# HELEN O. PITCHIK, PhD, MSc

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### **EDUCATION** PhD University of California Berkeley, School of Public Health 2016-2021 Berkeley, CA **Epidemiology** Committee: Lia C. H. Fernald (chair), Alan E. Hubbard, Stephen P. Luby (Stanford) Thesis: Child development in a global context: Innovations, interventions, and implementation at scale MSc Harvard T. H. Chan School of Public Health 2014-2016 Global Health and Population Boston, MA Advisors: Wafaie W. Fawzi & Christopher R. Sudfeld Thesis: Early-life predictors of child cognitive, motor and socioemotional development in Dar es Salaam, Tanzania AB Harvard University 2008-2012 Neurobiology, Mind Brain Behavior track Cambridge, MA Advisor: Robert Stickgold Honors thesis: Sleep and Ecological Memory RESEARCH EXPERIENCE Postdoctoral Scholar Division of Epidemiology July 2021-present University of California Berkeley, School of Public Health Cambodia positive parenting programme evaluation 2022 Funding: URC-HEARD USAID Role: Scoping review co-lead Effects of cash transfer for the prevention of HIV in young South African women 2019-2021 Funding: NIH-NIMH R01MH110186 Role: Data analyst Testing Means to Scale Early Childhood Development Interventions in Rural Kenya 2018-2020 Funding: NIH-NICHD R01HD090045 Role: Data analyst RINEW: Research on Integration of Nutrition Early Childhood Development WASH 2016-2021 Funding: Bill & Melinda Gates foundation OPP1146808 Role: Study design, lead data analyst Center for Global Child Health, Hospital for Sick Children Role: Summer Research assistant, Supervised by Diego Bassani, PhD Summer 2016 Role: Summer Research assistant, Supervised by Zulfigar Bhutta, PhD Summer 2014

Center for Disease Dynamics, Economics and Policy, New Delhi, India

Role: Full time research analyst

2012 - 2013

## RESEARCH SUPPORT

RESEARCH SUPPORT	
ACTIVE SUPPORT  Evaluating multicomponent interventions to entimize health and development. 08	/2024 09 /2026
Evaluating multicomponent interventions to optimize health and development 08 for children and adolescents living in poverty	/2024-08/2026 \$235,766
NIH-NICHD K99HD114882	Ψ <b>2</b> 33,700
Role: PI	
Effect of multi-component early child development intervention on school-aged	2024-2025
outcomes	\$25,000
Thrasher Foundation Early Career Award Role: PI	
PAST SUPPORT	
Effects in middle childhood of early exposure to WASH interventions: cluster-	2021-2023
randomized controlled trial	\$100,000
NIH-NICHD R03HD102468 Role: Equivalent to Co-I but not eligible at time of application, led all analyses	
Co-wrote proposal, supported by research advisor (PI: Lia Fernald)	
The Development of Picture Comprehension: Improving Learning Materials and	2021-2023
Assessment Tools in Global Contexts	\$150,000
Schools2030 Global Research Grant Role: Co-I	
Rapid development of guidelines for low-cost PPE evaluation and decontamination	2020
for resource-limited settings	\$44,000
Stanford Center for Innovation in Global Health Seed Grant: Special COVID-19 call Role: External Co-I (PI: Manu Prakash)	
When and How Do Toddlers in Rural Western Kenya Understand the	2020
Representational Nature of Pictures?	<b>\$4,4</b> 00
Psychology and Economics of Poverty (PEP) Seed Funding Award, UC Berkeley Role: Co-I	
AWARDS	
UC Berkeley Graduate Division Conference Travel Grant	2019
<ul> <li>For travel to the Society for Epidemiologic Research Conference in Minneapolis, MN</li> <li>Subir Chowdhury Graduate Fellowship on the Quality of Life in Bangladesh</li> </ul>	N 2018-2019
<ul> <li>For dissertation work on child development in rural Bangladesh</li> </ul>	
Society for Epidemiologic Methods Dissertation Workshop Participant	2019
Selected as one of 12 doctoral students to present dissertation prospectus for	
discussion with facilitating faculty and peers  UC Berkeley Center for Global Public Health Summer Research Fellowship	2018
For summer research in Bangladesh	2010
Willian Griffiths Fellowship	2017
Recipient of Public Health Alumni Association annual scholarship competition	
UC Berkeley Graduate Division Conference Travel Grant	2017
• For travel to the 2017 International Congress on Nutrition in Buenos Aires, Argentin	
Harvard Center for African Studies Graduate Research Grant	2015
<ul> <li>For master's thesis research in Dar es Salaam, Tanzania</li> </ul>	

