

INAUGURAL CONFERENCE

# LIFESTYLE MEDICINE IN LATIN AMERICA & THE CARIBBEAN PREVENTION OF NCD'S

February 23-25, 2024 Willemstad, Curaçao

# Abstracts & Faculty Biographies for February 23

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# Abstract & Biography Prof. Dr. Paulo Marchiori Buss

#### **Global public health challenges**

Paulo Buss, National School of Public Health, Fiocruz, Brazil

The Covid-19 pandemic showed the world's fragility in dealing with pandemics. Among these weaknesses is the lack of preparation of national health systems in several dimensions: preparation, response and recovery.

On the other hand, the fight against non-communicable diseases is hampered by failures in the health systems, which delay diagnosis and have difficulties in implementing treatment.



However, failures also exist at the global level, due to the weakening of global multilateralism, including the United Nations (UN) and its various agencies, funds and programs, including the World Health Organization (WHO)On the other hand, multilateral organizations of countries (such as the G7 and G20) and regional multilateral organizations, as seen in the Americas region, did not practice the necessary solidarity to face the pandemic or other health problems. This set off a global warning signal in all regions and countries of the world.

However, the same applies to chronic non-communicable diseases, in the area of health, and in tackling the climate crisis, preserving biodiversity and maintaining peace, all fundamental elements for human health and well-being. The evident delay in implementing the 2030 Agenda and its Sustainable Development Goals (SDG) was detected by the international community. Considering what is known about the social determination of health, the harmonious achievement of the SDGs would be essential for the achievement of human and planetary health and well-being.

From the author's perspective, the biggest global (but also national) challenge for public health is the full implementation of the SDGs by 2030, as in this way the world would be adequately addressing the social determinants of health.

In the specific sphere of the health sector at a global level, the WHO seeks to reorganize the response to current and future pandemics with the drafting of a binding Treaty on Pandemics and with the review of the International Health Regulations (IHR).

In the Americas region and sub-regions, it will be essential to reorganize regional diplomacy through the re-institutionalization of UNASUR and the strengthening of OPS and CELAC.

#### Biography

Medical Doctor (MD); Master in Social Medicine (MPH); PhD in Health and Sustainability Professor Emeritus, Oswaldo Cruz Foundation; Full Professor, National School of Public Health, Fiocruz, Brazil Full Member, National Academy of Medicine of Brazil President, Latin American Global Health Alliance



# Abstract & Biography dr. Izzy Gerstenbluth

#### What is public health; a Dutch Caribbean view

Izzy Gerstenbluth, Head Department of Epidemiology & Social Science of the Curacao Biomedical & Health Research Institute

There is an enormous discord between the focus of medical education and the health problems of our societies. We will discuss why this is very problematic and how public health is further weakened by the focus on short term quick political wins and a disregard for the real focus of Public Health, which is not merely the provision of some collective services. These issues are all the more troublesome in the context of Small



Island Developing States, where lack of funding, lack of capacity and critical mass in public health policy and research undermine an effective and structural response to the growing burden of NCD's and potential other emerging health challenges.

#### Biography dr. Izzy Gerstenbluth

Izzy Gerstenbluth heads the Department of Epidemiology & Social Science of the Curacao Biomedical & Health Research Institute. He received his medical degree from the University of Groningen in the Netherlands. After doing residencies in Surgery, Obstetrics & Gynecology and Neurology, he worked as a General Practitioner in government service in Curaçao, as well as working part time within the Public Health department where in the late eighties he set up the Epidemiology & Research Unit. He then trained at and obtained an MSc in Public Health Medicine from the London School of Hygiene & Tropical Medicine. He has served as National Epidemiologist, first for the Netherlands Antilles as a whole until its abolishment and then for the Country of Curaçao up to his retirement in 2022. He still holds a part time position with the Royal Institute of Public Health and the Environment in the Netherlands to advise and assist the three Dutch special municipalities of Bonaire, St. Eustatius and Saba on matters concerning communicable disease surveillance, public health practice and outbreak management. From February 2023 he works for the Public Health dept of Bonaire on a part time basis as well. Aside from communicable diseases, his work, however, mostly concentrates on non-communicable diseases. He has initiated and led major health studies on all of the islands of the former Netherlands Antilles and has set up and is working towards broadening registration systems regarding cardiovascular diseases. risk factors and cancers. His research efforts target the strengthening of surveillance & monitoring systems, reducing incidence of HIV, improving vector control and reducing the impact of vector-borne diseases including the understanding of behavioral aspects regarding prevention measures. In the non-communicable diseases his attention is directed towards obesity as central risk factor for hypertension and diabetes as well as several types of cancer, the epidemiology of chronic diseases and on how to effectively modify life styles taking the determinants of health into account especially inequities in health.

