

Social representations of health professionals on neglected diseases

Representações sociais de profissionais de saúde sobre doenças negligenciadas
Representaciones sociales de profesionales de la salud sobre enfermedades negligenciadas o desatendidas

Charles Souza Santos¹
 Antonio Marcos Tosoli Gomes²
 Flávia Silva Souza³
 Sergio Correa Marques²
 Marcio Pereira Lobo¹
 Denize Cristina de Oliveira²

1. Universidade Estadual do Sudoeste da Bahia. Campus Jequié, BA, Brazil.

2. Universidade do Estado do Rio de Janeiro. Rio de Janeiro, RJ, Brazil.

3. Faculdades Unidas de Pesquisa, Ciência e Saúde. Jequié, BA, Brazil.

ABSTRACT

Objective: To analyze the contents and the structure of social representations built by health professionals regarding neglected diseases. **Methods:** This is a qualitative research, supported by the Theory of Social Representations that uses a structural approach, with 51 health professionals who work in care services for neglected diseases in a municipality in the state of Bahia. Data collected through free evocations to the inducing term *neglected disease* during the first half of 2016 and analyzed by EVOC software. **Results:** The representational structure was formed by four dimensions (social, individual, socio-individual and imaginary) that explained the interface between the possible central core with the terms neglect/lack of knowledge and the peripheral elements with the terms poverty/lack of investment. **Conclusion:** The representational structure of health professionals translated the concept and image of neglected diseases, allowing for changes in individual and collective practices that are effective in combating these diseases.

Keywords: Neglected diseases; Health; Qualitative research.

RESUMO

Objetivo: Analisar os conteúdos e a estrutura das representações sociais construídas pelos profissionais de saúde acerca das doenças negligenciadas. **Métodos:** Pesquisa qualitativa, sustentada pela Teoria das Representações Sociais, abordagem estrutural, com 51 profissionais de saúde que atuam em serviços de assistência às doenças negligenciadas em um município do estado da Bahia. Dados coletados através de evocações livres ao termo indutor *doença negligenciada*, durante o primeiro semestre de 2016 e analisados pelo software EVOC. **Resultados:** A estrutura representacional foi formada por quatro dimensões (social, individual, socioindividual e imagética) que explicaram a interface entre o possível núcleo central com os termos *descaso/falta-conhecimento* e os elementos periféricos com os termos *pobreza/falta-investimentos*. **Conclusão:** A estrutura representacional dos profissionais de saúde traduziu o conceito e a imagem das doenças negligenciadas possibilitando mudanças nas práticas individuais e coletivas eficazes no combate dessas enfermidades.

Palavras-chave: Doenças negligenciadas; Saúde; Pesquisa qualitativa.

RESUMEN

Objetivo: Analizar los contenidos y la estructura de las representaciones sociales construidas por los profesionales de la salud sobre las enfermedades negligenciadas o desatendidas. **Métodos:** Investigación cualitativa, sustentada por la Teoría de las Representaciones Sociales, abordaje estructural, con 51 profesionales de la salud que actúan en los servicios de asistencia a las enfermedades desatendidas en un municipio del estado de Bahia. Datos recolectados a través de evocaciones libres al término inductor *enfermedad negligenciada o desatendida*, durante el primer semestre de 2016 y analizados por el software EVOC. **Resultados:** La estructura representacional fue formada por cuatro dimensiones (social, individual, socioindividual e imagética) que explicaron la interface entre el posible núcleo central con los términos *descuido/falta-conocimiento* y los elementos periféricos con los términos *pobreza/falta-inversiones*. **Conclusión:** La estructura representacional de los profesionales de salud tradujo el concepto y la imagen de las enfermedades desatendidas, lo que permitió cambios en las prácticas individuales y colectivas eficaces en el combate de esas enfermedades.

Palabras clave: Enfermedades negligenciadas o desatendidas; Salud; Investigación cualitativa.

Corresponding author:
 Charles Souza Santos.
 E-mail: charless@uesb.edu.br

Submitted on 08/11/2016.
 Accepted on 12/18/2016.

DOI: 10.5935/1414-8145.20170016

INTRODUCTION

Neglected diseases are characterized by a cluster of infectious diseases that mainly affect the low-income population in developing countries. These diseases receive little investment in research and technology to advance in terms of control, prevention and drug treatment. They are also denominated this way because they do not arouse the economic and financial interest of the big pharmaceutical industries, providing the continuity of the cycle of poverty and diminishing the quality of life of people. Neglected diseases are the set of illnesses caused by infectious and parasitic agents that produce significant physical, cognitive and socioeconomic harm in children and adolescents, especially in low-income communities.¹ They are also understood as infectious diseases of great importance in public health, but which have ceased to receive adequate attention by science as a whole.²

