

ORIGINAL ARTICLE

COLLECTIVE CONSTRUCTION OF A FLOWCHART FOR FOLLOW-UP OF PREGNANT WOMEN WITH SYPHILIS IN THE MUNICIPALITY OF SÃO JOSÉ-SC*

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ABSTRACT

Objective: To instruct, with a flowchart and Standard Operating Procedure, nurses from Primary Health Care, in order to monitor cases of gestational syphilis.

Method: Qualitative research, action-research type, practical-educational modality. Attendees: Representatives of the Epidemiological Surveillance, Women's Health Program, Primary Health Care, nurses from the Family Health Strategy and the medical staff. Made in the city of São José-SC, in October 2017.

Results: An instrument was developed to assist pregnant women with a rapid reagent test for syphilis.

Conclusion: The participants working in the primary care assistance practice, through a dynamic process, allowed legitimacy, seeking to meet the demands of the services and the professionals. The speed in the diagnosis, monitoring and treatment of syphilis in pregnancy are related to the proper management, associated with actions, strategies and updates, providing qualified assistance during the gestational period, to effectively eradicate congenital syphilis.

DESCRIPTORS: Congenital Syphilis; Primary Health Care; Pregnant Women; Healthcare Management Nursing.


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CONSTRUÇÃO COLETIVA DE UM FLUXOGRAMA PARA ACOMPANHAMENTO DAS GESTANTES COM SÍFILIS NO MUNICÍPIO DE SÃO JOSÉ-SC**RESUMO**

Objetivo: instrumentalizar, com fluxograma e Procedimento Operacional Padrão, os enfermeiros da Atenção Primária à Saúde, a fim de monitorar os casos de sífilis gestacional.

Método: pesquisa de abordagem qualitativa, tipo pesquisa-ação, modalidade prático-educativa. *Participantes:* representantes da Vigilância Epidemiológica, Programa Saúde da Mulher, Atenção Primária à Saúde, enfermeiros da Estratégia Saúde da Família e do corpo clínico médico. Concretizado na prefeitura de São José-SC, no mês de outubro de 2017.

Resultados: elaborou-se um instrumento para auxiliar no atendimento de gestantes com exame de teste rápido reagente para sífilis.

Conclusão: os participantes atuantes na prática assistencial da atenção primária permitiram, através de um processo dinâmico, a legitimidade, buscando atender às demandas dos serviços e dos profissionais. A celeridade no diagnóstico, acompanhamento e tratamento da sífilis na gestação estão relacionados com o manejo adequado, associado a ações, estratégias e atualizações, proporcionando assistência qualificada durante o período gestacional, para efetivamente erradicar a sífilis congênita.

DESCRITORES: Sífilis Congênita; Atenção Primária à Saúde; Gestantes; Gestão em Saúde; Enfermagem.

CONSTRUCCIÓN COLECTIVA DE UN FLUJOGRAMA PARA SEGUIMIENTO DE GESTANTES CON SÍFILIS EN EL MUNICIPIO DE SAN JOSÉ-SC**RESUMEN**

Objetivo: instrumentalizar, con flujograma y Procedimiento Operativo Estándar, a los enfermeros de la Atención Primaria de la Salud, con el objetivo de monitorear los casos de sífilis gestacional.

Método: investigación de enfoque cualitativo, tipo investigación-acción, modalidad práctico-educativa. *Participantes:* representantes de la Vigilancia Epidemiológica, Programa Salud de la Mujer, Atención Primaria de la Salud, enfermeros de la Estrategia Salud de la Familia y del cuerpo de clínica médica. Estudio realizado en la municipalidad de San José-SC, durante el mes de octubre de 2017.

Resultados: se elaboró un instrumento para auxiliar en la atención de gestantes con de test rápido reactivo para sífilis.

Conclusión: los participantes actuantes en la práctica asistencial da atención primaria permitieron, por medio de un proceso dinámico, la legitimidad, intentando atender las demandas de los servicios y de los profesionales. La celeridad en el diagnóstico, seguimiento y tratamiento de la sífilis gestacional se relacionan con el manejo adecuado, asociado a acciones, estrategias y actualizaciones, brindando asistencia cualificada durante el período gestacional, para erradicar la sífilis congénita de manera efectiva.

