



Healthy Cities: Improving health, equity and sustainability from the local level #EU2023ES



Urban epidemiology and its relevance to healthy, equitable and sustainable urbanism

Manuel Franco MD, PhD

Associate Professor

School of Medicine, University of Alcalá, Spain

Adjunct Associate Professor

Department of Epidemiology

Johns Hopkins Bloomberg School of Public Health, Baltimore

@mfranco_uah



1. Epidemiology and Public Health research career, both in the US and Spain, on Urban Health and Cardiovascular Diseases / NCDs
2. Social and Urban Determinants of CVD / NCDs
3. Social Epidemiology as an interdisciplinary approach collaborating with different Social Sciences



Urban epidemiology and healthy, equitable and sustainable urbanism



CITIES & HEALTH

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LEADING EDITORIAL



Challenges and opportunities for urban health research in our complex and unequal cities

Manuel Franco ^{a,b}, Ana V. Diez Roux ^{c,d} and Usama Bilal ^{c,d}

^aPublic Health and Epidemiology Research Group, School of Medicine, University of Alcalá, Madrid, Spain; ^bDepartment of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA; ^cDornsife School of Public Health, Drexel University, Philadelphia, PA, USA; ^dDepartment of Epidemiology and Biostatistics, Drexel University School of Public Health, Philadelphia, PA, USA

CHALLENGES: Social and health inequities in current cities

Climate change and health inequities in current cities

Policy translation of urban health research results and evidence

RESEARCH OPPORTUNITIES: Comparisons across cities, Mixed Methods, Policy evaluation

<http://hhhproject.eu>



Epidemiology • Volume 28, Number 1, January 2017

Fifty Shades of Green

Pathway to Healthy Urban Living

*Mark J. Nieuwenhuijsen,^{a,b,c} Haneen Khreis,^d Margarita Triguero-Mas,^{a,b,c} Mireia Gascon,^{a,b,c}
and Payam Dadvand^{a,b,c}*

Here, we describe the importance of green space for health, and make recommendations for further research.

Green space has been associated with many beneficial health effects, including reduced all-cause and cardiovascular mortality and improved mental health, possibly through mediators, such as reduced air pollution, temperature and stress, and increased physical activity, social contacts, and restoration.



