An Unassuming Revelation: Cuba's Social Policy toward the AIDS Epidemic

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ABSTRACT

The thrust of this essay is nestled in Cuba's complimentary approach to the treatment of the HIV/AIDS virus. In a comprehensive and comparative fashion, the contents herein give credence to a developing nation that demonstrates expedience and emphasizes a history of continuity with remarkable results. Underlying the report is a journey that enlightens the reader to a process rich in application and outcome during a period in which the plague of HIV has transformed the Caribbean and Latin America community. Meanwhile, it also speaks to a collaborative effort inclusive of government, medical agencies, laboratories, international organizations and the public toward a common good. The country, nonetheless, is not without its shortcomings and therefore monetary constraints and matters of confidentiality and discrimination are pivotal to the presentation. In fact, an elaborate characterization accentuates a 50-year old commercial interdiction as a deterrent that contributes to the disruption of affordability and accessibility to the exchange of goods, services and information. Against all likelihood, a contrasting analysis of regional states inclusive of the United States of America documents Cuba's astonishing success in restricting HIV/AIDS. The Cuban model as described is an exemplary work in progress but likewise the fulfilment of the socialist philosophy toward humanity.

Keywords: AIDS, Cuba, public policy, Revolution

Una Revelación Modesta: La Política Social de Cuba hacia la Epidemia del SIDA

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RESUMEN

El objetivo de este trabajo se inserta en el enfoque complementario de Cuba en relación con el tratamiento del virus VIH/SIDA. De una manera integral y comparativa, los contenidos en este documento dan crédito a una nación en desarrollo, que demuestra la conveniencia del enfoque, y destaca una historia de continuidad con resultados notables. El reporte tiene por trasfondo un recorrido que permite al lector entender con claridad un proceso rico en aplicaciones y resultados, durante un período en el cual la plaga ha transformado la comunidad del Caribe y América Latina. Se trata también de un esfuerzo de colaboración que incluye al gobierno, las agencias médicas, los laboratorios, las organizaciones internacionales y la opinión pública, enfocados en un bien común. Sin embargo, el país, no está libre de deficiencias, y las restricciones monetarias así como los problemas de confidencialidad y discriminación son fundamentales en el análisis. De hecho, se pone de relieve una vieja prohibición comercial de 50 años, que conspira contra la disponibilidad y el acceso al intercambio de bienes, servicios e información. Contra todos los pronósticos, un análisis comparativo de los Estados de la región, incluyendo a los Estados Unidos, confirma el asombroso éxito de Cuba en restringir el VIH/SIDA. El modelo cubano, tal como se describe, constituye un trabajo ejemplar trabajo en progreso, a la par que apunta al cumplimiento de la filosofía socialista hacia la humanidad.

Palabras claves: SIDA, Cuba, políticas públicas, Revolución

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HISTORY

Cuba, the largest Caribbean island of 42 803 square miles and a population of 11 million people, has achieved worldwide recognition for its prowess in sports and steadfastness to ideology and social assistance at home and abroad. Cuba

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is credited for its international contribution to baseball and boxing, politics, education and healthcare, the last of which is evident in optometry and HIV/AIDS.

The country's proactive response to the incurable and oftentimes fatal HIV/AIDS virus has been justly rewarded with less than 5000 incidences or 0.1% of the nation's population (Table 1).

Table 1: HIV infection rates and antiretroviral therapy coverage for the Caribbean and North America (2006)

Countries	IR (%)	ARVT (%)
Haiti	3.8	20.0
Honduras	1.5	35.0
Jamaica	1.5	56.0
Dominican Republic	1.1	36.7
United States of America	0.6	70.1
Columbia	0.6	44.0
Costa Rica	0.3	80.0
Mexico	0.3	71.0
Cuba	0.1	100.0

Source: World Health Organization; 2004

Infection rate (IR) = % adults 15– 49 years infected with HIV; antiretroviral therapy (ARVT) = % antiretroviral drug coverage.

Such dogged pursuance for containment and ultimately elimination – which is lauded for the contribution to the lowest HIV prevalence (0.05%) in the Americas and among the lowest in the world – commenced shortly after the disease became apparent in the region with its first case diagnosed in 1981 in the United States of America (USA). Two years later, a ban was ordered on all blood products originating from countries reporting cases of HIV/AIDS, and the National Commission on AIDS was introduced in Cuba with a mandate to study symptoms and share recommendations in preparation for the reversal of a health crisis that could adversely affect its inhabitants.

