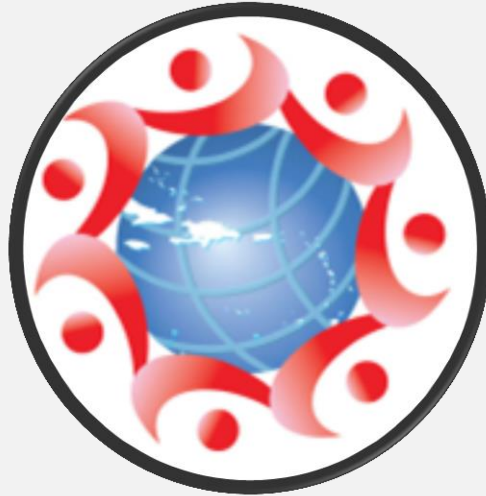
| MEETING REPORT |



Caribbean Oral Health Initiative

1st Summit

ENGAGING THE CARIBBEAN REGION FOR ORAL HEALTH

San Juan| Puerto Rico| November, 2013 |

English Version

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Note: An early version of the report was circulated for comments. All the comments were incorporated in this final report. See Annex 1.

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Steering Committee Members: Dr. Augusto R. Elías-Boneta(Chair), Ms. Agnes Rivera (Co-Chair) Dr. Rahul Naidu, Dr. Yilda Rivera, Dr. Ramón González, Professor Gloria Nazario Pietri, Dr. Elba Díaz and Dr. Elaine Pagán.

I would like to welcome you all to the 1st Regional Summit of the Caribbean Oral Health Initiative. I would like to thank our sponsor Colgate-Palmolive for its support. This meeting would have not been possible without their collaboration.

To have this gathering has been the fulfillment of many of my thoughts and emotions. I believe that with the exchange of ideas, concerns and experiences we can learn from each other. Engaging the Region for Oral Health is the theme of our meeting; and we must engage our hearts, minds and actions, and most importantly, our imaginations, to mark a change in the pattern of our thoughts to advance oral and systemic health in the region.
With a common history of slavery, plantations and colonialism, we are over 30 million strong. We are Amerindian, African, Spanish, French, English, Portuguese, Dutch, Danish, Asian, American, and Middle Eastern, and we have over 500 years' experience learning to live together, to unify in our diversity. We have dealt with the dilemma of difference, and the legacy of separate and broken identities.

With our historic identities, our flags and our imposed borders, this is our Caribbean. So, rather than looking to other geographical regions, we are reaching to our neighbors. We have dental societies, universities, scholars, corporate partners, and we needn't be isolated.
Oral health has largely been ignored by the medical profession and government; we are often forgotten, lumped into some insignificant and meaningless category.

The major causes of death in the West Indies are non-communicable diseases, violence, Sexually Transmitted Diseases and environmental hazards.

Obesity, cardiovascular disease, Type 2 diabetes, physical, social and mental malaise linked to misuse of drugs and alcohol, these are problems common to all our nations.
Oral- systemic health research has shown that diseases and disorders of the oral cavity affect general health, and that oral complications of many systemic diseases also compromise the quality of life. Oral health is orderly, related to everything.

Our priorities are no longer curative. There is a great need for social justice as a core value in order to increase the focus on health inequalities in the region. We now come together as Caribbean countries in an attempt to help ourselves and each other through synergistic partnering to improve health in the region. Life and its quality depend upon it.
So, despite our great diversity, many similarities in health, illnesses and determinants exist.

For example, due to the use of fluorides, sealants, better oral hygiene practices and enhanced treatment, oral health improved dramatically.
Advances in molecular biology have helped us better understand oral diseases and how they might be treated with tissue engineering. Not all segments of society have benefitted from the interventions and health promotion programs.

In Puerto Rico the incidence of oro-pharyngeal cancer is the highest among men in

the Americas; the fifth most frequent type of cancer among men and the sixth most common cause of mortality. Studying this inequality, we identified a deficit in biopsies for pre-malignant lesions, indicative of a late diagnosis. To further elucidate these findings, we conducted a series of Focus groups with dental professionals; interestingly, UPR alumni expressed limited training in both surgical techniques for oral cancer biopsies as well as inadequacies in communication skills as the major limitations for increasing oral cancer screening. We, then, conclude that we must carefully evaluate and adapt our dental curriculum to these research findings.

