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ADEQUACY OF PRENATAL CARE AT TWO HEALTH UNITS IN CURITIBA, PARANÁ

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ABSTRACT
This study aimed to evaluate the adequacy of prenatal care according to Curitiba Mothers Protocol in a primary care unit with the Family Health Program (PSF) and a traditional health unit (UBS). It was a cross-sectional study with retrospective data from medical records collected between February 2010 and January 2011. The study excluded women who had abortions or abandoned prenatal care, totalling 158 expectant mothers – 79 from the PSF unit and the rest from the UBS. The average start of prenatal care was 11± 6.26 weeks, and mean analysis of prenatal records for PSF and UBS for pregnant women were 10.39 and 8.82 for consultations, 9.87 and 8.57 for blood pressure, 1.04 and 1.22 for blood type, 2.17 and 1.86 for glucose, 1.32 and 1.05 for HBsAg, 2.35 and 1.89 for Partial Urine and 2.64 and 2.22 for Urine Culture, with statistically significant differences ($p < 0.05$) between the units. This study found differences in the adequacy of prenatal care between PSF and traditional models UBS, highlighting the superior performance of the PSF model. It also identified that some procedures – fundal height, fetal heart rate, urine analysis and VDRL – were short of the expected percentage, requiring review and improved practices by health professionals in prenatal care.

Keywords: Family Health Program. Prenatal Care. Health Evaluation. Health Care Service. Adequacy.

INTRODUCTION

Maternal and neonatal mortality are directly linked to adequate prenatal care[1]. The process of qualitatively evaluating prenatal care is difficult, as it involves careful observation of the results of the services offered and/or executed. Moreover, few studies have been carried out on this topic, despite its importance in reducing maternal and neonatal morbimortality [2, 3].

Adequate prenatal screening should begin as early as possible, afford universal access with at least some periodical appointments[1] and undertake preventive and educational health actions for expectant mothers[4]. According to Brazil's Ministry of Health[1,5], prenatal care coverage (six appointments) proved adequate in 77% of services in Brazil, although studies indicate that the quality of prenatal care Brazil has been compromised[2,4].

Certain indicators have been used to analyze the adequacy of prenatal care, such as the Kessner and Kotelchuck indices, based on the trimester in which prenatal care begins and/or the number of medical consultations during the pregnancy. However, their evaluation is limited, because each index quantifies only the number of appointments carried out throughout the full pregnancy, without evaluating the quality of the content of each consultation, including anamnesis, physical exam and complementary examinations. This type of evaluation could identify the real influence or contribution of these components on the final quality of the care given[2,6].

To improve health delivery in Brazil – including prenatal care –, the Ministry of Health implemented the Family Health Program (PSF) in 1994, replacing the traditional prenatal care model centered on Primary Healthcare Units. In PSF care, service is provided by a multi-professional team featuring health agents, nurses and physicians specialized in Family Health,

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whereas in the traditional model service is provided only by an OB/GYN [7].

Evaluations of PSF performance showed an increase in quality and equity of health delivery among the population [2] and improved effectiveness of prenatal care[2,4,8]. These results were also confirmed in a systematic review carried out in Atlanta (USA) comparing prenatal care performed by a multi-professional team to assistance in the traditional model. That study saw a reduction in the incidence of premature births, higher newborn weight at birth, improved rates of adequacy and satisfaction by mothers regarding the care provided by the multidisciplinary team [9].

In the city of Curitiba, the prenatal care program has been reformulated to meet the historical evolution in health services, adapting to the local reality by revising objectives, correcting deficiencies and being renaming "Curitiba Mothers Program". In that model, the flow of population care was redirected, preserving the distribution of appointments with a focus on expanding the number of appointments to seven, establishing rules previously analyzed by experts in the field regarding the procedure required for quality prenatal care[10].

With that, this study aimed to evaluate the adequacy of prenatal care in the Curitiba Mothers Program at a traditional-model Primary Health Unit (UBS) e and another unit adopting the Family Health Program (PSF), both of which located in the city of Curitiba-PR, Brazil, through standardized essential indicators.

METHODS

It is a cross-sectional, retrospective, descriptive and comparative study, using data from electronic medical records from expectant mothers enrolled at two Healthcare Units belonging to the Curitiba Health Agency, Boqueirão Health District.

