Care line for pregnant women with syphilis in the view of nurses

Linha de cuidados para gestantes com sífilis baseada na visão de enfermeiros

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Objective: to build a proposal of care line for pregnant women infected with syphilis from the perspective of nurses. **Methods:** this is a qualitative research conducted with seven Primary Health Care nurses, through semistructured interviews with aid of a script with sociodemographic and professional data and guiding questions. The technique of Content Analysis in the thematic modality was used for data analysis. **Results:** a central thematic unit and five categories were built, addressing the performance in Primary Health Care, difficulties and potentialities of care, the nursing process, interprofessionality, and the idealization of a care path. **Conclusion:** the results indicated the existence of a scenario of care to pregnant women infected with syphilis, but with minimally articulated actions. Nurses present difficulties that may interfere in the care provided, such as the fragile search for pregnant women and partners, and lack of involvement on the part of municipal management. **Descriptors:** Nursing; Pregnant Women; Syphilis; Primary Health Care.

Objetivo: construir uma proposta de linha de cuidado para a gestante com sífilis a partir da visão de enfermeiros. **Métodos:** pesquisa qualitativa, realizada com sete enfermeiras da Atenção Primária à Saúde, por meio de um roteiro de entrevista semiestruturado com dados sociodemográficos, profissionais e questões norteadoras. Para análise dos dados utilizou-se a técnica de Análise de Conteúdo na modalidade temática. **Resultados:** foi construída uma unidade temática central e cinco categorias que abordam a atuação da Atenção Primária à Saúde, dificuldades e potencialidades da assistência, processo de enfermagem, interprofissionalidade e a idealização de um caminho de cuidados. **Conclusão:** resultados apontam a existência de um cenário de assistência à gestante com sífilis, contudo, com ações minimamente articuladas. Os enfermeiros apresentam dificuldades que podem interferir no cuidado prestado, como a frágil captação das gestantes e parceiros, e falta de envolvimento da gestão municipal.

Descritores: Enfermagem; Gestantes; Sífilis; Atenção Primária à Saúde.

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Introduction

Maternal infections caused by microorganisms that can be transmitted to the fetus constitute one of the main possibilities for increasing and maintenance of high rates of perinatal morbidity and mortality⁽¹⁾. The highest transmission rates of these infections are concentrated in syphilis, a systemic disease defined as a public health problem due to the high frequency of infection and severe outcomes for pregnancy and for the fetus, such as miscarriages, late fetal losses and neonatal deaths⁽²⁻³⁾.

According to the Syphilis Epidemiological Bulletin 2018, it was estimated that 49,000 parturients were diagnosed with syphilis, resulting in approximately 24,666 live births with congenital syphilis and 206 deaths due to this infection⁽³⁾. Six million new cases of syphilis occur in the world, mostly in low- and middle-income countries⁽⁴⁾.

Personal, family and social impacts resulting from the effects of this disease require multidimensional care to the mother-fetus binomial, addressing all aspects inherent to the care process. From this perspective, the possibility of building a care line encompasses networking of different professionals in various health services and social sectors⁽⁵⁾.

Primary Health Care assumes the ideal scenario for this care to be expanded based on preventive activities and not only on assistance and/or administrative activities⁽⁶⁾. Prenatal care, according to the Program for Humanization of Prenatal and Birth Care, is at the forefront of screening, early diagnosis and skilled therapy to treat syphilis during pregnancy. It lays the groundwork for the promotion of quality care for pregnant women and the fetus/newborn, and provides a set of laboratory and immunobiological tests, risk classifications, and referrals to other levels of care⁽⁷⁾.

Given the broad role of nurses in this level of care, with emphasis to their participation in care management and in provision of health care for women and children in all their interfaces, as well as the pro-

portion of the damage caused by syphilis and its preventable nature, the present study was based on the following guiding questions: What care measures are provided by primary health care nurses to pregnant women infected with syphilis? How is the Health Care Network for pregnant women with syphilis structured in the municipality?

