

ORIGINAL ARTICLE

Pre-Natal Monitoring in the Primary Attention of the Brazilian Unified Health System

Suzely Adas Saliba Moimaz¹, Léa Lofego Garcia², Nemre Adas Saliba³, Tânia Adas Saliba⁴

Department of Child and Social Dentistry, State University of São Paulo, Araçatuba, SP, Brazil. 00000-0002-4949-529X
Post-Graduate Program, Preventive and Social Dentistry, State University of São Paulo, Araçatuba, SP, Brazil.

D0000-0003-0083-3216

³Department of Child and Social Dentistry, State University of São Paulo, Araçatuba, SP, Brazil. 00000-0001-9608-1631

⁴Post-Graduate Program, Preventive and Social Dentistry, State University of São Paulo, Araçatuba, SP, Brazil.

D0000-0003-1397-9913

Author to whom correspondence should be addressed: Suzely Adas Saliba Moimaz, Department of Child and Social Dentistry, State University of São Paulo, Rua José Bonifácio, nº 1193, Vila Mendonça, Araçatuba, SP, Brazil. Phone: +55 18 3636-3249. E-mail: sasaliba@foa.unesp.br.

Academic Editors: Alessandro Leite Cavalcanti and Wilton Wilney Nascimento Padilha

Received: 19 July 2018 / Accepted: 28 November 2018 / Published: 10 December 2018

Abstract

Objective: To analyze prenatal care in the primary care of the Brazilian Unified Health System. Material and Methods: This is a survey cross sectional research with inquiry-type quantitativequalitative approach. Data collection was performed in 28 cities of the São Paulo state, through on- site observations and interviews with health secretaries, coordinators of primary and oral health care. The following variables were analyzed: Primary health care services for pregnant woman as educational activities, presence of care and referral protocol and the organization of oral health care. Content analysis was performed for the answers of the open questions and the quantitative treatment of the discursive data was obtained through the categorial analysis. For the answers of the closed questions a descriptive analysis was performed. Results: The total number of participants interviewed was 84 managers. It was observed that 78.6 %% of cities carried out educational activities; 42.9% do not have an active care protocol and 57.1% do not have formal referral guidelines to high-risk pregnancies. The rapid tests for HIV, Syphilis, Hepatitis B and C were confirmed by 53.6% of managers and only 39.3% reported evaluating the vaccine situation. As to dental care, 71.4% of the municipalities do not have an established guideline; 46.4% reported that access occurs through spontaneous demand; 32.1% do not consider pregnant woman a priority care group and 67.9% have instituted prenatal dental care. Conclusion: Prenatal care has guaranteed educational activities, but it has deficiencies related to the work process and to the management of services, due, for the most part, to the inexistence of assistance and organizational protocols.

Keywords: Delivery of Health Care; Primary Health Care; Patient Care; Prenatal Care.



Introduction

Prenatal care has the objective of ensuring the development of gestation, allowing the delivery of a healthy newborn, with no impact on maternal health, including addressing psychosocial aspects and the educational and preventive activities [1].

In 2000, the Brazilian Ministry of Health established the Prenatal and Birth Humanization Program (PHPN) [2] to promote the articulation of health services during childbirth and prenatal care, normalizing health actions [2,3]. In 2011, through the Administrative Rule 1459, the Rede Cegonha (Stork Network) was instituted with the aim of providing women with humanized care for pregnancy, childbirth and the puerperium through the guarantee of access to quality prenatal care, reception with evaluation and classification of risk and vulnerability, of the binding of pregnant woman to the reference unit, of the safe transport and the security in the attention to the childbirth [4].

Primary care is the main gateway for the monitoring of pregnant woman in the Brazilian Unified Health System (SUS). At this level of attention, health workers are responsible for absorbing all spontaneous and programmed demand, for which they must offer a wide variety of actions such as: active search in the territory, diagnosis, pregnancy risk classification, complementary tests, dental care, immunization, educational activities, nutritional status assessment and gestational weight gain, blood pressure control, attention to psycho-affective aspects and common complaints in pregnancy, access to high-risk prenatal care, as needed, as well as many others services.

This high number of actions that integrate prenatal care has a direct influence on maternal and infant morbidity and mortality indicators. In this context, conducting research in services is fundamental for understanding situational reality and directing intervention strategies for the health care effectiveness.

The contributions of the literature [5-9] regarding the pregnant women monitoring in primary care reinforce the need for evidence-based health planning. In a study carried out with pregnant women, it was observed that only 15% of respondents received adequate prenatal care, considering all recommended actions nationally [5].

Low prenatal care adequacy rates in Brazil from 2005 to 2015, varying from 4.5% to 66.1% in several regions of the country, were also observed in the literature review, for reasons ranging from the failure to carry out the ideal consultation number and the early start of dental care, mainly to the lack of promotion of the quantitative and qualitative content recommended for these consultations [6].

