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## RESEARCH

## Health education about dengue: contributions to the development of competencies

Educação em saúde sobre a dengue: contribuições para o desenvolvimento de competências

Educación para la salud en el dengue: aportes para el desarrollo de competencias

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## ABSTRACT

**Objective:** To describe, through the perception of the academics, the actions of health education in the community Jurujuba, Niterói/RJ, discussing the contribution of this activity to its formation in the first period of nursing and graduate of the Federal Fluminense University. **Method:** A descriptive exploratory of qualitative type, conducted with 17 academics from the first semester of the second half of 2011. We used a semi-structured questionnaire. **Results:** from the interpretation and analysis of the questionnaires revealed three categories: Health education in nursing education, Skill development and Community observation. **Conclusion:** the activities offered to the students the development of skills that will mature during graduation, such as critical thinking, observation and communication. Moreover, added knowledge about the benefits of planning projects of health education in partnership with different institutions. **Descriptors:** Nursing, Dengue, Health education, Competency-based education.

## RESUMO

**Objetivo:** descrever, na percepção dos acadêmicos, a ação de educação em saúde na comunidade de Jurujuba, Niterói/RJ, discutindo a contribuição desta atividade para sua formação no primeiro período do curso de enfermagem e licenciatura da Universidade Federal Fluminense. **Método:** pesquisa descritiva exploratória do tipo qualitativa, realizada com 17 acadêmicos do primeiro período do segundo semestre de 2011. Utilizou-se um questionário semi estruturado. **Resultados:** a partir da interpretação e análise dos questionários, emergiram três categorias: Educação em saúde no ensino da enfermagem, Desenvolvimento de competências e Observação da comunidade. **Conclusão:** a atividade oportunizou aos acadêmicos o desenvolvimento de competências que serão amadurecidas durante a graduação, como o pensamento crítico, a observação e a comunicação. Além disso, agregaram conhecimento sobre os benefícios do planejamento de projetos de educação em saúde em parceria com diferentes instituições. **Descritores:** Enfermagem, Dengue, Educação em saúde, Educação baseada em Competência.

## RESUMEN

**Objetivo:** Describir las percepciones de los académicos, las acciones de educación para la salud en la comunidad Jurujuba, Niterói / Rio de Janeiro, discutiendo la contribución de esta actividad a su formación en el primer período de la enfermería y de posgrado de la Universidad Federal Fluminense. **Método:** Estudio descriptivo y exploratorio de tipo cualitativo, realizado con 17 estudiantes del primero semestre de la segunda mitad de 2011. Se utilizó un cuestionario semi-estructurado. **Resultados:** a partir de la interpretación y el análisis de los cuestionarios fueron reveladas tres categorías: Educación para la salud en la formación de enfermería, Desarrollo de habilidades y La observación de la comunidad. **Conclusión:** la actividad ofreció a los estudiantes el desarrollo de habilidades que maduran durante la graduación, tales como el pensamiento crítico, la observación y la comunicación. Por otra parte, añade el conocimiento sobre los beneficios de la planificación de proyectos de educación para la salud, en colaboración con diferentes instituciones. **Descriptor:** Enfermería, Dengue, Educación para la salud, Educación basada en competencias.

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## INTRODUCTION

**D**engue is a major public health problem worldwide. The World Health Organization (WHO) estimates that 50 to 100 million people infected annually, in more than 100 countries. About 550 thousand patients require hospitalization and 20,000 die as a result of dengue.<sup>1</sup>

Were reported 1.951 suspected cases of dengue fever in residents of Niterói/ RJ in 2012. The cumulative incidence is 398,4/100.000 inhabitants., Which configures the control diagram, an epidemic. The updated data of the day April 25, 2012 by Health Surveillance Coordination of Municipal Health Foundation of Niterói/RJ, also reveal the occurrence of a confirmed death and six others in research in the Municipality.<sup>2</sup>

Across the state of Rio de Janeiro were reported 38.527 suspected cases of dengue, according to the State Department of Health to date, there are seven confirmed deaths in the state, six of Rio and Niterói, Metropolitan Region.<sup>3</sup>

