

Researching livelihoods and
services affected by conflict

Understanding malnutrition and health choices at the community level in Sierra Leone

Report 4

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Cover image caption: Abdul with his newborn son
in Freetown, Sierra Leone
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- When it is appropriate to build secure livelihoods in conflict-affected situations (CAS) in addition to meeting immediate acute needs;
- What building blocks (e.g. humanitarian assistance, social protection, agriculture and basic services) are required in different contexts;
- Who can best deliver building blocks to secure livelihoods in different contexts; and
- How key investments can be better and more predictably supported by effective financing mechanisms.

The Overseas Development Institute (ODI) is the lead organisation with 8 core partners; Focus1000, Valid International, Centre for Poverty Analysis (CEPA), Feinstein International Centre (Tufts University), The Afghanistan Research and Evaluation Unit (AREU), The Sustainable Development Policy Institute (SDPI), Humanitarian Aid and Reconstruction based at Wageningen University (WUR) and the Nepal Center for Contemporary Research (NCCR).

Abbreviations

CHC	Community Health Clinic
CHP	Community Health Post
CHW	Community Health Worker
FHCI	Free Healthcare Initiative
IYCF	Infant and Young Child Feeding
M2M	Mother-to-Mother Support Group
MCHP	Maternal and Child Health Post
MoHS	Ministry of Health and Sanitation
NGO	Non-governmental organisation
PHU	Peripheral Health Unit
SLRC	Secure Livelihoods Research Consortium
SQUEAC	Semi-quantitative evaluation of access and coverage
TBA	Traditional birth attendant
UNICEF	United Nations Children's Fund
WHO	World Health Organisation

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1 Introduction

Malnutrition remains one of the greatest threats to public health in developing countries, and research into how prevention efforts might be more appropriately targeted is therefore in high demand.¹ The challenge is particularly acute in fragile and conflict-affected countries, where food production has been disrupted, infrastructure (including health systems) damaged, and community coping strategies strained. Perhaps unsurprisingly, efforts to prevent malnutrition often focus on the immediate medical cause – a deficiency in Type I and Type II nutrients.² While this is clearly key, it is also important to understand the wider social conditions that enable such a medical condition to arise. That is our purpose here – to understand the social conditions that allow malnutrition to persist in Kambia district, Sierra Leone (see Box 1 for a description of the socio-economic situation in Kambia district).

Box 1: The situation in Kambia district, Sierra Leone

Sierra Leone suffers from incredibly high rates of malnutrition – of the estimated 1 million children under five, 22% are underweight, 44% are stunted, and 8% are wasted (MICS, 2010). In 2009, Sierra Leone was ranked among the five countries with the highest global hunger index score (ACDIVOCA, 2011).

Kambia district, in Sierra Leone's Northern province, sits on the border with Guinea. According to 2011 data, 53.9% of its population live in poverty (World Bank and Statistics Sierra Leone, 2013). Livelihood options are heavily oriented towards agriculture and agricultural labour demands (particularly at certain times of the year) can place heavy burdens on households (WFP et al., 2011). This, in turn, can affect care for pregnant and lactating mothers, infants and children.

In terms of food insecurity, Kambia is among those districts with the highest levels of severe and moderate food insecurity in the country with one three districts – Tonkolili, Moyamba and Pujehun – more food insecure

1 Throughout this report we refer to malnutrition. We are not focusing solely on acute malnutrition – although this is obviously its most dire form – but rather on the wider causes of poor nutrition that are the starting point for more acute and deadly forms.

2 Type I nutrients include iron, calcium, vitamin D, copper and others. A Type I deficiency results in a specific physical sign, and can manifest itself in the form of a number of diseases, including anaemia and scurvy. A deficiency of Type II nutrients – which include potassium, sodium and zinc – results in overall reduced growth as the body seeks to preserve plasma and tissue levels at the expense of growth, repair and immune functions (Golden, 1996). A Type II deficiency does not result in specific physical signs, meaning that those affected appear no different from unaffected individuals.

were moderately or severely malnourished, compared with the national average of 29% (WHO, 2011a). In addition, more than half (57%) of households in Kambia rely on an unprotected water source for drinking – which may partly account for the persistence of malnutrition (WFP et al., 2011: 46).

These indicators highlight the challenge of the environment in which efforts to prevent malnutrition are taking place, characterised by high levels of poverty, food insecurity and poor sanitation. In part, these conditions are the legacy of Sierra Leone's 11-year civil war, which ended in 2002. They are also a testament to the long road to recovery that continues 12 years after the war's end.

This research is part of the Secure Livelihoods Research Consortium (SLRC) research programme in Sierra Leone, which is concerned with state capacity to prevent malnutrition. Through multiple stages of research, the programme seeks to explore how governments and development partners might better focus their investments to prevent malnutrition (see Box 2 for more information). This report responds to the second research question in that programme: What are the blockages to preventing malnutrition at the community level? Building on our first paper, which mapped current capacity support to Sierra Leone's nutrition sector and highlighted trends and gaps, this second research question takes a more localised perspective of the challenges faced in preventing malnutrition in a poor, fragile and post-conflict setting. It has been investigated in two parts – with a semi-qualitative evaluation of the causes of stunting earlier in 2014 (see Binns, et al. 2014). Following this and building on its findings, our fieldwork for this report sought to deepen our understanding of the factors that (re)produce the conditions for malnutrition and limit uptake of nutrition services. This latter stage of the research followed up on issues that emerged as potentially important through the semi-quantitative analysis, such as household decision-making processes regarding feeding and spending, the realities of exclusive breastfeeding, and sexual relations after birth (see section 2 for more detail on the methodology).

In order to conceptualise how our research fits within broader thinking on malnutrition, we have sought to situate it within the 'UNICEF framework' for analysing the causes of malnutrition. In 1990, a UNICEF document

entitled *Strategy for Improved Nutrition of Children and Women* presented a conceptual framework to guide analysis of the causes of malnutrition. That framework, shown here in Figure 1, has since become 'one of the most familiar images within the international nutrition community and has helped foster improved understandings and dialogue about the nature and causes of malnutrition' (Pelletier, 2002: 3).

Box 2: SLRC Sierra Leone country programme

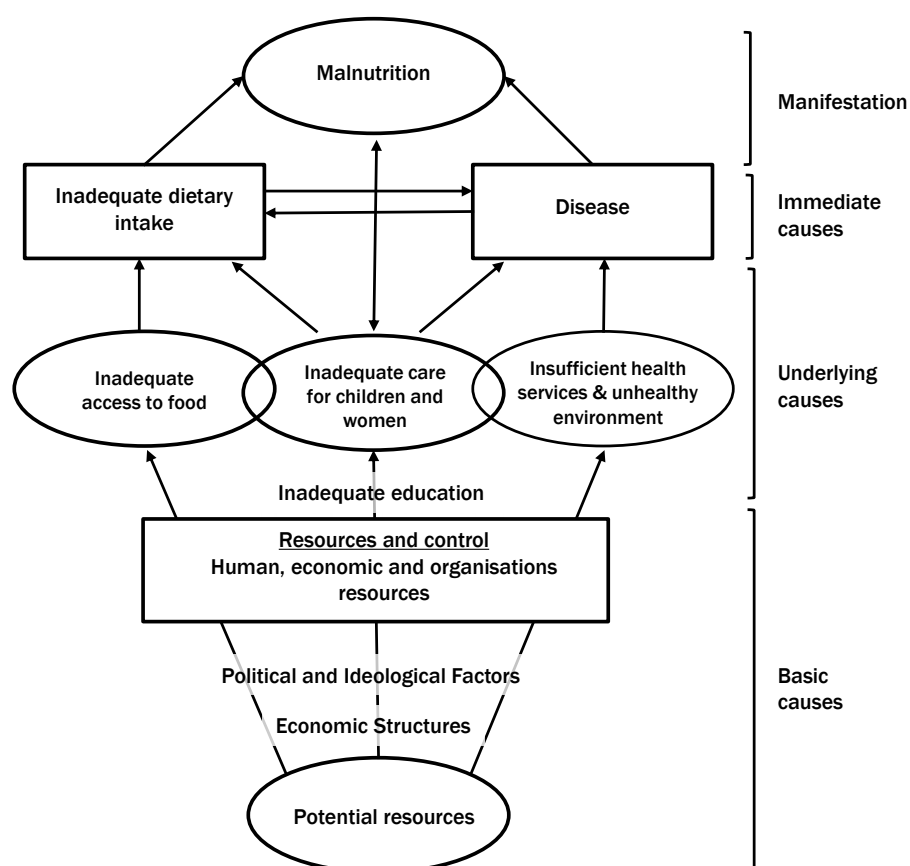
The SLRC Sierra Leone country programme, funded by Irish Aid, is being implemented over two years from April 2013 to April 2015, focusing on state capacity to address the country's strikingly high malnutrition rates. Guided by an overarching research question – 'How can development partners support improved strategies to prevent malnutrition in Sierra Leone?' – the programme comprises three discrete yet interconnected phases of research activity:

- 1 Are development partner approaches to capacity building appropriate to the challenges the nutrition sector is facing? Is the model of capacity building being used fit for purpose?
- 2 What are the blockages to preventing malnutrition at the community level?
- 3 How can broader stakeholders, beyond the immediate nutrition sector, be engaged to develop a more comprehensive approach to preventing malnutrition?

Two research reports have been produced to date by ODI, Focus1000 and Valid International: one responding to the first research question (see Denney, et al. 2013) and one using semi-quantitative methods to start to answer the second research question (see Binns et al., 2014).

The framework is composed of a number of layers relating to different parts of the causal chain underpinning malnutrition. For the purpose of our research, we are most interested in what are referred to as the 'underlying causes' which result in inadequate dietary intake and disease (which in turn lead to malnutrition) – these are highlighted by the red box in Figure 1. We thus examine a set of factors we know to be important in explaining variations in nutritional status. Importantly, however, we do this from a social, rather than medical, perspective. Partly as a result of this, our investigation of these underlying causes also speaks to what is happening at the 'basic causes' level: inadequate care for children, for

Figure 1: UNICEF Conceptual Framework for Analysing the Causes of Malnutrition



example, may reflect patterns of gendered power and inequality embedded within social norms.

