PROBLEMATIZATION METHODOLOGY IN EDUCATION IN HEALTH: EXPERIENCE WITH COMMUNITY HEALTH AGENTS

ABSTRACT

Objective: to report the experience of using the Problematization Methodology in teaching-learning process of health during an educational workshop. Method: this is a descriptive study of type experience report, from a workshop in a Unit of Health of Jequié/BA, with Community Health Agents, based on Problematization methodology with the Arch Method, which sought to empower them to act against the disease transmitted by the Aedes aegypti mosquito. Results: from the perspective of the theme, we followed all the steps proposed by the Arch Method, such as Reality Observation, Key Points, theorization, Solution Hypotheses and Application to reality. Conclusion: the Problematization Methodology is a great pedagogical strategy for teaching and learning in health, it provides the construction of critical-reflexive knowledge and the exchange of knowledge between teacher and student. Descriptors: Problem-Based Learning; Active Learning; Health Education.

RESUMO

INTRODUCTION

There has been a long time that Brazil is going through many changes in the context of education, among which the consolidation of relevant pedagogical proposals to education, including in health stands out. In this sense, legal and normative principles gain materiality in the form of arrangements and inductive devices training policies in joint strategies, or isolated from the Ministry of Health (MOH) and Education (MEC).\(^1\)

At the same time, \(^1\) the need for investment in the training of health professionals is seen increasingly on the national stage in order to make them able to work in a team, an interdisciplinary, humanistic and holistic perspective, according to the principles and guidelines of the Unified System Health (SUS).\(^2,3\)

In this perspective, the importance of formulating public policies for the development of human resources of the SUS have emerged to favor the formation of higher and technical professionals who understand the socio-cultural diversity of Brazilian society, and the ethical aspects of the system where health are inserted; as well as awareness of their duty and job performance process in health.\(^4\)

In this context, it highlights the need to break with the traditional education model, used for decades for the training of professionals, which justifies the extension of the discussions regarding the use of active methods of teaching-learning.\(^3\) Faced with new demands for vocational training, studies have highlighted the applicability of Problematization Methodology with the Maguer ez’s Arc method in the context of health as a positive pedagogical method the intellectual, professional and collective.\(^5,7\)

The Problematization Methodology is a process that favors the exchange of knowledge, knowledge and experiences between educator and students, considering that both have an individual/collective story and shared social context. This method places the subjects involved as holders of knowledge a priori, directing their knowledge to a convergence that results in individual and collective change and consequently to transform reality critically and creatively.\(^8\)

Because of the need to replace the traditional model of health education for alternative methods that help in building a critical and reflective attitude of professionals working with the demands of Public Health, this study is justified and shown to be relevant, as it is proposing a new educational strategy to be inserted into the practice of educators engaged in the training of health professionals, as well as the multiple possibilities of educational activities aimed at promoting health information.

Considering the described aspects, this study aims to report the experience of using Problematization methodology in health teaching-learning process during an educational workshop.

METHOD

This is a descriptive study and type of experience report, developed from the experience of students of the Graduate Program in Nursing and Health (PPGES) at academic master level, Universidade Estadual do Sudoeste da Bahia (UESB), to conduct a workshop, as proposed evaluation of the discipline Teaching and Learning Process in Health.

The workshop was held in May 2015 and sought to promote training of Community Health Agents (CHA) to act against the diseases transmitted by the mosquito Aedes aegypti: Dengue, Chikungunya fever and Zika virus. The scenario chosen was a Family Health Unit (USF), located in a suburb in Jequié/BA.

The choice of topics to be addressed at the workshop came from observations of the reality of places where Dengue, Chikungunya fever and Zika virus are featured in the epidemiological scenario. In the month of completion of the workshop, the Zika virus had just been discovered by researchers from the Institute of Health Sciences, at Universidade Federal da Bahia (ICS / UFBa), as one more of the types of infection transmitted by mosquitoes, the workshop became a suitable space to provide information to ACS about the new disease that until then was configured unknown for health professionals and for the entire population.\(^9\)\(^11\)

