NEOLIBERALISM AND HEALTH ALONG THE UNITED STATES-MEXICO BORDER: THE CASE OF TUBERCULOSIS

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ABSTRACT: The impact of the free market economic restructuring on public health systems during the last decades has been devastating to most parts of the world, including in the border communities of Mexico and the United States, a region on the planet where the model of neo-liberal globalization, combined with the maquilas industries and the North America Free Trade Agreement (NAFTA), were destined to showcase one of its most successful and brightest windows to the future. This economic rationality was accompanied by a movement of increasing privatization of the national public health systems, with its consequent substitution by a medical model, more compatible to the ideological concept of health as an individual's human capital, a commodity to be sold for a profit in the market, and acquired to be consumed by human beings turned into private owners of their own health.
The present article concentrates in telling «the case of tuberculosis» in the U.S.-Mexican border, one of the reemerging transmissible diseases world-wide. This is a disease that is historically known to be linked to growing poverty, and sensitive to the problems related to migration and its criminalization by some social sectors, to the deterioration of living conditions (housing, food, sanitary infrastructure), to the dismantling of the public health systems, and recently aggravated by the combination with other diseases like VIH-SIDA and the diabetes.
KEYWORDS: Tuberculosis, Globalization, Maquila, Health, Neoliberalism.

RESUMEN: El impacto de la reestructuración económica de libre mercado en los sistemas de salud pública durante las últimas décadas, ha sido devastador en gran parte del mundo, inclusive en las comunidades fronterizas de México y Estados Unidos, región del planeta donde el modelo de globalización neoliberal, aunado a la industria maquiladora y al Tratado de Libre Comercio de America del Norte (TLCAN), estaría destinado a lucir una de sus mejores y exitosas ventanas hacia el futuro. Acompañaba esa racionalidad económica, el movimiento de creciente privatización de los sistemas nacionales de salud pública, con su consecuente sustitución por un modelo de medicina, más afín al concepto ideológico de salud como capital humano de un individuo, una mercancía a ser vendida para obtener ganancias en el mercado y ser adquirida para el consumo de seres humanos convertidos en propietarios privados de su propia salud.
El presente artículo se centra en «el caso de la tuberculosis» en la frontera de México y Estados Unidos, una de las enfermedades transmisibles reemergentes en el nivel mundial. Se trata de una enfermedad conocida históricamente como vinculada estrechamente al crecimiento de la pobreza, sensible a la problemática de la migración con su criminalización por algunos sectores sociales, al deterioro de las condiciones de vida (habitación, alimentación, saneamiento básico), al desmantelamiento de los sistemas de salud pública y agravada recientemente por la combinación con otras enfermedades como el VIH-SIDA y la diabetes.
PALABRAS CLAVE: Tuberculosis, Globalización, Maquila, Salud, Neoliberalismo.

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The promotion and protection of the health of the people
is essential to sustained economic and social development
and contributes to a better quality of life and to world peace.
(Declaration of Alma-Ata, 1978)

Rats and cockroaches live by competition
under the laws of supply and demands,
it is the privilege of human beings
to live under the laws of justice and mercy.
(Wendell Berry, 2002)

During the annual meeting of the United States-Mexico Health Association (USMBHA) in June, 1995 in San Diego, California, the Secretaries of Health from states along the the Mexican-US border made public their «frustration caused by the lack of substantial improvements among the border population» and discussed the «lack of focus, communication and trust» (Overview: Binational Tuberculosis Symposium, 1996, p. 1) between health workers on both sides of the border. A little more than a year after the implementation of the North American Free Trade Agreement (NAFTA), the Secretaries of Health realized that «the attention (of governmental bodies) towards the US-Mexican border region has increased», and at the same time, «the human and commercial flow through this region has become tremendous.» (Binational Tuberculosis Campaign White Paper, 1995).

Although they did not specify in what sense this governmental attention to the border region had increased, they certainly were not referring to the health of the population on both sides of the border. Indeed, their proposal suggested that the attention in this area should at least reach the level of attention given to other areas such as the economy, security, or even the environment, as outlined in the La Paz Agreement signed in 1983. Upon discovering «the problem» in the proposal of a binational tuberculosis campaign in

December, 1995, the Secretaries recognized that although «there were various governmental and non-governmental entities that were proposing to evaluate border 'needs'» and «developing their abilities» in this sense, «unhappily […] we have not become any more capable of, at the same time, resolving our own problems.» (Binational Tuberculosis Campaign White Paper, 1995).

The lag in the health sector was serious and worrisome and not just because of the higher than average rates both in Mexico and the United States of diseases such as Hepatitis A, diabetes and tuberculosis, among others. The situation was particularly problematic because of the recognized inability to «learn to resolve»[1] common problems adequately on both sides of the border, with the necessary «focus, communication and trust» to overcome the political, economic and cultural barriers which separate by contrast a very long and heterogeneous, as well as unequal, border.

[1] The following paragraphs follow the text of this same White Paper for the first meeting of the Secretaries of Health. See pp. 3-4.

In this context, the Secretaries of Health identified tuberculosis as «an illness which all states on both sides of the border have referred to as a 'growing problem' and as a «mutually troubling problem, with an objective sufficiently tangible to see a difference.» In line with this concrete proposal the logic was followed that if the problem were handled successfully, then the learning experience could also be used to «eliminate the other problems from the list.»

The idea of focusing attention on one «problem» first before moving on to another, taking advantage of the experience gained, and choosing tuberculosis as a disease whose characteristics more easily facilitate this objective, became the more obvious choice for being «prevalent and persistent» throughout the border region. In addition, considering the high mobility of the border populations inside each country and between one country and the other, the potential of untreated or partially treated tuberculosis to spread to other areas of both countries is very great. Among migrants, the workers who travel all over the country from north to south, working in the fruit and vegetable fields and packing plants, can be found the population at greatest risk of contracting and transmitting tuberculosis to a large number of contacts before the carrier of this disease is located and monitored until the conclusion of his or her treatment.

Practically speaking, another reason health officials chose tuberculosis first was the prior existence, since the beginning of the decade, of binational projects located in border cities, primarily in Texas, followed by others throughout the rest of the states.[2]

The role of a «campaign» should be to create a «logical umbrella» for current and future projects regarding tuberculosis along the border, and its purpose and message should have as an end goal to «raise awareness» in order to lower the rate of tuberculosis in the border region. These messages should be clear, concise and direct, carefully thought out to inspire commitment and action. In addition, to be effective, they should «penetrate all facets of life of the community», and become as prominent in society as «Smokey the Bear»[3] and other campaigns considered to be successful in educating the public. As far as content, the messages should be focused on eliminating the stigma of tuberculosis through public edu-

[2] The Texas Department of Health (TDH) known today as the Texas State Department of Health Services (DSHS), started the first binational tuberculosis project «JUNTOS» in the El Paso/Ciudad Juarez region. In 1993, it initiated the project «Los Dos Laredos» and in 1995 created «Grupo sin Fronteras» to treat binational patients from McAllen/Reynosa, Harlingen and Brownsville/Matamoros. Binational tuberculosis programs were established in Yuma/San Luis Rio Colorado in 1992, and in 1997, Cochise/Northeastern Sonora en 1997; and in both Nogales (Sonora and Arizona) as well. Also in 1997, Cure TB in San Diego, California started its activities in order to track cases and insure the completion of TB treatment among migrant patients.