Considering the total number of severe cases, the lethality of dengue is 6,09%, in the state of Rio de Janeiro. The WHO recommendation is that the fatality rate is below 1%.<sup>1</sup>

Due to the severity of the disease, the fight is essential, and without the help of the population shares would be ineffective. Programs primarily focused on chemical control without community participation, intersectoral and without integration with little use of epidemiological proved unable to contain a vector, with high capacity to adapt to the new environment created by rapid urbanization and new hábitos.<sup>1</sup>

The mosquito outbreaks are widespread in areas near the residence of the residents, and even in their own homes. Besides the already known foci currently has mosquito outbreaks found in abandoned public buildings and sheds for the storage of seized cars, among others.

Community participation in this process is of fundamental importance, since through the actions of health education tool extremely important for the health professional, they become cooperators for the elimination of the vector.

Health education constitutes a set of knowledge and practices aimed at disease prevention and health promotion.<sup>4</sup>

Through it the population has access to a clear health-disease process, demystifying them, and the health care professional is intermediary such information. The knowledge about the conditioning factors and determinants of health is essential to changing habits harmful to health.

According to the above idea, Cavalcanti<sup>5</sup>, reports that there is a need for more relation between experts and ordinary individuals. Effective policies and practices of government, to sensitize and achieve compliance of the population, in the sense that it can, based on their daily lives, contribute and fulfill your part, so that public health interventions are increasingly efficient and effective.

Health education provides people the autonomy to develop preventive measures required for the elimination of the vector. Every action education tends to show a new look

involved through which they release a design that limits. Transform a static attitude facing a public health problem expands the vision of residents in favor of their own benefit.

Educational practices with the community should consider the knowledge in this area and the person who is the object of the action. The sense of knowledge should not be unidirectional but bidirectional. Considering knowledge apprehended by the client in relation to the subject matter, ie, considering common sense as a determinant for the effective implementation of health education.<sup>5</sup>

The undergraduate degree in Nursing and Bachelor of Nursing School Aurora Afonso Costa, Federal Fluminense University (EEAAC/UFF), provides grants to scholars to develop actions of health education in all its extension. The nurse in your field is not limited to healing activities, but also prevention and health promotion. Within these axes, it is a constant educator who provides its customers better living conditions, providing information through the empowerment of the client in relation to their health.

Due to serious health consequences caused by dengue, EEAAC/UFF through discipline University, Nursing and Academic Life (UEVA), taught in the first period of the course and in partnership with the extension project Educating for better care: A cartography Needs Health Users' community Polyclinic Jurujuba developed an action combat dengue which led scholars to conduct an active search of outbreaks of the mosquito, observe the community structure Jurujuba in Niterói, chat with the locals, and guide them about the proper way of prevention.

Importantly, the instruments are the basic nursing knowledge, skills, and attitudes acquired for the execution of an activity, ie, respectively, knowledge, know-how and being.<sup>6</sup>

The process of caring for clients in health services in primary care should include the planning, implementation and evaluation of care processes and methodologies of individual and collective action, and the development of processes of education and surveillance from the identification of needs community health.

The objective of this article was to describe, in the perception of academics, the actions of health education in the community Jurujuba, Niterói/RJ, discussing the contribution of this activity to its formation in the first period of nursing the EEAAC/UFF.

## METHOD

This is a descriptive exploratory qualitative type. Descriptive research aims to collect information about some parameter of study groups, samples or populations. It is exploratory when it comes to a subject still little investigated, according to the characteristics of a particular population involved.

Qualitative research seeks to obtain descriptive data through direct contact and interactive researcher with the situation under study. It is common that researchers try to understand the phenomena, from the standpoint of a given population.<sup>7</sup>

The study was conducted with 17 students from the first period of the Undergraduate and Graduate Nursing, Fluminense Federal University, in the second half of 2011, which agreed to participate in the activity of health education. The subjects were identified by letters to ensure your privacy, after approval by the Ethics Committee of the Faculty of Medicine of the same university, document CAAE nº 2866.0.000.258-10.

