

NURSES' PERFORMANCE IN CONGENITAL SYPHILIS PREVENTION AND DISCUSSION SPACES

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ABSTRACT

Objective: to know the possibilities for nurses' discussion and performance spaces in the quadrilateral of training in the health area: teaching, care, management and social control in the prevention of congenital syphilis.

Method: a qualitative and exploratory-descriptive research study, theoretically supported by public health policies. The data were collected in July 2020 through nine online focus groups with a total of 42 nurses from 18 municipalities in the mountainous region of the state of Santa Catarina, Brazil. For data systematization, thematic content analysis was used with the support of the *Atlas.ti* software, version 8.0.

Results: nurses' performance occurred especially during direct assistance to patients, when performing rapid tests, monitoring prenatal care and following-up cases of the disease. Discussions about congenital syphilis took place in care spaces. As for the quadrilateral, the nurses related health care to direct assistance and to management of the work organization process in relation to the prevention of congenital syphilis, in addition to pointing out weaknesses in education and social control. They suggested training managers about the quadrilateral.

Conclusion: the nurses acted in the prevention of congenital syphilis through direct assistance, making it necessary to expand actions to combat syphilis, especially by increasing the discussion spaces and the elaboration of strategies that involve professionals, managers, researchers and the community in an articulated way about the reality of syphilis in the state, as well as about prevention and treatment means.

DESCRIPTORS: Nursing care. Congenital syphilis. Teaching. Management of the health services. Health care. Social control.

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A ATUAÇÃO DO ENFERMEIRO NA PREVENÇÃO DA SÍFILIS CONGÊNITA E OS ESPAÇOS DE DISCUSSÃO

RESUMO

Objetivo: conhecer as possibilidades de espaços de discussão e de atuação do enfermeiro no quadrilátero da formação na área da saúde: ensino, atenção, gestão e controle social na prevenção da sífilis congênita.

Método: pesquisa qualitativa, exploratório-descritiva, sustentada teoricamente pelas políticas públicas de saúde. Os dados foram coletados em julho de 2020, por meio de nove grupos focais *on-line*, com um total de 42 enfermeiros de 18 municípios da região serrana do estado de Santa Catarina, Brasil. Para a sistematização dos dados, utilizou-se a análise de conteúdo temática com o apoio do *software Atlas.ti* na versão 8.0.

Resultados: a atuação dos enfermeiros ocorreu, sobretudo, durante a assistência direta às pacientes, ao realizar testes rápidos, acompanhar o pré-natal e monitorar os casos da doença. As discussões sobre a sífilis congênita ocorreram nos espaços assistenciais. Quanto ao quadrilátero, os enfermeiros relacionaram a atenção à saúde com a própria assistência direta, a gestão do processo de organização do trabalho em relação à prevenção da sífilis congênita, e apontaram fragilidades na educação e no controle social. Sugeriram capacitar gestores acerca do quadrilátero.

Conclusão: os enfermeiros atuaram na prevenção da sífilis congênita por meio da assistência direta, sendo necessário ampliar ações para combater a sífilis, sobretudo por meio do aumento dos espaços de discussão e da elaboração de estratégias que envolvam profissionais, gestores, pesquisadores e a comunidade de forma articulada sobre a realidade da sífilis no estado, bem como sobre as formas de prevenção e o tratamento.

DESCRITORES: Cuidados de enfermagem. Sífilis congênita. Ensino. Gestão dos serviços de saúde. Atenção à saúde. Controle social.

EL DESEMPEÑO DE LOS ENFERMEROS EN LA PREVENCIÓN DE LA SÍFILIS CONGÊNITA Y EN LOS ESPACIOS DE DEBATE

RESUMEN

Objetivo: conocer las posibilidades de espacios de debate y actuación de los enfermeros en el cuadrilátero de la formación en el área de la salud: enseñanza, atención, gestión y control social en la prevención de la sífilis congénita.

Métodos: trabajo de investigación cualitativo y exploratorio-descriptivo, sustentado teóricamente por las políticas públicas de salud. Los datos se recolectaron en julio de 2020 por medio de nueve grupos focales en línea, con un total de 42 enfermeros activos en 18 municipios de la región serrana del estado de Santa Catarina, Brasil. Para sistematizar los datos se utilizó análisis temático de contenido con el apoyo del programa de *software Atlas.ti*, versión 8.0.

Resultados: los enfermeros se desempeñaron especialmente durante la asistencia directa a las pacientes, al realizar *tests* rápidos, supervisar la atención prenatal y monitorear los casos de la enfermedad. Los debates sobre sífilis congénita tuvieron lugar en los espacios asistenciales. En relación con el cuadrilátero, los enfermeros relacionaron la atención de la salud con la asistencia directa en sí y con la gestión del proceso de organización del trabajo en relación con la prevención de la sífilis congénita, además de señalar debilidades en la educación y el control social. También sugirieron la posibilidad de capacitar gerentes acerca del cuadrilátero.