In this report we focus primarily on the second two underlying causes: inadequate care for children and women, and insufficient health services and unhealthy environment. The reason for this is largely practical. The third research question of SLRC's Sierra Leone programme is concerned with how actors outside the traditional nutrition community might be engaged as part of prevention strategies, with a focus on how individuals and households access food and engage with food markets. With this framework and our previous research in mind, we have thus sought to generate evidence on two sets of issues relevant to answering the research question on local blockages. These are:

- **Inadequate care for children and women.** We are principally interested in the factors that limit capacities to provide care. Within this, we focus on: the role of food taboos; the realities of exclusive breastfeeding knowledge and practice; gendered decision-making vis-à-vis household food distribution and spending decisions; and how seasonality affects levels of care. In examining these issues, our study pays close attention to how the social 'rules of the game' shape the provision of care for mothers and their children.
- **Health services.** There are multiple health providers in rural Sierra Leone, including the government-run health clinics, traditional healers and CHWs (Scott et al., 2014). In order to assess whether households are able to access decent healthcare – including whether key individuals are being exposed to behaviour change messages – our research looks at families' relationships with the health system, as well as relationships between different health providers. We examine how decisions are made in terms of where to seek help and what factors influence such decisions.

Ultimately, we find that a number of social factors at the community level play a central role in enabling the conditions

for malnutrition. These include the perceived unproblematic use of herbal medicines for infants during 'exclusive' breastfeeding, the role of gendered power relations in household decision-making, and rainy season dynamics. Other factors, such as traditional beliefs around sexual intercourse while breastfeeding and food taboos, appear to play less of a role than might be expected. Further, these social factors also play an important role in the ways that people utilise the health system – broadly understood to include a plural set of providers. On this basis, we argue that preventing malnutrition requires a nuanced understanding of these social factors that directly influence behaviour related to the underlying causes of malnutrition.

The paper is structured as follows. In Section 2 we outline in greater depth the methodology used for this study, including additional information on the Semi-Quantitative Evaluation of Access and Coverage (SQUEAC) study that preceded this report and information on site selection. Sections 3 and 4 constitute the analytical core of the paper: section 3 presents an analysis of some of the key factors undermining care for mothers and children, including household power dynamics in relation to feeding practices, decisions around breastfeeding and household finances, as well as the particularly acute challenges of 'lean seasons'. Section 4 illustrates and explains how people navigate the multiple health providers available to them. Finally, in Section 5, we summarise the key findings from this study and identify a series of recommendations to the Government of Sierra Leone and those working in the nutrition sector.

2 Methodology

In order to answer the research question at hand here – ‘What are the blockages to preventing malnutrition at the community level?’ – a mixed methods approach was used. This report thus builds on a SQUEAC survey conducted in February 2014 by research partners Valid International and Focus1000. This work involved drawing hypotheses from existing data and literature and then testing these through household surveys in Kambia district. In addition, a control trial was conducted comparing stunted and non-stunted children in the research sites. The SQUEAC survey report yielded a number of interesting findings that we further interrogated through an additional phase of qualitative research that informed this report (see Box 3 for more information on the SQUEAC study).

This second stage of the research involved semi-structured interviews and focus group discussions in three research sites within Kambia District in Northern Sierra Leone – the district focus for the SLRC’s Sierra Leone programme.³ Initially, this stage of the research was planned to involve a single day in a village in each of Kambia’s seven chiefdoms. However, findings from fieldwork conducted for the first research question, as well as for the SQUEAC survey, indicated little variation across chiefdoms in Kambia. Where variations within the district do exist, this is not due to chiefdom boundaries but rather to a number of other features – such as distance from a Peripheral Health Unit (PHU), remoteness, and so on. Combined with the importance of ensuring in-depth research coverage in the communities visited, this led to the decision to focus on just three research sites across the district (regardless of chiefdom), spending two days in each site. To select the three research sites, a number of criteria were taken into account:

- Remoteness (distance from a PHU)
- Size of closest PHU, and
- Existence and formality of a Mother-to-Mother Support Group (M2M Group).

Based on these factors, as well the logistical constraint of being able to drive to and from Kambia town each day, we selected three villages in three different chiefdoms in Kambia. To protect the anonymity of respondents in these sites, their names are withheld here and they are referred to as site 1, site 2 and site 3. Below, key features of the research sites are set out:

³ For a more detailed examination of district site selection, see our first report: Denney et al. (2014).

Box 3: Overview of SLRC's Kambia SQUEAC study

The SQUEAC study involved a three-stage methodology. First, a review of existing data and literature was conducted, informing the design of a series of hypotheses (see below). These hypotheses were then tested during the second stage through random sampling of mothers/carers in five semi-purposively selected communities. The third stage involved a case-control study, whereby two matched pairs of stunted and non-stunted children were identified in 10 sites (giving a total of 20 pairs of 'cases' and 'non-cases'). For each case and non-case, a questionnaire was administered to the mother of the child to generate data identifying factors associated with stunting and non-stunting. Some key findings are listed below.

Some hypotheses tested

- The rate of exclusive breastfeeding to 6 months in Kambia district is > 70%
- Herbal medicines are given when mother claims exclusive breastfeeding is practised in < 30% cases
- Belief in banfa in Kambia district is < 70%

Some key findings

- The majority of mothers perceive themselves to engage in **exclusive breastfeeding**, although most of those actually gave herbal medicines to infants from birth to six months
- Household **food allocation** practices limit the food quality and quantity allocated to mothers and children in favour of men and elders; reduced **maternal dietary diversity** appears to be linked to a greater likelihood of child stunting
- Report of **episodes of diarrhoea, respiratory illness and fever** for the child appear to carry an increased likelihood of stunting; the same association was found with a lack of access to clean drinking water
- The median **age of first pregnancy** amongst women in the study was 15, which correlated with early cessation of schooling
- **Participation of husbands** in community groups – such as mother support groups – appeared to be associated with a lower risk of stunting
- **Traditional birth attendants and healers** are a significant feature of community health services, particularly in relation to antenatal care

Source: Binns et al., 2014

Research site 1. A village of approximately 29 households. The closest PHU – a Maternal and Child Health Post (MCHP)⁴ – is five kilometres away but the PHU that the village falls in the catchment for is actually six kilometres away (another MCHP). There is no operating M2M Group, although there is a community-initiated women's group that covers some health and sanitation issues. There is no phone reception in the village and no vehicle. The majority of households are polygamous. It is approximately a one hour drive from Kambia town by car on dirt roads.

Research site 2. A village of approximately 4,160 inhabitants. There is a PHU (an MCHP) in the village and three operating M2M Groups (these have not received training and are community-initiated). There is phone reception and some people in the village have motorbikes or vehicles. There is a combination of monogamous and polygamous households. It is approximately a one hour and fifteen minute drive from Kambia town by car on dirt roads.

Research site 3. A large town of approximately 17,000 inhabitants. There is a PHU – a community health clinic (CHC) – and at least one operating M2M Group that has received training from a local non-governmental organisation (NGO). There is phone coverage and vehicles. There is a combination of monogamous and polygamous households. It is approximately a one hour

4 There are three levels of PHU in Sierra Leone. The largest is a Community Health Clinics (CHC), the middle size is a Community Health Post (CHP) and the smallest is a Maternal and Child Health Post (MCHP). According to Hodges et al. (2012), each PHU has a recognised catchment population of approximately 5,000 residents. Generally speaking, the higher the level of PHU, the more qualified the health staff.



Traditional remedies are frequently given to infants in order to help calm infants' stomachs and help them sleep.

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drive from Kambia town by car on a combination of paved and dirt roads.

Within each community, the research team conducted six focus group discussions (two with pregnant and lactating mothers, two with grandmothers, and two with men of varying ages). These focus groups aimed to gain an understanding of feeding practices (for both infants and the wider family), household decision-making, food sources and taboos, as well as behaviour related to the uptake of health services. While a list of questions covering these areas was provided to all researchers to guide discussion, these were used iteratively, allowing for adaptation to context and individuals as well as diversion and exploration of issues not originally planned for. This was important in allowing our research to pick up on under-explored issues not picked up in our reading of the existing literature prior to the fieldwork. Focus groups with women were led by female researchers and focus groups with men by male researchers to limit gender bias. In order to limit the bias that can result from pre-arranged community visits, the research team arrived in each

research site unannounced and met with the village chief to explain the research and organise two days of focus groups and interviews.

In each community, one mother from the focus groups was also selected (on the basis of contribution to discussion) for a more in-depth interview to understand decision-making around feeding practices in her home. These three interviews sought to balance between younger and older mothers, mothers who work and those who do not, as well as mothers in polygamous and monogamous relationships.

In addition to focus groups and interviews with mothers, approximately six semi-structured interviews were conducted in each research site with the following respondents:

- Chief
- PHU staff
- Community health worker (CHW)⁵
- Traditional birth attendant (TBA)
- Traditional healer
- Lead mother of the M2M Group (or equivalent).

These interviews asked similar questions to the focus group discussions but also sought to build an understanding of the relationships between health providers. In total, 18 focus group discussions and 22 interviews were conducted over a one-week period.

Following data collection, research notes from focus groups and interviews were written up and treated as primary sources alongside the secondary source literature. Key themes emerging across the research sites were pulled out and variations between the sites acknowledged. These differences were used to help to identify and explain the factors appearing to drive behaviour.

Research was undertaken by a team of five researchers – three Sierra Leoneans (two female; one male) and two foreigners (one female; one male), who have experience of working in Sierra Leone (and Kambia specifically)

5 There may be some confusion over definitions of community health workers, as compared to community health volunteers. While some understand the former to be formally recognised, paid health staff – such as Community Health Officers and Maternal and Child Health Aides (MCHAs) who work at PHUs – the majority of those we spoke to in Kambia district made a distinction between these kinds of government health workers and community-based volunteers who assisted with screening, referrals, sensitisation and so on. These volunteers were referred to as community health workers – and we follow that distinction in this paper.

previously. In each research site, each foreign researcher worked with a Sierra Leonean researcher (not least to overcome language limitations) and the third Sierra Leonean researcher led on conducting the semi-structured interviews. Language was problematic in some research sites, with only one Sierra Leonean researcher speaking *Temne* (the majority language in Kambia), and none of the research team speaking *Susu* (a minority language in Kambia spoken as the dominant language in one research site). Some interviews could be conducted in Krio (with English translation) but in some sites it was necessary to use local volunteers as translators – this has an unavoidable impact on the accuracy with which respondents views have been recorded.

