

# Prenatal care quality indexes of public health services in Salvador, Bahia\*

Indicadores de qualidade da assistência pré-natal em Salvador - Bahia

Indicadores de calidad de la asistencia prenatal en Salvador, Bahia

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#### **ABSTRACT**

**Objective:** To analyze prenatal care quality indexes of public health services in Salvador, Bahia following the implementation of the Prenatal and Birth Humanization Program (PBHB). **Methods:** This quantitative descriptive study was conducted in primary care units in Salvador that adopted the Prenatal and Birth Humanization Program. **Results:** Few pregnant women registered in the Prenatal and Birth Humanization Program had the benchmark of six prenatal consultations (9.76%). More than half of these registered pregnant women received all basic exams. However, only few women received puerperal consultations (5.66%), which conclude their maternal care. **Conclusion:** Prenatal care in Salvador, carried out through the Prenatal and Birth Humanization Program in 2002, had a low performance in basic exams, and in prenatal and puerperal consultations.

Keywords: Humanizing delivery; Prenatal care; Quality assurance, health care; Maternal health care services

#### **RESUMO**

Objetivo: Analisar indicadores de qualidade da assistência pré-natal prestada por serviços públicos de saúde de Salvador/Ba, após a implantação do Programa de Humanização no Pré-natal e Nascimento (PHPN). Métodos: Estudo quantitativo realizado nas unidades básicas de saúde de Salvador que aderiram ao Programa de Humanização no Pré-natal e Nascimento . Resultados: Baixo percentual de gestantes inscritas no Programa de Humanização no Pré-natal e Nascimento realizaram seis consultas de pré-natal (9,76%); mais da metade dessas mulheres realizaram todos exames básicos e houve baixo percentual das que compareceram à consulta de puerpério (5,66%). Ademais, apenas 5,66% concluíram a assistência pré-natal. Conclusão: A assistência pré-natal em Salvador, prestada através do Programa de Humanização no Pré-natal e Nascimento no ano 2002, caracteriza-se por baixa cobertura pelas unidades de saúde tanto de consultas prénatais quanto de exames básicos e consulta puerperal.

Descritores: Parto humanizado; Cuidado pré-natal; Garantia da qualidade dos cuidados de saúde; Serviços de saúde materno-infantil

### **RESUMEN**

**Objetivo:** Analizar indicadores de calidad de la asistencia prenatal prestada por servicios públicos de salud de Salvador/Bahia, después de la implantación del Programa de Humanización en el Prenatal y Nacimiento. **Métodos:** Estudio cuantitativo realizado en las unidades básicas de salud de Salvador que se adhirieron al Programa de Humanización en el Prenatal y Nacimiento. **Resultados:** Bajo porcentaje de gestantes inscritas en el Programa de Humanización en el Prenatal y Nacimiento realizaron seis consultas de prenatal (9,76%); más de la mitad de esas mujeres realizaron todos los exámenes básicos y hubo bajo porcentaje de las que se presentaron a la consulta de puerperio (5,66%). Además, apenas el 5,66% concluyeron la asistencia prenatal. **Conclusión:** La asistencia prenatal en Salvador, prestada a través del Programa de Humanización en el Prenatal y Nacimiento en el año 2002, se caracteriza por la baja cobertura realizada por las unidades de salud tanto de consultas prenatales como de exámenes básicos y consulta puerperal.

Descriptores: Parto humanizado; Atención prenatal; Garantía de la calidad de atención de salud; Servicios de salud materno-infantil

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#### INTRODUCTION

Prenatal healthcare covers a range of activities aimed at identifying risks and implementing measures to improve the level of health for women and the fetus<sup>(1)</sup>. However, the quality of this healthcare involves a series of factors, which may be personal, or linked to the organization offering the health services, among others.

For some time now, there has been a consensus among academics on the subject, and the bodies which form public health policies, concerning the relationship between prenatal care and the occurrence of maternal deaths. As a result, prenatal health care has become the target of government measures and programs aimed at reducing maternal mortality rates. In 2002, the municipal district of Salvador had a maternal mortality rate of around 66 deaths per thousand live births<sup>(2)</sup>.

Although lower than the national average, this rate is considered high, compared with municipal districts in some countries with comparable, or even lower socioeconomic conditions than those of Brazil, such as Cuba, Chile and Uruguay, where maternal mortality rates for the year 2000 were 33, 31, and 27 per hundred thousand live births, respectively<sup>(3)</sup>. Moreover, in developed countries, "it is possible for a situation exist, iin which maternal deaths no longer occur"<sup>(4)</sup>.

In order to change the Brazilian reality in relation to the high maternal mortality rate, on June 1<sup>st</sup>, the Ministry of Health launched, through Regulation/GM no. 569, its Pre-natal and Birth Humanization Program (PBHP) which instituted the adoption, by municipal districts, of measures to guarantee quality health care for pregnant women and newborn infants<sup>(5-6)</sup>.

The creation of the PBHP is based, therefore, on the overriding need to link the quality of prenatal care with extending access by women, to the prenatal services, in order to achieve maximum coverage by all the municipal districts in the country.