Conclusión: los enfermeros se desempeñaron en la prevención de sífilis congénita por medio de la asistencia directa, siendo necesario expandir acciones para combatir la sífilis, especialmente incrementando los espacios de debate y elaboración de estrategias que involucren a profesionales, gerentes, investigadores y la comunidad en forma articulada sobre la realidad de la sífilis en el estado, al igual que acerca de las formas de prevención y tratamiento.

DESCRITORES: Atención de Enfermería. Sífilis congénita. Enseñanza. Gestión de los servicios de salud. Atención de la salud. Control social.

INTRODUCTION

Congenital syphilis is a global public health problem, reemerging and on the rise over the last few years, becoming more evident for at least five years with the expansion of early diagnosis through the implementation of rapid tests. These were implanted to increase the possibility of immediate treatment and thus avoid vertical transmission. Epidemiological data from Brazil point to an overlapping of congenital syphilis cases with detected cases of gestational syphilis, which allows inferring that syphilis has been detected in children at birth¹.

A recent study on the persistence of syphilis deals with the challenges for public health in Brazil, given the limited access to adequate diagnosis and treatment in the Unified Health System (*Sistema Único de Saúde*, SUS) care network. It also highlights the magnitude of syphilis, evidenced by the data, but emphasizes that this information can translate into underestimations due to underreporting, compromising health planning actions, and also reinforces the effect of COVID-19 in 2020-2021, with a reduction in case detection².

With regard to public health policies, they should prioritize actions for syphilis control, with early screening, diagnosis and treatment strategies, reducing morbidity and contributing to improving the sexual and reproductive health of the general population and especially of more vulnerable people. Congenital syphilis is considered a sentinel event, as it is preventable, as long as health actions are efficient³.

Despite the existence of public policies, inequality in access to prenatal consultations and timely examinations for diagnosing the infection by the Human Immunodeficiency Virus (HIV) and syphilis has also been observed. Individual factors related to pregnant women's schooling collaborate, as well as contextual factors related to the Municipal Human Development Index (HDI) and the Gini index⁴.

Throughout the strengthening of the Unified Health System (SUS), public health policies were being developed and implemented in health services. In the course of the 34 years since its creation, marked by important advances and setbacks, there are several interfaces in the SUS involving management, health care, teaching and social control. It can be defined that such interfaces encourage the expansion of spaces for dialog between universities, services, community leaders and health councils, so that the participants share achievements, difficulties, desires and experiences and, mainly, discuss the each one's role in professional training and in care reorganization, and these four fields were equally terrains marked by advances and setbacks throughout the history of public health policies in Brazil⁵.

Among the setbacks, it is worth noting Constitutional Amendment (*Emenda Constitucional*, EC) No. 95 of December 15th, 2016, which establishes the New Fiscal Regime (*Novo Regime Fiscal*, NRF) within the scope of the Union's Fiscal and Social Security Budgets, which will be in force for 20 financial years. This amendment freezes the floor and the primary expenditures of each power, based on the funding according to the expenses during 2016, in the 20-year period. This spending freeze substantially affects the health system, which is fundamental for the health care of the population⁶⁻⁷.

The relevance of nurses' role within the SUS scope must be unquestionably understood and recognized, even when facing serious challenges such as precarious work, including work overload, low pay and lack of Nursing professionals in numbers and quality, among others no less important. In this context, nurses specifically play a decisive and proactive role regarding the identification of care needs, as well as in the promotion and protection of people's health, in the construction of their work and inclusion processes. In strengthening actions, transformations in public policies and in the organization and management of health services stand out⁸.

Thus, these professionals' role is more prominent in disease prevention, health promotion and education actions for the team and the community, as well as in prenatal care and syphilis screening, performing rapid tests and offering immediate treatment.

In view of this context and the observation of important knowledge gaps in this area, the following guiding question emerged: Which are the possibilities for discussion spaces and for nurses to act in the quadrilateral of training in the health area: teaching, care, management and social control in the prevention of congenital syphilis?

In search of answers to this question, the current study was developed with the objective of knowing the possibilities of discussion spaces and nurses' performance in the quadrilateral of training in the health area: teaching, care, management and social control in the prevention of congenital syphilis.

METHOD

This is a qualitative and exploratory-descriptive study. The theoretical support of this study is based on public health policies that are related to syphilis, in the context of newborn care and women's health, as well as men's health, Sexually Transmitted Infections (STIs) and the Human Immunodeficiency Virus (HIV/AIDS). The discussion spaces, nurses' role and their legal frameworks are contextualized in the quadrilateral of training for the health area: teaching, care, management and social control.

The study was carried out in the *Serra Catarinense* region, Santa Catarina, Brazil, with nurses from 21 institutions, involving the Municipal Health Departments of the 18 municipalities covered by the region, as well as hospitals that provide maternal and child care and regional health services.