The early days of *neglected diseases* date back to the 1970s, with the creation of the Rockefeller Foundation's The Great Neglected Diseases program. In 2001, *Médecins Sans Frontières* (Doctors Without Borders - MSF) proposed dividing diseases into Global, Neglected and Most Neglected. In the same year, the Report of the Commission on Macroeconomics and Health of the World Health Organization (WHO) presented a classification similar to that of the MSF, dividing diseases into Types I, II and III. Since then, the term *neglected disease* has been used to refer to a set of endemic infectious and parasitic diseases in low-income populations, especially in Africa, Asia and the Americas.³ This classification represents an evolution in relation to the denomination *tropical diseases*, since it contemplates the contexts of political, economic and social development, surpassing the colonialist perspective associated to a geographic determinism.⁴

Neglected diseases have common characteristics of high endemicity in the rural and less-favored urban areas of developing countries, as well as a shortage of research for the development of new drugs. These diseases can impair child growth and intellectual development as well as labor productivity. Thus, neglected diseases are those that "do not present economic attractiveness for the development of drugs, either because of their low prevalence or because they reach populations in a region of low development".⁵

These diseases are distributed throughout the world, but are prevalent mainly in tropical regions. According to the WHO, more than one billion people are infected with one or more neglected diseases, which represents one-sixth of the world's population. In this context, WHO has indicated new paths and started to place, as the agenda for discussion at its meetings, the significance of the perpetuation of neglected diseases for the world's socioeconomic development. To this end, the Millennium Summit was organized, bringing together 147 heads of state to discuss the real needs of people around the world, converging to the Millennium Development Goals (MDGs), which proposed, among other actions, development and poverty eradication. In 2003, WHO began to change the paradigm of controlling and

eliminating a group of neglected tropical diseases (NTDs). The process involved a major strategic shift from the traditional disease-centered approach to a strategy to address the health needs of marginalized communities.⁶

In recent years, Brazil has sought to define a plan of action to control neglected diseases through investment in research and financing in new technologies, starting the Research and Development Program on Neglected Diseases in 2006.⁷ Within the scope of the program, seven priorities were defined among diseases considered neglected, through epidemiological, demographic data and the impact of the disease: dengue, Chagas' disease, leishmaniasis, leprosy, malaria, schistosomiasis and tuberculosis. Studies have pointed out a high occurrence of neglected diseases in Brazil, revealing a worrisome epidemiological situation that needs to be combated by professional practices and actions of social economic development, avoiding the perpetuation of poverty.⁸

This study aims to analyze the contents and structure of the social representations built by health professionals in terms of neglected diseases, featuring the Social Representation Theory (SRT) as a theoretical support. Social representations can be considered as sui generis collective sciences, intended for the interpretation and elaboration of the real,⁹ or as a socially elaborated and shared form of knowledge, since they have a practical orientation and contribute to the construction of a reality together with a social group.¹⁰

In addition to the conceptual and epidemiological issues of neglected diseases, it is noteworthy that these morbid entities have representational constructions that mediate the interaction of health professionals with the world, their care practices, and their relationship with patients. In this way, the analysis of the objective and symbolic questions of this object is inseparable, not only with regard to the elements that make up this representation, but also the way in which they organize and relate internally in the construction of the representation of the object.

METHODS

It is a qualitative study, supported by the SRT in its structural approach, defined as Central Nucleus Theory, where all representation is organized around a nucleus that determines, at the same time, its significance and its internal organization. The central nucleus is a subset of representation, composed of one or more elements whose absence would disfigure the representation or give it a different meaning.¹¹

Were collected through the application of the free evocation technique with 51 health professionals, including 30 nurses, nine physicians, six biochemical pharmacists, three psychologists and three pharmacists, who work in the health services network in the municipality of Jequié, Bahia, in the period from January to May 2016. Only one researcher performed the collection, which consisted of asking the participants to immediately recall five words or expressions to the inducing term *neglected diseases*. The words or terms were recorded in proper form in the order in which they were mentioned. Participants were recruited in the

primary and secondary health units and were consulted whether they wished to participate. The application of the technique took approximately 15 minutes for its completion.

The technique of free evocations is considered as a major technique for collecting the constituent elements of the content of a representation. It consists in asking the subjects, from an inductive term (usually the verbal label that designates the object of the representation) presented by the researcher, to say the words or expressions that came immediately to their memory.¹² The words derived from the evocations technique were organized in Word document, which constituted the *corpus* of the analysis.

The data processing was performed by the *Ensemble de Permettant Analyzes of Evocations* (Permitting Set for Analyzes of Evocations - EVOC), version 2005, which analyzes statistically the textual data of an associative network, in which it is possible to combine the frequency of occurrence of evoked words with the attribution of its order of importance.¹³ The analysis was carried out by the technique of the four-house chart with the purpose of identifying the possible central nucleus of social representations. The combination of these two criteria, the frequency of evocation and the average order of evocation of each word, allows the survey of those that most probably belong to the central nucleus of the representation, due to its prototypical character, or its saliency. In the technique realized from the intersection of the average frequency of evocation of the whole set of words with the average of their respective mean orders of evocation, four quadrants that confer different degrees of centrality to the words that compose them are defined.¹⁴

The upper left quadrant, consisting of the most frequently mentioned terms and lower average order indicates the likely central core, while the lower right quadrant, comprising the least evoked terms and higher average order indicates the second periphery.¹⁵ The lower left quadrant has low frequency contents and also a low mean of the order of appearance and it is called contrast zone, where a representational subgroup can often be detected. The upper right quadrant is related to the first periphery, where the elements that often reinforce the central elements are.

