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**BARREIRAS DE ACESSO A REALIZAÇÃO DE EXAMES NO PRÉ-NATAL: REVISÃO INTEGRATIVA**  
**BARRIERS TO ACCESS PRENATAL SCREENING: INTEGRATIVE REVIEW**  
**BARRERAS DE ACCESO A LA REALIZACIÓN DE EXÁMENES EN EL PRENATAL: REVISIÓN INTEGRATIVA**

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## RESUMO

**Introdução:** O acompanhamento pré-natal é fundamental para a redução das taxas de morbimortalidade materna e neonatal. No entanto, barreiras organizacionais podem dificultar o acesso às ações e serviços cursando com a fragmentação do cuidado e da qualidade da assistência.

**Objetivos:** Analisar na produção científica brasileira, as barreiras de acesso a realização de exames no acompanhamento pré-natal.

**Método:** Revisão integrativa de publicações nas bases científicas da Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS), Base de dados de Enfermagem (BDENF) e Medical Literature Analysis and Retrieval System Online (MEDLINE), publicados nos idiomas português, inglês e espanhol, no período de 2005 a 2015.

**Resultados:** O processo de busca resultou em 708 artigos dos quais 15 cumpriram os critérios de inclusão. Os estudos foram sistematizados e originaram quatro categorias para análise: (1) Lentidão no processo de agendamento, coleta e liberação de resultados; (2) Quotas insuficientes dos exames destinados a atenção primária; (3) Falta de recursos das gestantes; e (4) Adequação dos exames relacionada ao início precoce do pré-natal.

**Conclusões:** As barreiras de acesso aos exames no acompanhamento pré-natal estão relacionadas principalmente aos recursos escassos na saúde destinados à atenção primária; à lentidão no processo de agendamento e realização; e, a falta de recursos da gestante para arcar com os custos de exames não realizados pelo sistema público. As publicações também evidenciaram os aspectos positivos para as gestantes que iniciaram pré-natal precoce.

**Palavras-chaves:** Cuidado pré-natal; Gestantes; Acesso aos serviços de saúde.

## ABSTRACT

**Introduction:** Prenatal monitoring is essential to reducing maternal and neonatal morbidity and mortality rates. However, organisational barriers may hamper access to the actions and services carrying on with the fragmentation and quality of care.

**Objectives:** To analyse in the Brazilian scientific production the access barriers to performing screenings during prenatal monitoring.

**Methods:** Integrative review of publications searched in the bibliographic databases of Latin American and Caribbean Center on Health Sciences Information (LILACS), Nursing Database (BDENF), and Medical Literature Analysis and Retrieval System Online (MEDLINE), published in Portuguese, English, and Spanish from 2005 to 2015.

**Results:** Of 708 articles searched, 15 met the inclusion criteria. The studies were systematised and led to four categories for analysis: (1) Sluggishness in the process of exam scheduling, sample collection, and releasing of results; (2) Insufficient quotas for the primary care screenings; (3) Lack of resources of the pregnant women; and (4) Adequacy of screenings related to the early onset of prenatal care.

**Conclusions:** The access barriers to screenings in the prenatal monitoring are mainly related to the scant health resources devoted to primary care; sluggishness in the process of scheduling and running of tests; and to the lack of resources of the pregnant woman, who cannot afford the costs of examinations not covered by the public health system. The publications also highlighted the positive aspects for the pregnant women who had an early onset of prenatal care.

**Keywords:** Prenatal care; Pregnant women; Access to healthcare services.

## RESUMEN

**Introducción:** El seguimiento prenatal es fundamental para la reducción de las tasas de morbimortalidad materna y neonatal. Sin embargo, barreras organizacionales pueden dificultar el acceso a las acciones y servicios cursando con la fragmentación del cuidado y de la calidad de la asistencia.

**Objetivos:** Analizar en la producción científica brasileña, las barreras de acceso a la realización de exámenes en el seguimiento prenatal.

**Método:** Revisión integrativa de publicaciones en las bases científicas de la Literatura Latinoamericana y del Caribe en Ciencias de la Salud (LILACS), Base de datos de Enfermería (BDENF) y Medical Literature Analysis and Retrieval System Online (MEDLINE), publicados en los idiomas portugués, inglés y portugués en el período de 2005 a 2015.

**Resultados:** El proceso de búsqueda resultó en 708 artículos de los cuales 15 cumplieron los criterios de inclusión. Los estudios se resumen y se produjeron cuatro categorías para el análisis: (1) proceso de programación lenta, la recogida y liberación de los resultados; (2) Cuotas insuficientes de los exámenes destinados a la atención primaria; (3) Falta de recursos de las gestantes; y (4) Adecuación de los exámenes relacionados al inicio precoz del prenatal.

**Conclusiones:** Las barreras de acceso a los exámenes en el seguimiento prenatal están relacionadas principalmente con los recursos escasos en la salud destinados a la atención primaria; a la lentitud en el proceso de programación y realización; y la

falta de recursos de la gestante para cubrir los costos de exámenes no realizados por el sistema público. Las publicaciones también evidenciaron los aspectos positivos para las gestantes que iniciaron prenatal temprano.

