Original Article

The focused ethnographic study ‘assessing the behavioral and local market environment for improving the diets of infants and young children 6 to 23 months old’ and its use in three countries

Gretel H. Pelto^{*}, Margaret Armar-Klemesu[†], Jonathan Siekmann[‡] and Dominic Schofield[‡]

^{}Division of Nutritional Sciences, Cornell University, Ithaca, New York, USA, [†]Noguchi Memorial Institute for Medical Research, College of Health Sciences, University of Ghana, Legon, Ghana, and [‡]Global Alliance for Improved Nutrition, Washington, DC, USA*

Abstract

The concept of a focused ethnographic study (FES) emerged as a new methodology to answer specific sets of questions that are required by agencies, policymakers, programme planners or by project implementation teams in order to make decisions about future actions with respect to social, public health or nutrition interventions, and for public–private partnership activities. This paper describes the FES on complementary feeding that was commissioned by the Global Alliance for Improved Nutrition and highlights findings from studies conducted in three very different country contexts (Ghana, South Africa and Afghanistan) burdened by high levels of malnutrition in older infants and young children (IYC). The findings are analysed from the perspective of decision-making for future interventions. In Ghana, a primary finding was that in urban areas the fortified, but not instant cereal, which was being proposed, would not be an appropriate intervention, given the complex balancing of time, costs and health concerns of caregivers. In both urban and rural South Africa, home fortification products such as micronutrient powders and small quantity, lipid-based nutrient supplements (LNS) are potentially feasible interventions, and would require thoughtful behaviour change communication programmes to support their adoption. Among the important results for future decision-making for interventions in Afghanistan are the findings that there is little cultural recognition of the concept of special foods for infants, and that within households food procurement for IYC are in the hands of men, whereas food preparation and feeding are women’s responsibilities.

Keywords: complementary feeding, qualitative research, information for decision-making, cultural beliefs and values, social and economic constraints to improving IYC diets.

Correspondence: Gretel H. Pelto, 129 Eastlake Road, Ithaca, NY 14850, USA. E-mail: gp32@cornell.edu

Introduction

The effectiveness of efforts to improve infant and young child (IYC) nutrition depends on a number of factors, including information about family behaviours and the community environment. This information is essential to ensure that nutrition interventions are potentially ‘actionable’ by the people to whom they are directed. The word ‘intervention’ is used here in the broadest sense to cover a wide range of activities that involve modifying existing conditions

through the planned introduction of new institutions, technologies, economic resources, knowledge, agricultural strategies and/or modifications to existing ones.

Because using traditional foods alone to meet the micronutrient needs of older infants and young children 6–23 months of age is difficult without intake of costly and often not available animal-source foods, such as meat, milk and liver, fortified products and home fortification of locally available foods are approaches that are affordable and effective alternatives.

In an effort to cost-effectively improve and sustain access by low-income households to good quality foods that meet the special needs of IYC, and to limit their exposure to low-quality, industrially processed foods, public health authorities are engaging with the private sector as cultivators and manufacturers and, increasingly, as distributors of fortified foods and home fortification products to supply and complement public sector delivery channels. Local companies, in turn, are trying to develop good quality fortified foods and home fortification products that meet nutritional requirements, are low cost and desirable to families of young children, and that can be made available to them using market-based channels. Knowing families' practices and beliefs around IYC feeding is critical to the success of these efforts.

The Global Alliance for Improved Nutrition (GAIN) is a not-for-profit international organisation that aims to harness both the public system and market-based channels to improve access by the poor to good quality complementary foods and home fortification products. For its programmes, GAIN needs to have a tool that ensures an evidence-based approach and that captures critical information that might otherwise be absent or somehow less complete if collected using typical 'market research' approaches, while providing it in a way that can assist with rapid business decision-making. In the public sector, approaches to information gathering are often subsumed under the heading of 'formative research.'

To help national authorities, local companies and the growing constellation of stakeholders working in parallel to increase access by the poor to good quality nutritional products and services, GAIN commissioned the development of a tailored focused ethnographic study (FES) tool and supported its

application in three very different country contexts burdened by high levels of malnutrition in older infants and young children.

This paper presents the FES methodology and how it addressed questions specific to each country. These questions were different for each application, and in this paper, our aim was to demonstrate the flexibility of the FES, showing how it yields broad descriptive data and, at the same time, provides answers to specific questions.

Knowledge for what?

The value of information about specific family IYC caregiving behaviours, their cultural underpinnings and the community environment in which they occur, resides in its utility for decision-making. Identifying the decisions for which information is essential is itself a major challenge for every formative research endeavour. The methodology, '*Assessing the Behavioral and Local Market Environment for Improving the diets of infants and young children 6 to 23 months old: a Focused Ethnographic Study Manual*' (FES) described in this paper was developed explicitly to support decisions of GAIN. Initially, the purpose for which the FES results were to be used was deciding whether to put resources into supporting potential new IYC interventions with specific products. However, as the richness of data and insights the studies yielded became apparent, its potential uses for other types of decisions were revealed.

