SEVEN
publicações acadêmicas

Path against dengue: Experience report of a university extension project

https://doi.org/10.56238/Connexpemultidisdevolpfut-124

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ABSTRACT
Dengue is an acute febrile disease with typical viral etiology and benign evolution that is severe when it presents in the hemorrhagic form. Its transmission occurs by the bite of Aedes aegypti, in a human-Aedes aegypti-human cycle. Therefore, care and prevention against dengue is a practice that should always be encouraged, especially in risk areas, in addition to seeking to include the population as participants in prevention actions against this arbovirus. The article is an experience report whose objective is to describe the experience developed and experienced by the students of the undergraduate course in Medicine of UniFipMoc-Afya during the extension project "Path Against Dengue" that took place in May 2022 in the Cândido Canelas Municipal Park, located in the Canelas neighborhood, Montes Claros – MG. The actions carried out had a socio-educational character, aiming to recognize and demarcate the determinants of dengue in the Canelas and Antônio Canelas neighborhoods, in order to sensitize the local community about the preventive measures against the proliferation of the disease and, in this way, contribute to the integralization of the health of the residents. The strategies employed brought reflection, the problematization of the agenda and the valorization of a change in behavior aimed at reducing the transmission of dengue in the Antônio Canelas neighborhood and in Canelas. Therefore, this set of experiences provided the possibility of promoting an advance in the care and prevention of dengue, placing the community itself as a precursor and responsible for the acts that will provide a health promotion and improvements in their lives.

Keywords: Dengue, Aedes aegypti, community.

1 INTRODUCTION

Dengue is a DFA (acute febrile disease - in the clinic, called nonspecific viral disease) and evolves benignly, and can be severe if it presents in its hemorrhagic form. It is currently the most important arbovirus - a disease transmitted by arthropods - that affects humans, in addition to being a major public health problem worldwide, especially in tropical countries, since they have environmental contexts that favor the development and proliferation of Aedes aegypti - the main mosquito vector.

The incidence of cases varies according to climate conditions and is associated with increased temperature, rainfall and humid air which facilitate the high number of free breeding sites and the development of the vector (DEPRADINE; LOVELL, 2004). According to the Ministry of Health (2002), there are four serotypes of dengue virus - an arbovirus of the genus Flavivirus, belonging to the family Flaviviridae: 1, 2, 3 and 4; In addition, the incubation period is 3 to 15 days, with an average of 5 to 6 days.

To be transmitted, the bite of Aedes aegypti must occur, in a "human-Aedes aegypti-human" cycle. Mosquitoes can transmit the virus after an incubation period of 8 to 12 days, after eating a meal of infected blood. This occurs during the time the virus is in the person's blood (viremia phase), and begins one day before symptoms of fever appear, which can occur until the 6th day. There is also mechanical transmission that can occur as soon as feeding is stopped and mosquitoes feed on a nearby passable vector.

There is no record of transmission by contact with sick individuals or by secretions from healthy individuals. There are epidemiological links involved in the transmission of the disease that are summarized in the chain, according to Martinez (1990), as follows: infected mosquito → susceptible man infected man → infected mosquito.

Another important information is that, according to World Health Organization (1999), dengue virus infections can manifest clinically in ways, to consider undifferentiated febrile illness or viral syndrome, dengue, dengue hemorrhagic fever (HD), HD without shock, and Dengue-associated shock syndrome (DCS); or simply if it may be asymptomatic. Also, according to Martinez (1990), regarding the treatment, there is nothing specific or vaccines for the occurrences, although larvicides and insecticides have been regularly used in order to avoid an increase in cases, however they have not yet obtained favorable results for vector control. In addition, health education has been adopted as a prevention strategy of immeasurable value, since this method contributes to sustainability and promotion of socio-cultural changes with the objective of raising individual and collective awareness for the maintenance of an environment without risks of mosquito reproduction.

Therefore, the main objective of this report is to describe the experience lived by the students of the undergraduate course in Medicine of UniFipMoc-Afya during the extension project "Path Against Dengue". It presents as specific objectives to point out strategies used for the improvement of sanitation; how to combat the etiological agent for health promotion; and, finally, to evaluate whether the actions carried out with this group sensitized the population.

2 METHODOLOGIES

The study method consists of an experience report on the Extension project, carried out in the Cândido Canela park, with the local population of the Canelas and Antônio Canelas neighborhoods, in the city of Montes Claros/MG, and developed by the academics of the first period of the undergraduate course in Medicine of the University Center FIPMoc - Afya, also proposes to integrate the university and society, contemplating the necessary care to cope with and combat dengue. The proposal covers reaching the population as a whole, aimed at health promotion and early prevention of problems with dengue.

Thus, the elaboration of the project for community approach arose from the need to bring information and instructions to the residents of the Canelas and Antônio Canelas neighborhoods, and was divided into 3 stages: 1) planning through meetings in the Rosemary Family Health Strategy with the academics and the preceptor; 2) data collection with the help of FHS Health Agents to raise the demands of the territory in order to understand the level of knowledge about dengue cases; 3) execution of the project with informative signs in the neighborhood park and a support base to serve the population.

The execution of the project counted on the distribution of informative signs, containing short sentences and images about signs, symptoms and prophylactic actions about dengue, throughout the course of the park, so that the population that passed through there obtained the information in a practical, fast and effective way. At the entrance of the park, leaflets were distributed to people. In addition, there was a table with fruit, water and popcorn cart that everyone could consume while watching or participating in the conversation circles taught by the agents of the Zoonoses Center.

