The Framing of Chagas Disease in the North American Media

Undergraduate Research Assistant Program (Summer 2014)

I. Description of the Project

Overview
I propose a qualitative content analysis study of how Chagas disease – Latin America’s most important parasitic disease – has been presented in the North American media. One of the major neglected tropical diseases in the world, until recently Chagas has been ignored in the North America media. But an exception occurred in May 2012, when the journal *PLoS Neglected Tropical Diseases* published an editorial calling Chagas the “new HIV/AIDS” of the Americas. The editorial receiving widespread media coverage (much of it sensationalist). I propose to use this opportunity to examine how Chagas was presented in the media – in particular, looking for how the ‘statist’ and ‘globalist’ perspectives on population health were used in combination with xenophobia, anti-immigration discourse, and biomedicalization. No systematic analysis of media coverage of Chagas exists. This work would advance my research agenda on global health, and would provide a DePaul undergraduate student a valuable experience in empirical social science research.

Background
Chagas disease is Latin American’s most important parasitic disease (Reithinger, Tarleton, Urbina, Kitron, & Gurtler, 2009). It is caused by the protozoan parasite *Trypanosoma cruzi (T. cruzi)*. The parasite is most commonly transmitted to humans through contact with the feces or urine of a triatomine bug who acts as a vector, carrying *T. cruzi* in their digestive systems.

Several triatomine bugs are known to carry *T. cruzi*, including *Triatoma infestans* (commonly referred to as *vinchuca* in Argentina and Bolivia or *barberio* in Brazil) and *Rhodnius prolixus* (the principal vector in Venezuela and Colombia). These cockroach-like bugs often bite at night, usually near the mouth or eyes, and while feeding defecate on their victim (they are often called ‘kissing bugs’ for their tendency to bite near the mouth). When the person scratches the bite site, material enters the body (or enters through the mucus membranes).

*Vinchuca* (and the other triatomine bugs) live in the cracks and crevices found in homes constructed of thatch, grass, sticks, unplastered cement, and other materials that are commonly found in the construction of poor rural dwellings in Latin America. *Vinchuca* are a particular concern in rural areas characterized by close contact between humans and animals, as they can also feed on dogs, chickens, and other farm animals. *T. cruzi* can also be transmitted in blood and organs from infected donors and may also pass from an infected mother to the fetus through the placenta (Senior, 2007). Vectoral transmission (through a bug vector, as described above) is the most common method (Prata, 2001).

Infection is followed by two phases: acute and chronic. The acute phase can last from 4-8 weeks, and is characterized by fever, swollen lymph glands, and often, inflammation at the biting site. Anywhere from 2% to 8% of infected children die in this phase of the disease (Ribeiro et al., 2009). Up to 40% of infected people are thought to develop chronic Chagas disease (Reithinger et al., 2009), which is characterized by cardiac and gastrointestinal complications. If
left untreated, these can be fatal. In disease endemic areas like Bolivia and northern Argentina, Chagas is the leading factor in cardiovascular deaths (Reithinger et al., 2009). Almost a third of patients are thought to develop Chagas-related heart damage, and 10% develop damage to the oesophagus, colon, or nervous system (or a combination of these), typically in the late chronic phase of the disease (WHO, 2010).

An estimated 7-8 million people are thought to be infected in the region of the Americas, with most of these cases being asymptomatic and undiagnosed. Endemic areas exist in 21 countries of Latin America. Chagas is a quintessential disease of poverty – one that poor peasants are at most risk of contracting, one that is largely undiagnosed, and one that has never been a priority for for-profit pharmaceutical research (only two pharmacological interventions for Chagas exist, and both are over 30 years old, with limited effectiveness, toxic side effects, and complicated dosing regimens).