3 Inadequate care for children and women: a social understanding of why malnutrition persists

In this section we argue that malnutrition must be understood as a deeply social and gendered issue – and must be approached as such by interventions designed to address it. Malnutrition is not simply about the behaviour of mothers and young children, but rather about the constellation of social forces, power relations and informal institutions that affects their care. Our analysis here aims to deepen understanding of some of the social factors that appear to constrain care for women and children – a key component of the UNICEF conceptual framework for malnutrition.

This section is split broadly into four parts. We begin in the first part by discussing the role of food taboos and their impact on feeding practices. While food taboos are often seen to constitute an important contributing factor to malnutrition, our research suggests that taboo beliefs are highly local and dynamic, often ambivalently held rather than stringently followed. In the second part, we argue that levels of exclusive breastfeeding are much lower than sometimes reported, and examine what drives the lack of uptake of this key infant and young child feeding (IYCF) message. In the third part of this section, we focus on the role of decision-making power within the household in limiting a woman's capacity to provide care vis-à-vis food distribution, decisions around when to stop breastfeeding, and household finances. The final part of this section illustrates how the inadequacy of care for women and children becomes particularly pronounced during Sierra Leone's rainy season – as well as during other less acknowledged 'lean seasons' throughout the country – when a 'perfect storm' of conditions for the social (re)production of malnutrition emerges.

3.1 The (overstated?) role of food taboos

The first stage of SLRC's research in Sierra Leone (see Denney et al., 2014) revealed that interviewees in Freetown and Kambia saw food taboos as a common problem limiting children's diets and contributing to malnutrition. Writing in *The Lancet* 60 years ago, Hope Trant of the East African Medical Survey argued that:

[O]ne cause of malnutrition which investigators who have not lived in the tropics are apt to overlook is food taboos. The importance of these restrictions has been greatly underestimated in the past, for the force of these taboos may lead to people living hungry in the midst of plenty. These beliefs and superstitions are found the world over, and date back as far as written history (Trant, 1954: 703).

In theory, social restrictions on the types of food people can eat might serve to limit diversity of diets. This matters because dietary diversity is a strong predictor of nutrition outcomes (Arimond and Ruel, 2006). It is commonly thought that in Sierra Leone a range of food taboos apply to young children as well as pregnant and lactating women, with particular restrictions around sources of protein – such as eggs, meat and fish. However, while such restrictions undoubtedly exist, our research suggests there is considerable variation between and within communities about what is permissible for certain social groups to eat and the extent to which these beliefs influence behaviour.

Our three research sites were located in a single district, yet we found that the types of restrictions present in one community were absent in others. There was also a lack of clear consensus within communities, with some focus group participants contradicting others even where beliefs in the taboos had been described as widely held. What seems more likely than the universal existence of beliefs and total compliance with these is wide variation in the degree to which food taboos are adopted and enforced. Our fieldwork suggests that while people might declare a belief in one taboo or another, it is less clear whether the belief is actually reflected in their behaviour. In one focus group in site 1, for instance, we were told that it was forbidden to eat mangoes that fall from the tree. Some minutes later, a mango landed quite free of human persuasion a few inches from one participant, who – without hesitation – divided it between nearby mothers and children. In the same community, we were told that while some mothers do not eat eggs during lactation, many in fact do. Meanwhile, in site 2, a group of male participants explained that members of the community's older generation do not eat monkeys, believing that these animals had been cursed by God, or that some family names had a connection to certain animals that they could therefore not eat. Younger individuals, on the other hand, ate monkeys quite freely (when they could get them). There is perhaps then a generational dimension to social restrictions of this nature, suggesting a dynamic rather than immutable belief system.

What is clear is that food taboos cannot simply be explained by reductive arguments about deeply held 'traditional beliefs'. That might be one part of the narrative surrounding restrictions, but there are also different logics at play. For instance, the taboo against eating mangoes fallen from trees in site 1 (even though apparently not always adhered to) was explained as having emerged recently in response to the Ebola

outbreak in neighbouring Guinea (and now Sierra Leone and Liberia), because bats carrying the Ebola virus may feed on the mangoes. In addition, site 1 was the only community where eggs were considered taboo. The initial explanation given for this was that eating eggs, or cooking in the same place an egg was boiled, would cause diarrhoea. Yet further questioning also revealed that women would sooner sell eggs than consume them because their monetary value was considered more useful. These examples suggest that explanations of food taboos centring solely on 'traditional beliefs' might mask sensible formulations of public health messages or more material considerations.

It is thus far from clear that food taboos play a significant role in the high rates of malnutrition observed in Sierra Leone. While there is perhaps some marginal effect, which becomes more pronounced in interaction with a series of other factors, the role of food taboos appears overstated given the prominence it receives in policy discussions around tackling malnutrition.

3.2 The case of (non-)exclusive breastfeeding

In order to prevent malnutrition, the international community has devised a number of 'best practice' strategies relevant to the challenges faced in developing countries (where, for instance, limited access to clean water means that breastfeeding is preferred over use of formula). Indeed, in Sierra Leone, the Director of the Food and Nutrition Directorate in the Ministry of Health and Sanitation focuses on promoting breastfeeding as the key approach to reducing stunting and malnutrition, with messages supporting this 'broadcast over the radio, during awareness weeks and via mother-to-mother support groups' nationwide (Leach, 2014). Moreover, Sierra Leone's National Food and Nutrition Security Strategy 2012-16 outlines a commitment to ensuring that 60% of children under five months are exclusively breastfed by 2016.

Information regarding exclusive breastfeeding and complementary feeding features strongly in IYCF training programmes run across Sierra Leone by multiple government and development partner organisations. One of the research assistants for this study – an employee of an NGO operating in Kambia – even wore a t-shirt during fieldwork with the message: 'Exclusively breastfeed your child for the first 6 months' in bold capitals on the back. Knowledge is paramount, so getting those messages to pregnant women is clearly part of a good prevention strategy. But it is not enough in itself.

It cannot be assumed that transferring knowledge necessarily generates the desired behaviour change. Usually, this kind of change occurs in a non-linear fashion, and is actually quite hard to predict. We know that knowledge transfer does not happen in a vacuum, and that there are multiple, sometimes unknown factors influencing an individual's motivations and behaviour beyond exposure to an intervention (Ramalingam, 2014). In relation to nutrition, Resnicow and Vaughan (2006: 6) refer to this unpredictable dimension as 'the random component of health behaviour change'.

The case of exclusive breastfeeding in Kambia illustrates this challenge. Data sources suggest that rates of exclusive breastfeeding in Kambia are very encouraging at 93.3%, far higher than the national average of 32% (GoSL and UNICEF, 2013).⁶ However, our SQUEAC study found the rate to be more like 30% – a huge divergence from official statistics (Binns et al., 2014). What might explain this? Evidence from both the SQUEAC study and our qualitative work suggests the variance may be accounted for by differences in reporting methodologies. According to the SQUEAC report, in 72.4% of cases where a mother reported exclusive breastfeeding, the child had in fact received additional herbal medicines on a regular basis (ibid). This suggests that many do not perceive exclusive breastfeeding and the consumption of herbs to be mutually exclusive – a problem that may be exacerbated by poor knowledge on the part of local health workers and community groups (possibly related in turn to issues with cascade training models – see Denney et al., 2014: 13-14). In addition, focus group discussions with mothers and grandmothers also found that many do not consider warm water as a kind of 'feeding' and so also give this to infants, including in the first six months, alongside what they consider to be 'exclusive' breastfeeding. If these nuances are not reflected in data collection methods, then inflated rates of exclusive breastfeeding are likely to be reported. It is only by asking additional questions – for example, 'in the first six months, did you give your child substances, such as herbs, roots, pap, bennimix or water?' – that the actual rate can be accurately calculated.

What might explain why so many women believe they are practising exclusive breastfeeding when they are in fact



Social forces within the household and community influence the ability of women to act on knowledge about appropriate feeding practices.

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– 'people are not doing what they should because they have not been told about it'. Our research, however, suggests that this is not necessarily the case. In all research sites, despite the varying levels of PHU, CHW and M2M Group activities, the vast majority of mothers and grandmothers admitted to giving early infants *gbangba* (a traditional herb that is mixed with water) for 'gripe'.⁷

What is more, our research indicated that such practices are not weaker in locations with more established healthcare services. While site 2 was host to an MCHP and three untrained M2M Groups, site 3 was a much larger town with a CHC, at least one large, formally trained M2M Group, and 18 CHWs. Intuitively, we might expect rates of exclusive breastfeeding to be higher in site 3,

⁶ The source of this 32% figure is the 2010 Sierra Leone Multiple Indicator Cluster Survey (MICS).

⁷ Water sources in rural Sierra Leone pose significant risks to infant health. Where there are proper wells, they often dry up from over-use, as was the case in site 2 (people from seven other villages reportedly also used this particular well). This means that people usually draw water from rivers and streams, if they are nearby (as was the case in sites 1 and 2). Open defecation, particularly near rivers, means that water often given to young child during the first six months (either on its own or mixed with *gbangba*) is contaminated, thus increasing the risk of diarrhoea and infection (and therefore the likelihood of stunting).

particularly given the presence of the trained M2M Group.

Yet, our qualitative evidence suggests that while the CHC staff in site 3 advised against giving young children anything additional before six months, the practice of many households contravenes this.⁷ In site 3 (as well as site 1), mothers and grandmothers admitted to giving infants warm water to settle their stomachs. This was not, however, the case in site 2, where mothers knew not

to give warm water to infants who were being exclusively breastfed. This is despite the fact that site 2 has a lower level health of infrastructure than site 3. In a male focus group in site 3, one participant went even further, explaining how, in his household, exclusive breastfeeding was usually only practised for one month before a mixture of pounded rice, foo-foo and fish was given to the child. He was unconvinced by the benefits of breastmilk: ‘this breastmilk cannot upkeep them ... they usually cry because of hunger’. What was particularly telling was the fact that he referred to this food mixture as the ‘local bennimix’,⁹ suggesting the practice was actually quite widespread in the community.

Evidence from both male and female (young and old) interviewees in site 3 shows that, despite the more sophisticated organisational set-up, IYCF messages are not being taken up by many community members. In contrast, our research appears to show that exclusive breastfeeding was practised more widely in site 2, with its lower level health infrastructure. Although many women here do use ‘bitter medicine’ (*gbangba*) to calm children’s stomachs during early infancy, all agreed that giving warm water was bad practice. In the male focus groups in that community, there was general agreement that nothing additional was given to children during the first six months, stating instead that whenever the child’s stomach aches or if they refuse milk, then they will be taken straight to the MCHP.