A total of 42 nurses selected for convenience participated in the study, with no refusals to participate, namely: seven from the hospital area; two from specialized outpatient care; 12 from program and committee management at the municipal and regional levels; 17 from Primary Health Care (PHC); and four with mixed performance, involving teaching and assistance. They were listed according to their experience and divided into three focus groups.

Inclusion criteria: nurses who work in health services in the care field (hospital, specialized outpatient services and PHC) and teaching (Public Health, Epidemiology and Maternal-Child Policy); groups such as: Regional Interagency Commission (*Comissão Intergestores Regional*, CIR), Health Councils, committees, steering groups of the Health Care Network (*Rede de Atenção à Saúde*, RAS), Technical Chambers; municipal health management representatives in the region who were nurses; and coordinators of programs related to PHC, maternal-child health and STI/HIV/AIDS/HV. Inclusion is independent of the time performing their functions.

Nurses who did not work in the related services and who were away on vacation or leave during data collection were excluded, as well as those who did not work and did not live in the region.

For data collection, the focus group technique was used, with meetings held online due to the COVID-19 pandemic. The participants were divided into three groups: I, II, III. Three meetings were held with each of these groups, totaling nine focus groups. Each focus group lasted a mean of 1 hour and 30 minutes.

For each group in the first focus group, an initial conversation was held to establish a bond with the participants. Subsequently, an active methodology was used, which consisted in folding an A4 sheet into four parts in order to symbolize the quadrilateral of health training for nurses in the prevention of congenital syphilis.

After this stage, on the back of the fold, each nurse was invited to represent, in the form of a drawing or symbol, what it means to be a nurse. Subsequently, the researcher conducting the focus

groups contextualized syphilis and used the following triggering questions: a) “Which of these four moments are you part of?”; b) “How do you perceive these discussions?”; c) “In what place or spaces for discussing health processes does this type of discussion occur most often?”; d) “And what do you do when you hear about it?”.

In the second focus group, for each of the groups, the folding was retrieved and the participants were asked to draw about the actions, in their current workspaces, for the prevention of congenital syphilis. Subsequently, the following questions were asked: a) “What kind of action do nurses perform in the prevention of congenital syphilis?”; and b) “Which are the strengths and weaknesses of the nurses’ role?”.

In the third focus group, for each of the groups, the participants were asked if they were aware of the health training quadrilateral. Afterwards, it was proposed that they use the folding in the logic of the quadrilateral and weave reflections on health care, teaching, management and social control. Likewise, they were asked to leave proposals on how to apply the quadrilateral in nurses’ performance in the prevention of syphilis.

The focus groups were conducted by the main researcher and an assistant. Data collection took place in July 2020. All conversations were noted down in a field diary, recorded and transcribed in full for later analysis.

For data analysis and systematization, thematic content analysis proposed by Laurence Bardin was used, following these stages: pre-analysis, exploration of the material, treatment of the results and interpretation, with the support of the *Atlas.ti* software, version 8.0.

The contents of the focus groups were pre-analyzed, explored and broken down into units called codes, which, according to their affinities, were regrouped into categories; and these categories, also according to affinities, were grouped into themes. The *Atlas.ti* software was used as support, which throughout the text makes it possible to create codes, which are terms highlighted and marked at the original point of the document – that is, the organization for data analysis according to Bardin, so that the groups within the program are related to the themes, and the codes are related to the codings, according to content analysis. The categories are groupings of the codes that have the greatest affinity within each theme originated from the results⁹⁻¹⁰.

The study was approved by the Committee of Ethics in Research with Human Beings of *Universidade Federal de Santa Catarina*, according to Resolution No. 466/12 of the National Health Council, which regulates research involving humans. The participants were previously informed about the research and expressed their consent to participate voluntarily, signing a Free and Informed Consent Form. Secrecy and confidentiality of the information collected were ensured. To preserve the interviewees’ anonymity, their names were replaced by alphanumeric codes consisting of the prefix “N” for “Nurse”, followed by a cardinal number, thus ranging from N1 to N42.

RESULTS

The study pointed to two categories: “Nurses’ performance in the prevention of congenital syphilis and their discussion spaces” and “The health education quadrilateral and its contributing aspects in nurses’ performance in the prevention of congenital syphilis”.

A total of 23 codings related to the contextualizations discussed in the online focus groups were detected. Of these, 22% point to daily performance issues in the work process; 21%, to discussion spaces on the topic; and 57%, to how they should act in the health training quadrilateral in health: care, management, teaching and social control. In the “Nurses’ performance in the prevention of congenital syphilis and their discussion spaces” category, the conversations are represented in Figure 1, where

each factor refers to a grouping of codes that showed affinities with each other, and the frequency of citations represents how many times they were mentioned by the nurses.

