

Normative prenatal evaluation at a philanthropic maternity hospital in São Paulo*

AVALIAÇÃO NORMATIVA DO PRÉ-NATAL EM UMA MATERNIDADE FILANTRÓPICA DE SÃO PAULO

EVALUACIÓN NORMATIVA DEL PRENATAL EN MATERNIDAD FILANTRÓPICA DE SÃO PAULO

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ABSTRACT

This cross-sectional study counted with the participation of 301 pregnant women seen in 2009 at a philanthropic maternity hospital in the city of São Paulo (a prenatal support program named Pré-Natal do Amparo Maternal — PN-AM). The objectives of this study were to evaluate the prenatal care according to the initial gestational age, the number of appointments that were held, the continuity of the assistance, and relate the appropriateness with the socio-demographic, obstetric and local variables of the initial prenatal care. The analysis criteria used was initiating prenatal care before 120 days of gestation and attending at least six appointments. The relationship between the variables was analyzed using the Chi-Square Test. Results showed that 41.5% of the pregnant women initiated prenatal care at another health care service and transferred spontaneously to the PN-AM; 74.1% initiated the prenatal care early and 80.4% attended at least six appointments; 63.1% met both criteria simultaneously. Appropriate prenatal care showed a statistically significant difference for mother's age, steady partner, employment, place of residence, having a companion during the appointment and place where prenatal care was initiated.

DESCRIPTORS

Prenatal care
Health evaluation
Health Services Accessibility
Obstetrical nursing

RESUMO

Estudo transversal com 301 gestantes atendidas, em 2009, em uma maternidade filantrópica da cidade de São Paulo (Pré-Natal do Amparo Maternal — PN-AM), com os objetivos de avaliar o pré-natal, segundo a idade gestacional de início, o número de consultas realizadas e a continuidade do atendimento e relacionar a adequação com as variáveis sociodemográficas, obstétricas e locais de início do pré-natal. O critério de análise utilizado foi o início até 120 dias da gestação e a realização de, no mínimo, seis consultas. A relação entre as variáveis foi analisada pelo Teste Qui-Quadrado. Os resultados mostraram que 41,5% das gestantes iniciaram o pré-natal em outro serviço de saúde e transferiram-se espontaneamente para o PN-AM; 74,1% iniciaram precocemente e 80,4% realizaram, pelo menos, seis consultas; 63,1% atenderam aos dois critérios simultaneamente. O pré-natal adequado apresentou diferença estatística significativa para idade materna, parceiro fixo, trabalho, local de residência, acompanhante à consulta e local de início do pré-natal.

DESCRIPTORIOS

Cuidado pré-natal
Avaliação em saúde
Acesso aos Serviços de Saúde
Enfermagem obstétrica

RESUMEN

Estudio transversal con 31 gestantes atendidas en 2009 en maternidad filantrópica de la ciudad de São Paulo (PN-AM), objetivando evaluar el prenatal según edad gestacional de inicio, número de consultas realizadas y continuidad de atención, y relacionar la adecuación con las variables sociodemográficas, obstétricas y del lugar de inicio del prenatal. El criterio de análisis utilizado fue el inicio hasta 120 días de gestación y la realización de mínimamente seis consultas. La relación entre variables se analizó por prueba de Qui-Cuadrado. Los resultados mostraron que 41,5% de las gestantes iniciaron el prenatal en otro servicio de salud y se transfirieron espontáneamente al PN-AM; 74,1% iniciaron precozmente y 80,4% realizaron como mínimo seis consultas; 63,1% atendieron ambos criterios simultáneamente. El prenatal adecuado presentó diferencia estadística significativa para edad materna, compañero fijo, trabajo, lugar de residencia, acompañante a la consulta y lugar de inicio del prenatal.

DESCRIPTORIOS

Atención prenatal
Evaluación en salud
Accesibilidad a los Servicios de Salud
Enfermería obstétrica

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INTRODUCTION

The Brazilian Health Ministry, grounded on the analyses of the needs for specific care to pregnant women, newborns, and mothers in the postpartum period, proposed, in the late 1990's, a new policy for prenatal, delivery and postpartum care. Ministerial Decree number 569 of June/01/2000 instituted the Program for the Humanization of Prenatal Care and Delivery (PHPN - *Programa de Humanização no Pré-natal e Nascimento*), which establishes that the first prenatal visit should take place within 120 days of pregnancy⁽¹⁾. For women with a low-risk pregnancy, the program recommends attending at least six prenatal appointments, divided as follows: one in the first trimester, two in the second, and three in the third⁽²⁾.

