Comprehensive care of Chagas disease in a non-endemic country: the example of Spain

Miriam Navarro1, Jordi Gómez i Prat2, Begoña Monge-Maillo3, José Manuel Ramos4, Magdalena García5, Rogelio López-Vélez3, Isabel Claveria Guiu2, Diego Torrús4, Brigitte Jordan1, Estefa Choque6, Cristina Parada7, Bartolomé Carrilero6, María D. Flores-Chavez6; Javier Nieto9, Juan José Santos4

1. Fundación Mundo Sano, Spain. 2. Drassanes-Vall d’Hebron International Health Unit; International Health Programme of the Catalan Institute of Health (PROSICS), Barcelona, Spain. 3. National Referral Centre for Tropical Diseases, Infectious Diseases Department, Ramón y Cajal Hospital, Madrid, Spain. 4. Infectious Diseases Department, Hospital Universitario de Alicante, Alicante, Spain. 5. Infectious Diseases Department, Valencia’s Consorci Hospital General Universitari, Valencia, Spain. 6. Asociación de Amigos de las Personas con la Enfermedad de Chagas (ASAPECHA), Barcelona, Spain. 7. Asociación de Afectados por la Enfermedad de Chagas, Voluntarios y Amigos (ASAPECHAVAE), Valencia, Spain. 8. Infectious Diseases Department, Hospital Universitario Virgen de la Arrixaca; Asociación de Afectados por la Enfermedad de Chagas-Murcia (ASAPECHAMUR), Murcia, Spain. 9. Leishmaniasis and Chagas Disease Unit, National Microbiology Center, Instituto de Salud Carlos III, Madrid, Spain.

Contact: miriam.navarro@mundosano.org

Introduction

Spain is the most affected country of Chagas disease (CD) in Europe, and the second non-endemic country globally (after US). Europe still faces an underdiagnosis of 90%. Among population from endemic areas, lack of knowledge, stigma and fear are still linked to CD. Community health activities are needed in order to reach population at-risk (par) and to overcome barriers for diagnosis and treatment.

Methods and Results

These activities had social, public health, holistic and global approaches. They have been performed since 2006 synergistically by one or several institutions/organizations, in the four Spanish regions with the highest prevalence of CD: Madrid, Catalonia, Valencia and Murcia. These are some highlighted actions:

- **Chagas disease patients’ associations** since 2008: Barcelona (ASAPECHA), Valencia (ASAPECHAVAE) and Murcia (ASAPECHAMUR).

![Playing soccer for beating Chagas disease in FC Barcelona's facilities: patients’ associations, health professionals and latino community. Barcelona, 4th September 2016.](image)

- **Catalonian Expert Patient Program® on Chagas Disease**: initiative started in 2011 within the Chronic Disease Program. It aims to boost responsibility of patients for their own health and to promote self-care. Results: 15 participants completed the program. Knowledge about disease improved after sessions.


- **Community screening campaigns** performed in non-clinical settings on Sundays, on the occasion of CD International Day or Bolivia National Day’s celebrations. Prior to the event, intense communicational campaigns are led by CHW and patients’ associations. Results (2012-May 2016): 4,142 par were screened in Barcelona, Madrid, Valencia, Murcia and Alicante; 895 were positive (T. cruzi prevalence 21.6%).

  ![Las miles de personas que viven con mal de Chagas en España y no lo saben](image)

  See video about the last campaign in Madrid (22nd May 2016):

- **Mothers committed to Chagas’ disease: taking action here and there®**: community health workers (CHW) specialized in CD’s training program, performed in Madrid in 2013 and 2016, by Mundo Sano. All CHW are affected by Chagas disease (directly or indirectly). Results (2014-May 2016): 1,684 par informed (185 in Bolivia); 89 par phoned the free-phoneline (900 103 209), asking mainly where to go for testing; 50 patients accompanied to the consultation by CHW in Madrid; more than 7,000 received informative material.

  ![The new 14 CHW specialized in Chagas disease receiving their certificates in Madrid. September 2016.](image)

- **Access to treatment**: 2013-2015: more than 4,000 treatments were administered among 155 healthcare centers all over the country.

Conclusions

Chagas disease requires interdisciplinary approach including prevention, control, strategies and programs, being CHW and patient’s associations key factors. Spain has reduced underdiagnosis and offers comprehensive care for Chagas disease patients.