Nurses' perceptions of counseling and rapid testing for sexually transmitted infections
Percepções de enfermeiros sobre aconselhamento e testagens rápidas para infecções sexualmente transmissíveis

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Objective: to understand Family Health Strategy nurses’ perceptions on counseling and rapid testing for sexually transmitted infections. Methods: this is a qualitative study, with data triangulation. Data collection was conducted through a semi-structured interview with seven nurses from Family Health Strategy. For systematization and data processing, content analysis was adopted in the thematic modality. Results: after analysis, four categories emerged: Rapid test training; Counseling conduction; Ease in rapid testing offer; and Challenges offering rapid testing. Conclusion: nurses’ perceptions were related to difficulties in the face of pre and posttest counseling, requiring improvement, permanent education and training for professional preparation, and the logistics of inputs and materials, in addition to changes in the physical structure of the units.

Descriptors: Counseling; HIV; Syphilis; Primary Health Care; Sexually Transmitted Diseases.

ABSTRACT

Objetivo: compreender as percepções de enfermeiros da Estratégia Saúde da Família sobre aconselhamento e testagem rápida para infecções sexualmente transmissíveis. Métodos: estudo qualitativo, com triangulação de dados. Coleta de dados realizada mediante entrevista semiestruturada com sete enfermeiros da Estratégia Saúde da Família. Para sistematização e tratamento dos dados, adotou-se a análise de conteúdo na modalidade temática. Resultados: após análise, emergiram quatro categorias: Capacitação em teste rápido; Condução do aconselhamento; Facilidades na oferta do teste rápido; e Desafios na oferta de teste rápido. Conclusão: as percepções de enfermeiros estiveram relacionadas às dificuldades diante do aconselhamento pré e pós-teste, necessitando de aperfeiçoamento, educação permanente e capacitação para preparo profissional, e à logística dos insumos e materiais, além de mudanças na estrutura física das unidades.

Descritores: Aconselhamento; HIV; Sífilis; Atenção Primária à Saúde; Doenças Sexualmente Transmissíveis.
Introduction

The provision of rapid tests, added to practice of pre and posttest counseling, represents an important strategy for comprehensive health care, in the primary care scenario, especially when related to detection, treatment and blockade in the transmission of infections\(^1\). Moreover, the timing of testing is opportune for counseling, a strategic tool based on active listening, the construction of trust between user and professional, and empowerment for self-care\(^2\).

The rapid test is offered free of charge in the public network by the Unified Health System (Sistema Único de Saúde), being an instrument of investigation in cases of acquired syphilis and prevention of congenital syphilis during prenatal care, besides enabling the screening of Hepatitis B and C\(^1\). The realization of this, in addition to reducing the waiting time for the result, assists in the prevention of injuries and in the disruption of the chain of transmission of diseases, without requiring complex laboratory equipment or specialized professionals, besides ensuring agility in therapeutic decision-making\(^2-3\).

However, rapid tests may show false-positive results caused by alloantibodies resulting from pregnancy, transfusion, transplantation, autoimmune diseases, low antibody levels, such as initial seroconversion, infection with less detectable variants, and improper sample handling. In line with, research results in Mathare North, Kenya, found that of the two thousand three hundred and eleven women tested during prenatal care, 30 had indeterminate/false-positive/false-negative results\(^1-3\), which were more common in pregnant women. Therefore, it is believed that counseling and testing programs aimed at pregnant women and other key populations require more support to deal with indeterminate tests\(^4\).

In Family Health Strategy, nurses have taken responsibility for testing, for this reason, the importance of qualifying the performance of these professionals is highlighted. However, this assistance is constantly affected by circumstances of the service itself, which have repercussions on limitations in this activity that is not just a procedure, as it is performed together with pre and posttest counseling, which require emotional support and adequate knowledge, especially in situations where the result is positive\(^5-6\).

