

H.D. Sgan-Cohen<sup>1\*</sup>, R.W. Evans<sup>2</sup>,  
H. Whelton<sup>3</sup>, R.S. Villena<sup>4</sup>,  
M. MacDougall<sup>5</sup>, D.M. Williams<sup>6</sup>,  
and IADR-GOHIRA Steering and Task  
Groups<sup>†</sup>

<sup>1</sup>IADR Regional Board Member for Europe, Community Dentistry, Hebrew University-Hadassah Faculty of Dental Medicine, Jerusalem, Israel; <sup>2</sup>IADR Past Regional Board Member for Asia-Pacific, Population Oral Health, The University of Sydney, Australia; <sup>3</sup>IADR President-elect, Oral Health Services Research Centre, University College Cork, Ireland; <sup>4</sup>IADR Regional Board Member for Latin America, Chair of Pediatric Dentistry, San Martin de Porres University, Lima, Peru; <sup>5</sup>IADR President, James Rosen Chair in Dental Research, School of Dentistry, University of Alabama at Birmingham, USA; and <sup>6</sup>IADR Past President, Institute of Dentistry, Barts and The London School of Medicine and Dentistry, Queen Mary University of London, London, England; \*corresponding author, harold@hadassah.org.il

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# IADR Global Oral Health Inequalities Research Agenda (IADR-GOHIRA<sup>®</sup>): A Call to Action

## BACKGROUND

While there have been major improvements in oral health in the past 30 years, with research leading to remarkable advances in the prevention and treatment of disease, inequalities remain, and a marked social gradient in oral health is seen similar to that in general health. Global inequalities in oral health persist, both between and within different regions and societies, and they undermine the fabric, productivity, and quality of life of many of the world's peoples. There has been much research into the biological and social determinants of general and oral health, including the influence of psychological, social, environmental, economic, cultural, and political factors on health outcomes (Marmot and Bell, 2011), but this has not led to the improvements that could be expected. The International Association for Dental Research (IADR) has invested in the Global Oral Health Inequalities Research Agenda (IADR-GOHIRA<sup>®</sup>) initiative, the key objective of which is to articulate a research agenda to generate the evidence for a strategy that, if properly implemented, will reduce inequalities in oral health within a generation (Williams, 2011a,b). IADR recognizes that, to date, there has been limited success in translating research into effective action to promote global oral health and eliminate inequalities. It is increasingly apparent that addressing this challenge will require closer and more robust engagement across sectors, including social policy, and the adoption of an upstream approach that integrates action on oral health with approaches to reduce the global burden of non-communicable disease in general. The essence of the present call to action is to focus the attention of international leaders in oral health research on this issue. IADR is committed to accepting a scientific, social, and moral leadership role in achieving this goal.

The underlying causes of global inequalities in general and oral health are the structural determinants and conditions of daily life. These include gross economic disparities between and within countries, and policies and programs that emanate from the failure of governments to address the social determinants of health. This leads to the conclusion that if systematic improvements in the health of societies are to be achieved, then all sectors of society must

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become engaged, and not only the health sector (Sheiham *et al.*, 2011). A full understanding of inequalities in health requires insight into: (1) the social determinants of health and the social gradient; (2) the fact that, in common with non-communicable diseases in general, oral diseases are socially determined, with consequences that may pass from generation to generation; and (3) the sources of the social gradient, often referred to as the “causes of the causes” (Marmot and Bell, 2011).

The overall aim of IADR-GOHIRA<sup>®</sup> is to focus attention on the need:

- for better understanding of the full range of oral health determinants that include biological and environmental factors as well as behavioral and social determinants of health and well-being;
- to promote research on social and physical environments, across the social gradient, with emphasis on marginalized and vulnerable communities;
- to focus on research strategies that can better serve to reduce existing health inequalities, including oral health inequalities within and between countries; and
- to develop and maintain usable resources for compiling evidence-based systematic reviews and guidelines on methods and strategies to address the inequalities in oral health.

## THE IADR-GOHIRA<sup>®</sup> RESEARCH PRIORITIES

Three key challenges have been identified. These are:

- (1) gaps in knowledge and, specifically, insufficient focus on social policy;
- (2) the separation of oral health from general health; and
- (3) inadequate evidence-based data (including research-driven programs, capacity-building strategies, standardized systems for measuring and monitoring, etc.).

