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Adherence to puerperal consultation: facilitators and barriers

Adesão à consulta puerperal: facilitadores e barreiras

Adhesión a la consulta puerperal: facilitadores y barreras

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Abstract

Objectives: to identify the prevalence of adherence and non-adherence to postpartum consultation, as well as facilitators and barriers, among postpartum women assisted in a teaching hospital. **Method:** a prospective cohort study, conducted with 121 postpartum women, from August to December 2019, assisted in a teaching hospital in the inland of Minas Gerais. **Results:** the prevalence of adherence to postpartum consultation was 34.7%. The reception of the health team during the prenatal and/or birth was observed as a facilitator. The mentioned barriers were the following: forgetfulness, complications with themselves and/or the newborn, transportation difficulty and distance between the service and residence. The factors associated with adherence were the following: postpartum women with higher education, who performed all or part of the prenatal care at the institution, who had pregnancy classified as high risk, who had previous diseases during pregnancy, primigravidae, and who had cesarean delivery. **Conclusions and implications for the practice:** the submitted data made it possible to delineate a profile of the postpartum women who adhered or not to the postpartum return, identifying facilitators and barriers as well as factors associated with greater adherence. It is necessary to rethink assistance to the postpartum period, since consultation is the one of the strategies to prevent maternal death.

Keywords: Postpartum Period; Prevalence; Disease Prevention; Maternal Death; Patient Discharge.

Resumo

Objetivos: identificar a prevalência de adesão e não adesão à consulta puerperal, assim como facilitadores e barreiras, entre puérperas assistidas em um hospital de ensino. **Método:** estudo de coorte prospectivo, realizado com 121 puérperas, no período de agosto a dezembro de 2019, nas dependências de um hospital de ensino do interior de Minas Gerais. **Resultados:** a prevalência de adesão à consulta puerperal foi de 34,7%. Observou-se, como facilitador, o acolhimento da equipe durante o pré-natal e/ou parto. Citaram-se como barreiras: esquecimento; intercorrências com o RN e/ou puerperais; dificuldade de transporte e distância entre o serviço e a residência. Foram associados à adesão: puérperas com maior escolaridade, que realizaram todo ou parte do pré-natal na instituição, que tiveram a gestação classificada como alto risco, que apresentaram doenças prévias durante a gestação, primigestas e as que tiveram parto cesáreo. **Conclusões e implicações para a prática:** os dados apresentados possibilitaram delinear um perfil das puérperas que aderiram ou não à consulta puerperal, desvelando fatores facilitadores e barreiras, assim como fatores associados à maior adesão. Faz-se necessário repensar a assistência ao puerpério, uma vez que a consulta é uma estratégia de prevenção de morte materna.

Palavras-chave: Período Pós-Parto; Prevalência; Prevenção de Doenças; Morte Materna; Alta do Paciente.

Resumen

Objetivos: identificar la prevalencia de adherencia y no adherencia a la consulta puerperal, así como facilitadores y barreras, entre las mujeres puerperales atendidas en un hospital universitario. **Método:** estudio de cohorte prospectivo, realizado con 121 madres, de agosto a diciembre de 2019, en las instalaciones de un hospital universitario en el interior de Minas Gerais. **Resultados:** La prevalencia de adherencia a la consulta puerperal fue del 34,7%. La bienvenida del equipo durante el prenatal y/o parto se observó como un facilitador. Se mencionaron las siguientes barreras: olvido, complicaciones con el recién nacido y/o puerperal, dificultad en el transporte y la distancia entre el servicio y la residencia. Los siguientes se asociaron con la adherencia: mujeres puerperales con educación superior, que realizaron todo o parte de la atención prenatal en la institución, que tuvieron un embarazo clasificado como de alto riesgo, que tuvieron enfermedades previas durante el embarazo, primigestas y quienes tuvieron un parto por cesárea. **Conclusiones e implicaciones para la práctica:** Los datos presentados permitieron esbozar un perfil de las mujeres puerperales que se adhirieron o no a la consulta puerperal, revelando factores y barreras facilitadoras, así como factores asociados con una mayor adherencia. Es necesario repensar la asistencia al puerperio, ya que la consulta es una estrategia para prevenir la muerte materna.

Palabras clave: Periodo Posparto; Prevalencia; Prevención de Enfermedades; Muerte Materna; Alta del Paciente.

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INTRODUCTION

The puerperium begins after the detachment of the placenta, its ending being indeterminate and individually variable, characterized by a period of changes and adaptations.[1] The repercussions generated by pregnancy and delivery can be present in women up to one year postpartum and promote changes in the body, mind and social aspects of women, making them susceptible to the appearance of problems in this period.[1]

Although the changes are mostly physiological, complications may come to arise. Pathological changes, if not identified and treated, can progress to worsening and even maternal death. The relevance of complications in the puerperal period can be seen in the data from the IT Department of the Unified Health System (Datasus) since, in the year 2018 alone, 1,802 maternal deaths were recorded and, of these, 1,199 occurred in the puerperal period (66.5%).[2]