In the national public Unified Health System (SUS - *Sistema Único de Saúde*), the number of prenatal appointments per delivery has increased from 1.2 in 1995, to 5.45 in 2005⁽²⁾. According to the 2006 National Study on Children and Women's Demographics and Health (PNDS - *Pesquisa Nacional de Demografia e Saúde da Criança e da Mulher*), 77% of the pregnancies complied with the minimum six prenatal appointments, and the percentage of pregnant women who attended seven or more prenatal appointments increased from 47% in 1996 to 61% in 2006⁽³⁾.

Literature states that pregnant women who receive care early in pregnancy and attend more prenatal appointments tend to have better maternal and perinatal outcomes compared to those whose first visit occurred late or who attended appointments mostly in a single trimester⁽⁴⁾.

A study that analyzed prenatal care in primary health care units in the city of São Paulo compared data of before and after the municipalization of the health system. The results found an increase in the number of follow-up prenatal visits in most units, and increased number of women initiating prenatal care more early, but the continuity of care decreased between 2000 and 2004⁽⁵⁾.

With the purpose to improve the quality of maternal and child care, the Network for the Protection of São Paulo Mothers (*Rede de Proteção à Mãe Paulista*) was created in the city of São Paulo, established by Municipal Decree number 46.966 of February 2, 2006. The network works by connecting, integrating, and monitoring ambulatory and hospital health care systems in the city and state. The São Paulo Mothers Program aims to ensure the following: enrolling pregnant women at the primary health care units close to their place of residence; including them in the program exclusively through primary health servic-

es, thus standardizing their entrance to the health system; registering pregnant women to the reference hospital in their region; offering free transportation passes, so the women can attend the prenatal appointments and the exams, and get to know the hospital where she will receive care during delivery⁽⁶⁾.

Studies about prenatal care in Brazil are generally performed in public health services. Studies consider that prenatal care initiates from the moment the pregnant woman joins the service, including those who had already initiated pregnancy follow up⁽⁷⁻⁸⁾. By adopting this criterion to evaluate when prenatal care began, the main focus is on the care rather than on the woman.

As it is a philanthropic service that does not belong to the primary care network, but works exclusively with the SUS, we considered it to be opportune to perform this study to portray the current situation of the clients in terms of complying with the quantitative indicators of the Program for the Humanization of Prenatal Care and Delivery (PHPN - *Programa de Humanização no Pré-natal e Nascimento*).

In the Prenatal Clinic of *Amparo Maternal* (philanthropic maternity hospital in the city of São Paulo – Brazil) has been drawing attention because of the number of women who attended the first prenatal visit at other prenatal clinics and later transferred spontaneously to this hospital to continue their prenatal follow up program. As it is a philanthropic service that does not belong to the primary care network, but works exclusively with the SUS, we considered it to be opportune to perform this study to portray the current situation of the clients in terms of complying with the quantitative indicators of the PHPN.

OBJECTIVES

The objectives of this study were: to evaluate the prenatal care of a philanthropic service, according to gestational age in the first visit, the number of appointments the women attended, and the continuity of prenatal care; and to relate the appropriateness of the prenatal care with the sociodemographic and obstetric variables, and the location where the first visit was held.

METHOD

This cross-sectional study was performed at *Ambulatório de Pré-Natal do Amparo Maternal* (PN-AM), a prenatal support program developed at a reference maternity hospital for low-risk pregnancies in São Paulo. The referred hospital is a philanthropic institution that offers maternity care and sheltering to women considered as being at social risk who need temporary housing during the pregnancy-postpartum period. The prenatal clientele are from different regions of the city and other neighboring municipalities, who seek the service spontaneously, besides the pregnant women sheltered at the institution. Obstetrical Nurses are responsible for the prenatal care, caring for a

mean 15 women per day and from 10 to 15 new pregnant women per week, with no restriction to gestational age.