In a study carried out to compare the quality of prenatal care to the recommendations of the Humanization Program in Prenatal and Birth, it was observed that the care offered to SUS pregnant women proved to be inadequate with late start of pregnant women in the program, insufficient number of consultations, poor coverage of the standardized tests and few guidelines [7], including reference maternity for childbirth; pilgrimage in the antepartum; lack of prioritization of pregnant





women at greater risk and problems in articulation with other maternal and child health services [8].

From the point of view of the professionals working in the Family Health Strategy teams, it was identified the need to qualify the work processes in prenatal care in order to avoid fragmented practices that cause distancing between services/professional and pregnant women [9].

Considering the objectives of the Stork Network and the historical and scientific context of pregnant women health care, the purpose of this study was to analyze prenatal care in primary care of Brazilian Unified Health System.

Material and Methods

Study Area

The research was carried out in 28 municipalities in the western region of the state of São Paulo, Brazil.

Study Design and Population

It is a cross-sectional research, with quantitative-qualitative approach, type inquiry. The population of this study was composed of local health secretaries, primary care coordinators and municipal oral health coordinators. If there was no primary care coordinator, the professionals responsible for the service were interviewed. As inclusion criterion, cities included in the Regional Interagency Commissions (CIR), Consortia and Central of the Regional Health Secretariat (DRS II) were considered.

Pilot Study

A pilot study was carried out in a non-integrating city according to the inclusion criterion of the research. The interview form was revised and adjusted, and one more variable was added to the study, identified during the interviewee's discursive report. The results of the pilot study were not considered for analysis in this work.

Data Collection

Data collection was performed through on-site interviews using a semi-structured form composed of open and closed questions. The following variables were investigated: existence of an educational program; conducting an active search and home visit; existence of care protocol and referral; conducting risk screening for social factors and lifestyle; 1st prenatal dental consultation; inclusion of pregnant woman in the priority group of care in oral health and existence of a dental care guideline to pregnant woman. For these variables the response options were considered: yes, no and I do not know. The time of performance in the function was verified and had the following options: Less than 6 months, 6 months to 2 years, 2 to 4 years and more than 4 years. The discursive issues included: health care organization for pregnant women; educational program effectiveness,





professional categories that carry out home visit to puerperal and pregnant woman; social and lifestyle factors considered during risk assessment, criteria adopted for high-risk prenatal referral and access to oral health care.

Statistical Analysis

Content analysis was performed for the answers of the open questions, through systematic procedures and objective description [10] of the messages. The qualitative responses were transcribed according to the interviewee's speech and then analyzed carefully for the identification of the contents. The elements were then classified into separate categories to which the common contents were grouped.

The quantitative treatment of the discursive data was obtained through the categorical analysis, calculating frequencies of certain characteristics previously grouped in significant categories [11].

The managers' answers to the open question related to the health care organization of the pregnant woman revealed several dimensions, for which specific categories were verified and descriptive statistics were performed according to the number of municipalities for the categories observed. A descriptive analysis was performed for the answers of the closed questions.

Ethical Aspects

This research was approved by the Research Ethics Committee of the School of Dentistry of Araçatuba - (FOA - UNESP), according to the Opinion Constituted no. 1,914,629.

Results

In this research on the primary health care of pregnant women, 84 managers were interviewed: 28 local health secretaries, 28 primary care coordinators and 28 municipal oral health coordinators. Of the total number of municipal health secretaries participating, 57.1% worked for less than 6 months, 3.6% worked between 6 months and 2 years, and 39.3% for more than 4 years. Among the primary care coordinators, 21.4% performed the job less than 6 months ago, 7.1% between 6 months and 2 years, 3.6% between 2 and 4 years, and 67.8% worked for more than 4 years. Regarding oral health coordinators, 42.8% performed the function for less than 6 months, 14.3% between 2 and 4 years, and 42.8% were in the coordination for more than 4 years.

According to the respondents, educational programs were observed in 78.6% (n = 22) of the municipalities. In other cases, there were occasional actions, such as discussion groups and lectures.

The consolidation of the data declared by the local managers on the accomplishment of home visit, risk screening for social factors and lifestyle, existence of care protocol and referral and guarantee of sanitary transport are presented in Table 1.

According to the informants, home visits to postpartum women and pregnant women are carried out in almost all municipalities (n = 27) and the nurse is the professional who most



frequently performs this activity. The community health agent (ACS), the auxiliary or nursing technician and doctors were mentioned, respectively by 85.2% (n=23), 66,7% (n=18) e 63,0% (n=17) of the managers.

Table 1. Percentage of municipalities (n = 28), according to the performance of basic care actions informed by local health managers.

