Background

Helen Keller International (HKI) is currently implementing the Assessment and Research on Child Feeding (ARCH) project within Phnom Penh, Cambodia. The ARCH project aims to build empirical evidence regarding the promotion of commercial foods consumed by infants and young children, and encourages the use of this information to strengthen policy and guidelines at the national, regional, and global levels. For children under 24 months of age, breast-milk substitutes (BMS), including infant formula and other commercial milks, are detrimental to child health and nutrition when they displace breastfeeding. For children over 6 months, commercially produced complementary foods (CPCF) can help improve nutritional status of young children if they are fortified, with optimal nutrient composition, and fed appropriately. However, other commercial snack foods may be detrimental to young child feeding by potentially increasing consumption of foods high in salt or sugar and displacing consumption of other more nutritious foods.

Introduction

Despite significant improvements in certain breastfeeding practices over the last decade, there is recent evidence of increased breast-milk substitute use across Cambodia. There has also been a decline in exclusive breastfeeding (EBF) in urban areas, from 49% in 2005 to 40% in 2010, with urban and wealthy women having the lowest relative rates of EBF and shortest duration of breastfeeding.

Additionally, a recent survey by HKI found high rates of milk substitutes (BMS) use among children under 2 years of age living in Phnom Penh; 43% of children 0-5 months, 40% of children 6-11 months, 14% of those 12-17 months, and 34% of those 18-23 months of age had consumed a BMS in the day prior to interview. Prior research indicates that reasons for ceasing EBF among Cambodian mothers include perceived milk insufficiency and time constraints due to work obligations.

In addition to optimal breastfeeding practices, optimal complementary feeding from 6 to 23 months of age is vital to ensuring the health and nutrition of children in Cambodia. The CDHS 2010 indicates that inadequate dietary diversity among young children is a significant problem; only 37% of children aged 6-23 months consume foods from the minimum standard of at least four food groups. There is also increasing evidence that infants and young children are being fed commercially produced foods and beverages, particularly snack products, such as cookies, chips, biscuits, and sweetened carbonated beverages, which typically have poor nutritional content. A recent survey by HKI found that while homemade complementary foods are most commonly fed to children 6-17 months, commercial savory snacks/chips were more commonly fed to older children; 51% of children 18-23 months of age had consumed a savory chip/crisp snack in the day prior to interview. Cambodia adopted the World Health Organization’s International Code of Marketing of Breast-milk Substitutes in the Cambodian Sub-Decree on Marketing of Products for Infant and Young Child Feeding (No. 133, November 2005), establishing its commitment to protecting breastfeeding and regulating the promotion of BMS and CPCF. In spite of this, promotions for such commercial products are highly prevalent in Phnom Penh. A recent survey from the ARCH project found that 85% of mothers in Phnom Penh reported observing a promotion for a BMS via media or other sources, most commonly television and in-store promotions. Among the mothers surveyed, 81% reported that they had viewed a breast-milk substitute promotion on television and 22% reported observing a promotion in a shop or pharmacy.

In order to further explore the factors that influence optimal breastfeeding and complementary feeding practices, particularly mothers’ attitudes and practices regarding commercially produced food products, HKI

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Key Findings

**BREAST-MILK SUBSTITUTES (BMS)**

**Factors that Influence BMS Use: Cleverness and “Chubbiness” as a Status of Good Health and Nutrition**

Ten of the mothers interviewed had tried BMS at least once, and five mothers were currently using BMS. Several mothers believed that feeding their child BMS would make their child “more clever”. One mother explicitly stated, “BMS has the nutrition that can make the baby become clever.” Another mother stated that this was a common opinion for Phnom Penh mothers: “For Phnom Penh residents, they believe their child to become more clever (by feeding them BMS).”

Several mothers (n=6) also reported choosing to or desiring to feed their child BMS because they believed the products would help their child to grow well and become ‘chubby’. As one mother said: “I notice that those who use these kinds of products (BMS) are healthy and strong.” While another mother mentioned: “Breast-milk substitute is good. Some breastfed babies get thinner and thinner, but when they start to formula-feed, they seem to be plump. In this case, BMS is better.”

**Factors that Discourage BMS Use: Fear of Illness, High Cost, and Child’s Preference**

Fear of sickness was the main concern cited among mothers that did not feed their child BMS. A few mothers (n=2) believed chemicals in BMS could cause illness, while others (n=4) thought that introducing an unfamiliar item, such as a BMS, into a child’s diet could cause him/her to become ill. One mother reported: “I am afraid my child will get sick. I don’t think that the product is not good. I am afraid he...will get sick.”