The research followed the ethical criteria established by Resolution No. 466, of December 12, 2012, of the National Health Council. The project was approved by the Research Ethics Committee (REC) of the Bahia Southwest State University (UESB) in December 22, 2015, under protocol number 1,333,774/2015. The authorization of the Municipal Health Department of Jequié was also obtained, in addition to the authorization of the participants, expressed in the signature of the Term of Free and Informed Consent.

RESULTS AND DISCUSSIONS

In characterizing health professionals, according Table 1, sociodemographic variables demonstrate the heterogeneity of the group with respect to professional training, a factor that provides care practices with multifaceted visions essential for the control of neglected diseases. Professional training times and performance in health institutions allow professional groups

to have a more meaningful construction of social representations, associated with the age group variable which, together, collaborates in the formation of imagery and symbolic dimension of diseases in the health field. Religion, in turn, contributes to the social positioning of professionals in the face of disease and its significance in the implementation of care practices. Thus, these variables favor the construction of the contents and structure of social representations regarding neglected diseases.

With regard to the evocation structure, the group of subjects evoked 180 different words, generating a frame of four houses with a minimum frequency of 05, average frequency of 12 and average recall orders of 2.5. The Table 2 is presented below, according to the results produced by EVOC 2005 software.

The representational structure is organized into a continuum, starting from the individual to the political and social dimension, passing the socio-individual and imagery (Figure 1). The individual structure is organized by the expression *knowledge lacking* and unfolds in the zone of contrast in the lexical *dissatisfaction* and in the second periphery, in the words *object*, *professionals*, *suffering* and *filth*. The so-called socio-individual is one that can be encompassed in the two poles, not having specificity and specific location, such as *poverty*, *misery*, *irresponsibility* and *transmitter*. The political-social dimension is organized around the lexicon *neglecting*, which unfolds, in the contrast zone, in elements such as *lack of incentives*, *lack of resources*, *inefficiency*, *economic interests*, *resources* and *seriousness*. The dimension of the image, in turn, focuses on the citation of neglected diseases, notably kalazar, leprosy, tuberculosis, leishmaniasis and malaria.

The individual dimension: the approach to personal knowledge or its absence

The individual dimension assumes an explanatory and descriptive function of representation, insofar as giving meaning to the term *lacking in knowledge* runs through the cognitive construction of human perception. In this sense, health professionals explain the perpetuation of the disease by the absence of knowledge of the people and this needs to be understood in a unique way, because, which knowledge are the participants talking about? Possibly, it is a consensual knowledge coming from the perceptions of the individuals regarding the definitions of the disease, how it can be transmitted and mainly how it can be prevented. The perception of disease is defined as the way individuals understand various aspects related to health and disease, taking into account their individual and collective experiences. In addition, the perception of the disease includes the information that individuals possess regarding their pathologies, as well as their symptoms, potential causes, probable duration, evolution in time and potential consequences. When individuals experience some symptom, a process of cognition begins in which people begin to compare these symptoms with the model that they have on the disease.¹⁶

Therefore, the individual dimension encompasses the approach to personal knowledge or its absence on the idea of health and disease, and in this case in particular, on neglected diseases. From the apprehension of individual perceptions in

Table 1. Sociodemographic characterization of health professionals who work in care services for neglected diseases regarding profession, age group, length of time, training time and religion, according to sex. Jequié/BA, 2016 (n = 51)

Variable	Female		Male		Total	
	N	%	N	%	N	%
Profession						
Nurse	30	100.0	-	0.0	30	58.8
Physician	03	33.3	06	66.7	09	17.6
Biochemical Pharmacist	03	50.0	03	50.0	06	33.3
Psychologist	03	100.0	-	-	03	20.0
Pharmacist	-	-	03	100.0	03	16.7
Age group						
≤ 38 years	15	83.3	03	16.7	18	35.3
39 to 50 years	12	80.0	03	20.0	15	29.4
≥ 53 years	12	66.7	06	33.3	18	35.3
Time of operation						
< 03 years	15	83.3	03	16.7	18	35.3
04 to 08 years	12	66.7	06	33.3	18	35.3
> 10 years	12	80.0	03	20.0	15	29.4
Training time						
< 13 years	09	60.0	06	40.0	15	29.4
14 to 22 years	18	100.0	-	-	18	35.3
> 25 years	12	66.7	06	33.3	18	35.3
Religion						
Catholics	18	66.7	09	33.3	27	52.9
Spiritists	12	80.0	03	20.0	15	29.4
Evangelicals	09	100.0	-	-	09	17.6
Total	39	76.5	12	23.5	51	100

