast, young women who got pregnant

older than 19 years old, had their sexual initiation at 17.5 and their first pregnancy at 22.0 in average, almost five years later.

TABLE 5
Sexual and reproductive behavior of adolescents, young women and men interviewed in Betim, Teófilo Otoni and Varginha by indicators of autonomy in the sphere of sexuality, Brazil 2011.

| Sexual Autonomy | | FEMALES (n=346) | 3 | | MALES (n=243) | |
|---|----------------------------------|--------------------------------|------------------------------|----------------------------------|---------------------------------|----------------------------|
| indicators | Pregnant before 20 (n=137) | Pregnant after 19 (n=74) | Never pregnant (n=135) | Pregnancy before 20 (n=27) | Pregnancy after 19 (n=39) | No pregnancy (n=173) |
| Age at 1° sexual intercourse ^{1,2} | | | | | | |
| Up to 15 years old | 58.8 | 28.8 | 26.3 | 85.2 | 59.0 | 48.9 |
| Between 16 to 18 years | 41.5 | 52.1 | 58.6 | 14.8 | 33.3 | 42.6 |
| 19 years or older | 0.0 | 19.2 | 15.0 | 0.0 | 7.7 | 8.5 |
| Desired to have first intercourse | | | | | | |
| NO | 17.5 | 11.0 | 13.3 | 3.7 | 13.2 | 9.5 |
| YES | 82.5 | 89.0 | 86.7 | 96.3 | 86.8 | 90.5 |
| It was the right age to have first intercourse ¹ | | | | | | |
| Right time | 20.6 | 48.6 | 55.2 | 33.3 | 65.8 | 54.1 |
| Too young | 77.9 | 47.2 | 44.0 | 51.9 | 26.3 | 35.3 |
| Too old | 1.5 | 4.2 | 0.0 | 14.8 | 7.9 | 10.6 |
| Talked to partner about contraception before 1 ^a sexual intercourse ¹ | | | | | | |
| NO | 55.5 | 42.5 | 37.6 | 77.8 | 76.9 | 68.8 |
| YES | 33.3 44.5 | 42.3 57.5 | 62.4 | 22.2 | 23.1 | 31.3 |
| Condom use at first sexual intercourse ¹ | 44.3 | 37.3 | 02.4 | 22.2 | 23.1 | 31.3 |
| NO | 39.0 | 28.8 | 15.6 | 33.3 | 33.3 | 25.0 |
| YES | 61.0 | 71.2 | 84.4 | 66.7 | 66.7 | 75.0 |
| Condom use at last intercourse ¹ | | | | | | |
| NO | 73.0 | 59.5 | 40.9 | 66.7 | 69.2 | 23.9 |
| YES | 27.0 | 40.5 | 54.1 | 33.3 | 30.8 | 76.1 |
| If a partner/If he ever refused to use a condom ¹ | | | | | | |
| NO | 66.9 | 77.0 | 82.8 | 73.1 | 86.8 | 89.1 |
| YES | 33.1 | 23.0 | 17.2 | 26.9 | 13.2 | 10.9 |

Source: META Survey, Brazil, 2011. ¹ Correlations with p-value= or <0.05 for females ² Correlations with p-value= or >0.05 for males

Young women who declared they were too young when they first had sex and also those who did not desired their first intercourse were more likely to have a teenage pregnancy. Those who discussed with their partner about the use of contraceptive methods before first intercourse had a smaller probability of getting pregnant before 19 years old, in contrast those who ever a partner refusing to use condom were more likely to have gotten pregnant as teenagers.

One very interesting result is that young women who got pregnant before they were 20 year old were less likely to have used condoms during their first and their last intercourse. This suggests a pattern of behavior that increases young women's vulnerability to an unplanned pregnancy and to STI's long after their first sexual initiation and that they also stay more vulnerable to relationships marked by gender

inequality. However, not feeling safe enough to interrupt or avoid intercourse to demand condom were related to a higher possibility of have ever been pregnant, not matter at what age. This result can probably be explained by the fact that young women in these circumstances were more likely to be married, a situation that makes more difficult to women to negotiate condom use and even intercourse.

For young men, as we said above, only the first variable "age at first intercourse" was associated to a teenage pregnancy although we could see a tendency among them of young men who ever got a partner pregnant during adolescence to have ever refused to use condoms or to declare they would refuse to stop intercourse to put a condom if his partner wanted (data not shown).

This tendency is more clearly observed in TABLE 6 where we present data on condom use in first and last intercourse by some selected indicators of autonomy in the sexual sphere. Young men who declared to have ever had a more controlling and violent behavior such as refusing to use a condom when a partner asked for it and forcing a partner to have sex against their will were less likely to have used condom in their last intercourse and those who ever hit a partner were also less likely to have used a condom in the first intercourse. On the other hand, male respondents who talked with their partner about contraception before their first intercourse were significantly more likely to have used condom at that time. These findings support our hypothesis that male who behave according to more traditional, sexist gender roles hurt not only women in the process but also are more likely to expose themselves to STIs/HIV and to a partner's unplanned pregnancy.

For young women, several indicators of autonomy in the sexual spheres are associated with condom use. Female respondents, who declared they desired first intercourse, discussed contraception with partner before first intercourse and felt comfortable to avoid intercourse if a partner refused to use a condom were more likely to have used a condom in their first intercourse. Those who had partners that ever refused to use a condom and did not feel comfortable to interrupt intercourse to demand condom use were less likely to have used a condom in their first intercourse. It is important to remind that, as we discussed above, condom use in the first intercourse is strongly associated with a pregnancy before 20 years old for females. Regarding condom use in the last intercourse, for females it was strongly associated with being married or in a stable relationship, since married/united women were much less likely to use a condom in their last intercourse. In this sense, gender inequality by influencing in

the likelihood of condom use in the first intercourse and also in the probability of a teenage pregnancy is associated with an early entrance in marital relationships where the young women are less likely to use condoms and then more vulnerable to STIs/HIV.