Two additional factors that influenced mothers’ decision-making regarding the use of BMS were the high cost and whether or not the child would like the product. With regards to cost, one mother mentioned, “For those who can afford, they buy the BMS. I heard that one tin of BMS costs $20 USD. How can I afford (that)!” Another mother reported that high costs of infant formula influenced her preference of breast milk for her child. She stated, “It (BMS) is good but we could not afford it to feed our child. And we don’t go to work, just stay at home, so it is better to breastfeed our child.” With regards to the child liking the product, many mothers emphasized how important this is in making their feeding decisions. One mother said, “If my baby likes it (BMS), it is good and I used to buy some... It’s not related to any nutritional information, but just if my baby didn’t (or did) like it.”

Objectives

The purpose of this study is to build the understanding of maternal perceptions and decision-making regarding the use of commercial food products among children between 6 to 23 months of age, specifically BMS, CPCF, and commercial snack products. Building an understanding of Phnom Penh mothers’ practices and perceptions of commercial food products could inform programmatic work to improve child health and nutrition in Cambodia.

Methodology

This qualitative study utilized in-depth interviews with mothers, with the research design drawing upon the focused ethnographic study methodology developed by Pelto et al. This methodology included a relatively short period of data collection, careful attention to participants’ language and vocabulary, and utilized model questions and detailed interview instructions. Five health centers (Steung Meanchey, Phsar Durm Thkov, Teuk Thla, Kilometer 9, and Daun Penh) in Phnom Penh were purposively sampled to provide an anticipated range of socio-economic status among mothers. Approximately 3-7 mothers were purposively sampled at each health center; in total, 21 mothers participated in this study.

Tools and Analysis

The in-depth interviews followed a conversational approach to solicit information from mothers. Open-ended questions focused on the mothers’ perceptions, beliefs and opinions regarding child feeding practices. The interviews gathered data on breastfeeding and complementary feeding practices, as well as mothers’ attitudes and opinions of commercial food products commonly fed to young children, including BMS, CPCF, and commercially produced snack foods. If a mother reported utilizing one of these products, information was gathered regarding why she chose to feed this/these products. If she did not feed her child these products, she was asked why the products were not chosen.

Interviews were audio recorded and these recordings were transcribed, translated, and analyzed after the completion of data collection. Approval for this study was obtained from the National Ethics Committee for Health Research (NECHR) of Cambodia.
Community and Commercial Influences in Formula Feeding

Among mothers interviewed, the experience and opinions of peers, particularly relatives and neighbors, highly influenced mothers’ decisions of whether to use or not use a BMS with their own child. Observing other women who had positive experiences with BMS influenced mothers in this study to use BMS with their own child; while if a friend or family member had or observed a negative experience from others, mothers in this study would not use BMS based on this observation and opinion.

One mother referred to her nephew’s experience; because her nephew had stomach and digestive problems while drinking BMS, the mother decided, “I dare not let my child use it.” Another mother voiced how her neighbor’s experience influenced her own opinion of BMS. She said, “I want to try Dumex Gold because I saw my neighbor’s baby is healthy and chubby.” Relatives’ recommendations to use BMS were also influential among mothers’ interviewed. One mother stated, “My husband’s relatives advised me to do so (purchase BMS). They told me that it could help the child to grow healthy, not fall ill, prevent pharyngitis, and assist in rehydration given that the child doesn’t like drinking.”

Commercial media advertisements for BMS were also influential in mothers’ opinions and decisions to feed their children BMS. One-quarter of the mothers interviewed referenced specific BMS advertising, particularly television commercials, when asked how they had heard of BMS. Some mothers mentioned this form of media influence without probing, while others mentioned the influence of television advertisements when asked what had informed their opinion of BMS. One mother mentioned, “Infant formula makes children grow faster since it has calcium, is food for bone like what has been advertised on TV spots.” Many of these mothers stated belief in the promotional messages and referenced certain phrases from advertisements that stood out to them. One mother repeated that BMS “helps child brain development, intelligence, and makes bones strong.” Brief review of several television advertisements for BMS aired on Cambodian television channels during the time of data collection confirmed that claims regarding growth, brain development and intelligence were commonly used in such advertisements. However, several mothers voiced their doubt and skepticism in regards to BMS advertising. One mother said, “I don’t think they (BMS) are as good as they advertised. Normally, it is just a way of promoting the sale of the product.”