The proposal of building a specific care line is launched as a method of increasing the quality and solving capacity of the health care provided, based on the fact that congenital syphilis is the cause of preventable perinatal morbidity and mortality, and in view of the scenario of frailty in the use of opportunities for screening, diagnosis and treatment, which are currently ineffective and lack quality.

Thus, the objective was to build a proposal of care line for pregnant women infected with syphilis from the viewpoint of nurses working in Primary Health Care.

Methods

Qualitative study that included all the nine Basic Family Health Units of the municipality of Cuité, Curimataú Paraibano, with distribution of five units in the urban area and four in the rural area, thus totaling nine nurses working in the units investigated.

After surveying the number of professionals, the following inclusion criteria were considered: I) working in one of the Basic Family Health Units of the municipality; II) not being removed from professional practice during the collection period. Two nurses refused to participate, resulting in a total sample of seven nurses.

The interviews had an average duration of 5 to 20 minutes and were conducted during the months of November and December 2017, in a date, time and place of the preference of the participants.

Data collection was mediated by a script for semi-structured interview created by the researchers, addressing questions about sociodemographic data, professional data and guiding questions regarding the researched theme. Sociodemographic data included gender, age and marital status, and professional data included time elapsed since graduation, time working in Primary Health Care, and training and qualification related to syphilis. The guiding questions were based on the perception about the current care network for pregnant women diagnosed with syphilis in the city, professional assistance offered to them, development of the nursing process in the follow-up of pregnant women diagnosed with syphilis, and the necessary tools for the construction of a care line for these patients.

The information obtained during the interviews was recorded and later transcribed and analyzed. To carry out this last step, the technique of Content Analysis was employed, through the thematic modality. The systematization of the interviews was based on the construction of a central thematic unit and categories. This methodological technique adopts the following phases: pre-analysis, material exploration, and inference and interpretation of results⁽⁸⁾.

Through a thorough analysis of the speeches of the research participants, one Central Thematic Unit was created: The knowledge of Primary Health Care nurses about Syphilis during pregnancy. From it, five categories were created: Primary Care as principal access for implementation of the care line for syphilis during pregnancy; Difficulties/potentialities of care for pregnant women with syphilis; Need to strengthen the nursing process for the systematization of care for pregnant women affected by syphilis; Interprofessionality and its importance for pregnant women with syphilis; and A path of possibilities for implementation of care.

The care line was built by the researchers based on the nurses' statements, emphasizing their opinions and needs, as well as the particularities of the service. Moreover, some care actions and services were implemented to the construction so as to include social and protective initiatives not mentioned.

The research followed the principles of Resolution 466/2012 of the National Health Council, hav-

ing its data collection preceded by submission to the Research Ethics Committee of the Alcides Carneiro University Hospital, under Opinion nº 2,382,256 and Certificate of Presentation for Ethical Appreciation nº 76904417,3,0000,5182. During the interpretation of the results, each participant was given as code name one of the following precious jewels: Diamond, Ruby, Sapphire, Emerald, Aquamarine, Amethyst and Tourmaline.

Results

The sample was composed entirely of women. The age ranged from 23 to 42 years, with an average of 30 years. It is noteworthy that one of the participants refused to inform her age, and her decision was respected. Regarding marital status, five participants were married, and only two claimed to have an unofficial union.

In the professional context, most of the participants had graduated less than 10 years ago and only two professionals more than 10 years ago. The time of work in Primary Health Care ranged from 11 months to 17 years. As for titles, one participant had *Stricto Sensu* postgraduate training (masters), while four had *Lato Sensu* postgraduate training (specialization), and one was attending a postgraduate course at the moment. Only one participant claimed to be trained in syphilis, specifically syndromic approaches related to the symptomatology of sexually transmitted infections.

