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ORIGINAL ARTICLE

EVALUATION OF THE WORK PROCESS OF PRIMARY HEALTH CARE TEAMS IN PRENATAL CARE

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Highlights:
(1) Managerial and care factors influence access to prenatal consultations.
(2) Poor referral flow and communication hinder effective prenatal care.
(3) Continuing education and care safety promote prenatal consultations.

ABSTRACT

The objective was to identify the factors associated with prenatal care based on the work process of primary health care teams in Brazil. This is a cross-sectional study with secondary data from 38,865 teams interviewed who took part in the external evaluation of the third cycle of the National Program for Improving Primary Care Access and Quality (PMAQ-AB, acronym in Portuguese) in 2017. The dependent variable was prenatal care, and the independent variables were grouped into hierarchical levels. Multiple logistic regression analysis was conducted, and the variables were classified into management and care. The care factors associated with consultation included continuing education, safety in providing care, and enough professionals. An institutionalized communication flow with the specialist team is absent in the managerial dimension. The lack of defined flows for delivery/maternity and the absence of a central regulation system for referrals, among others, contributed to the pregnant woman not having a consultation. The analysis provides input for improving work processes in prenatal care and strengthening the integration of the care network.

Keywords: primary health care; prenatal care; health evaluation.

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INTRODUCTION

Prenatal care (PNC) is one of the services that pregnant women need to follow up on and monitor the progress of their pregnancy, as it is one of the leading indicators of the proposed United Nations (UN) Sustainable Development Goals1. Recently, several initiatives have been implemented to improve the quality of care for pregnant women in Primary Health Care (PHC). The National Program for Improving Primary Health Care Access and Quality (PMAQ-AB) is one of the most relevant health strategies and the most significant proposal for evaluating the performance of programs ever developed in Brazil[2,3]. This program aims to encourage managers and teams to improve the quality of services through strategies for qualifying, monitoring, and evaluating the work of health teams[4]. Although the PMAQ still has limitations, its potential is represented by the participatory process of the entire team in the evaluation processes. In Brazil, PHC is referred to as Primary Care.

Despite recent advances in social and demographic indicators in Brazil, inequalities persist in access to and quality of PNC, especially in less developed regions[5]. These inequalities can be seen in the access, declaration, and outcome of PNC[6]. In this sense, Primary Care has expanded its offer of consultations and procedures to develop resolutive and welcoming actions with the health services network. However, there is a lack of evaluation studies, monitoring indicators, and management actions that favor the quality of the PNC offered by teams[7].

In several countries, problems relating to the quality of PNC have also been highlighted. In the maternal care systems of Central and Eastern Europe, inequalities persist with barriers to access and maternal care, as well as inadequate and outdated protocols, even though these systems are well implemented on the continent[8].

A study in some regions of Asia identified that the quality of PNC is inadequate, precisely due to managerial and care factors, such as the availability of human resources, facilities, distance between units, and more[9]. Another study, conducted in a Latin American context, identified low adherence to prenatal care and difficulties for health teams to link up with other points in the health care network[10].

From this perspective, evaluating the completeness of a repertoire of health actions is valuable for estimating the scope of care for pregnant women and its quality[11]. Information on the work processes of health teams and the organization of care for the user can support management and care strategies, which will help evaluate the quality of prenatal care in the country. This study aims to identify the factors associated with prenatal care based on the work process of PHC teams in Brazil.

METHODS

This cross-sectional study uses secondary data from PHC teams in the Brazilian Unified Health System (SUS), whose professionals responded to the external evaluation component of the third cycle of the PMAQ-AB. This program is linked to financial transfers based on the certification result obtained by the teams, which covered 93.9% of PHC teams in 95.6% of the municipalities in Brazil in 2017 when the data was collected[12].