**Palabras claves:** Cuidado prenatal; Gestantes; Accesibilidad a los servicios de salud.

## INTRODUCTION

The main purpose of prenatal attention is to assist the pregnant woman and offer her integral, humanised, and quality care, ensuring both maternal and foetal wellness, as well as contributing to favourable and positive outcomes. Such monitoring aims at providing guidance on healthy habits, preparing for delivery, diagnosing and treating pre-existing or gestational related conditions, and reducing maternal and infant morbidity and mortality rates (Dias Corrêa, Tsunehiro, Oliveira, & Bonadio, 2014). The World Health Organization (WHO) and the Ministry of Health (MS) recommend some indicators as reference parameters of prenatal quality of usual risk in primary care, among them the availability of all exams in a timely manner (Felisbino-Mendes & Matosinhos, 2016).

For Starfield (2002) all services should be adequately accessible. The first contact (access) carries within itself the idea that in an organized health system there is an entry point (doorway) easily accessible for every new problem or new episode of a problem that people are looking for care, bond and resolutiveness.

However, some social determinants of health (SDOH)—such as poverty, unemployment, lack of income, lack of information, low schooling level, lack of housing, and access to health services—define the way how a great deal of these pregnant women live. Belonging to a scenario of vulnerability and social exclusion, they are not aware of their constitutional principles as expressed in the Article 196 of the Constitution of Brazil (1988): “Health is a right of all and a duty of the State and shall be guaranteed by means of social and economic policies aimed at reducing the risk of illness and other hazards and at the universal and equal access to actions and services for its promotion, protection and recovery” (Section II - health).

Originally, the term social vulnerability refers to groups or individuals who have the guarantee of their citizenship rights undermined. Social vulnerability is determined by the economic, political, and social context with respect to the available structure of access to information, financing, services, cultural goods, and freedom of speech. It also refers to the living standard of the poorer and less favoured classes in society. The lack of access to basic prenatal screenings, for instance, indicates that a person or social group is in a socially vulnerable situation as such person or group is excluded from access to a right that has been guaranteed to all by the Brazilian Citizen Constitution (Silva, Malta de Mello, Mello, Ferriani, Sampaio, & Oliveira, 2014).

In the face of the Brazilian regional and social inequalities, ensuring the inclusion of all people to all rights becomes difficult when underfunding is regarded as a chronic problem in the development of the country’s Unified Health System—SUS<sup>1</sup> (Mendes, 2013). According to the World Health Organization (2013), the portion of the federal budget for health (8%) in Brazil is even lower than the average of African countries (10.6%) and the world average (11,7%). However, the situation was even worse ten years ago, when only 4,7% of public expenditure were invested in Health, what is considered a shame if comparing to other countries, such as Switzerland (21%), the Netherlands (20%), and the United States (19%). Allocating financial or physical resources more efficiently and equitably in Health is a challenge that health management professionals face on a daily basis (Granja, Zoboli, & Fracolli, 2013).

Underfunding and poor management of scarce resources compromise the implementation of the SUS constitutional principles that do not become concrete neither in the reality of the healthcare points of care nor in the users’ daily life (Bittencourt, 2013). Social inequalities in health conditions and access to the use of services express different opportunities according to social position, what constitutes situations of vulnerability and social injustice (Giovanela, Escorel, Lobato, de Carvalho Noronha, & Carvalho, 2012). The dynamics of the SUS should not only express the search for an efficient and effective system, but also fundamentally rescue the building of a society in which equality and solidarity are fundamental values (Iturri, 2013).

The reduction in maternal and infant morbidity and mortality coefficients is demonstrated by the adequate care for pregnancy. To reduce substantially maternal mortality, it is necessary to integrate the emergency care with the improvement in the quality of maternal healthcare since the pregnancy (Souza et al., 2013). The increase of diversity in the causes of maternal morbidity and mortality is an important challenge to the policies and programs that aim at meeting varied needs with different types of care in different contexts (Graham, Woodd, Byass, Filippi, Gon, Virgo, & Singh et al., 2016).

Accessing basic screenings in prenatal monitoring as recommended by the Brazilian Ministry of Health is important for the quality of healthcare of the mother-child binomial. However, for several reasons, many pregnant women arrive at the maternity hospital without such results and consequently excluded from the benefit of this right. Therefore, this study aimed at analysing in the Brazilian scientific production the access barriers to performing tests during prenatal monitoring.

<sup>1</sup> In Brazilian Portuguese: Sistema Único de Saúde (SUS).

## 1. METHODS

This integrative literature review proposes to gather, evaluate and conduct systematically, orderly and broadly a synthesis of the results of multiple published studies. The review followed the steps of elaboration of a protocol, including the definition of a guiding question, search strategies for finding scientific publications, data collection, critical analysis of studies, discussion of results, and data synthesis (Casagrande, 2016; Carvalho et al., 2017). In the face of the obstacles pregnant women face to take basic medical examinations, the following guiding question arose: what do highlight the Brazilian scientific productions on the access barriers to performing basic routine examinations during prenatal monitoring?