Three separate FES, carried out in Ghana, South Africa and Afghanistan, provided valuable insights and information for determining potential types of interventions, as well as data to guide the design and implementation of marketing strategies. These

Key messages

- The focused ethnographic methodology that was used for the design and execution of the studies in Ghana, South Africa and Afghanistan provided an efficient means of obtaining information about infants and young children feeding behaviours and local market conditions, which was then used to inform decisions about future interventions.
- In all three country contexts, the results of the studies document the interactions of economic factors, social conditions, and cultural beliefs and values in affecting IYC behaviours, and that are necessary for designing and implementing interventions.

include insights about the values that drive household decisions, the identification of gatekeepers whose approval or disapproval are essential to acceptance or rejection of new behaviours and products, and facilitators, barriers and venues for behaviour change. Thus, our purposes in this paper were to describe the tool that GAIN has developed, its methodological characteristics, and the structure of the protocols that comprise the tool. We also briefly describe the application of the tool for decision-making in three different contexts.

Methodology

What is FES?

The concept of an FES emerged as a new methodology to answer specific sets of questions that are required by agencies, by policymakers, by programme planners, or by project implementation teams in order to make decisions about future actions with respect to social, public health or nutrition interventions, and by extension, to public-private partnership activities. The application of the methodology typically begins by identifying what is currently known about an issue or area of concern through a review of published papers and reports. This is followed by the collection of data using a mixed-method approach that draws from a variety of ethnographic methods, including open-ended questions, formal ethnographic cognitive mapping techniques, survey questions, visual and even video presentations, participatory mapping, and/or, depending on the domain of concern, methods drawn from dietary intake studies, infectious disease monitoring, and others. The research process – from planning and study administration, to analysis and report writing – is facilitated by a manual. Data collection and analysis forms are also provided.

The goal of an FES is to obtain information on conditions and behaviours in a population that are important for various decision-making activities, including: (1) planning interventions that are appropriate for local conditions; (2) identifying potential bottle-necks that are likely to affect the success of an intervention; (3) designing and developing communication strategies and content (especially for behav-

iour change communication; and/or (4) deciding whether a proposed intervention is likely to be feasible or effective in a given environment.

In contrast to survey research in which the questionnaires are pre-coded by the investigators, and are based on a set of assumptions about how people will answer, ethnographic methods attempt to reveal realities from an insider's perspective. Anthropologists use the term 'emic' to refer to this feature. In ethnography, the goal is to describe the typical or usual behaviours, conditions and beliefs in the population. This contrasts with the goal in surveys where the investigators seek to describe the distribution of characteristics within a population. In many situations, it is unnecessary to have the statistical precision of a large survey in order to make decisions. Ethnography in formative research investigations provides the opportunity to learn how the people who are to receive an intervention view their situations.

Background

The term 'Focused Ethnographic Study' refers to a specific methodology that was developed initially at the World Health Organization (WHO) for the Programme for the Control of Acute Respiratory Infections (Pelto & Gove 1992; Gove & Pelto 1994). The purpose was to obtain insights and information about household management of respiratory infections in children that would provide an empirical basis for adapting general programme guidelines for specific sociocultural settings. It included information on peoples' beliefs and practices related to acute respiratory infection (ARI) in children, including their causes and treatment; identification of the factors that facilitated or constrained seeking treatment; and identification of other cultural characteristics and conditions that were likely to influence responses to the ARI programme.

The WHO FES for ARI was applied in more than 20 countries. After the development of the ARI FES, a study manual was also created for diarrhoeal disease control programmes. Since then, FES manuals have been developed for other public health and nutrition interventions. There are manuals for women's health (Gittelsohn *et al.* 1998), vitamin A

programmes (Blum *et al.* 1997) and a modification of the latter for a micronutrient supplementation programme in Tibet (Dickerson *et al.* 2008).

The concepts of 'formative assessment', 'formative evaluation', 'participatory action research', 'rapid assessment procedures' and 'focused ethnography' capture various aspects of and approaches to obtaining critical knowledge about a population and environment in which a potential intervention will be initiated. All of these terms or approaches have a number of common features: (1) the purpose of the study was to facilitate activities in a particular population, not to answer scientific questions (although the research results are often highly informative with respect to the latter); (2) the research should be conducted expeditiously, and the results fed back to the larger project as rapidly as possible; and (3) the costs should be as low as possible, without compromising quality.