The PMAQ-AB had an evaluation tool comprising three modules that guided data collection. Module I described the observation of the structural characteristics and ambience of the health unit; Module II interviewed professionals about the health team's work process and analyzed documents; and Module III interviewed users about their perceptions and satisfaction with health services in terms of access and use[12]. For this study, the variables contained in Module II were used so that the interviews took place using a non-probabilistic sample, in which four users from each unit were interviewed, totaling 140,444 users nationwide[12].

PMAQ data is collected through a tablet application, where all those involved in the health teams actively collaborate to ensure the smooth running of the program's external evaluation phase. The Module II variables were accessed by consulting the PMAQ *website* (https://aps. saude.gov.br/ape/pmaq), available as an XLSX file[12].

This study's population included teams that answered "yes" to "Do you provide prenatal care?", resulting in 38,865 questionnaires.

Whether or not prenatal consultations were conducted was considered a dependent variable, and the determinants of whether consultations were undertaken in PHC were classified into two dimensions of analysis: management and care. The conceptual model was based on Donabedian's theoretical framework[13] and adapted to represent the components of prenatal care (APN) proposed by Luz, Aquino, and Medina[14].

The components of the PNC and their relationships with each other were formulated in two dimensions of analysis: distal management level and proximal care level, made up of structure and process attributes (Figure 1).

The analysis matrix for the distal management level comprises structure and process attributes and includes the following variables: Is there an institutionalized communication flow between your team and specialist care? Do specialists contact primary care professionals to exchange information about pregnant women referred by primary care? Are there defined referrals and flows for delivery (maternity)? Is a regulation center available to refer pregnant women to other points of care? In the last year, has the team taken part in continuing education? Do the continuing educational activities meet the demands and needs of the team? Does the team monitor and analyze health indicators and information? Is there a lack of training?

In the care dimension, the structure and process variables were considered: Does the team receive support from other professionals to help or support the resolution of complex cases? Support from the Expanded Family Health and Primary Care Centers (Nasf-AB)? Do you know if the team conducts any activities to plan its actions? Is the infrastructure inadequate? Weren't the materials/supplies enough? Is there an absence of parameters? Is there a deficit of professionals (human resources)? Is there a lack of demand for the service? Work overload? Are there restrictive measures by the profession's supervisory board? Is there a lack of security during the consultation?

Most of the time, each criterion was constructed by aggregating aspects from more than one question from the PMAQ-AB instruments, dichotomizing the answer alternatives into yes and no. For the questions relating to actions taken by health professionals, only those cases in which the action was reported with documentary confirmation were considered to have an affirmative answer. Finally, the answer options "never available/sometimes available", "don't know/didn't answer", and "not applicable" were classified as "no".

After selecting the variables, the descriptive analysis of the database identified 23,067 interviews with missing answers (*missing*) in at least one variable. The multiple imputation method was used to avoid excluding participants, where missing data is imputed **m** times, generating **m** distinct and complete databases. From these different databases, we obtain results that match the desired objective, considering the variability of the imputation[15].

The imputation model is specified separately for each variable, using all the other variables as predictors. At each algorithm stage, an imputation is generated for the missing data variable; these imputed values are used to impute the following variable. The process continues until convergence is reached. In other words, the basic idea is to impute the incomplete variables one at a time, using all the variables and the variables already imputed in the previous stage.[16,17]

Multiple logistic regression with hierarchical variable entry was used for the analysis. Initially, the distal variables, considered conditioning factors for the variables at the next level, were analyzed; then, the intermediate and proximal variables were examined.

