

BIOGRAPHICAL SKETCH

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NAME: Datar, Ashlesha

eRA COMMONS USER NAME (credential, e.g., agency login): ADATAR

POSITION TITLE: Senior Economist and Director of Program on Children and Families

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Delhi University, New Delhi, India	B.A.	1995	Economics
Delhi School of Economics, New Delhi, India	M.A.	1997	Economics
Indiana University-Purdue University at Indianapolis	M.A.	1999	Economics
Pardee-RAND Graduate School of Policy Studies, Santa Monica, CA	Ph.D.	2003	Policy Analysis

A. Personal Statement

My research focuses on the role of school, neighborhood, and other contextual factors in influencing obesogenic behaviors and outcomes in children and families. I am an economist by training and have significant experience in analyzing large-scale secondary datasets using econometric techniques. Much of that research has focused on understanding how contextual factors in and around schools, neighborhoods and homes (e.g physical education and junk food access in school, neighborhood food prices, proximity to food outlets, crime) affect children's health behaviors and outcomes using large panel datasets (e.g. Early Childhood Longitudinal Study). I am currently leading several large natural experiment studies examining the effect of neighborhood contextual factors on obesogenic behaviors and obesity. I am the PI of the M-TEENS study (R01HD067536, R01DK111169), which is examining how neighborhood built environments influence obesogenic behaviors and outcomes among military families by leveraging the natural experiment created by the frequent relocation of military families. While the M-TEENS study recruited and followed a cohort of ~1500 military families, I am leading another study that will link data from the Millenium Cohort Study, a large representative panel of >200K military servicemembers, to data on neighborhood contextual environments to study their impacts on cardiometabolic health outcomes including, BMI/obesity, diabetes and heart disease (R01HL141870). I have recently received two other R01 grants to study the impact of changes in housing, and built- and social-environments on BMI/obesity outcomes in adults and children living in public housing using a natural experiment study design (R01CA228058, R01HD096293).

I have a very successful track record of grant-funding from federal agencies and private foundations, including the National Institutes of Health, U.S. Department of Agriculture, U.S. Department of Health and Human Services, and the Robert Wood Johnson Foundation. My research has been published in leading health and policy journals. I believe that my background and experience will allow me to successfully lead the proposed research study.

1. **Datar, A.**, & Nicosia, N. 2018. Assessing Social Contagion in Body Mass Index, Overweight, and Obesity Using a Natural Experiment. *JAMA Pediatrics*, 172(3), 239-246.
2. Shier, V., Nicosia, N., **Datar, A.** 2016. Neighborhood and home food environment and children's diet and obesity: Evidence from military personnel's installation assignment. *Social Science & Medicine*, 158: 122-131.

3. **Datar, A.**, Nicosia, N., Shier, V., Wong, E. (2015). "Neighborhood Environment and Children's Physical Activity and Body Mass Index: Evidence from Military Personnel Installation Assignments" *Childhood Obesity*. 11(2):130-8.
4. **Datar, A.**, N. Nicosia, and V. Shier. 2013. "Parent Perceptions of Neighborhood Safety and Children's Physical Activity, Sedentary Behavior, and Obesity: Evidence from a National Longitudinal Study" *American Journal of Epidemiology*. 177(10): 1065-73.

B. Positions and Honors.

Professional Experience

2013-present, Senior Economist and Director of Program on Children and Families, Center for Economic and Social Research (CESR), University of Southern California, Los Angeles, CA
2013-present, Adjunct Senior Economist, RAND, Santa Monica, CA
2011-2013, Senior Economist, RAND, Santa Monica, CA
2007-2011, Full Economist, RAND, Santa Monica, CA
2003-2007, Associate Economist, RAND, Santa Monica, CA
1999-2003, Doctoral Fellow, RAND Graduate School, Santa Monica, CA
1998-1999, Research Analyst, The Polis Center, Indiana University, Indianapolis IN

Honors, Awards, and Professional Activities

2013-2016 NIH Community Level Health Promotion (CLHP) study section standing member
2004 Herbert Goldhammer Award, RAND Graduate School
2002-03 Child Care Bureau Research Scholar Dissertation Grant Award
2001-02 American Educational Research Association Dissertation Grant Award
Member, American Economic Association
Member, Association of Policy Analysis and Management
Member, Population Association of America