The rest of the participants said they had taken a training course to carry out the rapid test through *Telelab*, which represents a permanent education program of the Ministry of Health that offers free courses in virtual media aimed at health professionals as target public.

Primary Care as principal access for implementation of the care line for syphilis during pregnancy

The Health Care System seeks to ensure com-

prehensive care also directed to the mother/baby binomial and, for this care to be effective, health professionals must offer it continuously, so that care is not fragmented. The elimination of syphilis depends on the qualification of care, especially of the Primary Health Care team, which is directed as the gateway to this Network. This statement is in line with the interviewee's speech, as follows: Well... it's... the gateway right as primary care... the Family Health Program has this power to have access and provides follow-up to all these pregnant women and those who do not have the follow-up, who, perhaps, miss consultations, those who do not want to do prenatal, they refuse it... we can have this control (Diamond).

Difficulties/potentialities of care for pregnant women with syphilis

The early identification of pregnant women by Community Health Agents and the use of social networks to maintain communication with users were potentialities emphasized by nurses. On the other hand, despite the variety of devices that facilitate the adherence of pregnant women to consultations, some difficulties that end up interrupting the continuity of care during prenatal care were pointed out, such as difficulty in performing the rapid test both by the pregnant woman, and especially by partners: To facilitate, what I think is a potential strong point, I created a group in WhatsApp with all the pregnant women of the unit... (Aquamarine). I get my health workers to detect these women, all the pregnant women I have in my territory, so I can monitor them 100.0% (Emerald). What we still find of difficulty in the issue of diagnosis of syphilis... but the thing is that the partner does not come to do the test... women participate more (Tourmaline). It's when the woman does not attend the scheduled consultation for the rapid test. There was a case of congenital syphilis because the woman did not attend the scheduled day for the rapid test... (Ruby).

Need to strengthen the nursing process for the systematization of care for pregnant women affected by syphilis

From the question on how the nursing process

is developed in the monitoring of pregnant women with syphilis, the following statements were selected: Through consultations, it is... prenatal care, but also through family monitoring... we have to... yeah, investigate the partner is... let me see what else... make sure she does the treatment right... I think that's it! (Amethyst). I don't have an answer now... the nursing process would be more the monitoring right? (Emerald).

As stated in the speeches above, the nursing process is not effectively implemented, which may weaken the care provided to pregnant women with syphilis. Only one nurse talked about how the nursing care systematization works in the care of pregnant women with syphilis: I made all the follow-ups in the nursing record itself, I requested the exams; we did all the systematization of nursing care... from this, right, the, the...the systematization that I did there, it's going to be recorded, right... even for other professionals who come, they will know what happened to the pregnant woman I was monitoring. This patient had a second pregnancy, but it was not me who was following up her case, was another nurse (Diamond).

Interprofessionality and its importance for pregnant women with syphilis

The Extended Family Health Center represents one of the main alternatives for interprofessionality, according to the following statements: We already need to have a preparation of that pregnant woman; we have to get support with the Extended Family Health Center, a psychological monitoring of this pregnant woman so that she can work right this problem (Tourmaline). We also refer her to... to other services, such as the psychologist, so that this pregnant woman feels supported... it's ... needs the psychological support for the fear that the disease brings, even despite the information we give (Amethyst).

A path of possibilities for implementation of care

In the question to the nurses about what they would add to a care line focusing on pregnant women with syphilis in the municipality according to the needs of their practice, multidisciplinary monitoring, mental health care, continuing education of professionals, and early detection prior to gestational desire

stood out, as in the following speeches: What could be as a line of care, it would be the follow-up with a multidisciplinary team... A unique therapeutic project for this pregnant woman! (Ruby). I think it has to come from the health department, I think it has to come from there... training, folders... (Sapphire). Early detection; this early detection will begin... is in women who do family planning, is... doing the tests yet... still during the... when they express the desire to... to get pregnant... (Amethyst).

