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The Impact of the US Economic Sanctions on Health in Cuba

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ABSTRACT: Economic sanctions, as a tool of coercive foreign policy, have been very popular in the 1990s. Sanctions are supposed to impose economic hardship on the country and make the government change its policies. However, there is strong evidence that sanctions cause severe civilian hardship. Reports suggest that sanctions can seriously harm the health of people who live in targeted nations. For this reason, the object of this paper is to address the health effects of economic sanctions in Cuba, because of its long history in facing sanctions. For more than a half of a century, the USA has imposed economic, commercial, and financial sanctions against Cuba. These sanctions have influenced the health of Cubans in many ways. This paper reviews the impact of economic sanctions on health, health services and food security. To do so, desk research and macro analysis have been used in the paper. Finding shows that sanctions have limited access to health services, medicine and adequate food in Cuba. According the results, sanctions have had negative and destructive effects on the health of Cubans and they have violated human rights. The performance of Cuban government has reduced their consequences, though.

KEYWORDS: Economic Sanctions, Health, Cuba.

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1. INTRODUCTION

Economic sanctions, as a tool of coercive foreign policy, are planned by one or more governments for various political purposes to put pressure on the target country through restricting economic relations. Economic sanctions are often regarded as an alternative to war or violent measures. The concept of economic relations is all kinds of economic interactions, including trade and financial relations. Countries impose sanctions in order to coerce other countries to change policies that they don't tolerate, for example to stop nuclear proliferation (Petrescu, 2010). After the cold war, sanctions have widely been seen as a less violent alternative to war; So that it was considered as a 'peaceful, silent, and deadly remedy'[3] that no nation can resist (Garfield, 1999). For this reason, many economic sanctions have imposed by countries and the United Nations after that.

Although the purpose of imposing sanctions is to put pressure on governments, there is strong evidence that economic sanctions cause severe civilian hardship and profound social and economic dislocation. Sanctions not only reverse development gains but also may increase suffering and death among civilians, particularly among the vulnerable groups, and their destructive effects cannot be mitigated by humanitarian assistance alone. Because of that, the macroeconomic and political impacts of sanctions have been heavily debated. To reduce the negative effects of sanctions, humanitarian policies and actions have developed and comprehensive analyses have done for some sanctioned countries (Morin and Miles, 2000).

The impacts of sanctions on health and health services are not limited to problems relating to the supply of medicine. Health and health services also depend on water and sanitation infrastructure, electricity and other functioning equipment such as ambulances and hospital facilities. Furthermore, the consequences of lack of access to foreign goods –both final goods, such as drugs and intermediate goods, such as raw materials and machinery for domestic production - affect the health of the citizens. Even if humanitarian exemptions were effective, which in practice they are often not, this would not be sufficient to maintain health and health services. Weakened physical and medical infrastructure on the one hand and decreasing revenue of sanctioned state- as a consequence of embargoes- for financing investment, maintenance and running costs on the other hand, reduce the ability of the health system to deliver services and respond to medical emergencies. As the quantity and quality of health services decline, people are less motivated to continue using them. Simultaneously, access and user rates go down because the civilian population is forced to engage in alternative social and economic activities to cope with the macroeconomic impact of sanctions on employment and livelihoods (Garfield, 1999).

The purpose of this paper is to address the health effects of economic sanctions in Cuba, because of its long history in facing with sanctions. We analyzed macro data to study some aspects of health impacts of economic sanctions in Cuba. Data come from World Bank, United Nations International Children's Emergency Fund (UNICEF), World Health Organization's (WHO), Foods and Agriculture Organizations (FAO) and the United States Census Bureau. Using data on health, health services and food security in Cuba, we find that sanctions have limited access to health services, medicine and adequate food in Cuba, and they have violated human rights in many ways.

The remainder of the paper is organized as follows. Section 2 presents a brief review of the literature on the relationship between economic sanctions and human right, and economic sanctions and health. Section 3 presents the method used in this paper. Section 4 dedicated to describe the effects of economic sanctions on health, medical care and food security in Cuba. Finally, conclusion of the paper is presented in Section 5.

[3] This term was used by US president Woodrow Wilson.

2. LITERATURE REVIEW

2.1. Economic Sanctions and Human Rights

Imposing sanctions on a country is to interrupt its communications, diplomatic and/or economic relations (Garfield, 1999). Economic sanctions, as a widely used tool of foreign policy, take many forms. Sanctions include mandating trade restrictions (for example, limiting imports from or exports to a sanctioned nation), freezing bank accounts, limiting international travel to and from an area, imposing additional tariffs, and exerting other pressures that are intended to slow key economic activities (Morin and Miles, 2000). Table 1 clearly shows the topology of economic sanctions.

A traditional argument in favour of the use of sanctions over military conflict has been that even if they have a lower probability of success than military conflict, the relatively low cost to both the sender and target might still make them a viable policy option. Unlike military conflict, sanctions are not intended to kill citizens of the target country (Drezner, 1998), so they are considered to be a more humane coercive policy (Allen and Lektzian, 2013). In line with this idea, after the cold war, as the global market expanded and direct military intervention by the major powers became less important (Garfield, 1999), many countries and the United Nations have increasingly used economic sanctions instead of military intervention to compel nations to end civil or extraterritorial war or to reduce abuse of human rights. Repercussions from these measures influence a country's economic development and, therefore, can also affect the overall welfare of a nation's population. In contrast to war's easily observable casualties, the apparently non-violent consequences of economic intervention seem like an acceptable alternative. But reports suggest that economic sanctions can seriously harm the health of persons who live in targeted nations (Morin and Miles, 2000).

Following the experience with sanctions in the 1990s, critics began to challenge this logic, arguing that sanctions are a potentially immoral foreign policy tool that indiscriminately and unjustly targets poor and innocent elements of society (Allen and Lektzian, 2013). Indeed, sanctions that have been imposed to force the government of target country to respect human rights may violate human rights themselves. Table 2 listed human rights which may be violated by economic sanctions.

International human rights were articulated to protect basic human needs (Garfield et all., 1995). In addition to political and civil rights, the 1948 Universal Declaration of Human Rights refers to a person's right to a standard of living that allows him or her to maintain health and well-being; this includes access to food and medical care (Article 25) (United Nations General Assembly, 1948). In 1976, the International Covenant on Economic, Social, and Cultural Rights proclaimed that all persons had a right to the highest attainable standard of physical and mental health; it called on all involved countries to ensure the prevention, treatment, and control of diseases and to create conditions that would ensure the delivery of medical care (Articles 12.1) (United Nations General Assembly, 1966). Although these responsibilities may be viewed primarily as domestic matters, the repercussions of economic sanctions imposed by other nations often result in a fundamental contravention of the spirit of the International Covenant (Morin and Miles, 2000).