Variables	Yes	No	Total
	%	%	%
Conducting a Home Visit	96.4	3.6	100.0
Risk Screening for Social Factors and Lifestyle	96.4	3.6	100.0
Service Protocol Implemented	57.1	42.9	100.0
Routing Criteria for Medium and High Complexity	42.9	57.1	100.0
Health Transport Guarantee	96.4	3.6	100.0

Information obtained on the risk screening carried out in the cities is described in Table 2.

Table 2. Absolute number and percentages of municipalities (n = 28), according to factors related to lifestyle and social risk considered by managers for risk screeni

factors related to mestyle and social risk, considered by managers for risk screening.			
Factor	N	%	
Alcohol	22	81.5	
Drugs	22	81.5	
Tobacco	06	22.2	
Low Income	26	96.3	
Violence	21	77.7	
De-structured families	01	3.7	

Based on the reports of the managers about the municipal organization of health care of the pregnant woman, three dimensions were identified: access, pregnancy test and activities performed during prenatal care. In the access dimension the categories were: free demand and active search. Regarding the pregnancy test modality, the following groups were observed: rapid test, beta HCG and rapid test and / or beta HCG. For the Activities carried out during the prenatal follow-up, the following categories were detected: vaccination status, risk classification, rapid tests for HIV, Syphilis and Hepatitis B and C, request for laboratory tests and ultrasound; periodicity of medical follow-up consultations, multiprofessional follow-up for pregnant women in situations of social vulnerability and referral. The categories identified were quantified and are shown in Table 3.

Table 3. Absolute number and percentage of municipalities (n = 28), according to the dimensions and

categories verified in the statements of the local managers.

Dimensions	Categories		N	%
Access	Free Demand		28	100.0
Access	Active Search		24	85.7
	Pregnancy Rapid Test		13	46.4
Pregnancy Tests	Beta HCG		6	21.4
	Quick Test and / or Beta HCG		9	32.1
	Vaccine Situation		11	39.3
	Risk Rating		27	96.4
	Quick Tests for HIV, Syphilis and Hepatitis B and C		15	53.6
	Request for Laboratory Tests and Ultrasound	Nurse	9	32.1
		Doctor	19	67.9



ĸ.	7	_	3	۰.

Activities Performed During Prenatal Care	Periodical Medical Consultations	Monthly Monthly and then Biweekly Monthly, Biweekly and Weekly	16 4 8	57.1 14.3 28.6
	Multi-Professional Follow-Up for Pregnan Vulnerability	t Women in Situation of Social	2	7.1
	Referring	Nutrition Oral Health	1 19	3.6 67.9

Below are transcribed portions of the managers' responses for each observed dimension.

Access

- "[...] The woman arrives at the Basic Health Unit with suspected pregnancy ..."
- "[...] The municipality intensifies the active search and managed to fulfill almost 100% of 7 consultations or more prenatal ..."
- "[...] Community Health Agents conduct a home visit, when there is a report of menstrual delay, women are advised to seek the Basic Health Unit ..."
- "[...] The woman arrives with suspicion ..."

Pregnancy Test

- "[...] The woman undergoes medical consultation, on suspicion she refers to a gynecologist requesting a laboratory examination and a rapid pregnancy test ..."
- "[...] With the suspicion is done the rapid test, if positive is performed nursing consultation ..."
- "[...] The woman arrives with suspicion and is asked Beta HCG, if positive, is started the prenatal ..."

Activities Performed During Prenatal Care

- "[...] In the first consultation with the nurse is made rapid test for detection of HIV, Syphilis and Hepatitis B and C, evaluation of the vaccination card, request for laboratory exams and ultrasound and risk classification. When the exams are ready the first consultation with the doctor is carried out. The consultations are interspersed one with the doctor and another with the nurse. Monthly consultation up to 27 weeks, then biweekly consultations up to 36 weekly and from 37 up to 40 weeks, consultations are weekly (more than 40 weeks every 3 days) ..."
- "[...] The woman with delayed step in the doctor who requests the rapid test, if positive, is done scheduling with the gynecologist doctor and in the educational group. At the first medical appointment all laboratory exams, ultrasound, HIV rapid test, syphilis, hepatitis B and C are requested. The first nursing consultation is carried out, where the risk classification is made, referral to the appointment with the dentist and evaluation of the vaccinal situation. Monthly the pregnant woman has medical consultation, at the end of the pregnancy is biweekly and weekly. Among the medical appointments, the pregnant woman undergoes a nursing consultation."
- "[...] The woman with suspicion arrives at the Basic Health Unit of the competent area and a rapid urine test is performed by the nurse, if positive the first nursing consultation is carried out with request for blood tests, ultrasound, of risk, calculated body mass index, if elevated the pregnant woman is referred to nutritionist, carried out to dental area, rapid test for HIV detection, Syphilis and Hepatitis B, evaluation of the vaccination situation and scheduling of the first medical appointment. Up to 30 weeks is scheduled monthly, then is fortnightly and from the 34th is weekly."
- "[...] In the medical consultation are requested the rapid test for detection of HIV, Syphilis, Hepatitis B and C, laboratory tests and ultrasound. The pregnant woman passes monthly by the doctor and if necessary, other consultations are carried out. The municipality uses rabbit scale to classify family risk of vulnerability that will determine care in a general way. The municipality guarantees multiprofessional care for the pregnant woman and the family."





