

# Perceptions of representatives of a committee against dengue in the health education actions, Goiás, Brazil

PERCEPÇÕES DE REPRESENTANTES DE UM COMITÊ CONTRA DENGUE NAS AÇÕES DE EDUCAÇÃO EM SAÚDE, GOIÁS, BRASIL

PERCEPCIONES DE REPRESENTANTES DE UN COMITÉ EN CONTRA LA DENGUE EN LAS ACCIONES DE EDUCACIÓN EN SALUD, GOIÁS, BRASIL

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## ABSTRACT

This study aimed to analyze how the educational actions of prevention and control of dengue are performed in Goiás, from the perspective of representatives of the State Mobilization Committee against Dengue. It is a cross-sectional descriptive-analytical study, carried out in Goiânia with 43 representatives of public-private institutions, members of the State Mobilization Committee against Dengue of Goiás, in 2013. The data collection was done through questioning about the perception of health education for dengue prevention. Data were analyzed using content analysis and the WebQDA software. Three dimensions emerged from the analysis: educational aspects, management aspects, and community involvement. Respondents recognized the importance of health education for the prevention of dengue, and of the planning to strengthen the activities of the Committee.

## DESCRIPTORS

Health education  
Dengue  
Committee of professionals

## RESUMO

Esta pesquisa teve como objetivo analisar como ocorrem as ações educativas de prevenção e controle da dengue em Goiás segundo a percepção dos representantes do Comitê Estadual de Mobilização Contra Dengue. Trata-se de um estudo descritivo-analítico, transversal, realizado em Goiânia, com 43 representantes de Instituições público-privadas integrantes do Comitê Estadual de Mobilização Contra Dengue de Goiás, em 2013. A coleta de dados realizada por meio de uma questão sobre a percepção da educação em saúde para prevenção da dengue. Os dados foram analisados por meio da análise de conteúdo com auxílio do *software WebQDA*. Emergiram da análise três dimensões: aspectos educacionais; aspectos de gestão e envolvimento da comunidade. Os respondentes reconheceram a importância da educação em saúde para a prevenção da dengue e do planejamento para fortalecer a atuação do Comitê.

## DESCRITORES

Educação em saúde  
Dengue  
Comitê de profissionais

## RESUMEN

Esta pesquisa tuvo como objetivo analizar como ocurren las acciones educativas de prevención y control de la dengue en Goiás según la percepción de los representantes del Comité Estadual de Movilización En Contra la Dengue. Se trata de un estudio descriptivo-analítico, transversal, realizado en Goiânia, con 43 representantes de Instituciones público-privadas integrantes del Comité Estadual de Movilización En Contra la Dengue de Goiás, en 2013. La colecta de datos realizada por medio de una cuestión sobre la percepción de educación en salud para prevención de la dengue. Los datos fueron analizados por medio de análisis de contenido con auxilio del *software WebQDA*. Emergieron de la análisis tres dimensiones: aspectos educacionales; aspectos de gestión y arrollo de la comunidad. Los respondientes reconocieron la importancia de la educación en salud para la prevención de la dengue y del planeamiento para fortalecer la actuación del Comitê.

## DESCRITORES

Educación en salud  
Dengue  
Comité de profesionales

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## INTRODUCTION

Dengue constitutes one of the major public health problems in the world, and it is estimated that about 500 000 people with the severe form require hospitalization each year, with a large proportion of children affected<sup>(1)</sup>.

In Brazil, the high morbidity and mortality of dengue highlights the need for more complex strategies to combat the *Aedes aegypti* mosquito. Control methods recommended in the country include the use of low-volume insecticides; biological control using *Bacillus thuringiensis*, *Bacillus sphaericus* and larvae-eating fish added to domestic water tanks, and informational campaigns in the media<sup>(2)</sup>.

It is necessary to transcend the actions to combat the dengue vector through the strengthening of prevention and control. Thus, investing in health education is essential, because it triggers the critical reflection and contributes to individual and collective awareness of people<sup>(3)</sup>.

The Health Education comprises a field of knowledge that aims to promote health through a dialogical relationship of teaching and learning, based on respect and appreciation of experiences and customs of the community<sup>(4)</sup>.

In 2014, until the 32<sup>nd</sup> epidemiological week (CDC), the country registered approximately 511,000 probable cases of dengue, especially in the Southeast region, that had the highest number of notifications (294,916 cases), followed by the Midwest region in second place, with about 100 thousand cases of the disease<sup>(5)</sup>.

Considering the Midwest region, the State of Goiás has recorded successive epidemics, especially in 2013, when it was observed an increase of 438.38% over the number of cases reported in 2012<sup>(6)</sup>, despite the creation of the State Mobilization Committee against Dengue in Goiás, based on the Decree N° 7223, of 21<sup>st</sup> February 2011. This committee is composed of representatives of the government and civil society of Goiás. One of its purposes is the integration of actions for promotion, prevention and control of dengue developed by all segments of the society of Goiás<sup>(7)</sup>.

