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CONNECT & EXPLORE

Childhood Obesity Research Across Borders:
Part 1: Social Determinants of Health
Part 2: The Physical Environment
Spotlight: Childhood Obesity Research Across Borders: The Social Determinants of Health

- Childhood Obesity & The Social Determinants of Health
- Migration as a Determinant of Childhood Obesity in the United States and Latin America
- The Social Environment and Childhood Obesity

Q&A

NCCOR Announcements

TODAY’S PROGRAM
Today’s Conversation

Karen Hilyard, PhD, Moderator

Rafael Perez-Escamilla, PhD, Yale University

Guadalupe X. Ayala, PhD, San Diego State University

Mireya Vilar-Compte, PhD, Universidad Iberoamericana
Need technical assistance? Have a question for our speakers?

Type your question(s) by clicking the Q&A icon located below and representative will respond shortly.
INTERACTIVE POLL
SPOTLIGHT
Childhood Obesity & The Social Determinants of Health

Professor Rafael Pérez-Escamilla, PhD
Director, Maternal Child Health Promotion Program, Global Health Concentration and Office of Public Health Practice
Yale School of Public Health

@rperezescamilla
Childhood Obesity Prevention Across Borders: The Promise of US-Latin American Research Collaboration

• NIH Fogarty Center for Global Health Studies

• Scientific Co-chairs
  – Rafael Perez-Escamilla, Yale University
  – Abby King, Stanford University

• Activities
  – 2 special supplements in Obesity Reviews (2017 & 2021)
  – RFP for cross-borders collaborations (2020)
Conceptual Frameworks (Obesity Rev. 2021)

Childhood obesity prevention across borders: The promise of US-Latin American research collaboration

Abby C. King | Rafael Perez-Escamilla | Susan Vorkopin | Nalini Anand | Juan Rivera

The social environment and childhood obesity: Implications for research and practice in the United States and countries in Latin America

Guadalupe X. Ayala | Rafael Monge-Rojas | Abby C. King | Ruth Hunter | Jerica M. Berge

Implementation of childhood obesity prevention and control policies in the United States and Latin America: Lessons for cross-border research and practice

Rafael Pérez-Escamilla | Mireya Vilar-Compte | Elizabeth Rhodes | Olga L. Sarmiento | Camila Corvalan | Rachel Sturke | Susan Vorkopin

Migration as a determinant of childhood obesity in the United States and Latin America

Mireya Vilar-Compte | Arturo V. Bustamante | Nancy López-Olmedo | Pablo Gañán-Rossi | Jaqueline Torres | Karen E. Peterson | Graciela Teruel | Rafael Pérez-Escamilla
Measurement challenges for childhood obesity research within and between Latin America and the United States

David Berrigan, S. Sonia Arteaga, Uriyoán Colón-Ramos, Lisa G. Rosas, Rafael Monge-Rojas, Teresia M. O’Connor, Rafael Pérez-Escamilla, Elizabeth F. S. Roberts, Brisa Sanchez, Martha Maria Téllez-Rojo, Susan Vorkoper, the Cross Borders Working Group

An action-oriented framework for systems-based solutions aimed at childhood obesity prevention in US Latinx and Latin American populations

Leandro M. T. Garcia, Ruth F. Hunter, Kayla de la Haye, Christina D. Economos, Abby C. King

Capacity for childhood obesity research in Latin American and US Latino populations: State of the field, challenges, opportunities, and future directions


Childhood obesity prevention across borders: A National Institutes of Health commentary

Susan Vorkoper, S. Sonia Arteaga, David Berrigan, Kevin Bialy, Andrew A. Bremer, Paul Cotton, Susan Czajkowski, Elizabeth Neilson, Stavroula K. Osganian, Charlotte A. Pratt, Le Shawndra N. Price, Derrick C. Tabor, Jenelle R. Walker, Makeda J. Williams, Nalini Anand
Key Lesson Learned

• Social determinants of health need to be taken into account to effectively address the cross-borders childhood obesity pandemic
Key Lesson Learned

• Few anti-obesity policies have been designed and implemented taking the social determinants of health and equity considerations into account