C. Contributions to Science

My research has made several important scientific contributions that are described below. A complete list of my research publication is available at

<https://www.ncbi.nlm.nih.gov/sites/myncbi/ashlesha.datar.1/bibliography/40800870/public/?sort=date&direction=ascending>

1. Describing the Problem of Childhood Obesity and its Consequences

In a series of publications in high-impact journals, I have used longitudinal data on a nationally representative sample of elementary school age children in the U.S (Early Childhood Longitudinal Study – Kindergarten Class 1998-99; ECLS-K 98-99) to describe important racial-ethnic, gender, and socioeconomic patterns in the evolution of childhood obesity during the elementary and middle school years. Most other nationally representative data for tracking childhood obesity are repeated cross-sections (e.g. NHANES) and/or collect self-reported height and weight data (e.g. NHIS). The ECLS-K is the only nationally representative longitudinal data with measurements of children's height and weight. These data allow an unprecedented view of how BMI evolves in a national cohort of children over a 9 year period. My research has found significant disparities in the evolution of BMI during this time in children's lives, especially in the elementary school years, which suggests importunities for interventions. Moreover, I have used the ECLS-K data to show that childhood obesity in the early school years influences children's school performance and social and behavioral outcomes.

1. **Datar, A.**, Chung, P.J. 2015. "Changes in Socioeconomic, Racial-Ethnic and Gender Disparities in Childhood Obesity at School Entry in US Children" *JAMA Pediatrics*. 169(7): 696-697.
2. **Datar, A.**, Shier, V., Sturm, S. 2011. "Changes in Body Mass During Elementary and Middle School in a Nationally Representative Cohort of Kindergartners". *Pediatrics*. Volume 128, Number 6, pp e1411-e1417.

3. **Datar, A.** and Roland Sturm. 2004. "Childhood Overweight and Teacher and Parent Reported Behavior Problems: Evidence from a Prospective Study of Kindergartners." *JAMA Pediatrics* (formerly *Archives of Pediatric and Adolescent Medicine*). Volume 158: 804-810.
4. **Datar, A.** and Roland Sturm. 2006. "Childhood Overweight and Elementary School Outcomes". *International Journal of Obesity*. Volume 30, No. 9: 1449-60.

2. Examining the Influence of Schools and Neighborhoods on Childhood Obesity

My second area of contribution is the examination of how school and neighborhood environments (e.g. Physical education and junk food access in schools, neighborhood safety and food prices) influence children's diet and activity behaviors and childhood obesity. Understanding these relationships is empirically challenging because of self-selection of individuals and households into schools and neighborhoods. Therefore, analyses based on cross-sectional, observational data are likely to yield biased estimates of this relationship and therefore experts have called for more rigorous studies. My training in econometrics and longitudinal data analyses has allowed me to apply more sophisticated statistical models that try to address this selection bias. Much of this research has been done using large nationally representative data such as the Early Childhood Longitudinal Study. I am also conducting a large natural experiment study in military families that leverages their frequent relocation to study how changes in children's school and neighborhood environments influences their diet, activity, and body weight.

1. **Datar, A.** and Roland Sturm. 2004. "Exposure to Physical Education in School and its Impact on Body Mass Index: Evidence from a Prospective Study of Kindergartners." *American Journal of Public Health*. Volume 94, No. 9: 1501-1506.
2. Sturm, R. and **Ashlesha Datar**. 2005. "Weight Gain in Elementary School Children and Metropolitan Area Food Prices." *Public Health* 119(12):1059-1068.
3. **Datar, A.**, N. Nicosia, and V. Shier. 2013. "Parent Perceptions of Neighborhood Safety and Children's Physical Activity, Sedentary Behavior, and Obesity: Evidence from a National Longitudinal Study" *American Journal of Epidemiology*. 177(10): 1065-73.
4. **Datar, A.**, Nicosia, N., Shier, V., Wong, E. (2015). "Neighborhood Environment and Children's Physical Activity and Body Mass Index: Evidence from Military Personnel Installation Assignments" *Childhood Obesity*. 11(2):130-8.