Salvador joined the PBHP in 2001, therefore the diagnosis of its first year of implementation, in relation to health planning, is appropriate.

This study therefore analyzes some quality indictors of prenatal care provided by public health services in Salvador/BA, following the implementation of the PBHP, with the following specific objectives: To determine the percentage of pregnant women enrolled in the PBHP who carried out six prenatal visits; to determine the percentage of pregnant women enrolled in the PBHP who carried out six prenatal visits plus all the basic exams; to determine the percentage of pregnant women enrolled in the PBHP who carried out six prenatal visits and the postpartum visit.

Among the components of the PBHP and the range of activities related to the planned prenatal care, this study

will focus on the analysis of indicators relating to the visits, basic exams, and tetanus vaccination, since these elements are directly linked to the conclusion of prenatal care.

The conclusion of prenatal care is understood, in this study, as a minimum range of activities/procedures administered to pregnant woman during the pregnancy/postpartum period, which includes at least six prenatal visits and one postpartum visit, as well as basic exams, it being implicit that that childbirth occurred during this period<sup>(7)</sup>.

#### **METHODS**

This study uses process indictors linked to visits and laboratory exams, and for the theoretical support, it is based on the systemic model of analysis in health, which besides the process, also includes elements related to the structure and results<sup>(8)</sup>. The analysis of the 'process - structure – result' triad is an important tool for the overall evaluation of Health systems or Programs.

Data collection was based on the year 2002, corresponding to the first year of development of the PBHP in Salvador, the period defined by the Ministry of Health for carrying out the initial evaluation in all the municipal districts which took part in the Program<sup>(6)</sup>.

The data were obtained from the Coordination for Regulation and Assessment (CRA) of the Municipal Health Secretary of Salvador, Bahia, which provided the indicators already processed by DATASUS, and presented in simple frequency form; these data are taken from prenatal healthcare records provided by the 38 basic health units in the Salvador/Bahia municipal district which maintained records of pregnant women and produced regular information for the Prenatal Information System (SISPrenatal) database. This software was specially developed by DATASUS, to monitor the data on pregnant women enrolled in the PBHP. The SISPRENATAL defines the minimum procedures for adequate prenatal care, and is capable of generating indicators of the healthcare provided, in terms of process, structure, and impact<sup>(5)</sup>.

All the pregnant women registered were given an identification number, which was used to add to the software every healthcare service provided in the health units, in order to feed the data collection system. The inputting of data to the system is generally done by the professionals who assist the woman during the first and subsequent visits, using two sources of data: The Pregnant Women's Registration Form and the Daily Healthcare Registration Form

The calculation of the indicators used in this study takes, as a reference, the concepts formulated in the PBHP itself<sup>(5)</sup>, which take into consideration the sufficient

gestational age for each item, and exclude women with more than 365 days since the last menstruation date. Thus, the following indicators were selected: the percentage of pregnant women enrolled in the program who carried out six prenatal visits and who had a gestational age of at least 240 days; the percentage of pregnant women enrolled who carried out six prenatal visits, the postpartum visit (up to the 42<sup>nd</sup> day after childbirth), and who had a gestational age of more than 294 days and less than 1 year since the last menstruation date; the percentage of pregnant women enrolled who carried out six prenatal visits plus all the basic exams, and who had a gestational age of at least 240 days; the percentage of pregnant women enrolled in the program who carried out six prenatal visits, the postpartum visit, and all the basic exams, and who had a gestational age of more than 294 days and less than one year since the last menstruation date.

The basic exams considered in the study were as follows: Request for ABO-Rh blood typing during the first visit; VDRL, an exam carried out on the first visit and in the 30<sup>th</sup> week of gestation; Urine - routine, an exam carried out on the on the first visit and in the 30<sup>th</sup> week of gestation; fasting Glycemia, with one exam in the first visit and one in the 30th week of gestation; and Hematocrit and hemoglobin, in the first visit.

The results will be analyzed and discussed in light of the relevant literature, focusing on the findings of other studies carried out on the theme in the country, and in other municipal districts. For the evaluation of the conclusion of the prenatal care, a target of 30% of pregnant women enrolled in the Program will also be considered as a parameter, defined for the first year in which the municipal districts joined the Program<sup>(6)</sup>.

#### **RESULTS**

The indicators calculated in this study were as follows: 9.76% of the pregnant women enrolled in the PBHP carried out six prenatal visits; 7.81% of the pregnant women enrolled in the PBHP carried out six prenatal visits plus all the basic exams; 5.66% of the pregnant women enrolled in the PBHP carried out six prenatal visits plus the postpartum visit; and 5.66% of the pregnant women enrolled in the PBHP concluded the prenatal care.

# **DISCUSSION**

It can be deduced, based on the definition adopted for the conclusion of prenatal, that the performance of the municipal district in obtaining maximum cover of this indicator depends on other factors such as attracting a higher number of pregnant women, and is directly linked to the number of pregnant women who carried out six prenatal visits. Therefore, this study has some limitations in relation to technical and operational issues in the construction of the percentage indicator of pregnant women who carried out six prenatal visits<sup>(9)</sup>.

