

ASSESSMENT AND RESEARCH ON CHILD FEEDING PROJECT: SUMMARIES OF RESEARCH FINDINGS, 2012-2015

SUMMARY:

This brief presents abstracts of forthcoming articles about research findings from Helen Keller International's Assessment and Research on Child Feeding Project (ARCH). ARCH is conducting research on the promotion of commercially-produced foods commonly fed to children aged 6-23 months and encouraging use of these findings for decision-making in policies and programs to improve the nutrition of infants and young children. The articles will be published in a forthcoming (March 2016) supplement in the journal *Maternal & Child Nutrition*.

COUNTRY PAPERS

CAMBODIA

Pervasive promotion of breast-milk substitutes in Phnom Penh, Cambodia and high usage by mothers for infant and young child feeding

In 2005, Cambodia passed the Sub-Decree on Marketing of Products for Infant and Young Child Feeding (No. 133) to regulate promotion of commercial infant and young child food products, including breast-milk substitutes. Helen Keller International (HKI) assessed mothers' exposure to commercial promotions for breast-milk substitutes and use of these products through a cross-sectional survey among 294 mothers of children less than 24 months of age. Eighty-six percent of mothers reported observing commercial promotions for breast-milk substitutes, 19.0% reported observing infant and young child food product brands/logos on health facility equipment, and 18.4% reported receiving a recommendation from a health professional to use a breast-milk substitute. Consumption of breast-milk substitutes was high, occurring among 43.1% of children 0-5 months, and 29.3% of children 6-23 months of age. Findings also indicated a need to improve breastfeeding practices among Phnom Penh mothers. Only 36.1% of infants 0-5 months of age were exclusively breastfed, and 12.5% of children 20-23 months of age were still breastfed. Children that received a breast-milk substitute as a pre-lacteal feed were 3.9 times more likely to be currently consuming a breast-milk substitute than those who did not. Despite restriction of commercial promotions for breast-milk substitutes without government approval, occurrence of promotions is high and use is common among Phnom Penh mothers. In a country with high rates of child malnutrition and pervasive promotions in spite of restrictive national law, full implementation of Cambodia's Sub-decree 133 is necessary, as are policies and interventions to support exclusive and continued breastfeeding.

High use of commercial food products among infants and young children and promotions for these products in Cambodia

Despite national improvements in child survival, 40% of Cambodian children less than five years of age are stunted (NIS, 2011). Commercially produced complementary foods could be nutritionally beneficial for young children in Cambodia if fortified and of optimal nutrient composition. However, other nutrient-poor commercial snack foods may be detrimental to young child feeding by displacing consumption of other nutritious foods. This study assessed consumption of commercial food products among infants and young children and their mothers' exposure to promotions for these products. A cross-sectional survey was conducted among 294 mothers of children less than 24 months of age living in Phnom Penh. Of children 6-23 months of age, 55.0% consumed a commercially produced snack food product on the prior day, and 80.6% had consumed one in the prior week. Only 12 (5.4%) children 6-23 months of age had consumed a commercial complementary food. Almost all mothers (96.9%) had observed a promotion for a commercially produced snack food product, and 29.3% reported observation of a promotion for a commercial complementary food. Less than one-third (32.0%) of children 6-23 months of age achieved a minimum acceptable diet. Findings indicate that there is a need to improve infant and young child feeding practices among children less than 24 months of age living in Phnom Penh. Nutritious options should be promoted and consumption of unhealthy commercially produced snack foods should be discouraged.

NEPAL:

Promotion and pre-lacteal feeding of breast-milk substitutes among mothers in Kathmandu, Nepal

In 1992, Nepal passed the Mother's Milk Substitutes (Control of Sale and Distribution) Act in order to regulate the sale, distribution and promotion of substitutes for breast milk within Nepal, in an effort to protect and promote breastfeeding (Nepal Government, 1992). Helen Keller International (HKI), in collaboration with Nepal's Ministry of Health and Population's Child Health Division, implemented a study to assess mothers' exposure to promotions for and utilization of breast-milk substitutes in Kathmandu Valley, Nepal. A health facility-based, cross-sectional survey was conducted among 304 mothers being discharged after delivery. Pre-lacteal feeding of breast-milk substitutes is prevalent (56.6% of mothers, n=172). Reported recommendations during antenatal checks and after delivery from health professionals to use breast-milk substitutes were prevalent, occurring among 47.4% (n=144) of mothers; rates of these recommendations were significantly higher for mothers that delivered in private health facilities, as compared to public (67.7% vs. 38.0%, $p < 0.001$). Mothers that received a recommendation to use a breast-milk substitute from a health worker were 16.7 times more likely to provide a pre-lacteal feed of a breast-milk substitute, as compared to mothers that did not receive a recommendation ($p < 0.001$). Few mothers reported observation of commercial advertisements for breast-milk substitutes inside a health facility (reported by 3.6% of mothers). No mothers reported receiving a sample of a breast-milk substitute, bottle or teat from a health professional. More information is needed to determine why there is such a high rate of health worker recommendations for breast-milk substitute use in the first few days after delivery.