DESCRIPTORES: Sífilis Congénita; Atención Primaria de la Salud; Gestantes; Gestión en Salud; Enfermería.

INTRODUCTION

Syphilis is a Sexually Transmitted Infection, considered a major public health problem by the World Health Organization, despite having a well-established and low-cost diagnosis and treatment. One of the main concerns about the difficulties in controlling the spread of this disease is the infection of women of reproductive age, which can lead to the occurrence of cases of congenital syphilis, through vertical transmission⁽¹⁾.

Each year, nearly six million people are infected with syphilis. One of the causes for the population's involvement is the non-use of condoms, associated with the risk of partner turnover⁽²⁾. In Brazil, in 2015, 33,365 pregnant women acquired syphilis, of which 6,005 (18.0%) belong to the southern region of the country⁽³⁾. In Santa Catarina, the number of cases is also significant. In 2016, 1,380 syphilis pregnant women were notified, affecting 554 babies and causing the death of 34 of these, in addition to 18 abortions⁽⁴⁾.

In order to promote the early treatment of syphilis and enable the beginning in a timely manner, new strategies are adopted by the Ministry of Health (MH) in order to expand the diagnosis and introduce new methodologies and flows that allow the early treatment of syphilis. Among the proposed innovations, there is the diagnosis that is carried through rapid tests. These are tests that are easy to perform and simple to read, making it possible to investigate syphilis in places without laboratory infrastructure and, often, difficult to access. In addition, by generating results in up to 30 minutes, the rapid tests eliminate the risk of the user not returning to the health system to know its result and, thus, allow the immediate follow-up of the individual⁽⁵⁾.

Syphilis can be classified as primary, secondary, recent latent, and late or tertiary latent. Primary syphilis refers to the diagnosis within 10 to 90 days after contact, secondary to six weeks to six months after contact, recent latent to two years and late latent the period after two years of contact⁽⁶⁾.

Faced with a pregnant woman diagnosed with syphilis already confirmed in the rapid test, in situations where it is not possible to understand the duration of the infection, it is always classified as latent syphilis, undergoing treatment with a total dose of penicillin⁽⁶⁾. Thus, the municipality of the study opts to follow the same protocol as the Ministry of Health, including the treatment extended to the pregnant woman's partner, even without performing the syphilis test.

The Ministry of Health recommends that cases of syphilis acquired in pregnant women be followed up monthly⁽⁵⁾. In addition, the compulsory notification of congenital syphilis throughout the national territory was instituted through Ordinance No. 542, of December 22,

1986; syphilis in pregnant women was instituted by Ordinance No. 33, of July 2005; and, finally, acquired syphilis through Ordinance No. 2.472, published on August 31, 2010⁽³⁾.

Due to this obligation to notify pregnant women still in prenatal care, the Ministry of Health increasingly seeks strategies to optimize this care. In 2012, it instituted the conduction of rapid tests for HIV, syphilis and hepatitis B and C in all Basic Health Units (BHU) for pregnant women in the first trimester, seeking in an opportune moment to start treatment, preventing vertical transmission⁽⁶⁾.

The municipality of São José-SC has the Women's Health Program, which has a comprehensive assistance protocol for women and children, with the aim of updating professionals regarding care and treatment within the scope of Primary Health Care, together with epidemiological surveillance of the municipality. Since 2014, the municipality has sought to optimize the service to pregnant women with the rapid test. Initially, tests were offered at the Testing and Counseling Center. One year after implementing the rapid tests, they were made available at the BHU. To this date, all the BHU have rapid tests for HIV diagnosis, and screening for syphilis, hepatitis B and C.

The use of management and care tools for the care of pregnant women diagnosed with syphilis, when well designed and implemented with health teams duly trained to do so, make it possible to eradicate congenital syphilis. In this way, it was decided to build two tools, one for management - flowchart - and the other for attention - Standard Operating Procedure (SOP) - to assist the health team in making decisions regarding this health problem. Thus, the objective of this research is to instruct, with flowchart and SOP, nurses from the Primary Health Care, in order to monitor syphilis cases during pregnancy.

METHOD

Research of qualitative approach of the type research-action, in the modality of educational practice, where a method of monitoring was constructed through a flowchart and a SOP for the cases of diagnosis of syphilis in pregnant women. These tools will be

incorporated into the Women's Health Care Protocol of the Municipality of São José-SC, and used by nurses in the Family Health Strategy (FHS).