[3] This was the name of the campaign begun in 1944 in the context of World War II which directed a patriotic call to the general public, including children, to watch over and defend the national forests against fires identified as the enemy. Using catchy phrases and colorful posters with messages such as «Forest fires aid the enemy» and «Our carelessness is the enemy's secret weapon», the Wartime Advertising Council organized these campaigns, believing that people could prevent accidental fires and at the same time, help win the war. See http://www.smokeybear.com/

cation, raising awareness regarding the symptoms of the disease and emphasizing the importance of completing treatment.

With these ideas presented in the document for discussion, the first meeting was organized in Austin, Texas,[4] February 7-8th, 1996 by the Texas Secretary of Health, David R. Smith and the General Consul of Mexico, Roberto Gamboa Mascareñas. The objective was to discuss the structure of the campaign, the similar and different needs of each country and the «logical components» that would include education, vigilance, and establishing communication mechanisms, as well as developing resources in the public and private sectors of the economies of the United States and Mexico. (Overview: Binational Tuberculosis Symposium, 1996).

In the opening discussion of the meeting, Dr. Federico Ortiz Quezada, after recognizing that the «regional health problems were becoming international», and indicating the «Mexican commitment in favor of a binational tuberculosis campaign», added that it was necessary to take precautionary measures to ensure that greater awareness regarding tuberculosis would not create a «phobia» among the population the campaign was trying to reach.

Indeed, no informative or educational campaign can be considered in itself a strategy for public health since the predominant focus is on the responsibility of the individual and not on the responsibility of public entities and organized communities. Furthermore, health authorities will never have complete control over the reception of the message or its effect on the population, one of the most heterogeneous both socially and economically as well as culturally.

For these reasons, one of the results of certain campaigns could only be to increase fear and anxiety, or to reinforce the stigmatism instead of eliminating it, above all in a political

context in which generally the campaigns are carried out through authoritative molds where the «target population», or destination population, is no more than precisely that: a «target», i.e., passive and inanimate object of an action initiated externally, where the institutional and legal powers are generally found to be in competition or in conflict with the popular vision of life, health and disease (Almaguer Gonzalez, José Alejandro 2003),[5] generating more confusion and fear than benefits among the population it seeks to serve.

[4] Meeting participants included Dr. Philip Lee, Assistant Health Secretary of the Department of Health and Human Services (DHHS), Dr. Dixie Snider of the CDC, Dr. Federico Ortiz Quezada, Director of the Office of International Affairs of the Secretary of Health (SSA), health officials form 10 border states, representatives from civil organizations such as Project HOPE, Texas Medical Association, American Lung Association, Pan American Health Association, National Center for Farm Worker Health, Migrant Clinicians Network and Rotary International.

[5] See «La Medicina Mexicana en el contexto intercultural» by Dr. Jose Alejandro Almaguer Gonzalez, director of Traditional Medicine and Intercultural Development of the Mexican Secretary of Health, on the SSA webpage: http://www.salud.gob.mx. One of the most serious problems that the health system faces in its relationships with patients is prescisely that of «adhering to treatment», and constitutes for our way of thinking, a conclusive test of the cultural and economic

Most likely due to Dr. Ortiz Quesada's intervention, a technical binational group on tuberculosis was formed calling itself Ten Against Tuberculosis (*Diez Contra Tuberculosis-DCT*) and self-defining itself as a «binational initiative», with the purpose of «identifying and responding to opportunities and challenges that cannot be unilaterally resolved by either of the two countries acting separately» (DCT, 1997). Since then, this binational initiative abandoned the original idea of promoting informative campaigns and moved on to developing action plans. However, 10 years after their formation, they have had little funding to carry out their actions and limited political support from state and federal health authorities.[6]

Although these «social determinants of health» (Wilkinson, Richard y Marmot, Michael, 2003) sean are more and more recognized by research and professionals in this area, and despite the fact that the Western model of medicine considers them an integral part of public health, the dominant mentality, reinforced by economic interests of pharmaceutical corporations and by the movement for privatizing the health system in the last few decades, still focuses on curing sick individuals, not on maintaining and caring for the health of the entire population. This conservative health mentality, like medicine, which has experienced a renewed impulse from the neoliberal ideology currently in vogue(Comisión Mexicana Sobre Macroeconomía y Salud 2000)[7] is even reflected in the strategic plan developed by the DCT group for 2005-2010 in which they propose, based on the framework of the previous plan for 1998-2004, the same

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distance which exists between the dominant medical system and health and disease among the marginal population. See research done on adherence to tuberculosis treatment in the state of Chiapas: http://www.insp.mx/salud/42/426_6.pdf

[6] Because of this, it is possible to affirm to a certain extent that this binational initiative was «aborted» after the first hour of its conception at least in the form of political compromise on behalf of federal and state health authorities in regard to developing binational activities in conjunction with the ten border states, particularly on the part of the four border states of the US, due to the growing competition for resources which year after year become more scarce. The need to continue dialogue and collobaration in the global environment along the entire border and sub region of the bordering states nationally and binationally is increasingly indispensable. Obviously this need is not restricted to one transmittable disease, the existence of an outbreak, or to emergency situations seemingly indicated by a more recent tendency since «September 11, 2001» with the possibility of bioterrorism, or the possibility of an avian influencza pandemic.

[7] The penetration of the neoliberal economic rationale has grown in Mexican National Health Programs over the last few Sexenios, typified by the cost-benefit and cost-efficiency calculation, in the decisions regarding health policies which precisely affect populations with the fewest resources. The health of the poor now has a market «value» just like all other merchandise, and those individuals transformed in (or reduced to) owners of their «human capital», compete for scarce resources, like all capital, to achieve «economic development» of a country. For the mid-end «macroeconomic rationality», the real result of health investment is to achieve «economic development» of a country in order to create a competitive market war in the so-called global economy. A healthy life for individuals and communities is hardly a *means* to achieve economic development. This market ethic in public health and its rationale can be found clearly expressed in Mexico in the document prepared by the Mexican Commission on Macroeconomy and Health, *Macroeconomía y Salud. Invertir en salud para el desarrollo económico,* Secretaria de Salud-Fondo de Cultura Económica, Mexico, 2006.

four courses of action, all focused on detecting and curing sick individuals as the preferred form of caring for the health of the community: 1) epidemiology and vigilance, 2) laboratories, 3)education and communication and 4) handling cases.