COMMERCIALY PRODUCED COMPLEMENTARY FOODS (CPCF)

Awareness versus Use

While only half of the mothers interviewed had ever used a CPCF in the past, almost all mothers had heard of CPCFs. Almost all mothers who had ever used a CPCF reported a positive experience because it saved the mother time, didn’t cause illness, and provided a nutritious food option for the child. One mother mentioned “When (CPCF is) eaten by my child, it doesn’t make his throat itchy, saves our time, and is free of germs.” Another mother voiced, “I think packed porridge is good since it is easy to use. It helps a child to be smart and healthy because it has enough vitamins and calcium.” Another mother noted, “Some mothers think that CPCFs are good for children because some do not have enough time to cook porridge for their children. Thus they give that tin porridge to their children, just pour in hot water and read to serve immediately...Otherwise the child would not have anything to eat.” It is also interesting to note that lack of product availability in local markets did influence if a mother fed CPCFs to her child. One mother stated, “If the tinned or packed porridges are available at the Vietnamese market (near my home), then I would try for my child.”

Similar to BMS, negative experiences with CPCFs involving illness or the child’s distaste for the product discouraged mothers from continuing use of a CPCF product. One mother cited that because her child was not used to that type of food she became ill; however another mother was unsure as to the reason for her child’s illness from consuming CPCFs. One mother stated, “He ate very little, then his temperature grew high, so I decided to stop feeding him (CPCF).” One mother mentioned that her child mainly played with the porridge and “the baby didn’t eat it, she just smelled it.”

Main Challenge in Feeding CPCFs: Cost

Most mothers cited that financial constraints make it difficult for them to purchase CPCFs. One mother said, “If I could afford (CPCF), I would buy the product to fatten my child.” A different mother stated, “We wish that we would be able to buy it (CPCF) too, but we don’t have money. So, money shortage does create difficulty in feeding the child.” Another mother noted that mothers don’t feed their children CPCFs “because they have financial difficulties.” Mothers tended to make homemade porridge or bor bor or buy cheaper snacks, such as biscuits and cakes, as an alternative to purchasing CPCFs.

COMMERCIALY PRODUCED SNACK FOODS

Convenience versus Healthy Snack Choices

Commercially produced snack foods were commonly consumed among the children of the mothers interviewed. Many mothers consistently fed their children commercial snack products, such as biscuits, chips, candy, sweetened milks, and soda, while several mothers tried feeding their children these foods and stopped. Despite common use of these products, most mothers interviewed felt that commercial snack products were unhealthy and would cause illness for their child.
One mother answered, “I think it (snack food) is not so good for children in that age as it may affect the child’s throat (and) the sugar content.” One mother specifically cited her own past experience: “I used to feed him with that when he was one year old. I gave him a kind of Red milk (Red cow) and Lactasoy. After he ate those kinds of things he had a high body temperature and suffered from laryngitis, I stopped him from eating those things and took him to the hospital. Since then, I’ve stopped him from eating anything like that.” However if their child demanded a certain product, mothers interviewed consistently replied they would provide it to cease his/her crying. One mother said, “The biscuit tastes a little salty and I have heard that this biscuit is made of a lot of powder and it is salty…but for me, I feed my kid with this biscuit only for her pleasure.” Another mother mentioned: “In short, no (commercial snack food) product is good. But if my child eats it and he doesn’t have a high temperature, I just let him eat it.”

Conclusion and Discussion

The ARCH project’s focused ethnographic study explored the factors that influence optimal complementary feeding and breastfeeding practices among mothers with children 6-23 months of age in Phnom Penh, particularly their attitudes and practices regarding commercially produced food products commonly consumed by young children. The in-depth interviews allowed mothers to share their perceptions and decision-making strategies for child feeding. In general, this study revealed that mothers were equally split in opinion regarding breast-milk substitutes, generally supported the feeding of CPCFs, and were critical of snack foods but in practice fed them to their children.

This study identified several key influencing factors in mothers’ attitudes and practices related to commercial food products for infants and young children. Time and financial constraints both play a pivotal role in mothers’ decisions regarding children’s diet. Many mothers reported the appeal of time-saving commercial BMS and CPCF products; however, their high costs prohibited many from purchasing these products. Personal contacts’ opinions and recommendations, including those of relatives, friends, and neighbors, influenced mothers’ feeding decisions for their children. Additionally, commercial media was found to be highly influential in mothers’ beliefs regarding the nutritional and health benefits of commercial food products, particularly BMS.

Nutritional programs in urban Cambodia can use these findings to inform activities that aim to influence mothers’ perceptions and infant and young child feeding practices. The cost-saving nature of breastfeeding could be used in motivational or behavior change campaigns aimed at protecting and promoting breastfeeding and discouraging use of infant formula. The promotion of appropriate, affordable and nutritious complementary food products could also appeal to mothers with limited time available for cooking enriched bor-bor or other nutritious foods for children. Additionally, given the significant role of media, particularly television, in mothers’ perceptions of food products for their children, the promotion of breastfeeding and nutritious complementary foods via television could influence mothers’ opinions and uptake of these practices.