Participants were 301 pregnant women assisted between the months of February and October, 2009. The following including criteria were used: having returned to the PN-AM for follow up after the first prenatal visit, and the pregnancy outcome having occurred before October 18, 2009. The follow up was considered completed with the pregnancy outcome or the woman's definitive absence to the appointments. Participants were excluded from the study if they attended only the first visit or if their estimated dates of delivery (EDD) were after October 2009.

The women's medical records were used for data collection.

The independent variables analyzed were: age (years); education level (years); steady partner (yes or no); employment status (employed or unemployed); companion to the appointments (yes or no); place of residence (Social Sheltering, South, Central-South, and other regions of the city or other cities); pregnancies (1 and ≥ 2); parity (0 and ≥ 1), children (0 and ≥ 1), place where the first prenatal visit occurred (PN-AM and other prenatal clinic), gestational age on the first prenatal visit (based on the date of the last menstrual period (LMP) or on the first ultrasound); number of prenatal appointments attended (all appointments were considered, adding up those performed at PN-AM and any other prenatal clinic).

The dependent variables analyzed were: first prenatal visit (≤ 120 days or > 120 days of pregnancy), number of prenatal appointments (\geq six or $<$ six) and continuity (continuity was defined as attending the scheduled appointments until the pregnancy outcome or their abandoning the program).

Prenatal care was considered appropriate if the following to conditions were met: initial prenatal visit within 120 days of pregnancy or 17 gestational weeks, and attending a minimum of six appointments⁽¹⁻²⁾.

A descriptive analysis of the data was performed. Measures of central tendency and dispersion were calculated for the continuous variables, whereas absolute and relative frequencies were calculated for the qualitative variables. The relationship between variables was analyzed using the Chi-Square test, with significance level at 5%, and $p < 0.05$ was considered statistically significant.

This study was approved by the Research Ethics Committee at the University of São Paulo School of Nursing (Process number 799/2009/CEP-EEUSP).

RESULTS

Participants were mostly young, with a mean age of 23.8 (sd \pm 6.4) years; 60.5% younger than 25 years, 27.6% were adolescents, and 6.6% were 35 years of age or older. The mean time of education was 8.9 (sd \pm 2.8) years; 79.7% had a stable partner, including those who were married or in common-law; 59.8% were not employed.

The women were from different regions of the Greater São Paulo; more than half (52.2%) lived in the South and Central-South; 18.9% were living temporarily at the Social Shelter, and 4% were from neighboring cities; about two-thirds (62.5%) were accompanied to at least one of the prenatal appointments.

As to the women's reproductive history and regarding the current pregnancy, it was observed that most were primipara (44.5%), and the mean number of pregnancies was 2.1 (sd \pm 1.4). Over half the participants were nullipara and without children, 52.5% and 54.1%, respectively.

As to the place of the first prenatal visit, 176 (58.5%) sought the PN-AM directly, and 125 (41.5%) attended another prenatal clinic (most from primary health care units) for their first prenatal visit and later transferred spontaneously to PN-AM. The main alleged reasons for this change were: 29.6% dissatisfaction with the health care professionals/or poor quality of the service; 28% need for housing; and 14.4% related to organizational barriers (delay to be included in the appointment schedule, lack of specialist professionals, or the health unit near their place of residence had been closed).

Participants who attended the first prenatal visit at other prenatal clinics did so with a mean gestational age of 11.7 (sd \pm 5.5) weeks, and attended a mean 2.7 (sd \pm 1.7) appointments (minimum of one and maximum of ten) before deciding to change places. When the women were enrolled in the PN-AM, their gestational age was (mean) 24.2 (sd \pm 7.4) weeks (minimum of ten and maximum of 39 gestational weeks).