In 2015, in the State of Bahia, until the month of June, 45,538 suspected cases of dengue, 8,906 suspected cases of Chikungunya and 32,873 suspected cases of Zika were reported, representing an incidence rate of 349%, 68% and 252%, respectively. In Jequité, study setting, the situation is no different, being characterized as an endemic area and at high risk for epidemic of these infections. Added to this, the fact that until July 2015 1,951 cases of dengue and 32,873 suspected cases of infection Zika virus had been reported, a situation that ensures it to be...
highlighted among the municipalities in Bahia in the notification of these diseases. 11

The justification of the selection of ACS to compose the target audience of the workshop was due to the fact that these professionals are a member of the community where they work, so they know and live with the local reality, and interact with the values, language problems, satisfactions and dissatisfactions of the place. 12 Since the diseases transmitted by the mosquito Aedes aegypti have a social character, means of transmission and prevention which depends on the active participation of the population, the ACS was seen as a link between the Graduate Program and community, a vehicle with the potential of spreading strategies of information in the territory to combat the mosquito.

The workshop had as its theoretical foundation the Problematization Methodology with the Arc method, in order to promote improvements in health conditions in the locality; health learning by the ACS; as well as to contribute to the professional development of students who were in training to work in the teaching area.

The Problematization Methodology was proposed firstly by Bordenave and Pereira, who bring the influences of Freire's thought and it is revealed as an innovative strategy in education, either as learning and teaching method. These authors used a scheme prepared by Charles Magueretz called Arc Method, to meet this teaching-learning model considering the premise of education, the surrounding reality to the individual, their experiences, experiences, knowledge and expertise. 13

The Magueretz's Arc method consists of five steps and suggests a course of observations and focalizations of problem, reflections, theories, solution hypotheses and propositions, thus, transcending, transforming and changing reality. The first is called "Observation of Reality" and it is characterized to be the moment that it is desirable to students and educators launch a watchful and critical eye to the experience, to see it differently and to identify what is concerning. 15

From the careful observation of the issue we proceeded to the second step, when "Key points" are listed in order to prioritize and characterize them more consistently to better understand the problem. This is where students and teacher defines what will be studied on the problem, aspects are defined that need to be better understood to support the search for a solution to the problem. 16

The third step is the "Theorizing" which includes the study of the "Key Points", and the time of investigation, research, analysis of what is the scientific production in relation to that subject or topic - the problem. This phase will enable students and educators to deepen the knowledge about the problem studied, a comparison of what was previously known in a more common sense view, now passing to a perspective more scientific. 17

Later, it follows for the fourth stage "Hypotheses solution", when students and educators propose hypotheses to solve the problem. This creative and reflective acting-looking provides a perception of the problem, its genesis, its surroundings and individual and collective consequences; it must be presented to enable others to think and act, an overcoming of knowledge, actions and existing attitudes and to build new knowledge and actions in order to facilitate social changes. 3

In the fifth and last stage of the Arch Method, it is necessary for "Application to Reality"; after reflection of reality, the rethinking about trouble spots, to research, theorize and take ownership of resolving cases, students and educators to turn to reality, aiming to transform it, change it. This step provides a moment of action, practice, to act on that reality envisioned as problematic, either individually or collective. 18

The problematization in teaching-learning process in health: the account of the experience

Stages 1 and 2: Observation of Reality and Choice of Key Points

Initially, as proposed by the first stage of the method, entitled "Observation of Reality", a dynamic was carried out to assess prior knowledge of the participants on the topic and to identify the main problems reported by ACS experienced in their work routines related to confront the diseases transmitted by the mosquito Aedes aegypti, namely: Dengue, Chikungunya fever and Zika virus.

Thus, they were asked to sit on chairs in a circle. Then they received a medium-sized box containing various roles with problem situations on diseases transmitted by mosquitoes and questions about the ACS front of action to this problem. At the sound of music, the box was passed from hands to hands at the time that it paused, who had the box, should presented himself to the group, draw lots a trouble situation, read aloud and answered according to his prior knowledge and experiences acquired in working practices.
The dynamics of cash in addition to providing a moment of interaction and group socialization allowed everyone involved, a critical observation of reality, identifying Dengue, Chikungunya Fever and Zika virus, as a worrying phenomenon for Public Health, confirming the need to be unveiled and studied. Moreover, this time allowed the students to assess the participants’ prior knowledge on the topic and to identify gaps to be filled in the subsequent step (Theorizing).