The city of Curitiba is subdivided into nine Health Districts; the Boqueirão District comprised 14 Health Units. In 2010, the traditional-model São Pedro Primary Health Unit recorded 15 thousand users, while the Érico Veríssimo Health Unit, which follows the Family Health Program (PSF) totaled 13 thousand. The Health Units were chosen based on demographic similarity, topographic proximity and ease of access to the Units.

Data from all expectant mothers assisted at both Primary Healthcare Units from February 2010 to January 2011 were collected using a structured questionnaire. The outcome variable was the type of care model under which the mother received prenatal assistance – PSF when prenatal care was performed at the PSF health unit, and UBS whenever prenatal screenings took place at the traditional health unit not under the Family Health Program.

During the study period, 145 expectant mothers were assisted in the PSF and 151 at the UBS. The small sample size for each group of pregnant women at each location was calculated based on the formula $n=z^2.p.q/e^2$, in which n=sample size; z= confidence coefficient, with an adopted value of 1.96, for alpha 0.05; p=prevalence of the phenomenon under study; q= prevalence complement (q=1-p); with maximum error in absolute value. A value of p=0.50 was used, equivalent to the highest ratio between p and q, and desired precision of e=5%. This resulted in a sample of 105 expectant mothers for the PSF unit, and 107 for the UBS unit, which was selected by randomizing expectant mothers by calculating random numbers in Statistica 8.0 software (Statsoft Inc, Oklahoma).

According to the Curitiba Mothers protocol, adequate assistance was achieved when the number of medical and nursing appointments during prenatal care was equal to or greater than seven – one consultation in the first trimester, two in the second trimester and four in the third trimester. Kessner's index was used for comparability, and adequacy was obtained at six appointments. Records of blood pressure (PA), fundal height (AU) and fetal heart rate (BCF) were considered adequate when performed during all prenatal appointments. Laboratorial exams were considered adequate when performed at least once during the prenatal period, including blood count, blood type, Rh factor, fasting glucose, HbsAg, anti-HIV-1 and HIV-2, Toxoplasma serology, glycemic response curve and fetal ultrasound. Partial urine (PU), urine culture (CU) and VDRL exams were considered adequate when performed at least

once each trimester, as well as the Indirect Coombs exam for Rh-negative expectant mothers. Cervical/vaginal cytopathology microflora was considered adequate when requested for expectant mothers who had undergone the exam more than one year before [10].

Expectant mothers who experienced abortion during the study period were excluded from the sample, as well as those who abandoned prenatal care through the public health system. This eliminated confounding factors when determining adequacy.

Data were analyzed by comparing demographic characteristics according to care model, adequacy and non-adequacy, as per the Curitiba Mothers Protocol, utilizing the variable according to the model in which prenatal delivery was provided (PSF or UBS). The prevalence was estimated for each of the procedures/exams, and statistical differences were observed using the Latin square test in the case of categorical variables. Poisson's regression was used to calculate the prevalence ratios (RP). A significance level of 5% was observed for all analyses.

This project was approved by the Research Ethics Committee of the Pontifical Catholic University of Paraná in opinion no. 4949/2011, and by the Ethics Committee of the Curitiba Health Secretariat, no. 32/2011 as per Resolution 196/96-CNS. No Free and Informed Consent Term (TCLE) was used, given that the data came from secondary sources.

RESULTS AND DISCUSSION

Although scarce, studies evaluating the quality of healthcare services and programs have offered important contributions in recent times [11]. To our knowledge, this is the first study to evaluate the adequacy of prenatal care service in PSF compared to the traditional UBS model following the Curitiba Mothers Protocol. The last cohort study evaluating prenatal care in the city of Curitiba took place in 2004 among first-time pregnancies [12].

Of the total of 212 expectant mothers, the study excluded those who miscarried (11 – 5.2%) and abandoned prenatal care (43 – 20.2%), as those factors could act as confounding variables. Therefore, the sample was finalized with 158 women. Of those, 79 expectant mothers belonged to PSF and the other 79 were enrolled in the UBS. The main epidemiological characteristics of the analyzed populations are shown in Table 1. The expectant mothers assisted in PSF and at the traditional UBS did not show statistically significant differences with regard to the epidemiological variables under study. Average age was 26 ± 7.15 years, ranging from 15 to 46 years of age, with 31 (19.6%) expectant mothers aged between 15 and 19 years, 101 (63.9%) between 20 and 34 years, and 26 (16.5%) older than 35 years. The findings showed lower prevalence of teenage pregnancy for expectant mothers younger than 19 years old and a higher percentage of pregnancy for the limit of reproductive age over 35 years, when compared to studies carried out in Maringá-PR[13] and Rio de Janeiro[14].

