THE FEDERATION'S PAGES

# Universal coverage and strategy of primary health care. The Cuban experience

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The Federation's Pages WFPHA: World Federation of Public Health Associations www.wfpha.org Bettina Borisch and Marta Lomazzi, Federation's Pages Editors

### Introduction

The National Health System (NHS) of Cuba emerged in the 1960s in a context characterized by a series of political and socio-economic decisions that preceded and accompanied it. Among these, the national campaign eradicated illiteracy and actions aimed at improving living conditions of large marginalized groups of the population. These two great actions demonstrate that Cuba has adopted a comprehensive understanding of health as socially determined process. In fact, education and living conditions are essential premises for the subsequent development of the Cuban national health system and its achievements in improving the health status of the entire population [1, 2].

This NHS is based on a set of principles that outlined the path towards the goal of a universal health system and that strengthen the key role of Primary Health Care (PHC), in achieving the following [3]:

- Integrity of a unique and planned health system
- Accessibility (economic, geographic, cultural, and legal)
- Regionalization of health services

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- Comprehensiveness of public health functions, with health promotion as the guiding axis
- Active and organized participation of the population
- · Integration of research, teaching, medical care, and management
- International collaboration.

The health of the population constitutes a citizen right and a duty of the State; thus, it is endorsed by the Constitution of the Republic of Cuba and the Public Health Law [4, 5].

In Cuba, more than 6% of GDP is dedicated to the well-being and health of the population. In the Cuban State budget for social expenses for the year 2019, more than 50% was dedicated to Health and Education [6]. Cuba has one of the best ratio of health professionals per population in the world, with 118, 131, and 595 residents for one doctor, nurse, and dentist, respectively [7].

For the training of health professionals, there are the several teaching institutions, all subordinate to the Ministry of Public Health, with a total of 35,858 teachers. These institutions include 14 universities, 25 faculties of Medical Sciences, 4 stomatology faculties, 4 Nursing faculties, 4 faculties of Health Technology, and 1 National School of Public Health.

The creation or strengthening of health services at the first level of care (Primary Health Care-PHC) throughout the national territory constituted the beginning of the chain of actions that led to the positioning of PHC today as the central strategy for all the work and development of the NHS in Cuba. In the first link in the chain for the provision of services, the basic health team (BHT) is made up of a specialist or resident in Comprehensive General Medicine and a professional or nursing technician. Together with their collaborators, they develop the model of family medicine care through the work program of the family doctor and nurse, a cross-sectorial program of comprehensive care for the individual, the family, and the community. This allows them to take care of the health of the population they serve—from 140 to 180 families—without exceeding 1,500 inhabitants [8, 9].

Three levels of care (primary, secondary, and tertiary) participate in national health programs to implement health policies, develop strategies, and meet the objectives set. Cuba integrates the guiding principles of the NHS and components of the PHC Strategy [10]. Here are some results from four of these programs.

### National program for maternal and childcare

During the last 12 years, the infant mortality rate has remained below 5 deaths/1000 live births. Mortality in children under 5 years of age remains below 6 deaths/1000 live births. 99.9% of births occur in health institutions. The percentage of children who survive to 5 years is greater than 99% [7, 11].

According to the international organization, Save the Children, that promotes the rights of children and considers the well-being, health, education, and economic situation of mothers, as well as maternal and infant mortality rates, Cuba is the best country for motherhood in Latin America and thirty-third country worldwide.

### National immunization program [7, 12]

Vaccination coverage for the entire population exceeds 98% every year, with application of 12 vaccines that protect against 13 diseases. Cuba produces eight of the vaccines in the country. In 2020, the Center for State Control of Medicines, Medical Equipment and Devices of the Republic of Cuba (CECMED), a certified entity by WHO, approved for the clinical trial phase of the Cuban vaccine candidate against COVID-19, called Sovereign 01. It is the 30th vaccine candidate in the world, among 200 candidates, and the first country in Latin America and the Caribbean to begin a phase 1 clinical trial.

So far, the main results of the National Immunization Program show that six infectious diseases are eliminated: Poliomyelitis (1962), Diphtheria (1979), Measles (1993),

Mumps (1995), Rubella (1995), and Whooping cough (1997). Four serious forms or complications removed: Tuberculous meningitis (1962), Post-parotiditis meningitis (1972), and Congenital Rubella Syndrome (1989).

Four illnesses do not constitutte a health problem anymore (rates less than 0.1 per 10,000 inhabitants): Haemophilus influenzae type b meningitis, Hepatitis B, Meningococcal meningitis, and Tetanus.

# National program for prevention, diagnosis, and management of genetic diseases and birth defects [13]

The national program for prevention, diagnosis, and management of genetic diseases and birth defects covers the entire national territory by region through 451 Community Medical Genetics Services, 168 municipals, 15 provincials, and one national center.

In Cuba, the identification of individuals with genetic risk is carried out according to population groups: women of reproductive age, pregnant women, newborns, families with several members affected by genetic diseases, individuals with a presumptive diagnosis of a genetic condition, and families with several members affected by diseases with possible genetic influence. The objectives of community genetics in Cuba are to

- provide clinical genetics services at the community level,
- perform genetic counseling,
- execute mass screening programs at the population level,
- provide genetic education to the population,



- provide genetic education to health workers,
- conduct epidemiological surveillance of genetic disorders in the population,
- keep records of genetic disorders,
- evaluate the impact of genetics programs and the degree of satisfaction of the population, and
- assess the quality of life in individuals with genetic disorders.

### National program for international collaboration

In May 1961, the first medical mission of solidarity aid occurred when a major earthquake occurred in Chile. In 1963, the first permanent medical mission took place, in this case in Algeria, a country that also hosted the first medical mission of a teaching nature, in 1969. Cuba has continued to carry out these missions over the years in more than 60 countries, with participation of tens of thousands of Cuban health professionals. The 28,400 health professionals, who were serving in 59 countries in Africa, Asia, and Latin America at the beginning of the COVID-19 pandemic, gave their consent to the respective health and government authorities to cooperate to confront the pandemic. The Ministry of Public Health organized its remote training from Havana to make it most effective. Until April 26, 2020, the governments of 51 countries in the world, including some where Cuban professionals already worked, made official requests to Cuba for collaboration. In response, 34 brigades of health professionals, members of the Henry Reeve Contingent, with vast international experience in disaster events, left the island for 26 of the requesting countries. In Cuba, more than seven thousands of students from 24 countries were training as health professionals in 2020 [14, 15].

## Conclusion

These examples show the power of the Cuban universal health system that is well integrated with other public policies and promotes the well-being of the entire population.

The experience of Cuba may inspire health reforms in other countries as it emphasizes that universal health coverage needs to be accompanied by equitable access; comprehensive care emphasizing disease prevention and health promotion; community and individual participation in health policy, planning, and provision; intersectoral action on health determinants; appropriate technology and cost-effective use of available resources; and international collaboration. These are the principles of the Declaration of Alma-Ata which must be renewed [16].

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