International law permits parties to deviate from some provisions of human rights treaties during war, but humanitarian law is increasingly relied upon to protect human rights and balance military necessity with humanity (Doswald-Beck and Vite, 1993). The Fourth Geneva Convention of 1949 and the Additional Protocols of 1977 mandated the unhindered delivery of food and medical supplies to civilian populations in time of war and declared that medical centres, hospitals, and other components of the public health infrastructure that help to combat contagious diseases and epidemics must be maintained and protected. It seems reasonable to

expect that economic sanctions and war would operate within similar humanitarian constraints (Morin and Miles, 2000).

Indeed, humanitarian goods, such as food or medicine, are often exempt from sanctions. However, this can have little practical effect if, for example, foreign currency is not available to import such goods, foreign bank accounts are frozen, or borders are closed (Garfield et all., 1997). In addition, virtually unattainable terms of trade, such as strict requirements for export licenses or restrictions on transportation, make it difficult to deliver food and medicine (Kirkpatrick, 1996).

The relation between the health of a country's population and the state of its economy is complex and interdependent. In its 1993 report investing in health, the World Bank supported the view that a healthy population leads to economic growth; conversely, economic growth can lead to a healthier population. Therefore, it becomes apparent that stifling the economic lifeline of a country through sanctions curtails not only the development of the economy but also the health of individual persons and violates cases of human rights (Morin and Miles, 2000). For this reason, humanitarian agencies (for example, UNICEF), religious organizations, networks of professional health organizations and human rights groups have all been critical of sanctions. While no simple or uniform policy on sanctions may be possible, the major humanitarian effects can be anticipated and prevented or attenuated. It should be noted that accurate assessment of sanction's effects is very important. In addition, affected countries can be helped to meet the basic needs of their citizens during sanctions, and their ability to recover and develop can be strengthened in the process (Garfield, 1999).

Medical ethics is also an important factor in improving and promoting people's health in sanctioned countries. Individual physicians are professionally obliged to relieve suffering and to promote health. In addition, physicians and their professional organizations must advocate the health of the public. Clinically, this refers to promoting the highest standards of medical care for individual patients. At a societal level, physicians must be wary of the tension that may exist between government policy and the healing duty of medicine (Morin and Miles, 2000).

Another important link can be seen between medicine, health, and human rights. The health of individuals and of populations, as emphasized respectively by medicine and public health, can encompass more than physical and mental health and the prevention of disease, disability, and death. The definition of health that was developed by the World Health Organization refers to a "state of complete physical, mental and social well-being" (Mann et all, 1994). In this regard, "the promotion and protection of human rights and promotion and protection of health are fundamentally linked" to ensure the advancement of human well-being. This proposition concurs with the belief that higher socioeconomic status and better health status are related (Morin and Miles, 2000).

Table1. The Topology of Sanctions

Diplomatic and Political Measures
• Public protest, censure, condemnation; • Postponement, cancellation of official visits, meetings, negotiations for treaties and agreements; • Reduction, limitation of scale of diplomatic representation affecting status of post, diplomatic personnel, consular offices; • Severance of diplomatic relations; • Withholding recognition of new governments or new states; • Vote against, veto admission to international organizations; vote for denial of credentials, suspension or expulsion; removal of headquarters, regional offices of international organizations from target.
Cultural and Communications Measures
• Curtailment, cancellation of cultural exchanges, scientific cooperation, educational ties, sports contacts, tourism; • Restriction, withdrawal of visa privileges for target nationals; • Restriction, cancellation of telephone, cable, postal links; • Restriction, suspension, cancellation of landing and over flight privileges; water transit, docking and port privileges; land transit privileges.
Financial Measures
• Reduction, suspension, cancellation of development assistance, military assistance; • Reduction, suspension, cancellation of credit facilities at concessionary or market rates; • Freeze, confiscation of bank assets of target government, target nationals; • Confiscation, expropriation of other target assets; • Freeze interest, other transfer payments; • Refusal to refinance, reschedule debt repayments (interest, principal); • Vote against loans, grants, subsidies, funding for technical or other assistance from international organizations.
Commercial and Technical Measures
• Import, export quotas; • Restrictive licensing of imports, exports; • Limited, total embargo on imports, exports (Note: arms embargoes); • Discriminatory tariff policy, including denial of most favoured nation trade, access to General Preferential Tariff; • Restriction, cancellation of fishing rights; • Suspension, cancellation of joint projects; • Suspension, cancellation of trade agreements; • Ban on technology exports; • 'Blacklisting' those doing business with the target; • Curtailment, suspension, cancellation of technical assistance, training programmes; • Ban on insurance and other financial services; • Tax on target's exports to compensate its victims.

Source: Garfield (1999)

Table2. Human rights which may be violated by economic sanctions

Human Rights	Relevant United Nations Instruments
Right to life	UDHR*(3); ICCPR**(6)
Right to liberty and security of person	UDHR(3); ICCPR(9)
Right to freedom of opinion and expression	UDHR(19); ICCPR(19);CRC***(13)
Right to adequate food, and to be free from hunger	UDHR(25); ICESCR****(11)
Right to the highest possible standard of physical and mental health	CRC(24); ICESCR(12)
Right to the provision of medical assistance and healthcare	UDHR(25); ICESCR(12);CRC(24)
Right to adequate clothing and housing	UDHR(25); ICESCR(11)
Right to adequate environmental conditions	ICESCR(12)
Right to a standard of living adequate for health and well-being	UDHR(25); ICESCR(11);CRC(27)
Right to education	UDHR(26);ICESCR(13); CRC(28)
Right to work, and to just and favourable conditions of work	UDHR(23); ICESCR(6,7)
Right to social security	UDHR(22); ICESCR(9);CRC(26)
Right to participate in government	UDHR(21); ICCPR(25)

Source: Hoskins (1998)

Relevant Human Rights Instruments:

* Universal Declaration of Human Rights (UDHR)

** International Covenant of Economic, Social and Cultural Rights (ICESCR)

*** International Covenant on Civil and Political Rights (ICCPR)

**** Convention on the Rights of the Child (CRC)

2.2. Economic Sanctions and Health

Economic sanctions are often blamed for human suffering. Even officials involved in imposing economic sanctions admit that sanctions could have an adverse effect on the population.[4] There are many ways in which economic sanctions affect the population in the sanctioned countries. One of the most direct ways they affect health is through the lack of proper nutrition. Cuts in food imports lead to shortages in calories intake and to under nutrition which makes children and other vulnerable groups such as the chronically ill more susceptible to tuberculosis, measles, and other infectious diseases. Increases in prices of food lead to poor nutrition during pregnancy that can have a negative effect on the baby (Garfield, 1997).