The average period of enrollment in the prenatal program, proposed by the Ministry of Health, is up to 12 weeks into the pregnancy. A study in Santa Maria-RS[8] observed an average of 16 ±7.6 weeks, whereas in Rio Grande- RS[2] and Rio de Janeiro[14] the program started at 13 weeks for 73.5% and 74.4% of expectant mothers, respectively. In the present study, an average was observed of 11± 6.26 weeks into the pregnancy until prenatal care started, ranging from 2 to 35 weeks. This average can be regarded as adequate, as 86.1% of expectant mothers were in the first trimester, 10.1% in the second trimester and 3.8% in the third trimester (Table 1). It is comparable to prenatal care in Montreal (Canada), where the average found was 12 weeks until the start of prenatal care [15]. This result demonstrates awareness by users of the importance of prenatal care and high adequacy of prenatal care in the Curitiba Mothers Program, although 13.9% of women began prenatal screening at an inadequate time.

With regard to obstetric history, 65 women (44.7%) were in their first pregnancy, 39 (27.2%) in their second, 24 (16.5%) in their third, and 17 (11.6%) had had multiple pregnancies, emphasizing that 13 (8.2%) women had no record. With regard to the number of children, 65 (49.6%) had no previous children, 37 (28.2%) had one, 18 (13.7%) had two, 6

(4.7%) had three, and 5 (3.8%) had multiple children, with highlight to 27 (17.1%) women with no record of that variable or with inconsistent data. With regard to the number of cesarean sections, 12 (7.6%) women had record of one C-section, and three women (1.9%) had had two. Four women (2.5%) mentioned one abortion and seven (4.4%) women had had two or more miscarriages, with one occurrence of twin pregnancy (Table 1).

With regard to prenatal risk, 115 (72.8%) women were classified as low-risk, and 43 (27.2%) were high-risk (Table 1). Among comorbidities associated with the prenatal period, two (1.3%) women developed pregnancy-induced hypertension (DHEG), eight (5.6%) had gestational diabetes, 11 (6.9%) went into premature labor, and 42 (26.6%) had urinary tract infections (ITU). Among other associated pathologies were vulvovaginal candidiasis in 30 (18.9%) women, followed by smoking among 22 (13.9%), bacterial vaginitis in 10 (6.3%) cases, anemia in 10 (6.3%), one case of H1N1 and eight (5.1%) cases of sexually transmitted diseases – three of syphilis, two of human genital papillomavirus and one case of genital herpes.

Table 1 - Number and percent distribution of expectant mothers according to demographic variables, adequate prenatal care and health unit. Curitiba-PR, 2010- 2011.

	PSF ADEQUACY				UBS ADEQUACY					
	YES		NO		YES		NO		TOTAL	
	N	%	N	%	N	%	N	%	N	%
Age (years)										
15 - 19	14	93.3	1	6.7	15	93.8	1	6.2	31	19.6
20 - 34	46	90.2	5	9.8	39	78.0	11	22.0	101	63.9
>= 35	11	84.6	2	15.4	8	61.5	5	38.5	26	11.5
Total	71	89.9	8	10.1	62	78.5	17	21.5	158	100.0
Prenatal enrollment										
1st trimester	71	100.0	-	0	62	95.4	3	4.6	136	86.1
2nd trimester	-	-	7	100.0	-	-	9	100.0	16	10.1
3rd trimester	-	-	1	100.0	-	-	5	100.0	6	3.8
Total	71	89.9	8	10.1	62	78.5	17	21.5	158	100.0
No. Pregnancies										
1	31	96.9	1	3.1	26	78.8	7	21.2	65	44.7
2	17	73.9	6	26.1	15	93.8	1	6.2	39	27.2
3	15	100.0	-	-	7	77.8	2	22.2	24	16.5
>= 4	7	87.5	1	12.5	6	66.6	3	33.3	17	11.6
Total	70	89.7	8	10.3	48	81.6	13	19.40	145	91.8
No. Deliveries										
0	31	96.9	1	3.1	26	78.8	7	21.2	65	49.6
1	15	78.9	4	21.1	16	88.8	2	11.2	37	28.2
2	11	100.0	-	-	5	71.4	2	28.6	18	13.7
3	3	100.0	-	-	2	66.7	1	33.3	6	4.7
>=4	2	66.7	1	33.3	1	50.0	1	50.0	5	3.8
Total	62	91.2	6	8.8	50	79.4	13	20.6	131	92.9
No. C-sections										
1	5	71.4	2	28.6	4	80.0	1	20.0	12	7.6
2	2	100.0	-	-	1	100.0	-	-	3	1.9
Total	7	77.8	2	22.2	5	83.3	1	16.7	15	9.5
No. Abortions										
1	3	100	-	-	1	100.0	-	-	4	2.5
>=2	3	75.0	1	25.0	2	66.6	1	33.4	7	4.4
Total	6	85.7	1	14.3	3	75.0	1	25.0	11	6.9
Gestational Risk										
Low	47	88.7	6	11.3	16	74.2	16	25.8	115	72.8
High	24	92.3	2	7.7	16	94.1	1	5.9	43	27.2
Total	71	89.9	8	10.1	62	78.5	17	21.5	158	100.0