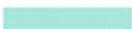
Show codes in the Nurses' Performance in syphilis prevention and its discussion spaces group.			
	Name	Magnitude	
<input type="radio"/>	◇ Working in direct assistance		31
<input type="radio"/>	◇ Working in PEH with the team		16
<input type="radio"/>	◇ Working in Education in Health		14
<input type="radio"/>	◇ Discussing with the team		12
<input type="radio"/>	◇ Discussing with the network		11
<input type="radio"/>	◇ Deficits in discussion		8
<input type="radio"/>	◇ Working in management support or managerial tasks		6
<input type="radio"/>	◇ Working with the community		3
<input type="radio"/>	◇ Discussions in teaching		3
<input type="radio"/>	◇ Discussing when the assistance is provided		3

Figure 1 – Frequency of the codes related to nurses' role in the prevention of syphilis and their discussion spaces.

When encouraged to discuss which actions nurses can visualize in the prevention of syphilis, the focus group participants highlight the issue of direct patient care as the most relevant in their narratives, when analyzed alone in the frequency of citations. The relationship of performance in the entire line of care is pointed out: rapid tests, Nursing consultation in prenatal care, follow-up and monitoring of cases in relation to tests and treatment, guidance for adherence to prenatal care and treatment with pregnant women and partners. [...] *I can see nurses in the assistance, work process, prenatal care, treatment, in the segment, a job even in the line of care, [...] the qualified Nursing consultation and bringing safety to the users and mainly to clear their doubts (N14). [...] consultation, referral when necessary, home visits and the care itself [...] (N7).*

The performance in care regarding incipency of the strategies and the concern related to the consequences of failing to timely act in a timely way also stand out: [...] rapid testing, treatment and thinking about the patient not getting worse [...] (N8). [...] acting in prevention, guidance, conduction, segmentation, treatment, to avoid consequences [...] (N1).

From the following speech it can be noticed that, in the prenatal care and late treatment aspects, lack of family planning is opposed to the issues of effectiveness in the prevention of congenital syphilis in nurses' role with regard to care: [...] *of the treatment, that we always need to be on top of it, running against time, mainly in relation to pregnant women, we need to treat before delivery, and sometimes it's the woman herself that identifies it in late prenatal care; the family issue planning issue is really uncommon, we manage to then monitor this baby in the segment, so I see more performance [...] (N24).*

With regard to the notes of the discussion spaces, they appear during the assistance provided: [...] *they occur more when I'm caring for the mothers, assisting them to carry out the treatment and then to give continuity, involve the partners and make them think that, if they had had the treatment during the prenatal pregnancy, they wouldn't need to be here. [...] discussions at the moment, this is how I can interact more with the patients than with the team [...] (N23).*

With regard to health education, the indication of actions at school is evidenced, which may take place in other spaces: [...] *working in health education, in the PSE [Programa Saúde na Escola], working with adolescents about STIs and emphasizing syphilis [...]* (N8). [...] *I see nurses working on syphilis prevention in education, not only in classrooms, but at health units, wherever their field of action may be, guiding patients, raising awareness of syphilis prevention, treatment, diagnosis [...]* (N16).

In general, the professional identify the need for Permanent Education in Health (PEH) to be able to complement the actions in nurses' work, experiencing greater possibilities to talk about syphilis: [...] *acting in team meetings, planning about care, although I'm always the one who passes on information to the team. I do PEH with a team [...]* (N8). [...] *performance aimed at the team that works directly, with guidelines, monitoring, treatment schedules, to be following-up the actions by Rede Cegonha, the protocols that are being incorporated, thus contributing to the prevention issue in PEH [...]* (N1).

The performance and discussions with the professionals involve spaces such as committees, councils and steering groups of the RAS: [...] *with the collaboration of colleagues to discuss. As I'm part of Rede Cegonha and somehow have access to the Vertical Transmission Committee, I end up helping in this sense, the way we have is permanent education and meetings [...]* (N19). [...] *while Rede Cegonha, also trying to work with the municipal units because we joke that we're paranoid about syphilis, we look to the side, to everyone and think about it [...]* (N24).

Discussions should not only be for health professionals, but for all areas involved: [...] *it can't be limited to responsibility, in the health professionals' discussion, this has to be expanded [...]* (N5). [...] *we've been looking for communication with the network, but still with difficulty, although already much better access also to spaces that are not only health, such as social assistance, for example [...]* (N19).

Teaching institutions appear less frequently as discussions spaces about syphilis by nurses: [...] *discussing bothers me a lot, this thought, where is the gap, the error, how is this happening; when I discuss this with students regarding human, sexual behavior, it comes up a lot in the discussions, and the absence, it's not absence, but the difficulty we have to discuss preventive health behaviors [...]* (N5). [...] *working with epidemiology in education, discussing health indicators, but not specifically syphilis, but in general so that they understand, get to know a given reality, because we have to know the pathologies, what happens in our city and region [...]* (N16).

When dealing with behaviors and spaces for discussion about syphilis, specifically those involving management, it is clear that, even though it is mostly care-related, the nurses' role is present when referring to the team, mainly in supporting the managers or in carrying out the actions themselves: [...] *we must not act only in procedures, it goes beyond, we have to act in management as well. Nurses go far beyond the professionals who perform the procedure, I think this is what we do least lately, but in management, having to manage conflicts [...]* (N16). [...] *in the segment, specific work even in the line of care and management support as well [...]* (N4).

