washplus Weekly
Supportive Environments for Healthy Communities

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This issue contains some of the most recent studies on stunting, open defecation, nutritional interventions, and other WASH and nutrition issues. Recent reports from the World Bank Water and Sanitation Program discuss the impacts of improved sanitation on child growth in Vietnam and Lao PDR. Training materials include the new Global Handwashing Day guide from the Global Public-Private Partnership on Handwashing and a WASHplus infographic on tippy taps.

BLOG POSTS

Left, Right, and Toilets. *Ideas for India*, Aug 2014. D Spears. (Link)
Eliminating open defecation in India is a policy priority. This column contends that successful strategies for reducing open defecation may not fit policy stereotypes of the left or the right. While rural sanitation policy in states where this practice is most concentrated has been focused on latrine construction, promotion of latrine use is what will make a difference.

What Do Toilets Have To Do with Nutrition? More Than You Might Think. *IFPRI Blog*, July 2014. L Haddad. (Link)
A new working paper from the Institute of Development Studies has looked at data from 116 low- and middle-income countries from 1970 to 2012. It found that access to safe water (20 percent) and improved sanitation (15 percent) explained 35 percent of the variation in stunting rates across countries and time periods. This reflects two things: the fact that water and sanitation are strongly linked to stunting reduction, and that both water and sanitation coverage have increased strongly in the past four decades.

JOURNAL ARTICLES BY PUBLICATION DATE

Noncommunicable Diseases in HIV Infection in Low- and Middle-Income Countries: Gastrointestinal, Hepatic, and Nutritional Aspects. *Journal of Acquired Immune Deficiency Syndrome*, Sep 2014. P Kelly. (Full-text)
The purpose of this review is to outline the interaction between HIV and noncommunicable diseases affecting the gastrointestinal tract, liver, and nutritional disorders in low- and middle-income countries, and to identify research priorities. HIV interacts strongly with environmental enteropathy, exacerbating malabsorption of nutrients and drugs. HIV and nutritional care need to be better integrated, but many questions on how best to do this remain unanswered.

The Effect of India's Total Sanitation Campaign on Defecation Behaviors and Child Health in Rural Madhya Pradesh: A Cluster Randomized Controlled Trial. *PLoS Medicine*, Aug 2014. R Sumeet. (Link)
The objective of this study is to measure the effect of the Total Sanitation Campaign implemented with capacity building support from The World Bank's Water and Sanitation Program in Madhya Pradesh on availability of individual household latrines (IHLs), defecation behaviors, and child health (diarrhea, highly credible gastrointestinal illness [HCGI], parasitic infections, anemia, and growth). The intervention led to modest increases in availability of IHLs and even more modest reductions in open defecation. These improvements were insufficient to improve child health outcomes. The results underscore the difficulty of achieving adequately large improvements in sanitation levels to deliver expected health benefits within large-scale rural sanitation programs.

An Evolving Perspective about the Origins of Childhood Undernutrition and Nutritional Interventions that Includes the Gut Microbiome. *Annals of the New York Academy of Sciences*, Aug 2014. T Ahmed. (Link)
This paper summarizes work on mechanisms underlying the varied manifestations of childhood undernutrition and discusses current gaps in knowledge and challenges to our understanding of undernutrition and infection/immunity throughout the human life cycle, focusing on early childhood growth. It proposes a series of basic and clinical studies to address this global health challenge.

Early Childhood Diarrhoeal Diseases and Cognition: Are We Missing the Rest of the Iceberg? *Paediatrics and International Child Health*, Aug 2014. J MacIntyre. (Abstract)
This paper reviews the burden of early childhood diarrheal diseases globally and the emerging evidence of their relationship with global disparities in neurocognitive development. The strength of evidence indicating that the severe childhood diarrheal burden may be implicated in cognitive impairment of children from low- and middle-income countries is discussed. Findings suggest that greater investment in multi-site, longitudinal enteric infection studies that assess long-term repercussions are warranted.

Climate Change, Crop Production and Child Under Nutrition in Ethiopia: A Longitudinal Panel Study. *BMC Public Health*, Aug 2014. S Hagos. (Link)
The amount and distribution of rainfall and temperature influence household food availability, thus increasing the risk of child undernutrition. However, few studies examined the local spatial variability and the impact of temperature and rainfall on child undernutrition at a smaller scale. We conducted this study to evaluate the effect of weather variables on child undernutrition and the variations in effects across the three agro-ecologies of Ethiopia.

Addressing Chronic Malnutrition through Multi-Sectoral, Sustainable Approaches: A Review of the Causes and Consequences. *Frontiers in Nutrition*, Aug 2014. K Reinhardt. (Link)
The objective of this paper is to review current knowledge on the causes and consequences of chronic malnutrition and their relationship with multiple sectors. Understanding the causes includes approaching chronic malnutrition from the basic, underlying, and immediate levels. The causes reach from macro-level environmental influences to specific micronutrient intake.

Why Worry About the Politics of Childhood Undernutrition? *World Development*, Vol. 64 2014. N Nisbett. (Link)

Undernutrition affects over 2 billion people, but most of the global policy focus has been on technical solutions rather than on understanding nutrition politics. This paper reviews existing literature on nutrition politics and policy. It identifies a number of recurring themes surrounding knowledge, politics, and capacities.

