CAN LESSONS LEARNED FROM A CUBAN EXPERIENCE IMPROVE HEALTH DISPARITIES IN SOUTH LOS ANGELES?

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The purpose of this study is to observe Cuba's working healthcare models in an effort to improve ethnic health disparities in south Los Angeles through generating a new level of synergy by mobilizing resources to create academic-community partnerships and apply lessons learned.

During a three-year period beginning in 2005, a team of 12–14 Charles R. Drew University and UCLA faculty, south Los Angeles community leaders, and health providers completed three one-week visits to Cuba to survey the country's approach to various health problems and ascertain their potential to improve health conditions in south Los Angeles. Various methods such as opinion surveys, evaluations, and team meetings were used to measure the direction and progress of translating lessons learned into creating a working relationship with community leaders. After two visits, opinion surveys demonstrated an increase in the response to acknowledging that there were lessons learned. However, respondents acknowledged that they encountered difficulty in attempting to make these changes. One outcome from these visits resulted in a community forum at which community leaders and residents from south Los Angeles heard various speakers present on lessons learned in Cuba.

In conclusion, after observing Cuba's approach to health problems that are also encountered in south Los Angeles, the team has begun to plan research projects and next steps to incorporate lessons learned into current programs with the community. (*Ethn Dis*. 2008;18[Suppl 2]:S2-141–S2-145)

Key Words: Community Based Participatory Research, Health Disparities, Cuban Health System

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INTRODUCTION

Today's Cuban healthcare system provides an example of how a country can transform from a third-world country where infectious diseases are the leading cause of death to a country where it is often said that Cubans "live like poor people and die like rich people." This statement indicates that Cuba has the same causes of death, such as cardiovascular disease and cancer, as developed countries in spite of a gross domestic product comparable to other third-world countries.[1]

In 1958, the most common causes of death in Cuba were infectious diseases.[2] Through a series of reforms beginning in the 1950s, the newly formed Cuban government adopted a decentralized strategic health plan in which the focus of healthcare delivery was implemented at the community level.[3] At this level, primary healthcare teams consisting of a family physician, nurse, and community health promoter living in the same neighborhood as their patients would attend to ≈120 families. The role of this team would focus on prevention of chronic disease, early disease detection, and community health assessment. They would provide these services in coordination with a nearby municipal polyclinic. The polyclinic would diagnose and treat more complicated diseases and offer rehabilitative services along with dental and psychological services.[4] Over time, this system has resulted in life expectancy and other health indicators that are now comparable to those in many first-world countries (Table 1).[5] This health system approach has served as a template for other countries attempting to improve their health status. Therefore, we wondered whether aspects of the Cuban model were translatable to other impoverished communities that are trying to improve their health status, such as south-central Los Angeles?

More than 10 million persons reside in Los Angeles County, making its population larger than those of 43 US states.[6] In an effort to integrate planning efforts, coordinate services, and share resources, the local public health department and various community-based organizations view Los Angeles County as eight distinct geographic areas called service planning areas (SPAs). Each SPA has unique geographic and demographic characteristics.

SPA 6, which primarily consists of south Los Angeles, often ranks highest in disease incidence and prevalence and lowest in in residents' self-reported quality of life compared to other areas in the Los Angeles area. Figure 1 compares death rates in Los Angeles County and SPA 6 to Healthy People 2010 death rate targets for heart disease, stroke, diabetes, and colorectal cancer—SPA 6 has the highest death rates in all instances.

Several factors contribute to these health disparities. Despite being the smallest SPA (77.3 square miles), SPA 6 is one of the most densely populated regions in Los Angeles County. Approximately 10% (>1 million) of all Los Angeles County residents live in SPA 6, with nearly 14,000 persons per square mile compared to the County average of 2500.[7] Such high population density strains the availability of and access to healthcare resources. As a result, 32% of SPA 6 residents aged 18–64 are uninsured, 27% of adults residing in SPA 6 report having no regular source of health care, and 44% of adults report having difficulty accessing medical care.[6] Furthermore, SPA 6 has the largest number of African Americans (327,910) and one of the largest Latino

Table 1. National comparison of health indicators

Indicator	Costa Rica	Dominican Republic	Cuba	Canada	United States
Per capita gross domestic product	2942	2091	2208	20,822	32,778
Infant mortality (per 1000 children)	12	44	7	6	7
Under 5 mortality (per 1000 children)	14	49	8	6	8
Life expectancy at birth (years)	76.0	70.6	75.7	79.0	76.7
Adults living with HIV/AIDS (%)	.5	2.8	.03	.3	.6
Physicians (per 1000 persons)	.85	1.5	5.18	2.1	2.6

Source: National Comparison of Selected Health Indicators 1999, United Nations Development Program 2001.

populations (693,444) in Los Angeles County.[7]

