



EPIDEMIOLOGICAL SYPHILIS STUDY IN PATIENTS PREGNANCY ANSWERED IN A HOSPITAL TERTIARY WEST AMAZON IN 2016 YEAR

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Abstract - Objectives: To report a prevalence of syphilis and Profile with pregnant women notification cases met the obstetric ward of Dr. Ary Pinheiro Base Hospital (CO-HBAP). **Methods:** It is a retrospective study of hum and secondary descriptive of pregnant notification of cases with syphilis met CO-HBAP. Were analyzed 89 reported cases of syphilis in pregnancy, in 2016, in the city of Porto Velho – Rondônia. **Results:** The prevalence of pregnant women with syphilis notification was 1,25%, the age ranged from 14 to 39 years, with a predominance of brown race. As the women surveyed performed at least six the prenatal consultations recommended by the Ministry of Health. **Conclusions:** This study indicates one syphilis is occurring in young people. Early onset of prenatal care, guarantee number query minimum, suitable management of pregnant women and their partners both diagnosis paragraph As treatment, are the criteria for best control transmission these vertical diseases.

Key words: Syphilis; Prenatal care; VDRL; *Treponema pallidum*.

1. Introduction

Syphilis is a systemic infectious disease and sexually transmitted, caused by *Treponema pallidum* bacteria, is presented as a public health challenge worldwide. It is transmitted sexually (acquired syphilis) and vertically (congenital syphilis) via placenta from mother to fetus. Other forms of transmission may be by an indirect route (contaminated objects) and blood transfusion^{1, 2, 3}

Syphilis has three stages: primary, secondary and tertiary. The primary phase begins, usually after 21 days of infection. The infected person develops painless genital ulcers, which can last for 2 to 6 weeks. The secondary phase is marked by the appearance of skin lesions throughout the body, associated sometimes fever and muscle aches. This phase has the same duration as the primary; however, it is followed by a latency period lasting years, characterized by the absence of signs and symptoms. Finally, the tertiary stage occurs after several years of initial infection and includes, for example, the nervous, cardiovascular and cutaneous forms of the disease⁴.

Gestational syphilis, despite a simple diagnosis and effective treatment, still has alarming prevalence⁵ produces severe outcomes to pregnancy and child, like premature birth, stillbirth and neonatal and congenital infection of the newborn⁶.

Prenatal care is critical to maternal and child health. During this period, activities related to health promotion and risk identification for the pregnant woman and the fetus should be developed, thus helping to prevent numerous complications, and reduce or eliminate risk factors and behaviors associated with various health problems. The Ministry of Health recommends prenatal care with at least six consultations with health professionals, at least two of them carried out by a physician. Also advises the start of care in the first trimester gestational^{7, 8}.

The diagnosis of syphilis in pregnancy can be done using non-treponemal test VDRL flocculation type, should be performed early in prenatal care, repeated in the third trimester and at delivery. The first two tests aim to ensure early diagnosis of pregnant women with syphilis and its treatment in a timely manner, and the third allows early treatment of child.⁹

In case of positivity, it is recommended to confirm the diagnosis with treponemic test by particle agglutination (TPHA) or fluorescent antibody absorption test (FTAABs), but the absence of these should not delay treatment. If the VDRL is reagent, and the

non-reactive treponemal test, this is a false positive, a fact which occurs in up to 30% of cases, after confirmation by treponemal test.¹⁰

Treatment of pregnant women infected with *Treponema* is made with penicillin G benzathine, and the regimen defined according to the clinical evaluation¹¹. The only treatment is considered effective for both the woman and the fetus, completed at least 30 days before delivery and was the partner concomitantly treated.^{12,13}

The Health Ministry, aware of the risks of pregnancy and congenital syphilis, became compulsory from 1986, notice of congenital syphilis; assuming in 1995 the commitment by the Pan American Health Organization (PAHO) for preparation of the Action Plan aimed at eliminating congenital syphilis by the year 2000, with the target set an incidence rate up to 0.5 cases per 1,000 live births.¹⁴

Data from epidemiological bulletin STD / AIDS Ministry of Health show that the number of reporting syphilis cases during pregnancy increases every year. Amounted to 14 321 in 2011 and in 2012 (January 1 to June 30) were reported 7,043 cases of syphilis in pregnancy, and 819 in the Northern region and 52 cases in the state of Rondônia¹⁵.