The literature search and the selection of articles were carried out between October and November 2016 in the bibliographic databases of Latin American and Caribbean Center on Health Sciences Information (LILACS), Nursing Database (BDENF), and Medical Literature Analysis and Retrieval System Online (MEDLINE), using a combination of controlled descriptors; terms contained within the structured vocabulary *Health Sciences Descriptors* (DeCS). The strategy used to obtain the publications had as its guiding principle the search among the following descriptors (“cuidado pré-natal” AND gestantes OR “baixo risco” AND “acesso aos serviços de saúde” OR “avaliação em saúde”)<sup>2</sup>. In the Medical Subject Headings (MeSH), the search used the following descriptors (“pregnant care” [MeSH Terms] AND (“pregnancy” [MeSH Terms] OR “pregnant woman” [MeSH Terms]) AND (health services accessibility” [MeSH Terms] OR “health assessment” [MeSH Terms])).

We established as inclusion criteria studies that give response to proposed objective, in full text, indexed in the databases of LILACS, BDENF and MEDLINE, available in Portuguese, English and Spanish, published between 2005 and 2015.

It is a research conducted in databases, with scientific articles considered in the public domain, there was no need for submission to a Research Ethics Committee for ethical review. However, the requirements related to the responsibility of researchers regarding the reliability of the presented data were observed.

## 2. RESULTS

The Figure 1 shows a flowchart describing the search of the reviewed articles. The process of searching for manuscripts in the databases found 708 studies. Afterwards, duplicated articles or articles that did not fit the eligibility criteria were excluded through the reading of work titles and abstracts. Of these, 563 were eliminated for they were not related to the research theme, and 125 for duplication.

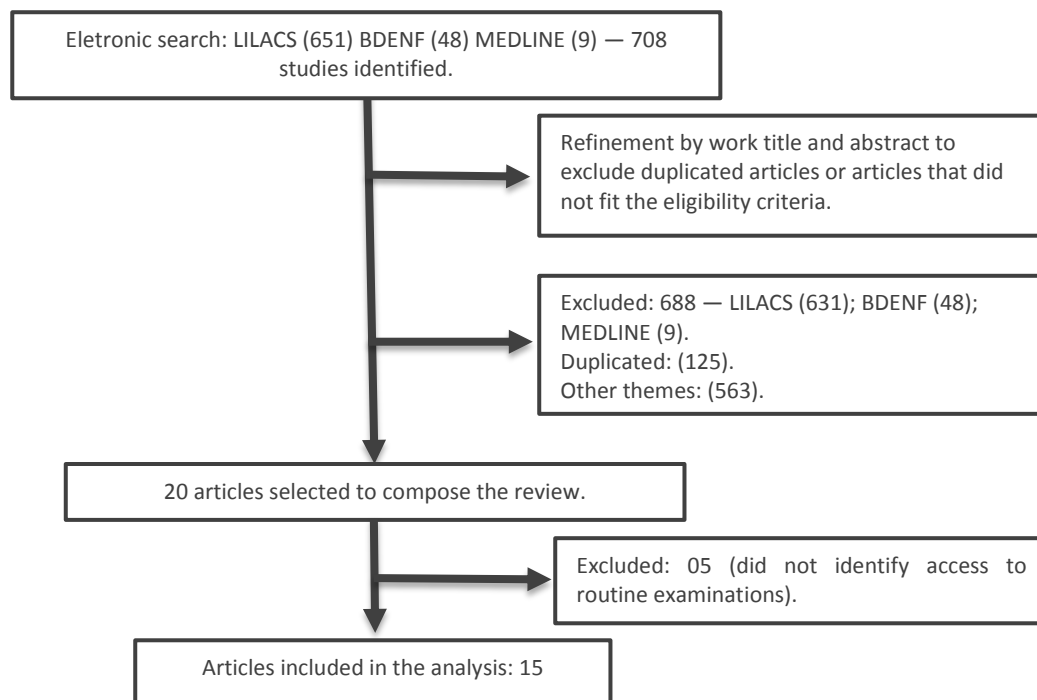


Figura 1. Fluxograma com a descrição das etapas de obtenção dos artigos revisados

<sup>2</sup> (“prenatal care” AND pregnant women OR “low risk” AND “access to healthcare services” OR “health evaluation”)

The research verified that most of the articles had a transversal descriptive design, published in Portuguese language (100%) between 2008 and 2013, in several journals, and all publications indexed in LILACS database.

Out of the 20 publications selected and read in full, five were excluded for they did not identify the access to the basic routine examinations conducted during prenatal monitoring, even though they included the prenatal card records. Therefore, the remaining 15 articles were analysed according to the variables to follow: year of publication, authors, work title, journal, and research method used.

The results of the selected studies were systematised in accordance with the similarities of the data analysed in each research. Based on this, the following categories for the description and discussion of the results originated: (1) sluggishness in the process of releasing of results; (2) insufficient quotas for primary healthcare; (03) lack of financial resources of pregnant women; and (4) adequacy of screenings related to the early onset of prenatal care. The synthesis and interpretation of data were based on the results of the critical evaluation of the selected studies.

Of the 15 publications analysed and related to the access of pregnant women to basic routine examinations, four pointed out difficulties in access due to sluggishness in the process of exam scheduling, sample collection, and releasing of results; two studies indicated a decrease in the quotas for primary healthcare; three studies highlighted that pregnant women lacked resources to pay for the examinations not made available by the SUS; and five studies showed that the pregnant women who had an early onset of prenatal care achieved greater adequacy in the process of taking tests and obtaining of results, as detailed in Table 1 below.