URL: https://www.cbhri.com/dr-izzy-gerstenbluth/



#### Abstract & Biography Professor Kasisomayajula Viswanath

# Translational Communication to Address Inequities in NCDs Global Burden

K. Viswanath, Ph.D., Lee Kum Kee Professor of Health Communication, Harvard T. H. Chan School of Public Health, Dana-Faber Cancer Institute, Boston, USA

Even as COVID continues to draw attention from policy makers and public health practitioners, non-communicable



diseases (NCDs) remain significant global public health threat. According to the World Health Organization (WHO), NCD's are "collectively responsible" for close to 74% of deaths worldwide. Two points are worth noting in this regard. One, the major risk factors causing NCDs – tobacco use, sedentary lifestyle, unhealthy diets, alcohol misuse, and air pollution, are all readily addressable through changes in environmental, policy and individual measures and are largely preventable. Two, the burden of NCDs is disproportionately borne by low and middle-income countries (LMICs). And, within LMICs, there are significant disparities in morbidity and mortality among people of different classes, geographies, and race and ethnicities. A profound irony is that the evidence-base to mitigate the impact of NCDs is already well-established and measures to prevent them are well-known suggesting a failure to communicate and translate knowledge to influence policy actions and individual behaviors. This talk will focus on why knowledge on NCD prevention is failing to translate to influence policy and practice, and how one might draw on *translational communication* to tackle the burden of NCDs globally. More central, we will address how translational communication can be designed and executed to mitigate inequities across and within nations.

#### Biography

Dr. K. "Vish" Viswanath is Lee Kum Kee Professor of Health Communication in the Department of Social and Behavioral Sciences at the Harvard T. H. Chan School of Public Health (HSPH) and in the McGraw-Patterson Center for Population Sciences at the Dana-Farber Cancer Institute (DFCI). He is also the Director of Lee Kum Sheung Center for Health and Happiness, Harvard Chan. Other additional administrative and scientific leadership positions held by Dr. Viswanath include Faculty Director of the Health Communication Core of the Dana-Farber/Harvard Cancer Center (DF/HCC), Director of the Center for Translational Communication Science, DFCI, Associate Director for Community Outreach and Engagement, Dana-Farber/Harvard Cancer Center, and Director, Harvard Chan, India Research Center. He is the founding Director of DF/HCC's Enhancing Communications for Health Outcomes (ECHO) Laboratory.

Dr. Viswanath's work is driven by two fundamental concerns: (a) how to center equity in drawing on translational communication science to promote health and well-being for ALL population groups, and (b) to involve community-based organizations and stakeholders in promoting social change.

The ultimate goal of the program of research is to influence public health policy and practice through knowledge translation. His work draws from literatures in communication and implementation sciences, social epidemiology, and social and health behavior sciences.