The Ministry of Health recommends that, before hospital discharge, the puerperal woman should be referred to the unit where she performed the prenatal care, sending a complete report on birth and immediate and mediate postpartum.[3,4] It is also recommended that the home visit be carried out in the first week after the patient's discharge; however, if the newborn (NB) has been classified as at risk, this must occur in the first three days.[3,4]

The World Health Organization (WHO) recommends a minimum of three consultations in the puerperium, at the third day postpartum, between seven and 14 days and six weeks after delivery, plus a home visit in the first week. The assessment should not be restricted to the physical aspects of the puerperal woman, but should include the emotional state and breastfeeding.[5] The puerperal consultation consolidates assistance to the pregnancy-puerperal cycle, in completeness and quality, consisting of an important care indicator.[6]

Carrying out the puerperal return is one of the nurse's duties in Primary Health Care and, if lack of postpartum is detected, an active search should be carried out. However, it is noted that there is no standardization in the conduct and that the commitment to carry it out is different.[7] Thus, it is not possible to analyze the assistance provided from a qualitative point of view, which is restricted only to presence or absence in the consultation.

In addition, there is a scarcity of studies on puerperal care, although there is a need for evaluation, educational activities and drug treatment, if necessary, aimed at this population, paying particular attention to the persistence of physical symptoms, which may indicate changes in the physical and/or mental health of these women.[8]

Since the puerperal consultation aims to detect and prevent complications early and given the scarcity of studies on the theme, there was concern about the realization of this study, which aimed to identify the prevalence of adherence and non-adherence to the puerperal consultation, as well as facilitators and barriers, among puerperal women being assisted in a teaching hospital.

METHOD

This is a prospective cohort study, carried out from August to December 2019, in the premises of a teaching hospital in the inland of Minas Gerais, which is a reference for the resolution of high-risk pregnancies, infectious diseases in the pregnancy-puerperal cycle, pathological prenatal care in the cities of the Southern Triangle of Minas Gerais (27 cities) and normal pregnancies of residents of District I of Uberaba (nearly 150,000 inhabitants) and of all cities in the Southern Triangle of Minas Gerais that do not have a hospital.

Nearly 32 consultations per week are scheduled, prior to hospital discharge, for all women who have had at least one prenatal consultation at the institution, adolescents, women who have not had any prenatal consultation and if the need for follow-up service is detected. The NBs' returns are scheduled by the mother and/or a family member.

During the data collection period, 121 puerperal women who were hospitalized in the institution's Rooming-in wards were interviewed, according to the inclusion criteria, which consisted of: being hemodynamically stable, aware and oriented and having received or having a forecast of hospital discharge, with return scheduled at the institution's outpatient clinic. Counter-referenced puerperal women for puerperal return in a BHU or FHS where prenatal care and women whose delivery was assisted in other institutions and who sought the service through the Emergency Department in the puerperium were excluded. One puerperal woman refused to participate even after clarification (0.8%).

Data collection was carried out prospectively at three different moments. After being instructed and consenting to participate in the study, all the mothers were interviewed, and the data were extracted from medical records. The approach, data collection from medical records and interviews were performed by a researcher trained and calibrated by the main researcher. In the interview, sociodemographic, clinical, obstetric and telephone contact numbers were obtained. Specific medical information on delivery, neonate, indication for return to the institution and incomplete information offered by the participant were consulted in the medical record data.

At a second moment, from the list of consultations scheduled for the date, recorded in the sector book and the hospital's computerized system (electronic medical records), two researchers, with training and calibration by the main researcher, independently verified the presence or absence of the puerperal women included in the study sample to the scheduled appointment, and the answers are validated after typing in the database.

The researcher, who carried out the interviews, contacted all the puerperal women by telephone, using the numbers provided by them in the initial contact. They were asked the following in the contact: reasons for non-adherence/barriers, reasons for adherence/facilitators and care follow-up for the NB. Three attempts at telephone contact were made and, if the attempts were unsuccessful, the researcher filled out the justification. In this stage, contact with 36 participants was possible, which corresponded to 29.8% of the sample.

Data was collected in a specific instrument, based on the information contained in the medical records and tested through a pilot study. Afterwards, they were coded, stored in an *Excel*® spreadsheet, with double entry technique and subsequent validation. After the bank was validated, it was imported to the *Statistical Package for the Social Sciences* (version 23). Initially, descriptive analyses (frequency, mean, standard deviation, minimum and maximum) of the variables were performed and the results were presented in tables.

The dependent variable of the study was adherence to the puerperal consultation. As adherence, it was considered having attended the first appointment scheduled at the institution. The effect of each dichotomous variable of interest (independent) was studied through the analysis of variances (F Test) and variables that presented p-values below 0.05 in the F Test, as well as those that presented normal distribution, were evaluated by means of Multiple Linear Regression, in which the effect of each of the variables was adjusted to the levels of the others in order to seek relationships that could explain adherence. Variables with $p<0.05$ in the model were considered significant.

This study is part of a larger project entitled "Postpartum care: Directing public health strategies", approved by the Research Ethics Committee, Opinion number 2,148,698, June 30th, 2017, and its entire development was guided and ruled by the Regulatory Guidelines and Norms for Research involving human beings contained in Resolution 466, December 12th, 2012, of the National Health Council.