It was also observed that most (n = 16) cities did not have a referral protocol for high-risk pregnancy, adopting as a criterion the medical evaluation (n = 11), Protocols for Basic Care of Women's Health provided by the Health Ministry (n = 6) and guidelines to high risk prenatal reference service (n = 3).

Of the total number of municipalities (n = 12) with established referral protocols, 75.0% (n = 12) 9) were established through joint ventures among a multi-professional team in the city, 66.7% (n = 8) with the Protocol of the Ministry of Health and one used the Line of Care for Pregnant Woman of the state of São Paulo as a theoretical basis .The protocols were registered and recognized by the health team in 58.3% (n = 7) of the cities. Only one municipality had the prenatal care protocol approved in the City Health Council.

Specifically regarding the access of the pregnant woman to oral health care, 2 categories were identified in the responses of the local managers, being: referral by the health team (67.9%) and spontaneous demand (46.4%). The following are excerpts from the managers' reports according to the categories identified.

Forwarding

"[...] The gynecologist, the nurse and the Community Health Agents advise pregnant women to schedule a dental appointment ..."

"[...] The pregnant woman at the first medical or nursing consultation is referred to dental care ..."

Spontaneous Demand

"[...] The access of the pregnant woman to the dental care is done by free demand. The active search for dental care is established in the nursing protocol, but it is not happening. The service is not being monitored, it is not standardized in the municipality ..."

"[...] Assistance to the pregnant woman is guaranteed and is performed immediately through the search ..."

Further information on dental prenatal care can be found in Table 4.

Table 4. Absolute number and percentages of municipalities (n = 28), according to the performance of oral health actions to pregnant women reported by local managers.

performance of oral nearth actions to pregnant women reports	ca by local in	idilagers.
Variables	N	%
First Prenatal Dental Appointment	21	75.0
Inclusion of the Pregnant Woman in a Priority Care Group	19	67.9
Protocol of Dental Care to Pregnant Women	8	28.6

Discussion

In this research on the organization of primary care in prenatal care, it was highlighted, as the main and relevant disability, the low standardization of care and organizational behaviors instituted in the municipalities.

The Ministry of Health of Brazil (MS) and the State Department of Health of São Paulo (SES/SP) implemented programs and public policies aimed at pregnant women's health [1,2,4,12] the establishment of internal routines in the basic health units addressing actions of promotion,





prevention, cure and rehabilitation of diseases and diseases, based on knowledge of the living conditions and health of the population. The pregnant woman's municipal care line should be continually improved and have a schedule of activities based on local reality and indicators that demonstrate the performance of the service.

It can be observed from the findings in this study that there is a great way to go to reach the national and state prerogatives, since the deficit in the standardization of conduits in a high number of municipalities.

The lack of care protocols allows the adoption of different therapeutic options by professionals from the same team, as well as reducing the rigor in the execution of actions relevant to maternal and child health, situations that may compromise the effectiveness of prenatal care and the patient with the health team.

The establishment of protocols allows the reorganization of the work process, favoring that it has as a central focus a multiprofessional team [13]. The interdisciplinarity allows the exchange of knowledge, enrichment of the professionals, allowing a broader view of the patient for whom it is possible to offer a more qualified and effective assistance [14].

The multiprofessional work in the monitoring of the pregnant woman includes norms about active search procedure; home visits; Health education; reception of the pregnant woman and her relatives, reception and registration; call for patients; dispensing of medicines; provision of reports and medical certificates; verification of physical data; routine of the consultations and the request of examinations, as well as the action in urgent cases, considering the preliminary assistance and the activation of the removal service [12].

Next, the managers' responses about the municipal organization for the health care of the pregnant woman suggest shortages and divergences of actions between the municipalities and the current regulations $\lceil 1, 2, 4, 12 \rceil$.

"[...] The woman with suspicion arrives at the Basic Health Unit of the competent area and a rapid urine test is performed by the nurse. If the result is positive, the first nursing consultation with blood tests, ultrasound, prescription of folic acid, educational guidance, completion of prenatal SIS, body mass index, forwarded to nutritionist. The nurse performs referral to the dental area, directing the appointment of a dental consultant, makes a rapid test for HIV, syphilis, hepatitis B, referral to the vaccine room, referral to the educational group and scheduling of the first medical visit..."

"\"\"...\" The woman with the menstrual delay looks for the Basic Health Unit and passes with the gynecologist who requests the Beta HCG, if positive, returns with the doctor who starts prenatal care by requesting laboratory tests and ultrasound..."