Furthermore, a collaborative and inter-professional approach with other Caribbean nations and agencies could "provide relevant information on the influence of genetic and environmental factors on disease occurrence".

Among different ethnic groups in the USA, Puerto Ricans present the highest prevalence of type 2 diabetes, after the Pima Indians in Arizona. Something worthwhile to note, and part of our dialogue here today, is that the Pima Indians residing in Mexico do not have the same situation. The change of diet, experienced by this ethnic group in Arizona, places it at higher risk of Type 2 diabetes. Puerto Ricans, as well as other Caribbean groups, both on our islands and in the United States, have incorporated new elements into our lifestyles and diets, positioning us at higher risk for the disease.

It has been demonstrated that when a group of people are dispossessed of lands, subsequent poverty, under-education, unemployment, exploitation and increased dependence on social welfare results. Sickness manifests itself in a myriad of ways.

We cannot allow any group, nationally, or globally, to bear the weight and bulk of a disease. Even if health systems automatically gravitate toward greater equity or evolve toward universal coverage, we must protect the poor and promote their help. We must be deliberate, use good science and ethical thinking.

The conditions of daily life constitute the social determinants of health and they are crucial to explaining inequalities. Conditions such as distribution of power, income, access to goods and health care - services, schools, education, work and leisure, homes, communities, rural and urban settings are structural determinants that influence how services are provided and received; and therefore, shape the outcomes and consequences. Equity in health care ideally implies that everyone in need receives it, regardless of position or other socially determined circumstances.

It is interesting to note that here, in Puerto Rico; 20 years have passed since the establishment of a government health insurance plan that provides preventive and restorative services, among others, to the medically indigent population. We see that the disease rates remain high and the utilization of services remain close to the levels before the government plan was implemented. In the area of oral health, the prevalence of dental caries was significantly reduced among 12 year olds; however, the gap between private and public school children (a proxy for socioeconomic status) increased.

Removing barriers to treatment is important, but only an oral health promotion policy that deals with the underlying causes of disease will close the gap. Pain, loss of

chewing and speech, poor aesthetics and low self-esteem should be taken seriously, and treated by culturally-sensitive curers who see oral health as a human right.

At this point, we must inquire, if the prevailing health education and intervention modalities are effective in reducing health disparities?

In synthesis, Dr, Lee Jong-wook, who served as Director of the World Health Organization stated that "interventions aimed at reducing disease and saving lives succeed only when they take the social determinants of health adequately into account".

According to Marmot "if the major determinants of health are social, so must be the remedies"

There is a worldwide movement to examine the social and health inequalities integrally. Instead of defining health by racial and ethnic inequalities, its focus is on the socio-economic role; scientific evidence confirms the inverse relationship between the social gradient and mortality.

The Marmot Review on Health inequalities explains that most factors influencing health, such as early years, education, working life, income and environmental conditions rest external to the impact and obligations of the health system; but health professionals have an important role in tackling health disparities among their patients and community.

Dr. Watt states that "a range of complimentary public health actions may be implemented at local, national and international levels to promote oral health improvements and reduce inequalities"

On a moral level, in the 21st century, with the expansion of the universal borders, we as health professionals cannot allow for essential hopes in the area of health care to remain unattended---for this is unethical and lacks scientific integrity---- hopes that once they become realities, will translate into full and active lives.

It is our wish that in this regional connection, we might identify research priorities, implement projects and programs in many collaborations, share expertise and experiences addressing similar problems, pool ideas and resources so that we can all benefit from an economy of scale. I am curious to see what each of you is doing in your respective countries, and hope that at the end of this meeting, we have a research agenda that identifies our respective needs. As Dr. Naidu points out, "Oral health care has been a low priority for most of our Caribbean governments". This effort is a first step towards a more encompassing and sustainable initiative.

I would like to extend a special thanks to the Steering Committee members, for their wonderful and hard work planning and organizing this meeting; and to Dr. Noel Aymat, Acting Dean of the School of Dental Medicine of the UPR, for his support.