Source: research files.

terms of the concept of diseases, health professionals tend to understand the prism of the consensual universe and, consequently, they will be better able to establish the interaction with the individual in facing these diseases in their practices. The meaning of the term *lacking in knowledge* reproduces a type of thinking of the professionals regarding the behavior of individuals before the disease, establishing a position of professionals in terms of explanation of the conducts that are promoters of the continuity of these illnesses. The process of determining neglected diseases is complex and involves factors that operate at various levels, from the most distal (e.g. social and economic policies, socio and environmental context and living conditions) to the most distant ones (e.g. Genetic and constitutional factors).¹⁷

The correlation between the *lack of knowledge* (term of representation centrality) and the *professional* term (element of the 2nd periphery) indicates that health professionals exert a relevant influence in the construction of knowledge on the prevention, control and treatment of neglected diseases.

In this sense, it is understood that health professionals are collaborative tools in the formation of strategies that can fight diseases through the services in which they work. One of these strategies, health education, allows an interaction between professionals and individuals in favor of expanding knowledge regarding diseases and, therefore, personal participation in the process of building new knowledge on health. Health education emerges as a strategy to promote health and primary and secondary prevention and should be a social practice focused on the problematization of daily life, valuing the experience of individuals and groups, taking as reference the reality in which they are inserted. It is the sum of all experiences that modify or exert an influence on the attitudes or behaviors of an individual in relation to health and the processes that need to be modified.¹⁸

When individuals know and have information about diseases, they will possibly be more likely to avoid these diseases, provided that such information is incorporated into daily practices to achieve social desirability necessary to combat neglected diseases. Therefore, the individual dimension

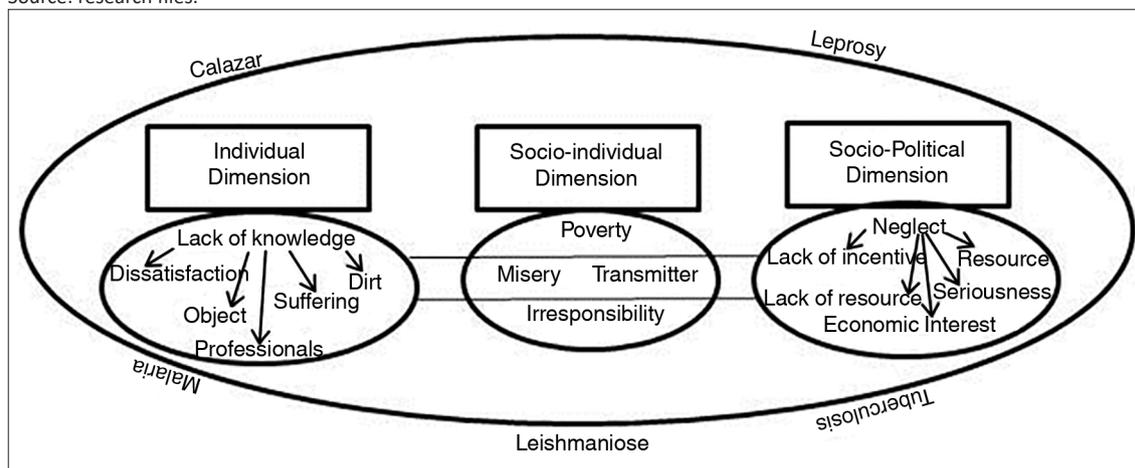
Table 2. Structure of social representations of health professionals regarding neglected diseases. Jequié/BA, 2016 (n = 51)

Ave. Freq.	Evoked term	Freq.	A.R.O. < 2.5	Evoked term	Freq.	A.R.O. > 2.5
≥ 12	Neglect	15	1.66	Poverty	30	3.33
	Lack of knowledge	15	2.00	Calazar	15	2.66
				Leprosy	15	3.10
				Tuberculosis	15	2.66
< 12	Irresponsibility	10	2.00	Leishmaniasis	10	4.00
	Lack of incentives	05	2.00	Malaria	05	5.00
	Lack of resources	05	1.00	Misery	05	5.00
	Hepatitis	05	1.00	Object	05	4.00
	Inefficiency	05	1.00	Professionals	05	3.10
	Dissatisfaction	05	2.00	Public	05	4.00
	Financial Interests	05	1.00	Suffering	05	5.00
	Resources	05	1.00	Dirt	05	3.10
	Rejected	05	2.00	SUS	05	5.00
	Seriousness	05	2.00	Transmitter	05	4.00

Source: Research Files. Ave. Freq.: average frequency; Freq.: frequency; A.R.O.: average recall orders.