High consumption of commercial food products among children less than 24 months of age and product promotion in Kathmandu Valley, Nepal

Commercially produced complementary foods can help improve nutritional status of young children if they are appropriately fortified and of optimal nutrient composition. However, other commercially produced snack food products may be nutritionally detrimental, potentially increasing consumption of foods high in salt or sugar and displacing consumption of other more nutritious options. Helen Keller International (HKI), in collaboration with the Nepal government, implemented a study to assess mothers' utilization of commercial food products for child feeding and exposure to commercial promotions for these products. A cross-sectional survey was conducted among 309 mothers of children less than 24 months of age across 15 health facilities. Utilization of breast-milk substitutes was low, having been consumed by 6.2% of children 0-5 months of age and 7.5% of children 6-23 months of age. Approximately one-fourth (24.6%) of children 6-23 months age had consumed a commercial complementary food in the prior day. Twenty-eight percent of mothers reported observing a promotion for breast-milk substitutes, and 20.1% reported promotions for commercial complementary foods. Consumption of commercially produced snack food products was high at 74.1% of children 6-23 months. Promotions for these same commercial snack food products were highly prevalent in Kathmandu Valley, reported by 85.4% of mothers. In order to improve diets during the complementary feeding period, development of national standards for complementary food products are recommended. Nutritious snack options should be promoted for the complementary feeding period; consumption of commercially produced snack foods high in sugar and salt and low in nutrients should be discouraged.

TANZANIA:

Infant and young child feeding practices among children under 2 years of age and maternal exposure to infant and young child feeding messages and promotions in Dar es Salaam, Tanzania

There are limited data describing infant and young child feeding practices (IYCF) in urban Tanzania. This study assessed the types of foods consumed by children under 2 years of age and maternal exposure to promotions of these foods in Dar es Salaam, Tanzania. A cross-sectional survey was conducted among 305 mothers of children less than 24 months of age who attended child health services in October and November, 2014. Among infants less than 6 months of age, rates of exclusive breastfeeding were low (40.8%) and a high proportion (38.2%) received semi-solid foods. Continued breastfeeding among 20-23-month-olds was only 33.3%. Consumption of breast-milk substitutes was not prevalent, and only 3.9% of infants less than 6 months of age and 4.8% of 6-23 month-olds were fed formula. Among 6-23-month-olds, only 38.4% consumed a minimum acceptable diet (using a modified definition). The homemade complementary foods consumed by the majority of 6-23-month-olds (85.2%) were cereal-dominated and infrequently contained micronutrient-rich ingredients. Only 3.1% of 6-23-month-olds consumed commercially produced infant cereal on the day preceding the interview. In contrast, commercially produced snack food products were consumed by 23.1% of 6-23-month-olds. Maternal exposure to commercial promotions of breast-milk substitutes and commercially produced complementary foods was low (10.5% and 1.0%, respectively), while exposure to promotions of

commercially produced snack food products was high (45.9%). Strategies are needed to improve IYCF practices, particularly with regard to exclusive and continued breastfeeding, increased dietary diversity and consumption of micronutrient-rich foods, and avoidance of feeding commercially produced snack food products.

SENEGAL:

Promotion and consumption of commercially-produced foods among infants and young children: situation analysis in a West Africa urban setting

This study assessed the promotion of commercially produced foods and consumption of these products by children less than 24 month of age in Dakar Department, Senegal. Interviews with 293 mothers of children attending child health clinics assessed maternal exposure to promotion and through maternal recall of foods consumed by the child on the preceding day.

Promotion for breast-milk substitutes and commercially produced complementary foods (CPCFs) outside health facilities was common with 41.0% and 37.2% of mothers, respectively, having heard, seen or read product promotions since the birth of their youngest child. Promotions of commercially produced snack food products were more prevalent, with 93.5% of mothers, having heard, seen or read such a promotion. While all mothers reported having breastfed their child, only 20.8% of mothers breastfed their newborn within the first hour after delivery and 44.7% fed pre-lacteal feeds in the first three days after delivery. Of children 6-23 months of age, 20.2% had consumed a breast-milk substitute, 49.1% ate commercially produced complementary foods, and 61.0% ate a commercially produced snack food product on the previous day.

There is a need to stop the marketing of breast-milk substitutes, including infant formula, follow-up formula and growing-up milks. More stringent regulations and enforcement could help to eliminate such marketing to the public in the media. Additionally, promotion of commercial snack foods is concerning, given the high rates of consumption of such foods by children under the age of two years. Efforts are needed to determine how best to reduce such promotion.