Based on the needs, the care line was proposed as follows: pregnant women in the area will be identified through active search by community health agents so as to do a quality prenatal treatment. Through screening tests, when Primary Care nurses and physicians report a case of syphilis, the pregnant woman should be referred to the High Risk Reference Center of the region, located in the city of Campina Grande, Paraíba.

Once the diagnosis is confirmed, the pregnant woman and the partner should be followed-up by a team composed of a nurse, a physician, a pharmacist, a psychologist and a social worker, integrating the Extended Family Health Center and the Reference Center on Social Assistance, which together will outline the Singular Therapeutic Project. Accordingly, there must be intersectoriality and interprofessionality between the Extended Family Health Center and Psychosocial Care Center in promoting and caring for the mental health of the pregnant women and their families.

Nurses should give guidance regarding care to pregnant women through the nursing process, making diagnoses and implementing interventions in order to minimize preventable risks, collect results, and meet the needs of the pregnant women.

The Psychosocial Care Center would integrate the care line if the pregnant women showed signs of psychological distress, changes in mental functions, and risk of suicide.

Discussion

The limitations of the study include the small number of participants, considering the universe of a municipality with only nine Basic Family Health Units. The proposal for the construction of a care line directed to pregnant women with syphilis represents a possibility for the implementation of comprehensive and problem-solving care that includes all the user's interfaces, and assists in the work of health care and social assistance services when it comes to guiding the decision making process.

In line with the findings of this study, international research indicates that the main challenges related to the elimination of congenital syphilis are the need to improve prenatal care, increase the coverage of the rapid test, train health professionals in diagnosis, treatment and follow-up, and expand access to screening tests and drugs used at the frontline of treatment⁽⁹⁾.

Furthermore, the inclusion of mechanisms that guide the development of good care practices, including the creation of care lines, also presents constraints that are conditioned to the municipal management, the users, and the involvement of professionals.

From this perspective, the reorganization of practices in the units is intended to make care networks follow-up users during the care flow within the system based on the problem-solving potential⁽¹⁰⁾. This system of integration of the Health Care Network provides users with a mutual referral between services with different complexity levels.

Integrated systems make referrals/counter-referrals work, making them effective at all three levels of attention. The need for referrals/counter-referrals in cases of syphilis during pregnancy is organized through a Health Care Network, recommending the participation of different points of care, having them as important mechanisms in the care process, which must be continuous⁽¹¹⁾.

The present study revealed that there is a path that pregnant women with syphilis travel in the municipality. All of them do rapid tests during prenatal care and nurses know how to act if the test is positive, so that Primary Health Care is an essential point for detection and follow-up of cases.

The potential of resolution of prenatal care is

mediated by the use of tools by the health team for the early detection of pregnant women to ensure the minimum number of consultations, access to diagnostic methods, and monitoring of the mother/baby binomial⁽¹²⁾. However, the main obstacle to the control of congenital syphilis in Brazil is the non-treatment or inadequate treatment of partners of the pregnant women. Authors argue that health services should take a new stance in order to foster embracement and decide strategies in collaboration with the couple, because reinfection can perpetuate the disease and appropriate treatment is crucial for breaking the chains of sexually transmitted infections⁽¹³⁾.

The speeches also showed that the nursing process is not effectively implemented in their units, thus hindering the comprehensive care for pregnant women with syphilis. Nurses have a relevant role in the proper management of care for pregnant women. In this specific case, the systematization of care is developed through prenatal consultations.

The applicability of systematization in health services falls short of the expectations. Examples of flaws are the lack of knowledge of professionals on how to properly carry out systematization and poor academic education. This fact represents a lack of commitment to the care method, when ignorance generates lack of interest and non-adherence to the nursing process in their work routine⁽¹⁴⁻¹⁵⁾.

Although not implementing the nursing process, nurses are aware that all care is planned and organized through it. Although the Theory of Basic Human Needs was implemented a long time ago and is mandatory in Brazilian health institutions, it is clear that it is not yet strictly followed⁽¹⁴⁾. Thus, nurses must commit to articulate new practices and knowledge based on scientific principles, as well as constantly reevaluate their work process.