The action research, starting from the situations experienced in everyday life, makes it possible to reflect on the care practice, leading to discover new realities and introduce innovations in the care practice. It consists of the intentional articulation with the practice and assistance actions, which are incorporated into the research process and vice versa. Action research always requires the active participation of the subjects who will be part of the research and is oriented towards making changes and/or introducing innovations in health practices. Therefore, it is understood and performed in conjunction with actions involving researchers and other people representing the situation to be researched, in a relationship of mutual cooperation⁽⁷⁾.

The educational action, in the scope of health education, becomes a dynamic process whose objective is the training of individuals and/or groups in search of improving health and work conditions⁽⁸⁾. Thinking about this collective construction process, the team from the Women's Health Program and epidemiological surveillance was included in this research. At the activity time, the program representatives appointed a FHS nurse from each health district, and the coordinator should select, according to their professional experience criteria, to collaborate on the construction of the management tool, as they are directly involved in the care process of pregnant women in prenatal care.

Participants were personally invited by the researcher. The educational activity was attended by representatives of primary care, epidemiological surveillance, the Women's Health Program, the FHS doctor and nurses from the southern, eastern and western health districts, totaling eight participants. The FHS nurse from the northern health district did not attend.

The educational activity took place on October 18, 2017, lasting one hour and 40 minutes, in the auditorium of the Municipal Department of Education.

The room was organized in a circle, allowing participants to look at each other during practice. The action was carried out by the researcher, and started with the presentation of the theme, raising the perception of the problem and arguing through the growing statistics why there is a need for strategies to minimize the damage of syphilis during pregnancy, in the absence of adequate treatment. To justify that there are already ordinances that aim at this care, the ministerial ordinance and the municipality's protocol were presented, in view of the deficient assistance in cases of pregnant women with rapid reagent syphilis test.

To begin the process of preparing the flowchart and SOP, the information that precedes the construction of the necessary elements in both documents was submitted. In the case of SOP, the city already had a standard model, making it necessary to carry out a specific model for pregnant women diagnosed with syphilis. Regarding the flowchart, the

steps that define the components of the process were presented, the importance of the order of the geometric figures, which define both the continuation and the completion of the monitoring, and the justification for the elaboration of the same.

The suggestions were corroborated by all, and ended with exactly the same opinion, having no doubts or disagreements. Subsequently, the proposal was presented through training to BHU nurses, which was reviewed and approved.

The study was approved by the Human Research Ethics Committee of the Federal University of Santa Catarina, opinion No. 2.836.404.