Sanctions can affect children also through water. Sanctioned countries experience shortages of materials and substances needed to clean the water which leads to less access to clean water. Dirty water causes diseases in people, particularly children and the vulnerable group (Garfield and Santana, 1997). In addition, reduction of raw materials and intermediate goods for the production of sanitary products increases the negative impact of sanctions on health (Petrescu, 2010).

[4].In an editorial in the Annals of Internal Medicine, Madeleine Albright, former U.S. Secretary of State, mentioned that "When the United Nations or the United States imposes sanctions against a regime; It does not intend to create unnecessary hardships for innocent people, especially children and infants. Good intentions, however, do not automatically translate into good results" (Albright 2000).

Lack of medicines is another problem caused by embargo in the embargoed countries. Imports of authorized medicines drop and imports of unauthorized and counterfeited drugs increase which lead decreases in efficiency of these drugs and severe side effects (Garfield, 1999). Lack of proper medicines leads the authorities to encourage the pharmacists to prepare old fashion remedies and the population to self-diagnose and to use traditional cures (Kandella, 1997). Although drugs and food are usually excluded from the sanctioned list, there is not adequate foreign currency for imports of these goods due to decrease of export in sanctioned countries. Even if there is sufficient foreign currency, the exchange is usually very difficult. As a result, drug shortages will be widespread in countries under sanctions. While it might be possible to produce some vital and rare drugs in sanctioned country, but decrease in the import of raw materials needed for drug production is an obstacle to deal with the lack of drugs.

Furthermore, due to lack of foreign currency, the exchange rate is likely to rise, increasing prices of imported goods. Thus, foreign currency shortage, difficulty of currency exchange among foreign banks and the sanctioned country and increase in prices of raw materials needed for domestic production may increase prices in the sanctioned country. Hence, the purchasing power of people for buying goods (for example foods and medicines) and services (such as medical and health services) is reduced, and the health of people is negatively affected.

Economic sanctions affect the quality of health care and can have huge negative implications on people's health. Insufficient vaccines in sanctioned countries can lead to outbreaks of diphtheria contagious diseases among children. Shortages of oil, gas, and electricity mean frequent power cuts and fuel shortages which affect emergency medical services, heating hospitals, and patient transportation to hospitals. These poor conditions in hospitals lead to increase in mortality. Hospitals also have fewer supplies and perform fewer tests (Garfield, 1999).

Also, sanctions can indirectly affect health through air pollution. Because of restrictions on the entry of new technologies, and the use of obsolete machinery in sanctioned countries, air pollution may rise, and therefore the health of population- especially vulnerable population- may be at risk. Sometimes countries under sanctions produce some essential goods for living to compensate their shortages. But usually due to lack of access to updated technology and knowledge for producing these goods, the produced goods may have low quality, and this may affect the health of citizens. These are only some of the channels through which sanctions affect the health and mortality of people- particularly children. In section 4 we will discuss some instances of the health effects of sanctions in Cuba.

3. METHODOLOGY

To determine the impacts of sanctions on the health of Cubans, desk research method is used. We have considered health effects of sanctions in three aspects: the impact of sanction on health indices, health services and food security. Macro analysis is applied to show the effects of sanction. In this regard, we have used data from World Bank, United Nations International Children's Emergency Fund (UNICEF), World Health Organization's (WHO), Foods and Agriculture Organizations (FAO) and the United States Census Bureau.

4. ECONOMIC SANCTIONS AND HEALTH IN CUBA

4.1. An Overview of Economic Sanctions against Cuba

The United States first placed an embargo on Cuba in 1960 ("The Cuban Embargo", 2014, April 5).[5] Although the embargo has always had a negative effect on the Cuban economy, its effect on

[5]. During détente in the 1980s sanctions were relaxed, permitting Cuba to purchase goods from US companies through third countries.

the health care system had been significantly offset by subsidized trade and aid from the former Soviet Union, countries in the socialist bloc, and Western Europe. Public health and universal access to free medical care have been priorities of Fidel Castro's government since its inception in 1959. Polio, malaria, tetanus, diphtheria, and human rabies have been eradicated from the island (American Association of World Health, 1997). General practitioners and nurses delivered preventive care through the Family Doctor Program; one physician and one nurse were personally responsible for each neighbourhood of 100 to 200 Cuban families. Cuba had twice as many physicians per capita as the United States, and the infant mortality rate was 10 per 1000 births (Barry, 2000).

In the 1980s, Cuba was one of only several developing countries with infant, child and maternal mortality rates approaching those of developed countries. But while the other 'good outcome' countries – China, Costa Rica, Kerala state in India and Sri Lanka – also had moderate to high rates of economic growth, per capita income in Cuba declined (Garfield, 1999). However, in the late 1980s and early 1990s, health care statistics in Cuba were far better than in other Latin American countries, and Cuban physicians were in demand in underserved foreign countries because of their expertise in public health promotion (Barry, 2000).

However, the socialist bloc crumbled in the late 1980s, and the U.S. embargo suddenly became much more of a threat to the Cuban health care system. Cuba lost $4 to $6 billion annually in subsidized trade, and almost overnight, imports required hard currency (American Association of World Health, 1997). Cuba no longer had access through the eastern bloc to the raw materials needed to manufacture pharmaceutical products, and lack of currency made it difficult to purchase drugs and medical equipment in western Europe. With the demise of subsidized trade, the absence of aid from the former Soviet Union, and the progressive tightening of the U.S. sanctions, Cuba's model health care system has become threatened by serious shortages of medical supplies. After that, profound changes have occurred in Cuban health care system that was once considered as a preeminent model for developing countries (Barry, 2000).

In 1992, the US embargo was made more stringent with the passage of the Cuban Democracy Act. The Cuban Democracy Act severely aggravated the situation by prohibiting foreign subsidiaries of U.S. companies from trading with Cuba (Barry, 2000). All US subsidiary trade has since been effectively prohibited. Ships from other countries were not allowed to dock at US ports for six months after visiting Cuba, even if their cargoes are humanitarian goods (Garfield, 1999). This act reflects one of the few sanctions worldwide that explicitly includes food and further defines trading restrictions that block access to medical supplies.

The U.S. sanction against Cuba, one of the few that includes both food and medicine, has been described as a war against public health with high human costs (Eisenberg, 1997). But pursuant to Trade Sanctions Reform and Export Enhancement Act (TSRA) in 2000, "the President shall terminate any unilateral agricultural sanction or unilateral medical sanction that is in effect as of October 28, 2000" (TSRA, 2000, October 28, article 7202(b), p1517). Of course, this title shall not affect those unilateral agricultural or medical sanctions that prohibit, restrict, or condition the provision or use of any agricultural commodity, medicine, or medical device that is (A) controlled on the United States Munitions List established ; (B) controlled on any control list established under the Export Administration Act of 1979 or any successor statute ; and (C) used to facilitate the design, development, or production of chemical or biological weapons, missiles, or weapons of mass destruction (TSRA, 2000, October 28, article 7203(2), p1517).