A deficit in relation to the discussion on congenital syphilis in other services stands out in the focus groups. The lack of information or dialog on certain issues of territorial epidemiological impact contributes to failures in courses of action. [...] *I see that this information needs to be publicized, we haven't been able to get there, you know? [...]* here we're in a separate group that's discussing [...] (N39). [...] *I think it's difficult to have these discussions dispersed in other sectors and with different professionals in a natural way, I believe they're more productive in specific places for this [...]* (N16).

In the category that deals with the health training quadrilateral and its contributing aspects in nurses' performance in the prevention of congenital syphilis, when citing PEH, we must consequently

understand the quadrilateral: health care, management, teaching and social control. In Figure 2, we can verify the interfaces addressed in this analysis of the result presented in the category.

Among the nurses, four participants reported that they had contact in some way, through seminars or study circles. Some reported some misunderstanding about PEH or the quadrilateral and how it is applied in the routine. Few know the quadrilateral, or have only heard about it, and most of them have never performed it. For this reason, they do not know that there has to be social control, management and teaching in combination. It is very distant from what is recommended and how it should be done; they even talk about the topic, but do not execute it. [...] *nurses always pull things for them, but many times they're pulling something that they don't even know what it is exactly. I had more contact when I was in management, but each one pulling to their side an occasional conversation with teaching, another at times being in the Health Council, but I still notice that nobody knows exactly their role [...]* (N23). *I heard about the quadrilateral, I worked with it at times, but not in depth, very superficially* (N28).

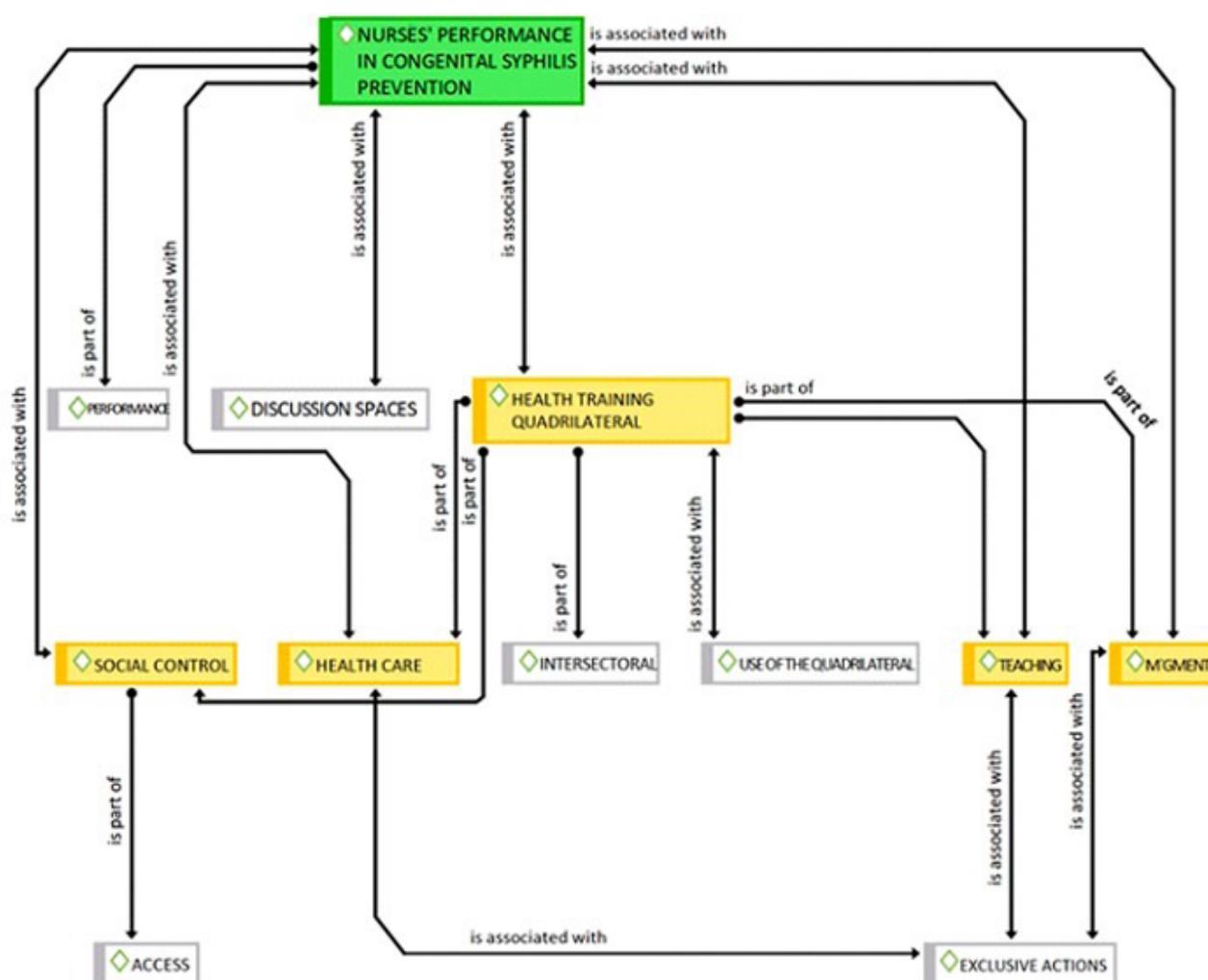


Figure 2 – Nurses' performance and its interfaces with the health education quadrilateral.