RESULTS

When characterizing the 121 mothers who participated in the study, the mean age was 25.45 ± 6.69, varying between 14 and 43 years old; 11 (9.1%) were adolescents and 13 (10.7%) were over 35; 56 (46.3%) declared themselves to be white-skinned; 44 (37.0%) completed high school and 50 (42.4%) did not engage in paid activities. Most were married (70 - 59.3%) and lived in the municipality (87 - 71.9%), as shown in Table 1.

Table 1. Sociodemographic characterization of the 121 puerperal women interviewed. Uberaba (MG), 2019.

Variables		N	%
Age	Less than or equal to 17 years old	11	9.1
	Between 18 and 34 years old	97	80.2
	Over 35 years old	13	10.7
Skin color	White	56	46.3
	Black	27	22.3
	Brown	37	30.6
	Others	1	0.8
Marital status	Married/Consensual union	70	59.3
	Single	48	40.0
	Judicially separated	2	1.7
Schooling	Illiterate	2	1.7
	Incomplete Elementary School	21	17.6
	Complete Elementary School	22	18.5
	Incomplete High School	22	18.5
	Complete High School	44	37.0
	Incomplete Higher Education	2	1.7
	Complete Higher Education	6	5.0
Occupation	Housewife	50	42.4
	Student	12	10.2
	Household activities	5	4.2
	Trade-related activities	10	8.5
	Activities that require higher education	1	0.8
	Others	40	33.9
Origin	Municipality	87	71.9
	Municipalities of the region	34	28.1

Source: Research date, 2019.

Regarding health conditions and habits, 18 (15.0%) reported smoking, 15 (12.4%), alcohol consumption, and three (2.5%) reported using illicit drugs; 73 (60,3%) postpartum women presented some pathology, the most frequent being hypertensive syndromes (14 - 19.2%), diabetes (11 - 15.1%), hypothyroidism (nine - 12.3%), obesity (eight - 11.0%), syphilis (seven - 9.5%) and toxoplasmosis (six - 8.2%).

Regarding obstetric data, the mean number of pregnancies was 2.50 ± 1.77, ranging from one to ten, and 42 (34.7%) were primiparous, and the mean number of deliveries was 2.19 ± 1.56, ranging from zero to nine, of which 49 (40.5%) were primiparous. The mean number of prenatal consultations was 7.25 ± 2.54 consultations, ranging from zero to 13; three (2.5%) did not have prenatal care and 15 (12.4%) attended fewer than six consultations.

Regarding the place where prenatal care was performed, 66 (54.5%) were assisted in the institution, 27 (22.3%) in Primary Health Care units (BHU, MHU or FHS), 21 (17.4%) started prenatal care in Primary Care and completed it in the institution, and four (3.3%) attended prenatal care elsewhere. It is noteworthy that 73 (60.3%) pregnancies were classified as high risk.

Regarding the gestational age (GA) at the time of birth, the age calculated by the first ultrasound was considered, since it has the most complete data. GA ranged from 35 to 41 weeks, of which 110 (87.6%) were classified as full-term pregnancy (37 - 41 weeks) and 11 (12.4%) were classified as premature.

Regarding the resolution of the pregnancies, 67 (55.4%) postpartum women had normal deliveries, of which 40 (59.7%) had perineal laceration, 17 (25.4%), episiotomy, and ten (14.9%) maintained the integrity of the perineum. The percentage of cesarean delivery was 44.6% (54 deliveries), citing as the following as the most frequent indications: pelvic presentation (seven - 13%); interactivity (seven - 13%); decompensated maternal disease (seven - 13%) and induction failure (seven - 13%). All the cesarean sections were performed for justifiable reasons.

During the hospitalization period of the 121 postpartum women interviewed, eight (6.6%) showed some type of complications during delivery/puerperium, the following being described with more frequently: intra- and/or postpartum hemorrhage; premature labor; delivery occurred at home, and a case of placental accretion.

Puerperal return

When the reasons for the return to be scheduled at the institution were evaluated, 62 (51.2%) were because they had prenatal care at the institution; 33 (27,3%) by medical request due to complications in pregnancy and/or delivery and/or puerperium; 11 (9.1%) because they are adolescents; three (2.5%) due to the absence of counter-reference (puerperal women who did not perform prenatal care) and 12 (9.9%) due to other reasons, the most frequent being: preference for the institution (five - 41.7%); desire for family planning – insertion of IUD or ligation (four - 33.3%); two (16.7%) reported not liking the service at the BHU and one (8.3%) reported that the BHU did not have a gynecologist. It is notable that, although it has been reported that they do not have a gynecologist, all units in the municipality have this professional being employed in their staff; however, the answer of the interviewees was kept in full.

Of the 121 postpartum women interviewed, 42 (34.7%) attended the puerperal return consultation. In the attempt of telephone contact, it was possible to contact 36 (29.8%) of the participants, of which 22 (61.1%) did not attend the scheduled puerperal return. Among the 85 missed calls (70.2%), in 71 (84.7%), three attempts were made at different moments without success; in six (9.4%), the number did not exist and in five (5.9%), the number did not confer. Among the puerperal women who answered the call, three (11.0%) reported complications in the period, and occurrences of convulsive crisis, severe headache and hospitalization for pyelonephritis were mentioned.