TABLE 6

Condom use in first and last intercourse of adolescents and young women and men interviewed in Betim,
Teófilo Otoni and Varginha by selected indicators of autonomy, Brazil 2011.

| Indicators of | FEM | ALES | MALES | | | |
|---|-------------------|------------------|-------------------|------------------|--|--|
| Sexual Autonomy | (n= | 346) | (n=243) | | | |
| J | DID NOT US | SE CONDOM | DID NOT U | SE CONDOM | | |
| | First Intercourse | Last intercourse | First Intercourse | Last intercourse | | |
| | (n=95) | (n=206) | (n=66) | (n=87) | | |
| Desired to have first | | | | | | |
| intercourse | | | | | | |
| NO | 20.0* | 17.1 | 9.4 | 7.0 | | |
| YES | 80.0 | 82.9 | 90.6 | 93.0 | | |
| Talked to partner about | | | | | | |
| contraception before 1 ^a sexual intercourse | | | | | | |
| NO | 68.1* | 49.5 | 90.9* | 74.7 | | |
| YES | 31.9 | 50.5 | 9.1 | 25.3 | | |
| If a partner ever refused to | | | | | | |
| use a condom/Ever refused | | | | | | |
| to use a condom | | | | | | |
| NO | 64.5* | 75.9 | 86.2 | 80.2* | | |
| YES | 35.5 | 24.1 | 13.8 | 19.8 | | |
| IF she felt safe enough to | | | | | | |
| refuse intercourse without | | | | | | |
| condom | | | | | | |
| NO | 27.8* | 66.9* | | | | |
| YES | 72.2 | 33.1 | | | | |
| Ever forced a partner to | | | | | | |
| have sex | | | | | | |
| NO | | | 97.0 | 93.1* | | |
| YES | | | 3.0 | 6.9 | | |
| Ever hit a partner | | | | | | |
| NO | _ | _ | 80.6* | 86.7 | | |
| YES | | | 19.4 | 13.3 | | |

Source: META Survey, Brazil, 2011. * Correlations with p-value= or <0.05

CONCLUSION AND RECOMMENDATIONS

The main objective of this paper was to analyze the relationship between women's autonomy and susceptibility to pregnancy and STI/HIV among poor young females in three different Brazilian middle size cities, focusing on cultural and on sexual and reproductive health factors. What has become clear is that in the three localities we have studied, gender inequality is still impacting negatively women's and men's sexual and reproductive lives, since it works to maintain females in less favorable

positions not only within their families but also within their relationships, and to prevent men to take of themselves and treat women more equally. As our results suggest, unequal gender relations operate to amplify females' susceptibility to pregnancy and STI/HIV by precluding them to achieve higher levels of autonomy and becoming, consequently, more able to overcome traditional norms and values that affects both women and men's sexual and reproductive lives.

Our results all indicate to a significant association between young women's lack of autonomy in different spheres and between more sexist behaviors from young men with the prevalence of teenage pregnancy and lower condom use among our respondents. The levels of autonomy of young women interviewed are directly affected by the context of the relationship with her partner, if more equal or more authoritarian and controlling. An abusive and controlling partner decreases young women's capacity to negotiate condom use and timing of intercourse, increasing their vulnerability to unplanned pregnancies and to STIs. On the other hand, communication among partners, the existence of dialogue about sex and contraception and the possibility of negotiation among partners are crucial elements for a healthy and satisfactory sexual life. Thus, unequal gender relations have a direct impact in both young men's and women's probability of avoiding an unplanned pregnancy and exposure to STIs, in different social contexts.

Our results suggest that implementing public policies geared towards adolescents and young adults' needs are fundamental to increase poor young women and men access to better educational and economic opportunities. Usually, more conservative and accepting of traditional norms and values present lower rates of educational attainment and less profitable and prized economic opportunities. It is well known that those in the forefront of changing attitudes are the higher educated ones. Additionally, public policies directed to poor young women and men should also to develop strategies in order to assure they will have access to sexual and reproductive health education and services before they get pregnant or get infected with a STI. It is also very important that health services prepare their professionals to deal with adolescents and young people needs without prejudice and conservative approaches. In this sense, health professionals would be able, for example, to talk openly with adolescents and young people, independently if they are males or females, about, for example, how to have a pleasant but safer sex life, using condoms.

Furthermore, public policies should also consider more seriously the situation of those teenagers who are already mothers and want to get back to school and to improve their professional capabilities. It includes providing access to day care facilities, but goes beyond that: it implies providing them opportunities for completing their education and acquiring high quality professional training. It is also very important to implement school programs to inform and educate about the perverseness of gender violence within families and couples' relationships as well as to develop strategies to curb and punish gender violence.

Finally, since a high school education is not preparing young women to get a more qualified position at labor market, social programs should increment their future professional opportunities by training them to have access to more diverse types of occupations. Traditionally, job training programs for women in Brazil only offer training in professions who have relation with the domestic sphere and traditional gender roles (such as cook, nannies, nurses, caretakers and hairdressers).

The absence of public policies focused on this segment represents a total lack of understanding of their reality and the impact of rapidly changing economic environment and of precarious working condition on their lives. In this sense, it is urgent to think new policies that make possible to adolescents and young adults from lower classes to have access to higher level of education and professional training that effectively incorporates them in the job market, opening perspectives of higher remuneration and a professional career. This seems to be possible ways to overcome the persistence of unequal and oppressive gender relations.

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