It is clear that the other participants had no contact, or did not remember, perhaps because they had not heard this expression, showing the distance in the way of articulating the four members of the quadrilateral to be able to better discuss health strategies: [...] *I never had contact with the quadrilateral, but I found it an interesting methodology, this reflection that will have to be had so that*

it may have an effect on health issues. [...] even not knowing about the quadrilateral, I think nurses have already been executing some of its sides; it's 1, 2, 3 separate sides, but it does, but I notice that there's no way to separate it, so for that we need more information, training to be able to use it best (N39). [...] I don't remember if I had contact with the quadrilateral [...] (N36).

As for the discussions directed to the quadrilateral (teaching, health care, management and social control) and nurses' role, some testimonies stand out. In teaching, health training is understood as integrating service and research. When the question "And how is performance in teaching?" was asked, the following answers were obtained: [...] *it's in training teaching itself, at school professionals come to the service with great difficulty for care. They don't know how to proceed in situations, they don't know how to read a syphilis test and evaluate the result, so there's lack of professional qualification in training, today it's one of the weaknesses we find here* [...] (N2). [...] *what can be done at the university, in the classrooms, in relation to the prevention of syphilis, and that's what is being done. In fact, I don't particularly address syphilis specifically in Epidemiology, but I see that it should be more emphasized when working with indicators* [...] (N16).

Even when teaching is mentioned for the training aspect, they reflect on some possibilities to discuss with students and on the desire for training to be continued while they are working professionally: [...] *if I put a little bit into the next professionals and co-workers, maybe I could make a difference in someone's life. So I always take the topic related to syphilis with a group that's focused on training Nursing technicians to develop health education actions. We usually apply it to young apprentices aged between 14 and 24 years old* (N12). [...] *the learning and evolution in our area, in our performance. We're attending graduate, masters, PhD studies* [...] (N22).

When approaching the discourse involving health care, performance in the assistance itself is understood: [...] *Proactive performance, care focused on solving problems, prevention, education and health, because whether we want it or not the Nursing practice will always be linked to education, either in teaching, for the user, or for the team* [...] (N14). [...] *people are always updating themselves in the technical-scientific issue to improve care, but we need to go far beyond having a focus centered on the patient, even on humanistic issues* [...] (N17).

When talking about management, they were asked: "And about nurses' performance in management, what actions could they develop?". The following answers were obtained: [...] *acting in this area is to support and organize the work process, and it's no use for us to define the work process and not provide conditions for those professionals and teams or situations not to happen. Management has a lot of roles...* (N14). [...] *promote the expansion of management communication with the rest of the team. You must invest in multidisciplinary work so that everyone is not in their own square, we must be proactive, understand what's happening, otherwise it won't get off the ground* [...] (N10).

The following questions about social control were asked: "Is there a role for nurses? How is social control present?". [...] *we're far from nurses' role in social control, it's still very focused on doing for the users. [...] I think that this relationship with social control should be more of a partnership, exchange, thinking and doing together, putting into practice the users' duties and not just their rights, of reading the letter even from SUS users* [...] (N7). [...] *this is where we have the greatest difficulty, if we were able to incorporate social control into reality, into the impacts that syphilis causes on society, perhaps the population would be able to see better this right to request [more actions, to understand the flows], to be able to see the effectiveness of the things proposed* [...] (N5).

The nurses participating in the study left proposals for using the quadrilateral: [...] *disclose what the quadrilateral is, because I've been working for 19 years and I didn't know it by that name. Engage services more and bring this into discussions* (N39). [...] *train managers on the different strategies and on the health area and how they should act and understand the quadrilateral* (N27). [...] *nurses could use the quadrilateral, as long as they understand what it is, many things can be*

improved (N31). [...] linking health, education, social assistance and the Public Ministry, it needs to be expanded in an intersectoral way [...] (N8).

DISCUSSION

One of the major challenges in achieving control has been to implement health care actions integrated with surveillance and control, ensuring access to diagnosis, treatment and monitoring in PHC.

Despite advances in the prevention and treatment of HIV, viral hepatitis and STIs within the global health strategy for 2016-2021, there are still critical issues (even before the COVID-19 pandemic) that may jeopardize the achievement of the Sustainable Development Goals for 2030. In 2021, the 74th World Health Assembly approved the need for new coping strategies for 2022-2030¹¹.