Thus, this research seeks to contribute to the identification of challenges and potentialities of nurses’ work related to rapid tests, mainly because there are few contributions from the multidisciplinary team, which results in an increase in nurses’ attributions in Family Health Strategy. For this reason, it was chosen to approach their perspective, due to the role they play as care managers and the orientation of team’s actions, especially in health promotion\(^5-9\). Thus, the question was based on: what are nurses’ perceptions about counseling and the execution of rapid tests for sexually transmitted infections in primary care?

In order to understand the characteristics of this offer in the primary care scenario, promote reflections and offer subsidies that can contribute to quality care, the study aimed to understand Family Health Strategy nurses’ perceptions on counseling and rapid testing for sexually transmitted infections.

Methods

This is a qualitative study, in which the Consolidated Criteria for Reporting Qualitative Studies (COREQ) was used to guide the elaboration and writing, which consists of a checklist of 32 items for focus group interviews.

The locus for developing the research was at seven Basic Health Units belonging to the rural and urban areas of Porteiras-Ceará, Brazil, which has approximately fifteen thousand inhabitants. The sampling method was non-probabilistic convenience and included all nurses who performed the rapid tests. Thus, seven nurses who made up the Family Health Strategy teams of the municipality were included in the study and met the following inclusion criteria: performing the rapid test and counseling in the service’s routine, for a minimum period of six months, time considered...
satisfactory to characterize individuals’ good experience. Teams in which the units did not have materials and supplies to carry out the tests during data collection were excluded. There were no dropouts or refusals to participate in the research.

The nurses’ initial approach took place in person and in the respective Basic Health Units where they worked. After applying the eligibility criteria and obtaining agreement to participate in the study, an individual interview was scheduled according to professionals’ availability. This interview was conducted by a previously trained research nurse with experience in testing and caring for people with Sexually Transmitted Infections (STIs), including the Human Immunodeficiency Virus (HIV), and who had no professional relationship with the Basic Health Units and the interviewees.

Data collection took place from September to November 2019 and was terminated due to speech saturation. The seven interviews that were recorded and transcribed in full, lasted approximately 30 minutes, and were guided with the aid of a semi-structured script to identify some results, guided by the generative question: How do you perceive counseling and rapid tests in primary care? Direct observation of counseling and some tests being carried out, with the purpose of having another dimension about the problem, with a view to greater reliability of the findings that were described in field diary(7). The script investigated general data and participants’ profile such as sex, race, age, additional education, employment relationship, length of service and performance of rapid test in Family Health Strategy.

In addition to this, we investigated the daily issues experienced by these professionals in the development of rapid testing, involving structural aspects of the service (physical space for carrying out the tests, storage place for testing kits and availability of testing supplies), counseling, weaknesses and strengths.

For data systematization and treatment, content analysis was adopted, thematic modality(8), based on the principles of care and humanization(9-10).

Content interpretation was based on phenomenology from narrative and symbolic interactionism review, with data triangulation in the steps: pre-analysis; coding; treatment of results; inference; and interpretation(8). Content analysis of interviews made it possible to define the central theme “Perception about working with rapid tests and counseling in Family Health Strategy”. Seeking the nuclei of meaning to extract the categories, the body of analysis was elaborated and, at the end of each transcription, reading and rereading exhaustively, in addition to consulting a field diary. Later, isolated analyzes of speeches were carried out, guided by the object of study. Based on the regularity of the discourse and the presence of units of meaning, it was possible to identify, classify and code the statements in E1, E2, E3, and so on, to ensure confidentiality.

A detailed reading of all the transcribed material was carried out by two reviewers, one external to the research, seeking to identify words and sets of words that expressed meaning for the research, as well as daily situations reported by the participating nurses, which were classified into categories which had similarities in terms of syntactic or semantic criteria. The emerging and discursive analysis categories were rapid test training, counseling conduction, ease and challenges offering rapid tests. After organizing the data, a summary was presented to participants, so that they could assess whether it actually reflected the feelings and experiences described. There was no need to make changes.

The research was submitted and approved by the Institutional Review Board of the Escola de Saúde Pública do Ceará, under Opinion 3.556.781/2019 and Certificate of Presentation for Ethical Consideration 19840619.7.0000.5037.