Regarding the facilitating reasons for puerperal return, ten (71.4%) highlighted the welcoming of the team during prenatal care and nine (28.6%) cited the reception at delivery. As for the reasons for absences, the most frequently mentioned were the following: forgetfulness (nine - 36.4%); complications with the NB (three - 13.6%); puerperal complications; difficulty of transport; distance from the residence to the service (two - 9.1%, respectively, each of the answers), and one puerperal woman cited the need for rehospitalization (4.5%).

Regarding childcare consultation, 33 (94.4%) NBs went through consultation with the pediatrician, and 26 (79.4%) were assisted at the BHU near their residence, six (17.7%) in the institution and one (2.9%), in a private office. All the NBs underwent a foot test and were vaccinated with the Hepatitis B and BCG vaccines, demonstrating greater respect for return and care for the NB.

Regarding the factors associated with adherence to the puerperal consultation, there was a statistical association for: postpartum women with higher schooling ($p = 0.021$); who had pathology ($p = 0.011$); primiparous ($p = 0.044$); who performed all or part of prenatal care at the institution ($p < 0.001$); who had their pregnancies classified as high risk ($p = 0.011$), who had cesarean delivery ($p = 0.055$), as shown in Table 2.

To verify the real association of the study variables and adherence to the puerperal consultation, multiple linear regression was performed. The variables that presented statistical significance in the univariate analysis ($p<0.05$) were included in the model: maternal schooling; presence of pathology; primigravity; having performed prenatal care in the institution; high-risk pregnancy; and having had a cesarean section.

When the variables were analyzed through the regression model, it was verified that being the first pregnancy (primigravida) and having performed prenatal care in the institution presented statistical significance; and all the factors tested, except having had a pregnancy classified as high-risk, behaved as protective factors for adherence, as shown in Table 3.

Table 2. Association of adherence to the puerperal consultation with variables of a sociodemographic, clinical and obstetric nature. Uberaba (MG), 2019.

Variables	Attended the Consultation		Did Not Attend the Consultation		p
	N	%	N	%	
Age <18 years old	4	3.3	7	5.8	1.000
Age >18 years old	38	31.4	72	59.5	
Age <35 years old	36	29.8	72	59.5	0.371
Age >35 years old	6	4.9	7	5.8	
White race/skin color	23	19.0	33	27.3	0.186
Non-white race/skin color	19	15.7	46	38	
Lives with partner	20	16.7	50	41.7	0.086
Does not live with partner	22	18.3	28	23.3	
Higher education to complete high school	24	20.2	28	23.5	**0.021**
Lower education than complete high school	17	14.3	50	42.0	
Performs paid activity	24	20.3	32	27.1	0.086
Does not perform paid activity	17	14.4	45	38.2	
Lives in the municipality	31	25.6	56	46.3	0.833
Lives in another municipalities	11	9.1	23	19.0	
Smoker	6	5.0	12	10.0	1.000
Non-smoker	35	29.2	67	55.8	
Alcohol consumption	5	4.1	10	8.3	1.000
Non-alcoholic	37	30.6	69	57.0	
Makes use of illicit drugs	0	0	3	2.5	0.551
Does not use illicit drugs	42	34.7	76	62.8	
With a pathology	32	26.4	41	33.9	**0.011**
Without any pathology	10	8.3	38	31.4	
Primiparous woman	20	16.5	22	18.2	**0.044**
Multi gestation	22	18.2	57	47.1	
Preterm NB	3	2.5	8	6.7	0.747
Term NB	38	31.7	71	59.2	
Performed prenatal care	41	33.9	77	63.6	1.000
Did not perform prenatal care	1	0.8	2	1.7	
Adequate prenatal care (≥ 6 consultations)	37	31.1	64	53.8	0.290
Prenatal care is not adequate (≤6 consultations)	4	3.3	14	11.8	
Carried out prenatal care at the institution	38	32.2	49	41.5	**<0.001**
Did not perform prenatal care at the institution	3	2.6	28	23.7	
High risk pregnancy	32	26.4	41	33.9	**0.011**
Normal risk pregnancy	10	8.3	38	31.4	
Normal birth	18	14.9	49	40.5	**0.055**
Cesarean delivery	24	19.9	30	24.8	
Normal delivery with laceration	9	7.4	31	25.6	0.067
Normal delivery without laceration	33	27.3	48	39.7	
Normal delivery with episiotomy	7	5.8	10	8.3	0.588
Normal delivery without episiotomy	35	28.9	69	57	
Delivery/Puerperium complications	1	0.8	7	5.8	0.260
Delivery/Puerperium without complications	41	33.9	72	59.5	

Source: Research data, 2019.

Table 3. Multiple linear regression model between adherence to the puerperal consultation associated to sociodemographic, clinical and obstetric variables. Uberaba (MG), 2019.

Variable	Coefficient	(95% CI)	P
Schooling	0.142	(-0.034) - (0.305)	0.117
Pathology	-0.381	(-1.277) - (0.532)	0.416
Primiparous woman	0.207	(0.032) - (0.377)	0.020
Place where prenatal care was performed	0.221	(0.035) - (0.444)	0.022
High risk pregnancy	0.512	(-0.389) - (1.388)	0.268
Type of delivery	-0.077	(-0.248) - (0.102)	0.410

Source: Research data, 2019.

