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Health education performed by nurses about arboviroses in Brazil

Educación en salud realizada por enfermeras sobre arbovirosis en Brasil

A educação para saúde realizada por enfermeiros acerca das arboviroses no Brasil

ABSTRACT
The present work aims to verify the scientific production about the nurse's role as a health educator in the scope of arboviruses. 444 articles were found, after applying the inclusion and exclusion criteria, 6 articles were selected, with the language in Portuguese, in the LILACS and BEDENF databases. Undoubtedly, the articles pointed out that there is misinformation on the part of the population and that there is a need for nursing professionals and the government to take actions to reinforce the ways of preventing arboviruses, in this sense, there was a scarcity of studies that portrayed the performance of nursing in health education on arboviruses. Studies on the topic of Dengue were emphasized at the expense of other arboviruses. Thus, it is necessary to invest in research and extension activities, and educational actions for health promotion, for the control of diseases transmitted by Aedes Aegypti and support for evidence-based nursing practice.
DESCRIPTORS: Nursing; Health Education; Dengue; Zika Fever; Yellow Fever; Chikungunya Virus.

RESUMEN
El presente trabajo tiene como objetivo verificar la producción científica sobre el papel de la enfermera como educador de salud en el ámbito de los arbovirus. Se encontraron 444 artículos, después de aplicar los criterios de inclusión y exclusión, se seleccionaron 6 artículos, con el idioma en portugués, en las bases de datos LILACS y BEDENF. Sin lugar a dudas, los artículos señalaron que existe una información errónea por parte de la población y que es necesario que los profesionales de enfermería y el gobierno tomen medidas para reforzar las formas de prevenir los arbovirus, en este sentido, hubo una escasez de estudios que retrataran el desempeño de enfermería en educación sanitaria en arbovirus. Se enfatizaron los estudios sobre el tema del dengue a expensas de otros arbovirus. Por lo tanto, es necesario invertir en actividades de investigación y extensión, y acciones educativas para la promoción de la salud, el control de enfermedades transmitidas por Aedes Aegypti y el apoyo a la práctica de enfermería basada en evidencia.
DESCRIPTORES: Enfermería; Educación en Salud; Dengue Fiebre del Zika; Fiebre Amarilla; Virus Chikungunya.

RESUMO
O presente trabalho tem como objetivo verificar a produção científica acerca do papel do enfermeiro como educador em Saúde no âmbito das arboviroses. Foram encontrados 444 artigos, após aplicação dos critérios de inclusão e exclusão, foram selecionados 6 artigos, com o idioma em português, nas bases de dados LILACS e BEDENF. Indubitavelmente, os artigos apontaram há desinformação por parte da população e ainda, que há necessidade dos profissionais de enfermagem e o governo realizarem ações para reforçar as formas de prevenção das arboviroses, nesse sentido, observou-se a escassez de estudos que retratassem a atuação da enfermagem na educação em saúde sobre arboviroses. Ressaltaram-se os estudos sobre o tema Dengue em detrimento das demais arboviroses. Assim, faz-se necessário o investimento em atividades de pesquisa e extensão, e ações educativas para promoção da saúde, para o controle das doenças transmitidas pelo Aedes Aegypti e subsídio da prática baseada em evidências da enfermagem.
DESCRITORES: Enfermagem; Educação em Saúde; Dengue; Febre Zika; Febre Amarela; Chikungunya Vírus.

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Rachel de Araujo Costa
Graduating from the Anna Nery School of Nursing – UFRJ. https://orcid.org/0000-0003-0564-3585

Giovanna Vivacqua Mendes
Graduating from the Anna Nery School of Nursing – UFRJ. https://orcid.org/0000-0002-6081-3260

Nathalia da Costa Melo de Andrade
Graduating from the Anna Nery School of Nursing – UFRJ. https://orcid.org/0000-0002-3837-3924

Maria Eduarda Fernandes Alves
Graduating from the Anna Nery School of Nursing – UFRJ. https://orcid.org/0000-0001-8138-7443

Janaina Moreno de Siqueira
Nurse. Master's student at Anna Nery School of Nursing – UFRJ. https://orcid.org/0000-0002-9806-6352