Manuel Franco

What we have done so far

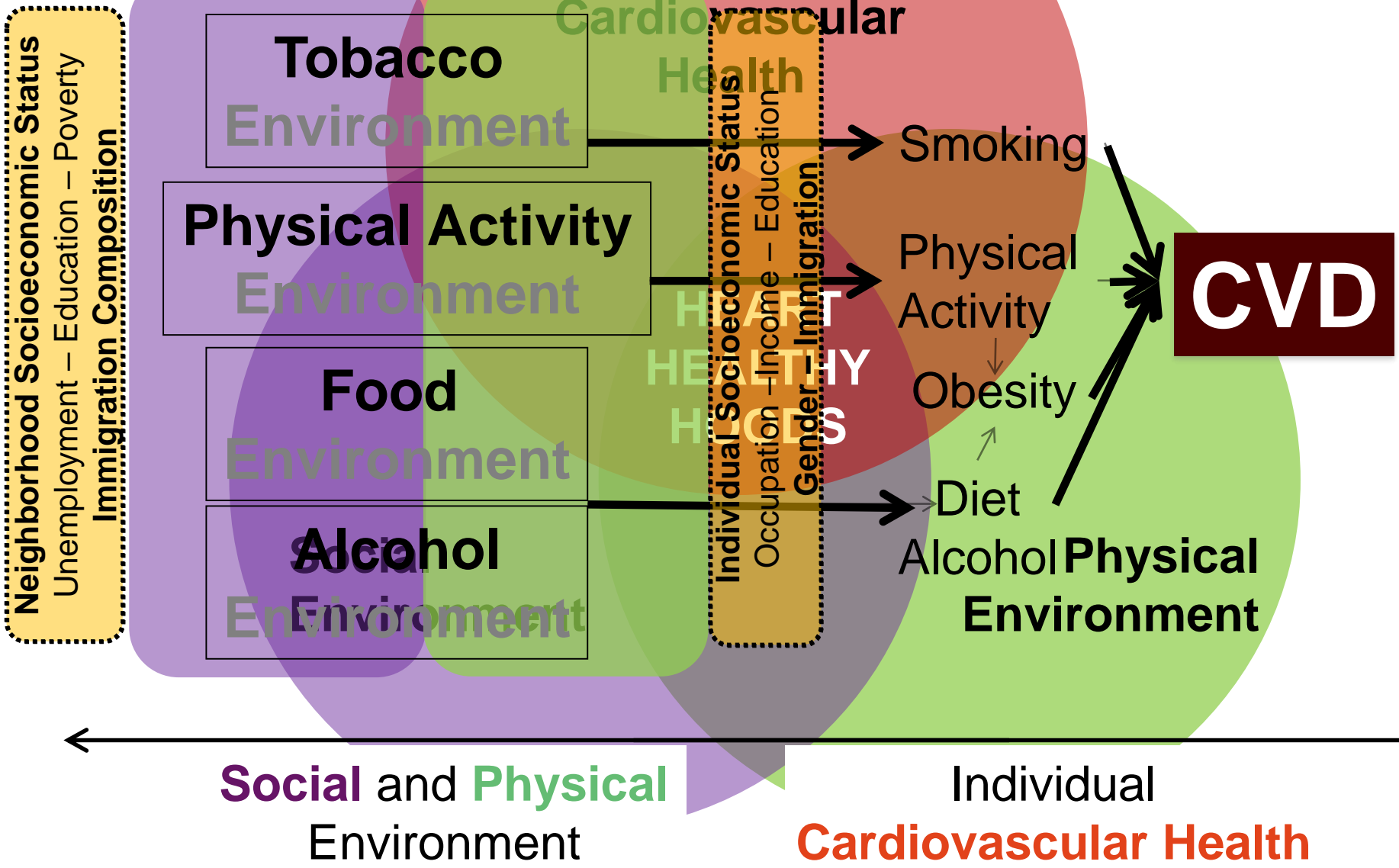


Social and Physical Urban Environment and CV Health: The Much Needed Population Approach



Heart Healthy Hoods Study

Main Goal





HHH overarching objective



Policy and research implications

To provide scientific evidence to **researchers, the general population and policy makers** to intervene in cities at the population level to prevent CVD, the first cause of death in Europe.

Towards a policy relevant neighborhoods and health agenda: engaging citizens, researchers, policy makers and public health professionals. SESPAS Report 2018

Manuel Franco^{a,b,*}, Julia Díez^a, Pedro Gullón^a, Mario Margolles^c, Rafael Cofiño^{c,e}, Maribel Pasarín^{d,f}, Carme Borrell^{d,f}

^a Grupo de Epidemiología Social y Cardiovascular, Universidad de Alcalá, Madrid, Spain

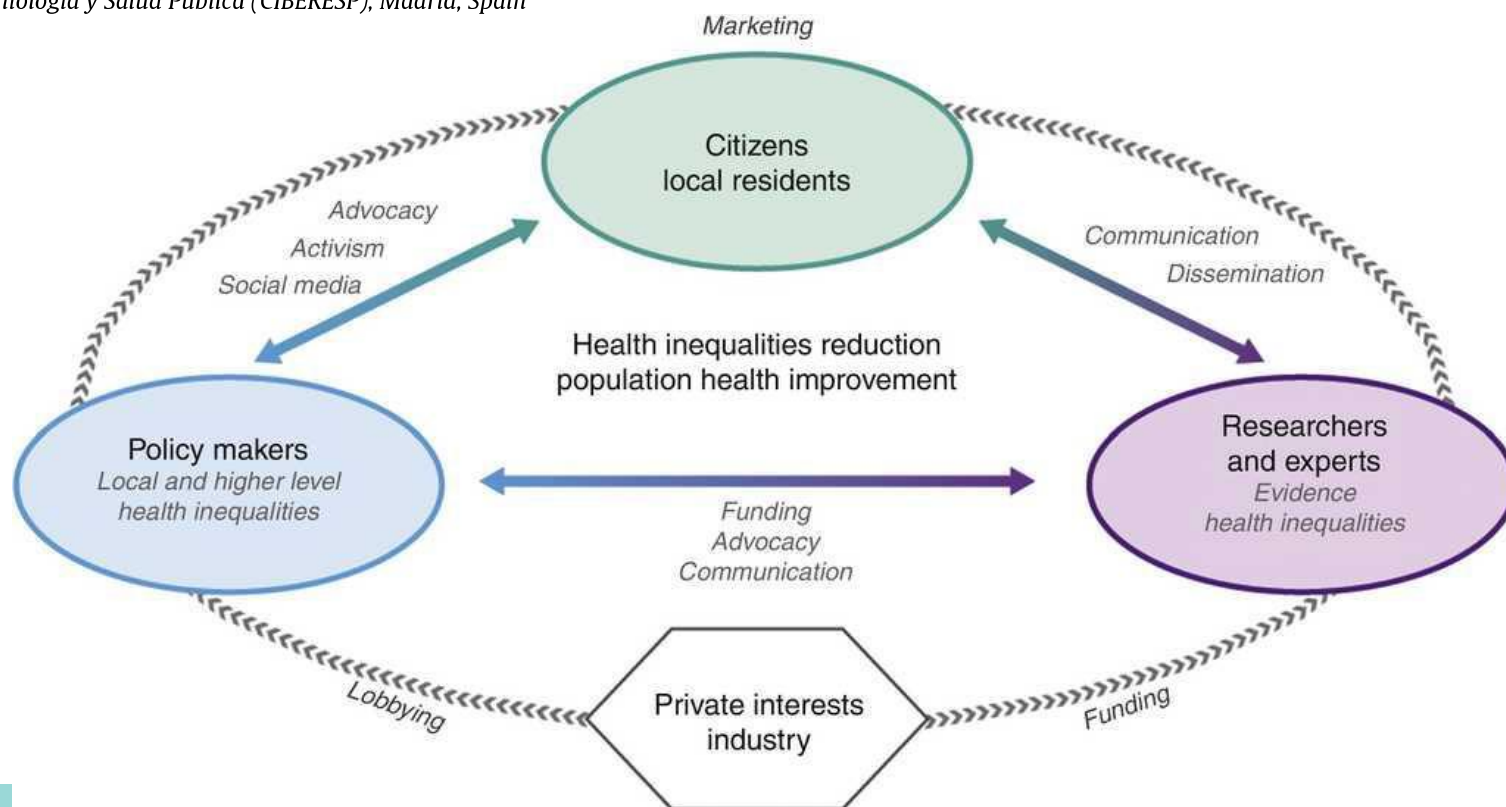
^b Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, United States of America