From the middle of the year 2000[8] until the middle of the first decade of the century, federal governments concentrated their attention and resources on the development and test piloting of a binational card to facilitate handling of binational tuberculosis cases. During these years, thanks to the combined efforts of the Mexican Health Secretary, the Centers for Disease Prevention and Control (CDC) and of the then recently inaugurated Mexico-United States Border Health Commission (CSFMEU), the idea of giving individual attention to the sick who cross the border predominated, which is why the new binational card was thought to be the most appropriate instrument (Forum Sobre Asuntos Fronterizos de Tuberculosis, 2006)[9] At the same time, the proposal of health workers along the border organized in the DCT initiative to act simultaneously on the 4 courses of action (mentioned in the previous paragraph) was left aside.

In 1998, the anticipated promise of extra funding to carry out binational tuberculosis activities along the border seemed to come from a different source, the United States Agency for International Development (USAID). However, although representatives from this agency in Mexico gave the impression that the intention was to create their plan of action in collaboration with the DCT, at least regarding the border states, in reality this was not carried out in any stage of the final development and implementation of the Tuberculosis strategy of USAID in Mexico for 1999-2004.

In November 2002, the DCT group was officially recognized by the Mexico-United States Border Health Commission as their technical advisor on tuberculosis. Two years later, on August 20, 2004, this group presented an extensive strategic plan for binational action on tuberculosis along the entire border for

[8] See the minutes of the *DCT Board of Directors* meeting, Hermosillo, May 2, 2002, p. 4, and the minutes of the *DCT Board of Directors* meeting, Las Cruces, May 29, 2001 p. 3. The intitiative for a binational tuberculosis card, later simply called «Binational Health Card», started from a «joint initiative of the Division of Tuberculosis Elimination of the CDC and the National Tuberculosis Program of Mexico, with the support and participation of other organizations including the DCT» (*Idem*). Since its inaugural meeting on November 27, 2000, the Commission of Mexico-United States Border Health has also supported the idea of developing a «method to insure the completion of treatment for tuberculosis patients on the border» *(Idem)*. Founded by the two federal governments, the Commission defines its mission as «providing international leadership to optimize health and the quality of life along the Mexico-United States border.»

[9] By the end of 2006, the benefits of the card were perceived very differently on each side of the border. On the US side, based on the criteria of a strict cost-benefit relationship, the card was not considered an «additional benefit» to reference systems already in existence (Cure-TB and TB-Net). On the Mexican side of the border, the card was perceived as an additional opportunity to educate patients about their disease and useful for the «sense of security» it provides, though more psychological than real, and the sense of «personal responsibility.» See the report of the «Forum on Border Tuberculosis Affairs», from Binational Health Week 2006, El Paso, Texas, October 2006, p. 6.

the years 2005-2010,[10] their 3rd plan during a 10 year period. At the end of their presentation, commissioners asked the group to develop specific sub regional plans of action as their next step, taking into consideration the diversity of local needs along the border, using their strategic plan as the general benchmark for these actions. Towards the end of 2006, it was estimated that these sub regional plans would be completed and presented to the Commission during the first few months of 2007 in order to initiate a new implementation stage of the recommended binational border activities. However, after the long years with few substantial results of this binational initiative as a collaborative action of the ten border states dealing with tuberculosis, the administrative uncertainties in group leadership and the lack of possibilities of obtaining funding from governmental and non-governmental agencies in both countries led to chronic discouragement and finally, to a complete paralysis and separation of members. Many of these were preoccupied with small projects, limited in space and time, with newly acquired funding from USAID and, on a lesser scale, from Rotary International, with no reference to a common Strategic Plan for the entire border.

TUBERCULOSIS: «THE PERFECT EXPRESSION OF AN IMPERFECT SOCIETY»

Tuberculosis is an infectious disease caused by a microorganism called *Mycobacterium tuberculosis* (*MTB*), also known as Koch's bacillus. This bacillus propagates through the air via small drops which contain bacilli emitted by an individual infected with pulmonary tuberculosis through coughing, breathing or speaking. When these drops are inhaled and the person becomes infected, they are at risk of developing the disease at any time in their life.

Thomas Dormandy began the first chapter of his respected work on the history of tuberculosis by affirming, very appropriately, that «tuberculosis has been called the perfect expression of an imperfect civilization» (Houston, Muiris, 1999). In fact, tuberculosis is a social disease in the greatest sense of the word, since its propagation is intimately linked to the living conditions of the population. «The risk of infection and of getting sick is determined by socioeconomic factors such as diet, housing, stress, etc.» (Diez Contra la Tuberculosis, DCT, 1996, p. 4) or by coinfection with other diseases such as diabetes, and more recently, HIV-AIDS.

The improvement of socioeconomic and environmental conditions in the United States and in some European countries between the first and second

[10] This Strategic Plan was presented during the annual meeting of the Border Health Commission in Ensenada, Baja California by Ten Against Tuberculosis (DCT). The *Strategic Plan 2005-2010*, was presented to the Commission of Mexico-United States Border Health on August 20, 2004. See the complete text on the DCT webpage: http://www.diezcontralatb.org or the English version: http://www.tenagainsttb.org

World Wars, for the first time made the eradication of tuberculosis in a not-so-distant future a real possibility. Although the downward trend in the number of tuberculosis cases was interrupted during World War II, hope was renewed with the appearance of chemotherapy for tuberculosis with the discovery of streptomycin in 1943. Basic medicines which are used even today for treating tuberculosis were discovered during the first two post-war decades: pyrazinamide (PZA) in 1950, isoniazid (INH) in 1952, ethambutol (EMB) during the mid-1960s and rifampicin (RIF) at the end of the 1960s.

From 1985 to 1992, tuberculosis cases increased again in the United States. The same trend multiplied in other parts of the world. The primary causes of this increase had their origin in the «complacency and negligence» resulting in the decrease and discontinuance of federal, state and local funding for several years for tuberculosis control, the complacency of health officials and the increase in infection rates in most of the world. (Geiter Lawrence, 2000).

Another 3 factors are mentioned (Diez Contra la Tuberculosis, DCT, 1996) which have led to the increase in tuberculosis in third world countries: 1) the demographics of these countries affected by economic, political, social and cultural changes; 2) the emergence of medicine resistant strains (MDR-TB),[11] and 3) the HIV-AIDS epidemic.

As for the demographic factor, children born after World War II who survived the elevated infant mortality rate, especially in poor countries, reached the age in which tuberculosis morbidity and mortality is highest (20-45 years of age). In many cases in these same countries, the economic and sociopolitical factors including armed conflicts in the Third World resulting from the prolonged cold war (1946-1989), the rise in poverty linked to the negative effects of neoliberal globalization,[12] the distinct forms of urban violence, the land struggle of farm laborers, and natural disasters have created a large number of displaced populations, malnourished, living in overcrowded conditions and in communities lacking even basic sanitation. This demographic factor, of which the great mass of migrants and refugees are a part, represents the majority of people today who die from tuberculosis in Asia, in Sub-Saharan Africa, in South America, in some Caribbean islands and in Mexican north and southern border states.