Undernutrition's Blind Spot: A Review of Fecally Transmitted Infections in India. *Journal of Water, Sanitation and Hygiene for Development*, July 2014. R Chambers. (Abstract)
With relevance to India and more widely, this review article examines links between fecally transmitted infections (FTIs) and undernutrition, presents a new framework for understanding the relative nutritional significance of FTIs, and draws practical implications for professionals and for future research.

REPORTS/TRAINING MATERIALS

Global Handwashing Day Planner's Guide: 3rd Edition, 2014. PPPHW. (Link)
In addition to background information, the top five facts about hand washing you should know, and insights from the latest in hand washing research, this newly revised Planner's Guide features: detailed celebration ideas designed to help religious organizations, schools, health care centers, and more plan effective messaging and events, and an event checklist that helps planners organize and make sure their event planning is on track.

How to Make Other Types of Tippy Taps, 2014. WASHplus. (Link)
This card has instructions on how to make tippy taps from mineral water bottles, tin cans, gourds, and jerry cans.

Investing in the Next Generation: Children Grow Taller, and Smarter, in Rural, Mountainous Villages of Vietnam Where Community Members Use Improved Sanitation, 2014. Water and Sanitation Program. (Link)
The use of unimproved latrines in rural villages in mountainous regions of Vietnam leads to 5-year-old children being 3.7 cm shorter than healthy children living in villages where everybody practices improved sanitation. This difference in height is irreversible and matters a great deal for a child's cognitive development and future productive potential. A child remains at risk of stunting if community members use unimproved sanitation facilities, even when the child's family uses improved latrines. Community-wide sanitation interventions should be considered for integration into nutrition and poverty programs to support stunting prevention.

Investing in the Next Generation: Children Grow Taller, and Smarter, in Rural Villages of Lao PDR Where All Community Members Use Improved Sanitation, 2014. Water and Sanitation Program. (Link)
This brief summarizes research examining whether open defecation and unimproved sanitation in a rural community are related to stunted children of different age groups. Among the key findings: what happens today in terms of sanitation behaviors will affect the country's future. Improving sanitation in rural communities of Lao PDR is thus a development priority that requires resources for a National Rural Sanitation Program.

Maharashtra's Child Stunting Declines: What is Driving Them? Findings of a Multidisciplinary Analysis, 2014. L Haddad, Institute of Development Studies. (Link)
Between 2006 and 2012, Maharashtra's stunting rate among children under 2 years of age was reported to decline by 15 percentage points—one of the fastest declines in stunting seen anywhere at any time. This was seemingly more remarkable because it occurred within a

context where Indian stunting levels nationally are regularly characterized as stuck or static.

What Are the Factors Enabling and Constraining Effective Leaders in Nutrition? A Four Country Study, 2014. N Nisbett, Institute of Development Studies. (Link)
This study of individuals identified as influential within the nutrition sector in Bangladesh, Ethiopia, Kenya, and India examines why particular individuals champion nutrition policy, and how they operate in the wider policy and political environments of their countries.

SQUAT Survey: Sanitation Quality, Use, Access and Trends, 2014. RICE Institute. (Link)
SQUAT is a quantitative survey that was conducted in rural areas of Rajasthan, Madhya Pradesh, Uttar Pradesh, Haryana, and Bihar. In each state, researchers visited two or three districts that had changes in household open defecation between the 2001 and 2011 censuses that were similar to the state as a whole. Within districts, villages were randomly selected, and within villages, they used an in-field randomization procedure to select households. The researchers interviewed 3,235 adults about their defecation practices and views on latrines and latrine use, and collected individual-level latrine use data for 22,787 household members.

Connecting Water, Sanitation, and Hygiene with Fresh Water Conservation and Climate Resilience: The Need to Facilitate Integration in Development Assistance, 2014. E Shope, National Resources Defense Council. (Link)
Currently, the development sector all too often addresses WASH, climate resilience, and fresh water conservation as separate issues. Fortunately, though, awareness about the importance of integrated efforts to solve these challenges in development projects is increasing. USAID has publicly spoken about and financially supported some efforts to promote integrated solutions for addressing WASH, conservation, and climate.

Care Groups—An Effective Community-Based Delivery Strategy for Improving Reproductive, Maternal, Neonatal and Child Health in High-Mortality, Resource-Constrained Settings, 2014. H Perry. (Link)
Care Groups are an innovation in reproductive, maternal, neonatal, and child health programming that is gaining increasing recognition because of their effectiveness in promoting behavior change and expanding population coverage of key interventions. This paper provides policy makers and donors with an introduction to the Care Group approach and an overview of the evidence of their effectiveness.

WASHplus Weeklies highlight topics such as Urban WASH, Indoor Air Pollution, Innovation, Household Water Treatment and Storage, Hand Washing, Integration, and more. If you would like to feature your organization's materials in upcoming issues, please send them to Dan Campbell, WASHplus Knowledge Resources Specialist, at dacampbell@fhi360.org.

About WASHplus - WASHplus, a five-year project funded through USAID's Bureau for Global Health, supports healthy households and communities by creating and delivering interventions that lead to improvements in access, practice and health outcomes related to water, sanitation, hygiene (WASH) and indoor air pollution (IAP). WASHplus uses at-scale, targeted as well as integrated approaches to reduce diarrheal diseases and acute respiratory infections, the two top killers of children under five years of age globally. For information,