The venue for performing the activity was Jurujuba community, to be part of the area covered by the Community Polyclinic Jurujuba (PCJ) which is the academic field visits during the period.

In the first phase of this event, in partnership with the PCJ and the Family Medical Program (FMP), the students were guided by the staff of the Center for Zoonosis Control and Disease Transmission Vector of Niterói on the latest information pertaining to the mosquito *Aedes aegypti* and dengue virus.

The training was held in the premises of the State College Ferdinand Magellan who supported the initiative. The room that was available for the training of scholars, contained: data show, table and chairs that were arranged to facilitate viewing of the slides. At this stage the students felt comfortable to answer your questions about dengue, and think of innovative ways to attract the interest of the residents in the subject.

In the second stage the students were conducting the field visits with teachers of the course, the monitors, the extension project fellows, nurses, and community nursing units. During the visits the students were encouraged to observe the structure of the community while doing Jurujuba guidance to families and completing a questionnaire about their needs.

After visiting the community and guidance to residents, academics answered a semi-structured questionnaire, consisting of four open and closed questions about the relevance of the activity for its formation. The answers will be presented by code letter and number corresponding to the student to preserve their identity.

## RESULTS AND DISCUSSION

The community has always been Jurujuba formed by families of fishermen, however currently the profile of the residents have been differentiated, and can be found in the same locality, people without resources and with other occupations. Population growth has done to other families migrate to this region in search of housing. However due to sprawl, many homes are located in inappropriate places without basic sanitation conditions. The sewage is not treated and is dumped into the sea where fishing occurs.

It is noteworthy that in the catchment area of the units there are five underserved communities, three of which are located in the neighborhood of Jurujuba, home to most of its users, and two in charitas, nearby neighborhood. The neighborhood community Jurujuba consists of 1.525 families and 5.129 people registered in the MFP, and of these 4.500 people are served at the PCJ.<sup>8</sup>

During the visit of the academic community, conducted after training, have been reported: the presence of water tanks just capped, which is incorrect, as they should be sealed; buckets storing water in backyards without the recommended coverage from leaves of trees in ground leading to formation of outbreaks of the mosquito; plant pots in saucers without sand, backyards without proper leveling, construction material in an unprotected place, such as water tanks for installation.

After this activity the students were asked to answer a questionnaire about activity contributes to its formation. From the interpretation and analysis of the questionnaires revealed three categories: Health education in nursing education, skills development and Observation community.

### **Health Education in Nursing Education**

It is understood by health education any combination of learning experiences outlined in order to facilitate voluntary actions conducive to health.<sup>9</sup>

Within this category we highlight some of the following responses of academics:

*"I learned about the importance of spending our knowledge for the people, because I saw that they really need" A7.*

*"I realized the importance of the role of the nurse when I saw that my guidance would be followed by resident (...)" A5.*

The answers are in line with that described by Fontana (2008) points out that when the nurse in his practice, has acted as facilitator, mentor or educator, inherent to the professional nature. Thus, the learning process should be the guiding theme of this everyday professional in building practices that give the opportunity for the development of healthy habits of individuals responsible for their social environment and above all respect for its social dimension.<sup>10</sup>

Freire's pedagogy was also observed in this activity because of the fact that health education be established in the environment of residents, there was greater respect from academics as residents understood as social beings, and historical endowed with their own knowledge, not only as "white papers". Thus academics, as change agents, using the knowledge already present to build a new knowledge with the locals while they learned.<sup>11-12</sup>

In his book, Bastable<sup>13</sup> says many nurses and health workers admit they feel competent and confident in their teaching abilities, although it is expected that nurses are educators, few have done at least one specific course on the principles of teaching and learning .

The University should introduce such content and provide the opportunity for development of health education by scholars to develop this skill.

In the case of this activity, health education gains importance and greater encouragement when the student performs observes that the result of their intervention by understanding the caller with what you have been told, ie, the receiver that is the subject of the communication assimilates what has been transmitted and generates a reflection.

The reflection observed by the professional educator provides motivation for the pursuit of health education, since it understands its importance in the life of another.