^c Dirección General de Salud Pública, Principado de Asturias, Oviedo, Spain

^d Agència de Salut Pública de Barcelona, Barcelona, Spain

^e Escuela Andaluza de Salud Pública, Granada, Spain

^f CIBER de Epidemiología y Salud Pública (CIBERESP), Madrid, Spain





Interdisciplinary team

PI: Social Epidemiology



Geography

University of Alcalá
CRESH Edinburgh
LSHTM

Health Sociology

University of Salamanca
Johns Hopkins School of Public Health

Primary Care System

Primary Care Research Unit, Madrid

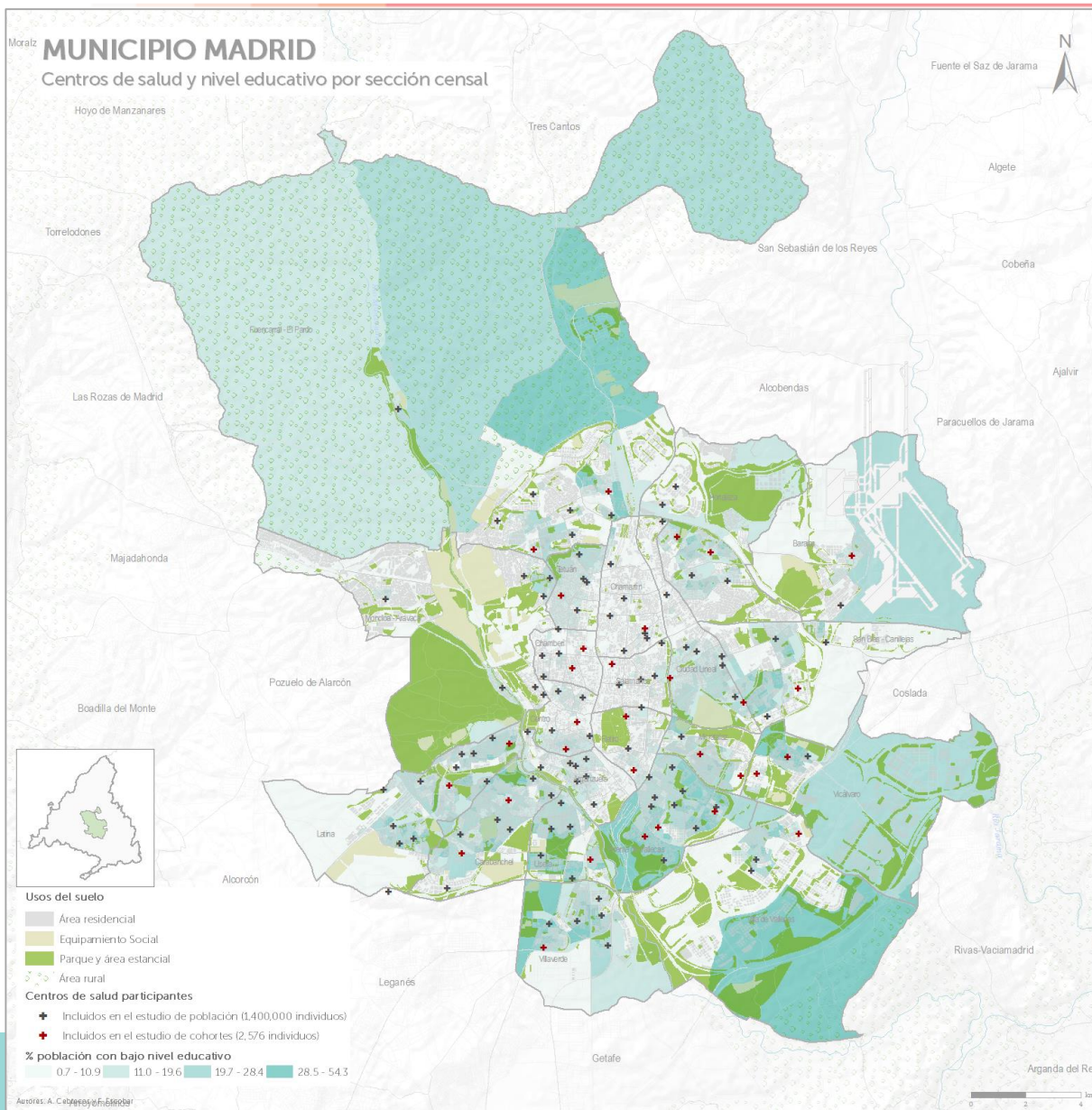
Epidemiology

University of Alcalá
Johns Hopkins School of Public Health

Photography
Knowledge
Dissemination
Citizen Science



MADRID MUNICIPALITY



21 Districts
128 Neighborhoods
2.412 Census Sections
(≈1.500 ps)
3,2 Mill. Residents

HHH will analyze the
Integrated Primary Care
Health System Electronic
Health Records Database of
1,4 mill. residents 40-75 ys.