When evaluating prenatal care using Kessner's index, it was observed that 155 (98.1%) expectant mothers underwent prenatal screenings considered adequate, and only 3 (1.9%) expectant mothers in the UBS had unsuitable care. Using the Curitiba Mothers Protocol, we observed that 133 (84.2%) expectant mothers experienced adequate prenatal care – that is, had seven or more medical or nursing appointments, for a maximum of 14 consultations. This result was higher than those found in other studies [2,8,11,14,16], with a variation of 44.8% to 79.2% adequacy of prenatal care according to Kessner's Index. It should be added that this high percentage found in Curitiba (84.2%) reveals the acceptance and participation of the population in the Curitiba Mothers Program, as it meets their needs, expectations and values during prenatal consultations.

No statistically significant difference was observed in the adequacy of the number of appointments according to Kessner's index between PSF and UBS expectant mothers, whereas the Curitiba Mothers Protocol showed a significant trend towards adequacy for PSF with 89.9%, and 78.5% for UBS (p=0.08117). Several works[8-10,15] mention appointment adequacy around at 78.0% of records, significantly higher for PSF compared to UBS; however, a 98.1% rate of adequacy was found using Kessner's index – which has a cutoff point of 6 or more appointments –, showing greater acceptability and legitimacy by the program implemented in the city of Curitiba (Table 2).

Table 2 – Number and percent distribution of health units according to adequacy during the prenatal period. Curitiba-PR, 2010-2011.

No. Appointments	PSF N %	UBS N%	Total N %
Adequate	71 89.9	62 78.5	133 84.2
Non-adequate	8 10.1	17 21.5	25 15.8
Total	79 50.0	79 50.0	158 100

Pearson's test $x^2 = 2.43$ p = 0.0817.

In the comparative analysis between PSF and UBS units, a prevalence was detected of clinical records for blood pressure (98.7% and 97.4%), fundal height (54.4% and 47.3%), for PSF and UBS, respectively, with no statistically significant differences between units (Table 3). This result merits an analysis regarding the low prevalence of records for the fundal height procedure, as assistance was compromised in both prenatal care models. In the study held in Santa Maria (RS), blood pressure records stood between 79.0% and 70.0%, and fundal height showed 69.0% and 59.0% for PSF and UBS, respectively, with a statistically significant difference in favor of PSF.

For variables: blood pressure, blood count, blood type/Rh factor, fasting glucose, anti-HIV-1 and HIV-2, and Toxoplasma serology, a prevalence of records over 90.0% was observed, with no statistical difference between the units, suggesting consistency of results with procedures integrated to the prenatal routine, for PSF and UBS professionals alike. These results were also observed in other studies[8,12,14,17]. However, statistically significant differences were found in the prevalence ($p<0.05$) for the variables fetal heart rate, partial urine, cervical-vaginal cytology and microflora, and fetal ultrasound, in favor of the PSF delivery model, confirming the results found in Santa Maria-RS (Table 3). On the other hand, the low percentage of records for these procedures, in both PSF and UBS, reveals that the quality of the delivery offered had been compromised.

Analyzing the recorded averages of procedures performed during prenatal care for PSF and UBS, respectively, statistically significant differences ($p<0.05$) were found

between the units for the variables appointments (10.39 and 8.82), blood pressure (9.87 and 8.57), blood type (1.04 and 1.22), glucose (2.17 and 1.86), HbsAg (1.32 and 1.05), partial urine (2.35 and 1.89) and urine culture (2.64 and 2.22). PSF demonstrably stood out with averages above those mentioned by other authors [17], denoting superior assistance in the Curitiba Mothers Program (Table 4).