Although the Committee is presented as a favorable space for discussion and planning of educational activities for dengue control, it is not always possible to put into practice what is recommended. Therefore, investigating the perception of health education as well as the conduct of its members can contribute to the reformulation of strategies adopted by the Committee, for redirecting the actions and strengthening health education as a priority measure for the prevention of dengue in the Midwest.

This article aims to analyze how the educational actions of prevention and control of dengue are performed in Goiás, according to the perception of the representatives of the State Mobilization Committee against Dengue.

## METHOD

This is a descriptive-analytical, cross-sectional study, carried out in 2013, in the city of Goiânia. The study participants were representatives of public-private institutions that were members of the State Mobilization Committee against Dengue of Goiás.

The study subjects were 43 representatives of both genders, who were present at the meeting of the Committee and agreed to participate in the study.

Data were collected through the following guiding question: 'What do you think of health education for prevention and control of dengue?'

Data analysis was performed through content analysis<sup>(8)</sup> of the thematic category type using the WebQDA software<sup>(9)</sup>. *The categorization searched to identify the perceptions related to health education for dengue prevention.*

The content analysis was done in three steps, namely: pre-analysis (enumeration of responses to ensure anonymity of the respondent and prior reading); exploration (second reading and the confluence of the first identified ideas) and treatment (regrouping of the ideas and confluence in six categories and two dimensions). The categories and dimensions emerged from the study objective<sup>(8)</sup>.

Considering the ethical aspects, the subjects had the protection of their rights guaranteed. The study population was informed about all relevant aspects of the study, including its risks and benefits, through the Informed Consent Form (ICF), which was available in two copies to be signed and dated. The study proposal was approved by the Ethics Committee in Research/Dean of Research and Post-Graduation (COEP/PRPPG) of the Universidade Federal de Goiás (UFG) under number 629.396<sup>(10)</sup>.

## RESULTS

From the speeches of the subjects (n = 43), emerged three dimensions related to the topic of study, namely: educational aspects, management aspects and community involvement. The aspects addressed in each dimension were defined in order to standardize the analysis and the grouping of categories (Table 1).

**Table 1** - Aspects covered in the dimensions used in the study.

Dimension	Addressed aspects
Educational Aspects	This dimension refers to the importance of health education for dengue prevention: formation of groups of permanent education focused on educational activities; planning; awareness and promotion of dialogues.

Continued...

Dimension	Addressed aspects
Management Aspects	This dimension refers to the strengthening of management and the reduction of expenses, through planning and intersectoriality (commitment of all segments of society).
Community Involvement	This dimension refers to the responsibility of individuals with the environmental cleanup and awareness of habit change, avoiding the proliferation of the <i>Aedes aegypti</i> mosquito (dengue carrier) breeding.

The main ideas related to the perception of the subjects were grouped into nine categories that converged in the dimensions of education, management and community, as shown in table 2.

**Table 2** - Coding of the responses of representatives of the State Mobilization Committee against Dengue of Goiás.

Dimensions	Categories	Ideas
Educational Aspects	Consolidation of educational actions	Important, essential, continuous
	Groups for Health Education	Teams of permanent education in health
Management Aspects	Economy	Financial advantage, minimize risk, reduction of hospitalizations and reduction of serious cases and complications
	Integration of the Committee representatives	Difficult, participation and integration
	Intersectoriality	Responsibilities of the various segments of society
	Ineffectiveness of educational actions	Powerlessness, lack of concrete actions, actions without effect
Community Involvement	Awareness	Needs to improve
	Change of behavior	Benefits, life habits, environmental cleanup, care with trash
	Disengagement	Lack of effort

**Dimension 1 – Educational Aspects**

In their statements, the Committee representatives recognized the importance of health education actions for the prevention and control of dengue. However, one of them reported not knowing what to do in practice.

R.2- *“Health Education is a very important work in several areas of the city...”*

R.7- *“I’m sure it is by implementing educational work that we will improve this situation...”*

R.14- *“We have many professionals with good will, but without a clue.”*

A respondent also stated that the lack of health education groups in the municipalities of the state of Goiás is a major obstacle for the management, as it impairs the planning and the continuity of actions.

R.25- *“[...] The major obstacle is the absence of health education teams in the 246 municipalities of the state, making the actions of the state team difficult and slow.”*

**Dimension 2 – Management Aspects**

Health education has been recognized as a key strategy to reduce the public health services expenses with medications, hospitalizations and skilled labor, as well as for reducing serious cases of dengue and especially the number of deaths.

R.41- *“Informing and convincing everyone about the benefits of disease prevention in addition to being more advantageous financially, with fewer hospitalizations and medical statements, also minimizes the risk of complications that each person can suffer”.*

Most representatives thought necessary to strengthen the integration among the Committee members and increase participation in the meetings.

R.11- *“I feel that we can improve our preventive actions in a participatory and integrated manner.”*

The data revealed some barriers that may hinder the resolution of actions, such as low or no interaction of the Committee with the management and the agents of endemic diseases combat.