Figure 1. Representational structure of health professionals regarding neglected diseases. Jequié/BA, 2016 (n = 51)

Source: research files.



composes the internal structure of professionals' representations regarding neglected diseases, demonstrating the influence of individuals and their co-responsibility in the participation of prevention, promotion and treatment of these diseases.

At this point, we understand that the possible central nucleus, organized here by the social and political and individual dimensions, defines a symbolic, social and cognitive reconstruction of neglected diseases, meaning that, for subjects, their existence and continuity is due to both the conditions of the society and the individual. In these representational processes, therefore, there are central elements, constitutive of the social thought, that enable it to put in order and understand the reality lived by individuals or groups.¹⁹

The social and individual dimension

The social and individual aspects that caused the neglected diseases were explained by health professionals during this study, when they evoked the terms *poverty*, *misery*, *transmitter* and *irresponsibility*. These are words bring the meaning of interconnection between socioeconomic conditions and individual attitudes, demonstrating, mainly, the social vulnerability of the populations affected by these diseases. The tropical diseases, considered to be neglected, constitute a set of illnesses prevalent in developing countries, affecting the entire population without distinction, but which have had a greater impact on populations in situations of social vulnerability, representing a serious obstacle to socioeconomic development and improvement in quality of life.²⁰

The terms that comprise this dimension, poverty, misery and transmitter, are intimately related to social, individual and environmental determinism, as they are placed as the main cause of neglected diseases. Poverty and misery cover a large part of the world's population and they have not yet been completely overcome, despite the strategic actions of some institutions. The 50 countries with the lowest gross domestic product (GDP) in the world are all tropical, as are countries with a *per capita* income of less than US\$ 2,500 a year. With one exception or another, such as Afghanistan, countries where at least 50% of the population is below the poverty line, and countries where 60 to 80% of the population live on less than US\$ 1 per day are tropical.²¹ Poverty, classically demarcated in terms of income, is nowadays seen much more widely. It is related to the deprivation of the most necessary items for a decent existence, such as freedom, well-being, health, education, rights, employment, means to participate in the consumer market, and as many others as one might think. Poverty is a complex phenomenon, and can be defined, in a generic way, as the situation in which needs are not adequately addressed.²²

The term poverty has a singular meaning in the representation of neglected diseases, since it determines and triggers the whole process of social vulnerability of the individual, caused by the absence of economic strategies of the countries to reduce social inequalities. Neglected diseases exist because poverty exists; therefore, government actions aimed at reducing social inequalities need to be strengthened, especially in Brazil, where they still live in a scenario of extreme poverty and, not by chance, assume the greatest burden of tropical diseases neglected in Latin America and the Caribbean. This means that most of the 40 million inhabitants of Brazil's poorest population are infected by one or more neglected tropical diseases.²³

The term *transmitter*, in turn, leads us to the idea of a biological agent, or an environmental vector that causes transmissible diseases, reflecting, according to the professionals' thinking, that neglected diseases need, in addition to social conditions, the human-environment relationship for its perpetuation and continuity. This representation presents the reality regarding neglected diseases, since it reflects precisely one of the main conditioning factors for its endemicity. In this reality, we have infectious diseases, such as Chagas disease, which have great importance for their expressive social impact, since they are directly associated with poverty and poor quality of life, encompassing pathologies related to poor housing, food and hygiene conditions, and the lack of knowledge in terms of risk factors.²⁴ There are reports that sociocultural factors, in large part, can control and prevent parasitic diseases, and it is fundamental to implement interventions combined with social awareness.²⁴

Therefore, this dimension presents, in addition to the causality of neglected diseases, the need to change practices both individually and socially. At the individual level, we understand that people who are vulnerable to these diseases need to know, through their consensual universe, the main

characteristics of diseases in order to bring to their daily life prevention actions, such as caring for the body, Eating habits, practices of combating vectors that are measures dependent on the cultural and personal apprehension of such knowledge.

At the social level, in turn, there is a need for a political action that shows, in addition to strategic plans, the will to know the reality of the population and take effective measures in the fight against neglected diseases. Investment in the health sector, especially in primary health care, would be one of the priority actions of the three federated entities (Federal, State and Municipal) that could reduce the burden of the diseases existing in Brazil. The increase in the health sector financing and its applicability in the qualification of primary health care services would certainly strengthen the fight against diseases, with the participation of health professionals in the promotion of integral health, developing intersectoral actions focused on the causes of diseases.

The political and social dimension: the neglect approach

In this political and social aspect, evidenced in the possible centrality of this representation on the part of health professionals, it is emphasized the need to value the magnitude and the effect produced by such diseases by interconnecting the *neglect* to the other constituent elements of the representation. Health professionals highlighted the *lack of resources and incentives*, reflected in the incipient financing by the federated entities in the fight against neglected diseases. In the situation of *neglect*, this is due to the absence of specific funds to achieve the goals and strategic actions that can eliminate this problem.