Table 3 - Prevalence (P%) and prevalence ratios (RP%) of complementary procedures and exams according to health unit – Family Health Program (PSF) and Traditional (UBS), Curitiba, PR, 2010- 2011.

Procedure / exam	PSF (P%)	UBS (P%)	RP	IC	p*
Blood pressure	98.7	97.5	1.01	0.97-1.06	1.0000
Fundal height	54.4	47.3	1.15	0.75-1.49	0.8730
Fetal heart rate (BCF)	53.2	30.4	1.75	1.18-2.59	**0.0061**
Blood count	97.5	96.2	1.01	0.96-1.07	1.0000
Blood Type / Rh	92.4	89.9	1.03	0.93-1.13	0.7795
Glucose	98.7	97.5	1.01	0.97-1.06	1.0000
Anti-HIV1 and HIV-2	98.7	97.5	1.01	0.97-1.06	1.0000
HbsAg	62.0	53.2	1.17	0.89-1.53	0.3341
Toxoplas0ma serology	98.7	96.2	1.03	0.98-1.08	0.6201
Partial Urine	44.9	25.9	1.73	1.11-2.75	**0.0193**
Urine culture	51.3	39.0	1.32	0.93-1.90	0.1494
VDRL	31.2	29.5	1.06	0.65-1.69	1.0000
Glycemic response curve	88.6	82.3	1.08	0.95-1.23	0.3668
Cervical-vaginal cytology	59.5	27.8	2.14	1.43-3.18	**0.0001**
Fetal ultrasound	20.3	3.8	5.33	1.62-17.58	**0.0033**

p* - significance level; IC – Confidence interval

According to the Curitiba Mothers Protocol, the exams for partial urine (PU), urine culture (CU) and VDRL are regarded as adequate when performed at least once each trimester. In this study, PSF and UBS alike showed averages for exams of partial urine (2.35 and 1.89 exams per mother) and urine culture (2.64 and 2.22 exams per mother) with statistically significant differences in favor of PSF, whereas VDRL (2.04 and 1.97) showed no significant difference (Table 4). In the study held in Rio Grande (RS) [2], all observed results showed differences in favor of PSF, reflecting the superior organization of the Family Health Program in Rio Grande do Sul state.

Of prenatal care refer to noncompliance with norms and routines by professionals and incomplete records of anamnesis, physical exams and complementary exam results[4,8]. Compliance with norms and rules of adequate prenatal care can improve the quality of assistance when the focus of the analysis is the process itself, as they guide those in charge of assistance regarding compliance with certain practices which, if incorporated, should assure the best possible result [11,14,18].

Table 4 - Averages of records for procedures and exams performed according to health unit – Family Health Program (PSF) and Traditional (UBS), Curitiba, PR, 2010- 2011.

Procedure / exam	**PSF**		**UBS**			
	m	(DP)	m	(DP)	OR	p*
Average No. of Appointments	10.39	2.95	8.82	2.88	**1.18**	**0.0011**
Average Blood pressure	9.87	3.03	8.57	2.85	**1.15**	**0.006**
Average Fundal height	6.97	2.59	6.6	2.19	1.06	0.3418
Average BCF	6.84	2.6	6.4	2.15	1.07	0.2513
Average Blood count	1.98	0.63	1.89	0.58	1.05	0.3508
Average Blood Type / Rh	1.04	0.2	1.22	0.63	**0.85**	**0.0254**
Average Glucose	2.17	0.76	1.86	0.62	**1.17**	**0.0063**
Average Anti-H1V1 and Hiv-2	1.78	0.55	1.66	0.6	1.07	0.1966
Average HbsAg	1.32	0.52	1.05	0.22	**1.26**	**0.0015**
Average Toxoplasma Sorol.	1.93	0.68	1.9	0.62	1.02	0.7253
Average Partial urine	2.35	1.06	1.89	0.74	**1.24**	**0.002**
Average Urine culture	2.64	1.15	2.22	0.81	**1.19**	**0.0093**
Average VDRL	2.04	0.73	1.97	0.65	1.04	0.5618

m= mean; DP = standard deviation; OR= Odds Ratio; p* = significance level.

