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Epidemiological analysis of notified cases of gestational and congenital syphilis: an ecological study

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ABSTRACT

OBJECTIVE: to analyze the factors related to the gestational and congenital syphilis cases notified in the state of Rio Grande do Norte. **METHOD:** an epidemiological and ecological study whose data collection will take place by means of secondary data (notified cases of Gestational and Congenital Syphilis, occurred in 2018 and recorded in the Information System for Notifiable Diseases). The data will be tabulated in the Microsoft Excel program and the statistical analysis will be performed by means of the SPSS software, version 23.0. **EXPECTED RESULTS:** the expectation is to clarify the space-time situation of gestational and congenital syphilis in the state of Rio Grande do Norte, as well as to describe factors that can affect the health of these population groups. The study will provide subsidies in the analysis of the indicators of diagnosis and treatment access by the pregnant women, in the prenatal consultations conducted by the nurses, by evidencing the health encouragement and education actions.

Descriptors: Syphilis; Pregnancy; Prenatal Care; Congenital Syphilis.

PROBLEM SITUATION AND ITS SIGNIFICANCE:

Syphilis is an infectious-contagious but curable disease, of a systemic nature and exclusive of the human race, whose etiological agent is the *Treponema pallidum* bacterium. Transmission occurs via sexual intercourse (acquired syphilis); transplacentally (Congenital Syphilis - CS), during pregnancy or at the time of delivery, as a result of inadequate treatment or of its absence during prenatal care (Gestational Syphilis - GS); and through blood transfusion, this latter being less frequent(1).

In addition to the aforementioned, as it is known, the syphilis treatment protocol, mainly in pregnant women, is effective and prevents transmission to the newborn. However, the notification of syphilis cases has increased significantly; a gradual increase in the number of GS, CS, and acquired syphilis cases has also been observed in Brazil, as a result of the increase in rapid testing coverage; reduction in the use of condoms; difficulties in administering penicillin in Primary Health Care, due to lack of training of the professionals and of equipment for cases that proceed with anaphylaxis; and world shortage of penicillin because of lack of raw material(1).

That said, the importance of this study is especially justified by the fact that Rio Grande do Norte (RN) stands as one of the Brazilian states with the highest GS

detection and CS incidence rates, following a trend in the entire Northeast region(2), a fact probably attributed to the change in the case definition criterion for surveillance purposes, which are notified in specific forms for each case, therefore lacking greater investigation to make the consolidation of scientific knowledge feasible, which in turn will contribute to the Nursing practice.

In the meantime, the use of epidemiological studies as a health surveillance tool seeks to clarify the epidemiological context of diseases, especially when it comes to frequency and space and time distribution, factors that can affect the health of these population groups, in order to allow for a better allocation of material and financial resources implemented in the state(3).

GUIDING QUESTION

Which are the factors related to the cases of gestational and congenital syphilis notified in the state of RN?

OBJECTIVES

General

To analyze the factors related to the cases of Gestational and Congenital Syphilis notified in the state of RN.

Specific

To identify the incidence of the gestational and congenital syphilis notification cases in the state of RN;

To characterize the sociodemographic profile of the pregnant women diagnosed with gestational and congenital syphilis in the state of RN;

To describe the factors that are related to the cases of gestational and congenital syphilis notified in the state of RN;

METHOD

An epidemiological and ecological study, whose data collection will take place by means of secondary data, in the state of RN, due to its representativeness in the notification rates for GS and CS in the Northeast region of the country.

The study population and sample will consist of all pregnant women notified with GS and children with CS in the databases of the Information System for Notifiable Diseases (Sistema de Informação de Agravos de Notificação, SINAN), with information coming from notification forms for GS and CS during 2018. Forms of pregnant women notified with syphilis but with no CS notification will be excluded, due to the need to investigate the factors related to vertical transmission cases, as well as cases of double notification or inconclusive.

The data collection instrument will consist of the SINAN compulsory notification form. The data collected will be the following dependent variables: pregnant women with GS and children with

CS; as well as the following independent variables: age range, race/skin color, income and schooling of the pregnant woman, prenatal care, treatment of the pregnant woman, treatment of the partner(s). Data tabulation will be organized in the Microsoft Excel program and the statistical analysis will be performed by means of the Statistical Package for the Social Sciences (SPSS), version 23.0.

Regarding the ethical aspects, the research will be conducted according to the rules of Resolution No. 510/16 of the National Health Council, which deals with the guidelines and regulations of research involving human beings and with secondary data. This will waive the need for the analysis by an Ethics and Research Committee.

EXPECTED RESULTS

The expectation is to clarify the space-time situation of GS and CS in the state of RN, as well as to describe the factors that can affect the health of these population groups. In addition to that, to subsidize the analysis of indicators of diagnosis and treatment access by the pregnant women, in the prenatal consultations, noticeably conducted by the nurses, by evidencing how important the health encouragement and education actions are; sensitization for the early initiation of gestational monitoring; ensuring quality consultations and

conducting pharmacotherapy for the positive cases.

REFERENCES

1. BRASIL. Ministério da Saúde. Secretaria de Vigilância em Saúde. Boletim Epidemiológico Sífilis 2020 [internet]. Brasília: Ministério da Saúde; 2020 [cited 2020 Oct 30]; 44p. Available from: <http://www.aids.gov.br/pt-br/pub/2020/boletim-sifilis-2020>.
2. Machado M, Felix ICG, Oliveira TF, Duarte MS, Gama Filho, ACB. Relationship between syphilis cases and family health strategy in northeastern Brazil. *Enfermería Global* [Internet]; 2021 [cited 2021 Jan 25]; 20(1):305-340. doi: <https://doi.org/10.6018/eglobal.436421>.
3. Rouquayrol MZ, Silva MGC. Rouquayrol: epidemiologia & saúde. In: Rouquayrol: epidemiologia & saúde. 8 ed. Rio de Janeiro. Medbook. 2018.

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