Results

When considering the sociodemographic aspects among the nurses interviewed, six were female and one was male, all experts in Family Health. As for
employment relationships, four nurses worked in permanent positions and three as temporary servants. The average age of respondents was 32 years and the average time of experience in primary care was eight years. The reported time of performing rapid tests in Family Health Strategy among professionals ranged from two to four years. Four categories emerged: Rapid test training; Counseling conduction; Ease in rapid testing offer; and Challenges offering rapid testing.

**Rapid test training**

Nurses classified the methodology used in training for the use of tests and the workload offered as insufficient. Marked by the focus on the practical part of the exam and summing up to brief theoretical presentations, not contemplating real situations of professional daily life and the handling in front of a reactive result, as evidenced in the speeches: I believe that more time or frequency could be dedicated to training, this would help to resolve doubts. The face-to-face meeting has better use (E4). The focus was on test execution. The counseling part was minimal (E1).

Study participants claimed to understand the need for continuing education in the context of STIs, HIV/acquired immunodeficiency syndrome (AIDS) and viral hepatitis as fundamental for the quality of care; however, they criticized the objective approach of the meetings, defending a character periodical in favor of better use of knowledge exchange and updating of Family Health Strategy professionals, as perceived in the report: I believe that annual or semi-annual training can contribute with some updating, clearing up doubts, some exchange of experience that I may not experience, however, another professional experienced it, I can also use it as a reference (E2).

As mentioned by the interviewees, it was observed, during the training, the predominant participation of nurses, a situation that is reflected in practice, as they are the only ones responsible for performing the tests in the service. Professionals showed dissatisfaction with lack of team collaboration in this process and the overload of the nursing service: I believe that at the moment of training, the inclusion of all professional categories is essential. But, it turns out that it is exclusively intended for nurses and other professionals were not included. This ends up generating a single responsibility (E2). I believe the doctor could also participate. Any top-level professional can apply these rapid tests. Unfortunately, there is resistance from the other categories (E3).

**Counseling conduction**

When asked about the conduct of counseling, respondents showed imprecision regarding the differentiation between the pre-and posttest stages. They understood the moment as an opportune time to raise awareness about the importance of the test and the results, inform about diseases, forms of transmission, clinical manifestations and prevention, through adequate and easy-to-understand language: Explaining the importance of performing the rapid test is critical. Facing a reactive test without having prepared the patient for this possibility is very complex (E7). Explain all peculiarities of the test, the possible results, the symptoms that can help the patient to recognize if he/she has already had any symptoms. Precisely because of this, it should be well worked on in counseling (E2).

There are also limitations in conducting counseling, due to the lack of preparation for dealing with users’ emotional aspects. However, respondents stated that gaps are minimized through multidisciplinary support: It’s one thing for you to undergo training on a possible reactive result and another for you to experience a situation that is very complex. You have to be flexible, cautious, master the subject, have self-control and help the patient (E2). Due to the situation, I went through with a patient with a reactive result, I did not feel prepared to give the necessary support in view of her reaction, which was very shaken. I had to ask for help. That day, my breath failed me. I asked the psychologist for help, who helped me the most at that time (E5).

**Ease in rapid testing offer**

Respondents highlighted some factors that, in their perceptions, favored the offer of tests in the service, such as the bond of trust established between professional and user, a characteristic that is expected from the relationships built within the Family Health
Strategies, enabling better handling of reactive cases: Talking about syphilis was easy with my user because I already had a very close contact with her and her family. Thus, as this is a pregnant woman, it was possible for her to understand well the whole context, the risks and what would need to be done (E2). It is essential to convey security and confidentiality in the dialogue with the user, explaining about the available flowchart and the care network to be guaranteed in reactive cases for their care and treatment (E7).

Moreover, the easy handling of materials and rapid access to the results became decisive for acceptance or not of this offer, facilitating even more the dissemination work carried out by the team in the dissemination of information in the waiting room: In waiting room activities, when users ask about the test, what they most seek to know is the number of days to receive the result. As soon as the test speed is clarified, they get interested right away (E1). Today, as information is very exposed, people are more aware of diseases, they know how to prevent themselves and this makes it much easier. That's why we invest in dissemination by the team, I seek to involve all professionals (E3).