To describe the prevalence and profile of cases of syphilis in pregnant women notification met the obstetric ward of Dr. Ary Pinheiro Base Hospital (CO-HBAP), in Porto Velho-RO.

2. Method

Treatment is a retrospective descriptive study of secondary data from case reporting of pregnant women with syphilis met CO-HBAP, in 2016, in Porto Velho. They considered cases of syphilis in pregnancy all pregnant women with positive serology result of the card or diagnosis of syphilis during hospitalization for childbirth. Constituted information sources prenatal card pregnant, test results performed during hospitalization.

The information of the chips were entered to compose a Microsoft Access database, analyzed by Microsoft Excel.

For this research, it was only used secondary data without identifying the patients. The database was provided by the Center for HBAP Hospital Epidemiology. Thus, the study was approved by the Research Ethics Committee was waived.

3. Results and Discussions

In the year 2016 were carried out 7,105 consultations of pregnant women in CO-HBAP, these 89 (1.25%) were pregnant with syphilis notification, the average age was 22,3 years, ranging from 14 to 39 years, as most syphilis detection in pregnant women 20-24 years adolescence is a risk factor for syphilis, among mothers with the disease, 31,5% were teenagers. To be dealing with the ethnicity of the infected group dominates the brown race.

Table 1 shows the distribution of pregnant women with VDRL reagent, according to the age and race.

Had at least six prenatal consultations recommended by the Ministry of Health 58.5% of the women surveyed. With the information available in this study could not establish the clinical stage of infection of pregnant women, 52% of patients were from the low risk, since the Municipal Maternity is the gateway to pregnant women in the city of Porto Velho.

Table I – Profile of 89 pregnant women with syphilis notification met the CO-HB, 2016.

Variables	Media (DP)	n	%
Patient age	22,3		
11 – 20		34	38,0
21 – 30		49	55,0
31 – 40		6	7,0
Race patient			
Black		13	14,6
Brown		72	80,9
White		4	4,5

Table 2 shows the distribution of pregnant women according to the evaluated obstetric variables. In this study indicates that syphilis is occurring in young, there was a high number of teenagers with gestational syphilis, probably reflecting the profile of the municipality's pregnant.

Table II - Distribution of pregnant women according to the obstetric variables evaluated in the CO-HB, 2016.

Variables	N	%
Prenatal realization		
Yes	86	96,6
No	3	3,4
Prenatal booklet		
Completed	85	95,5
Not completed	1	1,0
Does not have	2	2,5

Unknown	1	1,0
Gestational age at the time of consultation		
< 37 weeks	24	27,0
37 – 40 weeks	52	58,4
> 40 weeks	13	14,6
Origin		
Inside	6	6,8
Lowrisk*	52	58,4
High risk**	25	28,0
Home	6	6,8
Number of consultations in prenatal care		
0	9	10,0
1 – 5	28	31,5
> 5	52	58,5

Prenatal care is critical to maternal and child health is a right of pregnant women and duty of the health professional perform it in the best possible way. During this period, activities related to health promotion and risk identification for the pregnant woman and the fetus should be developed, thus helping to prevent numerous complications, and reduce or eliminate risk factors and behaviors associated with various health problems. Failure to do this is regarded as one of the main risk factors for congenital syphilis.^{16,17,18,19}

Despite efforts to prevent and control the number of syphilis cases in pregnancy continues to grow, it must improve the quality of reporting, attention to prenatal care, maintenance of vertical transmission of the disease and the increased migration of workers for project construction, taking place an explosive population growth.

The study shows the urgent need to review the procedures adopted and greater accountability of professionals towards an avoidable problem.