The intention is that Permanent Health Education become the pillar for the practice of Primary Health Care professionals in the municipality, since it results in improvements in the production of work and care itself⁽¹⁶⁾. The Family Health Strategy should

also undertake activities to sensitize the community on how to prevent and deal with syphilis.

The Pan American Health Organization encourages the introduction of training aimed at improving the work of professionals in Primary Health Care⁽¹⁷⁾. It is also imperative that the professionals seek improvement alternatives despite the means offered by municipal management.

The Municipal Basic Pharmacy participates in the line with the supply of medicines used to treat syphilis, as it is intended exclusively for Primary Health Care and outpatient care. It also provides drugs to children with congenital syphilis and with apparent clinical manifestations such as pneumonia, skin lesions and bone problems⁽¹⁷⁾.

Social programs such as *Bolsa Familia, Projovem Adolescente*, Happy Child Program and Popular Pharmacy may be included in the line depending on the needs of the pregnant women and the conjuncture of their families. In addition, the Specialized Reference Center for Social Assistance would intervene in case of vulnerabilities and risk of harm to the physical, mental and social integrity of the pregnant women. The inclusion of these services aims to promote better quality of life and social security for pregnant women and consequently for their babies, based on social protection as a constitution of the universal social right⁽¹⁸⁾.

From the perspective of respect for social and health rights, the implementation of the Singular Therapeutic Project in all care tools makes the quality and potential of resolution of care to become effective, as well as intersectoral and interprofessional actions with a comprehensive and interdependent approach based on the reorganization of the work process at different levels of attention⁽¹⁹⁾.

Conclusion

The results showed the existence of a scenario of care to pregnant women with syphilis. However, this care consists of minimally articulated actions. It was found that the nurses in this study gained know-

ledge about the subject, but presented some difficulties that tended to interfere with the care provided, such as the fragile detection and coverage of pregnant women and partners, lack of continuing and permanent education, and even lack of involvement of municipal management.

Colaborations

Araújo MAM and Trigueiro JVS participated in the conception, design, analysis and interpretation of data, writing of the article and relevant critical review of the intellectual content. Macêdo GGC, Lima GMB, Nogueira MF and Trigueiro DRSG contributed to the final approval of the version to be published.

References

- Pereira DAP, Maia BP, Seto IIC, Bichara CNC. Congenital infection in patients enrolled in mother child reference program. Rev Paraense Med [Internet]. 2015 [cited mar 20, 2019]; 29(1):31-5. Available from: http://files.bvs.br/ upload/S/0101-5907/2015/v29n1/a4655.pdf
- Dantas LA, Jerônimo SHNM, Teixeira GA, Lopes TRG, Cassiano AN, Carvalho JBL. Perfil epidemiológico de sífilis adquirida diagnosticada e confirmada em hospital universitário materno infantil. Enfermería Glob. 2017; 16(2):227-36. doi: http://dx.doi.org/10.6018/eglobal.16.2.229371
- Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Boletim Epidemiológico de Sífilis 2018. Brasília: Ministério da Saúde; 2018.
- 4. Trinh TT, Kamb ML, Luu M, Ham DC, Perez F. Syphilis testing practices in the Americas. Trop Med Int Health. 2017; 22(9):1196-203. doi: http://dx.doi.org/10.1111/tmi.12920
- Gryschek ALFPL, Nichiata LYI, Fracolli LA, Oliveira MAF, Pinho PH. Building the women's health network towards constructing a care line for pregnant and puerperium women in the Regional Management Board of Alto Capivari – São Paulo. Rev Saúde Soc. 2014; 23(2):689-700. doi: dx.doi. org/10.1590/S0104-12902014000200027