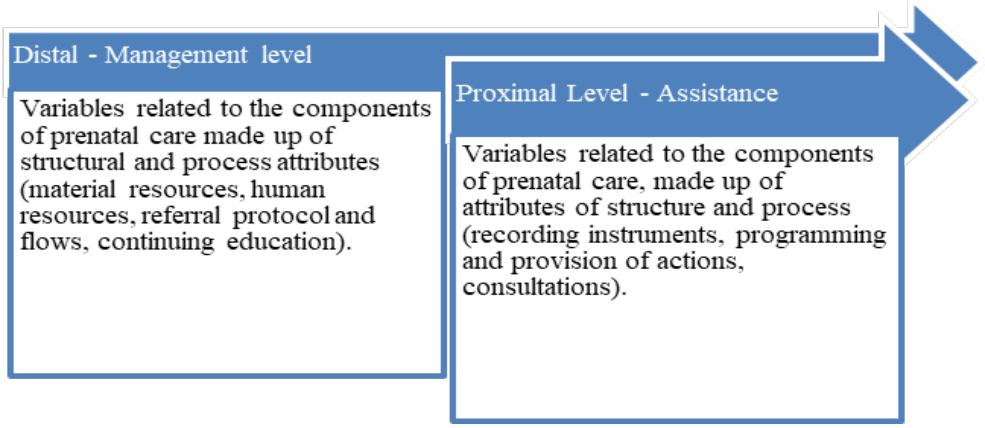

Figure 1 – Subdimensions of the National Program for Improving Primary Care Access and Quality database, 2017.

Source: PMAQ-AB Adaptation, 2017.

The multiple logistic regression model, including *stepwise forward* variables, considered those with a p-value < 0.20 in the bivariate analysis, and the variables with a p-value < 0.05 and/or which adjusted the model remained in the final model. The magnitude of the associations was estimated by the *Odds Ratio* (OR), with 95% confidence intervals (95%CI) as a measure of precision. The adequacy of the final model was checked using the Hosmer-Lemeshow test. The multicollinearity assumption was tested using the *Variance Inflation Factor* (VIF) and calculated by multiple linear regression, with the cut-off point being VIF ≥ 4. The test showed no evidence of multicollinearity between the independent variables studied for multiple logistic regression. The data was stored and analyzed using the *Statistical Package for the Social Sciences* (SPSS) *software*, version 20.0.

As this study uses secondary databases, whose information is aggregated without the possibility of individual identification, the Human Research Ethics Committee is exempt from analyzing it under Resolution 510/2016 of the National Health Council.

RESULTS

The proportion of teams that carried out prenatal consultations was 96.9% (n=36,702), with 35.6% (n=13,486) working in the northeast, followed by 32.9% (n=12,482) in the southeast and 14.7% (n=5,558) in the south. Table 1 shows the descriptive analysis of the primary care teams in terms of their employment characteristics. There was a predominance of nurses, 93.3% (n=35,371), who were civil servants and had a career plan.

Table 1 – Characteristics of health professionals in terms of employment profile, 3rd cycle of the PMAQ-AB. Brazil, 2017

Variables	**Population analyzed**	**n**	**%**
		37,894	**100**
Region			
	North	3,714	9.8
	Northeast	13,486	35.6

	South	5,558	14.7
	Southeast	12,482	32.9
	Midwest	2,654	7.0
Professional interviewed			
	Nurse	35,371	93.3
	Doctor	1,869	4.9
	Other senior professionals	110	0.3
What type of link			
	Civil servant	16,054	42.4
	Commissioned position	1,078	2.8
	Temporary contract by the public administration	8,530	22.5
	Temporary public administration contracts	4,726	12.5
	CLT public employment	2,321	6.1
	CLT Contract	3,992	10.5
	Self-employed	107	0.3
	Other	542	1.4
Career plan			
	Seniority progression	8,302	21.9
	Progression for performance/merit	5,674	15.0
	Progression for qualifications and training	8,144	21.5

Source: Authors, 2023.

Regarding the variables related to the work process at the distal level, on the anagerial dimension, the bivariate analysis indicated that all the variables were significant in at least one of their categories, as shown in Table 2.