Still relating *neglect* (centrality) to contrast elements (hierarchy), it is observed that the terms *economic interests* and *inefficiency* support the idea and justify the thinking of health professionals regarding the neglected diseases. Such terms indicate the proximity to the meaning of conduct of social authorities (governments and health services), which ultimately result in the inoperability or inefficiency of possible actions to deal with neglected diseases. These actions on the part of the political and technical authorities result in the perpetuation of the cycle of poverty and, therefore, the diseases considered neglected and that could be faced in a different way.

Analyzing this dimension, it can be said that the term *neglect* implies in the thought of health professionals to correlate the continuity of neglected diseases with the disinterest of society (individuals, government and institutions) for reasons justified by the elements of the contrast zone: *lack of resources, economic interests and incentives*, in combating the health problem that affects more than one billion people around the world. With regard to these terms, they reflect the relationship of market logic, since, as these diseases affect mainly underdeveloped countries and extremely poor populations, there is no financial and profitable return for the major pharmaceutical industries. In the period between 1975 and 2004, only 1% of the 1,535 new drugs registered were destined to tropical diseases. These data

suggest that investment in research and development of drugs for neglected diseases is inadequate, evidenced by the fact that the investment in malaria is at least 80 times lower when compared to HIV/AIDS.²⁵

Neglected diseases are considered to be infections that could be avoided if there was a greater interest in society to address them properly. Health professionals, participants in this study, emphasized this assertion in that they pointed to *neglect* as a synonym for neglected disease. What is in fact perceived is that few sectors of society realize the magnitude of these diseases and do not provide effective measures to combat such illnesses. In developing countries, neglected diseases have a huge impact on individuals, families and communities in terms of disease burden, quality of life, loss of productivity and poverty worsening, in addition to the high cost of long-term treatment. Thus they are a serious obstacle to socio-economic development and quality of life at all levels.⁶

Despite the changes in the epidemiological profile, which shows that cases of infectious diseases have decreased considerably compared to the last century, the incidence of these diseases remains high, mainly due to the lack of public authorities and international economic power. From the second half of the 19th century, especially between developed countries, a gradual and progressive replacement of infectious and parasitic diseases with chronic-degenerative diseases as causes of morbidity and mortality occurred. Nevertheless, in many populations, especially in underdeveloped or developing countries, a linear transition of these processes was observed, verifying, in fact, an overlap of these profiles (incomplete transition).²⁶

In this panorama, neglect may be related to the characteristics of the population that is affected by these diseases, mostly below the level of misery and poverty in the world. To this end, agencies such as the United Nations Children's Fund (UNICEF), the World Bank and WHO have recently launched the Special Program for Research and Training in Tropical Diseases (TDR), whose focus would be the infectious diseases that disproportionately affect poor and marginalized populations in the world.²¹ In the year 2000 alone, the United Nations (UN) attempted to expand this concern by publishing the declaration of development goals for the new millennium, setting the fight against extreme poverty as one of its global priorities, taking into account that efforts will not be spared to free our fellow men, women and children from the abject and inhumane conditions of extreme poverty, which are now subject to more than 100 million human beings.²⁷

These institutions, together with the countries of the world, had the opportunity to establish strategic goals and actions to combat the main cause of the continuity of these diseases, namely, the perpetuation of extreme poverty. Contrary to what might happen, and also in spite of the goals established during the UN meetings through the goals for the new millennium, what is perceived is the continuation of extreme poverty. Even with the substantial reduction in the share of the world population considered extremely poor - from 47% to 22% - more than 1.2 billion people are still in this condition. Out of every eight

individuals, at least one does not have regular access to sufficient food to meet their energy needs. In addition, more than 100 million children under the age of five are malnourished.²⁸

The imaging dimension

In the structure of the social representations of this study, the imaging dimension reveals the main diseases considered neglected by health professionals, with emphasis on the following diseases: Calazar, Leprosy, Tuberculosis, Leishmaniasis and Malaria. Among the neglected diseases of major interest in the Brazilian scenario, the WHO currently prioritises schistosomiasis, dengue, Chagas disease, leishmaniasis, leprosy, lymphatic filariasis, onchocerciasis, and soil-transmitted helminthiasis (e.g. ascariasis and hookworm), trachoma and rabies.²⁹ In Brazil, in 2008, the Ministry of Health and the Ministry of Science and Technology promoted the second Priority Research Workshop on Neglected Diseases, listing dengue, Chagas disease, leishmaniasis, leprosy, malaria, schistosomiasis and tuberculosis as the performance of the program on neglected diseases.⁷

Thus, the imaging dimension produced by health professionals is in line with the neglected diseases defined by the WHO and also by the Ministry of Health, implying in the assumption that the region of the municipality studied has an occurrence of these diseases, which need to be studied and researched in order to understand its epidemiology and, therefore, to develop possible actions to prevent and control these diseases.