Sheila Nascimento Pereira de Farias
PhD Professor at the Anna Nery School of Nursing – UFRJ. https://orcid.org/0000-0001-5752-265X

Anna Carolina de Araújo Cavalcante
Graduating from the Anna Nery School of Nursing – UFRJ. https://orcid.org/0000-0003-4885-7321

INTRODUCTION

In recent decades, arboviruses have represented a major problem in Public Health in the Americas, as well as worldwide. These are viral infections caused by the so-called "arboviruses" (from English, "arthropode-borne virus"), viruses essentially transmitted by blood-sucking arthropod vectors. Currently, it is estimated that there are approximately 545 species of arboviruses and that, around 150 of these, can cause infectious diseases in humans[1].

According to a study by the Evandro Chagas Institute[2], the emergence and spread of arboviral infections is due to some main factors, such as population growth, unplanned urbanization and forest clearing, in addition to increased human traffic and international trade, being a worldwide problem in Public Health due to the territorial dispersion it had reached, therefore requiring more complex prevention and control actions; however, favorable environmental and climatic conditions are also important determining factors for the development and proliferation of the vectors of these infections, being, for this reason, a more frequent problem in tropical countries.

Brazil, being predominantly tropical, has a favorable climate for the maintenance and circulation of vectors. The Brazilian population, in turn, continuously provides the formation of artificial habitats for spawning and the development of these arthropods, due to the individual's carelessness towards environmental conditions. Therefore, arboviruses are associated with major epidemics in the country, with a significant number of people infected each year.

The main arboviruses involved in the epidemics that plague the Brazilian territory are the flaviviruses - responsible for causing in the population the two main infections: dengue fever and zika virus and, more recently, yellow fever - and the alphaviruses - the genus that causes fever cases chikungunya. All infections caused by these genera in the country are mediated by a common vector: the female mosquito of the species Aedes aegypti, the main vector species that appears in this context.

Dengue (DEN) is considered the most incident arboviral infection worldwide, being responsible for several cases of death annually. According to the 2003-2019 Epidemiological Bulletin of the Ministry of Health (MS), in the period from 2003 to May 2019, 11,137,664 probable cases of DEN were reported in Brazil. In the country, the first clinical and laboratory documented DEN epidemic occurred in 1981 and 1982, however, since that time to the present day, four major epidemics have already occurred in the country, these being in 1998, 2002, 2008 and 2010, respectively . Currently, the incidence of this infection in the country is under greater control, but despite this, cases of death from DEN are still commonly reported, as shown in the Epidemiological Bulletin 2003-2019[3].

Zika virus fever (ZIKA), in turn, changed the Brazilian epidemiological scenario of neurological manifestations. After the detection of the virus in the country in April 2015, an increase in the number of encephalitis, myelitis, encephalomyelitis, Guillain-Barré syndrome and, mainly, microcephaly in live births, was observed, congenital malformation characterized by reduced head circumference for age pregnancy, accompanied by changes in the central nervous system. Since 2015, the number of neonatal microcephaly, possibly associated with ZIKA, has grown significantly in Brazil. About 1,608 cases of microcephaly were recorded in 2015 alone, a number much higher than the average obtained in previous years[4].

The first indigenous cases of chikungunya (CHIK) were first identified in Brazil in September 2014, in Oiapoque in the State of Amapá (North) and, Feira de Santana, State of Bahia (Northeast). Its somewhat different manifestation presents arthralgia as a prominent feature, a complication that in the chronic phase of the disease is possibly disabling. Between 2014 and 2019, still according to the Epidemiological Bulletin of 2003-2019, 589,076 probable cases and 495 deaths by CHIK were confirmed by the laboratory.

Yellow fever (FEBR), a disease long forgotten in Brazil, had a sudden manifestation. This is because, for years, there were no epidemics of the disease in the country until countless cases appeared in recent years, advancing throughout the Brazilian territory. Accor-

ding to the Epidemiological Bulletin 01 of MS, the biggest outbreaks in the history of wild FEBR in Brazil - since this transmission cycle was described in the 1930s - occurred in the monitoring years 2016/2017 and 2017/2018, when they were about 2,100 cases were recorded and more than 700 deaths from the disease[5]. But, despite being a potentially dangerous infection, different from the other arboviruses mentioned, to face this pathology, we have as a prevention strategy the vaccine, a strategy still much feared and mystified by the population.