His work so far has documented the relationship between communication inequalities, poverty and health disparities, and knowledge translation to address health disparities. He has written more than 300 journal articles and book chapters concerning communication inequalities and health disparities, knowledge translation, public health communication



campaigns, e-health and digital divide, public health preparedness and the delivery of health communication interventions to underserved populations. He is the Co-Editor of four books and monographs: Mass Media, Social Control and Social Change (Iowa State University Press, 1999), Health Behavior and Health Education: Theory, Research & Practice, 5th Ed. (Jossey Bass, 2015), The Role of Media in Promoting and Reducing Tobacco Use (National Cancer Institute, 2008) and A Socioecological Approach to Addressing Tobacco-Related Health Disparities (National Cancer Institute, 2017) and a co-author of The First 1000 Days of Life: Lessons from Social and Behavior Change Communication. He was also the Editor of the Social and Behavioral Research section of the 12-volume International Encyclopedia of Communication (Blackwell Publishing, 2008)

In recognition of his academic and professional achievements, Dr. Viswanath received several awards including the Postdoctoral Mentor of the Year Award from the Dana-Farber Cancer Institute, Joseph W. Cullen Memorial Award For Excellence in Tobacco Research, American Society for Preventive Oncology, the Dale Brashers Distinguished Mentorship Award, National Communication Association, Outstanding Health Communication Scholar Award jointly given out by the International Communication Association and the National Communication Association, the Mayhew Derryberry Award from the American Public Health Association (APHA) for his contribution to health education research and theory, and the College of Liberal Arts (CLA) Alumnus of Notable Achievement, University of Minnesota. He delivered the 23rd Annual Aubrey Fisher Lecture at University of Utah in 2009, and the Bettinghaus Endowed Lecture at Michigan State University in 2023. He was elected Fellow of the International Communication Association (2011), the Society for Behavioral Medicine (2008) and the Midwest Association for Public Opinion Research (2006).



# Abstract & Biography Professor Adolfo Rubinstein

# From implementation research to policy change in NCDs: the role of politics

Adolpho Rubinstein, Center for Implementation and Innovation in Health Policies, Institute for Clinical Effectiveness and Health Policies, University of Buenos Aires, Argentina

After new evidence from research on an intervention, program, or policy is published, even when it is strong or is developed rigorously and at a clinical, health service, or health system



level, even when using implementation science theories, processes, and frameworks, there are further critical steps to be considered. These steps, like policy formulation, adoption, and effective implementation are key to getting to the policy or practice change. In this regard, implementing a health policy is a long journey where research is very important but it is also just an intermediate station. All this process that goes from research to policy to politics, to make a change, depends critically upon a good political analysis and an adequate political strategy. As implementation is about people, most of the time, interactions of people as players, actors, or stakeholders around the health arena, as in any other field, are driven by power, positioning, expected gains or losses, vested interests, influence, and public perception.

This lecture will be focused on how to elaborate a political analysis and a political strategy in NCD prevention and control, based on a conceptual framework related to problem recognition, policy generation, and politics to set the agenda and create a window of opportunity to adopt a policy. In addition, the lecture will try to give some hints on how to close the gap between researchers and policymakers.

#### Biography

Prof. Rubinstein is a physician who graduated at the University of Buenos Aires (UBA). He received a MSc in Clinical Epidemiology from Harvard School of Public Health in 1996 and a DrPH in Public Health from UBA in 2000. In 2002, he obtained a diploma in Health Economics at the University of York, UK and in 2022, he completed the executive program of implementing public policies at Harvard Kennedy School of Government.

Dr Rubinstein is Full Professor of Public Health and Visiting professor of the Lown Cardiovascular program at Harvard TH Chan School of Public Health.

He was the founder and past Director-General of the Institute for Clinical Effectiveness and Health Policy (IECS) in Argentina since its creation in 2002 until March 2017 when he was appointed first as a vice minister and then National Minister of Health, from 2017 to 2019. From 2009 to 2017, he was Director and PI of the Southern Cone American Centre of Excellence in Cardiovascular Health, (CESCAS/IECS), sponsored by NHLBI and PI of several NIH-funded projects.