Table 1 – Number of pregnant women, according to the first prenatal visit held by 120 days, minimum of six appointments and completion of the follow up - São Paulo - 2009

Variables	N	%
First prenatal visit (days)		
≤ 120	223	74.1
> 120	78	25.9
Number of appointments		
≥ 6	242	80.4
< 6	59	19.6
First prenatal visit within 120 days and number of appointments		
Appropriate	190	63.1
Inappropriate	111	36.9
Completion of follow up		
Pregnancy at term	245	81.4
Abandonment	32	10.6
Preterm delivery	17	5.6
Referred to high-risk	6	2
Miscarriage	1	0.4
Total	301	100

The mean gestational age of the participants whose first prenatal visit occurred directly at the PN-AM was 15.9 (sd±6.8) weeks (minimum of five and maximum of 37 gestational weeks).

When the whole sample was considered, the mean gestational age of the women on their first prenatal visit was 14.4 (sd±6.9) weeks, and an average of 8.3 (sd±2.8) appointments.

It was observed that 55.8% of the present study participants made an early start on prenatal care, i.e., the first prenatal visit occurred by 91 days or 13 weeks.

According to PHPN parameters, i.e., having the first visit by 120 days of pregnancy and a minimum number of six appointments, prenatal care was considered appropriate in 74.1% and 80.4% of participants, respectively. When both criteria were considered together, the rate of appropriate prenatal care decreased to 63.1%.

Of the 301 pregnant women comprising the present study sample, the pregnancy outcome of 263 was known, i.e., they had a full-term or pre-term delivery or a miscarriage, which can be considered as the completion of the follow up at the PN-AM. Therefore, for most women (81.4%) the prenatal follow up at the PN-AM continued until the end of the pregnancy; 5.6% had a preterm delivery, two of which were extremely premature; one with 30 weeks and the other with 26 weeks – stillborn without an apparent cause.

Six women (2.0%) were referred to high-risk pregnancy specialist services: two due to renal problems, one due to heart failure, one because of a twin pregnancy, one due to hypertension, and the other on the account of the need for treatment at a psychiatric hospital. Thirty-two women (10.6%) abandoned the PN-AM program: eight women left the Social Shelter without giving their destination and did not return to PN-AM; seven stopped attending the appointments and were no longer found by active search; 12 were able to enroll at a health care unit close to their home; and five moved cities, but intended to continue their pregnancy follow up.

Excluding the women who abandoned the program and those who were referred, the rate of adherence to prenatal care at PN-AM was 87.4%.

Data on Table 2 show the appropriateness of the prenatal care related to the sociodemographic and obstetric variables and the place where the first prenatal visit was held.

Prenatal care appropriateness showed a statistically significant difference among participants with age ≥ 25 years, steady partner, unemployed, living in the South or Central-South regions, being accompanied to the appointment, and the first prenatal visit being held at another prenatal clinic.

Table 2 – Sociodemographic and obstetrical variables and the location where the first prenatal visit was held by 120 days of pregnancy and a minimum of six appointments - São Paulo - 2009

Variables	Appropriate N (%)	Inappropriate N (%)	p-value*
Age(years)			
< 20	46 (24.2)	37 (33.3)	0.0264
20 to 24	58 (30.5)	41 (36.9)	
≥ 25	86 (45.3)	33 (29.7)	
Education level (years)			
≤ 8	77 (40.5)	51 (45.9)	0.3588
≥ 9	113 (59.5)	60 (54.1)	
Stable partner			
Yes	159 (83.7)	81 (73.0)	0.0257
No	31 (16.3)	30 (27.0)	
Employment status			
Employed	92 (48.4)	29 (26.1)	0.0001
Unemployed	98 (51.6)	82 (73.9)	
Companion at appointments			
Yes	140 (73.7)	48 (43.2)	<0.0001
No	50 (26.3)	63 (56.8)	
Place of residence			
Social Shelter	26 (13.7)	35 (31.5)	0.0005
South and Central-South	109 (57.4)	44 (39.6)	
Other regions/cities	55 (28.9)	32 (28.8)	
Pregnancies			
1	85 (44.7)	49 (44.1)	0.9205
≥ 2	105 (55.3)	62 (55.9)	
Parity			
0	104 (54.7)	54 (48.6)	0.3075
≥ 1	86 (45.3)	57 (51.4)	
Children			
0	107 (56.3)	56 (50.5)	0.3245
≥ 1	83 (43.7)	55 (49.5)	
Place of the first prenatal visit			
PN-AM	96 (50.5)	80 (72.1)	0.0003
Another prenatal clinic	94 (49.5)	31 (27.9)	
Total	190 (100)	111 (100)	

* Chi-square test.