It is noted, therefore, in this scenario, the importance of the performance of Primary Health Care (PHC) in the engagement for the prevention and control of arboviruses. Since these are infections that can be easily prevented and controlled through the population's awareness of care for environmental conditions, PHC is of significant relevance, given that PHC is the main gateway to the System Unified Health System (SUS), especially when the focus is on Health Education for the community.

In this sense, the intention of this study was based on identifying, through a bibliographic survey in the scientific literature, in national and international productions, evidence supported by the guiding question: "How is the nurse's role as a health educator for prevention and control? arboviruses? "; with the purpose of contributing to a practical assistance within PHC contextualized in scientific evidence and also for the area of nursing focused on research and extension projects.

METHODOLOGY

The present study is an Integrative Review (IR), a method of bibliographic research that gathers information and results obtained from published articles, that is, scientific evidence, presented in summary form, about a certain theme and within a temporal cut, in order to support evidence-based health care.

The guiding question of the study consists of the possible analysis of the nurse's role as a health educator in the context of the aforementioned arboviruses, that is, "How is the nurse's role as a health educator being in the prevention of arboviruses?".

For the bibliographic survey, an online bibliographic search was performed in journals with national and international indexes, in the databases: Latin American and Caribbean Literature in Health Sciences (LILACS), Medical Literature Analysis and Retrieval System Online (Medline), Nursing Database (BDENF), consulted through the Virtual Health Library (VHL) website and also in the Scientific Eletronic Library Online (SciELO).

In the search for articles, descriptors were used in Portuguese, English and Spanish, such as: "Nursing", "Health Education", "Dengue", "Zika Virus", "Chikungunya Virus", "Yellow Fever", "Nursing "," Health Education "," Dengue "," Zika Virus "," Chikungunya Virus "," Yellow Fever "," Enfermería "," Education in Health "," Dengue "," Zika Virus "," Chikungunya Virus ", "Fiebre Amarilla". In addition to the use of three different languages, each descriptor combined with another descriptor of the same language with the use of the Boolean operator "AND", in each of the databases mentioned above.

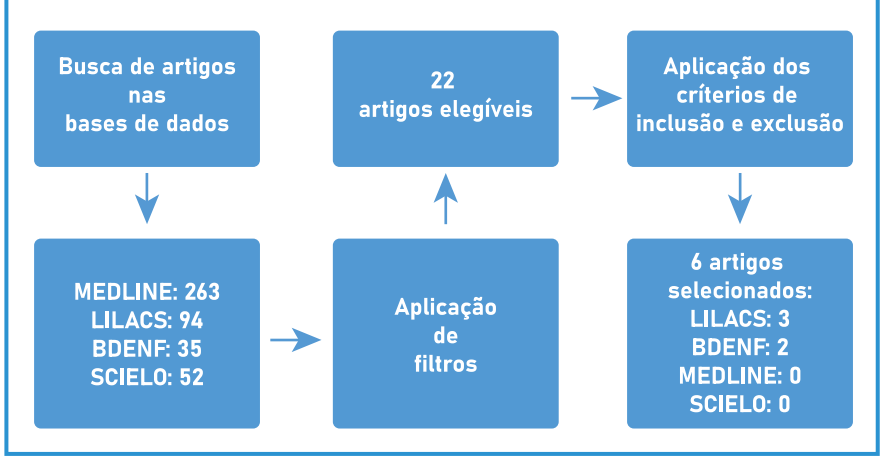
After searching the databases with the selected descriptors, as inclusion criteria, the IR sample was used: full articles available in full, published between 2014 and 2018, containing the IR descriptors in the title or abstract, scientific articles originals and reviews, and articles in which the country mentioned was Brazil. The following were excluded: articles identified in more than one database, theses, monographs, and books.