"\(\tilde{\cupsilon} \). On suspicion, the woman undergoes consultation with the Family Health Strategy doctor who requests the Beta HCG, if positive, is scheduled to the gynecologist requesting the exams and ultrasound. In this first consultation with the gynecologist are requested the rapid tests of some Sexually Transmitted Diseases (DST) that are performed by the nurse..."



"[...] Prenatal care is centralized in a single Health Unit. The woman arrives with the suspicion of pregnancy in any of the Basic Health Units and is referred to the Municipal Health House that is the reference to make the diagnosis, if positive, at the same time the prenatal care is scheduled (first consultation with the doctor). Prenatal care is performed only by a medical professional and dentist. There are no Family Health Strategy team implanted and there are Community Health Agents. At the first consultation are requested by the doctor prenatal examinations. The examinations of some Sexually Transmitted Diseases are performed in the health center and the others are collected and analyzed in the SUS laboratory. The municipality does not perform any rapid tests, nor the one of pregnancy..."

"[...] The woman arrives with the suspicion of another municipality or the Community Health Agent. Confirmed the gestation by rapid test or laboratory is initiated prenatal with doctor and nurse. It is made rapid test of HIV, Syphilis and Viral Hepatitis, registration in the SIS-prenatal, evaluation of the vaccination situation. In the course of gestation, the doctor prescribes the necessary vaccines. The educational group is open to all pregnant women, however those who participate are, in the great majority, low income..."

The structural, social and economic differences in the Brazilian regions are reflected in the health services, but essential actions such as rapid tests, active search, multiprofessional care and usual prenatal care at the Health Units should be guaranteed. The establishment of a minimum program of actions ensures access, bonding and continuity of care, and should be permanently inserted in the agenda of the health unit.

Health care must take into account the spontaneous demand for urgency and emergency, but the program agenda should be increasingly emphasized as a key resource for optimizing time, prioritizing and scheduling care based on health needs analysis [15].

Maternal mortality is unacceptably high. About 830 women die every day from complications related to pregnancy or childbirth worldwide and most of them could have been avoided [16]. In Brazil, 92% of maternal deaths are due to preventable causes and occur mainly due to hypertension, hemorrhage or infections [17].

Factors related to maternal mortality can be reduced through appropriate prenatal care, early identification of complications (secondary prevention), or avoidance of complications to severe life-threatening (tertiary-prevention) situations. It is necessary to strengthen the use of existing human and material resources to better address maternal mortality [12].

Group educational activities are potentially effective measures to improve care for pregnant women, as it is often in these spaces where doubts and experiences are shared that are not normally discussed in formal consultations, in doctors', nurses' or dentists' offices [1]. In this regard, the results of this research reveal advances in the national guidelines proven by the high percentage of municipalities that develop popular education.

The realization of educational groups in primary health care is an important work tool foreseen in the National Policy of Basic Attention [18] and its consolidation translates the distancing of methodologies centered on the medical-assistance model. Strategies for continuing





education and improvement of the work process should be maintained and strengthened by health secretariats to overcome curative services [19].

In primary health care a set of individual, family and collective actions that involve promotion, prevention, protection, diagnosis, treatment, rehabilitation, harm reduction, palliative care and health surveillance [20] should be developed seeking to provide integral care, meanwhile, nothing that is discussed in the field of Brazilian health continues to be more current than the challenge facing present and future generations: to make concrete, in the everyday life of citizens, the principles that motivated the Sanitary Reform and the Single System of Health [21].

In this study, deficiencies in the execution of basic actions and essences such as gestational risk classification, evaluation of the vaccination situation, rapid pregnancy test, rapid tests for HIV detection, syphilis and viral hepatitis, and prenatal dentistry were identified, to the integral health care of the pregnant woman, corroborating previous study [21].

The assessment and classification of gestational risk is a strategy to establish the prenatal therapeutic action plan, including the regularity of returns and its level of complexity [12], based on potential risk conditions ranging from personal, demographic characteristics, obstetric antecedents to clinical complications concomitant to pregnancy and diagnosed pregnancy complications.

The Ministry of Health recommends for the evaluation of the pregnant woman, the verification of the presence of symptoms and complaints; reproductive planning; family and social network; living conditions, working conditions and environmental exposures; physical activity; nutritional history; smoking and exposure to cigarette smoke; alcohol and other psychoactive substances (licit and illicit); clinical, gynecological and breastfeeding history; sexual health; immunization; oral health and family history [22].

In this study, the evaluation of social factors and lifestyle of pregnant women presented weaknesses, specifically smoking and the family and social network were little considered for the achievement of the risk classification. Other relevant aspects such as violence, alcohol and other drugs are not verified by all municipalities, in addition to other factors not mentioned by any municipality and should be considered during the gestational risk assessment.