His research was focused on health policy research, cardiovascular epidemiology and implementation research to improve prevention and control of NCD in Argentina and Latin America. He has been PI of research studies awarded by national, regional and international bodies such as NHLBI, NCI and FIC, IDRC, PAHO, WHO, WB, IDB, and others. Prof. Rubinstein has published more than 140 papers in peer-reviewed journals as well as textbooks and book chapters, focusing on NCD epidemiology, different aspects of the practice of primary care, and resource-allocation decision-making. In 2020, he returned to



IECS, to create the Center for Implementation and Innovation in Health Policies (CIIPS), where he is its current Director.



### Abstract & Biography Dr. Soraya Verstraeten

# An exploration of health research programming in the Caribbean part of the Kingdom of the Netherlands

Soraya Verstraeten, Caribbean Prevention Center (Fundashon Prevenshon), Willemstad, Curacao

#### Introduction

Health research only takes place to a limited extent on the islands of Aruba, Bonaire, Curaçao, Saba, St. Eustatius, and St. Maarten (ABCSSS islands), yet is important for good health and well-being and high-quality and affordable healthcare provision. This presentation shares the results of the exploration for health research programming for ZonMw, the Dutch funding organization for health research and innovation. The study aimed to identify and prioritize research topics, provide an overview of relevant organizations, and identify potential barriers and facilitating factors for health research on the ABCSSS islands.

#### Methods

The study used an exploratory mixed-methods approach. The overall design was based on the principles of "positive health" and the "dialogue model" and focused on the broad field of healthcare and welfare, with inputs from professionals working in health policy, practice, and research on all six ABCSSS islands.

The study consisted of four phases, 1. desk research, 2. interviews with experts (n=23), 3. an online questionnaire (n=262 respondents) and 4. reflection sessions on each island, with a shared session for Saba and St. Eustatius (n=5), in which data were gathered and previous results were shared and discussed. The research took place from 15 April to 14 October 2022.

#### Results

Based on the literature review (phase 1) and subsequent interviews with experts (phase 2), 8 research domains emerged and were prioritized in phase 3. Based on the Average Ranking Score (ARS), these are chronic diseases (ARS 2.60), mental health (ARS 3.14), organization of care (ARS 3.91), sexual health, maternal and childcare (ARS 4.37), healthy environment (ARS 4.49), infectious diseases (ARS 4.89), injuries/wounds (ARS 6.19), informal support (ARS 6.41). Within these research domains underlying avenues (subtopics) were identified. The reflection sessions (phase 4) generally confirmed the previously prioritized topics. In addition, the results of the exploration provide an overview of the island organizations that (can) play a role in answering research questions and identified factors that may hinder or stimulate health research on the ABCSSS islands.

#### Conclusion

Our exploratory approach led to a comprehensive health research agenda with input from a broad variety of health-related professionals from all six ABCSSS islands and the Netherlands. The results from the study are used within ZonMw to determine how they can deploy health research programming to contribute to good health on the islands.



#### Biography Soraya Verstraeten

Soraya Verstraeten is the quality manager of the Caribbean Prevention Center (Fundashon Prevenshon) in Curaçao and an Assistant Professor at the Erasmus School of Health Policy and Management in Rotterdam. She holds a bachelor's degree in molecular biology (cum laude), a master's degree in biomedical sciences and a PhD-degree in public health. Her work has been published in among others the American Journal of Public Health, the European Journal of Public Health, Social Science & Medicine and the Dutch Medical Journal (Nederlands Tijdschrift voor Geneeskunde). As the principal investigator, she has led several health studies in Curaçao, among others the national health surveys of 2013 and 2017 and the 2015 youth health survey, at the



Institute of Public Health (Volksgezondheid Instituut Curaçao), which she co-founded in 2012. Dr. Verstraeten serves as a member of the Scientific Committee of the Netherlands Society for Tropical Medicine and International Health and the Asosiashon Mediko di Antias, and is the chairwomen of the Kaya Kaya Foundation.