The total of studies found was 444 articles, most of which were published in English and found on Medline. With the application of the exclusion criteria, the articles were evaluated, excluding those that did not deal with the topic of IR in their abstract and that did not have any of the descriptors among the keywords.

In this phase of the selection, after the exclusion of articles that did not fit, 22 articles were found, which were read in full, being discarded after the analytical reading 16 of those that did not meet the inclusion criteria of the IR, composing the final sample of the RI only 6 articles.

For a better view of the entire sample selection process for this study, the flowchart shown in Figure 1 was prepared:

Figure 1. IR flowchart, selection of articles in the databases. Rio de Janeiro, RJ, Brazil, 2019.



RESULTS

The study sample consisted of six articles and the presentation of the results found is structured in this way: Chart 1 presents the characterization of articles eligible for IR according to the article's identification number, year of publication, author (s), title publication, the journal, country of origin, language and database; and, in Chart 2, the identification number of the study, its objectives, the type of study, results, conclusions and recommendations are displayed.

Chart 1 presents studies published during the period from 2014 to 2018, a defined time frame for the research carried out. The years 2016 and 2017 concentrated the largest number of publications, with a total of two each, followed by the years 2014 and 2015. In 2018, there was no production on the subject in the form of a scientific article. It was found that all studies had more than three authors. Regarding the country of origin, all articles were published in Brazil. The predominant language was Portuguese, and no studies were found in English or Spanish. When analyzing the databases, LILACS concentrated four publications that supported this research, representing 66.6% of a total of 100% of the data.

Chart 2 shows the characterization of the articles of the IR. As for the objectives, the reviewed studies mostly portray - three studies - on coping with DEN.

Of the total sample, one study aims to analyze the nurse's performance in

Chart 1. Characterization of the sample of RI articles. Rio de Janeiro, RJ, Brazil, 2014 - 2018.

Nº	ANO	AUTOR(ES)	TÍTULO	PERIÓDICO	PAÍS	IDIOMA	BASE DE DADOS
01	2015	Ronaldo Pinheiro Gonçalves, Edilmar Carvalho de Lima, José Wellington de Oliveira Lima, Marcelo Gurgel Carlos da Silva, Andrea Caprara	Contribuições recentes sobre conhecimentos, atitudes e práticas da população brasileira acerca da dengue	Saúde Soc	Brasil	Português	LILACS
02	2016	Franklin Learcton Bezerra de Oliveira, Rejane Medeiros Millions, Marcelo Viana da Costa, José Jailson de Almeida Júnior, Dany Geraldo Kramer Cavalcanti e Silva.	Estudo comparativo da atuação do enfermeiro no controle de dengue e febre chikungunya	Saúde Soc	Brasil	Português	LILACS
03	2016	Gabriel Augusto Cordeiro Dos Santos, Jacqueline Da Silva Rosa, Eliseth Costa Oliveira De Matos, Mary Elizabeth De Santana.	Dengue: Prevenção, Controle e Cuidados de Enfermagem - Revisão Integrativa da Literatura 2008-2013	Revista Brasileira de Ciências da Saúde	Brasil	Português	LILACS
04	2017	Luciane Abrantes Nicácio, Rejane Marie Barbosa Davim, Moisés Barbosa Oliveira, José Cleston de Farias Camboim, Hellen Renatta Leopoldino Medeiros, Silvia Ximenes Oliveira	Intervenção educativa sobre o mosquito Aedes aegypti em escolares: possibilidade para a enfermagem no contexto escolar	Revista de enfermagem UFPE online	Brasil	Português	BDENF
05	2017	Aparecida Maria da Silva Affini1, Sergio Neder Rocha, Simone Albino da Silva, Eliana Peres Rocha Carvalho Leite, Fábio de Souza Terra, Mônica Lá-Salette da Costa Godinho, et al	Condutas das enfermeiras sobre o Zika Vírus na consulta pré-natal	Revista de enfermagem UFPE online	Brasil	Português	BDENF
06	2014	Myrella Silveira Macedo Cançado, Maria Alves Barbosa, Ricardo Antônio Gonçalves Teixeira, Ellen Cynthia Fernandes de Oliveira	Percepções de representantes de um comitê contra dengue nas ações de educação em saúde, Goiás, Brasil	Revista Escola de Enfermagem USP	Brasil	Português	LILACS

Chart 2. Characterization of IR articles regarding their objectives, type of study, results, conclusions and recommendations. Rio de Janeiro, RJ, Brazil, 2014 - 2018.