As described by P.J. Peltó, (in press) specific characteristics of the FES approach include:

1. multiple data-gathering methods, mainly qualitative in nature;
2. relatively short time frame for data collection;
3. careful attention to peoples' language use and vocabulary (in the domain of concern);
4. model questions and detailed interviewing instruction; and
5. the primary focus is on information that will be useful for interventions.

An important feature of an FES is its modular construction. Structuring data collection into short modules, each of which is directed to a specific issue (e.g. beliefs about disease aetiology; sources of medical care; dietary intake during illness) adds greatly to the flexibility of the tool, making it possible to modify the number of respondents for any given issue, to modify the flow of interviews and easily add, subtract or modify specific focal issues so that data collection can be fine-tuned to differences within a population and across populations.

Another essential feature of the FES methodology is that the field research is conducted in phases. Phase 1 uses classical anthropological interviewing of key

informants (e.g. caregivers and health care providers) and community observations, including mapping of key locations (e.g. health centres, food stores, drug sellers). The results from Phase 1 are analysed and used to fine-tune the modules for Phase 2, which consist of in-depth interviews using a variety of methods to obtain data that are then subjected to qualitative and quantitative analysis. The methods that have been used in various FES have included open-ended questions, with probing; techniques drawn from cognitive anthropology (including 'free listing' and modifications of semantic differential techniques); social mapping exercises; scenarios to which respondents are asked to comment; and video clips. An FES is usually designed to be conducted in a period of fieldwork of 8–10 weeks by trained investigators.

The structure and organisation of the FES 'assessing the behavioral and local market environment for improving the diets of infants and young children 6 to 23 months old'

The core of the GAIN FES consists of four protocols. Two of the protocols are directed to an examination of local marketing characteristics, and two of them are concerned with home feeding. One of the local market protocols is designed for use with formal economic sector entrepreneurs and the other is directed to informal economic sector sellers. In these protocols, individual modules are used to obtain data on inventory, selling strategies, sources of products, as well as questions that are aimed at understanding sellers' views about their own motivations, and plans and perceptions about the population in which they operate.

The two protocols for household behaviours (one for key informants in Phase 1 of the study and one for caregiver-respondents in Phase 2) are more extensive than those for the local market sector, based on the likelihood that other background marketing data will be available to assist decision-making. The protocol for key informants consists of seven modules, which include exploration of foods for IYC; food preparation and feeding practices; sources of food acquisition and food expenditures; types of problems faced by

parents of IYC; food and nutrition problems of IYC; health and food perceptions; and perceptions about micronutrient supplements and fortification of infant foods.

For caregiver-respondents, there are eight modules that are used to interview caregivers with a child between 6 and 23 months. These modules are designed to provide data and insights about a range of issues related to household behaviours, including demographic and socio-economic status characteristics; a 24-h recall for the index child; food preparation and feeding behaviour; perceptions about value dimensions related to health and food; perceptions about factors that influence IYC feeding; perceptions about micronutrient supplements and fortification of infant foods; estimated weekly food expenditure; and food and feeding-related problems, challenges and solutions.

The sample design requires filling respondent categories based on subgroups of the 6–23 month age range, as well as ensuring that there is a range of socio-economic subgroups within the larger category of poor and disadvantaged families.

Additional protocols are available to meet context-specific needs. For example, in urban communities it is important to examine how IYC are fed in day care centres and crèches. In rural populations, particularly among families that are engaged in agriculture, a module on the effects of seasonality and seasonally related food insecurity is essential. In some contexts it may be important to collect quantitative dietary intake data.

Using FES results for decision-making: Ghana, South Africa and Afghanistan

The FES manual has been applied in three countries. In the following sections, we discuss the studies in Ghana, South Africa and Afghanistan, highlighting the purposes for which they were undertaken. As details about the results are available elsewhere (Altai Consulting 2011; Jones 2011; Pelto & Armar-Klemesu 2011) the findings will be described here briefly, primarily to illustrate particular points.

The FES in Ghana

The first iteration of the FES was designed to examine the potential for a new commercial cereal. Specifically GAIN sought to evaluate the potential of a new fortified, non-instant cereal, a product that had been proposed to them for support by a local Ghanaian company that wanted to develop a commercially viable product that would be affordable by low-income households.

At the most basic level, the design of the study could be defined as addressing the question: 'Is there a place (niche) in the present diet of IYC in urban Ghana that a new product could fill?' Secondly, 'Would a new, cereal-based product be a substitution for something that is currently being given or would it be an addition or both?'

To set this question in context, it is useful to inventory the several different categories of foods that a cereal-based food could, in theory, be substituted for. These include:

1. breast milk;
2. home-prepared foods that are made for older family members and are also given to the IYC, by mashing, by premastication, or by diluting them to a consistency that an infant or young child could consume;
3. home-prepared foods that are made exclusively for the IYC;
4. commercial products that are marketed for household consumption and purchased for household consumption, including the IYC;
5. commercial products that are marketed exclusively for IYC and purchased exclusively for the IYC; and
6. commercial products that are marketed for household consumption, but are purchased exclusively for the IYC.