These variations must be understood within the context of how formal state health organisations relate to their social context. We know from existing research that capacities (such as the capacity to promote the uptake of IYCF behaviour) are developed through social relationships, and that the nature of those relationships has profound implications for the ability of an agent, an organisation or a system to get things done (Clarke and Oswald, 2010; Eyben, 2008; Morgan, 2006). For instance, an organisation (health clinic) is made up of individuals (healthcare staff), and the way in which those individuals interact with others (service users) will partly determine the capacity of that organisation to perform (promote IYCF). The evidence emerging from our research in Kambia suggests that the contrasting relationships between health providers and community members in site 2 and those in site 3 are a vital part of the story behind variations in IYCF compliance. Put simply, we find that the better and more communicative relationships between PHU staff and the community in site 2 appear to be associated with better uptake of IYCF messages, whereas weak links and relationships between the PHU, M2M Groups and community members in site 3 – including negative perceptions of the clinic staff – appear to constrain state capacity to encourage uptake of IYCF messaging. We dig into this more deeply in Section 4, focusing on how people make decisions in plural health systems.

3.3 On the social regulation of household decision making

If ar nor want control ar nor de marrayd / I would not have married if I did not want to be under control.

Female focus group participant, site 1

Even where a young mother is aware of IYCF best practices and the kinds of behaviours associated with raising a healthy, well-developed child, this does not necessarily ensure that her behaviour will reflect this knowledge. A mother may know how to keep healthy during pregnancy, the importance of exclusive breastfeeding for the first six months of her child’s life, and how long to wait before weaning her child. But a key question remains: is she in a position to act on that knowledge and align her behaviour accordingly? Our research suggests that, in many cases she is not.

There are multiple social forces at play both within the household and community, which place bounds on human action (Willman and Corman, 2013: 31). The kinds

8 It is worth making the observation that if a health professional advises a particular kind of behaviour it does not necessarily mean they practise it themselves. This may be highly important in contexts where the examples set by health professionals – in terms of what they actually do as opposed to simply what they say – are followed by community members.

9 Bennimix is the generic name given to homemade complementary food made from locally produced raw materials (rice, beans and sesame), which contains appropriate levels of protein, calories, essential fatty acids and micronutrients for infants and young children when correctly prepared. *BENNiMiX* was developed by the FAO, Ministry of Health and Sanitation and Njala University in the 1970s as the commercially available product, processed and packaged in Bo. (Personal communication with Mary Hodges.)

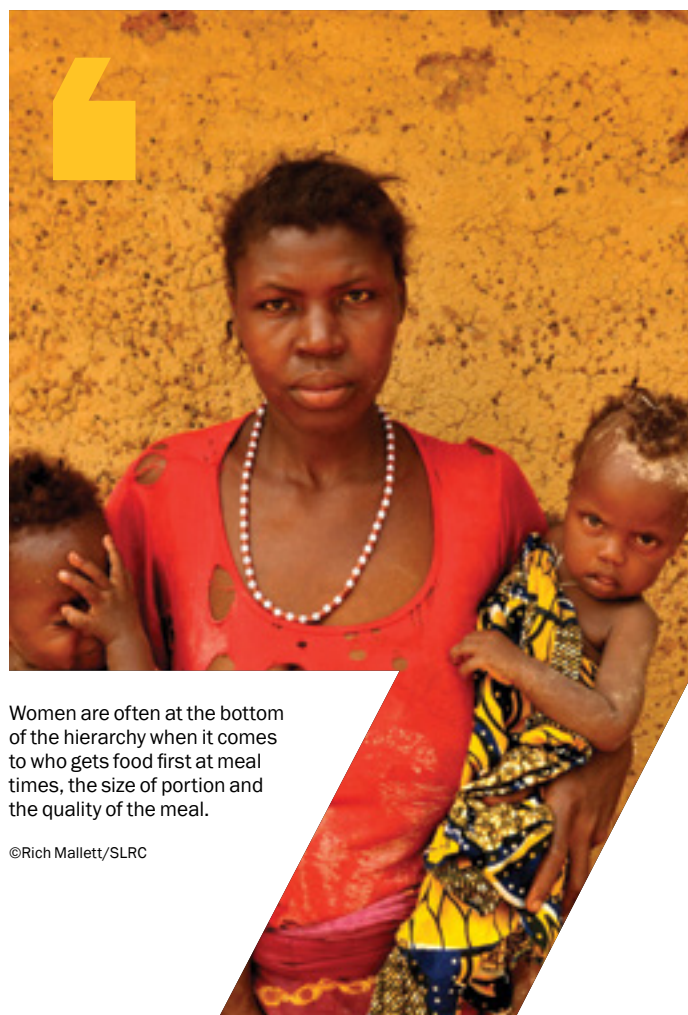
of social forces relevant to our analysis include a number of patriarchal forms of control over women's activity, the dynamics of polygamous marriages, and the inter-generational nature of relationships within households. These reflect the structure of institutional logics within Sierra Leonean society more generally; that is, the 'taken-for-granted social prescriptions that guide behaviour of actors' that exist in all societies (Battilana, 2006: 656).¹⁰ Thus, if we are interested in how young children fail to receive an adequate intake of nutrients, then we have to understand what governs acceptable behaviour – the 'rules of the game', as it were. This is an integral part of understanding the factors that drive and sustain malnutrition (although it bears mentioning that while institutions or the 'rules of the game' tend to be resilient, they are neither static nor immutable).

In each of our research sites, these social forces work to create and maintain a highly unequal system of interpersonal power relations, which limit the autonomy and decision-making capacity of young women – with some important nuances that are drawn out below. This ultimately makes it difficult for them to translate IYCF knowledge (if they have it) into practice. These limits can be observed in multiple dimensions of social and economic life within the household and community. We focus here on three particular aspects: feeding and food distribution; the practice of *banfa* (having sexual intercourse during lactation) and decision-making around when to stop breastfeeding; and control over household finances.

3.3.1 Feeding and food distribution

Our interviews and focus groups consistently showed that young women are at the bottom of the hierarchy when it comes to who gets food first at mealtimes, who gets the largest portion, and who gets the best quality meal – even though they are the ones who prepare it. The SQUEAC study that preceded this research also indicated that mothers and children ranked lowest in terms of access to quantity and quality of food (Binns et al., 2014: 23). In most households in our research sites, it was a combination of a woman's husband and her parents-in-law who received the first, largest and best meal portions. One male focus group participant in site 2 explained that

¹⁰ Institutional logics which place power in the hands of one social group over another are not specific to any one part of the world. While they may function in different ways or produce different outcomes, such forces are observable in all societies. Work by Barbara Pocock (2005: 32), for example, has shown how culturally embedded ideas of the 'unchanging normative male worker archetype dominates institutions of work and care' in Australia, while 'cultures of motherhood and fatherhood remain stoically resistant to renovation'.



Women are often at the bottom of the hierarchy when it comes to who gets food first at meal times, the size of portion and the quality of the meal.

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his parents had suffered to bring him up, so he would 'not do anything to satisfy the children over the elder parents'. Mothers in sites 1 and 2 also reasoned that their in-laws had suffered to bring up the head of her household, and so she must show them respect first. This illustrates that food distribution is an intersectional issue: gender is a key factor in determining allocations, but so too is age, and these factors interact in important ways. Nonetheless, where age is not a factor – for instance, amongst children – gender continues to play a determining role. Mothers and grandmothers both reported that boys receive a larger portion of food than girls. This was explained as being because boys have to provide more labour (for instance, helping their fathers with farming). However, given the arduous household tasks that girls are required to fulfil (including, mothers told us, collecting water and firewood, cooking, looking after younger children, laundry and cleaning), the unequal division of food seems to reveal more about the gendered notions of what tasks are considered laborious than an objective calculation of who works hardest.

The institutional logics that help maintain such an unequal system of food distribution is not forced on to women by men, nor on to youths by elders, in a straightforward sense. The power of cultural narratives around ‘who gets what’ goes beyond questions of agency alone, and should also be understood through a structural lens that prescribes the bounds of individual action. As such, the dominant pattern of food distribution observed here is often taken for granted, seen as part of the ‘natural order of things’ and determined in line with strong cultural ideas about family identities. For example, when asked why the food in her household goes first to her husband and mother-in-law, one focus group participant in site 3 answered simply: ‘[Because] he married me and he is the father of my children. The mother-in-law takes care of me as well’.

Food distribution, and the way in which it is socially regulated, has consequences for the nutritional status of a child in a number of ways. An obvious one is through the amount of food a child is able to consume. We found that women often cooked just once a day, so if consumption is limited during mealtimes that are already very spread out, it is possible that a child may not receive enough nutrients. In addition, if boys receive more protein than girls, it is possible that girls, in particular, will not receive enough nutrients for optimal development, potentially influencing early brain development and thus having consequences for educational prospects and beyond. Another means through which nutritional status can be affected is during pregnancy, when an expecting mother should be as healthy and well-nourished as possible. Limited food intake during this time can affect her own nutritional status (Mora and Nestel, 2000), as well as that of her unborn child (NICE, 2008). This finding was supported by the SQUEAC study informing our research, with reduced maternal dietary diversity linked to higher probability of child stunting (Binns et al., 2014: viii).

3.3.2 *Banfa* and the decision to stop breastfeeding

Gendered constraints are also observable in relation to decisions around when to stop breastfeeding. In each research site, community members reported a belief in *banfa*: that is, that if a woman has sexual intercourse while breastfeeding, her child will fall ill with diarrhoea, become malnourished, and even die. This is supported by the SQUEAC study which found that approximately 87.9% of respondents believed in *banfa* (Binns et al., 2014: 23).¹¹ In principle, a belief in abstaining from sexual intercourse while breastfeeding has some potential knock-on benefits in terms of birth spacing. The following

quote from a traditional birth attendant in site 2 illustrates this (as well as the notion that having sexual intercourse while breastfeeding is more prevalent amongst today’s younger generation):

In our days we had time. We had to avoid the man and we slept separately with the child. We stopped sleeping with our husbands from the time we were seven months pregnant to the time the child turned three. It was a way of birth spacing. Now, some mothers have a child and six months later they are pregnant. This causes a lot of misery in the family.