Nº	OBJETIVOS	TIPO DE ESTUDO	RESULTADOS	CONCLUSÕES	RECOMENDAÇÕES
01	Reunir e sintetizar estudos sobre o tema, com o fim de contribuir para a maior compreensão sobre educação em saúde na prevenção da dengue.	Estudo de revisão.	Foram selecionados 12 artigos, que sofreram divisão temática nos temas: atuação dos agentes de saúde, escola como agente promotora de saúde, papel da mídia e participação da população.	Há discrepância entre as ações governamentais e as reais necessidades da população.	Implantação de uma política de prevenção e controle em que as estratégias sejam norteadas pelo conhecimento social.
02	Analisar a atuação dos Enfermeiros das Estratégias de Saúde da Família no controle de dengue e febre Chikungunya nos municípios de Parnamirim e Santa Cruz/RN.	Estudo exploratório descritivo.	Com os dados coletados, dividiu-se a ação da enfermagem em duas categorias: "Educação em saúde" e "Campanhas higienistas e Informações".	Há uma forte presença do modelo higienista/campanhista na fala e atuação dos enfermeiros.	A julgar pela amostra pequena, há necessidade de mais estudos que aprofundem o tema.
03	Revisar na literatura as ações de controle, prevenção e cuidados de enfermagem aos indivíduos acometidos com o vírus da dengue.	Estudo de revisão.	A prevenção, quando bem desenvolvida, contribui significativamente para a redução dos casos de dengue. O controle através do combate é vital, e os cuidados de enfermagem são focados em reestabelecer a saúde do indivíduo infectado.	A eficiência nas ações de prevenção e controle são essenciais para a redução do número de casos da patologia, e os cuidados de enfermagem são cruciais para o reestabelecimento da saúde do paciente.	Não identificado.
04	Contribuir para o conhecimento coletivo sobre o mosquito Aedes aegypti, através do desenvolvimento de ações educativas com escolares.	Estudo qualitativo de intervenção.	Os alunos se mostraram interessados e participativos, visto que interviram na prática proposta.	Houve desinformação dos alunos sobre os perigos da dengue.	Fortalecimento da relação entre saúde e escola na prevenção do mosquito da dengue.
05	Avaliar o conhecimento das enfermeiras da ESF sobre a prevenção de infecções pelo vírus zika na consulta pré-natal	Estudo qualitativo, dedutivo, descritivo, exploratório.	Identificou-se insuficiência de conhecimento para o atendimento das demandas de ações educativas e assistenciais à gestante para a prevenção.	Evidenciou-se que as enfermeiras precisam de melhor preparo para atender gestantes com possível infecção pelo vírus Zika.	Capacitação para melhor atendimento das demandas da gestante relacionadas ao vírus Zika.
06	Observar 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.	Estudo transversal.	Surgiram da análise três vertentes: aspectos educacionais; aspectos de gestão e envolvimento da comunidade.	Os representantes do comitê reconheceram a importância das ações educativas na prevenção e no combate à dengue.	Não identificado

relation to ZIK and one study has the theme of the Aedes aegypti mosquito. Regarding the type of study, the review study prevailed, with a total of three, followed by a qualitative study, with a total of two studies.

Regarding results, most studies discuss the topic, dividing it into important aspects, such as community involvement, FHS action and the role of nursing. Study(6) shows that elementary school students participate in recreational activities.

As for the conclusions, three studies showed the need for improvement in educational actions. One study shows the importance of educational actions to face DEN, and the other concludes that elementary school students lack knowledge about the disease.

Among the recommendations found, the need for further studies on the subject and greater nursing training to act within the scope of arboviruses is clarified.