However, according to the UN Development Programme, Cuba has already achieved three out of eight Millennium Development Goals (universal primary education, promoting gender equality and empowering women, and reducing child mortality) and is on track to achieve the five other goals by 2015 or is very likely to do so (Amnesty International, 2009). In spite of

Cuba's achievements, the US embargo has been a significant factor in hindering further progress on meeting the MDGs; because the embargo affects the capacity of the Cuban government to progressively work towards the realization of some economic, social and cultural rights. Nevertheless**,** in 2009, President Obama lifted restrictions that had prevented US citizens from visiting relatives in Cuba, and sending remittances to them (Tutton, 2009). But despite numerous criticisms, no decision has been taken to stop the sanctions on Cuba and the U.S sanctions on Cuba have continued for over 5 decades ("The Cuban Embargo", 2014, April 5).

4.2. Data Analysis Results

4.2.1. The Effects of Sanctions on Health Indices

Infant, child and maternal health outcomes in Cuba have already been among the best in Latin America, and have continued to improve. For example, neonatal mortality rate[6] in Cuba was 2.6 per 1000 live births in 2012. Also, infant and under-5 mortality rate in 2012 have been reported 4.3 and 5.5 per 1000 live births, respectively. Despite the pressures of sanctions and a big drop in available calories, we can see a continuous improvement in these indicators during the considered period (Figures 1, 2 and 3). In addition, about 100 percent of all births (99.9%) occur in health institutions; and the percentage of all births below 2.5 kg is decreased. UNICEF has reported that the maternal mortality ratio was about 33.4 per 100,000 births in Cuba in 2012 (Figure 4); According to the latest available data, improvement in these indicators continues.

Some of the factors associated with these good outcomes are a strong family doctor program, food rationing, routine monitoring of weight and weight gain among pregnant women and young children, medical surveillance of pregnancies, long-range investments in general education issues (Garfield, 1999). In Cuba, preventive medical care, diagnostic tests, and medication for hospitalized patients are free, and many medical services are subsidized by the government. Cuban government is responsible for the bulk of health expenditure; so that the share of public health expenditure of total health expenditure was over 94 percent in 2012 (Figure 5). Per capita expenditure on health in terms of PPP index was close to $ 460 in 2011, which about 407 dollars has been done by the public sector (Figure 6). More than 11.5 percent of total government expenditure is allocated to health in 2012, however, it has significantly decreased compared with 15 percent in 2011 (Figure 7). Cuba greatly has improved its health systems during sanctions. Despite the tightening of the embargo, Cuban authorities have thus been able to make more efficient and timelier decisions on the use of very scarce resources (Garfield, 1999). With this performance, Cuba has been among the most successful countries in health indicators.

It should be noticed that infant, child and maternal health outcomes in Cuba have had short-term setbacks in some years. During the worst years of the economic decline and retooling of the health system, in 1993 and 1994, were poor health outcomes recorded. For example, maternal mortality among Cubans rose sharply from formerly low levels during this period. Extraordinary efforts to provide extra food rations to pregnant women and revamp birthing procedures rapidly reversed this trend (Garfield, 1999). During this time, infant mortality was reduced; the decreasing rate of infant mortality was declined, though. Subsequent efforts to improve maternal nutrition and conditions for delivery led to a subsequent decline in this rate. But along with a drop of GDP growth from 12.1 percent in 2006 to 1.45 percent in 2009, Cuba entered to a recession once again, and this was effective in the growth of maternal deaths to 46.9 per 100,000 live births in 2009. However, after serious efforts in the area of health system, improvement in the index resumed in 2010 (Figure 4).

[6] Neonatal mortality rate is the number of neonates dying before reaching 28 days of age.

Death rate per 1,000 people in Cuba decreased from 8.83 in 1960 to 5.83 in 1978; but after that, it has totally increased, so that the number of deaths per 1,000 people was 7.62 in 2012 (Figure 8). This increase is almost entirely due to an increase in mortality among those aged 65 years and up. This is mainly due to shortages of essential medicines and laboratory reagents for those with chronic diseases requiring regular monitoring. However, according to World Bank data, life expectancy in Cuba was approximately 79.07 years in 2012 (Figure 9), which was far higher than the average of life expectancy in Latin America and the Caribbean (74 years).