As suggested in the quote above, we found that in many cases pressures or desires to continue sexual intercourse undermine the potential birth spacing effects of *banfa* beliefs. When asked why couples continue to have intercourse despite the widespread belief that it is harmful, a number of reasons were cited. Men and older women, in particular, often explained it as due to the sexual urges of young women. As a participant in site 1 put it, some women will have sex ‘because it is in their blood.’ Yet it is clear there is more to it. Material concerns are often part of the story, with some young mothers participating in transactional sex simply to meet subsistence needs. A male respondent in site 1, for instance, explained that, if a young mother needs to get to the PHU (5-6 kilometres away in that particular instance), she might receive a lift from an *ocada* (motorbike) rider in exchange for sex. Another male participant in site 3 told how, if a husband has no money, he may tell his wife to have sex with another man so that he can then accuse that man of having sex with his wife and take him to the chief or local court in the hope of receiving financial compensation.

The particular dynamics of living in a polygamous relationship also influence whether or not beliefs in *banfa* are respected in a variety of ways. It was explained that when a man has multiple wives, he can continue to have sex with those who are not breastfeeding.¹² This was interpreted in different ways by different women. In site 2, some women saw this as alleviating their responsibility to have sex with their husbands and so polygamy was seen to enable beliefs in *banfa* to be upheld in practice, without worrying about a husband’s infidelity. Other women,

11 We found that while the term *banfa* was not universally recognised, it was nevertheless observed under a different name, including *katape* and *deegama* (literally ‘you have jumped [killed] the child’).

12 This is where the potentially ‘protective’ features of polygamous marriages can be observed. In theory, a woman who has just given birth may distance herself from her husband while he continues to have sexual intercourse with another wife.



The inadequacy of care for women and children is exacerbated during Sierra Leone's rainy season, worsening malnutrition.

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however, felt that not having sex with their husband would mean they are excluded from an important aspect of household life, which can have material implications. These women felt that in order to make sure their children continued to receive equitable treatment vis-à-vis the children of other wives, they need to continue having sex with their husband, even while breastfeeding. In other cases still, we heard that some breastfeeding mothers had sex with other men as an act of protest against their own husbands' infidelity (indeed there were many stories of many men taking 'girlfriends' while their wives were breastfeeding).

The reasons may be many, but these findings suggest that the perceived birth spacing advantages of *banfa* (see IRIN, 2012) may be outweighed by other considerations. In some cases this can mean that a child's nutritional status is undermined because breastfeeding is stopped when sexual intercourse commences (for all the reasons above – often before six months of age). We were told by the Community Health Officer in site 3, for example, that 'If the woman has sex, or is forced to have sex, she will

say: "Since you tampered with me, I will no longer give breastmilk to the child". In such scenarios, exclusive breastfeeding will be halted prematurely. However, the vast majority of women we spoke to appear to continue to have intercourse and breastfeed despite maintaining a belief in *banfa*. This suggests that the practicalities, desires and pressures of everyday household life tend to take precedence over cultural beliefs in this instance.

Aside from the influence of *banfa*, our research found that the decision to stop breastfeeding is largely made by the father of the child. In a similar fashion to attitudes towards food distribution, this decision-making power generally seems to be taken for granted by all members of the household. As one female discussant from site 3 explained, a woman does not contest her husband's decision in this area, because it is 'the man that owns the child'. Male discussants generally agreed that they had control over breastfeeding duration. Most said that if their wife were to suggest halting, they would consider it on the basis of the child's appearance and performance. Some, however, stated that such a suggestion would lead to conflict within the household, believing that this would constitute evidence of their wife sleeping with, or wanting to sleep with, other men. Most men appeared to want breastfeeding to continue for their children for as long as possible because they thought this was best for the

However, it is also possible that men favour longer periods of breastfeeding because it means one less mouth to feed, considering the limited food supplies that most households have access to. Other research in Sierra Leone has found similar patterns vis-à-vis control over breastfeeding practices: Turay (2014), for example, finds the most significant barrier to exclusive breastfeeding to be the attitudes of opinion leaders, which includes husbands and grandmothers.

3.3.3 Decision-making around household finances

The third aspect of gendered constraints discussed here relates to the control of household finances. In line with our discussion of other dimensions of social and economic life, there is a strong patriarchal influence over household decisions and control over income. About half of the female respondents we spoke to earned some kind of income, typically through small-scale farming (separate from the men), fishing or petty trading. Most female respondents – both young and old – joked that a woman's income is never her own and it is automatically given to her husband or, in the case of some of the older women who are widows, her son. Some women in research sites

1 and 2 explained that they could keep their income so long as it was a relatively minimal amount. As soon as that amount became in any way significant, it would need to be handed to the husband. A significant number of women also reported that, if they made an income, they would often choose to spend this to support their husband, either through buying food for the family, fixing things around the home, or hiring a labourer to assist their husbands in farming. Paying children's school fees was also a commonly reported use of income.

In each site, male informants agreed that it was possible for wives to access household income. However, when pushed on this, they often said that a wife was not permitted to spend the household income on whatever she wanted and women all reported it was necessary to first ask the husband before taking money for any purchases. Male informants in site 3 felt this was for the benefit of the wife as, if left 'unguided', she would spend it in a way that would not support the household; it was believed that 'the correct form of use is known by men' and 'some women will spend it unnecessarily'. Rather, when men talked of their wives having access to household income, they said this was 'through the pot'. In other words, women are able to spend a fraction of their husbands' income, but only on food items ('chop money'). The degree of autonomy over how much 'chop money' a woman can take seems to vary, depending partly on aggregate household income (it will always be small for the very poorest households), attitudes of the husband (some men hold more progressive views than others), and her own contribution to household income (there is some evidence to suggest that she has slightly more autonomy if she brings in an income, even if it is small). Additionally, in site 2, it became apparent that while husbands provided money for rice, they very rarely provided money for other ingredients (for the 'plasas' – or accompanying meat, fish and vegetables). As a result, women would have to fish, use garden farms, or the small income that was not turned over to husbands to purchase these ingredients.

On the question of whether a young woman is allowed to earn an income herself, there appears to be substantial variation in the nature of social regulation both between and within communities. In site 1, for example, male focus group participants were in general agreement that a woman should not conduct business, particularly in other towns (engaging, for instance, in petty trading). A woman working outside the village would be perceived as promiscuous and husbands, therefore, would not allow this. These social restrictions were almost entirely absent

from site 2 and far less pronounced in site 3. Despite the regulation of women's economic activity, there was, at the same time, a general sense that it is good for a woman to earn an income in addition to her work in the home. Male informants framed this not as being about female independence and autonomy, but as about supporting the husband as the main breadwinner. Several focus group participants spoke of how, when a woman earns an income, the household as a whole benefits: a woman who earns an income is, as one man in research site 2 stated, 'a woman who helps to drive hunger from the home ... She makes the whole home happy'. Despite the fact that it is usually the man who is 'the head, the driver', a woman's income can help him deal with financial problems, meaning that the problem will then 'remain in the home and not go outside'.

It seems, therefore, that women's financial contributions to the household economy are generally appreciated and seen as important. However, these contributions do not appear to buy most women much decision-making power when it comes to choices around food allocation, household expenditure, or duration of breastfeeding. These domains remain largely dominated by males and elders who ensure that younger women are less able to enforce their own ideas and preferences – this then has consequences on a woman's capacity to care for herself and her children.

3.4 Rainy seasons and perfect storms

The inadequacy of the care that women and children receive becomes particularly pronounced during lean seasons. These are times of the year when food is particularly scarce and sanitation conditions are worse. In Sierra Leone the most apparent 'lean season' – the rainy season – typically stretches from June through to September. This is considered the most difficult period for many: food supplies from last year's harvest are often running low or have already been exhausted, and the labour demand on farmers peaks as households prepare, transplant, weed and harvest their land (Chambers, 1982).

But not everyone considers the specific duration of the rains to be the hardest time of year. Female group participants in site 2, for example, explained that November and December were also difficult as this was a rice-producing community, and the harvest time for their crop comes in December/January. Meanwhile, in site 1, we were told that 'mothers feel stress and worry' between August and October, the time of year when

food access is at its lowest and credit must be sought. Our research suggests that lean seasons produce three key dynamics that combine to create a perfect storm of conditions for the (re)production of malnutrition. These are: limited coping strategies; the impact of heightened labour demands; and poor environmental hygiene and sanitation. While these conditions are most apparent from June to September during the rainy season, they can also extend to other times of year in some communities depending on their harvest season.

3.4.1 Limited coping strategies

Most households in our research sites use subsistence farming to meet their food needs, growing their own rather than purchasing from markets. It is typically during the rainy season, as the forthcoming harvest approaches, that households' food supplies stored from the previous years' harvest begin to dwindle. Despite this perennial problem, most families have few coping strategies available to them. For instance, in site 2, it was explained that during December community members do more fishing in order to sell the additional fish and buy rice while waiting for the harvest. But this cannot overcome the overarching problem of food shortage. Some families ask relatives or neighbours for food, but there is a degree of shame attached to this and often most households in a community all face the same challenge and are not in a position to help one another. The most commonly referred to strategy in all research sites is taking loans from market traders – known locally as 'trust'. Households typically obtain a number of bushels of rice from a creditor, which they then pay for after the harvest (in cash or sometimes in exchange for palm oil or other foodstuffs, including rice in larger quantities). The interest rate is high, sometimes 100%. While this method gets a family through tough times, it also creates longer term cycles of debt, thus prolonging food insecurity:

Agriculture is our main source of livelihood. We do not have the support, like seed rice. So we tend to loan the seeds. This has led to an increase in debt. When you pay back you are left with nearly nothing and so you have to take another loan. Now we have paid up all our debts, but what to eat is a problem, so we have started taking loans again.

CHW, site 2

The food insecurity that often results from debts accrued during the lean season, as well as the lack of alternative coping mechanisms, has two consequences

of relevance here. First, the reduced access to food during this time is potentially damaging to the health of pregnant women and their unborn children, as well as to the nutritional status of young children. Second, household spending is constrained even more than usual, meaning that things like healthcare or complementary foods are more likely to be foregone in order to save money. Both clearly affect the care of women and children negatively.