Table 2 – Bivariate analysis of the association between the variables related to the distal level in the management dimension by aggregating aspects from the PMAQ-AB and the prenatal visit. Brazil, 2017

	Conducts prenatal consultations			
Variables	**Yes n (%) 36,702 (96.9)**	**No n (%) 1,192 (3.1)**	**OR $_{crude}$(CI95%)***	**p-value**
Is there an institutionalized communication flow between your team and specialized care?				
Yes	32,835 (87.9)	548 (1.5)	1.00	Reference
No	3,867 (10.4)	100 (0.3)	1.54 (1.24 – 1.92)	0.000
Do the specialists get in touch to exchange information about pregnant women referred by AB?				
Yes	26,074 (78.1)	399 (1.2)	1.00	Reference
No	6,761 (20.3)	149 (0.4)	1.44 (1.19 – 1.74)	0.000
There are defined referrals and flows for childbirth (maternity).				
Yes	31,425 (94.1)	493 (1.5)	1.00	Reference
No	1,410 (4.2)	55 (0.2)	2.48 (1.87- 3.30)	0.000
Is a regulation center available to refer pregnant women to other points of care?				
Yes	34,844 (93.3)	598 (1.6)	1.00	Reference
No	1,858 (5.0)	50 (0.1)	1.56 (1.17 – 2.10)	0.000

In the last year, has the team taken part in continuing education?				
Yes	35,668 (95.5)	600 (1.6)	0.36 (0.26 – 0.48)	0.000
No	1,034 (2.8)	49 (0.1)	1.00	Reference
Do continuing education actions meet the demands and needs of the team?				
Yes	35,371 (97.5)	587 (1.6)	1.00	Reference
No	297 (0.8)	13 (0.0)	2.63 (1.50 – 4.62)	
Does the team monitor and analyze health indicators and information?				
Yes	32,375 (86.7)	468 (1.3)	1.00	Reference
No	4,327 (11.6)	180 (0.5)	2.87 (2.41 – 3.42)	0.000
There is a lack of training.				
Yes	2,553 (6.9)	37 (0.1)	1.20 (0.86 – 1.67)	0.160
No	33,948 (91.4)	591 (1.6)	1.00	Reference

*95% CI: 95% confidence interval; OR: odds ratio- crude value.

Source: Authors, 2023.

Of the proximal level variables related to the care dimension included in the bivariate analysis, those significantly affecting the study outcome were support from other professionals in the care network in resolving complex cases, support from the Nasf-AB, health action planning activities, available human resources, and safety in providing care to pregnant women (Table 3).

Table 3 – Bivariate analysis of the association between the variables related to the proximal level of care by aggregating aspects from the PMAQ-AB and the prenatal visit. Brazil, 2017

	Conducts prenatal consultations			
Variables	**Yes n (%) 36.702 (96,9)**	**No n (%) 1,192 (3.1)**	**OR $_{crude}$ CI(95%)***	**p-value**
Does the team receive support from other professionals when solving complex cases?				
Yes	35,923 (96.2)	624 (1.7)	1.00	Reference
No	779 (2.1)	24 (0.1)	1.77 (1.17 – 2.68)	0.008
Is there NASF-AB support?				
Yes	26,887 (73.6)	326 (0.8)	1.00	Reference
No	9,036 (24.7)	298 (0.8)	2.70 (2.32 – 3.18)	0.000
Does the team carry out any activities to plan its actions?				
Yes	35,478 (95.0)	549 (1.5)	1.00	Reference
No	1,224 (3.3)	99 (0.3)	5.22 (4.18 – 6.52)	0.000
Is there inadequate infrastructure?				
Yes	7,785 (21.0)	140 (0.4)	1.00	Reference
No	29,716 (77.3)	488 (1.3)	0.94 (0.78 – 1.14)	0.296
Is there a shortage of materials?				
Yes	7.961 (21.4)	138 (0.4)	1.00	Reference
No	28,540 (76.9)	490 (1.3)	0.99 (0.81 – 1.19)	0.480
Is there a lack of protocols?				
Yes	4,539 (12.2)	81 (0.2)	1.00	Reference
No	31,962 (86.1)	547 (1.5)	0.95 (0.75 – 1.21)	0.387