Dr. Augusto R. Elías-Boneta
Chair

Background

The World Health Organization (WHO) in 2010, for the first time in the organization's history, gave high priority to oral health among emerging public health conditions. The criteria for the assignment were: that the condition presented a large aggregate burden, displays large disparities, and disproportionately affects certain populations or groups within populations.[1] Oral Health conditions were categorized as an emerging epidemic by WHO. However, earlier in 2000, the United States Surgeon General (David Satcher) described oral disease as a silent problem (epidemic), especially in the underserved populations[2].

Some years in advance (2005), the Regional Oral Health Program of the Pan American Health Organization (PAHO) anticipated the sign of an ongoing health (particularly oral health) crisis in the Americas. The crisis was due to poor and inequitable health care, changing patterns of oral diseases, and a decrease in claimed funding. The integration of oral health into primary health care services was demanded[3]. In the same report, PAHO highlighted many barriers on their ability to reach all the populations. These include limited or nonexistent national and provisional data for other oral and craniofacial diseases (beside prevalence of dental caries), and the need of each country to identify disadvantaged groups and develop interventions to reduce oral health status disparities in the Region. Similar barriers were identified in Healthy People 2000 and 2010 in the United States.

The barriers are consistent with what other scholars call the Caribbean population heterogeneity. They respond to inequalities in income and the capabilities of individuals and families as well as to the variation of social and environmental exposures that are directly related to infectious diseases, specific risk factors, and other health burdens in the urban or rural areas that cannot be solved only with the Conditioned Cash Transfer program[4]. Although some regional oral health policies and strategies for program implementation (especially for dental

[1]Petersen PE, Kwan S. Equity, social determinants and public health programs – the case of oral health. Community Dent Oral Epidemiol 2011.
[2] Benjamin, R. Oral Health: The Silient Epidemic. Public Health Rep. 2010 Mar-Apr; 125(2): 158–159.
[3]Regional Oral Health Program. Strategy for Improving General Health in the Americas through Critical Advancements in Oral Health the Way Forward: 2005-2015. Regional Office the WHO: Pan American Health Organization; 2005.
[4] Conditioned Cash Tranfer (CCT) is are programs *established to provide a complementary income to poor families and make them co-resposible for increasing access to basic health services and children education and nutrition.* Gomes C..Family, Poverty and Inequalities in Latin America and the Caribbean.Sociology Mind.Vol 3. No 1: 25-31. 2013.

caries) were generally outlined by PAHO, the responsibility to set particular goals and outline strategies to achieve successful reductions on oral diseases burden were left to each country's government[5].

Some Caribbean scholars claim oral health in the Region has been a low priority for local governments[6]. In addition, concerns arose regarding the inadequate access to dental care provided by the public sector (with private practice treatment being difficult to access for the most disadvantaged groups), and the lack of oral health care personnel or inadequately trained personnel in some countries [4-5].

Prior Regional Oral Health Efforts

Two prior efforts are highlighted in the Caribbean Region. The first effort was a strategic oral health policy document conceptualized in 1995 in a Caribbean Atlantic Regional Dental Association (CARDA) meeting, later revised in 1997 and 2003[7]. The aim of the document was to provide a framework for PAHO oral health interventions in the English Caribbean with guidelines for the development and implementation of a strategy to improve oral health focusing in treatment needs, oral health promotion, disease prevention and the use of appropriate methodologies. The document was revised by two oral health leaders in the English Caribbean, Dr. Rahul Naidu and Dr. Fannye Thompson, along with feedback of the Heads of Dental Services in the area. The actions articulated in the document focused on the need of developing and using modern data gathering technologies, conducting standardized epidemiological studies and assessments in each country[8].

The second effort was a workshop to draft a research agenda for the Latino community in 2004 developed by the Hispanic Dental Association (HDA) and the University of Puerto Rico - School of Dental Medicine (UPR-SDM). A group of health care providers, educators, academicians, researchers and policy experts convened to examine the status of the Hispanic oral