Implementation of childhood obesity prevention and control policies in the United States and Latin America: Lessons for cross-border research and practice

Rafael Pérez-Escamilla¹  |  Mireya Vilar-Compte²  |  Elizabeth Rhodes³,³  |  Olga L. Sarmiento⁴  |  Camila Corvalan⁵  |  Rachel Sturke⁶  |  Susan Vorkoper⁶

• Front-of-food-package warning labels as an example
  • Profound food systems changes needed for low-income families to have access to affordable healthy and nutritious foods in lieu of unhealthy ultra-processed foods and beverages targeted by the warning labels
Moving Forward

• Important to understand why and how the social determinants of health can be taken into account to improve the effectiveness of anti-obesity policies across borders

• Today’s webinar examples
  • Migrations (Vilar-Compte et al., 2021)
  • Social environments (Ayala et al., 2021)
Migration as a determinant of childhood obesity in the United States and Latin America

Mireya Vilar-Compte
Research Center for Equitable Development (EQUIDE)
Universidad Iberoamericana
Mexico
### Migration: Definition, Trends and Drivers

<table>
<thead>
<tr>
<th>Migration</th>
<th>Migratory flows across the Americas</th>
<th>Drivers</th>
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<tbody>
<tr>
<td>Movement of persons away from their place of residence</td>
<td>Dominated by South to North (from LAC to the US)</td>
<td>Economic factors (wages, labor shortages)</td>
</tr>
<tr>
<td>Across an international border or within a country</td>
<td>About half of the US immigrant population, from LAC</td>
<td>Violence, poverty, and climate change</td>
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Why Migration Matters for Childhood Obesity

Aim: understand mechanisms (migratory and post-migratory) determining childhood obesity

Importance: effective prevention strategies for childhood obesity among migrant families need to account for such complex mechanisms
Studying Childhood Obesity Through the CEB Framework


Changes over time across generations and over the life course in society at large

CULTURAL-CONTEXTUAL INFLUENCES

- Historical Experiences and Adaptations
  - Conquest and conflict
  - Migration
  - Acculturation
  - Accommodation

- Type of Minority Status
  - Aboriginal
  - "Established" migrant
  - New migrant and Social disadvantage (Yes/No)

- Structural Influences
  - Political Power
  - Income, education and employment
  - Intergroup relations
  - Social stratification
  - Media and marketing
  - Neighborhood resources

- Sociocultural Influences
  - Norms, values, attitudes
  - Identity
  - Social relations
  - Coping styles

INTERVENTION SETTINGS AND AGENTS

- Built environment
- Physical activity resources, facilities, and opportunities
- Food environment
- Government nutrition assistance programs
- Endorsement, social support, and social capital for physical activity and healthy eating

INTERVENTION TARGETS

- Home food availability
- Food choices and feeding
- Electronic media use
- Physical activity opportunities
- Health care provider advice
- Food choices and eating behaviors
- Electronic media use
- Involvement in physical activity
- Weight control behaviors
- Awareness and advocacy

General Population and Culture in Host

Ethnic Minority Community

Food Intake

Physical Activity

Community Energy Balance and Weight Status
Studying Childhood Obesity Through the CEB Framework

- 3 key aspects about the CEB framework → migration and childhood obesity

Migrant environment and lifestyle in the host community, but accounting for self-identity & traditions

Adaptations to the host community (+, -, +/-) considering minority status and structural influences (stigma, prejudice)

Ecological interventions
Two Applications of the CEB Framework

• Migrant networks
  • Kinship networks as channels of cultural and material interchange
  • Association with childhood obesity in origin community (i.e., Mexico)

• Binational interventions
  • *Ventanillas de Salud* - VDS (Health Windows)
H₀: Children in Mexico with migrant networks in the US will be differently exposed to US-centric social norms

↑ risk of childhood overweight and obesity over time

Extended networks more likely to affect childhood obesity (i.e., horizontal, resemble more)
Migrant Networks

- Longitudinal and nationally representative data (MxFLS)
- Two-random intercept logistic models
- Step-wise modelling approach (unadjusted + individual level variables + household level controls)

2005
Not overweight or obese

2009
Overweight or obese

△ in BMI status category among children in the community of origin was associated with having migrant networks
Migrant Networks