Management of health services, health care, social control and teaching as discussion spaces are fundamental elements for the reduction of congenital syphilis, allied to the proposal of the logic of permanent education and the health training quadrilateral.

Such quadrilateral, consisting of these four elements already mentioned, is proposed by Ceccim¹², and the quadrilateral image serves to build and organize a management of education in health that is part of the health system management, resizing the image of the services such as management and health care and valuing social control.

When we talk about a quadrilateral, we point to a methodology for PEH, as it faces challenges inherent to the entire process of devising ways of thinking about education for health professions in the Brazilian context, with movements that depend on how PEH alternatives are operated. For this, it is necessary to commit to a democratic perspective of knowledge construction against the existing mercantilist logic for health, considering its alignment with the democratic principles of the Brazilian health system and the engagement for the maintenance of social and human rights and access to health by the population; in other words, it advocates the motto "learning together to work together"¹³.

Among nurses' various actions, the assistance activity – that is, health care – is the most evidenced throughout the discussions, considered important for congenital syphilis prevention and control. This includes carrying out adequate prenatal care with tests for syphilis, appropriate treatment of pregnant women and her sexual partners, proper follow-up of the newborns, and provision of effective treatments for congenital syphilis. Nurses' work process also permeates the management, teaching and research spheres, which are directly linked to care management practices, requiring the professionals' competencies and knowledge¹⁴. These competencies begin in the undergraduate training process and continue in the constant search for updates and spaces for intersectoral discussions and with health teams, for example.

Permanent Education in Health is a strategy that provides a discussion space, which can occur formally or not. It emerges as a possibility for innovation and (re)organization of the work process through in-service education, which aims at strengthening the development of competencies in Nursing professionals. Nursing has been dedicating itself to educational actions in all its professional dimensions, due to its historical path along with care and work management. Consequently, it carries out improvement and training of health professionals, also aiming at expanding quality and improving the assistance provided to the population¹⁵⁻¹⁶.

Permanent education and the training quadrilateral are important strategies for training and updating health professionals, including nurses, in congenital syphilis prevention and control. Some national and international studies highlight the impact of these strategies. One of them, carried out in 2018 in the city of São Paulo, showed that nurses' training in permanent education was effective in improving the quality of health services and reducing vertical transmission of syphilis¹⁷.

A study in Londrina says that permanent education actions and changes in the work process must have scheduled continuity, as their punctual action informs and updates professionals, but the change in conduct in practice requires vigilance and correction of errors, the title of learning, not punishment, reinforcing self-analysis and self-management activities of health teams¹⁸.

In health care, that is, health care, we perceive the intrinsic connection with teaching, because, when we recognize that part of it does not cope with the current health care model, we find flaws that involve work overload, in acting in the line of care and links with users and staff. A study on nursing care from the perspective of high-risk pregnant women highlights that inadequate nursing care contributes to maternal and neonatal morbidity and mortality rates, which still remain high, reflecting problems of access and quality of care. Spaces for discussion compete with the high demand for work, and, at the same time, it is noticeable, in addition to little appreciation and lack, the emptying and distancing, on the part of all health professionals, of the moments dedicated to reflection on the work process in their respective practice scenarios¹⁹.

Teaching can be highlighted in a recent study on the mapping of nurses' training in Brazil, which points to an accelerated growth in Nursing education at the undergraduate and graduate levels²⁰⁻²³. Another study emphasizes the role of competencies in Nursing education, in line with the National Curriculum Guidelines for the Nursing area. The research points to the need to provide these professionals with the knowledge required to put into practice the following general competencies and skills: health care, decision-making, communication, leadership and permanent education. In addition to that, it explains that the term "competence" is related to knowing and doing with quality²¹.

It is recognized that the Political-Pedagogical Projects of Nursing Courses (PPPNCs) seek to transpose curricular matrices centered on topics that prioritize biological aspects and medicalizing practices. In this way, the projects try to offer society the training of professionals with competencies, skills and ethical attitudes that respond to the demands imposed by health services and intersectorality²².

On the other hand, there is the difficulty of aligning theory with practice in view of the dynamicity of territories and the needs of the population, in view of the model of living conditions. There is a study on the early inclusion of students in the practical field as an innovative tool in the teaching-learning process but, even so, there is still a gap after the training when the professionals enter the job market. It is worth emphasizing the importance of theory for the professional practice, practice as a motivational factor for studies, greater confidence in patient care and the relevance of developing competencies to meet the care demands of the SUS²⁴.

With a focus on management, we can think that the health sector has traditionally worked with politics in a fragmented way: collective health separated from the clinic; clinical quality independent from the quality of management; management separated from care; care separated from surveillance, and surveillance separated from protection against external problems.

Effective management of health services is fundamental for congenital syphilis prevention and control. This includes implementing effective public health policies, organizing health services, training and updating health professionals, availability of rapid tests for syphilis, provision of adequate treatments, and monitoring and evaluation of programs targeted at preventing and controlling the disease.

