



The Cuban Healthcare System: An Insight

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Authors' contributions

This work was carried out in collaboration among all authors. The concept of this study, data analysis, drafting and finalizing of the results were done by author NZ. The article was critically reviewed and finally approved by author FA. While the literature research was done by authors AA, NI, SF and MS. All authors read and approved the final manuscript.

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ABSTRACT

All the countries in the world are struggling to improve their healthcare systems regardless of being rich or poor. Talking about Cuba, it represents an example of well-developed healthcare system and policies which is comparable to developed countries of the world. The success of Cuban healthcare system largely depends upon its strong primary health care system, proper immunization, robust public health policies, treating all the population classes equally providing them with free healthcare services. The control of infection spread and non-communicable diseases also contributes to the success of Cuban Healthcare system. We have discussed the Cuban health care system from start till the current situation and also, we performed SWOT analysis to bring the clearer depiction of the Cuban Healthcare System as it highlights the key internal and external issues which are further discussed in detail.

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1. INTRODUCTION

According to the WHO healthcare systems are responsible for restoring, promoting and maintaining health. Around the world, healthcare systems are different because of their variable mix of components. Today the dynamics of the healthcare are changing every day, the rate of world population is increasing and with that the rate of multimorbidity is also increasing [1]. Innovations in health and medicine are the only key factors which can be helpful in such scenarios [2]. Also the majority agree to the fact that good health system should consistently improve, respect the rights of all the individuals, should be transparent, accessible to everyone regardless of any difference and should provide financial security [3].

The Republic of Cuba has been well known and respected for its egalitarian healthcare system. It has always put Health on the priority since 1959 and devoted its resources and effort for the development of the National Health System. This system continuously moving near its objectives, making progress towards the universal health goals [4]. It is the most populated country in the Caribbean having African and American community dominating in the eastern provinces more than the rest. The population is well educated with strong primary healthcare system which is accessible to everyone, sustaining at international standards [5]. The health strategies developed in Cuba have concluded in continuous improvement in the health status of their population which is evident by certain health indicators such as IMR (Infant Mortality Rate), MMR (Maternal Mortality Rate), etc., high physician density, strong primary health care etc. these indicators are at par to the status of various industrialized and developed nations [6]. The Cuban health system has clearly put an amazing effort in prevention of the diseases by strengthening its primary healthcare system which is the need of the hour globally. Furthermore, the public health system of Cuba is of utmost importance, by controlling infectious diseases they have reduced the rate of non-communicable diseases, taken the example of COV-19 in recent times which will be further discussed later [7].

Pakistan being an under-developed country has a lot of shortcomings as far as its health system is concerned. The health system of Pakistan is under performing as compared to many other

countries of the world. However, there are a number of reasons that are further discussed [8].

In this review article, we discuss and evaluate the vision of healthcare system of Cuba and also confer to the strategies that has directed it towards its health gains and also will compare the Cuban Healthcare system with Pakistan Healthcare system. The review of literature is conducted on data bases to find out about all the related key points. Moreover, an open debate about the lessons to be erudite from this system also takes place.

2. METHODOLOGY

This is a review study about the healthcare system of Cuba. the search was conducted through electronic databases including MEDLINE or PUBMED, and public search engines (Google Search and Google Scholar). The appropriate keywords used for the search which was targeted towards the topic include "Healthcare system", "Healthcare system of Cuba", "WHO ranking", "SWOT analysis of healthcare system of Cuba".

Later on, we conducted SWOT analysis to find out the strengths, weaknesses, opportunities and threats of the Cuban Healthcare System. The method of SWOT analysis can be used for the analysis of the problems, for planning strategically and for providing solutions to the specific problems. It is a common tool that is used worldwide in various fields and situations, to identify both internal and external factors responsible which are analyzed to discover the strategies that can be implanted in order to grasp the standards of developed systems [9]. The main goal of SWOT analysis is to prevent the threats by using the strengths and opportunities and minimizing weaknesses [10].