**Challenges offering rapid testing**

Among the difficulties faced by professionals in providing the service, issues such as the high demand for functions concentrated in the nursing team were highlighted: We have a series of attributions in the unit, including managing it, so the rapid test offer service is a little limited (E6). I have many support points and there is a great demand to start prenatal care, so often the rapid test is not done in the first consultation (E3).

Furthermore, the low level of understanding on the part of the lay population becomes part of the great concern of professional daily life, evidenced in the report of a professional dealing with erroneous associations of symptoms of sexual infections with other health problems known to patients. Situations that delay the identification of cases that result in late diagnosis: When we searched for the patient and tested the reagent, he began to say that he had been feeling unwell for a long time, losing weight, and his skin peeling off, but he was also an alcoholic and, due to that, associated its symptoms with alcohol abuse (E5).

Another challenging situation in practice is the low adherence of sexual partners, especially pregnant women, even with efforts to attract partners during prenatal care, there is still strong resistance from male participation in health units, demonstrating barriers regarding the links of this population to health services: Still, there is difficulty in accessing partners, not least because few actually participate in prenatal care. Sometimes, after much insistence, they come. A part rejects, believes it does not need to take any test or simply does not feel like it (E5).

**Discussion**

During the present investigation, some limitations were perceived. Among these, the fact that professionals’ perceptions regarding the monitoring of positive cases by Family Health Strategy, the participation and perception of only nurses, which makes the findings representative only of their perceptions, stand out. Other aspects refer to the representativeness of individual speeches in relation to a larger collective, due to the reduced number of participants. However, it is suggested that these possible gaps can be filled by future evaluative studies.

This study may provide elements for the situational diagnosis, in order to consider the realization of rapid tests in Family Health Strategies, thus offering subsidies for discussion of improvements or adjustments in the planning of this offer in primary care, considering the complexity testing and care management by the team.

The results of this study demonstrate health units’ daily lives from the perspective of nurses who use rapid tests in their work routines. The reports highlight, above all, service organization in test implementation. Although admittedly satisfactory, the purpose is marked by limitations that configure the quality of the service provided (E11).

The issues of infrastructure and local organization define the quality of access to health services by the population and should not be restrictive, with the prioritization of specific groups for screening with
Rapid tests\textsuperscript{(12)}. Access to HIV tests and prenatal care in Brazil revealed that factors of socioeconomic inequalities, problems in the implementation of protocols and the absence or non-performance of these tests during prenatal care hinder access to testing and, consequently, disease control\textsuperscript{(13)}.

Particularities of services motivate professionals to seek adaptation and readjustment to work in health, which often makes it unfeasible to provide care on a spontaneous demand\textsuperscript{(2,11)}. In this sense, at the same time the team seeks to comply with protocols and recommendations, it also tries to maintain the organization and meet all service demands\textsuperscript{(11,14)}.

It is evident that the choice of a prenatal program to expand testing is a trend that began in the planning of HIV prevention actions, during the gestational period, in the 1990s, becoming a universal reference\textsuperscript{(14)}.

Rapid testing, during antenatal and postnatal, has increased the number of mothers who take and receive test results\textsuperscript{(3)}, ensuring that they can receive interventions to prevent mother-to-child transmission, prophylaxis and counseling about a positive life. However, false-positive results can cause psychological distress, while false-negative results can cause appropriate care not to be implemented.

Furthermore, it is noteworthy that, in the context of primary care, the expansion of access to diagnostic methods and continuity of STI control policies are pillars for achieving goals and controlling the transmission of these diseases\textsuperscript{(15)}. Another point addressed by the interviewees was the professional limitations in dealing with the subjectivities and emotional aspects of users\textsuperscript{(11,16)}. A study carried out with nurses from basic health units revealed that participants recognized failures in communicating a reactive result, due to the feeling of insecurity in dealing with users’ anxieties, sadness and anxieties\textsuperscript{(14)}.