<http://hhhproject.es>

Assessing Walking and Cycling Environments in the Streets of Madrid: Comparing On-Field and Virtual Audits

Pedro Gullón, Hannah M. Badland, Silvia Alfayate,
Usama Bilal, Francisco Escobar, Alba Cebrecos, Julia Diez,
and Manuel Franco

ASSESSING WALKING AND CYCLING ENVIRONMENTS IN THE STREETS OF MADRID

929



FIG. 3 Picture of a street feature as it was observed in physical (*left*) and virtual audit (*right*).



Parks use and Physical Activity Mixed Methods HHH results



ELSEVIER

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Health and Place

journal homepage: www.elsevier.com/locate/healthplace



Active use and perceptions of parks as urban assets for physical activity: A mixed-methods study

Mario Fontán-Vela^{a,b}, Jesús Rivera-Navarro^{a,c}, Pedro Gullón^{a,d,*}, Julia Díez^a,
Isabelle Angelovski^e, Manuel Franco^{a,f}

^a Universidad de Alcalá, Facultad de Medicina y Ciencias de La Salud, Departamento de Cirugía, Ciencias Médicas y Sociales, Grupo de Investigación en Epidemiología y Salud Pública, Alcalá de Henares, Madrid, Spain

^b Preventive Medicine Department, Infanta Leonor University Hospital, 28031, Madrid, Spain

^c Department of Sociology and Communication, University of Salamanca, 37007, Salamanca, Spain

^d School of Global, Urban and Social Studies, RMIT University, Melbourne, Australia

^e Catalan Institution for Research and Advanced Studies (ICREA), Universitat Autònoma de Barcelona (UAB), Institute for Environmental Sciences and Technology (ICTA), Barcelona Laboratory for Urban Environmental Justice and Sustainability, Medical Research Institute Hospital Del Mar (IMIM), 08003, Barcelona, Spain

^f Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, 21205, USA



Parks use and Physical Activity

Mixed Methods HHH results



M. Fontán-Vela et al.

Health and Place 71 (2021) 102660

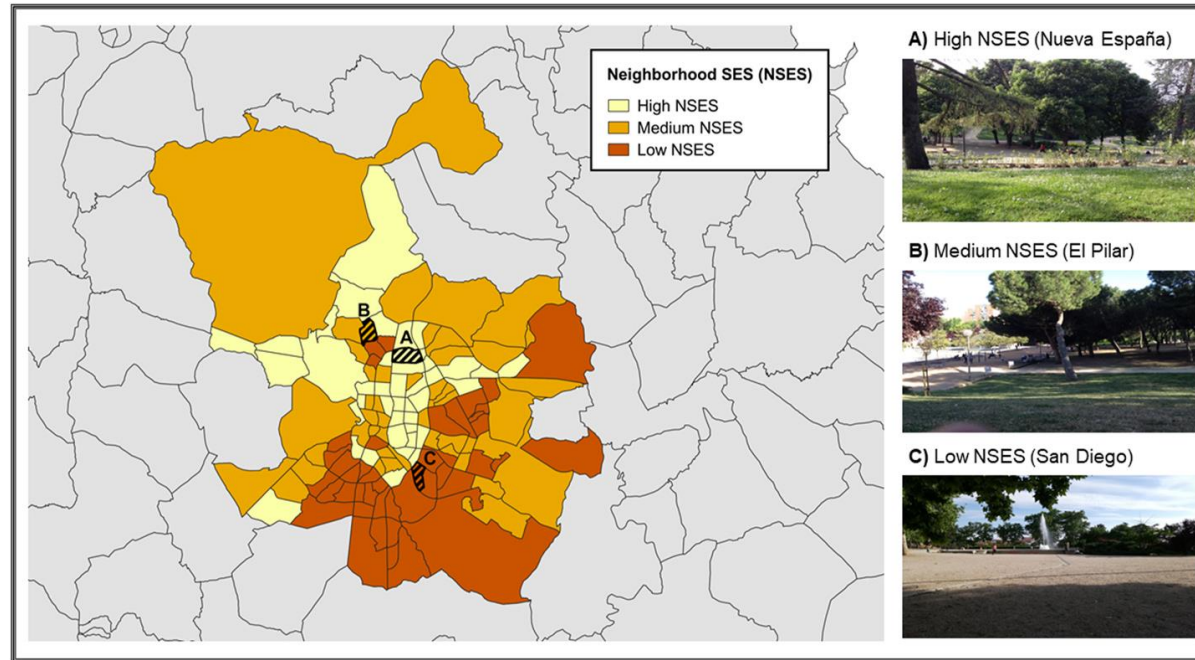


Fig. 1. Neighborhoods of the city of Madrid according to their socioeconomic status (SES), the final neighborhoods sample (A, B and C), and pictures of some of the parks selected for the systematic social observation within each neighborhood.