Figure 1. Neonatal mortality rate in Cuba

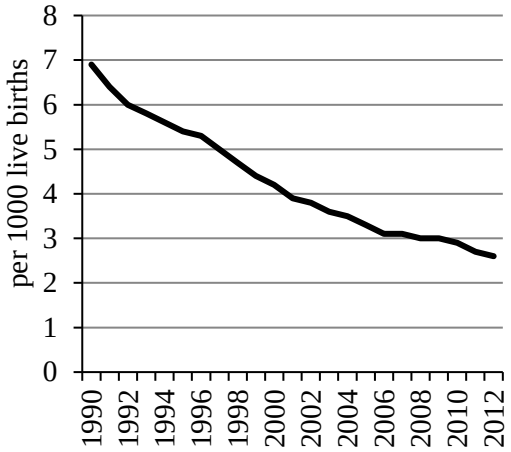


Figure 2. Infant mortality rate in Cuba

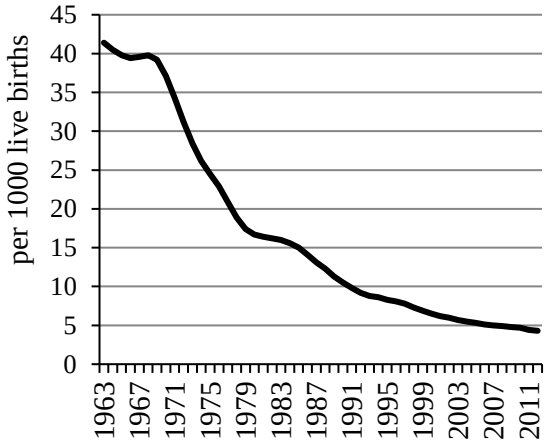


Figure 3. Under-5 mortality rate in Cuba

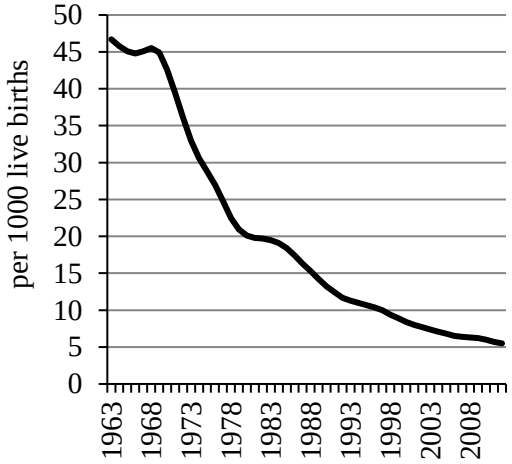


Figure 4. Maternal mortality rate in Cuba

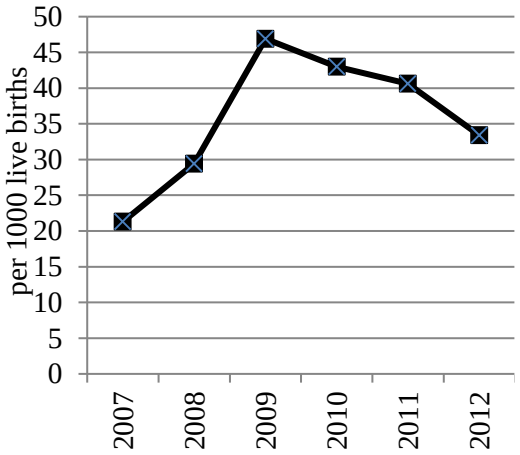


Figure 5. The private, public and total expenditure on health in Cuba

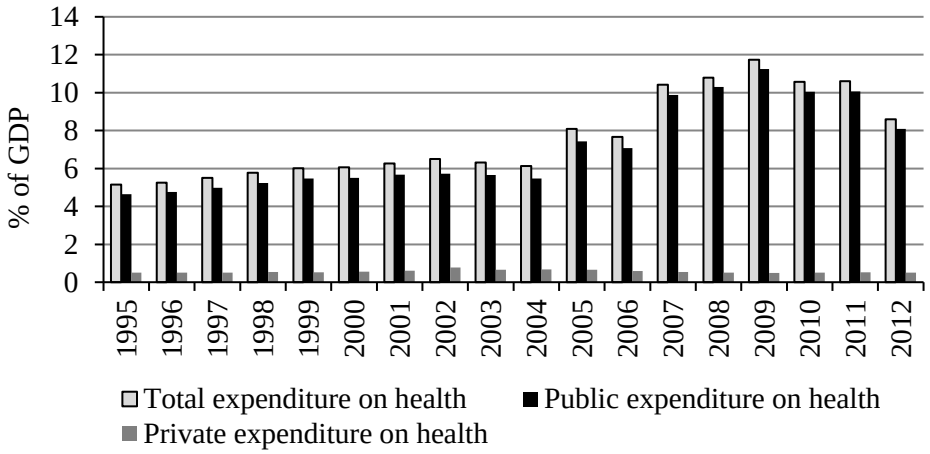


Figure 6. Per capita health expenditure (PPP) in Cuba

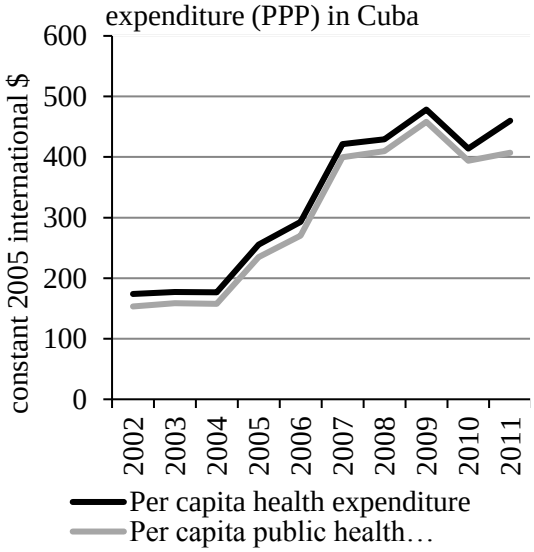


Figure 7. Share of public health expenditure of total public expenditure in Cuba

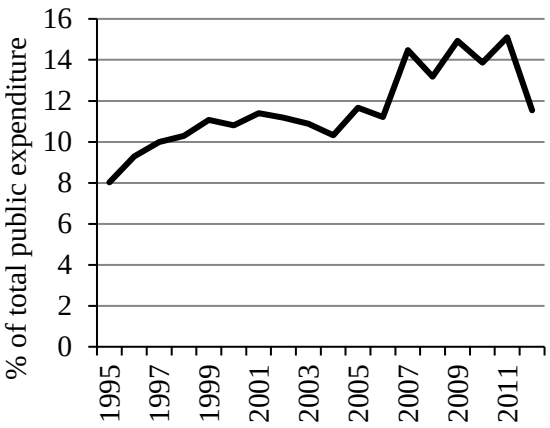


Figure 8. Death rate in Cuba

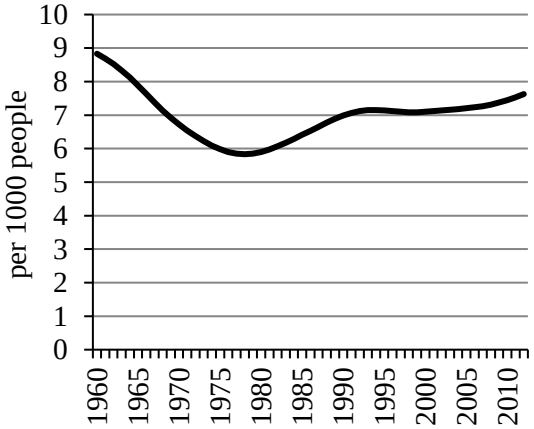
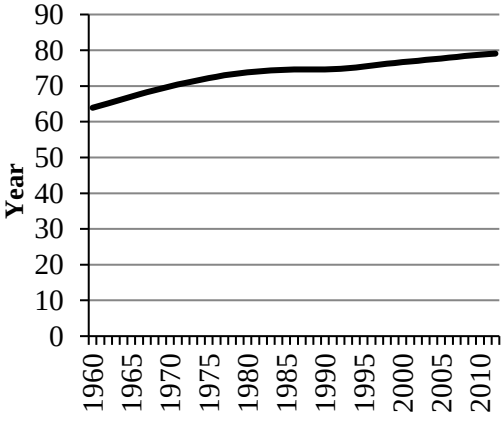


Figure 9. Life expectancy at birth in Cuba



4.2.2. The Effects of Sanctions on Food Security

The Cuban Democracy Act is one of the few sanctions worldwide that explicitly includes food and further defines trading restrictions that block access to medical supplies (Barry, 2000). About half of all proteins and calories in Cuba were imported prior to sanctions. But after imposing sanctions on Cuba, food import, as well as other goods import, has decreased. Importation of foodstuffs declined about 50 percent from 1989 to 1993, and milk production declined by 55 percent from 1989 to 1992 due to loss of imported feed and fuel. Reduced imports and a shift toward lower quality protein products are significant health threats: a daily glass of milk used to be provided to all children in schools and day care centres through age 13; it was subsequently provided only up to age six. It is estimated that sanctions on Cuba create a 'virtual tax' of 30 percent on all imports. These have higher purchase and shipping costs because they have to be purchased from more expensive and more distant markets (Garfield, 1999).