3. Contributions to Child Health Research

In addition to my research described above on childhood obesity, I have a body of research in child health that has focused on applying rigorous methodology to address selection bias concerns when using observational data. This research has focused on a variety of child health topics including children's mental, motor and physical development, diet and physical activity behaviors, childhood obesity, childhood immunizations, and birth weight. My research has applied econometric methods such as instrumental variables analyses, difference-in-differences analyses, and fixed-effects (within individual or within group) models to try to address endogeneity concerns. In ongoing research, I am using longitudinal data from the ECLS-K to examine how changes in ambient air pollution exposure over time is related to children's cognitive and health outcomes.

1. **Datar, A.** and Alison Jacknowitz. Nov 2009. "Birth Weight Effects on Children's Mental, Motor, and Physical Development; Evidence from Twins Data". *Maternal and Child Health Journal*. 13(6):780-94.
2. **Datar, A.**, Nicosia, N. Spring 2012. "Junk Food in Schools and Childhood Obesity". *Journal of Policy Analysis and Management*. 31(2): 312-337.
3. **Datar, A.**, Nicosia, N., Shier, V. 2014. "Maternal Work and Children's Diet, Activity, and Obesity" *Social Science and Medicine*. 107: 196-204.
4. **Datar, A.** Liu, J., Linnemayr, S., Stecher, C. 2013. "The Impact of Natural Disasters on Child Health and Investments in Rural India". *Social Science and Medicine*. 76, 83-91.

4. Understanding the Impact of Policies on Child Well-Being

Given my background in public policy, I have always had a keen interest in examining how policies impact children's well-being. In particular, I have conducted extensive research examining the impact of school entry age policies on children's cognitive and socioemotional developmental outcomes during school. This research has been widely cited and was influential in moving California's school entry age cutoff date. In other research, I have examined the effect of California's postpartum hospital stay legislation on newborns' outcomes and mortality. This research was published in *Pediatrics*. In my current research, I am examining the impact of state policies targeting competitive foods in school on school food environment and children's diet and BMI. I am also examining the effects of state BMI surveillance in schools on childhood obesity.

1. **Datar, A.** 2006 “Does Delaying Kindergarten Entrance Give Children a Head Start?” *Economics of Education Review* 25:43-62.
2. **Datar, A.** 2006. “The Impact of Kindergarten Entrance Age Policies on the Child Care Needs of Families.” *Journal of Policy Analysis and Management* 25(1):129-151.
3. **Datar, A.,** Gottfried, M. 2015. “School Entry Age and Children’s Non-Cognitive Skills: Evidence from a National Longitudinal Study of Kindergartners” (in press) *Education Evaluation and Policy Analysis*.
4. **Datar, A.** and Neeraj Sood. 2006. “The Impact of Postpartum Hospital Stay Legislation on Newborn Length of Stay, Readmission and Mortality in California” *Pediatrics* 118(1):63-72.

5. Using Natural Experiments to Study Neighborhood Effects on Obesity

A more recent focus of my research has been on leveraging natural experiments to study the effects of neighborhood environments on obesogenic behaviors and obesity among children and adults. Natural experiments fill a major void in the neighborhood effects and obesity literature since it is generally infeasible to conduct randomized trials to study neighborhood effects. Therefore, natural experiments are the next best alternative for studying causal effects of neighborhoods on health because concerns about self-selection into neighborhoods are minimized. In one natural experiment, I have leveraged the periodic relocation of military families across different communities to study how characteristics of those communities and neighborhood influence their diet and activity behaviors and body weight outcomes. In ongoing work, I am studying a natural experiment where a distressed public housing community is being completely redeveloped with brand new housing and major improvements to the built- and social- environments.