Chagas, like other ‘neglected tropical diseases’, has rarely found its way to public discourse in North America.¹ This reflects what Sarah Davies calls the ‘statist’ position in population health, where a disease comes to matter only if it is a threat to the domestic population. From this perspective, global health is securitized – and we come to see disease as a threat, much like a foreign enemy that must be defeated. In this light, ‘global battles’ against disease are waged to protect advanced industrialized states from contagion (Elbe, 2010; Owen & Roberts, 2005). According to Davies, “…powerful actors still only see a health crisis as worth responding to when it threatens them. Massive national expenditure on disease control can only be justified when governments can draw a link between the threat, infectious disease, and national security” (2010: 22). The problem in all of this, of course, is that a ‘securitized’ discourse on global health, where disease is primarily seen as a threat to otherwise healthy populations in non-endemic countries, leaves the social conditions wherein disease flourishes intact. The statist / securitized perspective can be seen in global efforts against HIV/AIDS as well as drug-resistant tuberculosis (with both diseases being capable of easily passing through national borders).

Opposing the statist position, Davies (2010) defines the globalist tradition. This perspective is more strongly tied to the global discourse on human rights and social justice. From this position, disease is seen from the perspective of individuals and marginalized populations, and it need not threaten non-endemic countries to be deemed a political priority.

While most other neglected tropical diseases are limited in their geographical ‘reach’ (they are rooted in exposure to unsafe water and living conditions, and cannot ‘travel’, as can HIV/AIDS or tuberculosis), Chagas disease has the potential to breach national borders. As a blood-borne...

¹ It is important to note that the reference to NTDs as ‘neglected’ does not imply that they are of secondary importance behind other infectious diseases such as HIV/AIDS, tuberculosis, and malaria – diseases which have gained attention in the Millennium Development Goals. Global health researchers have established that the combined burden of NTDs ranks as high as those of other better-known afflictions in many places, even if their death toll is lower. Rather, “their neglect reflects their epidemiology: they are prevalent among the poorest and most marginalized of the world’s population” (Manderson et al, 2009). NTDs are burdens of what Beyrer et al. refer to as “forgotten populations,” emphasizing that because NTDs do not generally affect so-called developed countries, they have been “largely ignored by medical science”. For Hotez, NTDs are the “forgotten diseases afflicting forgotten people”. But while forgotten, they are very much real in their impact.
disease, it poses a risk of transmission in non-endemic areas, and global climate change may create suitable niches where *vinchuca* bugs may thrive in the southern United States. Indeed, a new wave of articles and World Health Organization reports raise the specter of a ‘globalized Chagas’ which will affect non-endemic countries in Europe (Spain, France, UK) as well as Canada and the United States (Basile et al., 2011; Senior, 2007), and while the risk of vector-transmission is minimal (due to climate, geography, and living conditions), the risk of ‘migrating’ Chagas is being described with more frequency in the literature. The latest estimates suggest that up to 300,000 immigrants may carry *T. Cruzi* infection with them in the United States alone (Schmunis, 2007).

Fear surrounding Chagas disease in non-endemic countries like the United States reached a new high in May 2012, when the journal *PLoS Neglected Tropical Diseases* published an editorial by Peter Hotez et al entitled “Chagas disease: ‘the new HIV/AIDS of the Americas’” (Hotez et al., 2012). The editorial described Chagas as a growing threat, highlighting the parallels between the situation with Chagas today and the early years of the HIV / AIDS pandemic in the United States. The editorial was discussed by all of the major news outlets, including NBC, CNN, and Fox.

The Hotez et al editorial received a very mixed response in the academic literature, with many analysts decrying the comparison as inappropriate and alarmist. However, commentators in the mass media also seized on the editorial, framing Latin American immigrants as a ‘risk group’, and suggesting that the story was really about the spread of a Third-World disease to the developed world. The specter of a globalized Chagas disease combined in many reports with an anti-immigration discourse – raising fears of sick immigrants posing new threats to the domestic population.²

**Methodology**

This project will entail a systematic analysis of North American media reports on Chagas disease in the 2-4 weeks following the publication of the Hotez et al editorial. Chagas has rarely been discussed in the North American press, but in the period following the publication of the Hotez et al paper, there was widespread media attention to the disease. I think it is a great opportunity to systematically investigate how the ‘statist’ and ‘globalist’ perspectives play out in the media.