## Abstract & Biography Professor Michel Poulain

#### Martinique, the 5<sup>TH</sup> Longevity Blue Zone

Michel Poulain, UCLouvain, Belgium

A Longevity Blue Zone (BZ) is a delimited area where the population born in this place is proved to live significantly longer compared to populations elsewhere in the same country. It is basically a demographic concept and the first step for identifying a BZ is the validation of the age of the oldest olds to assess the level of population longevity. The BZ is a area where the population shares the same lifestyle and environment so that the BZ will bring the best opportunity to search for potential longevity determinants.



In the search for areas of very high survival, data quality is essential. In Martinique, all the data were accurately verified, without detecting errors, such as omissions or age exaggeration. And they testify to the exceptional survival of the population of Martinique in general, and not just a few privileged individuals. Martinique displays a longevity comparable to that of the Nicoya peninsula (Costa Rica) and of the islands of Okinawa (Japan), Sardinia (Italy), and Ikaria (Greece). More about them and the ongoing scientific investigations that are close to the interest of the lifestyle medicine can be found on the following website: <a href="https://longevitybluezone.com">https://longevitybluezone.com</a>.

#### Biography

Michel Poulain was originally skilled in astrophysics at <u>University of Liège</u> (Belgium), he received a PhD in demography at <u>UCLouvain</u> (Belgium). As demographer, he is specialized in Longevity studies. Currently emeritus professor at UCLouvain, he is also Senior Researcher at the Estonian Institute for Population Studies at <u>Tallinn University</u> (Estonia). He has been President of the Société Belge de Démographie (1984-1990) and later of the Association Internationale des Démographes de Langue Française (AIDELF) (1988-2000). Involved in centenarian's studies since 1992 he is active member of the International Database on Longevity (IDL) and the International Centenarian Consortium (ICC). In 2000, he was involved in validation the age of the numerous centenarians in Sardinia and introduced the concept of Longevity Blue Zone as area where the population experiences an exceptional longevity and includes a large number of centenarians. So far, he identified 5 Blue Zones: Ogliastra in Sardinia, Okinawa in Japan, Nicoya in Costa Rica, Ikaria in Greece and more recently Martinique, the French Oversea Department.



# Abstract & Biography Professor Jean Crusol

What are the costs and benefits of this for the island? Jean Crusol, University of the French Antilleese, Martinique

Professor Michel Poulain opened a new, original and fundamental research space, when at the beginning of the 2000s, he circled with his blue pencil areas and islands which in the world were distinguished by the proportion of centenarians who there live. These "blue zones", as he called them, have become important, not only for the interest they have for the study of the questions of aging, and the perpetuation of life in good health, but also for the attraction,



even the fascination, that they exert on people who would like to live old and in good health, i.e. the vast majority of humans, who are more and more numerous thanks to progress in medical techniques and economic wealth!

Increasing numbers of researchers have embarked on the path thus opened. This resulted not only in the identification of new "blue zones", but also in the enrichment and expansion of scientific knowledge on the causes of longevity, and the discovery of new knowledge, new behaviors and new modes of life allowing to optimize the chances "of living long and well".

Alongside the advances in "living long and well" which could be described as internal and individual advantages, we are seeing advantages emerging for countries which excel in "living long and well" and which could attract, thanks to fascination that they exert on people, a tourist clientele for visits, treatments, even for the permanent installation of people and families coming from outside. This would be an external and collective advantage! And in these two cases, there are costs to take into account: they are individual and collective. In our presentation, we propose to review several cases of "new blue zones" in the Caribbean (Barbados, Guadeloupe, Martinique, Puerto Rico) and to outline the bases of a cost-benefit study of "zones blue"!

#### Biography

#### Professor Emeritus University of the French Antilleese **CONFERENCES**

-2022-2023 : Conferences : Geopolitics in the Caribbean, at the Institute of Higher Studies of Nation Defense (France)

-1978-2023 : Conferences : Economics of island countries : University of Social Sciences of Toulouse (France); University of Bordeaux (France); School of Higher Studies on Latin America ;University of Florida International (USA) ; University of Rio Piedras (Puerto Rico) ; University of Cordoba (Argentina); University of Medellin (Colombia); University of Mauritius (Mauritius Island) ; University of the West Indies (Cave-Hill Barbados).