3.4.2 Heightened labour demands

The heightened demand for agricultural labour during the rainy season places additional pressures on households, particularly women. One of the main reasons the rainy months are considered the most difficult is because this is when people in agricultural areas are required to work hardest. These months are when cultivation demands are highest, and people's days are spent in the fields performing a range of tasks, including threshing, hoeing, ploughing, transplanting, monitoring and harvesting (although both the necessity and timing of these will vary by crop). These tasks, Behrman et al. (1988: 304) note, 'require greater sustained human energy expenditure than slack-season tasks'.

During this season, the gendered division of labour at the household level shifts, with women expected to cultivate land alongside male community members (although in some places, women do this all year round). We repeatedly heard how a 'good woman' is one who takes responsibility for all domestic work, but during the rainy months her contribution to household wellbeing extends to agricultural labour as well. A woman who has been on the farm all day is still expected to prepare food, do laundry, etc. In site 1, for example, the chief told us: 'Pregnant women are suffering in this community. They have to go to the farm, cook and look after the family ... This causes problems'. Pregnant and lactating women are not exempt from farming, although the husband may permit some brief period of rest in the very earliest stages following childbirth. Cultivation is labour intensive work, and farmers often spend hours, if not entire days in the fields. This can be exacerbated by the location of cultivatable land relative to the community, which proved to be a particular issue in site 3 where the rice fields were located some distance from the town, resulting in more time spent away from the household.

The additional labour demands can have consequences for both pregnant and lactating women and their children. For pregnant women, these demands mean little time to

rest and potential health concerns, as it does not appear that pregnant women consume more energy to make up for their additional exertion. This can adversely affect their unborn child who may not receive sufficient nutrients as a result (Naeye and Peters, 1982).

For lactating mothers, the additional responsibilities during the lean season can be even more challenging. Pressures or desires to participate in agricultural labour can keep women away from the home and limit their ability to breastfeed children, with consequences for a child's development, particularly during early infancy. The following quote from a CHW in site 3 sums up the problem:

The rainy season is the difficult time. There is a food problem – there is not enough and people are dependent on their farms. In our culture, some marry many wives because of the work on the farm. They use the wives as workers. The children will suffer because they need breastmilk. If the mother is on the farm for five hours, then she will have deprived her child. Their work is very plenty. We use women as slaves: the domestic work, they are on top; the farm work, they are on top.

The Chief Health Officer in the same community agreed, stating that young mothers who go to work on the farms leave their young children with others who may not be able to supply them with breastmilk. This, he suggested, was one of the 'main contributing factors' to malnutrition. Aspirations or pressures to participate in the labour market – which are particularly high during the lean season – and a lack of recognition of the importance and time-intensiveness of exclusive breastfeeding mean that lactating women find themselves 'time poor' and may not be able to meet the nutrition needs of their children.

Existing research suggests there may be physiological and psychological dimensions to this. Evidence from Whitehead et al. (1978) shows how, during Gambia's rainy season, mothers experienced a sharp decline in capacity for lactation if their average energy intakes fell to less than 50% of the recommended value. On the psychological dimension, recent studies show how the experience of living in poverty encourages stress and brings on a 'mindset of scarcity' (where people focus on urgent issues at the expense of other important but less pressing ones). These effects may become more pronounced during certain periods of the year, particularly in places where livelihoods and incomes follow seasonal patterns (Mani et al., 2013). Essentially, this research shows there are

limits on one's 'mental bandwidth'; when levels of stress increase – due to financial concerns, for example – tasks deemed less urgent are pushed aside. This potentially helps to explain why infants under six months old are fed things other than breastmilk, why trips to the health clinic are foregone in favour of agricultural labour in the rainy season, or why appropriate foodstuffs are not privileged within household finances. Such stresses are the reality of poor, and especially conflict-affected, contexts.

It is critical, therefore, to understand how the rainy season creates productive demands on women's labour, in addition to their reproductive demands in the private sphere. These combine to place additional pressures on them during lean seasons, with knock-on effects for care for themselves and their children.

3.4.3 Poor hygiene and sanitation levels

The rainy season also affects the care of women and children by exacerbating low levels of hygiene and sanitation. Malnutrition and infection are not isolated conditions. Scrimshaw et al. (1968) identify a number of ways through which infections can contribute to malnutrition, including via diarrhoea, anaemia and nutrient deprivation (in Schaible and Kaufmann, 2007: 807),¹³ and the SQUEAC study also found that episodes of diarrhoea, respiratory illness and fever in children, as well as lack of access to clean drinking water, appeared to increase the likelihood of stunting (Binns et al., 2014: viii; 27). This means that the circumstances of the environment in which a child grows up have an important bearing on her chances of staying healthy.

Of particular importance are methods for dealing with faeces. Recent quantitative research in India, for example, has shown that sanitation is a highly significant determinant of height-for-age and that 'Open defecation, which is exceptionally widespread in India, can account for much or all of the excess stunting in India' (Spears, 2013: 1). Long-drop latrines are often absent from rural communities in Sierra Leone, meaning that people may have little option but to openly defecate in bushes or rivers (reported in sites 1 and 2). This creates a particular problem in the rainy season when excess soil saturation leads to high levels of surface runoff, thus increasing human exposure to contaminated water sources. This, in turn, heightens the risk of diarrhoea and other forms of infection, and has wider

13 The relationship also works the other way: malnutrition can heighten the likelihood of infection.

consequences on susceptibility to malnutrition.

3.5 Summary

This section details some of the factors associated with poor maternal and infant care in Kambia. It is clear that knowledge is one part of the story, as is often suggested by those working on nutrition. Our evidence, for example, suggests a fairly widespread misunderstanding of what constitutes exclusive breastfeeding, as does the previous SLRC SQUEAC study (Binns et al., 2014). But it is perhaps slightly too easy to get hung up on the question of whether people are being exposed to the ‘right’ kind of information. There are other, equally important questions to consider, for example around whether people are able to translate that knowledge into action and around how their social position determines their capacity to do so. Our research clearly shows that malnutrition is a deeply social issue. As such, understanding why a mother or child fails to receive an adequate nutrient intake means understanding a range of complex and messy social dimensions, from the gendered politics of household decision-making, to the social regulation of labour market participation.

What also comes out clearly is the seasonal dimension of malnutrition. Taking into account geographic variation in the timing of ‘lean seasons’, it is clear that certain times of the year are associated with a peak in contributing factors. The rainy season and harvesting windows produce a combination of factors – low levels of food access, heightened demand for labour, and poorer levels of household and community hygiene – that together form a ‘perfect storm’ of conditions for the low levels of care that we know (re)produce malnutrition. These too must be understood as deeply social, and deeply gendered, issues.

4 Navigating a plural health system: How are decisions made?

The previous section was concerned with understanding the social factors that limit capacities for care at the local level and thus contribute to malnutrition. But it is also important, as the UNICEF conceptual framework suggests, to understand the local health services available and how these are (or are not) utilised. Many parts of Sierra Leone – including our research sites in Kambia – are characterised by plural health systems. That is, there is no one single provider present, but rather diverse providers that cut across state and non-state forms of provision. Understanding how and why people use the health services available to them is critical in developing appropriate interventions address malnutrition.

Our research set out to make sense of people's relationships with the full range of health providers available to them. More specifically, this section is concerned with how and why health seekers in our research sites make decisions about which provider(s) to use, with a view to understanding the relational dimensions of state capacity to prevent malnutrition. The section is split into three parts. The first part maps the actors that constitute the plural health system and examines the relationships between them. The second presents an analysis of the kinds of factors which appear to influence people's health-seeking behaviour. The third section, in an effort to bring out the comparative aspects of our research, clarifies how these factors played out in our three research sites.

4.1 Cooperative plurality

Sierra Leone, like many countries, has a plural health system with multiple providers that users decide between. Five providers in particular were repeatedly pointed to in our interviews and focus groups. From the most to least formalised, these include:

- 1 District hospital.** Located in district capitals. In Kambia, the district hospital has the only qualified practising doctor in the district. District hospitals offer the only facilities with paediatric care, in- and out-patient services, and surgical treatment.
- 2 Peripheral Health Units (PHUs).** These government run clinics come in three sizes. In descending order: Community Health Clinics (CHCs); Community Health Posts (CHPs); and Maternal and Child Health Posts (MCHPs). There are 1,228 PHUs across Sierra Leone, providing everyday healthcare to communities.
- 3 Community health workers (CHWs).** Community volunteers who have undergone training either by

PHU or NGO staff in first aid and, in many cases, child malnutrition screening (using middle-upper arm circumference measurement).

4 Traditional birth attendants. Women in the community who assist expectant mothers throughout pregnancy and delivery. Traditionally these women were untrained but efforts have been made to sensitise them to complications related to pregnancy and encourage them to refer women to PHUs for delivery.

5 Traditional healers. This category can include: herbalists, who treat illness using plants and animal products; and religious healers, who treat illness through prayer and blessed amulets (Scott et al., 2014: 296).

The first three of these providers occupy different levels of the state-provided healthcare system – although, importantly, it is not clear that community members view any of the providers as a part of, or outside of, a particular ‘system’. Rather, the providers were all referred to as discrete options within the realm of healthcare, and connections were as strong between state and customary providers as they were between different levels of state provision.

In addition to these frequently mentioned health providers, two others deserve mention despite coming up less commonly – or indeed, not at all – during our research. The first, drug peddlers, are traders who sell medicines (often expired or counterfeit) without prescription or consultation. In the case of stock-outs in PHUs, people often rely upon drug peddlers. The second health providers, not mentioned at all in focus groups or interviews, are secret societies. Both male and female secret societies in Sierra Leone (in Kambia, *Poro* for men, and *Bondo* for women) are repositories of spiritual knowledge, with society elders believed to possess knowledge of spiritual treatments for illness. Societies are, as the name suggests, secret, and one of the societies’ laws is that members are not meant to speak about the society to outsiders. As a result, these are a particularly inscrutable health provider. No up-to-date data exists regarding society membership, but it has been estimated that approximately 91% of women in Sierra Leone have undergone clitoridectomy, a key part of secret society initiation for girls (Statistics Sierra Leone and ICF Macro, 2009: 13). It is likely that *Bondo*, in particular, plays an important role in maternal health, as women’s secret societies have traditionally been involved in practices surrounding childbirth throughout the country (Fanthorpe, 2007). Despite the likely importance of this role, the secrecy surrounding the societies means our

research does not shed any further light on their role in health provision or their relationships with other health providers.