Ten key research objectives are prioritized, to address these challenges, with due regard to the different needs of the variety of global health care systems:

- (1) Identify critical gaps in knowledge.
- (2) Develop and implement, in partnership with cognate evidence-based medical and dental organizations, a knowledge base that uses a standard set of reporting criteria and includes a registry of implementation trials.
- (3) Emphasize the significance of psycho-social determinants of oral health, oral health-related behavior, and oral health care-seeking behavior, on whole populations and underprivileged communities.
- (4) Emphasize the importance of integrating research on oral health inequalities, with wider approaches to reducing health inequality as a whole.
- (5) Emphasize the importance of multi-disciplinary and translational research, seeking input from a range of social scientists and health professionals.
- (6) Develop disease prevention strategies based on broad social and environmental determinants of health, adopting

upstream rather than downstream strategies (Sheiham *et al.*, 2011).

- (7) Develop strategies that are capable of local interpretation in a way that respects cultural sensitivities and socio-economic constraints for improving oral health literacy.
- (8) Develop community-based regional- and country-level systems for oral health promotion and healthcare, recognizing previous experience and resource implications, and, where appropriate, emphasizing whole and at-risk populations (Monse *et al.*, 2010; Dugdill and Pine, 2011).
- (9) Raise the issue of oral health inequalities, with the need to promote proportionate universalism and specific emphasis on underprivileged communities, in wider public debates.
- (10) Advocate for the inclusion of oral health with other sectors in all policies, in line with the Adelaide Statement of Health in All Policies (WHO, 2010).

Examples of research needs are illustrated in 3 tables (see Appendix A) corresponding to the 3 identified challenges. These are set at 3 levels: basic research, clinical research, and implementation. The emphases of the priorities are on unifying themes that are common to all oral diseases, rather than focusing on individual diseases in isolation.

It needs to be emphasized that the present research agenda articulates a strategy that will engage all dental research disciplines and beyond. Some of the more prevalent oral diseases of concern are: dental caries (Pitts *et al.*, 2011), periodontal disease (Jin *et al.*, 2011), oral cancer (Johnson *et al.*, 2011), oral infections (Challacombe *et al.*, 2011), and craniofacial abnormalities (Mossey *et al.*, 2011). IADR recognizes that substantial progress in reducing oral health inequalities will be facilitated and promoted when researchers engage in coordinated programs of research across and translational to multiple sectors.

## OUTCOME PRIORITIES AND TIMELINE

The prioritized outcomes and timeline for implementation of the IADR-GOHIRA<sup>®</sup> Call to Action are as follows:

- (1) Establish and set in motion by 2013 the GOHIRA Scientific Network – GOHIRN (see Appendix B). This network should create a community of interest within IADR to facilitate the communication, wide dissemination, and implementation of IADR-GOHIRA<sup>®</sup> research priorities. GOHIRN was formulated at the 2012 IADR General Session at Iguacu Falls, Brazil. GOHIRN has initiated symposia and oral and poster sessions at IADR regional and international meetings throughout 2012 and 2013.
- (2) Engage with key partners, in particular the World Health Organization (WHO) and the FDI World Dental Federation, to agree on an integrated approach to the reduction of oral health inequalities (Petersen, 2010). After approval by the IADR Board, a joint workshop by 2014 is proposed, wherein specific measurable outcomes and timelines will be defined.
- (3) Engage, in 2013, with the main research funding agencies and oral health policy makers, to raise awareness and

increase the political priority of global oral health research to reduce inequalities, with the goal of locating funding resources and sustainable enabling infrastructure for achieving the IADR-GOHIRA® goal.

- (4) Adopt the common risk approach, build (by 2013) links across general health disciplines, including child health and primary care, so as to learn from others' experiences, cross-fertilize ideas and approaches, develop lateral support, maximize lobbying capacity, and address common issues.
- (5) Encourage, by 2013, research on health promotion aimed at improving existing dental health policies for children and young adults, with a strong emphasis on an integrated approach to the upstream approach of disease prevention and oral health promotion.
- (6) Monitor, evaluate, and conduct a comprehensive outcome assessment for the IADR-GOHIRA® initiative by 2016.
- (7) Attain, by utilizing IADR leadership and collaborative world research efforts, the social and moral goal of decreasing, and even eliminating, the global disparities and inequalities of oral diseases, within one generation (by 2030).

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### †IADR-GOHIRA® Steering Group

David M. Williams, Chair, IADR Past President  
 John Clarkson, IADR Past President  
 Lois Cohen, NIDCR  
 Christopher Fox, IADR Executive Director

John Greenspan, IADR Past President  
 Maria Fidela de Lima Navarro, IADR Past President  
 E. Dianne Rekow, IADR Immediate Past President

### IADR-GOHIRA® Task Group Chairs

Nigel Pitts, Dental Caries  
 Li Jian Jin, Periodontal Disease  
 Newell Johnson, Oral Cancer  
 Stephen Challacombe, Oral Infections  
 Peter Mossey, Development Abnormalities  
 Aubrey Sheiham, Implementation and Delivery

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