4. Final Considerations

This study indicates one syphilis is occurring in young people. Early onset of prenatal care, guarantee number query minimum, suitable management of pregnant women and their partners both diagnosis paragraph As treatment, are the criteria for best control transmission these vertical diseases.

Reference

1. Avelleira JCR, Bottino G. Syphilis: diagnosis, treatment and control. An Bras Dermatol. 2006; 81 (2): 111-26

2. Berman SM. Maternal syphilis: pathophysiology and treatment. Bull World Health Organ. 2004; 82 (6): 433-8.
3. Costa MC, DE Bornhausen, Azulay DR, Périssé AR, Dias MF, Nery JA. Sexually transmitted diseases in pregnancy, a synthesis of priorities. An Bras Dermatol. 2010; 85 (6): 767-82
4. World Health Organization global elimination of congenital syphilis:. Rationale and strategy for action. Geneva: World Health Organization; 2008
5. Secretariat of Health Surveillance, Ministry of Health Protocol for the prevention of vertical transmission of HIV and syphilis. - Pocket manual. Brasília: Ministry of Health; 2007.
6. Lima MG et al. Incidence and risk factors for congenital syphilis in Belo Horizonte, Minas Gerais, 2001-2008. Science & Public Health, 18 (2): 499-506, 2013
7. Secretariat of Health Surveillance, Ministry of Health Strategic Plan -. National STD and AIDS. Brasília: Ministry of Health; 2005
8. Department of Health Policy, Ministry of Health. Humanization program Deployment prenatal and birth. Brasília: Ministry of Health; 2000.
9. Department of Health Care, Ministry of Health Prenatal and postpartum: skilled care and humane - technical manual.. Brasília: Ministry of Health; 2005.
10. Amaral E. Syphilis in pregnancy and fetal death: back to the future. Rev Obstet Gynecol. 2012; 34 (2): 52-5
11. Ministry of Health (BR). Secretariat of Health Surveillance. Department of Epidemiological Surveillance. Infectious and parasitic diseases: pocket guide. 8. ed. rev. Brasília: Ministry of Health; 2010. 444 p. (Series B. Basic Health Texts)
12. Duarte G. Sexually transmitted diseases and pregnancy. In: Linhares IM, Duarte G, PC Giraldo, Bagnoli VR (eds.) Guidance Manual, STD / AIDS Brazilian Federation of Gynecology and Obstetrics (FEBRASGO). São Paulo: Editora Point; 2004.
13. Secretaria de Vigilância em Saúde, Ministério da Saúde. Diretrizes para o controle da sífilis congênita - manual de bolso. Brasília: Ministério da Saúde; 2006.
14. Ministério da Saúde. Secretaria de Políticas de Saúde. Coordenação Nacional de Doenças Sexualmente Transmissíveis e Aids. Boletim Epidemiológico de Controle das Doenças Sexualmente Transmissíveis. Ano XIV, nº 2. Brasília: Ministério da Saúde; 2001.
15. Ministério da Saúde. Secretaria de Vigilância em Saúde - Departamento de DST, Aids e Hepatites Virais. Boletim Epidemiológico – Sífilis 2012, ano I - nº 1. Brasília: Ministério da Saúde; 2012.
16. Secretaria de Políticas de Saúde, Ministério da Saúde. Implantação do programa de humanização no pré-natal e nascimento. Brasília: Ministério da Saúde; 2000.

17. Puccini RF, Pedroso GC, Silva EMK, Araújo NN. Equidade na atenção pré-natal e ao parto na área da Região Metropolitana de São Paulo, 1996. Cad.Saúde Pública 2003; 19:35-45.
18. Kilsztajn S, Rossbach A, Carmo MSN, Sugahara GTL. Assistência pré-natal, baixo peso e prematuridade no Estado de São Paulo, 2000. Rev Saúde Pública 2003; 37:303-10.
19. Brasil. Ações Programáticas Estratégicas. Área Técnica de Saúde da Mulher. Pré-natal e Puerpério: atenção qualificada e humanizada – manual técnico – Brasília: Ministério da Saúde, 2005.