After the passing of the 2000 Trade Sanctions Reform and Export Enhancement Act, which eased exports of agricultural products and medicine to Cuba, the process for obtaining licenses for exports of agricultural products to Cuba has been speeded up. So that licenses can be issued within 14 days. The Department of Commerce authorizes the use of these licenses. Due to this act, the United States exports to Cuba have increased: the total US exports to Cuba from 2001 to 2008 increased from US$ 7.2 million to US$ 711 million, according to the data from the US Census Bureau. But after that, it began to decrease, reached to $ 359 million in 2013. Total US food export to Cuba from 2004 to 2013 is given in table 3. As it is shown, US food exports increased from about $380 million in 2004 to $662 million in 2008. But then, in a decreasing trend, it reached to $335 million in 2013.

Increase in US food exports to Cuba after the passing of TSRA, has had a significant impact on the import of food and food supply in Cuba. This is clear in Figure 10; increase in food imports started in 2002, mainly by the increase of US import to Cuba. In 2008 in which the US food exports to Cuba reached to its peak, total food imports in Cuba increased suddenly, and then, by reducing the import of US food products, total food imports in Cuba significantly reduced. Furthermore, Figure 11 shows the supply of food (includes vegetal and animal products) in Cuba; in this chart it is clear that during the worst years of the economic decline in Cuba (1993 and 1994), per capita food supply at kilo calories per day greatly reduced (to about 2,300 kilo calories per day). But after that, government measures make the situation better and therefore, an increasing trend of food supply began. In recent years, in spite of its light fluctuation, food supply has remained constant close to 3200 kilo calories per day. It should be noticed that food production as well as food imports affects the trend of food supply. In this regard, the trend of food production index in Cuba is shown in figure 12.

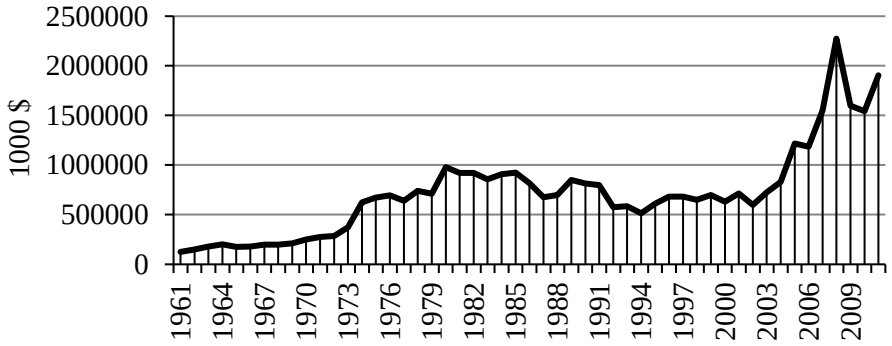
Despite the improvement in the process of importing food to Cuba, UNICEF reported that Cuba was unable to import nutritional products destined for children and for consumption at schools, hospitals and day care centres. This had an adverse effect on the health and nutritional status of the population and is believed to be a contributing factor in the high prevalence of iron deficiency anaemia (Figure 13). In 2007, this condition affected 37.5 percent of Cuba's children under three years old, according to UNICEF. Cuba can import these products from other countries, but there are major shipping costs and logistical challenges to contend with.

The Cuban approach to get rid of these problems has been based on the dual policies of equity and priority for vulnerable groups. Cuban government which began a food rationing program in 1962 to guarantee all citizens a low-priced basket of basic foods is now skilled at rationing food

and other scarce goods.[7] The Cuban government allocates a large amount of budget annually to subsidize the food ration; as a result, the cost of each food ration in Cuba is far less than other countries. Distribution of food, clothing, and other scarce goods to target groups, including women, the elderly and children, is facilitated via social service institutions, workplaces, pre-schools and maternity homes. These measures have neutralized a large part of the negative effects of sanctions on the nutrition. For example, according to the World Health Organization statistics, the percentages of underweight children (low weight for age) and stunting children (low height for age) decreased from 3.4 and 7 percent in 2000 to 1.3 and 3.7 percent in 2005, respectively.

As figure 14 shows, prevalence of undernourishment in Cuba reached to about 22 percent of the population in 1994. But then, along with the proper performance of government, it began to decrease and it reached to 5 percent in 2000; after that prevalence of undernourishment has fixed at this level. Figure 15 shows the depth of the food deficit in Cuba. The depth of the food deficit which is measured by the World Health Organization (WHO) indicates how many calories would be needed to lift the undernourished from their status, everything else being constant. Analyzing of this indicator for Cuba shows that after a big depth of the food deficit in Cuba in 1995 (159 kcal per day), depth of the food deficit in Cuba decreased to about 4 kcal per day in 2013. Furthermore, Figure 16 represents the prevalence of food inadequacy according to the Food and Agriculture Organization (FAO) data. This figure also confirms the previous findings from figures 14 and 15. It shows that after reaching its peak in 1994 (about 37 percent), the prevalence of food inadequacy in Cuba began to decrease, so that it reached to only 5.8 percent in 2001.

Figure 10. Food and animals import in Cuba



[7] For example; It has since used mass media and workplaces to promote the use of bicycles in place of cars, animals in place of tractors and trucks (for which fuel and parts are lacking), and the consumption of vegetable-based foods in place of scarce animal protein. In hospitals, rooming-in and other baby friendly changes have further promoted breast feeding. Eighty per cent of all births now occur in such baby friendly hospitals. The percentage of breast feeding raised from 63 percent in 1990 to 97 per cent in 1994.