In 1985, the tension climaxed when a Cuban soldier returning home from Mozambique tested positive for the disease. This drew attention to the well-being of over 300 000 Cuban soldiers who fought for at least a decade in Africa. Moreover, it instigated an inquiry into far-reaching implications for the Cubans at large and ignited screening for all blood donations and large-scale testing for Cubans of all strata (1, 2).

It soon became increasingly conspicuous that HIV/AIDS was a sexually transmitted illness that predominantly affected females and to a lesser extent their offspring who were exposed to shared blood and intravenous (IV) drugs. As a result, by 1987, investigations were mandatory for all pregnant females and the sexual contacts of HIV patients. Data indicated that the estimated ratio of homosexual to heterosexual transmission was 1:1. Condoms were recognized as a product capable of ensuring the safety of sexually active males and their partners. In addition, facilities were introduced to quarantine the afflicted.

In spite of a 50-year old blockade that limits an amicable relationship between the Cuban government and US pharmaceuticals and equipment manufacturers, the passage of time and a growing desire to stymie the advancement of the virus in the 1990s ushered in radical policies. The Cuba AIDS project was born and an era of changing policies emphasized preventive measures, proper care, responsibility and education and contributed to choices of wellness centres and exposure to updated medications (1).

According to Dr Rigoberto Torres, an HIV specialist in the Ministry of Health, Cuba, assertiveness has yielded positive results (Fig. 1). By 2004, only 3200 cases were reported, with modest increases as a percentage of the population thereafter (Tables 2 and 3).

Fig. 1: Number of HIV infected people.

*No homo-bisexual transmission among females was detected.

Table 2: HIV/AIDS cases in Cuba

	2006	2007	2008
Total HIV seropositive	6827	8873	10 454
Total AIDS cases	2782	3387	3910
Total AIDS deaths	1406	1534	1721
Seropositive males	5468 (80.1%)	7159 (80.7%)	8363 (80.0%)
Homo/bisexual male	4707 (68.9%)	6025 (67.9%)	7119 (68.1%)
Seropositive female	1339 (19.6%)	1714 (19.3%)	2090 (20.0%)

Source: (9)

Note: The source has failed to provide categorical information or a rationale for exclusion of 0.3% of seropositive residents for the year 2006.

To date, with participation from the international community, particularly United Nations' agencies (*eg* UNDP, UNICEF, UNESCO and UNAIDS), the Pan American Health Organization (PAHO), the World Health Organization (WHO), Doctors Without Borders and Global Fund to Fight AIDS, a $50 million benefactor between 2003 and 2008 and

Table 3: HIV/AIDS indicators in Cuba 1986–2010

Classification	n
Total seropositive persons diagnosed	14 038
Seropositive men (81% of total)	11 369
Seropositive women (19% of total)	2669
AIDS related deaths	2191

Source: Pedro Kouri Tropical Medicine Institute; 2011

most importantly the Cuban populace, well in excess of 20 million evaluations have been administered for HIV infections. Furthermore, free, accessible and universal healthcare, accompanied with an ever growing biotechnology industry at the centre of antiretroviral therapy (ART) are responsible for a low average of AIDS related deaths: 155 per year (1–3).

TREATMENT

Since its conception, the National AIDS Commission has been at the forefront of transformation with the intent to:

* Advance a national HIV prevention programme for the general public and particularly at-risk groups.
* Work in tandem with sanatoria nationwide.
* Conduct epidemiological surveillance and control.
* Promote scientific research and biotechnology production.
* Spearhead sustainable efforts for the arrest of mother-to-child transmission of HIV and the prevention of HIV-related opportunistic infections and AIDS.

Another early yet controversial approach to the pandemic was the establishment of sanatoria to explore causation and medical care for the affected with the hope of suppressing the spread of the disease. These institutions, of which Santiago de las Vegas and Los Cocos gained mixed reviews, were described as modern one- and two-floor apartment units, each built to house two persons with adjacent medical facilities, workshops, gardens and recreational attractions. All occupants therein were entitled to equal treatment administered by family physicians and associated staff (*eg* public health officials, epidemiologists and psychologists) which included periodical assessment and laboratory analysis whenever necessary.