# Mary Gordon MBB Thesis Research Grant and Harvard College Research Program Funding

2011

• For undergraduate honors thesis research in neurobiology

#### TEACHING, INVITED DISCUSSIONS & LECTURES

# Strengthening Maternal and Newborn Care in Bangladesh Discussant

February 2022

For a panel discussion on a USAID-funded Maternal Newborn Care Strengthening Project

# HED825: Introduction to Epidemiology, San Francisco State University

April 2020

Guest Lecturer

• Developed and delivered 45-minute lecture on intervention study designs to MPH students enrolled in a department of health education core course

# PH218b: Evaluation of Health and Social Programs, UC Berkeley School of Public Health

October 2019

Guest Lecturer

• Developed and delivered a 60-minute lecture on randomized control trials with an applied example

# PH250C: Advanced Epidemiologic Methods, UC Berkeley School of Public Health

Spring 2019

Graduate Student Instructor

- Taught weekly 2-hour discussion sessions and maintained weekly office hours to review material covered in lecture
- Graded homework assignments, midterms, and final exams

# PH250B: Epidemiologic Methods II, UC Berkeley School of Public Health

Fall 2017

Graduate Student Instructor

- Developed, administered, and graded three exams throughout the semester to test students' mastery of epidemiologic methods concepts
- Co-taught weekly 2-hour discussion sessions and maintained weekly office hours to review material covered in lecture

# GPH504: Applied Qualitative Methods for International Health Research, Harvard T.H. Chan School of Public Health

Spring 2016

Teaching Assistant

• Graded assignments, updated teaching materials, and co-taught a session on focus groups

## PUBLICATIONS (23 published, 6 submitted)

#### Peer-reviewed

- Butzin-Dozier Z, Mertens AN, Tan ST, Granger DA, Pitchik HO, Il'yasova D, Tofail F, Rahman Z, Spasojevic I, Shalev I, Ali S, Karim MR, Shahriar S, Famida SL, Shuman G, Shoab AK, Akther S, Hossen S, Mutsuddi P, Rahman M, Unicomb L, Das KK, Yan L, Meyer A, Stewart CP, Hubbard A, Naved RT, Parvin K, Mamun MA, Luby SP, Colford JM, Fernald LCH, Lin A. Stress Biomarkers and Child Development in Young Children in Bangladesh. *Psychoneuroendocrinology*. 2024; 164: 107023. doi: 10.1016/j.psyneuen.2024.107023
- 2. Styczynski A, Amin MB, Hoque KI, Perveen S, Pervez AF, Zeba D, Akhter A, **Pitchik H**, Islam MA, Hossain MI, Saha SR, Gurley ES, Luby S. Perinatal colonization with extended-spectrum beta-lactamase-producing and carbapenem-resistant Gram-negative bacteria: A hospital-based cohort study. *Antimicrob Resist Infect Control*. 2024(13). doi: 10.1186/s13756-024-01366-9
- 3. Winters S, **Pitchik HO**, Akter F, Yeasmin F, Jahir T, Huda TMN, Rahman M, Winch PJ, Luby SP, Fernald LCH. How does women's empowerment relate to antenatal care attendance? A cross-sectional analysis among rural women. *BMC Pregnancy Childbirth*. 2023;23(1):436. doi: 10.1186/s12884-023-05737-9

