

# Schistosomiasis *Mansoni* in Vitória de Santo Antão: Actions of coping program for neglected diseases - Sanar

Braz, C.Y<sup>1</sup>, Barros, D.M<sup>1</sup>, Santos, V.N<sup>1</sup>, Moura, D.F<sup>2</sup>, Gomes, T.P.S<sup>3</sup>, Oliveira, J.B<sup>4</sup>

1 – Federal University of Pernambuco / Academic Center of Vitória - UFPE / CAV

2 – Federal University of Pernambuco - UFPE

3 – University Center Maurício de Nassau – UNINASSAU

4 – Federal Rural University of Pernambuco – UFRPE

## Abstract

The Schistosomiasis *mansoni* is a neglected disease caused by *Schistosoma mansoni*, becoming a major public health problem. Pernambuco is the Brazilian state with the greatest degree of endemicity of the disease and Santo Antão of Victoria is a most affected municipality Pernambuco. The objective of this study was to carry out a survey on the occurrence of Schistosomiasis in the Vitória de Santo Antão city in the period 2005-2014, from the actions of SANAR – Programa de Enfrentamento às Doenças Negligenciadas (Combat Program for Neglected Diseases) in the city. We analyzed the data of the occurrence of the disease in Vitória de Santo Antão and the actions that had been performed by the program in the municipality. Over the period from 2005 to 2014 were carried out 27,326 examinations for the diagnosis of infection with *S. mansoni*, and 2,488 (9.1%) had positive results and 1,839 (73.9%) treated. In 2006 (13.3%) was the most positive in 2010 and the lowest (3.8%), but in 2013 the number of parasitized increased again (13.0%). From among the actions SANAR program, there is the implementation of collective treatment, implementation of selective treatment, education and report on sanitation. Vitória de Santo Antão city is endemic for schistosomiasis due to sanitation deficiency, with fluctuation in the number of infected in the period 2005-2014 and the SANAR program is relevant in combating the disease in the city.

Keywords: *Schistosoma mansoni*, endemicity, Pernambuco.

## Introduction

Schistosomiasis is a neglected disease endemic in tropical countries set as a serious public health problem (CARDIM, 2010). In Brazil is endemic and has millions of people infected in 19 states (NASCIMENTO, 2013). The disease is linked with water collections, presenting chronic or acute nature, it is caused by *Schistosoma mansoni*, being the definitive host and the *Biomphalaria* snail intermediate hosts (NEVES, 2005; VITORINO et al, 2012). Initial symptoms are nonspecific as dermatitis and fever, but the disease can lead to complications such as portal hypertension, gastrointestinal hemorrhages, edema, ascites, and severe hepatic impairment and patients may reach death (BRASIL, 2010).

Pernambuco is the state with the greatest degree of endemicity for schistosomiasis and has a high mortality rate (BARBOSA, 2011; PERNAMBUCO, 2013). To cope schistosomiasis and other six diseases neglected the Executive Secretariat of Health Surveillance created SANAR Program - Coping Surveillance for Neglected Diseases, intending to combat and eradicate these diseases (PERNAMBUCO, 2013). Vitória de Santo Antão city is the endemic municipalities listed by SANAR program and is located in the region of Pernambuco area of forest 49 km from Recife, having a population of 133,907 inhabitants. The city had 16.0%

prevalence in the period from 2010 to 2011 and 2.7% in 2013 (PERNAMBUCO, 2013).

The objective was to survey on schistosomiasis in Vitória de Santo Antão city in the period 2005-2014, and list the actions of Coping Program for Neglected Diseases - SANAR in the city.

## Material and Methods

To survey the situation of the disease in Vitória de Santo Antão, it was asked to Coping Program for Neglected Diseases - SANAR, data regarding the number of positive cases for schistosomiasis in the period 2005-2014 and the actions taken by the program in the municipality.

## Results

According to the data, 27,326 were carried out fecal examinations for the diagnosis of disease, 2,488 (9.1%) were positive and of these, 1,839 (73.9%) were treated. The positive cases oscillated during the study period, where more infected occurred in 2006 (13.3%) and the lowest number in 2010 (3.8%). It was reduced the number of cases from 2007 to 2012. In 2013, the number infected increased (13.0%). In relation to treatment, the highest percentage of treated subjects occurred in 2008 and the lowest in 2009, with no treatment of all positive during the study period.

One of the program actions was the implementation of selective treatment strategy (ST) that was developed in partnership with professionals of family health teams in the surveillance, diagnosis and treatment and prevention, in order to increase the appropriate amount of diagnostic and application of offer examinations, support of positive and increasing the amount of treated to prevent progression to severe forms of the disease. Besides meetings with managers to discuss the proposal and create action schedules, it was also carried out training of professionals working in family health units, to face the schistosomiasis in the municipality.

Another intervention was the implementation of collective treatment (CT) which was carried out in locations classified as hyperendemic in Vitória de Santo Antão. It was treated people aged between 04 and 70 years, and it is recommended to local professionals were carried out three treatments in patients. There have also been education and health activities through mobilizations with recreational activities such as mamulengo theater in schools and endemic locations.

The realization of environmental sanitation in the municipality report was another program of action, which can be observed that there are still many households not adequate sewage treatment and have no water supply, especially in rural areas.

### Discussion and Conclusion

The oscillation of cases over the years may be related to fashion, ineffective, distribution of examinations, since it is carried out primarily in locations with the greatest positivity. The lack of adherence to treatment also contributes to instability, as many patients reject treatment for fear of presenting adverse drug reactions, as has Vitorino and collaborators (2012) in their work. To decrease the high prevalence should be taken care aspects that contribute to disease transmission: sanitation, water contamination and the treatment does not cover all infected, as Silva (2011) points out in his research. The actions of SANAR program were relevant because, explains Vasconcelos et al (2009) in their study programs operating in the control of schistosomiasis have great contribution in reducing the prevalence and severe forms of schistosomiasis, but have not prevented new outbreaks the disease appear.

The Vitoria de Santo Antao city is endemic for schistosomiasis and presents oscillation in the number of infected in the period 2005 to 2014. The SANAR program is an important tool in fighting infection by *Schistosoma mansoni*.

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