By 1993, a combination of education and scientific intervention convinced the government to accept a recommendation from Dr Jose Perez, head of the national HIV treatment programme and director of the Pedro Kouri Institute of Tropical Medicine (IPK), to allow ambulatory services to those who choose to leave the confines of the sanatoria. Such a shift in policy has been warmly received by 60% of HIV positive patients who opted to exercise usage of ambulatory service as opposed to the rest that remained at the sanatoria.

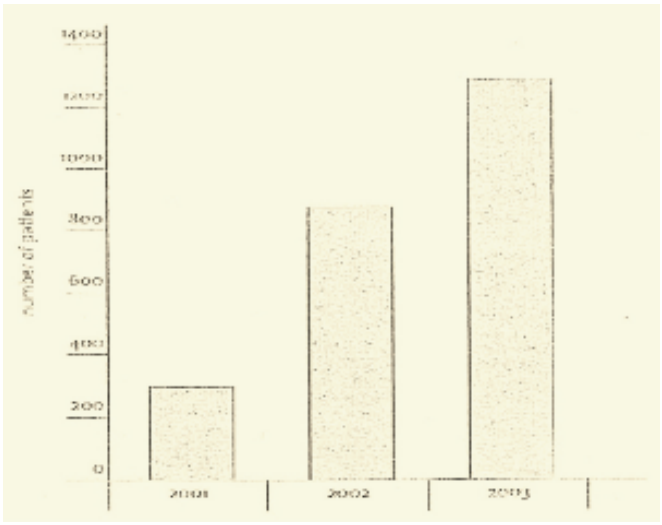
Besides the aforementioned medical advantages, sanatoria, along with the outpatient clinics, offer a holistic approach (Table 4). A stay at home or government facility is likewise bolstered with an up-to-date antiretroviral treatment programme (Table 5). Antiretroviral therapy has become the mainstay of an increasing number of patients (Fig. 2). Combinations of ART include: zidovudine (ZDV), lamivudine (3TC) and indinavir (IDV); ZDV, didanosine (DDI) and IDV; stavudine (d4T), 3TC and IDV; d4T, DDI and IDV.

Table 4: Medical options for treating HIV/AIDS patients

Facilities	Benefits
Sanatoria	Eight week information course Physical education course Full salary
Ambulatory service	Access to day clinic (same schedule as sanatoria) Special food rations

Table 5: Antiretroviral (ARV) treatment

Year introduced	Drugs
1987	Zidovudine (ZDV) immunotherapy for AIDS
1997	Lamivudine (3TC) and saquinavir (SQV) for HIV positive women and infants
Early 2001	ZDV, 3TC, stavudine (d4T), zalcitabine (ddC), didanosine (DDI) and indinavir (IDV) production and treatment was expanded
April 2001	National Treatment Protocol established, universal highly active antiretroviral treatment (HAART) begins
2003	100% HAART coverage achieved. Nevirapine (NVP), nelfinavir (NFV), abacavir (ABC) and efavirenz (EFV) production forthcoming



Source: Pedro Kouri Tropical Medicine Institute; 2004

Fig 2: The number of HIV positive patients receiving antiretroviral therapy.

To guarantee the effectiveness of the programme, at least four physicians oversee ART in every province with a portfolio that includes close association with personnel at the IPK. They are also accountable for the transfer of data to the

central computerized database (SIDA/TRAT). By 2001, 700 healthcare workers had participated in training courses on the management of HIV/AIDS and by 2003, a comparable sum in each of the 169 municipalities had gained proficiency (4–5).

By 2005, the advancement of decentralization to target vulnerable groups and locales encompassed establishing and equipping additional clinical, microbiology and pathology laboratories and specialized service facilities in Havana, Villa Clara, Sancti Spiritus, Holguin and Santiago de Cuba provinces. The acceleration oversaw the closure of 11 sanatoria that had outlived their usefulness. This effort extended internationally.

With 60% of affected males professing bisexual behaviour, coupled with an obligation to confront sexual diversity, the government welcomed the involvement of MSM – Cuba, a gay centred organization founded in 2001 with an emphasis on peer education. Ten years later, there is pending debate on the Gender Identity and Legal Sex Change bill. The country also welcomed international cooperation as is evident with the hosting of Foro 2003 – a six-day international conference on HIV/AIDS that caught the attention of 1483 delegates (among them World Bank representatives) from across the globe (6–7).

CHALLENGES

Given political parameters, the Cuban authorities are confronted with competing interests that could threaten a commitment to the Revolution, the well-being of the patient and/or self. These moral issues encompass but are not restricted to matters of confidentiality, prejudice and apportionment of scare resources.