DISCUSSION

Maternal and perinatal death rates are affected by the conditions of the prenatal care. Assuring availability and accessibility to quality services is an important measure to reduce maternal deaths, in addition to evaluating the assistance process covering the different components, in order to establish goals to guarantee quality care.

Accessibility consists of one of the requisites to performing prenatal care and it affects the women's adherence to the program and its quality. Prenatal follow up should start early and have universal coverage. It should be performed systematically by frequent and scheduled contacts of the health service with the pregnant woman. The moment that prenatal follow up was started and ended is an important marker of its quality, which, ideally, should begin in the 1st trimester and continue until the 4th, and the puerperal appointment should occur by the 42nd day following the delivery⁽²⁾.

It has been shown that an early enrollment of women in the follow up program is an important factor to maternal morbidity and to the improvement of perinatal outcomes, as it permits an early identification of any gestational risks and making the necessary interventions. The program should be maintained until the end of the 3rd trimester in order to guarantee a favorable outcome for the mother-child binomial.

The PHPN considers essential that the early enrollment of women in the program, so that the 1st prenatal appointment occurs by the 4th month of pregnancy, i.e., 120 days⁽⁹⁾. In this study, 74.1% of participants complied with this recommendation. Better data were found with the XI Regional Health Department of Botucatu (São Paulo state), which obtained a 85.2% rate for women starting prenatal care within 120 days of pregnancy⁽¹⁰⁾.

Considering the pregnancy trimester, over half the participants (55.8%) began prenatal follow up in the 1st trimester, i.e., by the 13th gestational week. These are better results compared to those of a study performed at the same institution between the months of July 2000 and June 2001, which found that women began prenatal follow up at a mean gestational age of 20.7(sd±7.7) weeks; with 19.7% starting in the 1st trimester of pregnancy; 57.2% in the 2nd, and 23.1%, in the 3rd⁽¹¹⁾. It is worth stressing that the reported study did not contemplate the appointments previously attended by the women at other services; it was considered that the beginning of prenatal follow up was when the woman attended the first appointment at the studied institution.

It should be noted that the reported institution does not deny assistance to any woman seeking prenatal care, including those late in the pregnancy, and this factor probably affects the mean initial gestational age, which becomes greater than that of other services. For example, a study performed in a municipality of the Greater São Paulo analyzed the medical records of 97 pregnant women found that 82% of the women started the prenatal follow up on the 1st trimester, and 18% on the 2nd. The authors consider that this percentage of early start in the obstetric follow up is due to the active search of pregnant women performed by the Community Health Agents working with the Family Health Program⁽¹²⁾.

A study performed in Rio Grande (RS) with the objective to evaluate the coverage of prenatal care found that 73.5% of the pregnant women who were enrolled in the 1st gestational trimester, with a mean 13 weeks⁽¹³⁾. The study that analyzed the process indicators of the Prenatal Information System (SISPRENATAL) in Quixadá (CE) found 34.12% from the beginning to the 4th month of pregnancy in 2004⁽¹⁴⁾.

In a study performed with the objective to evaluate the health care process in a prenatal support program for women with low-risk pregnancies (Programa Assistência Pré-natal às Gestantes de Baixo Risco) at the Maringá University Hospital (PR), 44.5% of the studied women had a late start. The factors that contributed to their late start in the follow up program were the search for better quality care and the difficulty to make an early start in the hospital's prenatal program⁽⁷⁾.

A study performed in Paranoá (Federal District) with the objective to learn the factors associated to the late access to prenatal care identified the following justifications: attending a prenatal program at another prenatal clinic; family issues (hiding the pregnancy from the family, conjugal conflicts) and a difficult accessibility to the health service. The authors pointed out the institutional barriers, such as poor organization of the health service, little information and poor dissemination of the health service, insufficient number of skilled professionals and an excessive demand, are factors that collaborate for a late start in the prenatal follow up⁽⁸⁾.