The identification of gaps to be filled in the ACS’s knowledge, combined to their experiences, lived and suggestions, allowed the group to list key points related to the theme of the workshop, to prioritize and characterize them more consistently in the following step.

As they answered situations problems, it was revealed that the ACS had relevant information on the conditions addressed. With regard to the approach of Classical Dengue and their responsibility to confront this issue as a member of a Family Health Team, the ACS demonstrated satisfactory knowledge with scientific reasoning. However, as regards the Hemorrhagic Dengue, Chikungunya fever and Zika virus, it was realized that they had knowledge characterized by common sense.

Thus, the group outlined the following key points: the mosquito Aedes aegypti as etiologic agent; clinical, epidemiological features, treatment and performance of the ACS for diseases transmitted by mosquito.

✓ **Stage 3: Theory Deepening (Theorizing)**

For “Theorizing”, an exhibition dialogued by students was held, covering sequentially all the theoretical and scientific knowledge concerning to the terms outlined as key points in the previous step.

This step provided an exchange of knowledge between the students, who presented the theoretical and scientific knowledge, and ACS, which complemented it with practical knowledge acquired in their work routine. So, this was a good time to inter-subjectivity and extremely enriching for the teaching-learning process of both parties.

✓ **Stage 4: Formulation of Hypotheses**

At the end of exposure dialogue, the problems pointed out by the ACS were resumed as barriers in their working practices for combating the spread of mosquito, to be discussed hypotheses to solve or at least to mitigate these problems.

In ACS reports it was revealed that they had knowledge enough and played their role for control of the vector Aedes aegypti in the community, guided the community on strategies for the control of mosquito breeding, went to houses guiding families about the importance to eradicate the focus and main actions to be taken against infection suspected of Dengue, Chikungunya fever or Zika virus; however, the argument that some factors are configured as real obstacles to the success of their work was very present.

Faced with these difficulties perceived by the group, as well as the four stages of the Arch Method proposed, Solution Hypotheses were suggested by both the ACS and the students to the problems that emerged during the workshop (Figure 1).
<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution Hypotheses suggested by ACS</th>
<th>Solution Hypotheses suggested by the master students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ineffectiveness of Health Care Network does not guarantee that cases of Dengue, Chikungunya Fever and Zika virus identified by ACS, receive health care at different levels of complexity. - Improved management of municipal health services;</td>
<td>- Improved management of municipal health services;</td>
<td>- Investing on strategies to enhance and qualify the health services offered to the population;</td>
</tr>
<tr>
<td></td>
<td>- Investment in Primary Care, which will help to minimize overcrowding of hospitals;</td>
<td>- To train health professionals to work effectively in the network, exploring the reference services and counter-reference in combating diseases transmitted by mosquitoes;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- To raise awareness among health professionals about the importance of collective, interdisciplinary and inter-sectoral work in tackling the diseases transmitted by mosquitoes;</td>
</tr>
<tr>
<td>Community neglect in regard to prevention, which provides favorable conditions for the spread of diseases transmitted by mosquito.</td>
<td>- To raise awareness the public about the importance of domestic and collective hygiene for the eradication of mosquito proliferation foci;</td>
<td>- To encourage social mobilization to combat the problem.</td>
</tr>
<tr>
<td></td>
<td>- To provide for the entire community epidemiological data and information relating to the magnitude of diseases transmitted by mosquitoes;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- To propose for the authorities the creation of a punishment to those who do not cooperate to the basic preventive measures;</td>
<td></td>
</tr>
<tr>
<td>Inadequate conditions of infrastructure and sanitation in the community that provide mosquito foci</td>
<td>- To charge the municipal secretary of infrastructure solutions to inadequate sanitation conditions, especially in the peripheries.</td>
<td>- To encourage community to exert social control, charging management investments in infrastructure and basic sanitation.</td>
</tr>
<tr>
<td>Lack of coordination between ACS and Endemic agents.</td>
<td>- Elaboration of management plans in the city to promote the reconciliation of ACS’s work with the endemic disease agents;</td>
<td>- To promote interdisciplinary meetings to discuss the health problems detected in the community, including the lack of partnership between ACS and Endemic agents.</td>
</tr>
<tr>
<td></td>
<td>- To reduce the rotation of Endemic agents in the territories, fixing them one at a micro-area, to facilitate the link between this professional with the community and other health professionals who work in the territory.</td>
<td></td>
</tr>
<tr>
<td>Devaluation of Community in the guidelines provided by the ACS because of the discontinuity of care in health services.</td>
<td>- To allow for healthcare professionals better working conditions so that they can properly attend the cases of Dengue, Chikungunya fever and Zika virus;</td>
<td>- To insert practices of continuing education for health teams to have enough knowledge to assist cases of Dengue, Chikungunya fever and Zika virus.</td>
</tr>
<tr>
<td></td>
<td>- Methodological innovations in the training organized by the Municipal Secretary of Health, so that teaching strategies are adopted that enhance the experience of ACS and propose solutions to the difficulties experienced in their working practices.</td>
<td>- Awareness of other professionals of the Family Health Team on the ACS potential for assistance and production of health knowledge.</td>
</tr>
</tbody>
</table>