While the establishment finds it necessary for patients to subscribe to conditions such as an acceptable health status, the completion of an HIV training course and acknowledgement of sexual responsibility to warrant transfer from quarantine to open society, dissenting voices consider this illegal and a violation of privacy. An unidentified person who opposes contact tracing posits the view that *"it should be a decision of the person to disclose, to take charge of their situation and to inform on people they have had relationships with"* without fear of retribution *ie* quarantine. An extended perspective is as follows, *"Life at the sanatorium is not a normal life because it is very controlled. It is all about illness. People may get quality medical care but they remain socially isolated. Many would live on the outside if they could afford to. How can you call something a choice if you don't have another option?"* (8).

Some question the sincerity of the policy as they purport discrimination and ethical infringements are openly exercised – a sentiment seconded by a 2009 survey of approximately 29 000 Cubans of whom 29% of men and 24% of women expressed severe or moderate reservations toward those living with HIV (7) [Table 6].

The seriousness of the problem is inflated by US/Cuban relations. Not only do visiting American delegations perpetuate the misconception that those quarantined live in a frightening environment, but the American media maintain that individual freedom was denied and the system is biased toward those of a bi/gay orientation who they assume to be targets for isolation (9). Despite political overtones, premature judgment is problematic to interpretation of the crisis as the previously mentioned 2009 survey revealed that 63% of men and 32% of women express ill feelings toward MSM (Table 7).

Table 7: Opinion reflecting prejudice toward men who sleep with men (MSM)

Opinion	Male respondents	Female respondents
MSM should not have management positions	28.1%	17.6%
MSM should not be classroom teachers	25.6%	18.7%
Unwilling to live in the same house with MSM	58.8%	32.6%
Unwilling to receive medical attention from MSM health professional	17.0%	6.8%
Unwilling to let MSM visit their home	36.6%	15.6%
Unwilling to participate in recreational activities with MSM	47.9%	20.2%

Source: National Statistics Bureau, Survey on HIV/AIDS Prevention Indicators; 2009

Table 6: Opinion reflecting prejudice toward people with HIV

Opinion	Male respondents	Female respondents
Unwilling to shake hands with or hug the affected	5.1%	4.7%
Teachers affected should discontinue teaching	10.8%	9.3%
Unwilling to work with the affected	6.5%	4.9%
Unwilling to live with the affected	5.1%	4.2%
Unwilling to allow visits to home by the affected	5.4%	5.4%
Unwilling to accept treatment at facility where the affected is receiving treatment	18.1%	16.6%

Source: National Statistics Bureau, Survey on HIV/AIDS Prevention Indicators; 2009

On an island that boasts a low AIDS-related mortality rate of 1.5% and 1.7% per 100 000 population annually for the period 2008 to 2010, stigma is at fault for the existence of an unaddressed silent minority. Testament to the fact is published reports in 2010 that indicate over 25% of AIDS-associated deaths lacked prior HIV diagnosis.

Compounding the problem is the omission of international credit to address ambitious projects in a timely fashion and restrictions to US counterparts, conferences and biotechnological centres. Dr Jorge Perez, who is of the belief that the US trade embargo is an impediment to medication nationwide, publicly states, *"It is true we are hurt by the economic problems and our patients have suffered from a lack of medicine. The lack of money is a constant problem for everybody"* (8). His frustration is validated as recently as March 2011 by the US blockade of $4 million to the Global Fund destined for the Cuba National HIV/AIDS programme.

Although less prone to chronic malnutrition, unsanitary living conditions and an inadequate public health infrastructure, Cuba – like other developing countries – is continuously besieged by obstacles pertinent to research and corrective measures. Central concerns entail the ongoing quality of care during and after clinical trials in part due to affordable access to essential drugs but Dr Perez concludes *"now we are producing our own drugs; things have begun to change."* Provision of medication for HIV/AIDS patients by foreign donors and the World Trade Organization's trade-related aspects of intellectual property rights (TRIPS) agreement which enables the nullification of patents and parallel importation of essential drugs are other positive indicators. The island would welcome donations to needy projects from pharmaceutical multinationals (8–10).

OUTCOME

Thus far, the country's success is confirmed in both words and deeds. Foresight and an investment of millions of dollars that defied the odds have produced a strategic and prosperous fusion between government, healthcare agencies and biotechnological entities. A Canadian academic once said, *"In the early 1980s, Cuba was widely condemned but by the late 1980s, they were more knowledgeable about the epidemic."* In addition, executive director of UNAIDS Peter Piot, a long-time critic, later remarked: *"Cuba was one of the first countries to take AIDS seriously as a problem and provide a comprehensive response combining both prevention and care"* (9).