• Children embedded in migrant networks, ↑ risk of developing overweight and obesity relative to children with no networks in the US (larger and more significant for extended networks)
Bicultural Interventions: *Ventanillas de Salud (VDS)*

<table>
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<tr>
<th>VDS a bicultural health intervention</th>
<th>VDS operation</th>
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<tr>
<td>• Binational</td>
<td>• Mexican government $ and partnership with public and private organizations</td>
</tr>
<tr>
<td>• Culturally sensitive</td>
<td>• 49 VDS (Mexican Consulates), 25 states</td>
</tr>
<tr>
<td>• Available nationwide</td>
<td>• 1.5 million visits yearly (70% undocumented migrants)</td>
</tr>
<tr>
<td>• Address fear of accessing social services</td>
<td></td>
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<tr>
<td>• Address structural inequities</td>
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</table>
Bicultural Interventions: *Ventanillas de Salud (VDS)*

3 types of services
(i) healthy lifestyles, (ii) immunization & early detection, (iii) referrals

VDS acknowledge key CEB framework’s factors
(i) self-identity and traditions, (ii) structural inequities (fear of deportation, stigma, lack of insurance)

Mainly individually-based, but partnering enables reaching other ecological layers

Potential to design interventions addressing childhood obesity (cultural tailoring, reaching distrustful populations)
Key Messages

- Migration is a social determinant of health that can impact childhood obesity
- Due to the dynamic nature of migration, it can affect children’s lifestyles in the host and origin community
- Different interventions are needed to effectively address childhood obesity among migrant children, including:
  - binational approaches
  - life course perspectives
  - structural inequities in origin and host communities
Thank you!
The social environment and childhood obesity: Implications for research and practice in the United States and countries in Latin America

Guadalupe X. Ayala, MA, PhD, MPH
Professor of Public Health, San Diego State University
Director, Institute for Behavioral and Community Health
Co-Director, SDSU HealthLINK Center for Transdisciplinary Health Disparities Research
Director, SDSU HealthLINK Endowment
Transdisciplinary Collaboration

**Jerica M. Berge** – Developmental Psychology – Family Systems
Department of Family Medicine and Community Health, Medical School, University of Minnesota, Minneapolis, Minnesota, USA

**Rafael Monge-Rojas** – Social Psychology – Interpersonal Processes
Health and Nutrition Unit, Costa Rican Institute for Research and Education on Nutrition and Health (INCIENSA), Cartago, Costa Rica

**Abby C. King** – Behavioral Scientist – Community and Population Level Interventions
Departments of Epidemiology & Population Health and Medicine (Stanford Prevention Research Center), Stanford University School of Medicine, Stanford, California, USA

**Ruth Hunter** – Social Networks
Centre for Public Health, Queen’s University Belfast, North Ireland, Belfast, UK
Conceptualizing the Social Environment

Socio-Ecological Framework

Social processes at all levels of the framework
Social Influences: Individuals

Individually-held norms, attitudes and behaviors of children and their parents relevant to interpersonal relationships

**Gender norms:** Socially constructed and accepted roles and stereotypes ascribed to gender (e.g., machismo, marianismo)

**Implications for physical activity:** Some activities incompatible with female gender stereotypes

**Implications for diet:** Consumption of some foods (e.g., meat) more masculine
Social Influences: Families

Family norms, attitudes and behaviors, parenting strategies, and sibling behaviors, including those that affect the broader home environment

**Familismo**: Socially-constructed norm with implications on: (1) family obligations, (2) family support, and (3) family as a referent

**Implications for diet**: Parental monitoring of child’s food consumption has a positive influence on risk for childhood obesity

**Implications for physical activity**: Parental modeling of physical activity important in the promotion of child physical activity
Social Influences: Communities

Social norms and attitudes are communicated, and behaviors are enacted within communities, thus serving as role models to others.