CONCLUSION

The objective of this study, which was to analyze the contents and structure of the social representations built by health professionals on neglected diseases, was achieved insofar as the elements that constitute a social representation and its internal organization were exposed, that is, the distribution and the relationship between the central and peripheral contents. Participants' social thinking implied the interface between neglected diseases and social, individual and political conditions, in line with the idea of the institutions involved in combating these diseases. In this sense, the social representations were structured in a central nucleus that chose the *neglect* and *lack of knowledge* as elements that have greater meaning in the context of the representation of the neglected diseases, and they were supported by the peripheral elements that, in turn, strengthened the ideas of centrality by listing the other factors associated with these diseases.

The collaborative factors for the high endemicity of neglected diseases were evidenced in the representational structure both in centrality and in the constituent elements such as, for example, the perpetuation of poverty and misery in developing countries, including Brazil. Because of this, the dimensions presented in this study, aimed to explain the internal organization of social representations of health professionals, translated the concept and the image of neglected diseases in order to enable changes in individual and collective practices.

As limits of the study, it is considered that the reduced number of participants may not reflect the full extent of the professional practices carried out within the municipality. The methodological course did not allow more precise inferences, inasmuch as it was not possible to use complementary techniques that sought to identify the semantic context of the evoked terms.

With regard to the implications for health practice, it is assessed that health professionals, with their ideas, convictions and thoughts analyzed, through the structural approach of social representations, pointed out issues related to the practice of care in order to resolve the causes of neglected diseases that affect their region, and they are aimed at combating poverty, neglect and lack of investment in research and knowledge of these diseases.