This plurality of health providers is hardly surprising given Sierra Leone’s still relatively recent experience of civil war and the breakdown of state functions that accompanied the conflict. As Scott et al. note (2014: 292):

Caregivers in Sierra Leone have endured in the absence of adequate health care for decades: their resourcefulness in devising multiple strategies for care must be recognised and integrated into the service delivery reforms that are making health care increasingly available.

A plural health system also helps to overcome the shortage of formal healthcare providers in the country. According to the WHO (2011b: 122), Sierra Leone has just 1.9 physicians, nurses and midwives for every 10,000 people, which sits in stark contrast with the recommended ratio of 23 providers per 10,000 people required to deliver basic maternal and child health services.

Our interviews with each of these providers, as well as focus groups with health system users, found that they are largely (but not always) cooperative, rather than competitive, and often refer cases between each other. This was particularly the case in the most remote of our research sites – site 1 – where PHUs were relied upon least. It may be the case that it is in settings where government-provided services are least institutionalised (and least accessible) that state providers need to build good relationships with the dominant non-state providers. Yet, even in sites where the PHU was more established and utilised, community members reported that PHU staff, traditional healers and TBAs all refer cases between themselves, with explicit examples of PHUs referring cases to traditional healers in sites 1 and 2 (this was much less evident in site 3). As one traditional healer in site 2 explained that all the health services work ‘hand in hand’.

In addition, we found that while health users often move through these providers in a sequential manner, it is also common for people to use multiple providers at once in order to maximise chances of recovery. This is broadly consistent with research conducted by Scott and colleagues which found that, at times, people felt it necessary to use ‘traditional’ and ‘modern’ medicine simultaneously in order to deal with all aspects of illness

– both biomedical and spiritual – in order to achieve full recovery (Scott et al., 2014: 298). The cooperative interactions between health providers, as well as the manner in which users access multiple services in tandem, are important features to be considered when attempting to alter health-seeking behaviour and to minimise the unintended consequences that can stem from such attempts. Importantly, reforms focused on just one provider within this interactive system often have consequences for the other providers (Scott et al., 2014: 300). As a result, reforms need to understand how the plural health system actually works from the perspective of those who navigate it, as our analysis sets out to do below.

4.2 Factors influencing decisions about healthcare providers

Given this plural and largely cooperative health system, how do households navigate the options available to them when a child is sick and what factors influence decision-making? Our research found that the particular path taken is influenced by a number of factors, relating to proximity, associated costs, tradition, perceived effectiveness and the manner in which providers treated users. All of these factors are in turn mediated by the nature of power relations within the household, which are fundamental to decision-making vis-à-vis health seeking behaviour. Each of these factors is discussed below, before considering how they interact in the three research sites investigated.

4.2.1 Proximity

The most apparent obstacle to reaching health providers is the sheer distance that people have to cover to reach care. Our findings suggest that this is a particularly binding constraint influencing decisions about where to seek healthcare. This was most apparent in research site 1, located six kilometres from the PHU under whose catchment zone the community falls. (Interestingly, there is another PHU five kilometres away which many of the community use, despite falling outside its catchment zone.) No one in the community possesses a vehicle and so travelling to either PHU means either hiring an *ocada* (motorbike taxi) – bearing in mind that there is no phone signal within the community to call outsiders – or walking. *Ocadas* come through the town on an ad hoc basis, but not on Fridays, Saturdays or Sundays. Three mothers have delivered babies on the walk to the PHU – and on one of these occasions the child died. One expectant mother on the second day of our research had walked



Engaging with local leaders, such as chiefs, religious leaders and traditional healers is crucial to addressing child malnutrition.

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to the closer PHU to attend an antenatal check-up. It took her three hours to walk five kilometres to get there as she had to stop frequently for rests along the way (the unpaved road is very steep and muddy in the rainy season). Such challenges of access mean that many mothers only travel to the PHUs for what they consider to be serious health matters. For instance, the mother above was only attending antenatal check-ups because she had experienced bleeding in the early stages of her pregnancy. She has three other children and did not attend antenatal visits for these pregnancies, instead giving birth at home with a TBA. She plans to give birth at home for this pregnancy as well because she has not experienced any problems doing so in the past and because the PHU is too far away to get to at short notice.

The Government of Sierra Leone has sought to overcome some of the challenges associated with geographical access by training CHWs, who, in theory, can assist in monitoring illness at the community level and refer those requiring treatment to the PHUs. However, we found that the CHWs were not widely used in practice. This may be

due to the particular dynamics in each of our research sites: in sites 2 and 3 there was an accessible PHU and so the CHW did not play as central a role; in site 1, where there was no PHU within a five-kilometre radius and where we would therefore have expected the CHW to play a more active role, the woman filling this role was not mentioned as a healthcare provider unless we explicitly asked about the CHW. This may be due to the fact that she is a young woman who only undertook the position after some pressure from her family and others in the community. Community members here, when asked directly about the CHW, said that she was available more for matters of first aid than illness. CHWs also receive limited and often poor quality training, which does little to equip them for the role they are meant to undertake. As a result, in this case at least, the CHW does not appear to assist in overcoming the challenge of PHUs' geographical distance. This also adheres with findings from the SQUEAC study that suggested connections between the CHWs and the rest of the health system were weak (see Binns et al., 2014: vii).

4.2.2 Associated costs

The costs associated with healthcare providers come in at least three forms: (1) user fees, (2) transport costs and (3) lost time for work and other tasks. Each of these play a role in influencing decisions about how to access healthcare.

User fees

In 2010, Sierra Leone introduced the Free Health Care Initiative (FCHI) for pregnant and lactating women and children under five, formally abolishing user fees for a basic package of their healthcare needs (Donnelly, 2011). It was estimated that approximately 230,000 pregnant women and nearly one million infants would benefit from the free healthcare services in any given year (GoSL, 2009). Findings to date suggest that the FCHI has led to greater uptake of government health services, which fits with broader findings suggesting the removal of user fees benefits the poor in particular (Diaz et al., 2013). Recent research, for example, indicates that between 40% and 52% of children with diarrhoea, fever or presumed pneumonia are brought for government healthcare (Diaz et al., 2013; Statistics Sierra Leone and ICF Macro, 2009; Statistics Sierra Leone and Ministry of Health and Sanitation, 2010).

Yet, despite this success, some PHUs continue to charge user fees. Indeed, research by the Health For All Coalition suggests that user fees are actually on the rise, observing

an increase from 8.6% in 2012 to 12.4% in 2013 (although this may also suggest that *reporting* of user fees being charged is increasing).¹⁴ Thus, while the FCHI has certainly had a transformational impact on health-seeking behaviour for many, cost remains an important barrier to access, particularly in remote communities.

In two of the three research sites we visited, communities consistently reported having to pay fees to PHUs for healthcare services and medicines. In some cases, it was apparent that these were services or medicines not covered by the FCHI and that communities were simply unaware that these services were meant to be paid for. Regardless of this, many people believe that they are being unfairly charged, creating grievances that are important in terms of influencing future health-seeking behaviour (and possibly their relationship with state authority more broadly). It is important that communities are made aware of what should be covered by the FCHI and what falls outside of this so that expectations are not inflated – especially in light of efforts to rebuild state-society relations in the post-conflict context.

In other cases, however, PHU staff did appear to be charging for services or medicines that are meant to be free (reportedly between 1,000 and 7,000 Leones per visit, or approximately \$0.23 – \$1.59). While this might seem low, it is important to keep in mind that over 50% of the population of Sierra Leone lives on less than \$1.25 per day (World Bank, 2011). This means that a key benefit of government-provided services is being undermined, thus creating a barrier to access for some people. This clearly needs to be addressed, not just through increased monitoring of PHU staff, but by considering how to alter the incentives that propel them to extract payment from users. This undoubtedly relates to the nature and quality of work conditions, including pay. In 2012, nurses in Sierra Leone's government-run health facilities reportedly earned \$55 per month – roughly \$1.80 per day (IRIN, 2012). It is hardly surprising that many feel compelled to supplement this through informally charging user fees or selling medicines. But informal charging may not be fully explained only by low levels of pay. One informant working in the health sector suggested cultural factors were also at play: 'Bad habits die hard, especially in rural communities where health workers are like chiefs'. Regardless of the causes, this experience is clearly undermining community perceptions of PHUs. When asked about PHU staff qualifications, one male focus

14 Interview with Alhassan Bakar Kamara, Health For All Coalition manager (June 2014).

group discussant replied that the only qualification they have is ‘the degree in taking money from people’.

Of course, traditional healers and TBAs also charge user fees for health services. On the whole, these were felt to be more flexible than those charged by PHUs, as they could be paid over time, or in kind. As Scott et al. (2014: 296) note: ‘traditional healers were often lenient about payments; some would accept a small amount coupled with hens, clothing or offers to farm on their behalf. In addition, traditional healers were reported to waive fees for relatives’. However, some community members noted that traditional healers can in fact be more expensive than PHUs, depending on the treatment prescribed. For instance, if a goat or chicken has to be purchased as part of the treatment (for using animal parts, for example) then traditional healers can actually become quite costly.

Finally, medicine stock-outs at PHUs can also lead to increased costs for users. Where the PHU is out of medicine, they provide patients with a prescription to purchase medicines at a pharmacy. Stock-outs were mentioned as having been experienced in each of the communities we visited, suggesting that this is a common occurrence across locations. This results in additional costs to health users and many reported buying medicines from drug peddlers, rather than pharmacies, due to cost and accessibility (drug peddlers often travel from village-to-village). This raises concerns about the use of expired or counterfeit drugs, as well as receiving incorrect doses (Scott et al., 2014: 296). As Diaz et al. (2013) found in their study in Sierra Leone: ‘stock outs can undermine the potential impact of providing free health care. In Sierra Leone despite FHCI in some instances, drugs and other essential medical supplies was simply not available’. PHUs in Sierra Leone are funded through performance-based financing from the central government every four months, but PHU staff reported that this funding is often delayed, meaning that PHUs do not have funds or stock in the interim.