DISCUSSION

Bearing in mind that flaviviruses - arboviruses that cause DEN, ZIK and FEBR - and alphaviruses - that cause CHIK - are highly incident in the country, the importance of actions to prevent and combat pathogens is evident. Considering that of all the diseases mentioned, only FEBR has a vaccine as a form of prophylaxis, we can conclude that the most effective way to prevent arboviruses is the education of the population on the subject.

In the meantime, it is observed that Nursing has a crucial role in promoting health related to arboviruses. It is the competence and responsibility of Nursing to carry out actions aimed at health education for the population. In view of this fact, it becomes evident the importance of analyzing scientific production about the role of nurses as educators in combating and preventing diseases caused by arboviruses.

In the calculated time frame, the results showed that most studies are related to DEN. The predominance of studies on this pathology to the detriment of other arboviruses occurs because DEN is an endemic disease in Brazil, which affects several countries in the world. Study[6] cites the fact that the World Health Organization (WHO) recognized DEN as a disease only in the 20th century, when several countries in Southeast Asia suffered endemics from the hemorrhagic version of the pathology.

Thus, combating this vector is the strategy most used by Brazilian public health. Study[6] affirms that all professionals who work in the FHS have a crucial role in the prevention of arboviruses, acting through health education, permanent education and guidance to the population.

This demonstrates that DEN has been present in the world for decades, being a pathology recognized to be dangerous, unlike CHIK and ZIK, which have presented themselves as potentially harmful in recent years. This fact is presented by authors[7], when they mention that the first case of CHIK diagnosed in Brazil occurred in 2010 and, in 2014, the first autochthonous cases were reported in the country, which would later make fever a Brazilian public health problem.

Study[8] on the role of nursing in the prenatal consultation of pregnant women infected with ZIKA confirms that ZIKA, like CHIK, has spread very recently in Brazil. The authors talk about the fact that outbreaks of microcephaly in the country began to occur in 2015, and how the FHS nurses, for the most part, are unprepared to guide and assist these pregnant women, considering that, in their academic training, such diseases were not yet prevalent.

In all the pathologies, the Aedes aegypti mosquito is the vector, that is, it is through the bite of this arthropod that individuals are infected by the DEN, CHIK, ZIKA and FEBR viruses. Thus, combating this vector is the strategy most used by Brazilian public health. Study[6] affirms that all professionals who work in the FHS have a crucial role in the prevention of arboviruses, acting through health education, permanent education and guidance to the population. They also reiterate that the mosquito uses utensils that the population uses in their daily lives and that they can also make their breeding sites in places with

open-air garbage - which is a reality in many places in the country, especially treating them needy communities. Bearing in mind that the breeding sites of the vector are present, mainly, in the houses and in the surroundings of the people, to advise on the proper conduct in face of this reality, with the aim of empowering individuals with their own care and preventive measures against such diseases. , is of great value.

No studies were found within the inclusion and exclusion criteria that discussed FEBR. This fact is alarming, considering that it is a highly dangerous disease. However, unlike other arboviruses, FEBR has a vaccine as a form of prophylaxis, facilitating prevention. According to the Ministry of Health (MS), the application of a dose between nine months and 59 years of age, in endemic places - which covers most of the country - is enough for an effective immunization for the rest of life. - from 95% to 99% -, in addition to be a known safe vaccine. However, even in the presence of a vaccine, it is necessary to guide the population as to its importance, so that citizens seek it in health services[9].

In the area of arbovirus prevention, the fact that health education has a fundamental role is indisputable. The Family Health Strategy, which is based on proximity to the population, has the responsibility to promote this education. As an essential part of the FHS, we have Community Health Agents who provide a link between the population and the local health service, whose professionals are closest to the community, who know the residents, their vulnerabilities and needs. In his study[9], The authors state that the CHAs play a role in encouraging the population to adhere to prevention practices. However, the authors still declare that, in addition to the Community Agents, the presence of the Vector Combat Agents (LCA) is important, considering that in this way the resources would be optimized and would allow greater community involvement in the control of the DEN.

Study[10], in turn, it states that the need to plan educational actions that encourage and guide the population to carry out control without the direct need for ACS or ACV, thus stressing the importance of people's empowerment over their own health. The authors also reiterate that, in addition to vector control, Epidemiological Surveillance is essential, given that it is through the notification system that it is possible to plan actions and design projects that meet the demands of the various endemic regions of Brazil.