Is there a shortage of professionals (human resources)?				
Yes	2,406 (6.5)	52 (0.1)	1.00	Reference
No	34,095 (91.8)	576 (1.6)	0.78 (0.58 – 1.04)	0.054
Is there a lack of demand for the service?				
Yes	5,295 (14.3)	91 (0.2)	1.00	Reference
No	31,206 (84.0)	537 (1.4)	1.00 (0.80 – 1.25)	0.518
Is there a work overload?				
Yes	1,865 (5.0)	29 (0.1)	1.11 (0.76 – 1.61)	0.321
No	34,636 (93.3)	599 (1.6)	1.00	Reference
Are there any restrictive measures from the profession's supervisory board?				
Yes	1,092 (2.9)	22 (0.1)	0.84 (0.55 – 1.30)	0.265
No	35,409 (95.4)	606 (1.6)	1.00	Reference
Is there a lack of security when providing care to pregnant women?				
Yes	1,.622 (4.4)	35 (0.1)	0.78 (0.55 – 1.11)	0.104
No	34,978 (93.9)	593 (1.6)	1.00	Reference

*95% CI: 95% confidence interval; OR: odds ratio- crude value.

Source: Authors, 2023.

Table 4 shows the hierarchical multiple analysis models by aggregating aspects from the PMAQ-AB and prenatal care. Model A, referring to the distal-level variables, and Model B, referring to the proximal-level variables, include all the statistically significant variables in the multiple analysis.

The multiple analysis showed that factors such as the absence of an institutionalized communication flow with the specialist team, as well as contact between specialists and PHC professionals about pregnant women, the absence of defined flows for childbirth/maternity, the absence of a regulation center available for referrals to other points of care, the lack of monitoring and analysis of health indicators and information, and the absence of capacity building/training were more likely to cause teams not to carry out prenatal consultations. It should be noted that the lack of planning of the team's actions was 2.95 times more likely not to provide care to pregnant women (OR 2.95, 95% CI 2.67 - 3.26) (Table 4).

On the other hand, factors such as continuing education, sufficient professionals/human resources, and safety in providing care to pregnant women functioned as favorable factors in providing prenatal care (Table 4).

Table 4 – Hierarchical multiple logistic regression analysis aggregates aspects from the PMAQ-AB and prenatal care. Brazil, 2017

Variables	**Model A***		**Model B****	**p-value**
	Adjusted OR(95%CI)***	**p-value**	**Adjusted OR(95%CI)**	
Lack of institutionalized communication flow with the specialist team.	1.18 (1.07 – 1.30)	0.001	1.10 (1.00 – 1.20)	0.034
Lack of contact between specialists and primary care professionals about pregnant women.	1.15 (107- 1.23)	0.000	1.08 (1.01 – 116)	0.025
Lack of defined delivery/maternity flows.	1.83 (1.64 – 2.05)	0.000	1.83 (1.64 – 2.05)	0.000
No central regulation center available for referrals to other points of care.	1.16 (1.03 – 1.31)	0.011	1.15 (1.02 – 1.30)	0.019

Continuing education.	0.54 (0.47 – 0.62)	0.000	0.66 (0.58 – 0.76)	0.000
Continuing educational actions meet the demands and needs of the team.	1.69 (1.34 – 2.14)	0.000	0.41 (0.12 – 1.79)	0.304
Failure to monitor and analyze health. Indicators and information.	2.28 (2.12 – 2.46)	0.000	1.75 (1.62 – 1.90)	0.000
Lack of training.	1.15 (1.01 – 1.30)	0.030	1.45 (1.25 – 1.68)	0.000
Lack of NASF-AB support.	-	-	2.16 (2.03 – 2.30)	0.000
Lack of action planning by the AB team.	-	-	2.95 (2.67 – 3.26)	0.000
Enough professionals/human resources.	-	-	0.78 (0.69 – 0.88)	0.000
Safety in providing care to pregnant women.	-	-	0.70 (0.60 – 0.82)	0.000

* Model of the variables related to the distal level in the management dimension.