We set out to discover which of these alternatives characterised IYC complementary feeding in urban Ghana. What we found is that all seven of these possibilities occurred! Women placed a high value on breastfeeding and breastmilk and did not see cereals as alternatives for breastmilk. Moreover they had clear views about the importance of continued breastfeed-

ing after complementary foods were introduced. However, from the perspective of caregivers, they were not all equally desirable. A number of factors affected caregivers' judgments and decisions about what they fed their infants and young children. In general, they placed a high value on giving foods, particularly cereal-based foods, that they judged to be healthy and would help their children grow. The women had clear and nearly universally agreed on ideas about which cereal-based foods were healthiest and which were less healthy. We discovered that traditional cereal-based foods were regarded as the least healthy food (unless prepared with milk), whereas commercial cereal-based foods, particularly the Nestlé product, *Cerelac*, were regarded as very healthy.

Another factor that influences caregivers' decisions about what to feed their IYC is the cost of food. The caregivers almost universally discussed the conflicting pressures of cost and inadequate financial resources, compared to what they would have preferred to give. They described multiple strategies to deal with these constraints.

The third major dimension of determinants emerged from the thematic analysis of the interviews and was confirmed through cognitive mapping techniques. We characterise this factor as 'time management concerns'. These relate to the complex trade-offs the urban women face in meeting all of the competing demands for their time. These include taking care of their children, purchasing and preparing food for their family, participating in income-generating activities (often as the sole breadwinner), and meeting other social demands and expectations. Taking the major determinants into account, we found that IYC feeding decisions, which are reflected in caregivers' behaviours, were the result of a delicate and dynamic balancing of the dimensions of nurturance, cost and time (Pelto & Armar-Klemesu 2011).

Both components of the FES in Accra – the market component and the household component – revealed that caregivers have many options when it comes to cereal-based foods. Commercial products are ubiquitous in all neighbourhoods, including individual serving size packets of an instant, fortified cereal, *Cerelac*, produced by Nestlé. In addition to being viewed as healthy, *Cerelac* fits well within the time

pressures and food preparation conditions women faced. It was universally recognised as expensive. On the other hand, traditional cereal preparations, whether made at home or purchased from informal food sellers, who produced them in their own home and sold them in kiosks or on the street, were regarded as having poor nutritional value. But they are affordable, and caregivers fed them relatively frequently, but with reluctance, to IYC. Fortified, non-instant cereals, made at home from recipes, or from mixes obtained from clinics, or purchased as commercial products, were not well regarded. They had none of the characteristics that women were trying to optimise; they were seen as only moderately healthy, not inexpensive and, most seriously, carrying a heavy burden of time costs, including the time required to secure them and prepare them and presenting challenges of storing them safely.

The FES in Ghana yielded the information GAIN required in order to make an informed decision. The likelihood that a non-instant, fortified cereal, positioned as an IYC food would be commercially successful and ultimately self-sustaining was low.

In addition to answering GAIN's main question, the study provided valuable information for future work directed to improving IYC feeding practices, not only for marketing a future product that might be developed, but also for supporting behaviour change communications aimed more broadly at improving nutrition of infants and young children in this environment.

The FES in South Africa

There were two main questions GAIN sought to answer through the FES research in South Africa: (1) Would sachets of multiple micronutrient powders (MNP), which caregivers could add to complementary foods, be a potential intervention in rural and/or urban South Africa? and (2) Would small quantity, lipid-based nutrient supplements (LNS) be a potential intervention for IYC, given the availability and apparent commercial success of peanut butter in the South African market and the possibility that peanut butter was already being used at home for feeding IYC?

The goal was to examine these questions not only within a cultural and economic framework, but also to include a general qualitative assessment of IYC dietary patterns.

The study was conducted in two different areas: (1) 'the largest urban population in South Africa, Gauteng, which is a melting pot of people from all over South Africa and southern Africa.' The caregivers who were interviewed were drawn from several low-income townships within this massive urban environment; (2) a rural community in KwaZulu Natal, where respondents were even more economically disadvantaged than the poor caregivers in the urban area.

The qualitative assessment of IYC feeding practices revealed the fact that most children were receiving a diet that is heavily dependent on the staple food, maize-based *mealie meal* (porridge, or pap), and 'some IYC do not receive anything other than this.' Given the grinding poverty that families face, this finding is not surprising but suggests that interventions aimed at improving micronutrient nutrition should be prioritised. Although the majority of infants are breastfed at birth, children begin receiving breast milk substitutes within the first 3 months, along with solid foods. In the urban area, instant commercial cereal-based food is the preferred early food, whereas mealie meal porridge is typical in the rural community.