DISCUSSION

The puerperal return or review is the ideal time to detect possible risks, prevent or treat them, and promote healthier habits, aiming to avoid or reduce maternal death rates.[9-10]

The interviewed women were in the age group considered as 'fertile age', as well as puerperal women who participated in other national and international studies.[11-20] However, the mean age (25 years old) was lower than the one found in studies conducted in the southern region of the country[11], in the city of São Paulo[20], in Sweden[14], United States[16] and Poland.[19] Although they were below the age of other studies, no associations were found between adherence and maternal age.

Most of the puerperal women claimed to be married; however, the rate of women in stable unions was lower than the results of studies conducted in different locations in the country[11,13] and in other countries[16,19], where the rates go from 70 to 100%. In the literature, the partner's support during the puerperium is signaled as relevant in moments of emotional fragility and uncertainty[9] and is associated with higher scores of mother-baby bond[17], positive feelings in the puerperium[19] and higher rates of family planning[18,20], although in this study, the association between having a partner and greater adherence to the consultation has not been proven.

In relation to maternal schooling, there was a greater number of respondents with complete high school; however, 56.3% had a schooling level below incomplete High School, indicating that it was a sample with low education. Schooling was lower than that of other samples of puerperal women who participated in national[11,13,19] and international[15-16,19] studies. As well as the results presented in this study, an association of non-adherence to the puerperal consultation and children with low schooling was verified in a study carried out in the southern region of the country.[11]

There was predominance of puerperal women who did not have their own income for performing unpaid domestic activities or being students (52.6%). These results are in accordance with data found in the literature, which showed that 49.4 to 77.7%[12,14,19,21] of the puerperal women devoted their time to household activities and did not have their own income. Low income was associated with non-adherence to postpartum consultations in the southern region of Brazil[11]; however, there was no association between income/occupation and adherence to the puerperal consultation in the study sample.

It was not possible to compare data regarding the declared race/skin color, smoking, drinking and use of illicit drugs and adherence to the puerperal consultation, as the evaluated studies did not analyze these variables. However, there was no association between these variables and adherence or non-adherence to the puerperal consultation.

It was identified that the majority of the puerperal women presented some pathology. However, it is emphasized that the hospital is a reference for high-risk pregnancies in the municipality and in the Health Regional Area, which may justify the high rate. Puerperal women who had problems during pregnancy classified home visits as important during the puerperal period.[22] It is noteworthy that the results of this study showed, in the univariate analysis, that having complications in pregnancy and having the pregnancy classified as high risk were associated with greater adherence to the puerperal consultation, corroborating the previous results, where the puerperal women attributed importance to the visits. In contrast, a study pointed out an association between maternal morbidity and non-adherence to the puerperal consultation in residents of the southern Brazilian region.[9]

There was predominance of primiparous women in the study sample (40.5%), as in national studies, in which the percentage ranged from 33.8 to 50.9%[9,12-13], and international studies, from 45.5 to 50%.[14-16] A Brazilian study emphasized the importance and necessity of the puerperal follow-up, especially the home visit for puerperal women who had their first child[22], corroborating the results of this study, which showed greater adherence to the puerperal consultation among primiparous women.

When analyzing variables related to prenatal care, most of the mothers (70.2%) had six or more consultations, with a mean of 7.25 consultations, according to the number of consultations recommended by the Ministry of Health.[3,4] However, the number of consultations and adherence to prenatal care did not influence the rates of adherence to t puerperal consultation in the studied sample. Most of the interviewees attended prenatal care at the institution (71.9%) and this variable was associated with greater adherence to the puerperal consultation. Likewise, a number of studies pointed out the relationship between the bond with

professionals and/or services and prenatal care and greater adherence to the puerperal consultation.[9,23]

Although the rate of cesarean sections was lower than that of births by normal delivery, operative delivery was associated in the univariate analysis with greater adherence to the puerperal consultation. The incision of the cesarean section is a reason for seeking puerperal assistance, since 61% of the mothers of NBs hospitalized in ICUs sought assistance for the professional evaluation of the incision[15] and a qualitative study showed that women who had a cesarean section gave importance to home visits due to the professional evaluation of the surgical wound.[23] The gestational age at the time of delivery did not influence adherence to the puerperal consultation and no studies were found to evaluate this variable for comparison purposes.

As for complications during the hospitalization period, 6.6% of the puerperal women who participated in this research had some type of complications during delivery/puerperium, but this data was not associated with greater adherence to the puerperal consultation. The frequency of complications found was lower than the data from a study carried out with puerperal users of the BHUs in Mato Grosso do Sul, where 15.4% presented complications at the time of delivery and 25%, in the postpartum period; and the fact that having had complications presented an association with greater adherence to the consultation in the puerperium.[12]

When specifically discussing puerperal return, a qualitative study verified the perception of couples about the assistance provided by the Hanami team, which makes returns at home on the 1st, 3rd, 7th and 10th days, with flexibility of returns when necessary, and more an appointment on the 30th postpartum day. The participants reported that the assistance consisted of respectful, sensitive, competent and important care for successful breastfeeding,[24] giving importance to the consultation, more frequent evaluation, and in critical moments of the puerperium.