- 4. Rahman M, Jahir T, Akter F, Yeasmin F, Pitchik HO, Hasan R, Das JB, Grant HX, Hossain K, Sultana J, Huda TMN, Shoab AKM, Khan R, Tofail F, Luby SP, Fernald LCH, Rashid J, Lipi SA, Leontsini E, Winch PJ. Implementing a group-based multi-component early child development intervention through the government health system in rural Bangladesh: a feasibility study. *Int J Health Plan Manag.* 2023. doi:10.1002/hpm.3647.
- 5. Jervis P, Coore-Hall J, **Pitchik HO**, Arnold CD, Grantham-McGregor S, Rubio-Codina M, Baker-Henningham H, Fernald LCH, Hamadani J, Smith JA, Trias J, Walker SP. Impact of the Reach Up parenting program on child and parent: systematic review and meta-analysis. *Pediatrics*. 2023;1:151(Supplement 2).
- 6. **Pitchik HO**, Tofail F, Akter F, Sultana J, Shoab AK, Huda TMN, Rahman M, Winch PJ, Luby SP, Fernald LCH. Concurrent validity of the Ages and Stages Questionnaire Inventory in rural Bangladesh. *BMC Pediatrics*. 2023;23(1). doi: 10.1186/s12887-022-03800-6
- Jain A, Pitchik HO, Harrison C, Kim R, Subramanian SV. The association between anthropometric failure and toilet types: a cross-sectional study from India. Am J Trop Med Hyg. 2023;108(4). doi: 10.4269/ajtmh.22-0138
- 8. Salem MK, **Pitchik HO**, Sultana J, Rahman M, Jannat KK, Luby SP, Mridha MK, Winch PJ, Fernald LCH. Prevalence of sugar-sweetened food consumption in rural Bangladeshi children aged 6-24 months. *J Nutr.* 2022. doi:10.1093/jn/nxac119
- 9. Forsyth JW, Kempinsky A, **Pitchik HO**, Alberts CJ, Mutuku FM, Kibe L, Ardoin NM, LaBeaud AD. Larval source reduction with a purpose: designing and evaluating a household- and school-based intervention in coastal Kenya. *PLOS Negl Trop Dis.* 2022;16:e0010199. doi:10.1371/journal.pntd.0010199
- Shless J, Crider Y, Pitchik H, Qazi A, Styczynski A, LeMesurier R, Haik D, Kwong L, LeBoa C, Bhattacharya A, Hamidi Y, Phalen R. Evaluation of the effects of repeated disinfection on medical exam gloves: Part 1. Changes in physical integrity. *J Occup Environ Hyg* 2021;0:1–11. doi:10.1080/15459624.2021.2015072
- 11. Phalen R, Patterson J, Cuadros Olave J, Mansfield S, Shless J, Crider Y, **Pitchik H**, Qazi A, Styczynski A, LeMesurier R, Haik D, Kwong L, LeBoa C, Bhattacharya A, Hamidi Y. Evaluation of the effects of repeated disinfection on medical exam gloves: Part 2. Changes in mechanical properties. *J Occup Environ Hyg.* 2021;0:1–14.
- 12. **Pitchik HO**, Tofail F, Akter F, Sultana J, Shoab AK, Huda TMN, Forsyth JE, Kaushal N, Amin MR, Jahir T, Yeasmin F, Khan R, Das JB, Hossain K, Hasan MR, Rahman M, Winch PJ, Luby SP, Fernald LCH. Effects of the COVID-19 pandemic on maternal mental health and the child caregiving environment on families in rural Bangladesh. *Child Dev.* 2021;92:e764–80
- 13. Jahir T, **Pitchik HO**, Rahman M, Sultana J, Shoab AK, Huda TMN, Byrd KA, Islam MS, Yeasmin F, Baker M, Yeasmin D, Nurunnahar S, Luby SP, Winch PJ, Forsyth JE. Making the invisible visible: Developing and evaluating an intervention to raise awareness and reduce lead exposure among children and their caregivers in rural Bangladesh. *Environ Res.* 2021;199:111292. doi:10.1016/j.envres.2021.111292
- 14. Jahir T, Winch PJ, Leontsini E, Hwang ST, Yeasmin F, Hossain K, Das JB, Amin R, Nurul Huda TM, Sultana J, Khan R, Akter F, Shoab A, Hasan R, Pitchik HO, Tofail F, Fernald LCH, Luby SP, Rahman M. Success factors for community health workers in implementing an integrated group-based child development intervention in rural Bangladesh. *Int J Environ Res Public Health*. 2021;18:7891. doi:10.3390/ijerph18157891
- 15. **Pitchik HO**, Tofail F, Rahman M, Akter F, Sultana J, Shoab AK, Huda TMN, Jahir T, Amin MR, Hossain K, Das JB, Chung EO, Byrd KA, Yeasmin F, Kwong LH, Forsyth JE, Mridha MK, Winch PJ, Luby SP, Fernald LCH. A holistic approach to promoting early child development: a cluster randomised trial of a group-based, multicomponent intervention in rural Bangladesh. *BMJ Glob Health*. 2021;6(3):e004307.