A study carried out in the Netherlands showed similarly that non-medical risk factors remain poorly evaluated in prenatal risk screening [23]. It is necessary to invest in policies of continuous and permanent education in order to qualify work routines through professional training.

In this study, the small percentage of managers who affirmed that the vaccination situation was evaluated during the gestational period is a worrying occurrence since immunization during pregnancy protects not only the mother but also the baby. Corroborating the findings in this study, data from the Brazilian Ministry of Health indicate a drop in vaccine coverage for this public. Adherence to the dTpa (diphtheria, tetanus and pertussis) vaccine, for example, exclusively for pregnant women was 38.5% in 2017, while the goal was to reach 95% of the target population. Other vaccines for pregnant women with below-expected coverage are dT (diphtheria and tetanus), which immunized 59% of women of childbearing age from 2013 to 2017; Hepatitis B, with 56% of women



protected in 2017; and influenza, with 79% of pregnant women vaccinated in the campaign last year [24].

During pregnancy, the mother-child binomial is susceptible to diseases that can be prevented by adherence to vaccination. Infection of diseases such as tetanus, pertussis, hepatitis B, diphtheria and influenza during pregnancy can lead to serious health problems and even death. The immunized pregnant woman transfers the antibodies obtained with the vaccination to the baby through the placenta and breast milk. In the first months of the child's life the immune system is still developing, this being a fundamental protection for the baby.

Another situation that deserves to be highlighted is the lack of use, by many municipalities, of the Rapid Pregnancy Test (TRG) to make the diagnosis. The TRG is one of the actions advocated by the Stork Network and aims to provide access to early detection of gestation, with reception of the primary care team and guidelines based on the unique needs of each user [25].

The immediate diagnosis makes it possible to initiate prenatal care at the time of the woman's search for the health service when there is suspicion, avoiding the loss of the pregnant woman and late follow-up.

The Prenatal, Childbirth and Puerperium Technical Manual recommends the health units to create a flow of agile care, seeking not to delay the diagnosis and offering early care for prenatal care and guidance. For the diagnosis, rapid urine pregnancy testing is an excellent choice. Its positive result is confirmatory and is not recommended to confirm with laboratory examination (serum β-HCG) [12]. In the sections below, it is possible to observe situations that may impair the early collection of the pregnant woman.

"[...] On suspicion, the woman undergoes consultation with the Family Health Strategy doctor who requests the Beta HCG, if positive, a scheduling is done with the gynecologist ..."

"[...] The municipality does not perform a rapid test, nor the pregnancy test"

In addition to performing the rapid pregnancy test, it is the responsibility of the primary care teams to perform rapid tests for HIV diagnosis and syphilis detection, as well as rapid tests for other diseases, in the context of prenatal care for pregnant women and their partners sexual relations [26]. Despite the current regulations, the results of this study show little adherence of the municipalities to this service and still reveal practices among the municipalities that impede access and promote the pilgrimage of pregnant women in health units, as can be seen below.

"\"...\] At the first medical appointment all laboratory exams, ultrasound, HIV rapid test, Sifilis, hepatitis B and C ..."

The State Health Department of São Paulo advises that ideally the pregnant woman should have an initial care in the health unit when the first nursing visit will be performed, the prenatal routine exams will be requested, and will be scheduled after the first visit doctor. The rapid test for HIV diagnosis and syphilis detection should be done at the first appointment and it is the nurse's assignment [12]. At the first prenatal medical visit, the results of the exams will be ready. recommended conduits as soon as possible.





Another situation observed was the lack of articulation between oral health and gestational care, highlighted by the high percentage of access to dental care through spontaneous demand and by the considerable number of municipalities that do not include pregnant women in priority care groups. Public guidelines regulate the care provided to the pregnant woman as a priority, taking care of it whenever necessary, be it for nutritional guidance, dental care, blood pressure monitoring or the presence of symptoms of the disease for those with a higher risk of preeclampsia, evaluation by complaint [12]. Additionally, a study points out that periodontal disease is a possible risk factor for low birth weight [27], evidences that reinforce the importance of programmed and prioritized access to oral health.

The problems related to dental care in pregnancy observed in this study confirm previous findings that point out faults in the access provided to families covered by the Family Health Strategy [28,29], noting that access does not occur as which is recommended in the doctrinal principles of the Brazilian Unified Health System.

Recently, the Ministry of Health developed a Plan of Action to address maternal and child mortality due to mortality rates. Six working guidelines were established, namely: Strengthening the implementation of Health Care Networks; Strengthening of Primary Care; Attention to Childbirth and Birth; Sexual Health and Reproductive Health; Health Surveillance: Health Information Systems / Communication and Continuing Education [30]. It should be emphasized that the situational diagnosis obtained in this study may lead to the adoption of intervention strategies to strengthen basic care and improve maternal and infant indicators.