Antiretroviral therapy, which by 2010 was valued at $6000 annually per person, has specifically prolonged and enhanced quality of life by reducing opportunistic infections even for those with advanced AIDS at the turn of the century (Table 8).

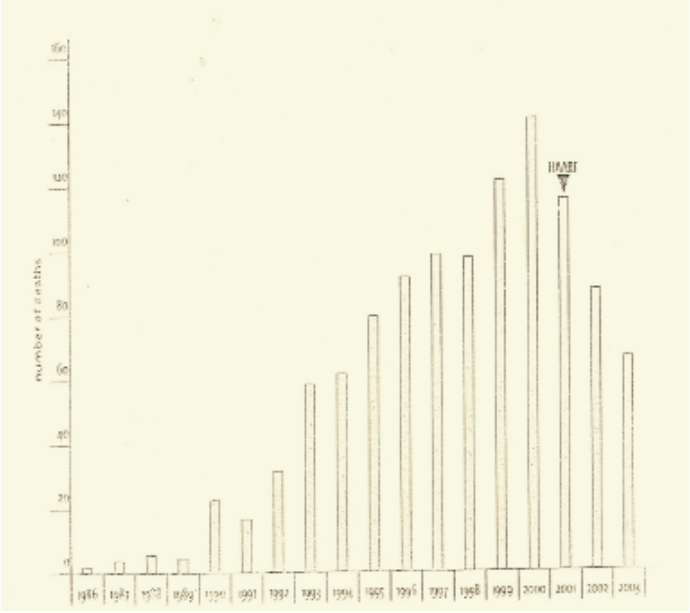
Records suggest that while 141 persons died from the disease in 2000, the number decreased the following year to 116. A carefully crafted plan of action through the introduction of HAART in 2001 is accountable for a decline in the number of deaths resulting from AIDS (Fig 3).

Over the years, proactive engagement has sustained life for those affected with the disease but longevity is not without a price – a slow increase of HIV prevalence. Associated incidents have increased from 13.9% to 16.2% per 100 000 between 2009 and 2010 (Table 9).

Table 8: Opportunistic infections before and after ARV Treatment

Infections	Infections before treatment Jan 2000–June 2001	Infections after treatment July 2001–December 2002	Difference
Neurotoxoplasmosis	112	74	-38
Candidiasis	107	49	-58
Chronic diarrhoea	105	31	-74
Pneumocystis carinii Pneumonia (PCP)	81	27	-54
Mycobacteriosis	76	48	-28
Crytococcosis	38	14	-24
Cytomegalovirus	21	6	-15
Lymphoma	18	20	+2
Kaposi's sarcoma	18	14	-4
"Slim" disease	17	21	+4
Histoplasmosis	17	7	-10
Rhodococcus equi infection	13	3	-10
Total	**623**	**314**	**309**

Source: Pedro Kouri Tropical Medicine Institute Statistics



Source: Pedro Kouri Tropical Medicine Institute; 2004.

Fig 3: Fatalities resulting from AIDS since the conception of highly active antiretroviral therapy (HAART).

Table 9: Selected HIV/AIDS indicators in Cuba 2009–2010

Indicator	2009	2010
HIV tests conducted	2 182 119	2 229 009
Number of cases detected	1562	1821
Incidence (per 100 000 population)	13.9	16.2
Incidence (per 100 000 men)	22.9	26.7
Incidence (per 100 000 women)	4.8	5.6
People who initiated ARV therapy	1016	658
People who receive ARV therapy	5034	5692

Source: Pedro Kouri Tropical Medicine Institute; 2011

CONCLUSION

Confronted with a daunting task to discover a cure amid challenges from an expanding tourism industry, the lack of access to US resources and an economy in need of remedy, Cuba is compelled to continuously reassess and allocate appropriately toward this medical priority, and simultaneously advance global networks to promote its strengths. Cuba must vigorously sustain an innovative spirit and a tradition of synergy. This has been demonstrated by the materialization of the world's first meningitis B vaccine and ongoing first class medical assistance to the developing world *via* training at the Latin American School of Medicine (ELAM) to achieving the ultimate objective – the eradication of HIV/AIDS (6, 11–12).

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