In addition to cereal-based foods, other foods that caregivers feed, such as home-prepared mashed vegetables and commercial yogurt, could, in theory, be easy to home fortify with MNP. But would caregivers be interested in doing this? Do they have a 'felt need' to improve the diet of the IYC?

At first pass, the answer to this seemed to be no. The study results suggested that, 'On the whole caregivers are satisfied with the diets they feed their IYC . . . mothers appear to be unaware of any nutrient deficiencies in their IYCs and do not appear to perceive a need for added nutrients.' However, this finding should not be taken as evidence that caregivers do not care about nutrition. To the contrary, they place a high value on food as an important component of ensuring child health. Moreover, their cognitive maps about foods include the concept of vitamins, which are seen as important for 'building the body.'

In sharp contrast to the situation in Accra, the foods that the caregivers most commonly fed to IYCs were given high rating on healthfulness. The strongest association that mothers have with a healthy child is a healthy appetite and steady weight gain. Mothers also believe that a healthy child is an active child.

Further exploration revealed that the concept of 'vitamins' is much more nuanced than appears at first glance. Vitamins are good. Food and breast milk are full of them. More vitamins might, therefore, be seen as a good thing because they are health promoting. On the other hand, some women, particularly in rural areas, appeared to be resistant to the idea of vitamin supplements.

This apparent disjunction requires other information to accurately interpret the findings. In the discussion about the types of problems caregivers face in taking care of their children, a consistent and common theme was the matter of 'poor appetite' and 'what to do when a child is not eating well.' Feeding problems are a mother's nightmare. Women were articulate about their anxieties around eating problems.

There was nearly universal agreement that a child with eating problems should be taken to a health centre, and the high regard accorded to health care professionals was a pervasive theme in the interviews. Apparently, a common treatment recommended at the health centres for feeding and appetite problems is 'vitamin syrup'. Caregivers consider vitamin syrup to be 'a medicine.' It is expensive to purchase and its use is discontinued as rapidly as possible. Thus, the concept of a 'vitamin supplement' was met with scepticism by many respondents. Because '*they are "medicines" and [are] only for use when there is a problem,*' supplements appear to be commonly regarded as an unnecessary waste of money for a healthy child.

However, that is not the end of the story. When the interviewers presented the idea of little packets containing vitamins that could be stirred into foods, most of the respondents (82%) generally expressed a positive reaction to this novel idea. Caregivers did not uniformly give a specific reason for their reactions but expressed a general feeling that it would be of value to the IYC. Comments included: '*It adds to what is already in the food,*' and '*Because it is added to food*

and it is easy to feed to the baby.' Other comments included: *'I will buy it if it is good for my baby;'* *'if I can afford I;'* *'if suitable for her age;'* *'would help child gain weight;'* *'especially in porridge;'* *'hidden in the food;'* *'don't like giving medicines like vitamin syrup;'* *'would be sure child is getting vitamins;'* *'easy to use;'* and *'syrup does not taste nice.'*

With respect to the matter of MNP, the results of the study suggest cautious optimism about the potential. Marketing will need to be sensitive to the potential pitfalls of associating it with a medicine. Keeping costs minimal is also essential.

Turning to the issue of small quantity LNS, which is a home fortificant provided in doses of 20 g and providing approximately 100 kcal in addition to essential fats, vitamins and minerals, the FES research ultimately yielded a positive answer, but also a lesson in the need for attentive vigilance in how one asks questions and interprets responses. GAIN's interest in exploring behaviours around peanut butter was motivated by the possibility that existing beliefs and practices about peanut butter might be harnessed to promote a small quantity LNS. The research on market availability of peanut butter was unequivocal. In both urban and rural areas there was peanut butter on the shelves of supermarkets and small shops. It was an easy product to sell, according to shop owners. But was it given to IYC?

With the FES, the initial overview of what IYC are being fed comes from the key informant interviews. Then the caregiver modules on what the index child has been given in the previous 24 h, the questions on food preparation, and the probing questions on other foods the child receives are the primary sources of data on caregivers' feeding practices. For peanut butter, in both rural and urban areas, the results from both key informant and caregiver interviews were disappointing. It seemed that the majority of IYC were generally not being given peanut butter and, even among those who were, it was by no means an integral part of young children's diets.

However, the picture was inconclusive and we decided that a more directed examination of IYC diet and peanut butter was necessary. We recontacted half of the caregiver sample and asked if we could talk to them again. This time we focused directly on peanut

butter, asking about whether they buy it, who in the household eats it and how it is eaten. The answer to how is that it is eaten as a spread on bread or crackers or is stirred into foods, including porridges. The answer to the question of who eats it was usually 'everyone in the family.' When we asked explicitly: 'do you give peanut butter to the index child' 17 of the 18 women we re-interviewed said yes! And the 18th said she would start soon; she felt her 10 month old wasn't quite ready but would be soon.