Can we improve our neighbourhoods to be more physically active? Residents' perceptions from a qualitative urban health inequalities study

Jesús Rivera-Navarro^{a,*}, Lidia Bonilla^a, Pedro Gullón^b, Ignacio González-Salgado^a,
Manuel Franco^{b,c,d}

^a *Sociology and Communication Department, Social Sciences Faculty, Universidad de Salamanca, Salamanca, Spain*

^b *Surgery and Medical and Social Sciences Department, School of Medicine and Health Sciences, Universidad de Alcalá, Alcalá de Henares, Madrid, Spain*

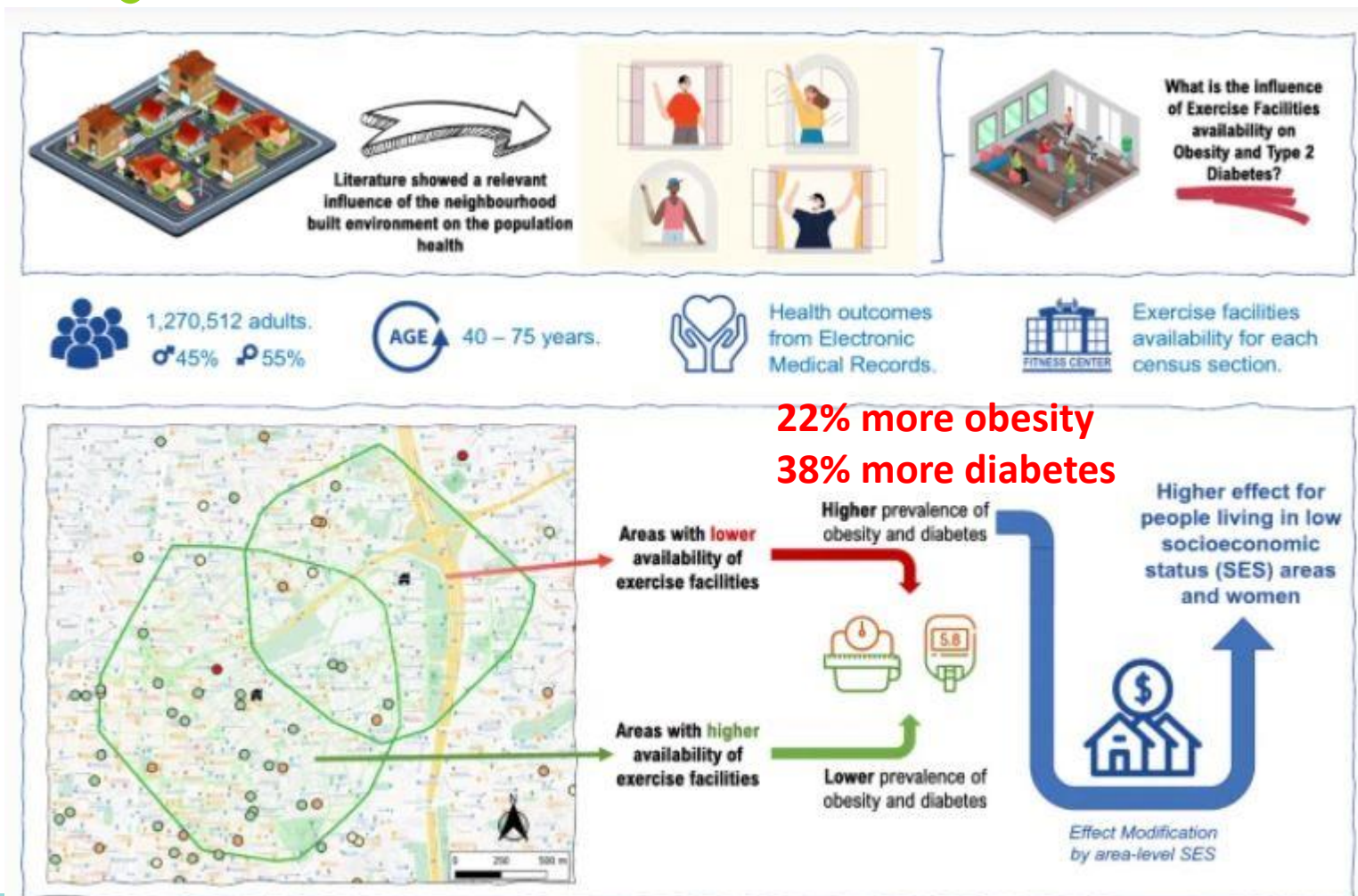
^c *Public Health and Epidemiology Research Group, School of Medicine and Health Sciences, Universidad de Alcalá, Alcalá de Henares, Madrid, Spain*

^d *Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States*

The objective of our study was to identify neighbourhood factors which prevent and encourage physical activity, according to the residents' perspective. We used qualitative methods, conducting 37 semi-structured interviews and 29 focus groups. The main results were that the type of physical activity that took place in every neighbourhood was different; access to sports facilities varied due to prices and safety issues; garbage and obstacles on sidewalks were a serious limitation to physical activity; economic instability had an impact on physical activity. These results might lead the perception and insights of residents to be considered in public health interventions.