**Table 1:** Description of the reviewed articles

YEAR OF PUBLICATION	AUTHORS	WORK TITLE	JOURNAL	METHOD
<b>SLUGGISHNESS IN THE PROCESS OF RELEASING OF RESULTS</b>				
2015	Silva, Alves, Rodrigues, Padoin, Branco, & Souza.	A qualidade de uma rede integrada: acessibilidade e cobertura no pré-natal	Rev Pesquisa Cuid Fundam	Descriptive Exploratory
2015	Leal, Teme-Filha, Moura, Cecatti, & Santos.	Atenção ao pré-natal e parto em mulheres usuárias do sistema público de saúde residentes na Amazônia Legal e no Nordeste	Rev Bras Saúde Matern Infantil	Population-based survey
2011	Peixoto, Campos, Teles, Freitas, Paula, & Damasceno.	O pré-natal na atenção primária: o ponto de partida para reorganização da assistência obstétrica	Rev de Enferm UERJ	Descriptive Transversal
2013	Paris, Martins, & Pelloso.	Qualidade da assistência pré-natal nos serviços públicos e privados	Rev Bras de Ginecol Obst	Transversal
<b>INSUFFICIENT QUOTAS FOR PRIMARY HEALTHCARE SCREENINGS</b>				
2015	Degli Esposti, Oliveira, Santos Neto, & Travassos.	Representações sociais sobre o acesso e o cuidado pré-natal no Sistema Único de Saúde da Região Metropolitana da Grande Vitória, Espírito Santo	Saúde e Sociedade	Content analysis based on Bardin
2012	Santos Neto, Oliveira, Zandonade, Gama, & Leal.	O que os cartões de pré-natal das gestantes revelam sobre a assistência nos serviços do SUS da Região Metropolitana da Grande Vitória, Espírito Santo, Brasil?	Cad de Saúde Pública	Epidemiologic Transversal
2012	Pimentel, Sá, Ferreira, & Silva.	Perfil clínico-social das gestantes atendidas numa unidade docente-assistencial baseada no modelo de saúde da família	Rev Baiana de Saúde Pública	Descriptive

YEAR OF PUBLICATION	AUTHORS	WORK TITLE	JOURNAL	METHOD
2009	Almeida & Tanaka.	Perspectiva das mulheres na avaliação do Programa de Humanização do Pré-Natal e Nascimento	Rev de Saúde Pública	Case study
<b>LACK OF RESOURCES OF THE PREGNANT WOMEN TO PAY FOR EXAMINATIONS</b>				
2008	Rasia & Albernaz	Atenção pré-natal na cidade de Pelotas, Rio Grande do Sul, Brasil	Rev Bras Saúde Matern Infantil	Transversal
2009	Gonçalves, César & Mendoza-Sassi.	Qualidade e equidade na assistência à gestante: um estudo de base populacional	Cad de Saúde Pública	Transversal
<b>ADEQUACY OF SCREENINGS RELATED TO THE EARLY ONSET OF PRENATAL CARE</b>				
2013	Domingues, Leal, Hartz, Dias & Vettore.	Acesso e utilização dos serviços de pré-natal na rede SUS do município do Rio de Janeiro, Brasil	Rev Bras de Epidem	Descriptive Transversal
2013	Hass, Teixeira, & Beghetto.	Adequabilidade da assistência pré- -natal em uma estratégia de saúde da família de Porto Alegre-RS	Rev Gaúcha de Enferm	Historic cohort study
2013	Oliveira, Benedett, Paula, Rossoni, Grellman, Grzybowski...& Antonioli.	Avaliação do processo de assistência pré-natal em uma unidade básica de saúde no município de Chapecó, Brasil	Arq Catarin Med	Transversal
2011	Andreucci, Cecatti, Macchetti, & Sousa.	Sisprenatal como instrumento de avaliação da qualidade da assistência à gestante	Rev de Saúde Pública	Transversal
2008	Chrestani, Santos, César, Winckler, Gonçalves, & Neuman.	Assistência à gestação e ao parto: resultados de dois estudos transversais em áreas pobres das regiões Norte e Nordeste do Brasil	Cad de Saúde Pública	Transversal

### 3. DISCUSSION

The Primary Healthcare—a gateway to the healthcare network, planner and coordinator of care, *locus* where low-risk prenatal care is monitored—aims to offer universal access and integrality of actions and services within the mother-child care line. In addition to fulfil the doctrinal and organizational principles of the SUS, several strategies have been used in order to implement in practice the transfer of resources that finance the demands of the society. The universality of the right to health and the guarantee of the integrality of care express both social solidarity and commitment with respect to the health needs. That being said, the right to health comprises universal and equal access to health services and actions (Cappelletti & Andrade, 2016).

The Table 1 shows an overview of the publications related to the access of pregnant women to taking basic routine examinations during prenatal monitoring. The publications revealed a diversity of existing barriers in the access to taking examinations according to the social, regional, geographic, demographic, and political conditions the pregnant women are in. They also presented the positive aspects for the women who had an early onset of prenatal care.