This experience illustrates how difficult it can be to ask about ingestion. It is important to ask about food, for example, in discussing kinds of foods that are 'good for IYC' or foods that should be avoided. But it is challenging to phrase the question appropriately in relation to local language and culture. What is a food? In Accra, we found that women were not reporting fruit in their dietary recalls although they listed oranges and juice as health-giving items. When we asked why oranges and other fruits were missing from the list of foods they give their IYC women replied: *'But you asked for foods, fruit isn't a food.'*

Even a question on 'What did you give her/him to eat or drink' doesn't guarantee a full report. Similarly, asking 'How did you prepare it?' elicits descriptions of cooking techniques and recipes, but doesn't necessarily elicit information about items that are added after cooking or at point of feeding. Women sometimes spontaneously told us they added margarine, rarely anything else. One would explicitly have to ask, 'After you made it, did you add anything?' In the case of peanut butter even this was not always successful as the first round of interviews demonstrated. It was only when we asked explicitly about peanut butter that we discovered its ubiquity. It is not clear why this is so – there doesn't appear to be anything negative or undesirable about peanut butter. Rather it seems as though peanut butter occupies a place in the diet that corresponds to a condiment – an item that is used routinely to enhance the flavour or texture. But if one does not ask about it directly, it does not emerge from respondent's reports.

Viewed in the light of the follow-up interviews, from the perspective of GAIN's concerns, the prospect for a small quantity LNS is positive if it can occupy the same dietary niche that peanut butter

currently does but replace it with a nutritionally superior alternative.

The FES in Afghanistan

This FES was undertaken to: '(1) map IYC feeding practices at the household level, particularly assessing the current needs and demands expressed by mothers for IYC foods; (2) understand the social, economic, cultural, institutional, and technological factors that influence the care of IYC in Afghanistan and how these influence the perceptions of Afghans towards health, nutrition, and IYC foods; and (3) map current initiatives and actors in the area of IYC nutrition in Afghanistan in order to gauge lessons learned and best practices, so as to identify a niche area of intervention and potential partners'.

In contrast to the studies in Accra and South Africa, which were aimed at highly specific questions, the study in Afghanistan was more general. The authors of the report defined the focus as an 'over-arching research question'. They framed that question as: 'How can GAIN play a constructive role in improving delivery and accessibility of commercial IYC foods in Afghanistan?'

The findings on current nutrition-related caregiving practices that are particularly important for GAIN include the following:

1. *There is no routine household use of special, home-prepared complementary foods.* This finding is in sharp contrast with many other areas of the world where home-prepared porridges and gruels form the foundation of complementary feeding.
2. *The most common commercial foods in the diet of IYC are wheat biscuits (sweetened cookies), which appeared in more than 50% of the diets in all four study areas – two rural, one urban and one peri-urban. Nestlé's instant, fortified cereal, Cerelac, has penetrated into all sites, but at relatively low levels, less than 7%. It is given mainly to children under a year of age, but some use at 18–20 months was reported in rural areas.* In general, commercial products appear to be replacements for traditional complementary foods.
3. *Infants' and young children's diets are very limited in diversity with heavy reliance on 'bread and tea' and*

rice. This finding provides clear evidence about the importance of GAIN's intentions to address the issue in Afghanistan, in all parts of the country.

4. *Breastfeeding is universal and there is no evidence of early cessation of breastfeeding. There are reports of 'milk insufficiency' and use of powdered milk to supplement breastfeeding.* The investigators concluded that, although there is a clear need to sustain efforts to promote optimal breastfeeding practices, there are many other agencies and groups working in breastfeeding promotion and support. Therefore, they recommended that GAIN should focus on complementary food and share the FES findings with the relevant partners promoting optimal breastfeeding practices.

The key findings concerning caregivers' perceptions and cultural values and features of the social and economic environment that affect feeding behaviours include:

1. *The foods that form the basis of IYC diets are generally ranked low on healthiness by caregivers, whereas fruits, vegetables and animal-source foods, which are not given with any frequency, are regarded as healthy and held in high esteem for various qualities that caregivers value.*

This finding is important because it indicates that there are no strong cultural barriers in the form of incorrect beliefs about the healthfulness of the foods that need to be added to the limited IYC diets. This is sometimes not the case, and cultural beliefs that restrict IYC intake of nutritious foods are found in many cultures.

On the other hand, a negative finding for potential interventions is that there does not appear to be a strong cultural concept of 'special foods for infants'; in fact, the case is rather the opposite. Thus, an important finding for GAIN is the discovery that families are reluctant to buy foods that cannot be eaten by everyone in the household. Some modifications to family food (e.g. reducing spiciness) are practised. This emphasis on 'family foods for everyone' has important implications. Is this 'food for everyone' a deep-seated cultural value or prompted by poverty or both? The fact that some families are willing to buy

Cerelac, which is a special food for older infants, suggests that it is economic constraints, as the authors of the report conclude.