RESULTS

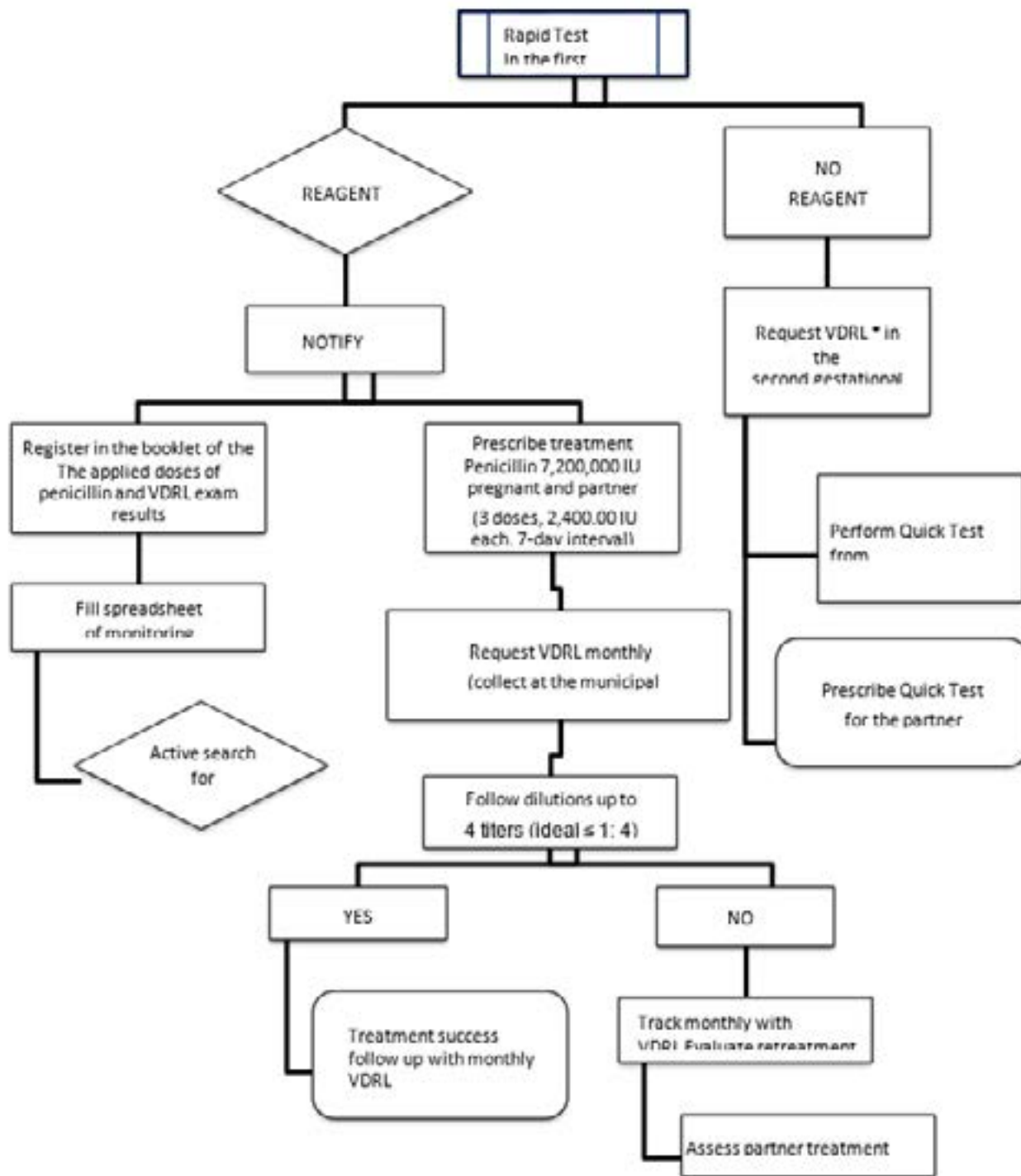
With the realization of the educational activity, focusing on the training of individuals to seek ways to improve work processes, we sought to collect knowledge, stimulating dialogue and reflection. The participation of the professionals was essential, since they work in the field of practice, know the real needs and manage to prioritize the needs of the users.

Thus, learning took place effectively, as the group had the opportunity to share ideas, receive support, promote a feeling of companionship, reinforcing the knowledge from their co-workers. Collectively, two products resulted from the educational practice, a flowchart and a SOP, submitted below.

In October 2017, an educational action was carried out in the northern auditorium of the Municipal Education Secretariat of the city of São José-SC. Representatives of Primary Health Care, Epidemiological Surveillance, Women's Health Program, a FHS nurse from each sanitary district in the municipality and a doctor took part in such action, aiming to the collective construction of a SOP with flowchart, to later be submitted as management tools for the care of pregnant women diagnosed with syphilis assisted by FHS nurses.

Known as a graphic representation of content, the flowchart is a process that uses geometric symbols to describe the step by step of a flow. The objective is to show in an uncomplicated way the stages of the information and elements, in addition to the operational sequence that characterizes the work being performed.

The flowchart developed in this study aims to guide the care professional in conducting the pregnant woman when performing the rapid test for syphilis, as seen in Figure 1.



* Municipal Laboratory: Policlínica Forquilha. Collection time from 7:00 am to 5:00 pm from Monday to Friday.

Caption: Predefined process Process Demanding decision-making Finalizer

Figure 1 - Flowchart of the pregnant woman during the rapid test for syphilis. São José, SC, Brazil, 2018

In turn, SOP, thought of as a standard goal, is a document that expresses the planning of repetitive work, which must be performed by the work team, in order to standardize the services. The SOP constructed by the professionals in this research concerns the monitoring of pregnant women undergoing syphilis treatment, explained in Table 1.