** Model of the variables related to the proximal level of the care dimension adjusted by the distal level variables.

***IC95%: 95% confidence interval; OR: odds ratio – adjusted value.

Source: Authors, 2023.

DISCUSSION

This study demonstrated essential factors in the work process of PHC health teams, both in terms of management and care and whether prenatal consultations are carried out in the country. In Brazil, most studies related to prenatal care have focused their analysis on classic user evaluation criteria [2,6,18].

The use of PMAQ-AB data has strengthened the evaluation process in the SUS and revealed, considering Donabedian's[13] approach, the management conditions and organization of the work process of health unit professionals and the development of health actions within the scope of PHC[14]. From a theoretical and methodological point of view, PMAQ-AB has broadened the scope of analysis of PNC in the country with the availability of indicators and information that cover issues of access to maternal care outcomes.

Despite the high coverage of PNC and its institutionalization many years ago in standards and protocols in Brazil, problems of various managerial natures and working conditions persist, potentially damaging maternal and child health[2,6].

It is worth noting that the difficulty in developing management actions in health units and managing policies at the municipal level are challenges for improving PNC throughout the country. As for the management conditions that have the potential to support care actions, this study identified difficulties in planning and organizing flows in the network for monitoring pregnant women, a lack of regulation, and a deficit in the use of indicators, monitoring, and analysis of data that support activities related to PNC.

Furthermore, this study corroborates the results found in another evaluation of prenatal care at a national level[7] regarding the inadequacy of the (infrastructure) structure of basic units for maternal care, which affected approximately 43% of the units surveyed in the study. This is pointed out as a barrier to the quality of PHC in local scenarios in country[19].

In addition to the managerial dimension, investigating the determinants of why professionals in the teams do not carry out prenatal consultations can have a negative influence on the longitudinally of care, on the team's relationships with the populations they assist, on pregnant women's adherence to prenatal care, and, consequently, on the inefficiency of PHC[20]. The principle of continuous care implies trust between user and professional, as it implies trust between user and professional. This

attribute of PHC is of great importance in prenatal care so that there is continuity of care for pregnant women, ensuring the bond between women and health professionals to achieve a good progression of pregnancy and the well-being of pregnant women[21]. It is, therefore, essential to guarantee the availability of consultations and the monitoring of pregnancy progress for all pregnant women in all units across the country.

Studies have assessed the quality of prenatal care and identified weaknesses in care when teams do not have matrix support from other professionals and/or other points in the healthcare network. They have also identified a lack of planning and organization of the work process, well-defined flows, and guidelines.[18,22,23]

This study's lack of support meant that PHC team professionals were twice as likely not to conduct prenatal consultations. Matrix support has helped to improve the quality of PHC in Brazil, and important levels of matrix support corresponded to high chances of teams obtaining better certification in women's care by the PMAQ-AB[24].

The idea that characterizes matrix support is linked to that of the reference team – a discussion presented by Campos (1999)[25] – and is a different operating mode from the traditional one, in which "specialized" professionals are responsible for providing pedagogical support to the professionals in the generalist PHC teams[25]. The results of the NASF-AB work process represented a fascinating evolution in the work of PHC teams in terms of collaborative action[26].

However, the change in the National Primary Care Policy on September 21, 2017, in the organization and funding for the Nuclei led to their extinction in many places, not guaranteeing that the logic of matrix support would remain, even in the territories in which the "support" multi-professional teams persist[27].

Other factors, such as the lack of care flows, available central regulation, and monitoring and analysis of health information indicators, were also crucial in the PHC teams' failure to conduct prenatal consultations. These aspects are essential for establishing the basis for the referral system for the country's pregnant women, which leads to discontinuity and fragmentation of care[28]. This implies the need to continue discussing the attributes of PHC in terms of the coordination of care (in this case, the lack of it).

The definition of care coordination was primarily inspired by the conceptual model that accurately illustrates the meaning attributed to care coordination: *anything that bridges gaps*. In this sense, coordination means establishing connections to meet users' needs and preferences in providing quality care. In PHC, the absence of roles and flows aggravates this disarticulation of care and assistance, implying the quality of regulation processes, including the insufficient supply of specialized care in the SUS[29].