#### **CONSULTING**

-1978-2023 : Moroco's Ministry of Development : Tourism development in the Region of Merzouga ; Organization of American States (OEA) : Development and Integration in the Caribbean : Organization for Cooperation and Economic Development (OECD) : International subcontracting for Development In the Caribbean Region ; European Community : New Orientation and Teaching for Tourism in Bulgaria.



#### TEACHING

-1970-2013 : Professor of Economics and Economic Dynamics : University of the French Antilleese and French Guyana ; University of the West Indies ; Institute of International Relations (Trinidad and Tobago) ; University of Paris1 Sorbonne ; University of Paris 9-Dauphine.

#### ADMINISTRATIVE RESPONSABILITIES

-1972-2015 : past-Dean and Vice-Dean of the Faculties of Economics and Law of Guadeloupe, Martinique, French Guyana ; Director of the Doctoral School of the University of the French Antilleese.

#### POLITICAL POSITIONS OCCUPIED

-1992-2015 : Vice-President of the Martinique Local Assembly

-1984-1989 : Member of the European Parliament

-1984-1994 : Member of the Economic Counsil of France

#### TRAINING AND QUALIFICATIONS

-2020 : Special Diploma in Geopolical and Strategic Studies

-2018 : Certificate OSCR/ODHIR of International Observer of Elections

-1990 : State Agregationin Economics University of Paris 1 Sorbonne

-1985 : University Doctorale in Economics University of Paris 1 Sorbonne

-1977 : State Doctorale in Economics University of Paris 9 Dauphine

#### **BOOKS AND ARTICLES**

-10 books and 50 articles



### Abstract & Biography Dr. Eduardo Barbosa

#### Lifestyle and Endothelium

Eduardo Barbosa, Hypertension and Cardiometabolism/Vascular Dynamics Lab, Hospital São Francisco at Santa Casa, Porto Alegre

The presentation is about the assessment of vascular damage and the impact of physical exercise and breathing pattern on endothelial dysfunction and arterial stiffness. We demonstrated through our investigations that in young people (pre-adolescents) we have the presence of risk factors without



endothelial dysfunction occurring. Throughout life, exercise has an impact on reducing blood pressure, but through different physiological mechanisms, depending on the type of exercise. The impact of exercise on vascular damage is different depending on the point in the atherosclerosis continuum (young people, normal individuals, hypertensive individuals and those with coronary disease). We also demonstrated that training a breathing pattern can help improve recovery from vascular damage.

#### Biography

Cardiologist / Intensive Care. PhD in Clinical Medicine from UNICAMP. Fellow ISH. Past President of Hypertension Department / Brazilian Society Cardiology; LASH; Artery Latam and Pan American College of Endothelium. Head Hypertension League Porto Alegre - ESH Excellence Center; Dep. Hypertension and Cardiometabolism / Vascular Dynamics Lab. at Hospital São Francisco at Santa Casa in Porto Alegre.



### Abstract & Biography Dr. Vilma Irazola

**Fighting hypertension in Low- and Middle-Income Countries (LMIC): the role of implementation science** *Vilma Irazola, South American Center of Excellence for Cardiovascular Health (CESCAS), Institute for Clinical Effectiveness and Health Policy (IECS), Buenos Aires, Argentina* 



Implementation science plays a vital role in improving hypertension control, a critical aspect of public health globally,

by contributing to bridging the gap between scientific evidence and real-world healthcare practices and policies.

Implementation science helps investigate the barriers to effective hypertension control at different levels and tailor interventions to specific contexts. These interventions are usually complex, that is, they consist of several components, involve multiple stakeholders, and act at different levels (for example, the community, patients, caregivers, healthcare providers, built environment, decision-makers).