REFERENCES

- Mathers CD, Gore FM, Patton GC, Ferguson J, Sawyer SM. Global burden of disease in young people aged 10-24 years: authors' reply. *Lancet*. [Internet]. 2012 [Cited 2016 Jun 03]; 377:28. Available from: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(12\)60020-8/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(12)60020-8/abstract). DOI: [http://dx.doi.org/10.1016/S0140-6736\(12\)60020-8](http://dx.doi.org/10.1016/S0140-6736(12)60020-8)
- Pustiglione M. Medicina do trabalho e doenças emergentes, reemergentes e negligenciadas: a conduta no caso das febres da dengue, do Chikungunya e do Zika vírus. *Rev Bras Med Trab*. [Internet]. 2016 [cited 2016 May 05]; 14(1):1-12. Available from: <http://www.cvs.saude.sp.gov.br/zip/PDF%20ARTIGO%20MARCELO.pdf>
- Souza W. Doenças negligenciadas. Rio de Janeiro: Academia Brasileira de Ciências. [Internet]. 2010 [Cited 2015 Set 23]; p. 01. Available from: <https://pt.scribd.com/doc/82360799/Doencas-Negligenciadas>
- Morel C. Inovação em saúde e doenças negligenciadas. *Cadernos de Saúde Pública*. [Internet]. 2006 [Cited 2015 Dec 03]; 22(8):1522-1523. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-311X2006000800001. DOI: <http://dx.doi.org/10.1590/S0102-311X2006000800001>
- Ministério da Saúde (BR). Resolução RDC nº 28, de 4 de abril de 2007. Dispõe sobre a priorização da análise técnica de petições, no âmbito da Gerência-Geral de Medicamentos da ANVISA, cuja relevância pública se enquadre nos termos desta Resolução. Brasília: Ministério da Saúde; 2007.
- Organização Mundial de Saúde (OMS). Primeiro relatório da OMS sobre doenças tropicais negligenciadas: Avanços para superar o impacto global de doenças tropicais negligenciadas. Organização Mundial de Saúde; 2012.
- Ministério da Saúde (BR). Departamento de Ciência e Tecnologia. Secretaria de Ciência, Tecnologia e Insumos Estratégicos. Doenças negligenciadas: estratégias do Ministério da Saúde. *Rev Saude Publica* [Internet] 2010 [Cited 2015 Jun 03]; 44(1):200-202. Available from: <http://saudepublica.bvs.br/pesquisa/resource/pt/lil-538163>. DOI: <http://dx.doi.org/10.1590/S0034-89102010000100023>
- Garcia LP, Magalhães LC, Aures AP, Santos CF, Almeida RF. Epidemiologia das Doenças Negligenciadas no Brasil e Gastos Federais com Medicamentos. Texto para discussão 1607. IPEA [Internet] 2011. [Cited 2016 May 5]; 7-62. Available from: http://www.ipea.gov.br/portal/index.php?option=com_content&view=article&id=8064.pdf
- Moscovici S. A representação social da psicanálise. Rio de Janeiro (RJ): Zahar Editores; 1978. 292 p.
- Jodelet D. Representações sociais: um domínio em expansão. In: Jodelet D, organizadora. *As representações sociais*. Rio de Janeiro (RJ): EDUERJ; 2001. p. 17-44.
- Abric JC. Méthodologie de recueil des représentations sociales. In: ABRIC JC. *Pratiques sociales et représentation*. Paris: PUF, 1994. p. 59-82.
- Abric JC. *Práticas sociales y representaciones*. Ciudad de México (MX): Ediciones Coyoacán; 2001.
- Vergés P. Ensemble de programmes permettant l'abalyse des evocatos - Manuel. Version de 5 de abril de 2002.
- Verges P. Approche du noyau central: proprietes quantitatives et structurales. In: Guimelli C. *Structures et transformations des representations sociales*. Neuchâtel, Delachaux et Niestlé, 1994. p.233-253
- Santos WS. Representações sociais da tuberculose pulmonar [dissertação]. [Jequié]: Universidade Estadual do Sudoeste da Bahia; 2010. 138 p.
- Gomez PF, Gutiérrez MGR, Moreira RSL. Percepção da doença: uma avaliação a ser realizada pelos enfermeiros. *Rev Bras Enferm* [Internet]. 2011 out 12. [Cited 2015 Dec 03]; 64(5):925-30. Available from: <http://www.scielo.br/pdf/reben/v64n5/a19v64n5.pdf>. DOI: <http://dx.doi.org/10.1590/S0034-71672011000500019>
- Ehrenberg JP, Ault SK. Neglected diseases of neglected populations: thinking to reshape the determinants of health in Latin America and the Caribbean. *BMC Public Health*. [Internet]. 2005 nov 11. [Cited 2015 Nov 04]; 5:119. Available from: <http://bmcpublihealth.biomedcentral.com/articles/10.1186/1471-2458-5-119>. DOI: 10.1186/1471-2458-5-119
- Camara AMCS, Melo VLC, Gomes MGP, Pena BC, Silva AP, Oliveira KM e cols. Percepção do processo saúde-doença: significados e valores da educação em saúde. *Rev Bras de Educ Med*. [Internet]. 2012. [Cited 2016 Jul 07]; 36(1): 40-50. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0100-55022012000200006. DOI: <http://dx.doi.org/10.1590/S0100-55022012000200006>
- Abric JC. *Pratiques sociales et représentations*. Paris, Presses Universitaires de France, 1994.
- Hotez P. The giant anteater in the room: Brazil's neglected tropical diseases problem. *PLoS Negl Trop Dis*. [Internet]. 2008 jan 30. [Cited 2016 jun 13]; 2(1):77. Available from: <http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0000177>. DOI: <http://dx.doi.org/10.1371/journal.pntd.0000177>
- Camargo EP. Doenças Tropicais. Dossiê Epidemia. *Estudos Avançados*. *Jornal da USP*. [Internet]. 2008 [Cited 2015 Nov 04]; 22(67):95-110. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-40142008000300007. DOI: <http://dx.doi.org/10.1590/S0103-40142008000300007>
- Rocha S. *A pobreza no Brasil: afinal, do que se trata?* Rio de Janeiro: FGV Editora, 2003.
- Hotez P. A new voice for the poor. *PLoS Negl Trop Dis*. [Internet]. 2007 [Cited 2016 Jun 13]; 1(1):77. Available from: <http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0000077>. DOI: <http://dx.doi.org/10.1371/journal.pntd.0000077>
- Santos PMC. Inovação para tratamento da doença de Chagas: efeito antiinflamatório e regulador do transit intestinal em ensaio pré-clínico de dieta a base de subproduto vegetal. [Tese]. [Rio de Janeiro]: Instituto Oswaldo Cruz. [Internet]. 2014 [Cited 2016 May 5]; 149 p. Available from: http://www.arca.fiocruz.br/bitstream/icict/13698/1/priscila_santos_ioc_dout_2014.pdf
- Vidotti CCF, Castro LLC. Fármacos novos e necessidades do sistema único de saúde no Brasil. *Espaço Saúde* [internet]. 2009 [Cited 2016 Jan 10]; 10:7-11. Available from: <http://www.cff.org.br/userfiles/file/Farmacos%20novos%20e%20necessidades%20do%20SUS.pdf>

26. Pontes RJ, Ramos-Júnior AN, Kerr LRS, Bosi MLM. Transição demográfica e epidemiológica. In: Medronho RA, Bloch KV, Luiz RR, Werneck GL. Epidemiologia. 2. ed. São Paulo: Atheneu; 2009. p.123-52.
27. United Nations Millennium Declaration DPI/2163. Published by United Nations Information Centre, Lisbon - 2000.
28. Brasil. Objetivos de Desenvolvimento do Milênio: Relatório Nacional de Acompanhamento/Coordenação: Instituto de Pesquisa Econômica Aplicada e Secretaria de Planejamento e Investimentos Estratégicos; supervisão: Grupo Técnico para o acompanhamento dos ODM. Brasília: Ministério da Saúde; 2014.
29. World Health Organization. Neglected tropical diseases, hidden successes, emerging opportunities. Geneva: World Health Organization; 2009.