Another cause was the appearance of multi-drug resistant strains (MDR), above all in third world patients and those from the former Soviet Union. It has been said that if AIDS had its origin in the Third World, then MDR Tuberculosis had

[11] «Multi-drug Resistant Tuberculosis» It is common to use the abbreviation MDR-TB.

[12] In the case of Mexico, for example, in three decades, after having reached a historic high in 1976 of 53.36 pesos per day, the minimum wage plummeted to 11.01 pesos per day in 2005, representing a 79% loss in purchasing power of Mexican workers. See the article: «En tres décadas cayó 79% el poder adquisitivo: Universidad Obrera de México (UOM)», in *Milenio* (Mexico) Monday, February 5, 2007. Regarding the effects of neoliberal globalization on a worldwide scale, see Hertz, Noreena, *The Silent Takeover. Global Capitalism and the Death of Democracy*, The Free Press, New York, 2001, 247 p.

its origin, or at least people became aware of it, in the «heart of the Fourth World, New York», on August 30th, 1991 with the publication of the news regarding 4 small outbreaks, in the journal *Morbidity and Mortality Weekly Report* of the Centers for Disease Control and Prevention (CDC) (Dormandy, Thomas1991, p. 386). The Fourth World refers to people who live on the streets, the homeless in this and other large cities, a by-product of unequal development and social inequality (Farmer, Paul, 1996, pp. 259-269) in the bosom of the very same «First World.»

Multi-drug resistance represents one of the most relevant threats to global public health. (Reichman, Lee B. y Janice Hopkins Tanne, 2002). The multi-drug resistant tuberculosis strains might be just as contagious as the non-resistant strains, but they are less treatable and constitute a death sentence for patients in poor countries. In many of these countries, not only is it the high cost and the diluted effect of second-rate medicines which present obstacles for treatment, but also the lack of essential laboratory equipment and infrastructure for monitoring patients. Apart from the obvious need for the reduction of poverty (Comisión Mexicana Sobre Macroeconomía y Salud, FCE-Secretaría de Salud, 2000)[13] the most important instrument recommended by the World Health Organization for these countries for stopping tuberculosis and its complications with MDR is the application of DOT (Direct Observation Therapy) or TAES (*Tratamiento Acortado Estrictamente Supervisado*), as it is known in Mexico, to ensure that the patient duly completes his or her treatment. However, the shortage of financial resources (International Union Against Tuberculosis and Lung Disease on behalf of the Stop TB Partnership, 2002)[14] the lack of adequate training of health workers, laboratories without proper equipment for detecting tuberculosis, the lack of trans-

[13] The relationshiop between tuberculosis and poverty was emphasized in 2002 by the motto of that year's World Tuberculosis Day: «Stop tuberculosis, fight poverty.» The Campaign Diary emphasized the fact that fighting poverty is also fighting tuberculosis and vice versa. As we hope to elaborate on in another place, a recent trend in economic thought aims to reduce the problem of poverty to the problem of poor health in a population, with no mention of the structural inequalities created by the same dominant economic system. A population's health is considered not only a «result» but a «determinant» of a country's wealth, just as education was previously thought to be, an element constituting «human capital.» This trend, spearheaded by macroeconomists or development economists, considered their find to be a true «paradigm shift» for considering health to be a «theme on the development agenda», not merely a «specialized theme for experts in public health.» (see Julio Frenk Mora's prologue to the work *Macroeconomía y Salud. Invertir en salud para el desarrollo económico*, presented by la Comisión Mexicana Sobre Macroeconomía y Salud, FCE-Secretaría de Salud, 2000).

[14] Government commitment in countries with elevated rates of tuberculosis is fundamental in order to gain the the necessary resources for handling this disease, which often implies substantial changes in national priorities. In this sense, the «good example of Peru» was recalled by Peru's Vice Minister of Health in 2001: «In terms of resources, this has meant changes in funding: 20% less for defense, 56% more for health and a spending budget for the control of tuberculosis in 2002 of 23 million dollars.» Cited by the International Union against Tuberculosis and Lung Disease on behalf of the Stop TB Partnership, in *Detener la tuberculosis, luchar contra la pobreza. Diario de Campaña. Día Mundial de la Tuberculosis* (*Stop Tuberculosis, fight against poverty. Campaign Diary. World Tuberculosis Day*) March 24, 2002, p. 25. http://www.stoptb.org/world.tb.day/WTBD_2002/default.asp

portation for patients and medical personnel, insufficient amounts of appropriate medicine necessary for the duration of the treatment (on average, 6 to 8 months), lack of sufficient food, etc., added to the constant transit between the borders of states and countries, all make the successful application of this therapy extremely complex.

The HIV-AIDS epidemic in combination with tuberculosis has worsened an already grave tuberculosis situation on a worldwide scale. The risk of contracting the disease by immunocompromised individuals such as those infected by the human immunodeficiency virus (HIV) is much greater than for a person with a healthy immune system. The double HIV-TB infection occurs most frequently in regions where HIV is pandemic, and it is estimated that this coinfection represents more than 30% of infected cases.

In 1993, this situation led the World Health Organization (WHO) to declare tuberculosis a reemerging disease. However, more than a decade after this declaration, the situation has not improved. There are more people infected with the M. Tuberculosis bacteria this year than at any other time in history, close to a third of the world's population. The estimated number of new cases of tuberculosis, close to 8 million in 1997, reached 9 million in 2004 (WHO Report 2006). According to the WHO, 22 countries[15] represent 80% of world tuberculosis cases. 98% of the 2 to 3 million deaths[16] each year occur in the same countries which contain 95% of active tuberculosis cases.

In the Americas, Brazil in 2006 continued to be the only country which among the 22 countries at greatest risk, occupying 15th place on a global scale of number of cases, and with an incidence rate of 50 out of every 100,000 inhabitants (Global Tuberculosis Report, 2008). Haiti has fewer cases than Brazil, but with an incidence rate of 306 out of every 100,000 inhabitants, similar to Sub-Saharan African countries, and has the highest rate in the Americas. The estimated tuberculosis rates for the South American countries of Bolivia (217),[17] Peru (178), Ecuador (131) and Guyana (140), greatly exceed the average rate for the rest of the Latin America and the Caribbean. In Central America, the countries with the highest rates are Guatemala and Honduras (77 each) and Nicaragua (63). The countries with the lowest estimated tuberculosis rates in Latin America are Cuba (10), Costa Rica (14) and Chile (16).

Mexico, despite the disparity between the WHO estimated rate of 32 cases for every 100,000 inhabitants and the official rate published by the Health Ministry in 2004 of 13.7 (see Table 2), is among the countries where tuberculosis incidence

[15] These countries are: Afghanistan, Bangladesh, Brazil, Cambodia, China, Congo, Ethiopia, India, Indonesia, Kenya, Mozambique, Myanmar, Nigeria, Pakistan, Philippines, Russia, South Africa, Thailand, Uganda, Tanzania, Vietnam, Zimbabwe.