[5]Adewakun, AA. Oral Health. In Pan American Health Organization: Health Condition of the Caribbean. Washington, DC: Pan American Health Organization;1994:221-235. (Scientific Publication 561)
[6] Naidu, R., Harracksingh, A. Oral Health Inequalities in the Caribbean. UWI Today page 3. (Supplement to Trinidad Guardian Newspaper December 2011). Available at: Url: http://sta.uwi.edu/uwitoday/archive/november_2011/online_oralhealth.pdf
[7] Supported by Pan American Health Organization, Regional Office of the World Health Organization, and the Caribbean Community Health desk.
[8] PAHO/CPC/3.1/05.7. Oral Health-Office Caribbean Program Coordination. Available at: http://www.paho.org/ecc/index.php?option=com_docman&task=doc_view&gid=7&Itemid=154.

health research and to identify gaps in the existing data and its methodology. As result, the attendees recommended the development of a multidisciplinary pipeline of researchers and a collaborative research approach to address the growing needs of the Latinos and to advance existing oral disease prevention and promotion efforts[9]. One of the organizers of the activity was the Assistant Dean of Research of the UPR-SDM; Dr. Augusto R. Elías-Boneta.

Caribbean Oral Health Initiative

The Caribbean Oral Health Initiative (COHI) idea was conceived in 2012 with initial conversations between Dr. Elías-Boneta from the University of Puerto Rico School of Dental Medicine, and Bernal Stewart, and Agnes Rivera from Colgate Palmolive about the oral health status of the Caribbean Region. The need to expand the research activities and strategies for delimiting a collaborative approach among the Region motivated the formation of the Initiative[10]. Colgate-Palmolive's collaborative efforts, along with the officers in the Region and Dr. Elías-Boneta's past experiences resulted in the formation of a Steering Committee that included educators, academicians and researchers from the UPR-SDM, and Dr. Rahul Naidu.[11].

In November of 2013 academicians, researchers, professionals and government officials from the Barbados, Dominican Republic, Guyana, Jamaica, Trinidad y Tobago and Puerto Rico convened in a Summit supported by Colgate-Palmolive and the University of Puerto Rico - School of Dental Medicine. The primary aim was to develop a collaborative approach to improve oral health across the Region. This report addresses the process prior to the Summit and the main results made in thematic discussions.

[9] Ramos-Gomez, F., Cruz, G., Watson, R., Canto, M., Elías-Boneta, A. Latino Oral Health: A Research Agenda toward eliminating oral health disparities.
[10] Bernal Stewart and Agnes Rivera are two key leaders in the oral health research and promotion activities how work at Colgate-Palmolive. Bernal Stewart is the Manager of Technology at Clinical Dental Research and Development Technology Center in Piscataway, New Jersey. Agnes Rivera is the Regional Professional Relations Manager of Colgate-Palmolive Caribbean.
[11] The Steering Committee members are Dr. Augusto R. Elías-Boneta(Chair), Ms. Agnes Rivera (Co-Chair) Dr. Rahul Naidu, Dr. Yilda Rivera, Dr. Ramón González, Professor Gloria Nazario Pietri, Dr. Elba Díaz and Dr. Elaine Pagán.

1st Summit: Organization & Findings

In preparation for the summit, delegates[12] from each country were asked to prepared a comprehensive report in the form of a PowerPoint presentation. Report guidelines were distributed to ensure cross-country comparison and later analysis[13]. **Table 2** presents a summary of the reports and relevant data by country. Instead of attempting to analyze the reports, the organizers divided the data, and used it as background information for the Summit's breakout sessions. Each country's delegate presented their reports at the beginning of the Summit.

Guidelines for the Breakout Session

The purpose of the breakout sessions was for working groups to identify specific challenges, opportunities and to propose options/strategies to address Regional issues in four main areas. Each breakout session had specific aims, which were:

1) **Policy Options for Effective Actions**. This session fostered a discussion around the access to oral health care services, the workforce training requirements, insurance coverage, and other crucial issues as well as to compare local oral health care policies (effectiveness and challenges).

2) **Strategies for an Effective Oral Health Workforce.** This session assessed the profile of oral health workforce in the Region, how well they meet the needs of the population, what major changes are required to improve the delivery of services and how working together helps advance the implementation of these changes.