Nursing is the reference profession when it comes to health promotion. It is up to the nurse to guide the population, plan educational actions and prepare the team for this. Therefore, the nurse must constantly be studying, updating, and leading the team for successful health education. Furthermore, as described in a study[10], the nurse acts in the risk classification in urgent and emergency services, which demands pathophysiological knowledge about arboviruses.

Paying attention to the nurse's role as a health educator, we can see that in many places this assignment has not been carried out successfully. Study[7] explains that the population has a high level of knowledge about DEN, but the levels of mosquito installation remain high. For the authors, this is since, constantly, educational actions have a vertical, centralized and unidirectional bias. Educational actions carried out in this way can be unsuccessful, as this model prevents the interaction of the population, making it difficult to assimilate and internalize past knowledge. In addition, the exchange of information between nurses and users is crucial for the professional to identify individualities and vulnerabilities, thus being able to act in the most effective way possible for everyone.

Many nurses use the traditional method of education, giving lectures and exhibitions for this purpose. In addition, the campaign and hygienist model is still strongly preached to combat mosquitoes. In the study, he affirms that these models are rooted in public health, and that there is a need to develop new educational strategies aimed at interaction with the community, and that are based on popular knowledge and experiences[7].

Thus, it is observed that nursing has the great challenge of deconstructing the traditional ideas previously established and developing new strategies that suit the reality of users. In the meantime, study[7] still cites social networks as a potential tool for health education, which can be implemented by the ESF to share content, in addition to creating groups for users to exchange experiences with each other.

In addition to mass educational actions, individualized education is also important, especially during nursing consultations. Study[8] confirms this fact, when discussing the nurse's conduct in relation to preventing and fighting ZIKA in prenatal consultations. The authors say that nursing effectively guides pregnant women regarding measures to prevent mosquito bites, however, they are ineffective in other orientations, such as possible complications of virus infection. As an educator, nurses must respect and fight for the individual's right to know their health situation, acting ethically towards the subjects under their care. The authors also mention that an effective way of promoting health education is the creation of groups of pregnant women, in which they will share their experiences in the presence of trained professionals to clear up any doubts they may have and provide necessary guidance.

Another especially important area of activity is the school. For authors[11], the school is a significant place of articulation between the health service and society, being a favorable environment for students to learn, form citizenship and practice attitudes that make them act more intelligently. Therefore, educational actions in schools are interesting for preventing arboviruses. Study[4] discusses educational strategies for children, in which the use of playfulness is of great value, as it facilitates the understanding and interaction of students with heal-

th professionals. Through the Health at School Program, the nursing team can articulate with the teaching networks and carry out educational actions, respecting the age group and adapting their conduct for each one. It is emphasized that for elementary school children, the use of theater as a recreational resource is valid and, in their study, students responded positively to the approach.

Finally, the link between nursing and the population is crucial. Study[1] declares that the principles of popular education are of great value, and that it is necessary, in educational actions, to encourage an active popular position in the fight against Aedes aegypti, and not just to share information. For the population to change behaviors, it is necessary to change values first. To this end, it is necessary for nurses to abandon their superiority posture and consider popular knowledge as part of their strategy.

CONCLUSION

In view of the high rates of arboviruses in Brazil and the high demand for health services - mainly Primary Care -, it is observed that the number of studies on the role of nurses in health education to cope with these pathologies is insufficient. It was found that most studies discuss DEN to the detriment of other arboviruses, which indicates a deficiency in scientific production on these diseases that are strongly affecting the Brazilian population. In addition, paying attention to health education, it appears that the nursing team needs improvement in carrying out effective educational actions.

Therefore, it is necessary to produce more studies about the performance of nursing in this area, considering that the nurse is the central professional when it comes to health education. In the Primary Care scenario, the transition from the traditional and vertical model to a more centered method on the individual and his/her socio-cultural background is essential for the success of educational actions. It is important that nurses encourage this transition in their team since there is a clear need for different strategies to suit the reality of the population today. ■

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