Exercise facilities and the prevalence of obesity and type 2 diabetes in the city of Madrid

Luis Cereijo^{1,2,3}  · Pedro Gullón¹  · Isabel Del Cura^{4,5,6} · David Valadés²  · Usama Bilal^{7,8}  · Hannah Badland³  · Manuel Franco^{1,9} 





HEART HEALTHY HOODS



Proyectos de investigación acción participativa para mejorar el entorno urbano en Madrid



Manuel Franco MD, PhD

Associate Professor

School of Medicine, University of Alcalá, Spain

Adjunct Associate Professor

Department of Epidemiology

Johns Hopkins Bloomberg School of Public Health

**CONVOCATORIA 2014 DE AYUDAS A LA INVESTIGACIÓN
IGNACIO HERNANDO DE LLARRAMENDI, FUNDACIÓN MAPFRE**

**TÍTULO: Estrategia participativa de prevención de la Obesidad:
Estudio PHOTOVOICE del entorno alimentario en Villaverde, Madrid**

INVESTIGADOR PRINCIPAL: Manuel Franco

RESUMEN

Introducción: En España los altos niveles de obesidad y enfermedades asociadas como la diabetes y las enfermedades cardiovasculares representan un grave problema de salud pública. La prevención primaria mediante estrategias poblacionales que incluyan el entorno urbano es por tanto de máxima relevancia. La propuesta es un subestudio del proyecto Heart Healthy Hoods* que tiene como objetivo estudiar la asociación entre las características físicas y sociales del entorno urbano en relación a la salud cardiovascular. **Objetivos:** Realizar un diagnóstico comunitario del entorno alimentario en relación con la prevención de la obesidad mediante un estudio participativo de *PHOTOVOICE* en población mayor de Villaverde, Madrid. **Metodología:** Se llevará a cabo un estudio participativo con metodología *PHOTOVOICE* con 4 grupos de 6 residentes mayores (45-84 años) cada uno que



● Ángel Frías



● Amador Silebo



● Daniel Rafael Mato



● José Luis Carrero



● Christine Funrock



● Esther Ortiz



● Juani Moreno



● Mercedes Bellot



● Isabel Masa



● M^a Soledad Olivo



● Mercedes Rivera



● Zakia El Khamlichi



● Beatriz Criado



● Juana Carulli



● Sagrario Gómez



● Encarnación Franco



● Rosa Arana



● Encarna Dopido



Using Photovoice to Examine Physical Activity in the Urban Context and Generate Policy Recommendations: The Heart Healthy Hoods Study

Pedro Gullón ^{1,2} , Julia Díez ¹ , Paloma Conde ¹, Carmen Ramos ³, Valentín Márquez ^{4,5}, Hannah Badland ⁶ , Francisco Escobar ^{1,7}  and Manuel Franco ^{1,8,*}

Table 3. Policy recommendations from Photovoice participants grouped according to the Analysis Grid for Environments Linked to Obesity (ANGELO) framework [14].

Domains	Villaverde	Chamberí
Physical environment	<ul style="list-style-type: none"> Redistribute sports facilities favoring proximity Re-design the bus network Increase street furniture Place the existing outdoor fitness equipment in parks Widen sidewalks for people with reduced mobility Improve access to the urban gardens 	<ul style="list-style-type: none"> Surface improvements (e.g., sidewalk maintenance) Create new bike lanes Increase accessibility to sport facilities Include physical activity amenities in small spaces Create pedestrian streets for walking
Socio-cultural environment	<ul style="list-style-type: none"> Increase awareness on civic responsibility regarding the use of public spaces Delimit use of public spaces Educate in the practice of a mixed-gender physical activity 	<ul style="list-style-type: none"> Educate in the practice of age-specific physical activity Design active transportation awareness campaigns Awareness campaign against antisocial behavior
Political and economic environment	<ul style="list-style-type: none"> Adjust sport facilities fees o the area SES Build parking lots and a bike lane Create informative signs on the use of sports facilities and public spaces Support residents’ initiatives and events promoting physical activity Increase human resources at sport facilities Open schools’ sports facilities to community users Increase maintenance of neighborhood green spaces Create multipurpose spaces for diverse activities Increase security in public spaces 	<ul style="list-style-type: none"> Create incentives for active transportation Map cultural tours for walking in the neighborhood Create an app for combined transportation (walking + public transportation) Limit traffic speed to increase pedestrian safety Limit motorbike parking in sidewalks Open schools and other public centers for cultural and social uses Maintain public management in public spaces and facilities

PHOTOVOICE VILLAVERDE AND CHAMBERÍ URBAN ENVIRONMENT AND PHYSICAL ACTIVITY PROJECT

Table 2. Photovoice themes ($N = 14$) in Villaverde (low-SES neighborhood) and Chamberí (high-SES neighborhood) resulting from the successive approximation process.

Villaverde	Chamberí
1. Active transportation	1. Active transportation
2. Working as physical activity	2. Working as physical activity
3. Local administrations	3. Local administrations
4. Public spaces	4. Physical activity for all social groups
5. Safety	5. Sport in the city
6. Public transportation	6. Urban Architecture
7. Citizens' awareness	7. Antisocial behavior



Photograph: "Our walk"

"Walking helps you being active. [...] In this Street is where there are most of the neighborhood local stores and the food market"

(Female, 66, Villaverde)



Photograph: "Bikes vs cars"

"We have the dream of a more 'bikeable' city"