#### **Sluggishness in the Process of Exam Scheduling, Sample Collection, and Releasing of Results**

Four studies (Silva et al., 2010; Leal et al., 2010; Peixoto et al., 2011, & Paris et al., 2013) detected a similar pattern in relation to the sluggishness in the process of releasing the tests' results. The women confirmed they had access to taking the tests; however, the delay in the sample collecting and receiving the results was a stressor for the subsequent appointments. There is a hypothesis that some of them only took part of the tests due to difficulties in scheduling or to the lack of reagents.

The authors emphasised the importance of examinations in the prenatal routine for the monitoring and classification of prenatal risk factors. The low percentage of the screenings showed deficiency in the quality of care. The researchers also believe that some tests might have been taken, but not recorded on the pregnant card (Paris et al., 2013). The literature has shown that the delay in the tests' results is one of the greatest limitations in the quality of the prenatal follow-up, in addition to leading to the dissatisfaction of pregnant women, who arrive at the place of delivery without the exam records on their prenatal card (Pereira et al., 2015 & Dias Corrêa et al., 2014).

### **Insufficient Quotas for Primary Healthcare Screenings**

Six of the analysed studies identified the limited resources in Health that prevent the doctrinal and organisational principles of the SUS from taking place in the users' daily life (Degli Esposti et al., 2015; Santos Neto et al., 2012; Pimentel et al., 2012 & Almeida & Tanaka, 2009). The pregnant women reported they took tests in private institutions to ensure the results were available before the appointment. One cannot ignore the fact that there are regional and social inequalities and that the challenges faced by the SUS regarding underfinancing is a chronic problem, what contributes to the scarcity of resources. This translates into a conceptual error with significant practical repercussions, leading to serious risks to the objective of proper application of the limited health resources, both from the efficiency and justice point of view (Fleury, 2012).

Studies showed that the depletion of the quotas of examinations for the primary healthcare was the most cited cause as a barrier to undertaking such tests. Other factors were also pointed out, such as the scheduling of sample collection after the date of the next appointment; non-attendance to the laboratory; difficulty in accessing the health unit, lack of money and time; and the distance between the residence and the laboratory (Pimentel et al., 2012; Almeida & Tanaka, 2009).

The most important attribute of access to health is the availability of services, equipment, and human resources. However, the availability of resources itself does not guarantee the access. Geographical, financial, organisational, and cultural barriers, for instance, either facilitate or obstruct people's ability to use health services. In general, from the territories' point of view, the greater the distance, the lower is the use of the health service (Giovannella et al., 2012).

From the current scenario of technological and scientific advances, it is understandable that the health needs are broader than the availability of resources and that the public managers do not thoroughly supply the demand of the population, what results in many users being out of access, or even of the integrality of actions. Such reality, however, especially affects the poorest population, who has no money neither for private examinations nor for buying drugs at a pharmacy without compromising the family income (Cappelletti & Andrade, 2016).

The lack of records on prenatal cards may be misinterpreted as the non-taking of the tests (Pimentel et al., 2011). A percentage varying from 20% to 50% showed incompleteness on the records of the screenings in the first trimester. In the second routine scan, all records, without exception, presented incompleteness greater than or equal to 50%. The records reveal if the pregnant women have access to the services. However, the blank fields on the prenatal cards infer they access the services without keeping track of records. The mere fact of having access to health services bureaucratically does not imply the quality of care, since the problem solving related to the capacity of a service play its part is a key factor to the care process (Santos Neto et al., 2012).

Other studies (Dias Corrêa et al., 2014; Ferreira do Val & Nichiata, 2014) also reported the possibility of failures in the carrying out of the examinations due to the lack of specific supplies, restriction of quotas, damaged equipment, delays in the scheduling of sample collection, releasing of results, and loss of samples. Organisational barriers of this kind—such as the convenience of operating hours, waiting time, management of exam quotas, scarcity of human resources, and damaged equipment—are organisational characteristics that may hamper access to service (Giovannella et al., 2012).

Not even the Brazilian Law 8.080/1990—that guarantees universal and equal access of the population to actions and services for the promotion, protection, and recovery of health—has secured enough quotas for the demand for healthcare services. This commitment made by Brazil—when declared itself as a Democratic State of Law, guaranteeing of the fundamental human rights—must be recovered by both the people and the public power. Health is under the jurisdiction of all entities of the Brazilian federation in order to guarantee the resources and the best operational strategy for each region within the macro system of health management (Cappelletti & Andrade, 2016).

### **Lack of Resources of the Pregnant Women to Pay for the Examinations not Available by the SUS**

Studies have shown that higher-income pregnant women have access to the basic routine as recommended by the PHPN<sup>3</sup> and that the most vulnerable social groups receive poor prenatal care (Rasia & Albernaz, 2008; Gonçalves et al., 2009). Financial barriers represent significant constraints to the use of health services. Poor pregnant women use fewer services in response to financial barriers if compared to those with better financial conditions. When the SUS does not make the screenings available, low-income women are not able to pay for them (Giovannella et al., 2012). Reducing access barriers to prenatal services,

<sup>3</sup> Brazilian Ministry of Health's Program for Humanization of Prenatal and Childbirth Care (Programa de Humanização no Pré-natal e Nascimento — PHPN).

serological testing, diagnosis, and treatment are important factors for a better management and disease control during pregnancy, and different strategies are necessary for different types of health services (Domingues et al., 2013).