COUNTRY COMPARISON PAPERS:

Point-of-sale promotion of breast-milk substitutes and commercially produced complementary foods in Cambodia, Nepal, Senegal and Tanzania

In order to assess the prevalence of point-of-sale promotions of infant and young child feeding products in Phnom Penh, Cambodia; Kathmandu Valley, Nepal; Dakar Department, Senegal and; Dar es Salaam, Tanzania; approximately 30 retail stores per site, 121 in total, were visited. Promotional activity for breast-milk substitutes and commercially produced complementary foods in each site were recorded. Point-of-sale promotion of BMS occurred in approximately one-third of sampled stores in Phnom Penh

and Dakar Department, but in 3.2% and 6.7% of stores in Kathmandu Valley and Dar es Salaam, respectively. Promotion of commercially produced complementary foods was highly prevalent in Dakar Department with half of stores having at least one promotion while promotions for these products occurred in 10% or less of stores in the other three sites. While promotion of breast-milk substitutes in stores is legal in Senegal, it is prohibited in Cambodia without prior permission of the Ministry of Health/Ministry of Information and prohibited in both Nepal and Tanzania. Strengthening legislation in Senegal and enforcing regulations in Cambodia could help to prevent such promotion, which can negatively affect breastfeeding practices.

Assessment of corporate compliance with guidance and regulation on labels of commercially-produced complementary foods sold in Cambodia, Nepal, Senegal, and Tanzania

National legislation and global guidance address labeling of complementary foods to ensure that labels support optimal infant and young child feeding (IYCF) practices. This cross-sectional study assessed the labels of commercially produced complementary foods (CPCF) sold in Phnom Penh (n=70), Cambodia; Kathmandu Valley (n=22), Nepal; Dakar Department (n=84), Senegal; and Dar es Salaam Region (n=26), Tanzania. Between 3.6-30% of products did not provide any age recommendation and 8.6-20.2% of products, from all sites, recommended an age of introduction of <6 months. Few CPCF products provided a daily ration (0.0-8.6%) and 14.5-55.6% of those that did exceeded the daily energy recommendation for complementary foods for a breastfed child 6 to 8.9 months of age. Only 3.6-27.3% of labels provided accurate and complete messages in the required language encouraging exclusive breastfeeding and almost none (0.0-2.9%) provided accurate and complete messages regarding the appropriate introduction of complementary foods together with continued breastfeeding. Between 34.3-70.2% of CPCF manufacturers also produced breast-milk substitutes (BMS) and 41.7-78.0% of CPCF products cross-promoted their BMS products. Labeling practices of CPCF included in this study do not fully comply with international guidance on their promotion and selected aspects of national legislation, and there is a need for more detailed normative guidance on certain promotion practices in order to protect and promote optimal IYCF.

Cross-sectional survey shows that follow-up formula and growing-up milks are labeled similarly to infant formula in four low and middle-income countries

This cross-sectional survey assessed the characteristics of labels of follow-up formula (FUF) and growing-up milk (GUM) compared to infant formula (IF), including cross-promotion practices between FUF/GUM and IF manufactured by the same company, sold in Phnom Penh, Cambodia; Kathmandu Valley, Nepal; Dakar Department, Senegal; and Dar es Salaam, Tanzania.

All products were imported. A wide recommended age/age range for introduction was provided by manufacturers across all sites, with products with an age recommendation of 0-6 months being most prevalent in three sites, representing over a third of all products. Various age categories, (e.g. 1, 1+, Stage 1) commonly appeared on labels. A number of descriptive names (e.g. infant formula, milk formula) per category of age of introduction were used with some appearing across more than one category. Images of

feeding bottles were found on most labels across all age categories, but prevalence decreased with older age categories. The majority of FUF/GUM manufactured by IF companies across all sites displayed at least one example of cross-promotion with one or more of the company's IF: two-thirds or more contained similar color schemes/designs and similar brand names; 20-85% had similar slogans/mascots/symbols.

A wide and potentially confusing range of ages/categories of introduction and descriptive names were found, and cross-promotion with IF was common on FUF/GUM labels. Global guidance from normative bodies forms the basis of most low and middle-income countries (LMIC) policies and should provide specific guidance to prohibit cross-promotion between FUF/GUM and IF, and all three categories should be classified as breast-milk substitutes.

ABOUT ARCH

ARCH is in the process of synthesizing evidence from several countries in Asia and East and West Africa (Cambodia, Nepal, Senegal, and Tanzania) for use by global and national policymakers and program managers. To understand the role of commercially-produced complementary food products within the broader context of infant feeding, ARCH gathered information on the availability, promotion and consumption of a range of foods consumed by infants and young children, including breast-milk substitutes and commercially-produced snack foods.

ABOUT HKI

Founded in 1915 by Helen Keller and George Kessler, the mission of Helen Keller International (HKI) is to save the sight and lives of the most vulnerable and disadvantaged. HKI combats the causes and consequences of blindness and malnutrition by establishing programs based on evidence and research in vision, health and nutrition. Headquartered in New York City, HKI's programs prevent blindness and reduce malnutrition in 22 countries in Africa and Asia, as well as in the United States. For more information, visit www.hki.org.

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