**Cultural syndromes:** social constructs that help to organize and interpret the world by focusing attention on subjective elements of the environment, such as values, norms, beliefs, and assumptions (e.g., individualism and collectivism)

**Individualist countries** show a stronger tendency to harbor anti-fat prejudice when they hold individuals accountable for their weight

**Collectivist countries** are less likely to link negative cultural values (being obese is bad) to the person (being an obese person is bad)
Conceptualizing the Social Environment

Socio-Ecological Framework

Social processes at all levels of the framework
Influence of Acculturation and Childhood Obesity

- **Definition:** Acculturation is a complex process in which individuals retain parts of their original culture while also adopting beliefs, values, and behaviors from the new culture they are continuously exposed to.

- Language acculturation gap and youth obesity

LeCroy et al., (2021)…NIH-funded Hispanic Community Health Study/Study of Latino Youth (HCHS/SOL Youth)
Community Health Workers as Change Agents

- Many definitions! Many names!
- Para-professional, often identified by the community as leaders, who can serve as a positive source of influence within families and communities
- Addressing childhood obesity through…..

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<thead>
<tr>
<th>Individuals</th>
<th>Parents</th>
<th>Communities</th>
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</thead>
<tbody>
<tr>
<td>Motivational interviewing</td>
<td>Teach effective parenting strategies</td>
<td>Advocating for build environment changes</td>
</tr>
<tr>
<td>Realistic goal setting</td>
<td>Linking with services</td>
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NHLBI-funded Aventuras Para Niños

CDC-funded California Childhood Obesity Research Demonstration Study (CA-CORD) Our Choice / Nuestra Opción

- Appeal to their collectivistic nature
- Show respect for importance of schools and teachers
- Acknowledge changes due to acculturation

Community level sectors
Recreation: ce
Restaurants: F

Organizational level sectors
Early care and development,
Health care: I
Decision supp
Systems: Patient treatment plan, EHR alerts; Self-Management Support: CHW-led Family Wellness Program

Interpersonal level sector
Family health
Parental model
Other social in
Availability at

Child health behaviors and their outcomes

Future Directions

Use innovative methods to study social processes

- Ecological Momentary Assessment (EMA)
- Resident driven data collection, including Photovoice
- Image-based: Video recording, Eye tracking
Key Messages

• Consider social processes at all levels of the socio-ecological framework

• Consider the influence of changes in culture with in- and out-migration (acculturation), and how these changes influence our behaviors with implications on health

• Consider the positive influence of community health workers and other peer supporters across levels of the socio-ecological framework
Thank you!

¡Gracias!
ANNOUNCEMENTS
Childhood Obesity Research Across Borders:
Part 1: Social Determinants of Health
Thursday, June 17, 12-1pm ET

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Childhood Obesity Research Across Borders:
Part 2: The Physical Environment
Tuesday, July 20, 12-1pm ET
Why should students use NCCOR’s tools?

They’re free, easy to use, and save time by providing easy access in one centralized location!

How can these tools help me in my classes or on my projects?

These resources can assist you in selecting the most appropriate measures or datasets. These are handy for thesis or capstone projects where you can:
- Conduct systematic reviews and meta analyses
- Develop a childhood obesity intervention
- Evaluate a health promotion program

What types of undergraduate and graduate programs can use these tools?

Students in all types of programs can benefit from these tools, including Master’s and PhD programs in public health, nutrition, exercise physiology, and epidemiology.

Sign up for NCCOR Student Hub!

→ nccor.org/e-newsletter
Check out the student hub webpage!
Have you used any of NCCOR’s tools?

• Let us know at nccor@fhi360.org and we may feature you in our next webinar!
FURTHER QUESTIONS?

Other questions about NCCOR or upcoming activities?

Email the NCCOR Coordinating Center

nccor@fhi360.org
WHAT'S HAPPENING IN

NCCOR NEWS

NCCOR publishes chapter: Behavioral Design as an Emerging Theory for Dietary Behavior Change

NCCOR is highlighting multidisciplinary partnerships to celebrate National Childhood Obesity Awareness Month 2018!

Utility of the Youth Compendium of Physical Activities

NCCOR to present at the Society for Prevention Research and the American College of Sports Medicine 2018 Annual Meetings

NCCOR updates the Catalogue of Surveillance Systems and seeks recommendations for new systems

Connect & Explore

Upcoming Webinars

Mark your calendar for these upcoming Connect & Explore webinars!
THANK YOU!