Nurses can also act in the management of syphilis prevention and control programs through the organization of awareness raising campaigns, supervision and training of health teams, monitoring and evaluation of programs and articulation with other health and civil society sectors. A study carried out in 2017 in Colombia showed that the management of syphilis prevention and control programs was effective in reducing incidence of the disease²⁵.

In this sense, health managers and professionals need to devise common goals, for which they share knowledge and professional effort and are equally involved. A study on clinical management principles, which deals with the connection between management, health care and health education, states that, in order to face this challenge, greater emphasis should be given to the subjects involved in the relationships established in comprehensive health care and in the consequent learning processes, conceived in the health care-management-education triad²⁶.

At any institutional level, the role of health management encounters several challenges that need to be faced. Managers are faced with situations and problems of different natures, which can be approached in different ways depending on combinations of techniques/methods and technologies/equipment available for the organization of work processes, in addition to a wide variety of items and resources with which they will have to deal in their routine.

Social control constitutes a significant challenge, as pointed out by the participants of this study. With the publication of Laws No.8,080/90 and No.8,142/90, social participation and control in health are established in the SUS philosophical framework, which are among the greatest results of the health reform project²⁷.

In a survey on motivations, importance, challenges and perspectives of social control in health, participation is related to a possibility of complementing work with the community, an important space to fight for collective needs, for what is best for others. Leading to a reflection on the partnership between the community and managers, it becomes a relevant connection means with other instances, such as residents' associations, the Municipal Health Council and, mainly, municipal management. This space assumes a relevant role with regard to democratization of the opinions expressed there by all who participate²⁸.

When incorporated into the process, social control makes it possible to expand knowledge and places users at the center, in a relationship of co-responsibility, enabling participatory management and, consequently, improving health care. Making a connection with teaching about the need to train nurses capable of encouraging users, either individually or collectively, to act in councils, for example, proves to be an essential tool for society. In a study on nurses' role in social participation, the actions they developed with regard to the SUS involve the search for alternatives to increase community engagement in the actions offered by the service and the intermediation of social participation spaces²⁹.

The importance of nurses' role is undeniable, but not sufficient and unique. Despite its vital role, it is necessary to strengthen the SUS through more consolidated public policies and with sufficient funding to provide opportunities for the continuous improvement of actions in the territories, as well as to seek effective discussion spaces that take the proposals critically to the pertinent instances.

The issues of the health quadrilateral as a possible discussion space can configure devices for the analysis of the experience(s), of the organization of network/chain actions, and of possibilities for integration between training, teachers' development, changes in management and health care practices, strengthening popular participation and valuing local knowledge¹⁸. These discussion spaces in the quadrilateral logic contribute a background in which everyone governs in everyday life and disputes the direction of actions in health, making use of the resources at their disposal.

The need to move forward in the debates about syphilis control is acknowledged in a study on *Evaluation of the appropriate management of patients with syphilis in Primary Care in different Brazilian regions between 2012 and 2018*. This study clearly shows that there is still a major obstacle in this discussion, which is negligence in the face of the disease. Despite the structure for screening vertically transmitted diseases, there are still flaws in prenatal care and epidemiological surveillance with regard to underreporting and effective actions in health services, due to behavioral issues of the professionals and to weak public policies³⁰.

Some challenging objectives are listed in syphilis control, such as: eliminating vertical transmission; improving case surveillance; developing them more accurately to diagnose active syphilis, neurosyphilis and congenital syphilis; expanding access for the most vulnerable populations; developing alternatives for oral medications and vaccines against *Treponema pallidum*, strengthening the network within its health care levels; understanding teaching as part of the processes; and seeking out the community and making it part of the prevention process and of adherence to the treatment, as well as the discussion of effective actions³¹⁻³².

CONCLUSION

The current study made it possible to discover the possibilities of discussion spaces and for nurses to act in the quadrilateral of training in the health area: teaching, care, management and social control in the prevention of congenital syphilis.

The findings show the importance of technical-scientific knowledge, with nurses playing a fundamental role in the different performance contexts. It is important to understand the moments when nurses can act in care articulation in order to reduce the problems, prevent the increase in child morbidity and mortality indicators and provide advances for the care practice.

In this sense, the need to combat syphilis emerges, which will only gain strength through the implementation of actions to prevent this condition and of more effective health promotion actions. Although public health policies are present, even if in transition or weak, they are oftentimes not part of everyday teaching combined with real practice. Likewise, management faces challenges in linking knowledge about public policies with processes. This is the case with social control, which is left with few resources of knowledge about policies to be able to be active in the context. Health care is weakened by work overload or by the lack of more effective connections for discussion in collective spaces that cover intersectoriality. Health prevention consists of an early action that must be based on knowledge of the natural history and on the promotion of actions, in the movement of driving, fostering, creating and generating more health.

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NOTES

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