Figure 11. Food (vegetal and animal products) supply in Cuba

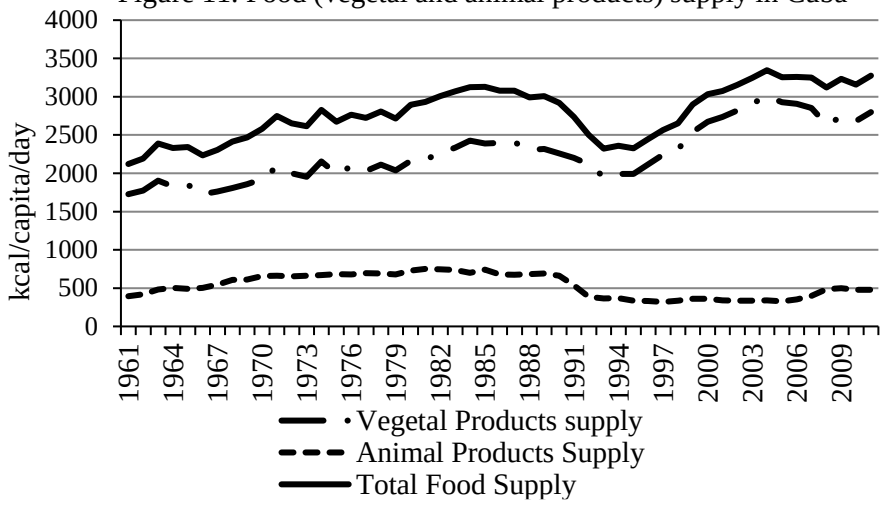


Figure 12. Food production index in Cuba

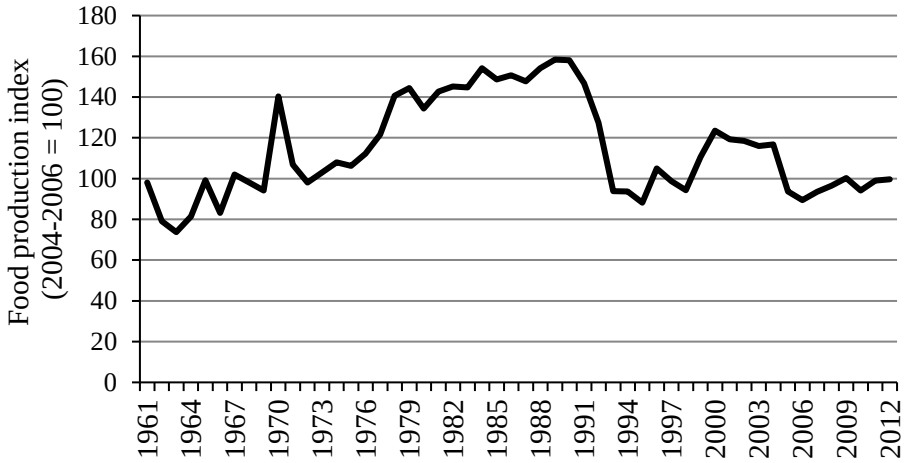


Figure 13. Prevalence of anemia among children in Cuba

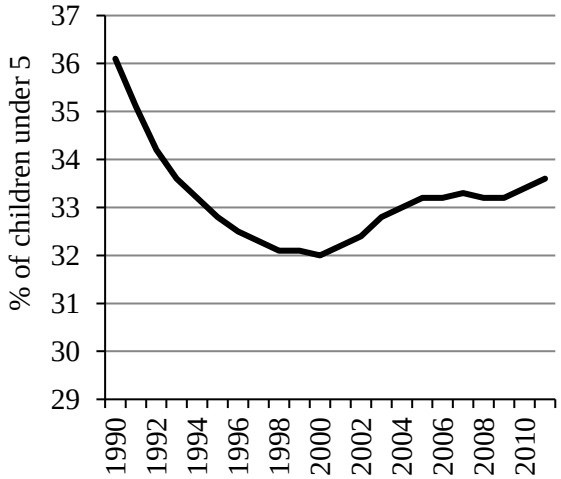


Figure 14. Prevalence of undernourishment in Cuba

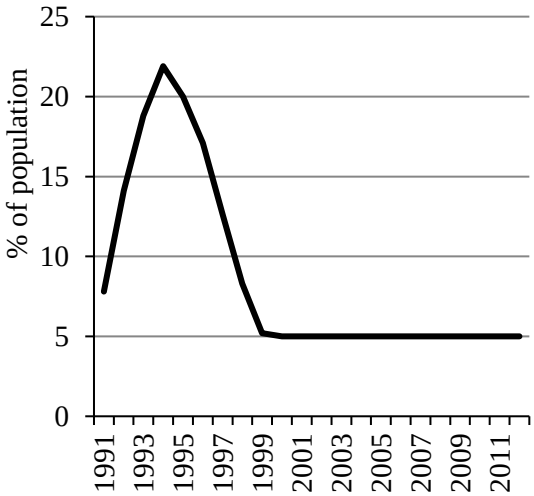
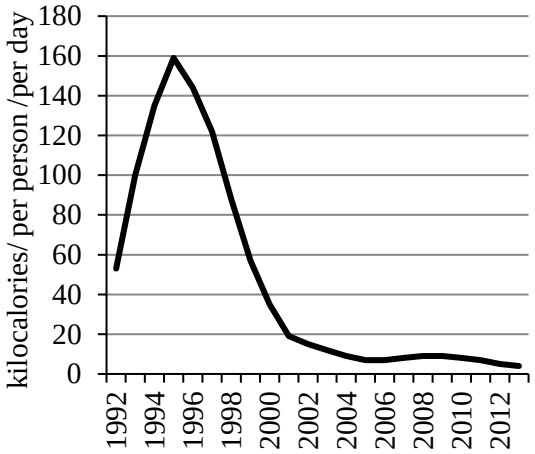
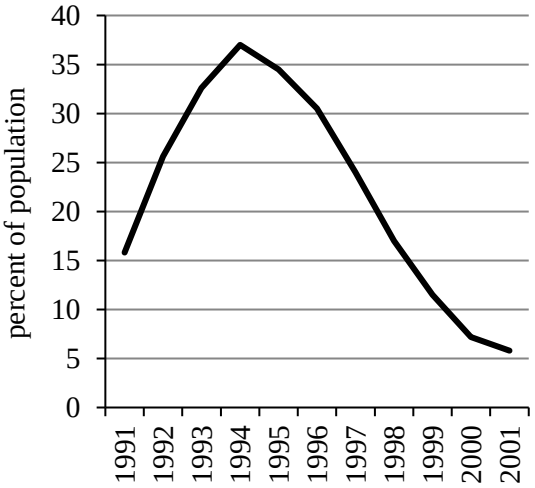


Figure 15. Depth of the food deficit in Cuba



16. Prevalence of food inadequacy in Cuba



4.2.3. The Effects of Sanctions on Health Services

The US trade embargo on Cuba is endangering the health of millions by limiting Cubans' access to medicines and medical technology. The embargo restricts the export of medicines and medical equipment from the US and from any US-owned company abroad (Tutton, 2009). Although embargo legislation since World War II has usually included exemptions for humanitarian goods, the 1992 embargo legislation on Cuba does not permit sales of food and requires unprecedented 'on-site verification' for the donation of medical supplies. The legislation does not state that Cuba cannot purchase medicines from US companies or their foreign subsidiaries; however, such license requests have usually been delayed or denied (Garfield, 1999). This makes the export of medical equipment and medicines to Cuba very difficult in practice. As US pharmaceutical and biotechnology companies merged with European companies, Cuban physicians had to cope with a progressive lack of critically needed medicines, diagnostic tools, vaccines, and medical machinery that had previously been available or affordable (Kirkpatrick, 1996). Several public health catastrophes have occurred in 90s due to the reduction of foods, health products and medicine (Barry, 2000).[8]

A large part of all new medicines produces by US-patented companies. Thus, due to US sanctions on Cuba, these are not available in Cuba at any price except by smuggling. Physicians sometimes spend much of their day not treating patients but going from centre to centre in search of a scarce medicine for a single patient. In addition, ambulance access has become scarce as spare parts are increasingly difficult to obtain (Garfield, 1999). Also physicians in Cuba always worry that an international supplier will be bought out by a US company, leaving medical equipment without replacement parts and patients without continuity of medications (Tutton, 2009). Furthermore, sanction does not permit the sale of active ingredients or raw materials to the Cuban pharmaceutical industry. Therefore, domestic production of drugs is subject to problems. Products which are patented in the US are covered by the embargo. This particularly affects AIDS treatments because the latest medicines for AIDS treatments are usually covered by US patents, and therefore these products are rare in Cuba.