It is understood that the fair prioritisation of resources should be made explicit in order to improve the forms of actual participation of the community in the decision-making process. Utilitarianism is a current of thought widespread by the health management professionals, who believe the correct, the fair, would be the allocation of resources that provided greater benefit to a larger number of people (Granja et al., 2013).

#### **Adequacy of Screenings Related to the Early Onset of Prenatal Care**

Five studies (Domingues et al., 2013; Hass Teixeira & Beghetto, 2013; Oliveira et al., 2013; Andreucci et al., 2011 & Chrestani et al., 2008) included in this review identified that the “adequacy of the screenings” was strongly associated with the early onset of prenatal care and with the holding of six or more appointments. Comparing the years of 2002 and 2005, it is noticeable that the majority of the pregnancy assistance and delivery indicators in poor areas of the North and Northeast Brazil presented significant improvements (Chrestani et al., 2008).

Although there was a significant growth in the carrying out of such screenings, the rates fell far short of a quality of care, corroborating the findings of the Brazilian studies (Fonseca et al., 2014; Martinelli, et al., 2014), in which the lower family income, lower schooling, and non-white women appeared as those who had a late entry into prenatal care. When they did take the tests, they were of very poor quality, revealing that vulnerability and social inequality compete to maximize inadequate prenatal care conditions.

In general, the health conditions of a population are strongly associated with the pattern of social inequalities present in the society. Therefore, social determinants that directly affect social groups influence such health conditions. Moreover, the adequate primary healthcare services may contribute to reducing social inequalities in the health conditions (Giovannella et al., 2012). The level of schooling, family income, housing conditions, access to water, sanitation, and health services influence the social determinants of health (Sousa Campos & Pereira Júnior, 2016). The SUS, however, has been implementing policies to promote equity in order to reduce the vulnerabilities to which certain population groups are more exposed.

Taking into consideration the importance of working to guarantee the access to health services, Rede Cegonha—a Brazilian federal program formulated in the context of the organisation of the healthcare network—aims at structuring the management of the health system, organised by the maternal-infant healthcare network in the regional and hierarchical levels of care, guaranteeing vacancies from the beginning of prenatal care, a variety of points of care, in addition to the effectiveness of the regulation and planning of the system. Both competencies and responsibilities of the points of care in integral care correlate with a population-based coverage, accessibility, and scale to adequate the services, in such a way as to make access equal for all women, regardless the social group they belong (Carvalho et al. al., 2017).

#### **CONCLUSIONS**

The reviewed publications showed significant evidence of access barriers to performing risk screenings, among which are the scarcity of health resources that preclude the integrality of actions in the primary health care; the sluggishness in the process of scheduling tests and releasing of results, what leads to the incompleteness of records on the prenatal cards; and the lack of resources of the pregnant women to pay for the examinations not available by the SUS.

The incompleteness of records on the prenatal card reinforces the need for improvement training for health professionals, focusing on the valorisation and completion of the prenatal card as an important communication tool, since this adds relevant details to the decision-making in case of identifying pregnancy risk.

It is recommended to define priorities for future and in-depth studies on the theme, as well as studies that evaluate public policies for the health of women; national and regional programs; and local management, emphasising on the scarcity of resources in health, financing, and management of resources for primary health care.

It is essential that public managers, health professionals, researchers, health councils, and the community itself seek for possible ways to improve the efficiency and effectiveness of the SUS in terms of expansion of the actions to promote health, improvement of health units, control of limited resources, or redefinition of competencies at the various levels of management. The political challenge is to make the access to SUS available for all.

#### **REFERENCES**

Almeida, C. A. L., & Tanaka, O. Y. (2009). Perspectiva das mulheres na avaliação do Programa de Humanização do Pré-Natal e Nascimento. *Revista de saúde pública*, 43(1), 98-104.