3. DISCUSSION

3.1 The Foundation of the Cuban Healthcare System

Initially, the healthcare system of Cuba was no different than any less developed country. The health ministry was ineffective, financial fragile and corrupt too. The health expenditure was large enough to be afforded by the high class only [11]. Those who were less privileged and belong to rural areas were deprived of the basic

health services having only one hospital for rural area. Also, there was poor hygiene and sanitary conditions with predominance of malnutrition amongst the children that contributed significantly to the IMR of 100/1000 live births, MMR 125/100,000 births, general mortality rate 11/1000 person and life expectancy of 59.5 years. This picture started changing after the revolution of 1959 took place [12].

3.2 Setting National Goals

As the disparity between urban and rural healthcare service providence was quite visible that is why a national health policy developed according to the following factors,

- Availability of free healthcare services is the right to all equally, for which the state is responsible.
- Integration of Preventive and curative services.
- The public takes part in the development and functioning of health system.
- Health care activities are united with social and economic development.
- The fundamental compulsion of health professionals is the cooperation at Global level [6].

3.3 National Health Policy

The foremost issue to be addressed was to extend the healthcare services in the rural areas for which in 1960 Rural Medical Service was established that posted numerous physicians in remote areas due to which the number of hospitals in rural areas increased to 53 in 1970 [13]. That was only the start of the efforts for the betterment and by 1976 a new Ministry of Health was established that further helped and focused on the factors including education, infection control, hygiene and sanitation etc [14].

3.4 Public Health Programs

By 1980, the Cuban healthcare system focused on prevention of chronic diseases for which they started a number of programs including family physician and nurse program that greatly helped in promoting health through spreading awareness and knowledge about sanitary habits and personal hygiene, immunization [15]. This program also worked on prevention of diseases with timely diagnosis and treatment. With that they also concentrated on studying the health needs of the population [16].

3.5 The Existing Healthcare System

Till the year 1999, the goal of providing full population healthcare coverage was achieved successfully by Cuban healthcare system. After that Cuba put their efforts in providing tertiary care services to its population maintaining the international standards in both rural and urban areas. Today's family medicine of Cuba is well structured and available in every block providing services to 100 plus families [17,14]. There is a ratio of 1 physician to every 125 individuals. These setups are responsible for providing primary healthcare services to the people while for all the major diseases and its treatments secondary care and tertiary care hospitals are present [18]. Furthermore, in order to control any disease there is community program approach implementation which causes widespread impact [19].

Following comparison of health indicators between the year 1960 and 2019 showed the achievement of Cuban Health system very well.

3.6 COVID-19 and CUBA

The global pandemic Covid-19 also has hit to Cuba and the first case of COV-19 identified in first week of march. Following the usual pattern, the cases started to increase in Cuba. But, in early July, Cuba has very well controlled the spread of COV-19 with the help of following standard protocols with 7,490 patients recovered out of 10,000 patients [20]. There were more than seven institutions were dedicated to the research of COV-19, with a number of laboratories opened. Moreover, during the second wave of Covid, the cases seem to be under controlled due to the widespread infection control policies of Cuban Ministry of Health Department [21]. Keeping in view the progress of Cuban healthcare system against the COV-19 pandemic, it can be said that planning and implementation of right policies and appropriate treatment caused the significant results [22,23].

3.7 SWOT Analysis of Cuban Healthcare System

The healthcare system in Cuba is improving with the time and they are able to maintain their aura through contact analysis of their performance. It is very crucial to perform a balanced evaluation of strengths and weaknesses of the components of a healthcare system before recommending it.

The screenshot shows the PubMed.gov search interface. At the top, the NIH logo and 'National Library of Medicine National Center for Biotechnology Information' are displayed. The search bar contains 'cuban healthcare' with a search button. Below the search bar are options for 'Advanced', 'Create alert', and 'Create RSS', along with a 'User Guide' link. Action buttons for 'Save', 'Email', and 'Send to' are visible, along with sorting options 'Sorted by: Best match' and 'Display options'. The search results section shows '343 results'. On the left, there are filters for 'MY NCBI FILTERS', 'RESULTS BY YEAR' (with a bar chart showing an increase in results from 1964 to 2021), and 'TEXT AVAILABILITY' (with checkboxes for 'Abstract', 'Free full text', and '...'). The main results list includes two entries:

- 1 **Learning about mental healthcare in today's Cuba: An interview with the president of the Cuban society of psychology.**
Cite Linz SJ, Lorenzo Ruiz A.
Perspect Psychiatr Care. 2021 Jan;57(1):206-213. doi: 10.1111/ppc.12548. Epub 2020 Jun 7.
Share PMID: 32506500
PURPOSE: Little is known about Cuba's mental healthcare system. We present background information and an interview with the President of the Cuban Society of Psychology to learn about current mental healthcare in today's Cuba. ...PRACTICE IMPLIC ...
- 2 **Cuban healthcare providers in Venezuela: a case study.**
Cite Westhoff WW, Rodriguez R, Cousins C, McDermott RJ.
Public Health. 2010 Sep;124(9):519-24. doi: 10.1016/j.puhe.2010.05.008. Epub 2010 Aug 14.
PMID: 20713295

Fig. 1. Literature search on pubmed/medline

The aforementioned factors in the Table 2 showed that the strengths of Cuban system lie in their workforce and hardworking resources. they have invested a lot in their healthcare system and now they are able to provide free healthcare system to their people which is a great achievement in itself and the most vital feature. However, the weaknesses that are producing damage to the system includes the corruption. The salaries are less of the doctors and paramedics due to which they are looking for jobs outside their country. Human capital leaving the country is also a threat to the Cuba system and they need to control this as soon as possible. Emerging political issues has also put the healthcare system on stake. Nevertheless, the Cuba can maintain and sustain to its potential healthcare goals through renewal of the health policies, control on corruption with the help of external resources, also, the international partnerships with various hospitals and institutions can give better outcome. According to the SWOT analysis strategies can be made to cater the challenges in future while maintaining the strengths and changing the weaknesses into opportunities.

3.8 Lessons for Pakistan

Healthcare systems are undergoing important changes worldwide and it is important because of

challenges increasing with every passing minute [25]. World is looking towards Cuban healthcare system; it is a great example for all the developing countries. Pakistan as a third world country has lacking healthcare system having several loopholes and it can learn a lot many things from Cuba, how they develop their healthcare system and maintaining it. There is lack of governance, the free medical services provided by the government hospital are not up to the mark and people are forced to visit private hospitals for better services [26]. Lack of resources also cause inappropriate providence of services including primary health care and immunization. There are certain diseases like polio which are still present in Pakistan. Non communicable diseases cause a large number of mortalities in our country such as metabolic syndrome comprises of hypertension, obesity, atherosclerosis etc [27,28]. Cuba on the other hand as we have discussed has a very strong primary and community healthcare system due to which their health indicators are showing better picture day by day [3] Also, there is no need of private healthcare sector in Cuba, reason being their strong government health care system. Pakistan should also work on its government sector, strengthen it so that health can become accessible and free for our population also both in urban and rural parts of the country.

Table 1. Health indicators of cuba

Indicators	1960	2019
Infant Mortality Rate	100/1000	4/1000
Maternal Mortality Rate	125/100,000	40/100,1000
Death due to infectious diseases	250/100,000	<30/100,000
Life expectancy	59.5 years	79.5 years

(WHO Health Statistics 2019)

Table 2. SWOT analysis of cuban healthcare system

Strengths	Weaknesses
Adequate number of doctors and nurses	Lack of resources
Hardworking resources	Poor organization
Strong health outcomes	Weak HR functions
Free healthcare services	Lacks of resources
Strong primary and public health care sector	Widespread corruption
State of the art hospitals and teaching institutions	Less salaries
Opportunities	Threats
Renewal of health system policies	Economic distress
External funding opportunities	Long standing political issues
International partnership with hospitals and institutions for training of doctors	High turnover and attrition rate because of better salary and living opportunity in other countries

Ebrahim, Ghebrehiwot et al. [24]

4. CONCLUSION

The Cuban health system is a living example of continuous evolution of a system for the betterment of its people. The Cubans have successfully attained the health goals which seem difficult or impossible. That is why we also believe that we can apply these principles as demonstrated by Cuba to bring about a change in our own country, Pakistan, that will result in improvement of our health system. It is also concluded that the healthy communities also strengthen their economy and general outlook of the country which contribute to their healthy future in the world.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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