The results of this study showed a low rate of adherence to the puerperal consultation (34.7%), when compared to rates found in studies carried out in Mato Grosso do Sul (43.1%),[12] in the municipality of Botucatu, where the adhesion rate was 46.9% in the BHUs and 69.7% in the FHS[25], in the state of Paraná (51,1%)[26] and in the southern region of Brazil (75.2%).[11] However, the index found is within the rate pointed out in a literature review study that found adherence rates ranging from 16.8 to 58%.[6,27] This index is far below the desired one, when compared to the data of the United Kingdom, where adherence to the puerperal consultation shows an index of 91%.[27]

Low adherence can directly reflect on problems and complications that may arise in the puerperium and turn a routine appointment into a need for emergency care. Thus, it is necessary to rethink health care in the puerperium, looking for reasons for adherence and non-adherence to the puerperal consultation. It is noteworthy that urgent and emergency services are intended to deal with acute problems of high severity that require prompt and immediate assistance, especially when there is an imminent risk of death.[28] When searching for these units without presenting urgent conditions, they can contribute to the overload of the team's work and to delays in the assistance, compromising the quality and resolution of the services.[28]

The welcoming of the team during prenatal care and delivery was mentioned as facilitators for adherence to the puerperal return. Similarly to this finding, a number of studies pointed out the bond and the welcoming of the team during care as a factor associated with adherence.[9,23] As factors associated with adherence, he literature also pointed out the previous appointment of the consultation (before hospital discharge)[12], the presence of maternal and/or neonatal complications,[12] and the search for family planning.[23]

When analyzing the reasons for absences (non-adherence) to the puerperal consultation, the most frequently mentioned were the following: forgetfulness; complications with the NB; puerperal complications; difficulty in transportation; distance between service and residence; and a puerperal woman mentioned the need for rehospitalization.

A qualitative study with puerperal women living in Recife pointed out the following as barriers: complications; difficulties in scheduling the appointment; very quick consultations; incomplete physical examination (restricted to the evaluation of the breasts and surgical incision); failures in anamnesis; consultations centered on the NB and restricted to contraception; late consultations; and insufficient guidelines.[22] It is noteworthy that only 5.6% of the puerperal women who participated in research in Mato Grosso reported that they were instructed about the puerperal consultation before hospital discharge.[13]

Puerperal women assisted in a BHU in Mato Grosso do Sul also mentioned transportation difficulties,[12] as in this study. The authors highlighted that public transportation, as the main means of locomotion, makes it difficult for postpartum women to access the health service, since she needs to take the NB and is subjected to climatic and meteorological changes.[12]

The mother's focus on care for the NB is noticed, since the puerperal return rate was 34.7% and the childcare consultation rate was 94.4%. All the NBs underwent a foot test and were vaccinated with the Hepatitis B and BCG vaccines, demonstrating greater respect for return and care for the NB. A study warns that, since the woman starts to center the focus on the NB, she often forgetting about self-care, and problems and complications become common in this period.[29]

In order to capture the puerperal woman early, the authors suggested the importance of scheduling the puerperal consultation on the same day as the foot test collection[30,31] or at the time of the BCG vaccination[31] to provide opportunities for the return of the binomial. It is emphasized that the BCG vaccine, despite regional variations, has national coverage above 90%,[32] an index equivalent to the results found in this study. Thus, it is verified that the puerperal woman returns to the care unit to take the NB, but is lost to follow-up and is not evaluated, which should be a reason for reflection for professionals and services that provide this care.[32] It is reiterated that, although consultations are currently held at

different times in the study institution, the data were presented to those responsible for the service, who are discussing the flexibility of joint scheduling of the binomial.

The puerperium constitutes a moment of fragility for the mother-child binomial and demands, from health professionals, an attentive and committed look, both in the hospital environment and in primary health care.[21] The literature displays points to be rethought in the care for the puerperium: postpartum care is still primarily focused on NB care[25]; greater adherence to the consultation due to complications (curative rather than preventive); the need for greater visibility of women; and greater professional qualification in puerperal care.[22]

The authors understand that a limitation of the study refers to external validity, since the data cannot be generalized to other realities. It should be noted that, from the results found, new studies on the theme can be carried out in the future, which are proven through hypothesis tests or which use different designs.

CONCLUSIONS AND IMPLICATIONS FOR THE PRACTICE

Low adherence to puerperal return was observed, with a prevalence of 34.7%. The univariate analysis showed an association between adherence and: puerperal women with higher schooling, who performed all or part of prenatal care at the institution, who had their pregnancies classified as high risk, who had previous diseases during pregnancy, primiparous women; and those who had cesarean delivery. Being the first pregnancy and having performed prenatal care at the institution showed significance with the adherence confirmed by multiple linear regression.

The welcoming of the team during prenatal and/or delivery was cited as a facilitating reason for adherence and, as to the reasons alleged for absence, the following were most frequently mentioned: forgetfulness; complications with the NB; puerperal complications; difficulty in transportation; distance between service and residence; and a puerperal woman mentioned the need for rehospitalization.