- Andreucci, C. B., Cecatti, J. G., Macchetti, C. E., & Sousa, M. H. (2011). Sisprenatal como instrumento de avaliação da qualidade da assistência à gestante. *Revista de Saúde Pública*, 45(5), 854-864. Acedido em: <http://www.scielo.org/pdf/rsp/2011nahead/2438.pdf>
- Bittencourt DAS (Org). (2013). *Vigilância do óbito materno, infantil e fetal e a atuação em comitês de mortalidade*. Rio de Janeiro: EAD/Ensp.
- Carvalho, E.M.P., Göttems, L.B.D, Monteiro, S.N.C., Guilhem, D. B., & Ribeiro, L. M. (2017). O acesso aos exames básicos no atendimento pré-natal: Revisão Integrativa. *CIAIQ 2017*, 2. Acedido em: <http://proceedings.ciaiq.org/index.php/ciaiq2017/article/view/1199/1160>
- Casagrande, L. P. (2016). Assistência de enfermagem na qualidade de vida do idoso: revisão integrativa. *Saúde. com*, 11(4). Disponível em: <http://www.uesb.br/revista/rsc/ojs/index.php/rsc/article/view/297>
- Cappelletti, P., & Andrade, M. (2016). A questão da judicialização da saúde na realidade jurídica brasileira: um reflexo da omissão do estado em seu dever de garantir este direito fundamental. *Revista Thesis Juris*, 5(2). Acedido em: <http://www.revistartj.org.br/ojs/index.php/rtj/article/view/169/pdf>
- Chrestani, M. A. D., Santos, I. S., Cesar, J. A., Winckler, L. S., Gonçalves, T. S., & Neumann, N. A. (2008). Health care during pregnancy and childbirth: results of two cross-sectional surveys in poor areas of North and Northeast Brazil. *Cadernos de Saúde Pública*, 24(7), 1609-1618. Acedido em: <http://www.scielo.org/pdf/csp/v24n7/16.pdf>
- CONSTITUTION OF BRAZIL. (1988). Retrieved November 15, 2017, from <http://www.v-brazil.com/government/laws/titleVIII.html>
- Degli Esposti, C. D., Oliveira, A. E., dos Santos Neto, E. T., & Travassos, C. (2015). Representações sociais sobre o acesso e o cuidado pré-natal no Sistema Único de Saúde da Região Metropolitana da Grande Vitória, Espírito Santo. *Saúde e Sociedade*, 24(3), 765-779.
- Dias Corrêa, M., Tsunehiro, M. A., de Oliveira Pimentel Lima, M., & Bonadio, I. C. (2014). Avaliação da assistência pré-natal em unidade com estratégia saúde da família. *Revista da Escola de Enfermagem da USP*, 48(1). Acedido em: <http://www.redalyc.org/html/3610/361033339004/>
- Domingues, R.M.S.M, do Carmo Leal, M., de Araújo Hartz, Z. M., Dias, M. A. B., & Vettore, M. V. (2013). Acesso e utilização de serviços de pré-natal na rede SUS do município do Rio de Janeiro, Brasil. *Rev Bras Epidemiol*, 16(4), 953-65.
- Ferreira do Val, L., & Yasuko Izumi Nichiata, L. (2014). A integralidade ea vulnerabilidade programática às DST/HIV/AIDS na Atenção Básica. *Revista da Escola de Enfermagem da USP*, 48(1). Acedido em: <http://www.redalyc.org/html/3610/361033339021/>
- Felisbino-Mendes M.S. & Matozinhos F.P. (2016) Ciclo gravídico-puerperal: sistematização da assistência de enfermagem como foco na Atenção Primária à Saúde. In: Associação Brasileira de Enfermagem, Associação Brasileira de Obstetras e Enfermeiros Obstetras; Morais S.C.R.V., Souza K.V., Duarte E.D., organizadoras. PROENF Programa de atualização em Enfermagem: Saúde Materna e Neonatal: Ciclo 8. Porto alegre: Artmed Panamericana.
- Fleury, S. (2012). Judicialização pode salvar o SUS. *Saúde em debate*, 36(93), 159-162. Acedido em: <http://www.redalyc.org/pdf/4063/406341763003.pdf>
- Fonseca, S. C., Monteiro, D. D. S. A., Pereira, C. M. D. S. C., Scoralick, A. C. D., Jorge, M. G., & Rozario, S. D. (2014). Inequalities in prenatal care in a southeastern city in Brazil. *Ciência & Saúde Coletiva*, 19(7), 1991-1998.
- Giovanella, L., Escorel, S., Lobato, L. D. V. C., de Carvalho Noronha, J., & de Carvalho, A. I. (2012). Políticas e sistema de saúde no Brasil. *SciELO-Editora FIOCRUZ*.
- Gonçalves, C. V., Cesar, J. A., & Mendoza-Sassi, R. A. (2009). Quality and equity in prenatal care: a population-based study in Southern Brazil. *Cadernos de saude publica*, 25(11), 2507-2516.
- Granja, G. F., Zoboli, E. L. C. P., & Fraccolli, L. A. (2013). The discourse of managers on equity: a challenge for Brazil's Unified Health System (SUS). *Ciencia & saude coletiva*, 18(12), 3759-3764. Acedido em: <http://www.scielo.org/pdf/csc/v18n12/a32v18n12.pdf>
- Graham, W., Woodd, S., Byass, P., Filippi, V., Gon, G., Virgo, S., ... & Singh, S. (2016). Diversity and divergence: the dynamic burden of poor maternal health. *The Lancet*, 388(10056), 2164-2175. Acedido em: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(16\)31533-1/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)31533-1/fulltext)
- Hass, C. N., Teixeira, L. B., & Beghetto, M. G. (2013). Adequabilidade da assistência pré-natal em uma estratégia de saúde da família de Porto Alegre-RS. *Revista gaúcha de enfermagem*. Porto Alegre. Vol. 34, n. 3 (2013), p. 22-30. Acedido em: <http://hdl.handle.net/10183/85471>
- Iturri, J. A. (2013). Políticas e Sistema de Saúde no Brasil. *Ciência & Saúde Coletiva*, 18(10), 3101-3103. Acedido em: <http://www.scielo.org/pdf/csc/v18n10/v18n10a35.pdf>