[16] It is difficult and disconcerting to calculate the precise number of fatalities cuased by a curable disease which occurs 95% of the time among the poorest population.

[17] The number in parenthesis corresponds to the rate (cases for every 100,000 inhabitants).

is moderately serious, higher in the northern and southern border states, receptors of internal migration as well as from other Latin American countries.

The 2005 rates in Canada (5) and the United States (4.8) place them among the countries with the lowest incidence of tuberculosis in the world, although they are still far from reaching the goal established in 1989 by the Advisory Committee for the Elimination of Tuberculosis of the CDC, to *eliminate* tuberculosis (that is to say, an incidence rate of less than one case for every 100,000 inhabitants) in the United States by the year 2010 (A Strategic Plan for the Elimination of Tuberculosis in the United States, 1989).

THE BORDER BETWEEN MEXICO AND THE UNITED STATES

The political border which separates Mexico and the United States extends 3,141 kilometers or 1,952 miles between the Gulf of Mexico and the Pacific Ocean. The border states share three large desert regions: the Altar, or Sonora Desert, the Mojave Desert and the Chihuahua deserts which extend throughout the states of Texas and New Mexico. Texas and Chihuahua are the geographically largest states in their respective countries (except Alaska) but contain areas which are for the most part unpopulated.

At least three criteria have been proposed for fixing the boundaries between Mexico and the United States (Gasca Zamora, José, 2002). The first refers to the 39 Mexican and the 25 United States strictly border townships and counties. The second, and most utilized, refers to recognizing the binational programs for environmental protection derived from the «La Paz Agreement» of 1983, in which the border region is defined as a 100 kilometers (62 miles) stretch of land towards the interior of each country, using the international border line as a reference. The third and last criterion refers to determining the border space based on the group of federal entities in the Southwest United States: California, Arizona, New Mexico and Texas and those of Northern Mexico: Baja California, Sonora, Chihuahua, Coahuila, Nuevo Leon and Tamaulipas. We believe this to be the most appropriate criteria for defining the border, taking into consideration the totality of the historical, economic and social dynamic, as well as the political-administrative dynamic, for these states.

Of the entire border region, the six most populated areas are:

AREA	POPULATION (MILLIONS) (2001)
San Diego-Tijuana	4.0
Mexicali-Calexico	0.8
El Paso-Ciudad Juarez	1.9
Laredo-Nuevo Laredo	0.4
Brownsville-Matamoros	0.5
Harlingen/McAllen-Reynosa	1.0

In social and economic terms, four of these seven cities and five of the poorest counties of the United States are found along the Texas border with Mexico. As a whole, for more than 30 years these counties on the United States side of the border have seen an increase in unemployment and a decrease in per capita income. An example of this is the city of El Paso, Texas, where poverty is two times higher than the national average and per capita income is three times lower. This is the fruit of what David Simcox calls «growth without prosperity» (Simcox, David, 1993). Access to health care is also insufficient on the United States side of the border. El Paso, with a rate of 35% of people without health care, has the highest rate of all the cities in the country (Roberts, Chris, 2003).

On the other hand, the six border states in northern Mexico are among the federal entities with the lowest indices of extreme poverty in the country as well as the lowest unemployment rates (Rodríguez, Israel, 2003).[18] Nonetheless, the contrasts in living conditions of the majority of the population remain great when compared to the people who live on the United States side of the border.

The external debt crisis in Latin America that began in Mexico in 1982 put an end to the economic model of import substitution with the implementation of the neoliberal globalization model (Homes Noria y Antonio Ugalde, 2003, pp. 2016-2022) or free market, a product of which is the North America Free Trade Agreement (NAFTA), inaugurated on January 1, 1994. These economic and political factors are considered the principle causes of the increase in Mexican migration to the northern states in search of jobs in the maquiladora industry, and towards the United States.

After the first 10 years, NAFTA proved to be a great success in economic terms, above all for transnational corporations. Mexican exports increased by 600% between 1993 and 2002 and Foreign Direct Investment (FDI) tripled between 1985 and 2002, reaching 55 billion dollars during this period (Arroyo Picard, Alberto, 2004). Mexican productivity also increased by 45% since 1995. In addition, the Mexican economy during these years became completely linked to (or dependant on) that of its neighbor to the north, since 65% of Mexican imports originate in the United States, while 85% of exports are directed to the United States.

As a model for development, however, NAFTA has not fulfilled its promises. The *per capita*

Gross Domestic Product (GDP) rate remained the same as in 1980. In 2002, only 4% of raw material used in the maquiladora industry was of Mexican origin, which means little or no growth in domestic industry (Hargrove, Basil «Buzz, 2004, p. 34). Moreover, absolute poverty as well as relative poverty has

[18] The extreme poverty rate is around 10%, while in the southern states it may be high as 40%. See the ariticle by Israel Rodríguez, «Las cifras oficiales de desempleo y pobreza, irreales: OCDE» in *La Jornada* (Mexico), Friday, June 27, 2003. The article comments on the official rates of unemployment and poverty, published by the OECD.

increased. Out of a total population of 104 million inhabitants, 54 million Mexicans live in poverty (less than $2 dollars a day) while 21 million live in extreme poverty, less than $1 dollar a day (Brown, Garrett, 2004, p. 4).

The most visible result of this economic model adopted in 1982 is, without a doubt, migration. In November 1993, the US Secretary of State, Warren Christopher, affirmed that «as the Mexican economy prospers, higher salaries and improved opportunities will reduce the pressure for illegal migration to the United States» (Ferris, Susan, 2003, p. 16).[19] In the words of the then president of Mexico, Carlos Salinas de Gortari, the intention of NAFTA was to «export merchandise, not people» (Massey, Douglas, 2000). Ten years after the implementation of this treaty, the result is clearly the opposite, considering that Mexico, unable to «export sufficient merchandise to make the NAFTA strategy function, has been forced to continue exporting its people» (Faux, Jeff, 2004, p. 97).

In the year 2000, the Mexican census indicated a population growth in the six northern border states of 3.6% to 5.5% in comparison with the national annual average of 1.7%. The growth is largely attributed to migrants coming from other central and southern Mexican states in search of jobs in the maquiladora industry, the only sector where job opportunities doubled between 1994 and 2000, while stagnant in the rest of the country (Faux, Jeff, 2004, p. 98).

The yearly average for Mexican migration to the United States, which from 1930 to 1980 had been 30,000 people, rose to close to 170,000 people during the 1980s, and 360,000 during the 1990s. In 2003 alone, the National Population Board (Conapo) estimated that 400,000 Mexicans had migrated to the United States. During the «last two economically lost decades of Latin America», the population of Latin American and Caribbean origin in the United States rose from 4.4 million to 14.5 million, of which close to 30% are of Mexican origin.