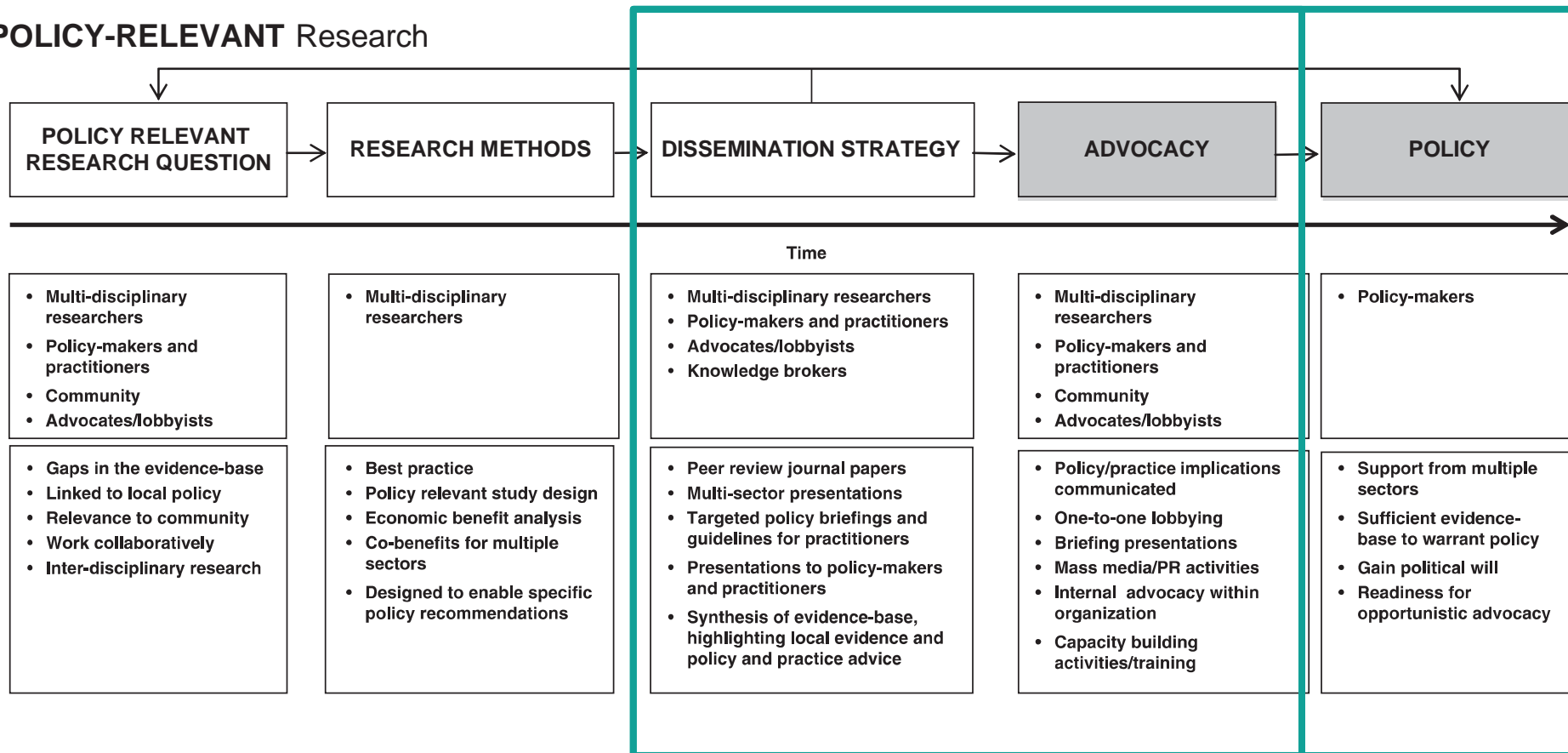
(Female, 49, Chamberí)



From Urban Health research to action



POLICY-RELEVANT Research



Gilles-Corti et al. Journal of Public Health Policy 2015 Vol. 36, 2, 231–243



HEART HEALTHY HOODS

www.hhhproject.eu



European Research Council

Established by the European Commission

Supporting top researchers
from anywhere in the world

A CITIZEN SCIENCE APPROACH FOR FOOD IN THE CITIES, THE HEART HEALTHY HOODS ERC PROJECT: EXHIBITION AT THE EUROPEAN PARLIAMENT

European Parliament will host from May 2nd through May 10th an exhibition on this project

The exhibition, which has the impulse of MEP Estefanía Torres, will be visible at the

Mezzanine YEHUDI MENUHIN, PHS building 1st Floor, European Parliament

Official public opening Thursday 4th at noon, registration at 11:30 am



Communicating photovoice results European Parliament





UAH What we are doing

Child Health and Nutrition projects



- **Estudio PASOS** Physical Activity, Sedentarism and Obesity in Spanish Youth Fundación Gasol, **Desigualdades y Entorno**
- **Estudio DIBA: Desigualdades socioeconómicas en alimentación y actividad física en adolescentes. Estudio cualitativo en Madrid y Bilbao**



Protocol

Child Health

Influence of home/school environments on children's obesity, diet, and physical activity: the SUECO study protocol

Julia Díez^{a,*}, Pedro Gullón^{a,b}, Roberto Valiente^{a,c}, Luis Cereijo^a, Mario Fontán-Vela^{a,d}, Alba Rapela^{a,e}, Alejandro Blanco^f, Irene Valero^f, Agustín Haro^f, Gema Blasco^f, José Manuel Díaz-Olalla^f, Manuel Franco^{a,g}