I propose a content analysis project to examine how Chagas disease was presented in these media reports. The content analysis will be primarily qualitative in nature. I am not interested in merely counting the frequency of reports of Chagas, but rather, I am more interested in investigating the manifestation of the statist and globalist perspectives – how these positions influence our discourse of global health. I would look for signs of the statist and globalist perspectives in the media reports. I would also look for themes of xenophobia, with Chagas disease being associated with undocumented migration. I would also look at these media reports for examples of biomedicalization – the process of reducing a complex socially-patterned disease to a simple biomedical issue that requires pharmaceutical intervention (rather than structural and political changes to improve the living conditions of the poorest people in Latin America).

² The ‘sick immigrant’ paradigm, where immigrants are feared and immigration control is called for if disease is not to run rampant in otherwise ‘clean’ places, has a long history in public health (see Beiser, 2005).
The methodology of the project would follow the examples of Raphael (2011), who analyzed the framing of the ‘social determinants of health’ in the popular press as well as of Clarke & van Ameron (2008), who analyzed media presentations of cancer and heart disease. As discussed above, I have a preliminary set of themes that I want to explore in the content analysis (statist / globalist perspectives, xenophobia, as well as biomedicalization). In the early stage of the project, I would work with the student research assistant to turn these themes into characteristics of a media report – perhaps creating a ‘spectrum’ of responses for each theme (following the practice of Starosta’s (1988) qualitative content analysis of the New York Times), or coding each attribute to reflect its presence or absence in the text. Other themes will emerge through the process of grounded theory (Corbin & Strauss, 1990; Pidgeon, 1996), where new categories emerge from the first wave of coding.

I request funding for one quarter. This would help me to carry out the data collection and analysis phases of the project. By the end of the summer, I expect to have a clean dataset, preliminary analyses, and a rough sketch of a manuscript. I would then polish the paper over the Fall quarter, submitting it for review in early 2015 (likely to Sociology of Health & Illness).

II. Responsibilities of the Student Research Assistant
The student research assistant will play an integral role in this project. I will train and supervise them on key aspects of the work. The student will be responsible for a range of tasks:

1. Collect newspaper articles focusing on Chagas disease in the 2-4 weeks following the publication of the Hotez et al editorial. I will train the student on how to systematically search for articles using our library databases. I will also train the student in how to systematically file the articles for analysis.

2. Set up an SPSS database of the articles. I will train the student on how to do this (although the student has some exposure to this from the sociology research methods courses). This will be used for descriptive statistical analysis of the reports.

3. Read and code the articles. I will work closely with the student on this task – guiding the development of the coding schedule used to track the characteristics of the articles. This will involve an in-depth qualitative analysis of the texts. I would work particularly closely with the student on this task.

4. Organizing related research literature using EndNote.
The project’s timeline would be as follows (over the 10-week summer quarter):

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<thead>
<tr>
<th>Task</th>
<th>Week</th>
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<tr>
<td></td>
<td>1</td>
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<tr>
<td>Planning meeting</td>
<td>x</td>
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<tr>
<td>Student reading: selected background papers on Chagas disease and content analysis (I have a selection of papers ready for this)</td>
<td>x</td>
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<tr>
<td>Data collection (mostly RA, guided by me)</td>
<td>x</td>
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<tr>
<td>Data entry (mostly RA, guided by me)</td>
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<tr>
<td>Analysis (mostly me, with learning opportunities for RA)</td>
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<tr>
<td>Writing (entirely me, although I would show the student my process as a learning opportunity)</td>
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III. Required skills and abilities
The student research assistant needs to have some exposure to global health. I propose to work with a student who excelled in SOC365 Health and Globalization, where we cover NTDs and Chagas in particular. The student also needs to possess excellent organization skills and a basic knowledge of data entry (skills developed in our Introduction to Statistics for the Social Sciences course). The student needs a basic level of skill with SPSS (for data entry and preliminary data analysis), and needs to be a good writer.

IV. What will the student learn from participation in this project?
The student research assistant will be exposed to the process of designing and implementing a small empirical project (in this case, a content analysis of popular press articles on Chagas disease). They will learn about data collection and data management, as well as qualitative data analysis. In this case, the student will learn about grounded theory methodology, and the generation of codes / themes from textual sources. The student will also exposed to a small academic project from its beginnings (the conceptualization of the research question) to the end (the drafting of an article). They will advance their knowledge of social science research methods as well as their familiarity with debates in global health.
References


