

# Elaboration of protocol for rapid testing for HIV: experience report

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Elaboración de protocolo para pruebas rápidas del VIH: informe de experiencia

## RESUMO

**OBJETIVO:** O objetivo foi relatar a experiência diante da elaboração de um protocolo para realização de teste rápido diagnóstico de HIV 1/2. **MÉTODO:** Trata-se de um relato de experiência, sobre a elaboração de um protocolo para realização de teste rápido do tipo DPP para diagnóstico de HIV 1/2, realizado com 11 enfermeiros em um município do nordeste. Para orientar as etapas de elaboração utilizou-se a ferramenta gerencial 5W2H. **RESULTADO:** A elaboração ocorreu em três etapas: avaliação diagnóstica da situação problema; elaboração e discussão do protocolo; e validação consensual e divulgação. **CONCLUSÃO:** O desenvolvimento de protocolos assistenciais contribui como embasamento teórico e padronização de procedimentos para as equipes de enfermagem, oferecendo suporte técnico, manejo e conduta em determinadas ações.

**DESCRIPTORES:** HIV; Educação Continuada; Protocolos

## ABSTRACT

**OBJECTIVE:** The objective was to report the experience with the elaboration of a protocol for carrying out a rapid diagnostic test for HIV 1/2. **METHOD:** This is an experience report on the development of a protocol to perform a rapid test of the DPP type for the diagnosis of HIV 1/2, carried out with 11 nurses in a city in the northeast. To guide the elaboration steps, the 5W2H management tool was used. **RESULTS:** The elaboration took place in three stages: diagnostic assessment of the problem situation; elaboration and discussion of the protocol; and consensual validation and disclosure. **CONCLUSIONS:** The development of care protocols contributes as a theoretical basis and standardization of procedures for nursing teams, offering technical support, management and conduct in certain actions.

**DESCRIPTORS:** HIV; Education Continuing; Protocols.

## RESUMEN

**OBJETIVO:** El objetivo fue reportar la experiencia con la elaboración de un protocolo para la realización de una prueba de diagnóstico rápido de VIH 1/2. **MÉTODO:** Se trata de un relato de experiencia sobre el desarrollo de un protocolo para realizar una prueba rápida tipo DPP para el diagnóstico de VIH 1/2, realizada con 11 enfermeras en una ciudad del noreste. Para guiar los pasos de elaboración se utilizó la herramienta de gestión 5W2H. **RESULTADOS:** La elaboración se llevó a cabo en tres etapas: diagnóstico de la situación problemática; elaboración y discusión del protocolo; y validación y divulgación consensuadas. **CONCLUSIONES:** El desarrollo de protocolos de atención contribuye como base teórica y estandarización de procedimientos para los equipos de enfermería, ofreciendo soporte técnico, gestión y conducta en determinadas acciones.

**DESCRIPTORES:** VIH; Educación Continua; Protocolos.

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## INTRODUCTION

**T**he Human Immunodeficiency Virus (HIV) epidemic shows itself as a big world's public health problem. According to The Joint United Nations Programme on HIV and AIDS (UNAIDS), in 2020, 37,6 millions of people were living with HIV, stimulating an increase of 1,5 millions of infections till the end of the same year 1.

HIV is a retrovirus with RNA genome and subfamily Lentivirinae, the virus has a capacity of infecting the lymphocytes through the CD4 receptor. The infection walks in three distinct phases which present distinct clinical forms and variable time period depending on the viral charge and the immunological response. The initial phase (acute infection) occurs between the first and the third week after the infection, characterized for signs and symptoms unspecific of the pathology apparitions. The subsequent phase named as asymptomatic infection may last for years till the opportunists infections appears being considered definers for the Acquired Immunodeficiency Syndrome (AIDS)<sup>2</sup>.

Many strategies have been used as an aim of amplifying prece diagnosis quality of the virus infection, in a way that this method can be effective and fast for beginning the treatment. Some algorithms are recommended for the infection diagnosis, among them the immunoassays, the complementar tests and the fast tests. Those fast tests (TR) are simple immunoassays that can be made in laboratorial or non-laboratorial environments with results until 30 minutes, allowing to amplify the diagnosis access. There are many types of those fast tests, and the most used are: lateral flow immunochromatography devices (or strips), immunoconcentration and immunochromatography of double route (DPP)<sup>3</sup>.

The TR DPP HIV-1/2 is a test based at the immunochromatography technology for Human Immunodeficiency Virus antibodies detection, type 1 and 2, in samples of oral fluid, total venous blood, digital puncture, serum or human plasma, that

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might be used for HIV infection diagnosis support, with result interpretation in a time not superior to 25 min<sup>4</sup>.

The TR making must be done by trained health professionals and/or trained person for the test making. The protocols elaboration become useful for directioning and proportioning the assistance increasing, resources optimizing and a quality and efficient care. That way, the protocols are systematically developed for guiding the management of a health problem, specific clinical circumstance, diagnosis tests and treatments based on scientific literature. Are concise orientations for procedures padronization for the health teams<sup>5,6</sup>.

The protocol building allows to standardize the nursing procedures in a way to guarantee a better safety for the professionals at the procedures realization, offering quality and safety at the assistance given for the patients. Beyond that, the main focus of the study was to relate the experience at a protocol elaboration of fast test making of DPP type for HIV 1/2 diagnosis.

## METHODS

It is about an experience of relating over a protocol elaboration of HIV 1/2 diagnosis DPP fast test making, made in a municipality in the countryside of Brazil's Northeast, with a population of approximately 63.217 inhabitants. The municipality has 23 Family Strategy Teams (ESF), distributed in rural and urban zones.