In addition, the quality of skills experienced in recent years was negatively assessed, which corroborates what is pointed out in the literature, in which the skills demonstrated to follow an insufficient model to overcome the limitations in the reality of professional practice\textsuperscript{(16)}.

As for counseling conduction, the mere transfer of information has predominated, without spaces for listening to users\textsuperscript{(17)}. According to these results, it was found that less than a third of the participants had received pretest counseling (30.8%), with a summarized approach to explaining the reasons for performing the examination, and 51.2% were counseled in the post-test\textsuperscript{(18)}.

The literature emphasizes the importance of observing, during counseling, the voluntary and confidential nature of the testing, respecting the exchange of information about the testing systems and the immunological window, the meaning and impact of possible results, in order to emphasize the difference between HIV infection and AIDS, in addition to reinforcing the need to adopt safe sexual practices, such as the use of condoms during sexual intercourse\textsuperscript{(19)}.

As well as early diagnosis, professionals must import the conditions and guidelines necessary for the comprehensive care of users. Their welcoming behavior must be present in referrals, in treatment, as well as in encouraging the use of condoms, always free from prejudice and judgment.

Although the interviewees recognized the importance of counseling, professionals’ personal aspects that influence the performance of this activity were highlighted, such as lack of time, skill, knowledge and even lack of interest, factors that contribute to low achievement and neglect of this stage\textsuperscript{(6)}.

A research assessed emotional support during counseling as a step taken by some professionals as a hard technology, scripted and not enabling risk management by users, caused by the feeling of professional unpreparedness in the face of a reactive result, leaning towards preferring to delegate the management of the situation for other professionals considered specialists such as psychologists and psychiatrists\textsuperscript{(2)}.

Furthermore, the absence of other professional categories involved in rapid testing, as well as in training promoted by managers, ends up limiting the offer of tests within health units. This organization generates a logic of division of tasks within health servi-
ces, distorting the preventive nature of health actions as the responsibility of the entire team\(^{(14)}\).

The challenge for nursing professionals, in the context of rapid tests, has also been the non-attendance of sexual partners, including pregnant women, during the prenatal program. It is evident that sexual partners’ resistance is related to the low level of information from users in general. Although there are initiatives to attract them to attend for the exam and actively participate in prenatal care, the male population refuses to attend the health unit, due to factors related to sex stereotypes, resuming the idea that health services are female environments, in addition to issues related to feelings of fear and the hours of health service operation\(^{(11)}\).

As for the perceptions about the ease offering rapid testing, professionals highlighted the particularities of the exam. According to the literature, the speed of the result minimizes the anxiety generated by the reduced waiting time, as well as the simplicity of applying the exam, reflecting the good acceptance by users\(^{(12)}\).

Rapid tests can fail in some diagnoses, such as HIV, especially if it is performed during acute infection. Detection sensitivity increases over time, however, negative results should be excluded with caution.

In addition, the importance of the production of bonding, trust, welcoming and exchanges that involve the interactions between health worker and users are highlighted, in the context of rapid tests, the proximity of relationships has demonstrated the difference between care technologies that have been contributing to the achievement of desired goals during counseling\(^{(2,14)}\).

**Conclusion**

The nurses who contributed to this study, reported difficulties related to the need for improvement, continuing education and training in professional preparation, especially in light of pre and posttest counseling that requires welcoming, qualified listenting, humanization, planning, team involvement in expanded clinic and matrix support for the establishment of spaces that favor the reflection of good health practices and the development of coping strategies for professional qualification and development of a unique, centralized therapeutic plan in the person and not just in the application of techniques and procedures aimed at identifying the problem. Also, they scored the establishment of assistance flow that includes logistics in the delivery of inputs and materials. Furthermore, they highlighted the importance of improvements in the physical structure of the units.

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**Authors’ Contribution**

Project design and relevant critical review of intellectual content: Brito AD.
Planning, analysis, data interpretation, critical review of content and approval of the final version to be published: Lima RCR.
Relevant critical review of intellectual content and approval of the final version to be published: Galvão MTG, Maia ICVL.

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