Moreover, health indicators of south-central Los Angeles compare closely to those of many third-world countries; in a population of 107,504 consisting of 60% Latinos and 35% African Americans, >50% live 200% below the federal poverty line.[8] The infant mortality rate is 6.7 per 1000 live births, the African American infant mortality rate is 10.8 per 1000 live births, and south-central Los Angeles has 18 AIDS cases per 100,000 residents. Homicide/violence and alcohol dependence are the two leading causes of premature death and disability for men in an area with one physician per 3000 residents, compared to 1 physician per 680 residents in California as a whole.[8]

The purpose of this study was to observe Cuba's healthcare models in an effort to improve health disparities in south-central Los Angeles. This will occur through generating new levels of synergy through mobilizing local resources leading to the creation of academic-community partnerships. This partnership will apply lessons learned from the Cuban healthcare model.

METHODS

Believing that lessons can be learned from Cuba's healthcare system, a faculty-community health leadership (FCHL) team was formed consisting of 12 faculty members from UCLA's School of Public Health, the departments of pediatrics and family medicine from Charles R. Drew University of Medicine and Science, a community clinic medical director, executive directors of nonprofit clinics, and directors from community organizing and mental health programs working with African American and Latino populations in south Los Angeles. Medical Education Cooperation with Cuba (MEDICC) acted as a consultant for the research team. Formative research through observation of how Cuba's preventive health services are organized and implemented was conducted from January 2004 through January 2007, with participants traveling to Cuba legally under the US Treasury's general license for professional research.

Before the first visit, the FCHL team read articles and attended presentations that described the Cuban healthcare system. This preparation also helped to conceptualize how Cuba's model may apply to problems facing south Los Angeles.

Based on the readings, community planning was incorporated into the research project to assess the levels of coordinating health access in Cuba.[9] This topic became part of the lessons learned and later became a main objective for engaging in dialog with south Los Angeles community leaders. Moreover, this was further reinforced by conducting a separate workshop in South Los Angeles on the community action model.[10]

An itinerary of health topics was then developed between the FCHL team and MEDICC to address areas most closely related to FCHL's work in south Los Angeles. In collaboration with Cuba's School of Public Health, the final research assessment format during for the three trips covered healthcare

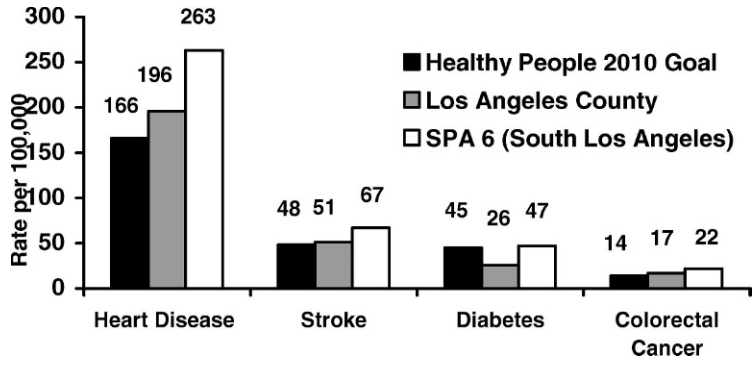

Fig 1. Disparities in death rates: Healthy People 2010 goals, Los Angeles County and service planning area 6 (South) death rates. Source: Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology. *Mortality in Los Angeles County 2003: Leading Causes of Death and Premature Death*; 2006.

organization; health services such as mental health, HIV/AIDS, disaster preparedness; and community organizing.

These three areas were subdivided for a more in-depth investigation. This consisted of learning how Cuba's medical and public health curricula were developed as applied to the delivery of primary care. The FCHL team also conducted formative research in several hospitals, polyclinics, and doctor/nurse clinics, as well as in the Pediatric Asthma and Diabetes Research Center and a provincial center for natural and traditional medicine. Selected participants of the mental health component learned about how patients receive treatment and therapy in the community while the remainder of the group participated in the community organizing component and learned a wide range of subjects such as community transformation, popular education, and intersectorial health planning. During the first trip, the team met with directors and faculty at Cuba's National School of Public Health, where the FCHL team presented their current work and challenges in south Los Angeles and then heard presentations on the Cuban healthcare system.

The FCHL team compiled notes that were documented and shared with their respective universities and agencies. After the first and second research trips, the FCHL team reconvened in Los Angeles to discuss next steps. In addition, opinion surveys were administered to the FCHL team (12 participants) before and after each visit to poll responses about applying lessons learned in Cuba and their possibility of being applied in south Los Angeles. The survey contained both qualitative and quantitative questions. The quantitative questions asked Likert-scaled questions. These questions were scaled from one (strongly disagree) to five (strongly agree).