In this study, it was observed that the majority of the participants (80.4%) attended at least six appointments, with a mean 8.3 appointments. These results are better than those found in a previous study at the PN-AM⁽¹¹⁾, which found that 60.5% of the pregnant women attended six appointments, with a mean 6.5 appointments. These results are also superior to the 71.0% found in a municipality of Greater São Paulo⁽¹²⁾, 75.9% at the Botucatu (SP) DIR XI⁽¹⁰⁾, 77% in Pelotas (RS)⁽¹⁶⁾, 64.98% in Quixadá (CE)⁽¹⁴⁾, and 42.0% in Rio de Janeiro (RJ)⁽¹⁵⁾.

When only the minimum of six consultations was considered, 19.6% of the participants did not receive appropriate prenatal care, a result a bit lower than the 22.9% found in Pelotas (RS)⁽¹⁶⁾. In the State of Santa Catarina, it was found there was a greater chance for preterm births among women without accessibility to prenatal care (OR=8,6; CI 95%: 7.0 – 10.6), indicating that the number of appointments has a strong effect on the occurrence of prematurity⁽¹⁷⁾.

The mean number of appointments in the present study was greater than that found in previous studies, 7.4 appointments in Rio Grande (RS)⁽¹³⁾, 7.25 in a municipality in the Greater São Paulo⁽¹²⁾, 6.4 in Juiz de Fora (MG)⁽¹⁸⁾, and 5.3 in Recife (PE)⁽¹⁹⁾, but was lower than the 9.8 found in Maringá (PR)⁽⁷⁾.

The appropriateness rate was 63.1% in the analysis of the combination between the first prenatal visit \leq 120 days and the minimum of six appointments. These results are better than those found in a study with 612 women assisted at two SUS units, which are reference units for high-risk pregnancies in Recife (PE) which found that only 38.0% of the women attended the first prenatal visit by the 4th month of pregnancy and had six or more appointments⁽¹⁹⁾.

A greater appropriateness rate of prenatal care was obtained for pregnant women who were 25 years of age or older ($p=0.0264$). Results of the 2006 PNDS, comparing adolescents to women 20 years of age or older, showed a positive association for the minimum number of appointments for non-adolescents (OR 1.4; CI 0.9 – 2.0)⁽³⁾.

In this study, the mothers' level of education, an important variable for women and children's health, was not statistically significant for prenatal care appropriateness. However, a study performed in Juiz de Fora (MG) compared pregnant women who had eight or more years of education (39.2%) with those who were illiterate (0.8%) and found the former had higher rates for searching prenatal care in the 1st trimester (33.0% vs. 0.0%), as well as a higher mean number of appointments (6.9 vs. 4.3) compared to the latter⁽¹⁸⁾. In the 2006 PNDS, attending a minimum of six appointments had a positive association for women with 11 or more years of education compared to those with less than four years of schooling (OR 2.2; CI 1.4 – 3.4)⁽³⁾.

The stability of the pregnant women's marital status is a recognized component that must be valued, especially in the pregnancy-postpartum period. In a study performed in São Luís (MA), not having a partner was a socioeconomic factor associated to the inappropriateness of prenatal care for the studied women⁽²⁰⁾. In the present study, the prenatal appropriateness rate for participants who had a partner was 83.7%, but, for those without a partner, the rate of insufficient prenatal care was about twice that value ($p=0.0257$).

Unemployed participants showed a higher rate of unsatisfactory prenatal care - 73.9% vs. 26.1% for employed participants ($p=0.0001$). In general, women without a regular job attended the first prenatal visit later in their pregnancy. Similarly, a study with the objective to identify factors associated to the late access to prenatal care found a higher rate among unemployed pregnant women⁽⁸⁾.

Results show a 73.7% appropriateness of prenatal care for the women who had someone accompany them to their appointment against 26.3% for those without a companion ($p<0.0001$). The companion, a person important to the pregnant woman, who is part of her support network, can offer emotional, educational and social support besides making her feel safer and cared for through the process of giving birth. A qualitative study performed in the interior of Rio Grande do Sul emphasized that the

fathers' participation in the prenatal appointments is still low, as 17 of the 20 participants were alone or accompanied by another relative, usually their sister, daughter, grandmother or mother⁽²¹⁾.