Table 1 - Standard Operating Procedure: Monitoring pregnant women undergoing syphilis treatment. São José, SC, Brazil, 2018

MONITORING PREGNANT WOMEN IN SYPHILIS TREATMENT	
Creation date: 10/18/2017	Reviewed by: Nurses at FHS
Review date: 10/31 and 11/01, 2018	Agent(s): Nurse
Objective: To realize adequate monitoring of pregnant women diagnosed with syphilis.	
<p>1. CONCEPT: Pregnant women undergoing syphilis treatment should be monitored monthly with non-treponemic tests (VDRL - quantitative). Considering the detection of possible indication of retreatment, due to the possibility of therapeutic failure⁽¹⁾. Pregnant women in low-risk treatment with rapid reagent test for syphilis, perform monthly control for treatment and cure⁽²⁾.</p>	
2. ESSENTIAL MATERIALS	
<ul style="list-style-type: none"> · Individual protection materials; · Rapid testing kits 	
3. PROCEDURAL STEPS	
<ol style="list-style-type: none"> 1. Schedule the prenatal consultation, preferably on up to 12 weeks of gestation; 2. First prenatal consultation with the FHS Nurse; 3. Perform quick test in the first prenatal consultation, pre and post test counseling; 4. Rapid reagent test for syphilis: Prescribe 7,200,000 IU penicillin to be applied in three weeks, 2,400,000 IU every seven days; 5. Apply the first dose of 2,400,000 IU penicillin; 6. Request quantitative VDRL every 30 days until the end of pregnancy; 7. Request quick test for the partner; 8. Prescribe partner treatment, 7,200,000 IU to be applied in three weeks, 2,400,000 IU every seven days (all partners must be treated regardless of testing); 9. Fill out a web monitoring spreadsheet (institutional tool); 10. NOTIFY 	
4. REFERENCES	
<ol style="list-style-type: none"> 1. Ministry of Health (BR). Secretaria de Vigilância em Saúde. Departamento de IST/HIV/ Aids e Hepatites Virais. Manual Técnico para Diagnóstico da Infecção pelo HIV. 3 ed. Brasília; 2016. 2. São José City Hall. Santa Catarina (BR). Secretaria Municipal de Saúde. Diretoria de Vigilância Epidemiológica. Programa DST/HIV/AIDS/Hepatites Virais. Aconselhamento em DST/HIV/AIDS no Município de São José – SC. São José; 2015. 	

DISCUSSION

Putting into practice work based on ethical responsibility and ensuring health promotion, disease and disease prevention, is one of the best strategies to minimize syphilis during pregnancy. As syphilis is a pathology of easy and quick diagnosis and treatment, the discovery during prenatal care represents an enormous challenge for primary care, because generally the approaches have been individualized by professionals, which leads to a succession of errors in control and treatment of the pregnant woman and partner. The standardization of care, as management tools, establishes collective criteria, which certainly offers greater security to the professional in performing a quality service from the assistance perspective.

The best way to start standardizing an object is by understanding how the whole process occurs and, in this case, a systematic representation is necessary. SOP is a tool that describes each critical and sequential step, which must be taken by the operator, to

guarantee the expected result of the assistance. In addition to relating to the technique, it refers to the help of a rule to do something with disposition⁽⁹⁾.

The disorganized characteristic of health and nursing care services is based on the lack of standardization of procedures, the absence of norms and routines and the non-use of nursing services methodology, due to the different forms of professional conduct. Therefore, standards are defined, aiming at setting up guidelines for controlling and continuous quality improvement. In addition, standardized care is detailed guidelines that represent predictable care, indicated for specific situations, which will encourage organizations to develop process improvement and guarantee results⁽¹⁰⁾.

Well-trained nurses provide rationalization of routines, standardization and greater safety in carrying out procedures, effective participation in planning and freeing up more time to interact with the patient and, therefore, there is a need to monitor new determinations and participate in the construction of alternatives respond to the challenges of improving the quality of services provided⁽¹¹⁾.

The content of the SOP, as well as its application, must have the complete understanding and familiarization on the part of the nursing team that has direct and/or indirect participation in the final quality of that procedure, and the rapid test performed by the nurse in the first prenatal consultation. Usually, interference from supervisors, coordinators and directors at this point is one of the causes of inefficiency in the implementation of a quality system. They are responsible for reviewing and approving the SOP⁽¹²⁾.