Of note, implementation science relies on theories, models, and frameworks that allow for a holistic approach to these complex health problems, and the co-design of contextualized implementation strategies. Moreover, once effective strategies are identified and tested, implementation science provides tools for scaling them up to reach larger populations, addressing health disparities, and promoting long-term sustainability.

In a cluster randomized controlled trial conducted in Argentina, in the primary care setting, we found that a community health worker-led intervention including patient self-management, simplified clinical guidelines, and digital tools, significantly reduced blood pressure and improved the hypertension control rate.

At a larger scale, the HEARTS initiative developed by WHO/PAHO is being implemented in different countries. The HEARTS technical pillars are defined as priority lines of work that facilitate programmatic implementation, provide technical resources, and promote innovation. The technical pillars comprise standardized training and education, accurate blood pressure measurement, simple specified treatment protocols, team-based care, research and evaluation, and data-driven decisions.

These and other experiences will be discussed in this session.

#### Biography

Cardiologist and epidemiologist, expert in Implementation Science. Director of the Institute for Clinical Effectiveness and Health Policy (IECS) and the South American Center of Excellence for Cardiovascular Health. Director of the Master's Degree Program in Clinical Effectiveness at the University of Buenos Aires.

Visiting professor at NYU and Harvard University.



### Abstract & Biography Dr. Manuel Ramirez-Zea

Implementing multicomponent interventions to control (pre)-hypertension in poor Latin American populations

Manuel Ramirez-Zea, INCAP Research Center for the Prevention of Chronic Diseases. Department of Nutrition and Chronic Diseases (CIIPEC), Institute of Nutrition of Central America and Panama (INCAP)

Dr. Adolfo Rubinstein and Dr. Vilma Irazola, South American Center of Excellence for Cardiovascular Health (CESCAS). Institute for Clinical Effectiveness and Health Policy (IECS), Buenos Aires, Argentina



Hypertension is the leading preventable risk factor of cardiovascular diseases, premature death, and disability in the world. Three guarters of patients with hypertension live in low- and middle-income countries and <10% of them have their blood pressure (BP) controlled. In the last 10 years, we have developed several randomized controlled trials to assess whether 1) mHealth (monthly motivational counselling calls and weekly personalized text messages) would reduce BP in persons with pre-hypertension living in poor urban settings in Guatemala, Peru, and Argentina; and 2) the effect of a multilevel and multicomponent intervention program on BP control among patients with hypertension in Guatemala. Our mHealth-based intervention on pre-hypertension, conducted in 2012, did not result in a significant change in BP compared to usual care, but was associated with a small reduction in body weight and an improvement in some dietary habits. In Guatemala (2019-2022), we adapted a complex intervention that was already successfully used in reducing BP in Argentina. However, although patients in the intervention group had a significantly greater proportion with BP controlled at the 6- and 12-month time points (45% and 46%) compared to usual care (35% and 36%), the difference disappeared at the 18-month time point (45% and 44%). This result was due in part to the difficulty in implementing the program during the COVID-19 pandemic. In conclusion, mHealth has the potential to reduce hypertension risk factors in individuals with pre-hypertension and multilevel/multicomponent intervention programs have the capability to improve BP control. More research is needed to evaluate the scalability of these effective and affordable interventions at the national level to help bridge the equity gap in the management of cardiometabolic risk factors.

#### **Biography**

Manuel Ramirez-Zea, Guatemalan MD, PhD. Head, Department of Nutrition and Chronic Diseases. Institute of Nutrition of Central America and Panama. Research interest: malnutrition; early nutrition and long-term health; healthy lifestyles; chronic diseases; physical activity.

He has 140+ publications and has mentored 50+ graduate students.



# Abstract & Biography Dr. Robert Kelly

#### Nutrition approaches to prevent cardiovascular disease Robert Kelly, UCD School of Medicine, Dublin, Ireland

Cardiovascular disease (CVD) is the number one cause of morbidity and mortality in the Western world (including Latin America countries). It accounts for 35% premature death from heart attacks and strokes

Chronic diseases such as blood pressure, diabetes, obesity, cholesterol, metabolic syndrome are the leading causes for CVD (as well as smoking, family history, social factors). 60% of the population has at least one chronic disease. World estimates attribute 22% of adult deaths to dietary habits. Obesity predicts increases in stroke rates especially among women. Chronic diseases increase mortality from Covid 19 twelvefold.