Regarding the limitations of this study, we considered those that were inherent to the crosssectional study and the time of performance in the position by the research participants. The managers of the services took part in the study, many of them new entrants in the function and with different times of work in the position, situation resulting from the exchange of personnel in the management positions every 04 years in the municipal policy. The difference in the time of action can interfere in the organization and quality of health care.

Considering the situational diagnosis of prenatal care, it is necessary to adopt significant changes in the process of management and work of primary care in order to avoid damages to maternal and child health. As a proposal for intervention it is proposed to hold periodic workshops involving the multiprofessional team working in basic care, where care and organizational care protocols will be discussed and elaborated, based on national and state guidelines and locoregional reality. The joint elaboration allows adaptation according to the expanded view of the process, the need and installed capacity of the service.

Conclusion

Prenatal care in the primary care of the SUS has guaranteed educational activities for pregnant women, but presents deficiencies related to the work process and to the service



management, mostly due to the lack of assistance and organizational guidelines. It is necessary to increase the investment in continuous and permanent education programs directed to health professionals for the standardization of procedures and consequent service restructuring.

Financial Support: Brazilian National Council of Scientific and Technological Development (CNPq) (Process No. 166289 / 2017-5).

Conflict of Interest: The authors declare no conflicts of interest.

References

- Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Atenção $\lceil 1 \rceil$ ao pré-natal de baixo risco. Brasília: Ministério da Saúde; 2012. [In Portuguese]
- Brasil. Ministério da Saúde. Portaria GM/MS nº 569. Institui o Programa de Humanização no Pré-natal [2]e Nascimento, no âmbito do Sistema Único de Saúde. 2000. [In Portuguese]
- Serruya SJ, Cecatti JG, Lago TDGD. The Brazilian Ministry of Health's Program for Humanization of [3]Prenatal and Childbirth Care: Preliminary results. Cad Saúde Pública 2004; 20(5):1281-9. https://doi.org/10.1590/S0102-311X2004000500022
- Brasil. Ministério da Saúde. Portaria nº 1.459, de 24 de junho de 2011. Institui, no âmbito do Sistema [4]Único de Saúde - SUS - a Rede Cegonha. Diário Oficial da União 2011; jun 25. [In Portuguese]
- Tomasi E, Fernandes PAA, Fischer T, Siqueira FCV, Silveira DS, Thumé E, et al. Quality of prenatal [5]services in primary healthcare in Brazil: Indicators and social inequalities. Cad Saúde Pública 2017; 33(3):e00195815. https://doi.org/10.1590/0102-311x00195815
- Nunes JT, Gomes KRO, Rodrigues MTP, Mascarenhas MDM. Quality of prenatal care in Brazil: [6]Review of published papers from 2005 to 2015. Cad Saúde Coletiva 2016; 24(2):252-61. https://doi.org/10.1590/1414-462X201600020171
- Dantas DS, Mendes RB, Santos JMJ, Valença TS, Mahl C, Barreiro MSC. Quality of prenatal care in the [7]Unified Health System. Rev Enferm UFPE on line 2018; 12(5):1365-71. https://doi.org/10.5205/1981-8963-v12i5a230531p1365-1371-2018
- [8]Mendes RB, Santos JMJ, Prado DS, Gurgel RQ, Bezerra FD, Gurgel RQ. Evaluation of the quality of prenatal care based on the recommendations prenatal and birth humanization program. Cienc Saude Colet 2018; 0362/2018. Avalailable from: http://www.cienciaesaudecoletiva.com.br/artigos/avaliacaoda-qualidade-do-prenatal-a-partir-das-recomendacoes-do-programa-de-humanizacao-no-prenatal-enascimento/16895. [Accessed on November 11, 2018].
- Tomazettia BM, Hermesb L, Martelloc NV, Schmittd PM, Braze MM, Hoffmannf IC. The quality of [9]pre-natal assistance under a multiprofessional perspective. Ciência & Saúde 2018; 11(1):41-50. https://doi.org/10.15448/1983-652X.2018.1.27078
- Bardin L. Análise de Conteúdo. Trad.: Luís Augusto Pinheiro. São Paulo: Edições 70, 2016. [In Portuguese 7
- [11]Quivy R, Campenhoudt LV. Manual de Investigação em Ciências Sociais. Lisboa: Gradiva, 2005. [In
- [12] São Paulo. Secretaria da Saúde. Linha de Cuidado Gestante e Puérpera: Manual Técnico do Pré-Natal, Parto e Puerpério. São Paulo: SES/SP, 2018. [In Portuguese]
- [13] Rodrigues EM, Nascimento RG, Araújo A. Prenatal care protocol: Actions and the easy and difficult aspects dealt by Family Health Strategy nurses. Rev Esc Enferm USP 2011; 45(5):1041-7. https://doi.org/10.1590/S0080-62342011000500002
- Franco TB, Bueno WS, Merhy EE. "User embracement" and the working process in health: Betim's case, Minas Gerais, Brazil. Cad Saúde Pública 1999; 15(2):345-53. https://doi.org/10.1590/S0102-311X1999000200019
- [15] Melo LMLL, Moimaz SAS, Garbin CAS, Garbin AJI, Saliba NA. The construction of a shared management schedule to reorganise the oral health demand. Rev Ciênc Plural 2016; 2(1):42-55.
- [16] OPAS/OMS-Brasil. Folha Informativa: Mortalidade Materna. Brasília, 2018. [In Portuguese]