- 6. Mororó RM, Lima VC, Frota MVV, Linhares MSC, Ribeiro SM, Martins MA. A percepção dos enfermeiros da Estratégia de Saúde da Família acerca do seguimento da sífilis congênita. Rev Saúde.com [Internet]. 2015 [citado 2019 abr 20]; 11(2):291-302. Disponível em: http://www.uesb.br/revista/rsc/v11/v11N3a06.pdf
- Leal MC, Theme-Filha MM, Moura EC, Cecatti JG, Santos LMP. Atenção ao pré-natal e parto em mulheres usuárias do sistema público de saúde residentes na Amazônia Legal e no Nordeste, Brasil 2010. Rev Bras Matern Infant. 2015; 15(1):91-4. doi: http://dx.doi.org/10.1590/S1519-38292015000100008
- 8. Bardin L. Análise de conteúdo. São Paulo: Edições 70; 2011.
- Silveira MF, Leon RGP, Becerra F, Serruya SJ. Evolution towards the elimination of congenital syphilis in Latin America and the Caribbean: a multicountry analysis. Rev Panam Salud Publica. 2019; 43:e31. doi: https://doi.org/10.26633/ RPSP.2019.31
- Peiter CC, Santos JLG, Lanzoni GMM, Mello ALSF, Costa MFBNA, Andrade SR. Healthcare networks: trends of knowledge development in Brazil. Esc Anna Nery. 2019; 23(1):e20180214. doi: http:// dx.doi.org/10.1590/2177-9465-ean-2018-0214
- Lazarini FM, Barbosa BA. Educational intervention in Primary Care for the prevention of congenital syphili. Rev Latino-Am Enfermagem. 2017; 25:e2845. doi: http://dx.doi.org/10.1590/1518-8345.1612.2845
- Lopes ACMU, Araújo MAL, Vasconcelos LDPG, Uchoa FSV, Rocha HP, Santos JR. Implementation of fast tests for syphilis and HIV in prenatal care in Fortaleza–Ceará. Rev Bras Enferm. 2016; 69(1):62-5. doi: http://dx.doi.org/10.1590/0034-7167.2016690108i
- 13. Suto CSS, Silva DL, Almeida ES, Costa LEL, Evangelista TJ. Prenatal assistance to pregnant women diagnosed with syphilis. Rev Enferm Atenção Saúde [Internet]. 2016 [cited Apr 20, 2019]; 5(2):18-33. Available from: http://seer. uftm.edu.br/revistaeletronica/index.php/enfer/article/view/1544/pdf

- 14. Soares MI, Resck ZMR, Terra FS, Camelo SHH. Systematization of nursing care: challenges and features to nurses in the care management. Esc Anna Nery. 2015; 19(1):47-53. doi: http://dx.doi. org/10.5935/1414-8145.20150007
- 15. Marinelli NP, Silva ARA, Silva DNO. Sistematização da assistência de enfermagem desafios para a implantação. Rev Enferm Contemp. 2015; 4(2):254-62. doi: http://dx.doi.org/2317-3378rec.v4i2.523
- 16. Silva CEM, Friedrich DBC, Farah BF, Silva KL. Continuing education and its interfaces with ambulatory care sensitive conditions. Rev Rene. 2017; 18(6):794-802. doi: http://dx.doi.org/10.15253/2175-6783.2017000600013

- 17. Cooper JM, Sánchez PJ. Congenital syphilis. Semin Perinatol. 2018; 42(3):176-84. doi: http://dx.doi.org/10.1053/j.semperi.2018.02.005
- 18. Couto BR. Assistência social: direito social ou benesse?. Serv Soc Soc. 2015; 124(1):665-77. doi: http://dx.doi.org/10.1590/0101-6628.045
- 19. Rocha EN, Lucena AF. Single Therapeutic Project and Nursing Process from an interdisciplinary care perspective. Rev Gaúcha Enferm. 2018; 39:e2017-0057. doi: dx.doi.org/10.1590/1983-1447.2018.2017-0057