The first limitation relates to the population base, which estimates the number of pregnant women by the number of live births, thereby excluding pregnancies which terminated in stillbirths; the cumulative count of live births of twins; and the possibility of live births that die shortly after the birth being declared as stillbirths, thereby underestimating the total number of live births<sup>(10)</sup>.

Secondly, there are some limitations to the data collection tool<sup>(10)</sup> – declaration of live birth – in relation to the information on the number of visits as being seven or more; it does not specify whether the visit was carried out by a doctor, nurse, or other health professional, since the technical regulations of the Ministry of Health for the PBHP specify, for this purpose, that the visit be carried out be a doctor or nurse. Conversely, this item is filled out based on the information given by the mother, and is therefore subject to interpretation error, since these professionals do not always identify themselves at the time of the visit, as well as other factors<sup>(9)</sup>.

The analysis of the results should therefore take into consideration the limitations described above. It is observed that only 9.76% of the pregnant women enrolled in the PBHP carried out the minimum number of visits established by the Ministry of Health, i.e. six prenatal visits. Despite this percentage being considered extremely low, in Bahia as a whole, the performance of this indicator, for the same year, was below 3%<sup>(11)</sup>.

On the other hand, national data on healthcare for pregnant women with six or more visits, for the year in question, indicate cover of 46%, the proportions being lowest in the states of the North (25.8%) and Northeast (32.9%)<sup>(10)</sup>.

It was also observed that of the pregnant women who carried out six prenatal visits, 7.81% completed all the basic exams. This percentage is very low, given that among women who are users of the SUS (national Brazilian healthcare system) in Caxias do Sul who reported six or more prenatal visits, 42.4% completed all the exams recommended by the PBHP<sup>(12)</sup>.

It should be emphasized that the low percentage of pregnant women who carried out six prenatal visits, plus all the basic exams, is a reflection of the low percentage of pregnant women who carried out the six prenatal visits. Therefore, taking the 100 pregnant women who carried out the six visits as the study sample, we have 80% cover for the basic exams, for the public considered.

The percentage of pregnant women who carried out the postpartum visit in addition to the prenatal visits (5.66%) is considered very low, compared with the performance of other municipal districts. A study on the prenatal program in health units in the South of Brazil indicates that the postpartum visit was carried out in approximately 50% of women<sup>(13)</sup>.

Despite the financial incentives received by the municipal districts which are part of the PBHP<sup>(7,14)</sup>, the postpartum visit in Salvador, following discharge from hospital, was still not carried out, the women being left to seek out healthcare for themselves in the event of postpartum occurrences or complications<sup>(15)</sup>.

This low indicator, according to the study carried out in Salvador, is closely linked to the low offer of this service in recent years<sup>(1)</sup>.

It was also observed that the women returned to the service after the childbirth more often for care of the newborn infant, given that over last six years in Brazil, vaccine coverage in the first month of life (BCG) has reached 100%. The fact reveals the lack of articulation of the basic actions and also gender bias (16) since a qualified and humanized healthcare should incorporate conducts which are all-embracing and enable easy access to quality health services, integrating actions at all levels of healthcare: promotion, prevention and healthcare, both for the woman and the newborn infant.

In relation to pregnant women who concluded the prenatal healthcare, i.e. those who completed six prenatal and one postpartum visit, plus all the basic exams, and who received tetanus immunization, the low percentage found is cause for concern (5.66%). According to regulation no. 9 of the Secretary for Health Policies of the Ministry of Health, the municipal districts which are part of the PBHP should have completed, in the first year, the prenatal healthcare for at least 30% of the pregnant women registered in the program<sup>(6)</sup>.

The low percentage obtained for the indicator conclusion of prenatal healthcare is directly linked to the percentage of pregnant women who carried out six visits, which was also low, reaching just over half of these women. This indicates an important aspect relating to the quality of the healthcare in question, which is adherence to the measures instituted for the control, diagnoses, prevention or treatment of health-related situations or problems. Attention must therefore be given to the access difficulties for low income women who are the potential users of the public health services.

# **CONCLUSIONS**

Based on the results obtained, it was observed that prenatal health care in the public health services, in the municipal district of Salvador/BA, through the PBHP, is characterized by: Low cover by the health units of the basic health network, in terms of prenatal visits basic exams and postpartum visits, compared with the standards defined by the Ministry of Heath and other municipal districts in Brazil.

Of the pregnant women who carried out the six prenatal visits 100, the majority (80) also completed all the exams recommended by the PBHP, in contrast to the low percentage of those who carried out the postpartum visit (5.66%).

During the prenatal visit, it is necessary to offer the women conditions so that they can return to the health unit after the birth, for the postpartum visit. Also, and more importantly, the health services should increase the offer of this type of healthcare.

It is worth noting, also, that the difficulties experienced by many women belonging to sectors of society with low spending power, are very great, since the healthcare that should be provided to the newborn infant is not always an easy task when there is no financial or institutional support. On the other hand, we live in a society characterized by deep-rooted gender inequalities which mean, among other aspects, that the responsibility for domestic work falls almost exclusively on the mother herself who, during the postpartum period, faces a considerable increase in workload in relation to the care of herself and the newborn infant.

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