Perhaps a more positive indicator of migration is the growing amount of monetary remittances sent by migrants to their country of origin. Remittances sent by Mexican migrants to their relatives increased from 2.5 billion dollars in 1990 to 13.3 billion dollars in 2003 (Gonzalez Amador, Roberto 2004),[20] reaching the sum of 23 billion dollars in 2006, thus becoming the most significant form of Foreign Direct Investment (FDI) to the country. An ever-increasing majority of fam-

[19] See the article by Susan Ferris, «How economic reforms have failed Mexico. 20 years later, 50% still poor», in *Austin American-Statesman*, August 10, 2003, p. A16. The work by Calva, José Luis, *México más allá del neoliberalismo. Opciones dentro del cambio global*, Plaza y Janés Ed., México, 2000, 311 p., rich in statistical data, it is a testimony of the neoliberalism crisis in Mexico and indicates the country's principle options for finding a way out.

[20] See *La Jornada* (México), Wednesday, February 4, 2004. The three states which received the most foreign remittances representing 31.5% of the national total were: Michoacan, Jalisco and Guanajuato. The federal entity which received the least amount of remittances was Baja California Sur, with a total of 18 million dollars or 0.13% of the national total. Moreover, in 2003, the Consejo Nacional de Población (Conapo) revealed that of the 2, 443 municipalities existing in Mexico, only 93 had never received foreign remittances nor had any relatives who had migrated.

ilies in Mexico[21] and other countries in Central America, South American and the Caribbean depend on remittances sent by their relatives living and working in the United States and Europe for their survival.

Despite repression and criminalization, the flow of workers across the borders has been fundamental for the economies of both countries and the migrant producing regions, as well as their families. Still, the increase in remittances sent by migrant workers to their homes can hardly be considered a practical strategy for economic development (Faux, Jeff, 2004, p. 97),[22] however spectacular they may be.

Migration of undocumented workers has increased in the last ten years which have seen a lack of migration policy compatible with an economic model that aimed to provide free trade flow of merchandise only. Although it is notably difficult to obtain an exact estimate, the percentage of undocumented migrants between 1993 and 1997 was 48%. From 1998 to 2000, that percentage was 68% and 75% between 2001 and 2003 (Robles Nava, Francisco 2004).[23] In 2003, there were between 7 and 9 million undocumented migrants in the United States, of who it was estimated 4 million were of Mexican origin.

It is necessary to consider, in addition, the fatalities resulting from the current migration policy which has become a new threat to public health. Between 1994 and 2006, nearly 4,000 people died while attempting to cross borders in increasingly dangerous and inhospitable regions. Of these people, an annual average of more than 400 died over the last few years (200-2006).

TUBERCULOSIS ALONG THE BORDER

As an infectious disease, tuberculosis knows no geographical, political, economic, or social boundaries, although more than 95% of its victims are found in the poorest world populations. Among these poor populations, there are also ethnic minorities living in first world countries and, in the last two decades, immi-

[21] Between 1992 and 2000 there was a 90% increase in the number of households receiving remittances, currently around 1.2 million households. One out of every ten receiving households is located in an area with a population under 2,500 inhabitants. (Conapo).

[22] See Jeff Faux, *op.cit*., p. 97. Aware of this reality, the president of Brazil, Luis Ignacio da Silva, speaking to Brazilian immigrants in New York during his visit in July, 2002, affirmed that although remittances sent by migrants are important for their relatives and for their country, «the greatest contribution that you will truly give will be the day when you will be able to return to Brazil and live there with dignity», referring to the day when the country can provide jobs worthy of its population. Two weeks after the interview given on one of the major television networks of the country, Globo International, two Brazilians died trying to cross the border in the desert between Chihuahua and Texas and another 20 were captured by the US border patrol.

[23] See the article by Robles Nava, Francisco, «Aumenta la cifra de emigrantes mexicanos. Un promedio de 437 mil personas salieron de México, la mayoría sin papeles, hacia EU en los últimos tres años», *La Opinión*, January 27, 2004. The article comments on recent data published by Conapro, relating to the Mexican migration trend to the United States during recent years.

grants from third world countries, as well as migrants living on the borders of these countries, the vast majority trying to improve their living conditions.

The 2000 United States census indicated that, for the fist time, the majority (51%) of the foreign-born population originated from Latin America and the Caribbean, of which 28.7% originated from Mexico (U.S. Department of Commerce 2001, p. 10).

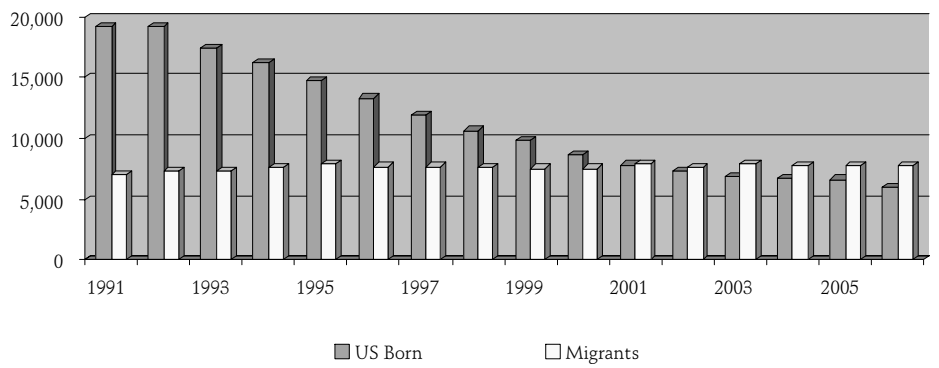
Aware of the growing importance of migrants as a risk factor for tuberculosis transmission, the Centers for Disease Control (CDC) included the category «birth country» on the tuberculosis notification form in 1986. After this date, migrants appear in statistics as «foreign-born», and make up an increasingly relevant proportion of tuberculosis cases when compared with US-born cases.

For example, in 1991, 73% of reported tuberculosis cases were found among persons born in the United States (19,161 cases) while 27% were found among foreign-born persons or immigrants (6,982 cases).[24] In 2001, for the first time on a national scale, the percentage of tuberculosis cases for these two groups practically evened out (7,845 cases and 7,865 cases, respectively).

In 2006, migrants accounted for 57% (7,799 cases) of the total number of tuberculosis cases in the United States (see Graph 1). California (2,779 cases) and Texas (1,585 cases) were the border states with the greatest number of cases in 2006, of which 76.6% were migrants in California and 47.9% in Texas. (See Table 1).

GRAPH 1

Number of Tuberculosis Cases[25]
Comparison between US-born and Migrants, 1991-2006



[24] See CDC, *Reported Tuberculosis in the United States. Mycobacterium Tuberculosis, 2006*. Atlanta, US Department of Health and Human Services, CDC, September 2006 (http://www.cdc.gov/tb/surv/surv2006/default.htm). Regarding the epidemiology of tuberculosis on the Mexico-US border, see Schneider, Eileen, Laserson, Kayla F., Wells, Charles D. *et al*. Tuberculosis along the United States-Mexico border, 1993-2001. *Rev Panam Salud Publica*, July 2004, vol.16, no.1, p. 23-34, also at http://www.scielosp.org/scielo.php?script=sci_arttext&pid=S1020-49892004000700004&lng=en&nrm=iso

[25] *Ibidem*. p. 107.