- 16. Jeong J, **Pitchik HO**, Fink G. Short-term, medium-term and long-term effects of early parenting interventions in low- and middle-income countries: a systematic review. *BMJ Glob Health*. 2021;6(3):e004067.
- 17. Yeasmin F, Winch PJ, Hwang ST, Leontsini E, Jahir T, Das JB, Amin MR, Hossain MK, Huda TMN, Akter F, Shoab AK, Tofail F, Mridha MK, Sultana J, **Pitchik H**, Fernald LCH, Luby SP, Rahman M. Exploration of attendance, active participation, and behavior change in a group-based responsive stimulation, maternal and child health, and nutrition intervention. *Am J Trop Med Hyg.* 2021;104(4):1586–1595.
- 18. Luoto JE, IL Garcia, FE Aboud, DR Singla, LC Fernald, **HO Pitchik**, UY Saya, R Otieno, E Alu. Group-based parenting interventions to promote child development in rural Kenya: a multi-arm, cluster-randomised community effectiveness trial. *Lancet Global Health*. 2021;9(3):e309–e319.
- 19. Akter F, Rahman M, **Pitchik HO**, Winch PJ, Fernald LCH, Huda TMN, Jahir T, Amin R, Das JB, Hossain K, Shoab AK, Khan R, Yeasmin F, Sultana J, Luby SP, Tofail F. Adaptation and integration of psychosocial stimulation, maternal mental health and nutritional interventions for pregnant and lactating women in rural Bangladesh. *Int J Environ Res Public Health* 2020;17(17):6233.
- 20. **Pitchik HO**, Chung EO, Fernald LC. Cross-cultural research on child development and maternal mental health in low- and middle-income countries. *Curr Opin Behav Sci.* 2020;36:90–97.
- 21. Fernald LCH, **Pitchik HO**. The necessity of using direct measures of child development. *Lancet Global Health*. 2019;7(10):e1300–e1301.
- 22. Jeong J, **Pitchik HO**, Yousafzai AK. Stimulation interventions and parenting in low- and middle-income countries: a meta-analysis. *Pediatrics*. 2018;e20173510.
- 23. **Pitchik HO**, Fawzi WW, McCoy DC, Darling AM, Abioye AI, Tesha F, Smith ER, Mugusi F, Sudfeld CR. Prenatal nutrition, stimulation, and exposure to punishment are associated with early child motor, cognitive, language, and socioemotional development in Dar es Salaam, Tanzania. *Child Care Health Dev.* 2018;44(6):841–849.

### In revision or under review

- 1. **Pitchik HO**, Jain A, Kupfer M, Parida M, Ghimire P, Ray I. The role of community and public sanitation in peri-urban India: An exploratory study from Jharkhand. [UNDER REVIEW]
- 2. Zhu R, **Pitchik HO**, Nduku T, Engelmann J, Fernald LCH, Gopnik A. The development of picture comprehension across early environments: Evidence from urban and rural toddlers in Western Kenya. [IN REVISION]
- 3. Figueroa D, Mamun MMA, Jung DK, Li A, Tan ST, Jamshed F, Butzin-Dozier Z, Mertens AN, Lin J, **Pitchik HO**, Parvin K, Silvera A, Fernald LCH, Arnold BF, Ali S, Shoab AK, Famida SL, Akther S, Rahman MZ, Hossen MS, Mutsuddi P, Rahman M, Unicomb L, Kariger P, Stewart CP, Hubbard AE, Benjamin-Chung J, Dhabhar FS, Luby SP, Colford JM, Naved RT, Lin A. Maternal experience of intimate partner violence, maternal depression, and parental stress are not associated with child telomere length in Bangladesh. [UNDER REVIEW]
- 4. Jeong J, Chi H, Bliznashka L, **Pitchik HO**, Kim R, Co-occurrence and correlates of stunting and off-track early child development: a pooled analysis of Demographic and Health Surveys and Multiple Indicator Cluster Surveys data from 41 low- and middle-income countries. [UNDER REVIEW]
- 5. Ho GG, Achando BS, Ali S, Mertens AN, Hemlock C, **Pitchik HO**, Stewart CP, Tofail F, Rahman MZ, Alauddin M, Rao G, Dentz HN, Buleti JP, Nekesa C, Arnold CD, Famida SL, Hossen MS, Mutsuddi P, Akther S, Grembi JA, Tan ST, Alauddin ST, Meerkerk T, Wolfe MK, Cheruiyot P, Njenga SM, Shoab AK, Rahman M, Unicomb L, Arnold BF, Kariger P, Hubbard AE, Colford JM, Pickering AJ, Null C,

- Luby SP, Fernald LCH, Lin A. Environmental enteric dysfunction and neurodevelopmental outcomes among children in rural Bangladesh and Kenya: a prospective cohort study [UNDER REVIEW]
- 6. Bliznashka L, Hentschel E, Ali NB; Hunt X, Neville SE, Olney DK, **Pitchik HO**, Roy A, Seiden J, Cordero KS, Thapa A, Jeong J. Psychometric properties of early childhood development assessment tools in low-and-middle-income countries: a systematic review [UNDER REVIEW]