2. *Another key finding from the FES is that food procurement (for complementary foods as for all family foods) and food preparation are in the hands of different family members.*

The original FES modules were based on the assumption that caregivers would be able to report about food purchases. However, in Afghanistan, even in urban areas, this is not the case. Husbands, not wives, buy all the foods almost without exception. This fact required a modification of the design and relevant modules of the FES. Fortunately, the modifications were readily accomplished, reflecting the flexible nature of the FES methodology.

The role of men in household decision-making about infant feeding has been a theme in nutrition and public health for many years. However, following through on the implications in intervention planning and delivery is not common.

3. *Throughout the report, the authors stress the role of poverty and lack of financial resources to purchase nutritious foods as a primary driver of the behaviours they identified.*

This finding is important for decision-making because it highlights the fact that the environment for planning interventions is one in which the majority of households are so resource-stressed that they will always be forced to review what they will have to give up if they want to buy something they are not already purchasing.

4. *Another finding of note was that none of the populations in the four ethnically and geographically diverse areas in which the research was conducted had any experience with multiple micronutrient powders or other home fortification techniques.*

This information is important because it means that extensive behaviour change communication activities will be required. It does not mean that the population would be resistant, but only highlights the fact that investments in promoting MNP will not have a cultural 'niche' to build on.

Concerning the experiences with respect to the first two purposes of the study noted earlier, it is very

encouraging, with respect to the future use of the FES manual, that in the diverse communities in Afghanistan where the study was conducted, with all of the trauma people have experienced and continue to experience, respondents were willing to participate fully in the study. The authors report an average of 3 h per household to complete the modules. It is highly unlikely that they would have been willing to submit to 3 h of a standard survey questionnaire. The nature and diversity of the protocols and the opportunity to engage in meaningful discourse are aspects of structured qualitative ethnography that contribute to their attractiveness for respondents and investigators alike.

Shifting to the third purpose of the study – creating a map of the network of agencies and 'players' involved in nutrition in Afghanistan – the report from the project provides a description that will be important for GAIN decision-making in future activities. Although the FES does not contain specific modules for this purpose, the research team used the same in-depth, qualitative interview approach to derive the description. It was readily completed within the time frame and structure of the FES project. The description illustrates the point that sufficient data to derive a good picture of the nutrition landscape in a country, and the basic features of the organisation of the 'players,' can be constructed without a major investment of time and financial resources. Of course, the overview that is generated by this type of review is not adequate to provide specific guidelines on where and how to intervene to improve the network, but that the level of intervention activity was not central to GAIN's mission. Another, related point, is to underscore the importance of identifying the purpose of specific types of data before one undertakes a study. For example, in the case of the FES in Afghanistan, the level of specificity and depth with respect to the network of players that was required was well defined prior to the start of the study, and the protocol for obtaining data was therefore appropriate for GAIN's needs.

Conclusions

The first part of this paper discussed the concept of focused ethnography and earlier developments of

topic-focused study manuals, beginning with the FES to understand household management of ARIs. It then continued with a description of the FES for complementary feeding, a tool that has been commissioned and developed by GAIN. Key features of the FES tool include: (1) the capacity to provide a holistic picture of local marketing conditions of complementary foods; (2) characterisation of dietary intake and dietary patterns of IYC, together with description of food preparation, storage and feeding behaviours; and (3) insights into the larger context of economic constraints, social organisation and household management of IYC feeding, and the underlying values, motivators and beliefs that affect feeding behaviours and patterns.

Following the sections on the FES tool and its characteristics, we then turn to an examination of the studies that have been completed, using this tool. Each of the studies we discuss in this paper was undertaken for a different purpose and in a different context. Together, they provide evidence of the flexibility of focused ethnography as a practical research approach. They also illustrate the value of qualitative research as a means of obtaining answers to assist planning and decision-making. The FES reviewed here show that it is possible to conduct structured data collection and retain the strengths of ethnography that is aimed at uncovering 'emic' perspectives and cultural values related to a particular area of human behaviour – in this case, the behaviours that comprise the domain of IYC feeding and care.

The first study was carried out in Accra, Ghana. In addition to addressing a specific decision, it provided a first field test of the protocols and the study design. Following the study in Ghana, the studies in South Africa and Afghanistan were conducted simultaneously. In some respects, these were also pilot studies because they led to further refinement and development of the manual. However, in hindsight, we see that every application of the tool constitutes a kind of 'pilot study'. There are two types of modifications that a living tool, like the FES, entails. One type is the modifications that are undertaken to refine and improve the basic protocols and the design. The other type of modification is the changes that are required to address new issues and questions that arise from

the specific purposes for which the study is being undertaken.