5,961 children ages 3-12 in 60 schools in the city of Madrid

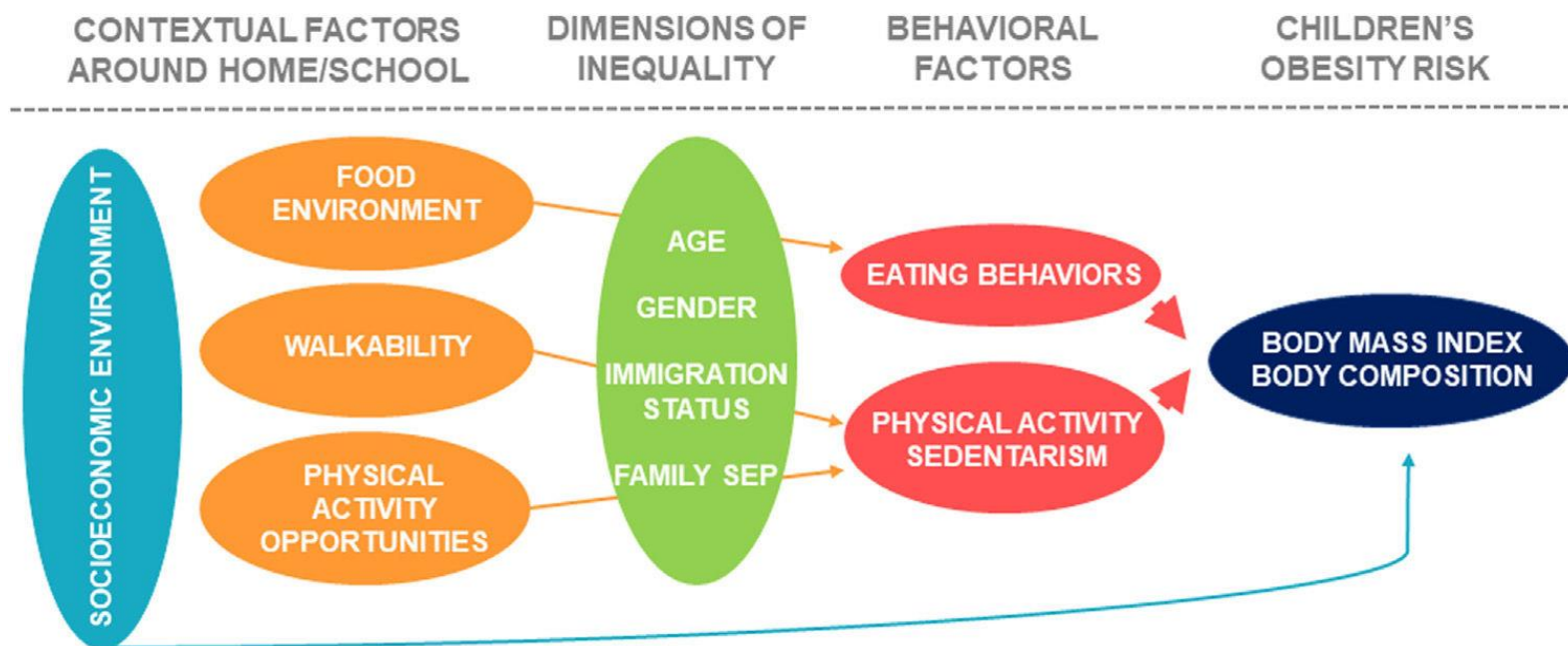


Figure 1. Flow-chart of the study population.

OBCT

Obesity: Biological, socioCultural, and environmental risk Trajectories

STAYHLTH-01-05-two-stage



OBCT at a glance

The steady rise in overweight and obesity in Europe disproportionately affects people and communities with a lower socio-economic position (SEP). Many obesity prevention approaches exist, but these have had limited effects thus far in populations that need it the most: low-SEP subgroups. In this context, there is a need for implementation of effective individual-level and population-based strategies that prevent obesity and reduce health inequalities. Effective strategies require consideration of the complex and dynamic interplay between biological, sociocultural and environmental risk factors of obesity across the life course. OBCT provides health professionals, researchers, policymakers and the public with knowledge, maps and tools to support sustainable prevention of obesity, with a particular focus on reducing risk in low-SEP communities. To achieve this, we

OBCT starts November 2023 and runs for 5 years Total budget of €10.496.138

Coordinator: Jeroen Lakerveld Free University of Amsterdam

UAH Partners: Manuel Franco, Pedro Gullón, Julia Diez



Urban epidemiology and healthy, equitable and sustainable urbanism



MANUEL FRANCO

15 JUN 2022 - 11:16 CEST



EL PAÍS

Salud y Bienestar

LA SALUD VA POR BARRIOS · NUTRIR CON CIENCIA · ENFÓRMATE · NOSOTRAS RESPONDEMOS · SALUD MENTAL · ÚLTIMAS NOTICIAS

SALUD PÚBLICA > TRIBUNA

Peques, adolescentes, mayores, ¡tomemos los parques!

Estos espacios verdes permiten a los usuarios, gracias a su tamaño y características, socializar y realizar actividades en ellos





¡ Muchas Gracias !



Manuel Franco MD, PhD

@mfranco_uah