R.10- *“Difficult contact with the endemic agent of the region [...]”.*

The lack of intersectoriality was also mentioned by respondents, because fighting dengue is not only responsibility of the health sector, but also of other society segments (sanitation, environment, public safety, etc.); and this fight should be inserted in various social facilities, especially at school.

R.17- *“There is lack of concrete actions involving since the assistance professionals of the health units, until the managers who plan the actions.”*

R.19- *“Education should be a priority to combat dengue, that’s the only way to make it all better. Focusing especially on the education of parents and children.”*

R.39- *“[...] dengue is a disease of social and educational aspect.”*

R.29- *“I consider the actions in health education essential, and reiterate that they must happen in various spaces such as schools, churches, community centers and others. Dengue will only be resolved with intersectoral actions [...]”.*

It was also evident that the lack of coordination between the different segments of society results in actions that do not have the expected preventive effect, making professionals feeling powerless.

R.4- *"The feeling of powerlessness is really great in face of innocuous actions or even in lack thereof."*

### **Dimension 3 – Community Involvement**

The Committee representatives are aware that the community needs to be closer to the institution, since the citizen is also co-responsible for combating dengue regarding the cleanliness of the environment and change in habits. However, they highlighted the lack of awareness of citizens and the lack of commitment in keeping the environment free of waste.

R.5- *"[...] changing the practice and customs of the community in order not to let reservoirs for the breeding of mosquitoes."*

R.42- *"[...] you don't see much effort from the population in general."*

## **DISCUSSION**

In this study, it was found that participants recognize the importance of health education for dengue prevention, since it enables a higher quality and effectiveness of actions. This perception is complemented by a study that described the influence of the educational process in the academic training, contributing to the formation of skills<sup>(11)</sup>.

The absence of health education teams in most counties in the state of Goiás, reported in the speeches, hinders the continuity of actions and the improvement of the educator-professional. Studies on the demands of health workers and the expectations about training at work, showed that permanent education provides a reflection on the reality of work, besides enabling the mobilization of workers and the perception of problems from the perspective of those involved<sup>(12,13)</sup>.

For the Committee representatives, the education in health expands the field of practice of the public health services management at the same time that it approximates management and the population, which allows the community to assume the responsibility for keeping the environment clean and free of breeding places of the mosquito that transmits dengue. A study demonstrated the importance of proximity between management and community in dengue control, by encouraging empowerment, as individuals empowered with knowledge have greater conditions to work together and become protagonists of their own lives<sup>(14)</sup>.

It was also evident that citizens who recognize their importance in disease prevention can develop their skills and become capable of coping with difficult situations. This perception of prevention was observed in all the speeches shown in this study, and should be inserted in the actions of permanent education of the surveyed institutions and services. A study found that for achiev-

ing improvements in the system for dengue surveillance in Brazil, the main suggestion of the Coordinators of the Center for Epidemiological Surveillance of the State of Goiás (54.5%) and of the assistance professionals (43.8%) was the training with focus on permanent education of the professionals involved in this surveillance. These surveyed professionals suggested the adequacy of human resources and infrastructure (40.9%), and the assistance professionals suggested preventive actions (25%)<sup>(15)</sup>.

It was emphasized by participants that investing in the prevention of dengue, which is a preventable disease, results in the rationalization of public health expenses and allows the redirection of investment to other diseases and disorders. The concern with costs generated by dengue is in agreement with some studies in which the costs of the dengue control program were evaluated<sup>(16,17)</sup>.

Team work was mentioned as a way to break the traditional vertical relationship between the health professional and the subject of the action, being a strategy to facilitate the collective and individual expression of the needs that influence health. Furthermore, it constitutes a tool for critical awareness of people. A study has shown that the educational process results in behavior change when the reciprocal group dialogue and the life experience of communities are taken into consideration<sup>(18)</sup>.

Intersectoriality was mentioned as a new guiding logic of public policies, especially to combat dengue, since it enables the articulation between knowledge and experiences. Moreover, it creates spaces where power relations are shared and individual interests are collectivized.

Studies have demonstrated the importance of coordinating external social spaces with the health sector, especially the school, which is a favorable environment for students learning to conquer their citizenship and form attitudes and values that lead them to behave intelligently<sup>(19-21)</sup>.

Finally, in this perspective of health education for prevention and control of dengue, the planning is necessary to decrease the risk of new epidemics, mainly by the potential of an epidemic during events involving many tourists<sup>(22)</sup>. The surveillance allied to prevention educational activities in all the 553 micro areas of Brazil, point to the need of methodologies that should be done routinely for mass events like the World Cup, held in 2014, predicting the intersectoral organization for upcoming events, such as the Olympics to be held in Brazil in 2016<sup>(23)</sup>.

## **CONCLUSION**

The representatives of the State Mobilization Committee against Dengue of Goiás recognized the vital importance of health education for the prevention of dengue, which represents a major breakthrough in the discussions about the strengthening of preventive actions to control this endemic disease.

The dimensions identified in this study (education, management and community) are connected to the proposed theme, because it is necessary to systematize a continuous and permanent process of health education involving both the Committee as the community, for the control and prevention of disease.

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