### Skills Development

Professional competence is the ability "to mobilize, articulate, and put into action, values, knowledge and skills necessary for the efficient and effective performance of activities required by the nature of the work".<sup>14</sup>

Within this category were assigned the following answers:

*"I learned to guide residents after training, and I was less shy to talk to them." A11*

*"I was more confident with the contact with the residents of the community along with my classmates, and I know it will help me in another job I will develop." A16*

The responses above illustrate some of the basic tools of nursing work, which according to Horta (1970) is the observation, communication, assessment, manual dexterity, application of scientific principles, planning, creativity, teamwork, scientific method and referral to resources the community. This author just called them, considering them essential to the exercise of all professional activities of nursing.<sup>15</sup>

Higher education in nursing is responsible for the development of skills in their academics. Education policies through the National Curriculum Guidelines aim to target the higher education institutions for the training of the following skills and general skills of health professionals: health care, decision making, communication, leadership, administration and management and continuing education.<sup>14</sup>

Peres<sup>16</sup> criticizes education policies aimed at skills training when he says that they appear to adapt education systems to a new concept of the professional qualification to meet international investors. The author also claims that the logic of the market for hand press workforce trained to account for the technological dimension and does not privilege the critical-reflective able to impact the market and lead to improved local social medium and long term.

Skills development should be encouraged in higher education since the beginning of the course through activities that put students in practice. Thus, the formation will have a solid foundation in criticism and reflection, as the student himself is the one who founds.

All these features will be developed, to study, reflection and action. The academics are top professionals when articulating these aspects for a more efficient and effective. Responses testified that the activities of health education stimulated the development of skills in academics.

### Note of the Community

In all questionnaires academics stressed situations observed or not related to dengue. What has spawned this category.

The Note is part of the skills and is used in the work of nurses at any level of complexity; it is critical to the performance of the profession and aims to collect data.<sup>15</sup>

Among the responses, we highlight the following:

*"There were big cats near where they prepared seafood." A3*

*"It was remarkable during the visit to see a woman with one leg amputated and the other has an ulcer, because of diabetes, because we know that this can be avoided with guidance." A13*

*"We found a teenager with a skin problem caused by a parasite, which, according to the teacher and the nurse, was the Larva migrans cutaneous ". A1*

*"There was a house with lots of plants and lots of little plates without sand" A5*

It was found that the students had a capacity of observation beyond the situations related to dengue control, they observed all situations that provided health risks to residents. Look academics was expanded and the same might promote health in other ways, not limited to the topic discussed.

This phase of analysis revealed that health education activities developed since the beginning of training provide the maturity of holistic look, with a complete understanding of the phenomena and not just of its separate parts.

Reading and analyzing the questionnaires it was found that students of nursing stimulated early awaken their profile educators and developed their skills. And, that such activities contribute to the maturation of the students and the education of future professionals who know the influence of their work on the community enrolled.

The interaction observed between the academic community and shows that such activities nurture greater safety during college to skills development.

From the activity the students identified themselves as professionals, because they understood the importance of their roles in the process of teaching, being more aware, responsible, valuing communication, which enables the integration and coordination of the actions of those involved.

## CONCLUSION

To insert the student of the first period in the reality of a region through partnership with different institutions is a way to improve their understanding of the needs of residents. These requirements extend to simple queries on the Health Unit It covers all the conditioning factors and determinants of health of this community.

The context of the fields of action for the future professional, their needs, lack of access for residents to goods and services that should be provided by the State, give a reality check in academics, ripen her gaze on the object of his care and gives them the opportunity to understand the experience of the resident through a holistic look.

The benefits of this form of educational practice transcend the goal of understanding the process of spread of dengue and its consequences. The experience gained by the students in their relationship with the residents and users of the Polyclinic, the exchange of knowledge that were possible with this visit gave a new meaning to nursing, and showed that it has unlimited access to different types of actions, and are extremely essential for improving the quality of life of citizens.

The activity provided an opportunity to the academics to develop skills that will mature during graduation as critical thinking, observation and communication. Furthermore, they aggregated knowledge about the benefits of project planning of health education in partnership with different institutions.

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