Additionally, in 2006, 27 states reported that 50% or more of their tuberculosis cases were found among migrants. The rate of tuberculosis in 2006 among migrants was 22 cases for every 100,000 migrants, or 9.5 times greater than that among US-born residents (2.3 cases for every 100,000 inhabitants).

In 2002, 12.2% of population of the United States was foreign-born, of which 52% were Latin American and 28.7% were Mexican. However, Latin America and the Caribbean were the regions of origin for 45% of tuberculosis cases, 25% of these cases of Mexican origin (CDC, 2005, p. 19).[26]

Table 1 (below) shows the percentage of tuberculosis during the last 9 years (1998-2006) among the US-born (US) foreign-born (FB), and Mexican-born (MX) populations in the four southern US border states in comparison with the national average.

TABLE 1

Percentage of tuberculosis among US-born (US), foreign-born (FB) and Mexican-born (MX) populations

	% IN 1998			% IN 1999			% IN 2000		
	US	FB	MX	US	FB	MX	US	FB	MX
Arizona	61.0	39.0	69.6	58.8	40.8	62.6	43.3	55.9	66.4
California	29.9	69.6	31.4	29.8	69.4	32.7	27.6	72.0	31.8
New Mexico	69.1	30.9	66.6	70.3	29.4	89.4	60.9	35.0	87.5
Texas	62.5	37.2	59.2	60.3	39.3	56.1	59.3	41.0	60.6
United States	*58.1*	*41.3*	*23.1*	*56.0*	*43.1*	*23.2*	*53.2*	*46.1*	*23.4*

	% IN 2001			% IN 2002			% IN 2003		
	US	FB	MX	US	FB	MX	US	FB	MX
Arizona	52.6	46.0	61.7	49.9	51.7	75.7	40.7	58.0	69.0
California	25.2	74.0	32.1	24.0	75.2	34.0	24.3	75.0	34.0
New Mexico	77.8	22.0	66.7	63.2	35.1	65.0	57.1	40.8	75.0
Texas	56.8	43.0	54.8	57.6	42.2	58.2	55.3	44.6	57.9
United States	*49.1*	*49.3*	*23.4*	*48.4*	*50.8*	*24.6*	*46.4*	*53.1*	*26.0*

	% IN 2004			% IN 2005			% IN 2006		
	US	FB	MX	US	FB	MX	US	FB	MX
Arizona	42.3	57.0	63.9	38.8	60.1	65.1	40.6	56.8	65.9
California	24.0	75.5	32.0	22.6	76.8	32.3	23.0	76.6	31.5
New Mexico	54.8	45.2	89.5	53.8	46.2	72.2	26.0	47.9	87.0
Texas	55.4	44.6	58.6	51.9	48.1	57.6	52.1	47.9	51.4
United States	*46.0*	*53.8*	*25.4*	*45.2*	*54.6*	*25.2*	*43.1*	*56.6*	*24.7*

Source: *Centers for Disease Control and Prevention* (CDC).

[26] CDC, *Reported Tuberculosis in the United States. Mycobacterium Tuberculosis 2005*, op.cit. p. 19. This proportion did not change significantly in 2006 according to the corresponding report of the CDC for that year.

The incidence of tuberculosis is greater than the national average in California and Texas on the US side. On the Mexican side, in all states except Chihuahua, the incidence of tuberculosis is greater than the national average. (See Table 2).

The states of Chihuahua and Coahuila have reported rates similar to the national average, while on the US side, Arizona and New Mexico have reported rates lower than the national average, with the exception of 2003 when Arizona reported a rate of 5.3 cases for every 100,000 inhabitants.

In 2005, California (8.0) and Texas (6.7) were among the 13 states which reported rates higher than the national average. In addition, the average rate of the four border states (7.1) continued to be higher than in 2002 when they reached their lowest rate (6.0) despite the fact that the rate in New Mexico had continued to decrease.

Nevertheless, national budget cuts continued for tuberculosis control programs financed by the CDC, with a 5.5 million dollar budget cut corresponding to the 2005 fiscal year[27] and a 16% cut for 2007, while at the same time Congress approved a funding increase for bioterrorism and influenza pandemics (Gorman, Christine, 2006, pp. 60-61).

The border states of Mexico and the United States with the highest rates reflect the current Mexican migration routes from the central and southern states towards the northern border states and to the United States. Baja California and Tamaulipas have become the principle destination states of permanent border migration and temporary migration for migrants from Mexico, Central America and South America heading towards the United States and Canada.

TABLE 2

Pulmonary tuberculosis rates* in border states of Mexico and the United States, 1995-2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
US	*8.0*	*5.6*	*6.8*	*6.4*	*5.8*	*5.6*	*5.2*	*5.1*	*4.9*	*4.7*	*4.6*
Arizona	6.4	6.5	5.4	5.5	5.1	5.4	4.8	5.3	4.7	4.7	5.1
California	13.5	12.6	11.8	10.9	9.7	9.7	9.0	9.1	8.3	8.0	7.6
New Mexico	5.2	4.1	3.9	3.7	2.5	3.0	3.1	2.6	2.2	2.0	2.5
Texas	11.0	10.3	9.2	8.2	7.2	7.7	7.1	7.2	7.5	6.7	6.7
Border States	*9.0*	*8.3*	*7.6*	*7.0*	*6.1*	*6.4*	*6.0*	*7.9*	*7.5*	*7.1*	*6.9*

[27] See notes from the June 23-24, 2003 meeting of the CDC Advisory Council for the Elimination of Tuberculosis (ACET).

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Mexico	*18.2*	*20.7*	*18.7*	*17.2*	*15.8*	*16.1*	*15.1*	*14.4*	*13.7*	*14.3*	*12.8*
Baja California	36.0	28.9	35.1	33.8	36.6	57.4	48.1	41.6	41.5	44.3	38.2
Chihuahua	23.7	14.4	16.4	19.0	15.0	17.6	18.2	15.4	11.1	13.7	15.0
Coahuila	19.8	18.6	22.5	19.0	16.5	17.9	17.2	17.3	18.8	18.5	15.8
Nuevo Leon	26.0	29.3	36.6	25.9	26.7	31.1	27.9	28.8	21.9	20.3	19.8
Sonora	26.8	19.7	19.2	21.1	21.3	22.6	21.7	23.0	25.5	31.3	23.4
Tamaulipas	31.3	33.0	38.5	34.5	38.0	35.4	35.8	30.6	31.1	33.1	32.6
Border States	*27.1*	*24.1*	*28.0*	*25.5*	*25.7*	*30.3*	*28.2*	*26.3*	*24.6*	*26.3*	*24.0*

Source: *Centers for Disease Control and Prevention* (CDC), *Centro Nacional de Vigilancia Epidemiológica y Control de Enfermedades* (CENAVECE). Programa Nacional de Tuberculosis, Mexico.
* Cases for every 100,000 inhabitants.