1. **Datar, A.,** & Nicosia, N. 2018. Assessing Social Contagion in Body Mass Index, Overweight, and Obesity Using a Natural Experiment. *JAMA Pediatrics*, 172(3), 239-246.
2. **Datar, A.,** Nicosia, N., Shier, V., Wong, E. (2015). “Neighborhood Environment and Children’s Physical Activity and Body Mass Index: Evidence from Military Personnel Installation Assignments” *Childhood Obesity*. 11(2):130-8.
3. Shier, V., Nicosia, N., **Datar, A.** 2016. Neighborhood and home food environment and children's diet and obesity: Evidence from military personnel's installation assignment. *Social Science & Medicine*, 158: 122-131.

D. Research Support

Ongoing Research Support

R01HL141870-01A1 Datar (PI)
NHLBI

3/1/2019 – 2/28/2023

Contextual Effects on Cardiometabolic Health: Evidence from a Natural Experiment

This study proposes to investigate the causal mechanisms and pathways through which contextual factors influence cardiometabolic (CM) outcomes in adults, including BMI/obesity, diabetes, and hypertension. The study will link individual-level longitudinal data from the Millennium Cohort Study to county- and neighborhood-level contextual data on the physical and social environment and estimate multilevel longitudinal models.

R01CA228058 Datar (PI)
NCI

03/01/2018 – 02/28/2023

The Impact of Improvements in Built- and Social-Environments and Housing on Obesity in Public Housing Residents: Evidence from a Natural Experiment in South Los Angeles.

This project will use a natural experiment design to study the impact of major improvements in the built-, social- and housing environments on the BMI and obesity outcomes of adult public housing residents in South Los Angeles.

R01HD096293 Datar (PI)
NICHD

07/24/2018 – 04/30/2023

The Impact of Improvements in Built, Social, and Housing Environments on Low-Income Children's Obesity

This study will evaluate the effect of major improvements in the built-, social- and housing-environments of low income children on their BMI and obesity using a natural experiment in the Jordan Downs public housing

project in south Los Angeles. The study will collect annual data from children and their parents over 5 years and track diet and activity behaviors as well as mediators and moderators to understand why or why the redevelopment didn't have the intended effects and whether the effects varied by children's sex, race-ethnicity and age.

R01DK111169 Datar (PI)
NIDDK

4/01/17-3/31/2021

Environments, Preferences and Childhood Obesity: Evidence From a Natural Experiment

This project will continue to follow the existing MTEENS cohort to examine the effects of built- and policy-environments on obesogenic behaviors and obesity in adolescents and parents from military families. A novel contribution of the proposed study is the examination of whether the environment's effects vary by adolescents' and their parents' time- and risk-preferences (i.e. future-orientation and risk-aversion).

R01DK114238 (PI: Samek)
NIDDK

9/1/2017-6/30/2022

"Effects of an Early Childhood Intervention on Childhood Obesity"

This study will exploit the Chicago Heights Early Childhood Center (CHECC) RCT to investigate the impact of preschool and parenting programs at ages 3-5 on childhood obesity and health outcomes at ages 6-11.

Role: Co-I

Completed Research Support

R01HD067536 Datar (PI)
NICHD

9/27/11-5/31/2017

Environment's Impact on Children's Diet, Activity & Obesity: A Natural Experiment

The Military Teenagers Environments, Exercise, and Nutrition Study (M-TEENS) leverages the natural experiment created by frequent relocation of military families to examine the effects of changes in military children's food and physical activity environments on their diet, activity, and obesity. The study will collect primary data on a sample of about 1500 military children and their neighborhood and school environments at baseline and after their relocation to a new base.

R03ES021569 Datar (PI)
NIEHS

11/9/2012 – 10/31/2015

Air Pollution and Children's Cognitive and Health Outcomes

This study will use longitudinal data on a nationally representative sample of children in the U.S and quasi-experimental methods to estimate the effects of ambient air pollution exposure during the elementary and middle school years on children's health and cognitive outcomes.

R03HD069739 Datar (PI)
NICHD

6/6/2012 – 5/31/2015

School Food Environment and Child Well-Being

This study will use longitudinal data from the ECLS-K and quasi-experimental methods to estimate the causal effect of competitive food availability, defined as foods and beverages available for sale in schools outside of the school lunch and breakfast programs, on children's dietary behaviors, body weight and other health- and school-related outcomes.