SOP presents itself as a basis to guarantee the standardization of tasks and to guarantee users a service free of undesirable variations in its final quality. It facilitates the work of everyone who will use this procedure on a daily basis, providing more security to nurses and those who will use this service, and everyone will gain with more quality care.

The word "standard" has the meaning "that which serves as the basis or norm for the evaluation", and is related to the results that one wishes to achieve. In the health area, it is equivalent to the standards of care and assistance, which relate to the client's rights to receive adequate assistance, according to their needs⁽¹²⁾.

The flowchart, along with the SOP, is suitable for the enrichment of the management tool and facilitator of service management, as it describes, through the use of specific symbols, each stage of a process. This tool aims to clearly describe a work flow, sequence or process, thereby helping to create new processes, improve existing processes, eliminate duplicate tasks, eliminate damage/waste time and inputs, in addition to transmitting a systemic view of existing processes in the organization to all individuals involved directly or indirectly in the activity represented⁽¹³⁾.

Analytically, the flowchart is a tool that represents the routine of a process, representing the beginning operations, displacements, storage, waiting, inspections, interruptions and conclusions of this process, as well as representing the flow of information and the consequences resulting from the choice of performance or not at a certain point in the process by the executor. To build up a flowchart, one must necessarily define their application, identify the intended start and end and step by step of the stages, analyze whether, in fact, they replicate the reality of the process or activity, use the symbols in a standardized manner to facilitate the understanding of everyone who will have access to the document, and, whenever necessary, analyze and update, in order to adapt possible deviations or changes.

The flowchart is a great facilitator, allowing a better visualization and a better understanding of the inputs, outputs, relationships, interactions and decisions⁽¹⁴⁾.

The flowchart provides an understanding of any changes that are proposed in existing systems by clearly visualizing the changes introduced. Among its advantages, it stands out that it allows to verify how the components of a system are connected and related, mechanized or not, facilitating the analysis of its effectiveness and the location

of deficiencies, by the easy visualization of steps, transports, operations and forms. The flowchart is pointed out, graphically, as the heart of the process mapping, and is often used for the purpose of processing information⁽¹⁴⁾.

An instrument that guides the monitoring of syphilis cases in pregnant women implies raising the quality of nursing care, benefiting both the patient and the nurse, validating the scientific knowledge of nursing, determining the nurse's autonomy, providing a better quality of care, making it safer, more qualified and providing increased satisfaction and growth for the professional nurse and, above all, the reduction of congenital syphilis.

The justification on the instrumentalization for care is to expand the understanding of how important the role of nurses is in providing adequate care, observing the increasingly present need for the use of instruments that seek to improve the quality of care provided by nurses and their staff to the users. Teamwork is important for making these changes, in addition to being a way to make joint decisions, as it systematizes care and brings nurses closer to the user, strengthening the presence of this professional and contributing to the process of rehabilitation and healing of individuals.

Educational practice is an action of the professional nurse and is part of nursing care. In this way, knowledge is considered emancipatory, it thinks the consequence of its acts, in which the subject-object relationship is replaced by reciprocity between the participants and where solidarity and participation are present. Conducting health education in a process that encourages inquiry, dialogue, reflection and shared action, raises the knowledge of the participants. For health education to happen, it is essential that educators know the reality, the worldview and the expectations of each individual, so that they can prioritize the needs of users, and not just the therapeutic requirements⁽⁸⁾.

We emphasize that the study was limited to a specific context, with the tools being structured to the health needs of a given population and the health network of the municipality at issue. However, we estimate that this research can serve as a basis for the development of new research that seeks to instrumentalize professionals, especially with regard to the prevention and treatment of syphilis acquired in pregnant women and congenital.

FINAL CONSIDERATIONS

This research aims to contribute to the agility of the diagnosis, monitoring and treatment of syphilis in pregnant women and their partners, understood as a point of paramount importance, since the lack of adequate management for these pregnant women and partners is directly associated with actions and strategies that need to be rethought through updates and news that provide qualified care during the gestational period, to effectively eradicate congenital syphilis.

Thus, the flowchart and SOP, as long as they are well designed and understood as a management tool, become support for the decision-making process, as they follow a single flow, corroborating the search for adequate service, both by the professional health and for the treatment and cure of syphilis during pregnancy, preventing the birth of children with congenital syphilis.

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