The data presented in this study made it possible to outline a profile of the puerperal women who adhered or not to the puerperal consultation, unveiling facilitating factors and barriers, as well as factors associated with greater adherence.

The importance of puerperal consultation as a tool for preventing diseases and maternal death is emphasized. Thus, it is necessary to rethink puerperal care, reinforcing the importance of the consultation during hospitalization and seeking to schedule returns for the puerperal woman and NB on the same date and place to optimize travels and increase adherence.

These guidelines and strategies can be instituted both in the institution where the study was carried out as well as in other institutions, given that, in comparison with other studies, the need to increase adherence in different contexts and institutions is identified.

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REFERENCES

1. Maciel LP, Costa JCC, Campor GMB, Santos NM, Melo RA, Diniz LFB. Mental disorder in puerpério: risks and mechanisms of counseling for the promotion of health. Rev Pesqui Func Cuid. 2019 jul;11(4):1096-102. http://dx.doi.org/10.9789/2175-5361.2019.v11i4.1096-1102.
2. Ministério da Saúde (BR). Departamento de Informática do Sistema Único de Saúde. Óbitos maternos em 2018 [Internet]. Brasília: Ministério da Saúde; 2018 [citado 2020 Jun 13]. Disponível em: http://tabnet.datasus.gov.br/cgi/tabcgi.exe?sim/cnv/mat10uf.def
3. Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Atenção ao pré-natal de baixo risco. Brasília: Ministério da Saúde; 2012 (Série A. Normas e Manuais Técnicos. Cadernos de Atenção Básica, n° 32).
4. Portaria nº 1.459, de 24 de junho de 2011 (BR). Institui, no âmbito do Sistema Único de Saúde - SUS - a Rede Cegonha. Diário Oficial da União, Brasília (DF), 2011.
5. World Health Organization. WHO recommendations on Maternal Health Guidelines approved by the WHO Guidelines Review Committee. Genebra: WHO; 2017.
6. Monteiro MFV, Barbosa CP, Vertamatti MAF, Tavares MNA, Carvalho ACO, Alencar APA. Access to public health services and integral care for women during the puerperal gravid period period in Ceará, Brazil. BMC Health Serv Res. 2019;19(1):851. http://dx.doi.org/10.1186/s12913-019-4566-3. PMid:31747914.