With its emphasis on family behaviours and the sociocultural (beliefs and values), economic and household organisational features of feeding and caring for children, the FES methodology also has a role in formative research that is undertaken to inform decisions about intervention planning. Other decisions for which the FES data can make useful contributions are the design of surveys, including descriptive, epidemiological studies and intervention evaluations. Ethnographic studies not only provide information about how to structure questions to improve communication with respondents and improve validity, but also, information on types of questions to ask to capture feeding practices. The studies also reveal barriers and facilitators of behaviour change, which are factors that affect responses to interventions. These factors are also potential confounding variables in evaluations and are thus essential from the perspective of improving both internal and external validity of evaluation research. In short, we see a range of uses for the FES beyond specific GAIN information for investment decision needs.

Finally, we want to stress that the use of focused ethnography provides a scientific and credible way of giving mothers a voice so that they are heard. Being heard means that the decisions that are made are relevant for their needs and not made solely in terms of the preconceived notions of survey researchers or other well-intentioned people. This is not only important for successful public health programming, but a fundamental precondition for building a citizen's movement for better nutrition in which the people who are currently targeted as passive beneficiaries become the motivating force and mobilise to demand access to better services and products than are available to them now.

Acknowledgements

We would like to acknowledge Tina Van den Briel, Director Program Delivery, GAIN, for her extensive inputs and implementation support to the Afghanistan FES; Sawudatu Zakariah-Akoto, Nutrition Department, Noguchi Memorial Institute for Medical

Research for the Ghana FES; and Sylvia Jones, Lodestar Marketing and Jane Badham, JB Consultancy for the research in South Africa – without their steadfast commitment to the research, this paper would not have been possible. A special thank you to Pertti J. Peltó, who provided valuable insights and suggestions on the structure and content of the paper. In addition to the individuals named above, we gratefully acknowledge the support of the FES Advisory Group: Alison Draper, Homero Martinez, Albertha Nyaku, Kevin Peddie, and Susan Scrimshaw.

Source of funding

The Global Alliance for Improved Nutrition, with funding from the Bill and Melinda Gates Foundation for the research in Ghana and South Africa, and the Khalifa Bin Zayed Foundation for the research in Afghanistan.

Conflicts of interest

None of the authors have conflict of interests to report in connection with the research described here.

Contributions

The development and initial fieldtesting of the FES protocols was the responsibility of Gretel Peltó and Margaret Armar-Klemesu. Jonathan Siekmann and Dominic Scofield provided input and feedback at every step. GP and MAK wrote the first draft of the paper, after which JS and DS made significant additions and modifications. Throughout, the interpretation of findings and decisions about what to highlight

in the results from the three studies was the result of a collaborative, interactive process.

References

- Altai Consulting (2011) Infant and Young Child Feeding and Micronutrient Supplements Use in Afghanistan. Kabul, Afghanistan.
- Blum L., Peltó P.J., Peltó G.H. & Kuhnlein H.V. (1997) *Community Assessment of Natural Food Sources of Vitamin A*. International Nutrition Foundation: Boston.
- Dickerson T., Fernandez D., Topgyal S.A., Gelek N., Peltó G., Craig S. *et al.* (2008) From butter tea to Pepsi®: a rapid appraisal of food preferences, procurement sources and dietary diversity in a contemporary Tibetan township. *Ecology of Food and Nutrition* **47**, 229–253.
- Gittelsohn J., Peltó P.J., Bentley M.E., Bhattacharyya K. & Russ J. (1998) *Ethnographic Methods to Investigate Women's Health*. International Nutrition Foundation: Boston.
- Gove S. & Peltó G.H. (1994) Focused ethnographic studies in the WHO Programme for the Control of Acute Respiratory Infections. *Medical Anthropology* **15**, 409–424.
- Jones S. (2011) Complementary Micronutrient Supplementation in 6 to 24 Month Old Infants: A Focused Ethnographic Study for GAIN. Johannesburg, South Africa: Lodestar Marketing Research.
- Peltó G.H. & Armar-Klemesu M. (2011) Balancing nurturance, cost and time: complementary feeding in Accra, Ghana. *Maternal and Child Nutrition* **7** (Suppl. s3), 66–81.
- Peltó G.H. & Gove S. (1992) Developing a focused ethnographic study for the WHO Acute Respiratory Infection Control Programme. In: *Rapid Assessment Procedures: Qualitative Methodologies for Planning and Evaluation of Health Related Programmes* (eds N.S. Scrimshaw & G.R. Gleason), pp 215–226. International Nutrition Foundation: Boston, MA.
- Peltó P.J. *Ethnography: Guidelines for Field Research*. Left Coast Press: Walnut Creek, CA. (in press).