Chronic diseases can be prevented by adopting healthy lifestyle behaviours including healthy eating. There is good clinical evidence that changes in nutrition can prevent and reverse chronic diseases and CVD. The PURE trial showed that diets with more vegetables, grains, nuts, fish, fruit, plants, and legumes lowered the risk of heart disease across world populations.

Whole Food Plant Based, and Mediterranean diets consistently show reductions in incident heart disease by 10-40% with over 15 years of follow up. Improvements are driven by lowering cholesterol, blood pressure, weight, calorie intake and portion size. There are anti-inflammatory and anti-clotting benefits too. Low fat and low salt diets reduce stroke rates. Lifestyle based interventions (including low calorie diets) reverse diabetes, improve metabolic factors and reduce the risk for heart disease by 40% over 12 years follow up. Weight loss and program attendance are the strongest predictors of consistent positive outcome.

The EPIC study of 23,000 people who exercised for 3.5 hours/week, did not smoke, ate a healthy diet, and kept to a healthy weight, prevented 93% of diabetes, 81% of heart attacks, and 50% of strokes in people at risk for heart disease.

Heart disease and stroke are the number one causes of premature death. Chronic diseases are the cause in 80% of people and over 60% have more than one often starting early in life. Healthy eating with Mediterranean Diet or Whole Food Plant Based Diet can prevent and reverse cardiovascular and chronic diseases. These diets also include social connection and physical activities. European and American Heart Prevention guidelines recommend these approaches for individuals and all populations at risk for heart disease. The emphasis is to avoid cardiovascular disease. The challenge is education and teaching people how to adopt healthy eating and lifestyle behaviors.

#### Biography

Professor Robert Kelly MD MBA FRCPI FESC FACC FFESM Associate Clinical Professor of Medicine, UCD School of Medicine, Dublin, Ireland Senior Lecturer Clinical and Lifestyle Medicine, RCSI University of Health Sciences Consultant Cardiology & Lifestyle Medicine, Beacon Hospital, Dublin, Ireland Medical Director for Lifestyle Health and Wellbeing, Beacon Hospital. Health Behaviour Designer and Tiny Habits Coach. Board Member of European Lifestyle Medicine Organisation. Co-Founding Member of the Irish Society of Lifestyle Medicine



Fellow of the American College of Cardiology, European Society of Cardiology, Royal College of Physicians in Ireland, Faculty of Exercise and Sports Medicine Ireland Author. Public Speaker

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# Abstract & Biography Professor Barry Popkin

# The Nutrition Transition: Dynamics and potential for slowing down or reversing the current pattern *Barry Popkin*

The nutrition transition describes the shifts in the way we eat, drink and move, the environmental shifts underlying these changes, and the subsequent shifts in our body composition from paleolithic period to the present. The shift from the hunter-gatherer period to periods where agriculture and a



more limited diet to industrial error and current time have been linked with huge shifts in our diet, body composition and nutrition-related NCDs. Our biology has remained fairly unchanged and has allowed modern food technology to utilize basic preferences to create a fairly unhealthy diet globally with all the NCDs linked with this shift.

#### Biography

Barry M. Popkin developed Developer of the concept of the Nutrition Transition, the study of the dynamic shifts in our environment and the way they affect dietary intake and physical activity patterns and trends in obesity and other nutrition-related noncommunicable diseases. His research program focuses globally (both the US and low- and middle-income countries) on understanding the shifts in stages of the transition and programs and policies to improve the population health linked with this transition. He is now actively involved in work on the program and policy design and evaluation side at global levels in an attempt to reduce demand for unhealthy food and increase that for healthy minimally processed and real food.