In the present study, it was observed that about two-thirds of the participants (62.5%) had a companion with them to at least one prenatal appointment. At the PN-AM, the presence of a companion, especially that of the partner, is among the successful experiences of the program and consists of one of the factors that determine the women's decision to continue the follow up program at that location.

The easy geographical accessibility to health services is another factor to be considered in prenatal care. The pregnant women who lived in the South and Central-South of São Paulo had the highest rates of appropriateness (57.4%); probably because it is easy to access the PN-AM from those locations or because of the available public transportation.

The pregnant women living at the Social Shelter had a lower rate of prenatal care appropriateness, 13.7% ($p=0.0005$); those women seek shelter at the institution for different reasons: their denial of the pregnancy, being abandoned by relatives, no housing, using drugs, and others. Under these conditions, women attended the first prenatal visit later in their pregnancy and thus require intervention strategies for social groups of high vulnerability, with the purpose to eliminate the risk of unfavorable maternal and neonatal outcomes.

As to the location where the women attended the first prenatal visit, it was observed that the women whose first visit was held directly at the PN-AM had a higher rate of inappropriate prenatal care (72.1%) compared to those who attended another prenatal clinic – 27.9% ($p=0.0003$). One should keep in mind that the studied institution does not deny assistance to any women seeking prenatal care, regardless of their gestational age. This factor is likely to interfere on the women's mean gestational age on the first prenatal visit, making it higher than that at other prenatal clinic.

An expressive proportion of women (41.5%) transferred spontaneously from the place of their first prenatal visit to the PN-AM. The main reasons reported for seeking the PN-AM to continue their prenatal follow up, such as their dissatisfaction with the service they received and the delay in scheduling the appointments at the health units, show that, somehow, the pregnant women seek quality care that meets their needs during their pregnancy. This situation also reveals the poor effectiveness of some municipal ambulatory services in São Paulo, in terms of the São Paulo Mothers Program.

The study performed at the same institution analyzed the statements of 211 pregnant women who lived in different regions of São Paulo, which were out of the area covered by the service, and attended at least six prenatal ap-

pointments. The study evidenced the women's adherence to the program and their decision to continue the prenatal care despite their living away from the location. The participants justified their behavior on account of the technical and human quality of the professionals; the attitude of the professionals especially in terms of not having a value judgment, and not discriminating them regarding their marital status, socioeconomic conditions, and others. In general, many women are not treated as they expected at prenatal care clinics. Rather, the assistance they get does not permit them to develop trust in the professionals, i.e., it is depersonalized, with marked impatience and rush, and thus the women rate the service as of poor quality⁽²²⁾.

According to the general principles and guidelines of the Brazilian Health Ministry, thoroughly discussed in the literature, and therefore, of general knowledge, in order to deliver qualified obstetric and neonatal care, factors such as welcoming, building attachment between the pregnant women and the professionals, making room for listening and dialogue often determine the women's decision to join and their permanence in the chosen health service.

CONCLUSION

Almost half the study participants attended their first prenatal visit at different prenatal clinics and transferred spontaneously to the PN-AM. Though living far from the

service, most women continued the prenatal care follow up at the PN-AM. Most participants began prenatal follow up early and attended at least six appointments, thus complying with the criteria established by the PHPN.

The normative appropriateness of the prenatal care showed a positive relationship with age ≥ 25 years, having a stable partner, being accompanied to the appointment, and living in the South or Central-South São Paulo. The pregnant women living at the shelter, those unemployed and those who the first prenatal visit was held directly at the PN-AM showed a higher rate of inappropriate prenatal care.

The present study results confirm the high percentage of pregnant women that seek the PN-AM to continue the prenatal follow up they had already begun at another prenatal clinic, usually municipal health units in São Paulo. Even though the prenatal care was started early, the interruption in the follow up can compromise the outcome of the care.

Nevertheless, the excellence of prenatal care does not depend exclusively on quantitative criteria. Rather, and mostly, it depends on the quality of the appointments and on actions of welcoming the women. These aspects of health care are essential to establish a significant relationship between women and professionals in order to guarantee the continuity of care and permit timely interventions, thus promoting appropriate maternal and neonatal outcomes.

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