- Leal, M.C, Theme-Filha, M. M., de Moura, E. C., Cecatti, J. G., & Santos, L. M. P. (2015). Atenção ao pré-natal e parto em mulheres usuárias do sistema público de saúde residentes na Amazônia Legal e no Nordeste, Brasil 2010. *Revista Brasileira de Saúde Materno Infantil*, 15(1).
- Martinelli, K.G., Santos Neto E.T., Gama, S.G., Oliveira AE. (2014). Adequação do processo da assistência pré-natal segundo os critérios do Programa de Humanização do Pré-natal e Nascimento e Rede Cegonha. *Rev Bras Ginecol Obstet*, 36(2), 56-64.
- Mendes, E. V. (2013). 25 anos do Sistema Único de Saúde: resultados e desafios. *estudos avançados*, 27(78), 27-34. Acedido em: <http://www.scielo.br/pdf/ea/v27n78/03.pdf>
- Oliveira, P. P., Benedett, A., de Paula, D., Rossoni, J., Grellmann, J. K., Grzybowski, L. S., ... & Antonioli, M. A. (2013). Avaliação do processo de assistência pré-natal em uma unidade básica de saúde no município de Chapecó, Brasil. Acedido em: <http://www.acm.org.br/revista/pdf/artigos/1229.pdf>
- Organização Mundial de Saúde. (2013). ONU: quanto se gasta com saúde no mundo por habitante e por PIB. [ periódico na internet]. Acedido em: <http://www.humanosdireitos.org/noticias/denuncias/619-ONU--quanto-se-gasta-com-saude-no-mundo-por-habitante-e-por-PIB.htm>.
- Paris, G. F., Martins, P. M., & Pelloso, S. M. (2013). Qualidade da assistência pré-natal nos serviços públicos e privados. *Rev bras ginecol obstet*, 447-452. Acedido em: <http://www.scielo.br/pdf/rbgo/v35n10/04.pdf>
- Peixoto, C. R., Campos, F. C., Teles, L. M. R., Freitas, L. V., Paula, P. F. D., & Damasceno, A. K. D. C. (2011). O pré-natal na atenção primária: o ponto de partida para reorganização da assistência obstétrica. *Rev. enferm. UERJ*, 286-291. Acedido em: <http://www.facenf.uerj.br/v19n2/v19n2a19.pdf>
- Pereira, K. G. P., de Abreu, R. M., Leite, E. D. S., de Sousa, A. K., & de Farias, M. D. C. (2015). Atenção à saúde da mulher no pré-natal. *Revista Brasileira de Educação e Saúde*, 5(4), 01-08.
- Pimentel, K., Sá, C. M. M., Ferreira, N., & Silva, T. O. D. (2012). Perfil clínico-social das gestantes atendidas numa unidade docente-assistencial baseada no modelo de saúde da família. *Revista Baiana de Saúde Pública*, 35(2), 239. Acedido em: <http://files.bvs.br/upload/S/0100-0233/2011/v35n2/a2439.pdf>
- Rasia, I. C. R. B., & Albernaz, E. (2008). Atenção pré-natal na cidade de Pelotas, Rio Grande do Sul, Brasil.
- Santos Neto, E. T., Oliveira, A. E., Zandonade, E., da Gama, S. G. N., & do Carmo Leal, M. (2012). O que os cartões de pré-natal das gestantes revelam sobre a assistência nos serviços do SUS da Região Metropolitana da Grande Vitória, Espírito Santo, Brasil? Prenatal patient cards and quality of prenatal care. *Cad. Saúde Pública*, 28(9), 1650-1662.
- Silva, A.L., Herdy Alves, V., Pereira Rodrigues, D., de Mello Padoin, S. M., Lutterbach Riker Branco, M. B., & de Mattos Pereira de Souza, R. (2015). A qualidade de uma rede integrada: acessibilidade e cobertura no pré-natal. *Revista de Pesquisa Cuidado é Fundamental Online*, 7(2). Acedido em: <http://www.redalyc.org/html/5057/505750946010/>
- Silva, M. A. I., Mello, F. C. M. D., Mello, D. F. D., Ferriani, M. D. G. C., Sampaio, J. M. C., & Oliveira, W. A. D. (2014). Vulnerability in adolescent health: contemporary issues. *Ciencia & saude coletiva*, 19(2), 619-627. Acedido em: <http://www.scielosp.org/pdf/csc/v19n2/1413-8123-csc-19-02-00619.pdf>
- Souza, J. P., Gülmezoglu, A. M., Vogel, J., Carroli, G., Lumbiganon, P., Qureshi, Z., ... & Neves, I. (2013). Moving beyond essential interventions for reduction of maternal mortality (the WHO Multicountry Survey on Maternal and Newborn Health): a cross-sectional study. *The Lancet*, 381(9879), 1747-1755. Acedido em: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(13\)60686-8/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)60686-8/fulltext)
- Sousa Campos, G. W., & Pereira Júnior, N. (2016). A Atenção Primária e o Programa Mais Médicos do Sistema Único de Saúde: conquistas e limites. *Ciência & Saúde Coletiva*, 21(9). Acedido em: <http://www.redalyc.org/html/630/63047411002/>
- Starfield, B. (2002). Atenção Primária: equilíbrio entre necessidades de saúde, serviços e tecnologia. Brasília: UNESCO/Ministério da Saúde.