Figure 1. Confrontations appointed by ACS for management / control of cases of Dengue, Chikungunya Fever and Zika virus in Jequié, Bahia, with its solution hypotheses.

Stage 5: Reality Application: During the course of the workshop it was perceived by the students that all the
difficulties experienced by the ACS in their working practices have culminated in the motivation to act in view of coping with diseases transmitted by mosquito. In most cases, these professionals go so far as to discredit the work resolution, because they do not find favorable conditions in the health care network to ensure the continuity of operations.

In order to encourage these professionals to continue persisting in their practices, even in the presence of many adverse situations, it was shown by the students a motivational video for the entire health team of USF, which brought a reflection on the importance of teamwork, dedication and perseverance of every professional who compose it, to overcome the social problems, mainly in the public health order.

The goal of motivational video display to the entire team was to promote a space where other professionals of the team could sensitize about the importance of ACS for Public Health. In this context, it is necessary to have an appreciation of these professionals, not only when they are facing the mosquito Aedes aegypti, but in all health practices, as they bring with them a knowledge resulting from their experiences and experiences in the community that actually they have much to contribute to the resolution and construction of knowledge in health.

The cooperative vision of the video also applied perfectly to the problem of diseases transmitted by mosquitoes that not only consists of a medical problem, but a matter of Public Health that suffers direct influence of social determinates, so inter-sectoral action and collective mobilization for resolution are necessary.

The motivational video display that was proposed by the students for the stage of Reality application was based on the principle that any change in thinking, in the way of perceiving, in the way of thinking, in the way of critically launch innovative looks to what is post, should be considered positive, as a possible solution to the problem.4

**FINAL THOUGHTS**

At the end of the workshop with the ACS, it was revealed that the objective initially proposed by the discipline Teaching and Learning Process in Health was awarded, since it was possible to apply an investigative methodology, such as the Arch Method in teaching practice and perceive it as an excellent pedagogical strategy to be valued in health education.

The socialization of this experience very important because the results express the importance of teaching-learning process of health where there is the appreciation of the exchange of knowledge between teacher and student, overcoming the traditional model of education, and represents a proposal for solution to issues such as excessive amount of transferred content and techniques, the gap between scientific knowledge and the reality of the labor market, the dichotomy between theory and practice, teaching and assistance, among others.

Moreover, the experience leads to understanding that Problematization methodology should be a pedagogical strategy to be inserted into teaching practices in health care as it has great potential to assist in the formation of critical and reflective professionals who are able to act recognizing all conditions and external influences that affect the lives and development of an organism, surpassing the medical curative vision.

**REFERENCES**


11. Bahia. Secretaria de Saúde do Estado da Bahia. Superintendência de Vigilância e Proteção da Saúde. Situação Epidemiológica da Dengue, Chikungunya e Zika. Bahia, 2015. [Internet]. 2015 [cited 2015 Dec 19]. Available from: http://www.suvisa.ba.gov.br/sites/default/files/boletim%20epidemiol%20%20%20%20%20%20 %20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20%20...