7. Castiglioni CM, Cremonese L, Prates LA, Schimith MD, Sehnem GD, Wilhelm LA. Práticas de cuidado no puerpério desenvolvida por enfermeiras em Estratégia de Saúde da Família. Rev Enferm UFSM. 2020;10(50):1-19. http://dx.doi.org/10.5902/2179769237087.
8. Mori E, Iwata H, Sakajo A, Maehara K, Tamakoshi K. Association between physical and depressive symptons during the first 6 months postpartum. Int J Nurs Pract. 2017;23(Suppl 1):e12545. http://dx.doi.org/10.1111/ijn.12545. PMid:28635063.
9. Silva EC, Pereira ES, Santos WN, Silva RAR, Lopes NC, Figueiredo TAM, Coqueiro JM. Puerpério e assistência de enfermagem: percepção das mulheres. Rev Enferm UFPE on line. 2017; 11(Supl 7):2826-33. http://dx.doi.org/ 10.5205/reuol.11007-98133-3-SM.1107sup201702.
10. Verbiest S, McClain E, Stuebe A, Menard MK. Postpartum Health Services Requested by mothers with newborns receiving Intensive Care. Matern Child Health J. 2016;20(Suppl 1):125-31. http://dx.doi.org/10.1007/s10995-016-2045-6. PMid:27357697.
11. Gonçalves CS, Cesar JA, Marmitt LP, Gonçalves CV. Frequência e fatores associados à não realização da consulta puerperal em um estudo de coorte. Rev Bras Saúde Mater Infant. 2019;19(1):71-8. http://dx.doi.org/10.1590/1806-93042019000100004.
12. Fusquine RS, Lino NCF, Chagas ACF, Muller KTC. Adesão e rejeição à consulta puerperal por mulheres de uma Unidade Básica de Saúde da Família. Arch Health Sci. 2019;26(1):37-40. http://dx.doi.org/10.17696/2318-3691.26.1.2019.1241.
13. Vilela MLF, Pereira QLC. Consulta puerperal: orientação sobre sua importância. J Health NPEPS. 2018;3(1):228-40. http://dx.doi.org/10.30681/252610102908.
14. Gingnell M, Toffoletto S, Wikstrom J, Engman J, Bannbers E, Comasco E et al. Emotional anticipation after delivery – a longitudinal neuroimaging study of the postpartum period. Sci Rep. 2017;7(1):114. http://dx.doi.org/10.1038/s41598-017-00146-3. PMid:28273912.
15. Senol DK, Yurdakul M, Ozkan SA. The effect of maternal fatigue on breastfeeding. Niger J Clin Pract. 2019;22(12):1662-8. http://dx.doi.org/10.4103/njcp.njcp_576_18. PMid:31793471.
16. Guerra-Reyes L, Christie VM, Prabhakar A, Harris AL, Siek KA. Postpartum health information seeking using mobile phones: experiences of low-income mothers. Matern Child Health J. 2016;20(Suppl 1):13-21. http://dx.doi.org/10.1007/s10995-016-2185-8. PMid:27639571.
17. McNamara J, Townsend ML, Herbert JS. A systemic review of maternal wellbeing and its relationship with maternal fetal attachment and early postpartumbonding. PLoS ONE. 2019;14(7):e0220032. http://dx.doi.org/10.1371/journal.pone.0220032.
18. Dev R, Kohler P, Feder M, Unger JA, Woods NF, Drake AL. A systematic review and meta-analysis of postpartum contraceptive use among women in low- and middle-income countries. Reprod Health. 2019;16(1):154. http://dx.doi.org/10.1186/s12978-019-0824-4. PMid:31665032.
19. Wszołek KM, Żak E, Żurawska J, Olszewska J, Pięta B, Bojar I. Influence of socio-economic factors on emotional changes during the postnatal period. Ann Agric Environ Med. 2018;25(1):41-5. http://dx.doi.org/10.26444/aaem/74486. PMid:29575879.
20. Alves MO, Parreira BDM, Dias FA, Mendes LC, Elias TC, Silva SR. Uso de métodos contraceptivos e fatores relacionados ao planejamento da gravidez entre puérperas. Rev Enferm UFSM. 2016;6(3):424-33. http://dx.doi.org/10.5902/2179769221249.
21. Andrade RD, Santos JS, Maia MAC, Mello DF. Fatores relacionados à saúde da mulher no puerpério e repercussões na saúde da criança. Esc Anna Nery. 2015;19(1):181-6. http://dx.doi.org/10.5935/1414-8145.20150025.
22. Corrêa MSM, Feliciano KVO, Pedrosa EM, Souza AI. Acolhimento no cuidado à saúde da mulher no puerpério. Cad Saude Publica. 2017;33(3):e00136215. http://dx.doi.org/10.1590/0102-311x00136215. PMid:28380144.
23. Batistti EES, Bertolini G, De Bortoli CFC, Beheregaray LR, Graminho FS. Expectativas de puérperas sobre a avaliação puerperal. Rev Baiana Saúde Públ. 2017;41(2):440-50. http://dx.doi.org/10.22278/2318-2660.2017.v41.n2.a2357.
24. Collaço VS, Santos EKA, Souza KV, Alves HV, Zampieri MF, Gregório VRP. Parir em nascer num novo tempo: o cuidado utilizado no puerpério pela equipe Hanami. Rev Min Enferm. 2016;20:e949. http://dx.doi.org/10.5935/1415-2762.20160018.
25. Oliveira RLA, Ferrari AP, Parada CMGL. Processo e resultado do cuidado pré-natal segundo os modelos de atenção primária: estudo de coorte. Rev Lat Am Enfermagem. 2019;27:e3058. Enfermagem. 2019;27:e3058. http://dx.doi.org/10.1590/1518-8345.2806.3058. PMid:31340338.
26. Oliveira ICB, Silva RMM, Ferreira H, Ferrari RAP, Zilly A. Influência de fatores epidemiológicos no seguimento e aparecimento de problemas puerperais. Rev Baiana Enferm. 2020;34:e35763. http://dx.doi.org/10.18471/rbe.v34.35763.
27. Baratieri S, Natal S. Ações do programa de puerpério na atenção primária: uma revisão integrativa. Cien Saude Colet. 2019;24(11):4227-38. http://dx.doi.org/10.1590/1413-812320182411.28112017. PMid:31664395.
28. Sousa KHJF, Damasceno CKCS, Almeida CAPL, Magalhães JM, Ferreira MA. Humanização nos serviços de urgência e emergência: contribuições para o cuidado de enfermagem. Rev Gaucha Enferm. 2019;40:e20180263. http://dx.doi.org/10.1590/1983-1447.2019.20180263. PMid:31188988.
29. Quirino ÁFA, Ferrari RAP, Maciel SM, Santos IDDL, Medeiros FF, Cardelli AAM. Práticas de autocuidado no primeiro ano pós-parto. Cienc Cuid Saúde. 2016;15(3):436-44. http://dx.doi.org/10.4025/cienccuidsaude.v15i3.31787.
30. Pereira MC, Gradim CVC. Consulta puerperal: a visão do enfermeiro e da puérpera. Cienc Cuid Saúde. 2014;13(1):35-42. http://dx.doi.org/10.4025/cienccuidsaude.v13i1.19572.
31. Santos FAPS, Brito RS, Mazzo MHSN. Puerpério e revisão pós-parto: significados atribuídos pela puérpera. Rev Min Enferm. 2013;17(4):854-8. http://dx.doi.org/10.5935/1415-2762.20130062.
32. Arroyo LH, Ramos ACV, Yamamura M, Weiller TH, Crispim JA, Cartagena-Ramos D et al. Áreas com queda da cobertura vacinal para BCG, poliomielite e tríplice viral no Brasil (2006-2016): mapas da heterogeneidade regional. Cad Saude Publica. 2020;36(4):e00015619. http://dx.doi.org/10.1590/0102-311x00015619. PMid:32267382.