The elaboration of the protocol took place from January to April 2021. In March, the protocol was sent, via instant communication application (whatsapp), to 28 nurses, of which 11 returned with contributions. Online meetings were held through Google Meet, lasting three hours each, conducted by the Primary Care Coordinator with the teams, aiming to sensitize them about the importance of the protocol, its elaboration and use.

The following inclusion criteria were used to participate in the elaboration of the protocol: all nurses from the Family Strategy Teams who participated in the online meetings and were willing to contribute to

the elaboration of the protocol. Exclusion criteria were: nurses who were on vacation, on leave or away due to illness.

The construction took place in three stages: the first consisted of the diagnostic assessment of the problem situation; the second stage was carried out in February and March and included the elaboration and discussion of the protocol; the last stage took place in April and dealt with consensual validation and dissemination of the protocol.

To guide the steps, the 5W2H management tool was used, whose acronym contains the initials of the processes in English, where: 1 – What (what); 2 – Who (who); 3 – When (when); 4 – Where (where); 5 – Why (why); 1 – How (how); 2 – How Much (how much)<sup>7</sup>.

As this is an experience report, this study does not require the approval of the Research Ethics Committee – CEP. The information was compiled, without the possibility of identifying the subjects, which is in line with resolution 510/2016 of the National Health Council, which determines specific ethical guidelines for research in the human and social sciences<sup>8</sup>.

## EXPERIENCE REPORT

Protocols are instruments that have systematic recommendations based on scientific evidence, in the assessment of health services and quality assurance of the services offered. In order to optimize the elaboration of the protocol, an administrative tool called 5W2H was used. This tool made it possible to map and implement the activities developed<sup>7,9</sup>.

### 1st Stage: Diagnostic assessment of the problem situation

This phase consisted of the analysis, investigation and identification of the specific problem. Thus, together with the Coordination of the IST/AIDS Center and the Coordination of Primary Care, the following problems were identified: change in municipal management and lack of direction in strategic actions; absence of procedural protocols; and technical difficulty

**Table 1- Action plan for the elaboration of the rapid test protocol of the DPP type for the diagnosis of HIV 1/2. Barreirinhas, 2021.**

PHASES	ACTION PLAN
1. What	Elaboration of the rapid test protocol of the DPP type for the diagnosis of HIV 1/2
2. Who	Coordination of the STI/AIDS nucleus, Coordination of Primary Care and Nurses of the Family Health Strategy.
3. When	January to April 2021
4. Where	Municipality of Barreirinhas
5. Why	Standardization of nursing care
6. How	Based on the protocols and technical standards of the Ministry of Health and the test manufacturer
7. How Much	Internet access network, notebook, paper, ink and printer

Source: Author, 2021.

of nurses in performing the rapid test of the DPP type for the diagnosis of HIV 1/2.

Similar studies have also described the experience in the construction of a nursing care protocol, in which the context in professional practice was investigated in the initial phase, defining the problems, justifying the choices and tracing the objectives<sup>9</sup>.

In an experience report on the creation of a network protocol for combating violence against women in a municipality in the state of Minas Gerais, it was found that, in the initial phase, the participants shared the problem and sought a solution, such strategies were also experienced in this study<sup>10</sup>.

The initial diagnostic assessment allows for a survey of local care needs, as well as a situational diagnosis, where prevalent problems are identified in the search for a future solution<sup>11</sup>.

### 2nd Stage: Preparation and discussion of the protocol

In the second stage, theoretical references, protocols from the Ministry of Health and the manufacturer's instruction manual were analyzed. Thus, considering the COVID-19 pandemic period, the protocol was previously elaborated by the STI/

AIDS Coordination and forwarded, via instant communication application, to 28 nurses, of which 11 returned with contributions<sup>12</sup>.

Thus, from the contributions, adjustments were made to make a new version available, which consists of five sections which were distributed over five pages and have the following items: identification header, containing information about the version, date, preparation and approval of the document, introduction, purpose, care and precautions for use, necessary materials, steps of blood sample collection, interpretation of results, notification and references.

In a study that describes the elaboration and validation of a protocol for the administration of enteral nutrition, the construction of the protocol took place in weekly meetings, initially a situational diagnosis was made, soon after a literature review, subsidizing and supporting the creation of the protocol<sup>13</sup>.

According to studies, the low adherence by professionals in the elaboration of work protocols demonstrates amateurism in participating in discussion spaces and lack of formalization and mandatory participation<sup>10</sup>.

### 3rd Stage: Consensual validation and disclosure of the protocol

After the protocol was adapted, it was approved by the Primary Care Coordination, together with the STI/AIDS Coordination, and subsequent preliminary dissemination through an instantaneous workgroup communication application.

The relevance of this step was evidenced in an experience report on the elaboration and implementation of a protocol of conducts against the extravasation of non-chemotherapeutic drugs, where the protocol, after being prepared, was revised and subsequently carried out the suggested modifications, being validated and disseminated through the institutional electronic

system<sup>14</sup>.

The implementation and elaboration of protocols provide the qualification of care, promoting patient safety. Management tools and instruments enable the systematization, lightness and agility, and improvement of the process, however, this must be the result of the joint effort of the team and coordinations, however, there needs to be behavioral change in the group<sup>15</sup>.

### CONCLUSION

The development of care protocols contributes as a theoretical basis and standardization of procedures for nursing teams, offering technical support, management

and conduct in certain actions, as well as in the production of knowledge and learning about the content.

Currently, the standardization of procedures is a fundamental management tool, however the operational standardization of procedures is still considered deficient in Brazil, a fact resulting from the lack of awareness and knowledge of people who occupy management positions. Thus, the feeling of involvement, of participation, is of great importance for changing this paradigm, fostering a culture of patient safety, which is essential for the improvement of health services.

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