3) **Disease Prevention and Oral Health Promotion.** This session aims to promote an exchange of ideas to discuss what the Region is doing to reduce oral health diseases, what challenges are faced in the education of oral health care and the

[12]Dr. Fanney V. Thompson - Senior Dental Officer, Ministry of Health (Barbados), Dr. José Manuel Saldaña – Vice-Minister at the Oral Health Department/Public Health Ministry (Dominican) Republic), Dr. Shameer Ali - Principal Dental Officer, Ministry of Health (Guyana), Ms. Juliet Yolande Powell – Regional Dental Coordinator, Southern Regional Health Authority (Jamaica), Dr.VishaRamroop - Lecturer Community Dentistry/Unit of Child Dental Health (Trinidad and Tobago) and Dr. Ramón González - Professor, University of Puerto Rico School of Dental Medicine (Puerto Rico).
[13] See Annex 2.

Table 3: Oral Health Diseases and other Related Diseases

Primary source: World Health Organization - Noncommunicable Diseases (NCD) Country Profiles

	Barbados	Jamaica	Trinidad & Tobago	Guyana	Puerto Rico	Dominican Republic	Grenada
DMFT 12-yr olds[43]	0.8 (2001)	1.1 (1995)	0.6 (2004) 2.54 (2004) in 6-8 yr olds[44]	1.3 (1995)	2.7[45] (2011)	4.4 (1997)	2.7 (2000)
Prevalence of Diabetes[46]	14.8%[3]	10.8%	14.2%	14.3%	15.5%	10.7%	8.4%
Prevalence of HIV & AIDS[47]	0.9% [2]	1.8%	1.7%	1.4%	N/A	0.7%	Males: 17.3% Females: 16.9% (2005)[4]
Prevalence of Obesity[48]	Males: 22.5% Females: 45.9% Total: 34.7% (2008)[1]	Males: 9.7% Females: 37.5% Total: 24.1% (2008)	Males: 20.6% Females: 37.5% Total: 29.3% (2008)	Males: 8.6% Females: 27.1% Total: 17.2% (2008)	Males: 69.9% Females: 62.7% Total: 66.2 % (2015)[49]	Males: 14.0% Females: 28.3% Total: 21.2% (2008)	Males: 13.7% Females: 30.7% Total: 22.5% (2008)
Population Based Cancer Registry	YES[1]	YES	YES	YES	YES	NO	NO

[43] PAHO. Regional Core OH Indicators DMFT with links to country reports - last updated 2012.
[44] Trinidad & Tobago report on 1st COHI Summit.
[45] Elías-Boneta, AR., Toro, M., Rivas-Tumanyan, S., Murrillo, M., Orraca, L., Encarnación, A., Toro-Vizcarrondo, C. Persistent Oral Health Disparity in 12-year-old Hispanics: A cross-sectional study. BMC Oral Health Journal. Submitted on July, 2015.
[46] 2014 International Diabetes Federation (20-79 years) (%). ADD webpage
[47] UNAIDS 2013 (Adults aged 15 to 49 prevalence rate)
[48] Cooperation Strategy, WHO 2009 and World Health Organization - Noncommunicable Diseases (NCD) Country Profiles , 2014.
[49] Sorce: http://www.salud.gov.pr/Estadisticas-Registros-y-Publicaciones/Publicaciones/Resumen_General_Situacion_de_la_Salud_2004-2013_Update_tablas_Final_21marzo.pdf

Annex 1: Summited Comments

8/6/2015. ***General Comment***. "Thank you for sending me this draft report. It reads very well and addresses all the important issues". Summited by Dr. Rahul Naidu (

8/ 7/2015. ***Follow up Activities***. *The collaboration between* Dr. Weistein (University of Washington) and Dr. Naidu (University of West Indies) is missing. Summited by Dr. Lydia López (Puerto Rico)

8/12/2015. ***Policy Options for Effective Actions***. "What all countries agreed to have in common is the need of access of the CDO to the governor and or Health Minister, to assure that oral health issues are attended by the governments". Dr. Elaine Pagán (Puerto Rico)

8/12/2015. ***Policy Options for Effective Actions***. Is necessary to distinguish public policy meaning. Some minor edits in text are attached. Summited by Dr. Elba Diaz.

8/12/2015. ***Background***. Is necessary to explain the Conditioned Cash Transfer program. ***Caribbean Regional Oral Health Initiative***. Is necessary to separate the organizers from the delegates. Some minor edits in text are attached. Summited by Prof. Gloria Nazario.