### **CONFERENCE PRESENTATIONS**

- 1. **Pitchik HO**, Fernald LCH, Rahman M, *et al.* COVID-19 and child development in a longitudinal cohort in rural Bangladesh. Meeting of the Society for Epidemiologic Research. Portland, OR; June 2023 [oral]
- 2. **Pitchik HO**, Fernald LCH, Rahman M, *et al.* Impact of COVID-19 on child development, academic achievement, and behavioral development in Rural Bangladesh. Society for Research on Child Development Biennial Meeting. Salt Lake City, UT; March 2023 [oral]
- 3. Tofail F, **Pitchik HO (presenting)**, Shoab AKM, *et al.* A 7-year follow-up of an early water, sanitation, hygiene, and nutrition intervention in rural Bangladesh. Society for Research on Child Development Biennial Meeting. Salt Lake City, UT; March 2023 [oral]
- 4. **Pitchik HO**, Chung EO, Bhushan NL, *et al.* Pregnancy and depressive symptoms in adolescent girls and young women (HPTN 068). Meeting of the Society for Epidemiologic Research. Chicago, IL; June 2022. [oral]
- 5. **Pitchik HO**, Tofail F, Akter F, *et al.* Effects of the COVID-19 pandemic on caregiver mental health in a low-resource, rural context. Measuring Development 2021: Emerging Data and Methods in Global Health Research. Virtual; April 2021 [oral]
- 6. **Pitchik HO**, Tofail F, Akter F, *et al.* Effects of the COVID-19 pandemic on caregiver stimulation and maternal mental health in rural Bangladesh. Society for Research on Child Development Biennial Meeting. Virtual; April 2021 [oral]
- 7. **Pitchik HO**, Sultana J, Shoab AK, *et al.* Delivery of an integrated child development intervention by government health workers in Chatmohar, Bangladesh. Society for Research on Child Development Biennial Meeting. Virtual; April 2021[oral]
- 8. **Pitchik HO**, Tofail F, Fernald LCH, *et al.* Concurrent validity of the Ages and Stages Questionnaire Inventory in rural Bangladesh. Panel Discussion at Connecting Worlds: Studying Child Development in Low Resource Contexts, special topic meeting of SRCD. Virtual; Dec 2020. [oral]
- 9. **Pitchik HO**, Rahman M, Tofail F, *et al.* Scaling up an integrated child development intervention in Chatmohar, Bangladesh. Meeting of the Society for Epidemiologic Research. Virtual; Dec 2020. [poster]
- 10. **Pitchik HO**, Tofail F, Fernald LCH, *et al.* Examining the delivery and dosage of caregiving interventions and caregiving practices in rural Bangladesh, a cluster RCT. Meeting of the Society for Epidemiologic Research. Minneapolis, MN; June 2019. [poster]
- 11. **Pitchik HO**, Tofail F, Fernald LCH, *et al.* Impact of integrated caregiving intervention on maternal caregiving practices and mental health in rural Bangladesh, a Cluster RCT. Meeting of the Society for Research in Child Development. Baltimore, MD; March 2019. [poster]
- 12. **Pitchik HO,** Fawzi WW, Sudfeld CR, *et al.* Prenatal nutrition, stimulation, and exposure to punishment are associated with early child motor, cognitive, and socioemotional development in Dar es Salaam, Tanzania. International Congress on Nutrition, Buenos Aires, Argentina; Oct 2017. [poster]

#### **SERVICE**

#### Ad hoc reviewer

• Child Development, Maternal & Child Nutrition, Wellcome Trust

# N95decon.org

April 2020 - Dec 2021

 Part of a team of volunteer scientists and researchers developing PPE guidance for low- and middleincome countries during the COVID-19 pandemic

## Mentor, Undergraduate Research Apprentice Program

Spring 2017

• Met weekly with two undergraduate students to introduce them to global child development research and mentor them on a research project to better understand parenting practices in rural Bangladesh

#### **PROFESSIONAL AFFILIATIONS**

- Society for Epidemiologic Research
- Society for Research in Child Development

### **SOFTWARE**

- Quantitative Analysis: Stata, R
- Qualitative Analysis: Nvivo, ATLAS.ti
- Survey Administration: SurveyCTO, CommCare, REDCap, OpenDataKit, KoboCollect