- [17] Brasil. Ministério da Saúde. Ministério da Saúde investe na redução da mortalidade materna. Available from: http://portalms.saude.gov.br/noticias/agencia-saude/43325-ministerio-da-saude-investe-na-reducao-da-mortalidade-materna. [Accessed on November 13, 2018]. [In Portuguese]
- [18] Brasil. Ministério da Saúde. Portaria nº 2.436, de 21 de setembro de 2017. Aprova a Política Nacional de Atenção Básica, estabelecendo a revisão de diretrizes para a organização da Atenção Básica, no âmbito do Sistema Único de Saúde (SUS). Available from: http://www.foa.unesp.br/home/pos/ppgops/portaria-n-2436.pdf. [Accessed on December 14, 2017]. [In Portuguese]
- [19] Bordin D, Fadel CB, Moimaz SAS, Garbin CAS, Santos CB, Saliba NA. User satisfaction with the public oral health services in the different dimensions of health care. Pesqui Bras Odontopediatria Clin Integr 2017; 17(1):e3112. https://doi.org/10.4034/PBOCI.2017.171.57
- [20] Moimaz SAS, Costa ACO, Saliba NA, Bordim D, Rovida TAD, Garbin CAS. Working conditions and quality of life of Dental Surgeons at the Brazilian Public Health Service. Rev Ciênc Plural 2015; 1(2):68-78.
- [21] Campo CEA. Integrality (comprehensiveness): From the viewpoint of health care and the recent proposals regarding basic assistance in Brazil. Cienc Saude Colet. 2003;8(2):569-584. https://doi.org/10.1590/S1413-81232003000200018
- [22] Brasil. Ministério da Saúde. Protocolos da Atenção Básica: Saúde das Mulheres. Brasília: Ministério da Saúde; 2016. [In Portuguese]
- [23] Vos AA, Leeman A, Waelput AJ, Bonsel GJ, Steegers EA, Denktaş S. Assessment and care for non-medical risk factors in current antenatal health care. Midwifery 2015; 31(10):979-85. https://doi.org/10.1016/j.midw.2015.06.008
- [24] Brasil. Ministério da Saúde. Gestantes de todo país devem atualizar caderneta de vacinação. Available from: http://portalms.saude.gov.br/noticias/agencia-saude/42730-gestantes-de-todo-pais-devem-atualizar-caderneta-de-vacinação. [Accessed on November 20, 2018]. [In Portuguese]
- [25] Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Ações Estratégicas. Teste Rápido de Gravidez na Atenção Básica: Guia Técnico. Brasília: Ministério da Saúde; 2014. [In Portuguese]
- [26] Brasil. Ministério da Saúde. Portaria nº 77, de 12 de janeiro de 2012. Dispõe sobre a realização de testes rápidos, na atenção básica, para a detecção de HIV e sífilis, assim como testes rápidos para outros agravos, no âmbito da atenção pré-natal para gestantes e suas parcerias sexuais. Available from: http://bvsms.saude.gov.br/bvs/saudelegis/gm/2012/prt0077_12_01_2012.html. [Accessed on December 14, 2017]. [In Portuguese]
- [27] Cruz SS, Costa MCN, Gomes Filho IS, Vianna MIP, Santos CT. Maternal periodontal disease as a factor associated with low birth weight. Rev Saúde Pública 2005; 39(5):787-7. https://doi.org/10.1590/S0034-89102005000500013
- [28] Madruga RCR, Soares RSC, Cardoso AMR, Cavalcanti SALB, Góes PSA, Cavalcanti AL. Access to oral health services in areas covered by the Family Health Strategy, Paraíba, Brazil. Pesqui Bras Odontopediatria Clin Integr 2017; 17(1):e3006. https://doi.org/10.4034/PBOCI.2017.171.06
- [29] Carnut L, Filgueiras LV, Figueiredo N, Goes PSA. Initial validation of the index of oral healtcare needs for oral health teams in the family healthcare strategy. Cienc Saude Colet 2011; 16(7):3083-91. https://doi.org/10.1590/S1413-81232011000800008
- [30] Brasil. Ministério da Saúde. CONASS. Diretrizes para o Plano de Enfrentamento de Mortalidade Materna e na Infância. Brasília: Ministério da Saúde, 2018. [In Portuguese]