The first two surveys' qualitative questions followed a similar format before and after each trip. Questions listed on the pre-visit questionnaire for trips one and two included naming expectations about the trip and, relating to professional practice, listing what may be learned or experienced. After the second trip, pre-visit questions also included comparing expectations from the first trip and, if changes were made, how the changes have been made. Questions listed on the post-visit questionnaire for trips 1 and 2 included whether expectations for the trip had been met, what participants learned relating to professional practice, and whether the lessons could feasibly and practically be applied to professional practice. After the second trip, a post-visit question included naming three new things that could be taken back to participants' practice or community.

RESULTS

Round Table Discussion

After the first trip, during a round table discussion, the FCHL team identified two problem areas in south Los Angeles that could guide future research trips in Cuba: healthcare systems and health conditions. Subsequent research trips were designed to address both systemic problems and health needs as shown below.

Systemic type problems:

1. Lack of cooperation and collaboration among existing community organizations
2. Lack of health care access
3. Economic disparity
4. Violence prevention
5. Lack of integrating interdisciplinary teams to confront health problems
6. Need to develop healthy messages to promote South Los Angeles
7. Need to engage community residents

Specific health needs:

1. Asthma education
2. Occupational health
3. Lack of physical activity
4. Obesity
5. Nutrition
6. Women's health
7. STDs, and AIDS/HIV
8. Substance abuse
9. Adolescent sexual health
10. Mental health and depression
11. Diabetes
12. Posttraumatic stress in adolescents

Opinion Survey Results

Regarding the opinion survey, results supported an overall consensus that lessons learned from the Cuban visits could be applied. These opinions were reaffirmed at a team workshop held in Los Angeles after the second research program in Cuba. Before the second trip, participants who went on the first trip to Cuba were asked to report how easy or difficult it was to make changes in their practice, based on the experiences from Cuba and how open or closed the community was to the information from Cuba. During the 2nd trip post-visit survey, the opinions improved, from pre-visit to post-visit, for thinking that lessons will be learned and for thinking that one will be able to make change in one's practice or community. At the end of the third trip, the post-visit questionnaire asked all participants questions on whether they learned lessons in Cuba that they could take back, whether they thought going to Cuba was a valuable professional experience, whether they will be able to make changes in their practices or communities, and whether they think that their practices or communities will be open to what they have learned. Overall, the participants scored high on each of the four questions. There was a wide range, however, for thinking that they will be able to make changes in their practices and/or communities based on what they learned and experienced in Cuba. Participants were also asked to rate overall success of the project (1= very unsuccessful to 5=

very successful); mean score = 4.1; whether they thought the program should be expanded to other communities (1= strongly disagree to 5= strongly agree), mean score=4.3; and how they rated the community forum held in 2006 (1= very unsuccessful to 5= very successful), mean score=4.0.

DISCUSSION

The Cuban experience has served as a formative research process, which will engender continued dialog with community leaders and residents in south Los Angeles. This dialog will include plans to implement lessons learned. To date the FCHL team has made multiple presentations to community organizations on our experiences in Cuba and has received numerous requests for further community presentations. Internally, FCHL team participants have collaborated on community proposals, although an initial problem was a lack of cooperation and collaboration among community organizations. However after the first trip, community groups had begun to work together on different projects and started referring their clients to each others' facilities.

One immediate outcome from traveling to Cuba was a community forum held for south Los Angeles community stakeholders. Attending this forum were >250 community leaders and residents. Presentations were delivered by a California assemblywoman and by the former president of Charles R. Drew University. These speeches were followed by three presentations from the FCHL team that discussed HIV/AIDS, mental health, and disaster preparedness in Cuba. These presentations served as examples of lessons learned.

Other individual applications of lessons learned from Cuba included implementing zoo therapy for mental health patients, empowering apartment tenants in a disaster preparedness program, and providing a stronger focus on prevention and education in the community clinics.

A one-year followup will demonstrate the outcomes and impact of this research. We anticipate positive long-term outcomes and that this program can then serve as a model for other communities. We are also in the process of developing stronger links between university and community-based organizations. In this phase of community-based participatory research we expect to encounter similar challenges as other community-based researchers in this field where success is measured by the bond of trust developed with the community.[11] Based on our lessons learned, we are prepared to confront these potential problems.[12]

In addition to observing a well-structured healthcare system focusing on primary care and prevention, Cuba offers other lessons that can be learned, such as those surrounding sex disparities, however these lessons are out of the context of this article.[13] What has made this experience unique is that although preliminary literature has shown that Cuba has exported various forms of healthcare expertise such as physicians, there is very little evidence reported as to importing and implementing its prevention models.[14,15]

IMPLICATIONS FOR IMPROVING HEALTH DISPARITIES

The keys in reducing health disparities in the community follows that when planning health programs and services it is important to understand the history of the community and to involve the community in the planning stages.

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