FINAL CONSIDERATIONS

Some of the limitations of this work include the use of secondary data to evaluate the process, and the population sample limited to two health units. The use of secondary data makes it impossible to estimate how much the frequency of sub-recording distorts the results found herein, considering that in this study 8.2% of records had no history of number of pregnancies and 17.1% had no record on the number of childbirths.

The contribution of the present study is to provide information so that the care model of the Family Health Program being implemented in Brazil can be redirected, in order to raise awareness and sensitize health professionals to the importance of following the recommended protocol and guarantee quality prenatal care.

This study found a high rate of adequacy with regard to the number of appointments and routine prenatal exams, confirming the Curitiba Mothers Program as a model of organizational delivery. The differences in how procedures were carried out indicate superior care in the PSF, while records for certain exams were short of expected percentages, demonstrating that the practices of health professionals in prenatal care must be revised and improved.

ADEQUABILIDADE DA ASSISTÊNCIA AO PRÉ-NATAL EM DUAS UNIDADES DE SAÚDE EM CURITIBA, PARANÁ

RESUMO

Este estudo objetivou avaliar a adequabilidade do pré-natal conforme Protocolo Mãe Curitibana em uma unidade básica de saúde com Programa Saúde da Família (PSF) e outra unidade de saúde tradicional (UBS). Estudo transversal, retrospectivo com dados dos prontuários cadastrados entre fevereiro de 2010 a janeiro de 2011. Foram excluídas as gestantes que apresentaram abortamento e abandono do pré-natal, totalizando 158

gestantes, sendo 79 da unidade PSF e o restante da UBS. A média do início do pré-natal foi de 11±6,26 semanas, e a análise das médias dos registros no pré-natal para o PSF e UBS foram de 10,39 e 8,82 nas consultas, 9,87 e 8,57 para pressão arterial, 1,04 e 1,22 no tipo sanguíneo, 2,17 e 1,86 para glicemia, 1,32 e 1,05 para HbsAg, 2,35 e 1,89 para Parcial de Urina e 2,64 e 2,22 para Cultura de Urina com diferenças estatisticamente significativas (p<0,05) entre as unidades. Observou-se diferenças na adequabilidade da assistência pré-natal entre as unidades PSF e UBS, com melhor desempenho no PSF. Alguns procedimentos como a verificação de altura uterina, batimentos cárdio-fetais, exames de urina e VDRL estão aquém dos percentuais esperados, necessitando rever e aperfeiçoar as práticas dos profissionais de saúde na atenção pré-natal.

Palavras-chave: Programa Saúde da Família. Cuidado Pré-Natal. Avaliação em Saúde. Assistência a Saúde. Adequabilidade.

ADECUABILIDAD DE LA ATENCIÓN AL PRENATAL EN DOS UNIDADES DE SALUD EN CURITIBA, PARANÁ

RESUMEN

Este estudio tuvo como objetivo evaluar la adecuabilidad del prenatal según Protocolo *Mãe Curitibana* en una Unidad Básica de Salud (UBS) con el Programa Salud de la Familia (PSF) y otra unidad de salud tradicional (UBS). Estudio transversal, retrospectivo con datos de los registros médicos catastrados entre febrero de 2010 a enero de 2011. Se excluyeron las gestantes que tuvieron abortos y el abandono del prenatal, totalizando 158 gestantes, siendo ellas, 79 de la unidad PSF y el resto de UBS. El promedio del inicio del prenatal fue de 11±6,26) semanas, y el análisis de los promedios de los registros en el prenatal para el PSF y la UBS fue de 10,39 y 8,82 en las consultas; 9,87 y 8,57 para presión arterial; 1,04 y 1,22 para el grupo sanguíneo; 2.17 y 1.86 para la glucemia; 1,32 y 1,05 para el HbsAg; 2,35 y 1,89 para el parcial de la orina y 2,64 y 2,22 para el cultivo de orina con diferencias estadísticamente significativas (p <0,05) entre las unidades. Se observaron diferencias en la adecuabilidad de la atención prenatal entre las unidades PSF y UBS, con mejor desempeño en el PSF. Algunos procedimientos como la comprobación de la altura uterina, latidos cardíacos fetales, exámenes de orina y VDRL están abajo de los porcentajes esperados, necesitando rever y perfeccionar las prácticas de los profesionales de salud en la atención prenatal.

Palabras clave: Programa Salud de la Familia. Atención Prenatal. Evaluación en Salud. Atención a la Salud. Adecuabilidad.

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