[8] For example, an epidemic of blindness that was partially attributed to a dramatic decrease in access to nutrients, an outbreak of the Guillain–Barre´ syndrome caused by lack of chlorination chemicals, and an epidemic of lye ingestion in toddlers due to severe shortages of soap. For more detailed information see Barry (2000).

In spite of facilitating the process of obtaining license for exports of US agricultural products to Cuba after the passing of TSRA in 2000, obtaining license for exports of medicine and medical devices to Cuba still hasn't eased and continues to be subject to the requirements provided for in the Cuban Democracy Act (Amnesty International, 2009). The Department of Commerce, in its 2008 Report on Foreign Policy-Based Export Controls, clearly states the restrictions in exporting goods and medicines to Cuba.[9] Table 3 summarizes the values of US exports to Cuba of medical and pharmaceutical products from 2004 to 2013 as provided by the US Census Bureau. Donations of medicine and medical equipment to Cuba also face restrictions from the US authorities. An export license is required even when the donation fulfils a humanitarian purpose. For instance, in June 2007, officials at the Maine-Quebec (Canada) border stopped and pushed back a shipment of medical donations for Cuba (Amnesty International, 2009).

According to data from the World Health Organization, death by non-communicable diseases (including cancer, diabetes mellitus, cardiovascular diseases, digestive diseases, skin diseases, musculoskeletal diseases, and congenital anomalies) in Cuba has increased due to the lack of access to medicines and medical equipment needed for diagnosis and treatment of chronic diseases. Death by non-communicable diseases as a share of total deaths increased from 79.7 percent in 2000 to 85.5 percent in 2012. During more than 5 decades of sanctions, patients with AIDS and cancer are the most affected ones (Tutton, 2009).

Table3. US food, medicinal and pharmaceutical exports to Cuba from 2004 to 2013
(in US dollars)

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Laboratory Testing Instruments	30	8	7	0	0	0	36	0	0	29
Medicinal equipment	468	396	753	366	295	30	146	80	0	1720
Pharmaceutical Preparations	1298	1747	2111	1862	940	487	536	843	3096	1560
Total US Medicinal and Pharmaceutical Exports to Cuba	1796	2151	2871	2228	1235	517	718	923	3096	3309
Total US food export To Cuba	380285	336329	314407	415603	662143	499417	326318	325609	429018	335152

Source: Bureau of the Census, United States, Foreign Trade Statistics (www.census.gov).

4.3. Findings

We analyzed macro data to study the health impacts of sanctions in Cuba. We distinguished three aspects relating to the health area and considered the effects of sanctions on each of them. Particularly we study the impacts of sanction on health indices, health services and food security. Finding on first aspect shows that despite pressure imposed by sanctions, Cuba has succeeded to improve health indices continuously. Reviewing the impacts of sanctions on food

[9] For detailed information see 2008 Report on Foreign Policy-Based Export Controls, p. 34.

security presents that sanctions have reduced Cuban government's ability to provide universal access to basic foods. However, proper efforts of government, for example in food rationing, have been an effective tool to compensate the negative effects of sanctions on food security. After the passing of the 2000 Trade Sanctions Reform and Export Enhancement Act, the export of US agricultural products to Cuba has eased. Easing the export of agricultural products to Cuba by TSRA in 2000 has had a positive impact on reducing food shortage, and it has helped government to realize the right to adequate food. But UNICEF data confirm that Cuba is still unable to import adequate nutritional products destined for children and for consumption at schools, hospitals and day care centres.

Finally, findings on the impacts of sanction on health services show that the export of medicines and medical equipment to Cuba is still limited, and it endangers the health of Cubans. This especially affects the treatments of chronic patients. Limited access to medicines and medical equipment prevents realization of the right to the provision of medical assistance and healthcare. It should be noted that proportion of death by communicable diseases and maternal, prenatal and nutrition conditions has decreased. As discussed before, this outcome represents an acceptable performance of Cuban government in this area. But death by non-communicable diseases in Cuba has increased due to the lack of access to medicines and medical equipment needed for diagnosis and treatment of chronic diseases.

5. CONCLUSION

Economic sanctions have been a common instrument in foreign policy in 20th century. Although economic sanctions are imposed to force governments to change their policies, they have irreparable effects on people's health in sanctioned countries. Because economic sanctions result in shortages of food and medical supplies, their most severe consequences are often felt by the persons who are least culpable and most vulnerable; untoward health sequela usually occur in civilian rather than military populations. It has been shown that women and children younger than 5 years are particularly affected by food shortages and weakened public health infrastructures caused by embargoes. In general, economic sanctions have unintended and deep effects on the health and nutrition of vulnerable populations in sanctioned country. Because of this, economic sanctions are exposed to huge ranges of critics by humanitarian groups.

This study examined the effects of US sanctions on the health of Cubans. To do so, a large set of latest data is used, and this makes the paper different from other similar works. Especially using data from various sources, we analysed macro data in three aspects relating to the health area. The results are consistent with other studies; showing that economic sanctions have affected the considered aspects of health, especially food security and medical services, in Cuba. However, government thwarted much of the negative consequences of sanctions by properly designed programs, rationing and subsidizing to increase food security, and promoting medical services.

These results have important policy implications. First, sanctioned governments should be able to make efficient and timely decisions on the use of very scarce resources after facing economic sanctions. To show a proper reaction, sanctioned governments must try to realize the health impacts of sanctions and their magnitudes carefully. Second, humanitarian aid should be provided immediately after the onset of the sanction to reduce the negative consequences of sanctions on health.

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ETHICAL CONSIDERATION

Authenticity of the texts, honesty and fidelity has been observed.

AUTHOR CONTRIBUTIONS

Planning and writing of the manuscript was done by the authors.

CONFLICT OF INTEREST

Author/s confirmed no conflict of interest.

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