The network fragmentation, lack of flow definition, and disruption of health services make it even more difficult for the PNC to perform its role as the preferred point of entry for the care of pregnant women. Each point of care in the network must be appropriately structured so that the work process can be organized and at least one line of care is followed for the demands of pregnant women.

Despite the guidelines for achieving comprehensive prenatal care (PNC), such as the Stork Network and the Prenatal and Birth Humanization Policy (PHPN), it is necessary to rethink how these policies are implemented and to rethink prenatal care models based on the uniqueness of each woman, family, and territory[30].

In this context, the organization of the work process is linked to the quality of prenatal care to guarantee the sustainability of actions and the agility of the maternal care flow (management dimension *vs*. care dimension). Even though most of the teams interviewed said they had well-defined

care protocols and flows within the care network, the need to guarantee and provide comprehensive and resolutive care for all pregnant women in the country is reinforced.

The regulation of pregnant women's care is the responsibility of managers, permeated by public, private, and individual motivations and interests. However, it impacts the work process of the PHC team. Therefore, managers should provide spaces for dialogue and joint planning between professionals in the service network and the regulation centers, with a view to systemic integration and defragmentation of the care flow.

On the other hand, factors such as continuing education, safety in providing care to pregnant women, and enough professionals/human resources reinforced the prenatal care provided by the PHC teams in this study. Therefore, this is a significant health care initiative (including prenatal care) and should be instituted regularly in institutions.

Investing in health professionals' qualifications strengthens their capacity for planning, collective, and collaborative work. It also enhances cognitive tools such as welcoming, guaranteeing agile flow, and coordination between the different points of health care, which are fundamental for conducting prenatal consultations. In addition, enough professionals in the team's enhance these tools' use, favoring the professionals' work process and guaranteeing comprehensive and coordinated care for pregnant women [26].

It highlights the critical role that primary care (PC) teams play in caring for and monitoring pregnant women in Brazil and their direct relationship with better morbidity and mortality indicators.

CONCLUSION

The work process of the PHC teams in prenatal care was associated with both management and care factors. The percentage of teams identified in this study with resources and strategies available to conduct prenatal care in the units was quite significant. However, ensuring that all pregnant women in the country have access to prenatal care and monitor their pregnancy progress is essential.

Factors such as continuing education, safety in providing care to pregnant women, and sufficient professionals/human resources functioned as factors within the care dimension that favor and reinforce the provision of prenatal care by health teams. On the other hand, factors in the management dimension such as the absence of an institutionalized communication flow with the specialist team, the lack of contact between specialists and PHC professionals about pregnant women, the absence of defined flows for delivery/maternity, the absence of a central regulation system available for referrals to other points of care, among others, were factors that contributed to the teams analyzed not carrying out the consultation for pregnant women.

The PMAQ-AB proved to be a valuable tool for evaluating most of the items relating to health professionals' work process in Brazil's primary care teams. This instrument was developed to assess Primary Care (AB, in Portuguese) and not exclusively evaluate prenatal care. It was possible to extract extensive elements relating to management and organization to analyze prenatal care. However, the evaluation through the PMAQ-AB is carried out because of adherence by the teams, i.e., it does not represent all of them. It may have a selection bias because more responses were concentrated in some regions than others, which may be a study limitation.

The innovative nature of the work process analysis using PMAQ-AB indicators concerning maternal health stands out for identifying positive and negative factors in management conditions and the organization (or lack of) of teams in planning care that allows users to follow a therapeutic path or flow of care, supported by a line of care and guaranteeing quality access. It thus provides input for rethinking work processes and strengthening the integration of the care network based on initiatives between managers, regulation centers, and health teams.

Based on subsequent external evaluations of the PMAQ-AB, other studies should be conducted to assess the quality of care provided to pregnant women in the country and observe adjustments over time.

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