SOME CONCLUSIONS

The socioeconomic and political factors inherited from the last few decades and the subsequent deterioration of living conditions in third world countries indicate that the hope of first world countries of eliminating tuberculosis in the near future increasingly depends on the success these countries achieve among migrants and the rest of the «minorities», who constitute the second most important risk factor. As demonstrated since the 1850s, poverty stands out as the greatest risk factor for tuberculosis.

In our current world dominated by neoliberalism, globalization, and poverty, which results in infectious diseases, favored above all by migration, to which no border is perfectly insurmountable or impenetrable. However, the «free market» which is supposed to be established between countries with economic disparities cannot for long detain on one side of the national borders the most important «merchandise» of this same market: the labor of the workers.[28] Similarly, international economic treaties should not continue to benefit some productive factors to the detriment of others, or fail to include cooperation and dialogue in the areas of health and education, which are fundamental for ending the vicious circle of poverty and tuberculosis.

While in the First World the best living conditions and available human and material resources allow tuberculosis to be kept under control, many third world countries find themselves on the border of catastrophe.[29]

[28] See for example, regarding this, according to NAFTA in the Mexican migration to the United States, the chapter on «Labor Migration» by Juan Manuel Sandoval, *Resultados del Tratado de Libre Comercio de América del Norte en México: Lecciones para la negociación del Acuerdo de Libre Comercio de las Américas*, Red Mexicana de Acción Frente al Libre Comercio, Oxfam Internacional, México, 2001, pp. 82-90. According to the author, worker migration cannot be understood as an isolated phenomenon from the movement of merchandise and capital.

[29] There is now an abundance of literature alerting us to the threat under which the health systems of the world's richest countries find themselves regarding the imminent collapse of the poorest

Responding to the raised awareness accumulated during the last few years demonstrating that health is one of the fundamental human rights and the responsibility of states and social organizations (Secretaría de Salud (SSA), México, 2001, p. 18),[30] concrete actions should be taken which guarantee these rights in practice, using all available local, national and international resources to do so. Experience in recent decades with international actions against tuberculosis indicates that the world market logic with its sacred law of supply and demand is incapable of taking an interest in investing in producing new medicine to combat tuberculosis, much less vaccines because, as a pharmaceutical company executive cynically stated, although «tuberculosis is a life-threatening disease, it (life) has no market value» (Reichman, Lee y Janice Hopkins, 2002, p. 179).[31]

Since it is «not possible to put up a sanitary protection rope» along the borders, the best argument to justify the US and other developed countries involvement in the effort to control tuberculosis worldwide, beyond their own limited interests, is the «moral duty to act in order to save the life of millions who would otherwise die» (Reichman, Lee y Janice Hopkins, 2002, p. 153).[32]

Armed with this «elevated humanitarian argument», the Institute of Medicine in its work, *Ending Neglect,* pretends to overcome the impasse created by the market rationale of pharmaceutical companies, through their recommendations regarding the role of the United States in controlling tuberculosis worldwide

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countries and in the former Soviet Union, one of the effects of «globalization.» See for example: Garret, M., *The coming plague*. Newly emerging diseases in a world out of balance. New York, Penguin Books, 1995; Cueto, M., *El regreso de las epidemias. Salud y sociedad en el Perú del siglo XX*, Lima, IEP, Editores, 1997; Buj Buj, Antonio, «¿La inmigración como riesgo epidemiológico? Un debate sobre la evolución de la tuberculosis en Barcelona durante el último decenio (1990-2000)», in *Scripta Nova*, Revista Electrónica de Geografía y Ciencias Sociales, Universidad de Barcelona No. 94 (95), August 1, 2001; See also the work already cited by Reichman, Lee B. & Janice Hopkins Tanne, *Timebomb*.

[30] The *Programa Nacional de Salud 2001-2006. La Democratización de la Salud en México. Hacia un Sistema Universal de Salud*, affirms in this sense that the «health protection cannot be considered as merchandise, an object of charity or privilege: it is a social right», Secretaría de Salud (SSA), México, 2001, p. 18. See also the Alma-Ata Declaration of 1978, «Health for All», available at: http://www.phmovement.org/charter/almaata.html, as well as the article by Debabar Banerji, «Salud para todos, parte de la lucha por un mundo más justo», in *Revista del Sur* (145/146) November/December 2003, at http://www.redtercermundo.org.uy. A second World Health Assembly of Peoples was held in Cuenca, Ecuador, July 17-23, 2005: (http://www.redtercermundo.org.uy/texto_completo.php?id=2838)

[31] The quote is from the book by Reichman, Lee B. & Janice Hopkins Tanne, *Timebomb*. *Op. cit*., p. 179. The Institute of Medicine in *Ending Neglect* argues against the false assumption that a «lack of market» for new antituberculosis medicine, affirming that current worldwide expenditure on the four antituberculosis drugs is approximately $800 to $900 million dollars annually when the commonly quoted cost of developing a new drug is $350 million. This fact definitely justifies, even on «market terms», investing in the development of new medications and new vaccines. See *op. cit*., p. 140.

[32] *Idem*, p. 153. However, it is obvious that the governments of the most developed countries act in their own self interest –or for their «vital interests» as suggested by the Institute of Medicine– conforming to the dominant ethic of the «free market», and rarely to genuinely humanitarian motivations.

(Institute of Medicine 2000, pp. 149-158). Together with other industrialized nations, they would be the only ones with the scientific, technological and financial resources necessary for the long-term commitment required for the development of a vaccine. The Institute concludes its recommendations by citing the 1998 report entitled *The Future of Public Health,* which states that «the vital interests of our nation are clearly better served by a sustained and reinforced commitment of the United States to world health (Institute of Medicine 2000, pp. 158). Very different is a proposal put forth by Spain which considers that, in these times, given the absence of a «miracle vaccine, […] the best option becomes avoiding situations of poverty, overcrowding and segregation of less fortunate social groups» (Buj Buj, Antonio, 2001, p. 17).

Therefore, the task of controlling and eventually eliminating tuberculosis will hardly achieve any success if the current «imperfect civilization» based on the «personal interests» of the most powerful countries remains as it is. This civilization which today predicts the fatality of globalization, forgets, or does not wish to recall, that all historic deeds are constructed by human beings and by institutions capable of intervening in favor of life and human rights or, on the contrary, sacrificing them on the altar of an ideology that claims to be superior, be it «democracy», «the free market», or «the civilized world.»

A new collaborative spirit based more on solidarity than on an ethic of self-interest, the market ethic (Cfr. Hinkelammert, Franz J. 2005), on a genuine respect for human rights and the dignity of life and not on rationality and technological, economic or political supremacy, has become indispensable for overcoming colonialism and the barriers created by historical, cultural, political and economic differences between countries of the First and Third Worlds.

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