The project was carried out in order to spread a warning message to the population of the Canelas and Antônio Canelas neighborhoods in relation to the fight against the reproduction of the Aedes aegypti mosquito, a mosquito vector of the dengue virus. Thus, this action was planned in the Cândido Canelas Municipal Park aiming to spread signs that would indicate to the population the methods that could be done to prevent the circulation of the vector, all this in an attractive and simple way so that the residents of the neighborhood would be interested and quickly learn how it should be done in the fight against the dengue mosquito.

3 RESULTS AND DISCUSSIONS

The theme addressed in the project was planned through the determinants of health analyzed in the city of Montes Claros, mainly in the Canelas and Antônio Canelas neighborhoods. Since dengue, a theme chosen by the group, is one of the biggest public health problems in Brazil (TEIXEIRA, 2008). Therefore, care and prevention against this problem is a practice that should always be encouraged, especially in risk areas, such as in some regions of the mentioned neighborhoods.

In carrying out the project, some informative signs were scattered throughout the walking path of the Cândido Canelas Municipal Park and, also, there was a theatrical presentation on the outbreaks of dengue, which had the help of an agent of the Center for the Control of Zoonoses that represented the vehicle of the disease - the dengue mosquito, Aedes aegypti. In addition, it was available to the population: popcorn, fruits and water. During the whole action, basic health care (blood pressure measurement and verification of anthropometric measurements) performed by the students was made available. This practice allowed the academics to be closer to the community that went to honor them, contributing to the strengthening of the bond and to their protagonism. In addition, the execution of the project allowed the group to intervene among the population, which encouraged the care and prevention of dengue by the people of the neighborhood.

The activities carried out by the group contributed to health promotion and prevention by sensitizing the population about the importance of measures to combat dengue in their homes and in the community, in addition, the action also helped to sensitize the FHS health team in the Canelas neighborhood about the need to work to combat dengue, in an attempt to contribute to the elimination of breeding sites and, consequently, reduce the incidence of the disease.

Menezes and Avelino (2016) demonstrate the need that health professionals should have, through group activities, to work and discourse on important topics for community members, offering them information through different active methodologies in order to cause a change in posture and new health habits for the participants of the practice.

The awareness of dengue was important since the participants had little knowledge about the subject addressed in the theme. At first, it was sought to deconstruct the adverse knowledge about dengue that differs from the applied literature, as in Teixeira (1999), which describes the necessary prevention measures against dengue. For discussion, an awareness conversation circle was held to point out how the transmitting mosquito proliferates and how to avoid it. Soon after, a theater was held with the participation of professionals working in the control of zoonoses, which one of the agents dressed up as the Aedes Aegypti mosquito and together with the academics resumed the explanation about the reproduction of the transmitter of the dengue virus in an even more playful way for the spectators. With this, they were able to understand how they could prevent such spread and how it would affect the decrease in cases of people infected by the dengue virus in the neighborhood.

Thus, addressing important and complex themes, through these methodologies that involve discussion circles and theatrical stagings, contributes to the awakening of curiosity and the construction of critical and reflective thinking, thus reformulating previous knowledge for a different and effective participation, thus impacting on the education of the population for an improvement in collective health. Duarte (2019) promotes this same idea by considering that it is a very significant strategy that enables humanized and more meaningful care for the information process of the people who participate in the care moment.

The methodologies used in the group involving educational activities aimed at health promotion have again proven to be an essential tool to raise awareness among the population. The strategies used and employed brought reflection, problematization of the agenda and appreciation of a change in behavior aimed at reducing the transmission of dengue in the neighborhood Antônio Canelas and Canelas, because it empowers the community and expands its knowledge on the subject; Thus, those involved were subject to a transformation in the field of prevention against the pathology.

4 FINAL CONSIDERATIONS

Given what was exposed, it was realized that prevention against dengue is necessary in the neighborhoods of Montes Claros and that some residents are not aware of the ways of prevention, generating the increase in cases in the neighborhood. During the practices carried out in the project, it was possible to sensitize the population in relation to this theme. The Center for the Control of Zoonoses was essential in this aspect, using different methodologies with the residents, explaining the stages of the mosquito in the dengue cycle and the places of risk within the houses.

This set of experiences provided, in addition to the possibility of knowing the difficulties encountered from the perspective of the residents, stories and remarkable events in the neighborhood, for example, people who were newly infected and chose to share the experience during dengue infection. Through the experiences lived in the project, it is concluded that the awareness of the population goes hand in hand with health education, through theoretical and practical approaches together with popular knowledge. In this sense, the community proved to be very proactive in the dynamics presented, a highlight aspect of the project, and there was the guarantee that our objectives were achieved: to discuss about the prevention of dengue within the neighborhood and to get to know the target audience better.

Therefore, the implementation of projects focused on the health area related to prevention gains more and more importance due to direct contact with the population, positively adding and applying the necessary knowledge to prevent the spread of this pathology. Moreover, it is emphasized that the integration between the academic and the professional in the service provides great improvement in the formation of the student, increasing his understanding of the practice, which contributes to train

more sensitive and qualified professionals for the prevention and promotion of health. In this way, a mutual contribution is observed: while the student expands his academic repertoire, the population is benefited by the awareness of the prevention of the main re-emerging disease in the world. It is expected that this experience report will contribute to the application of continuous measures when addressing the importance of health education practice in relation to dengue for the population.

The studies serve as an incentive for professionals and for the municipal organization, aiming to carry out more and more educational actions in the region, in order to propagate academic and population knowledge and apply interventions in problems related to dengue, covering a large part of the community of the city of Montes Claros.Finally, it was possible to realize how important health education is for promotion, health protection and prevention, aiming at the integral attention of the subject, making the individual develop a sense of own and community health, promoting an advance in the care and precaution of health problems, a fact that puts the population active, aware and responsible for their health acts.

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