Travel costs

While the user fees charged by the traditional healer, TBA and PHU may be of a similar level, if the PHU is not located within the community and requires travel costs, then they become much more unaffordable. In the two smaller research sites – 1 and 2 – travel costs can certainly be considered a barrier to healthcare access. In research site 1, the distance to the PHU, combined with a lack of vehicles within the community, meant that any trips

required substantial walking or travel costs: an *ocada* ride to the PHU takes 30 minutes and costs 5,000 Leones (\$1.14). Some community members spoke of an informal association in the village whereby members would make small contributions when someone needed to hire a car to travel to Kambia district hospital (people with serious illnesses in this community were reportedly taken directly to the district hospital, rather than PHUs, by taxi at a cost of approximately 20,000 Leones, or \$4.55). Male focus groups in site 1 also told us that some women exchange sex for *ocada* rides to the PHU, highlighting the difficulty of meeting travel costs. In research site 2, while there is a MCHP within the village, alleviating travel costs in the first instance, community members reported taking those who remain ill to a larger PHU several kilometres away by car or boat. Most prefer to go by boat, which is cheaper but slower, highlighting how financial constraints influence decision-making.

Lost time

Costs should also be thought of in terms of time. The vast majority of the population in our research sites did not have access to cars and only some had access to motorbikes (in research site 1, there was no vehicle of any kind in the entire village). This means that PHUs are often reached on foot, which can take hours – especially for those who are pregnant, ill or injured, to say nothing of those with permanent disabilities. What is more, many women reported that after travelling to the PHU very early to arrive by mid-morning, they have to wait until mid- to late-afternoon to meet clinic staff. Travelling to a PHU can thus take substantial time away from other productive and reproductive tasks such as farming, cooking, cleaning, caring for children, market trading, etc. Associated costs should also be considered, therefore, in terms of lost time and lost earnings.

Of course, as the above discussion highlights, issues of proximity and associated cost are closely linked. Combined, these two factors can become more than just an obstacle – indeed, they can be a binding constraint on the options available to healthcare seekers. A household’s financial limitations to accessing healthcare, aggravated in those cases where services are located at a distance and require travel, limit what is possible in a very real way. A number of respondents indicated that they would prefer to use government health services but that they were simply inaccessible and/or unaffordable. This is not to suggest that alternative providers are only used because of proximity and cost issues associated with PHUs, but this certainly plays a role.

4.2.3 Perceived effectiveness

The perceived effectiveness of health providers is a key factor that households take into account when deciding where to seek help. Diaz et al. (2013) note that ‘perceptions of receiving ineffective treatment due to symptoms not abating often led to respondents switching type of provider’. Unfortunately, however, other constraints can outweigh the perceived effectiveness of treatment, meaning that households are forced to use services they do not deem to be the most effective.

The majority of community members in research site 2, and some community members in research site 1, felt that the PHU offered better care for sick children than alternative providers. Mothers generally said that PHU medicine worked more quickly than traditional medicine and, in research site 2 in particular, respondents were adamant that PHU medicine was best. In communities where access to PHUs was not a problem, this generally meant that households opted to take sick children to the PHU first. Similarly, Scott et al. (2014: 297) found that ‘respondents who were most adamantly opposed to other forms of care and in favour of government clinics tended to live close to facilities.’ However, in site 1, even where some mothers felt PHU medicine was more effective, due to accessibility and affordability challenges they often relied first on alternative providers. This is also in keeping with research from Scott et al. (2014: 296) who found that: ‘Caregivers living far from healthcare facilities or unable to procure funds for treatment described using traditional treatments despite a preference for care provided by government facilities’.

However, a number of community members claimed that there are some illnesses that traditional medicine is more effective at dealing with. This is primarily where illness is perceived to be caused by spiritual forces, rather than a manifestation of underlying biomedical problems, although malaria and typhoid were also listed as illness that traditional healers can deal with effectively. Because people are not always sure which underlying factor is responsible for their illness, households reported pursuing both traditional and PHU medicine at once. Some spoke about this as trying all options available to find whichever cure is most effective, whereas others suggested that only the use of both medicines in tandem could deal with all aspects of an illness (see also Scott et al., 2014: 298). Where both treatment approaches are pursued simultaneously, it becomes impossible for a household to know which medicine has actually been effective in curing an illness (if indeed one was), and it is thus unclear what

this means for how households view the effectiveness of both providers the next time a family member is ill.

CHWs were rarely mentioned unless explicitly asked about. They were perceived as helpful but more in a first aid sense than medical treatment. This is, in part, because they reportedly have few medicines so are not seen as an effective source of treatment. PHU staff also reported that there are challenges in getting CHWs to attend monthly trainings, as they are volunteers and do not receive assistance in getting to the PHU each month. This can mean that the CHWs are quite disengaged from their role within the healthcare system and efforts need to be made to effectively incentivise, train, supervise and monitor them.

4.2.4 Manner in which providers treated users

We found that decisions about where to seek healthcare are, unsurprisingly, influenced by previous experience of treatment by providers. As Scott et al. (2014) argue, ‘care seeking hinges on perceptions drawn from prior interactions with health services’. This extends beyond one’s own treatment at the hands of health providers to reported experiences of others in the community. In research site 1, for instance, many community members reported personally experiencing poor treatment by PHU staff – including staff being rude, unhelpful, denying women water after the long walk to the clinic, etc. Not only did this experience deter those women directly affected by this treatment from using PHUs – but others within the community who had not personally experienced this poor treatment also referred to such reported mistreatment as a reason why they would not go to the PHU. In this community, respondents spoke of often skipping the PHU entirely and going directly from the traditional healer to the district hospital in Kambia.

In contrast, in research site 2, community members were incredibly complimentary about the PHU staff and their helpfulness, with one mother claiming that they would open the PHU in the middle of the night if you needed assistance. This appeared to be a critical factor in encouraging use of PHU facilities.

4.2.5 ‘Tradition’

While alternative health providers, such as traditional healers and TBAs, are utilised in large part because they are closer and considered more affordable, as has been highlighted above, they are also perceived to offer an important and unique form of treatment that the PHUs

and CHWs cannot deliver. Illness is often considered in Sierra Leone to be a manifestation of the spiritual world and traditional healers are seen to possess the ability to mediate with the spirits of ancestors who may need to be appeased in order for a sick person to recover (Ferme, 2001). This stems from a belief that the outward, physical world, is merely one layer of reality and that it is intimately connected to a metaphysical world beneath that can have direct effects on the physical world (ibid). One traditional healer told how she selects herbs to treat a child possessed by a devil: 'If I go into the bush and see a snake on the leaf, this will indicate that the child has a devil. I will use the herbs that I find the snake on to heal the child.' Understanding these beliefs and how they relate to malnutrition is critically important to finding sustainable solutions to prevent it.

Added to this causal understanding of illness as not always connected to biology is the high level of respect accorded to elders and traditional knowledge in Sierra Leone (Diaz et al., 2013). Even where individuals may not actually *believe* in the particular treatments or causes of illness diagnosed by traditional healers, as venerated people in society, their views are not to be trifled with. This is particularly the case where the traditional healer is a religious leader (as opposed to an herbalist) as their treatments then become bound up with social norms about good behaviour.

4.2.6 Role of household power relations

Mediating all of the above factors, most critically, is the nature of household power relations. These determine the balance of the other factors in decision-making and are critical in understanding health-seeking behaviour.

In all our research sites, fathers clearly dominate decision-making about where to take their children when sick. When asked about who makes decisions regarding where to take sick children, a father in one focus group responded: 'The father – of course', and was met with unanimous nods from the other men. In part, this dominance of men in decision-making is due to their control of household income – necessary to access most health providers. Even where women made their own income, virtually all of them said that they handed their earnings over to their husbands. As one woman responded 'you can see it [your earnings] but you can't touch it.' Another woman reported 'not even seeing it, let alone controlling it'. Even in the few instances in which women said they did not give their earnings to

their husband, they still reported consulting him on decisions about healthcare for the family. Decision-making dynamics are thus also deeper than control of household finances and speak to perceived gender roles. Focus group discussions routinely found that husbands were viewed as responsible for 'taking care of the family'. Many in the community, both men and women, referred to men's legitimacy as the decision-maker because of dowry payments. As one female CHW told us:

The man has the power, because he pays the dowry. He has to be given respect. The men are in control in this community. The man has to be in control because if my parents die he will be responsible for burying them. He is also responsible for looking after my other family members.

There is a sense, then, in which people feel that men have bought their rights to decision-making and that this must be respected.

Decisions are also influenced, to varying degrees, by paternal grandmothers (the father's mother) who often live with their sons if their own husbands have died. The role of paternal grandmothers should not be underestimated – they are often around the home more than husbands and can exert substantial influence over their daughters-in-law. It is often mothers-in-law who encourage traditional remedies for illness that they used for their own children, when PHU facilities were significantly scarcer and not free to use. Our focus groups revealed that grandmothers were much more likely to believe strongly in *banfa* and in feeding infants bitter herbs within the first six months of life. Indeed, it is often the paternal grandmothers who collect and stew the bitter herbs. Our focus groups with grandmothers did not indicate substantially stronger support for traditional healers than amongst mothers, and they appear to welcome PHU healthcare (bearing in mind all their limitations, discussed above) as much as other members of the community. However, the role in promoting traditional practices in the area of child feeding practices is indicative of their influence and suggests that grandmothers, along with fathers, are an important target for sensitisation in order to achieve behaviour change. Focusing on mothers alone will not result in change if they are not the ones making decisions. This is also supported by: i) the SLRC SQUEAC study, which found that where fathers are involved in M2M Groups, children are less likely to be stunted than where only mothers are involved (Binns et al., 2014: xiii); and ii) other research from northern Sierra Leone, which finds that a woman's ability to join a

M2M Group is partially dependent upon permission from her husband (MacWright, 2012).

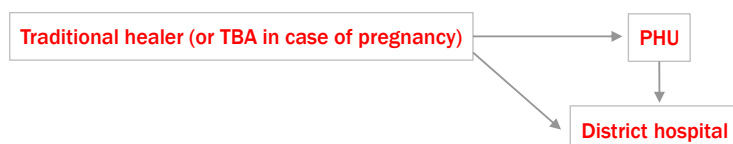
4.3 How these factors play out in our research sites

The above factors all play a role in influencing decisions around uptake of health services. Considerations of each factor do not happen discretely, but rather as an interactive set of dynamics. Some factors – such as proximity and associated costs – can become binding constraints, limiting the field of possible options in a very real way. Others, such as perceived effectiveness, quality of treatment and tradition are more subjective and changeable factors based on previous experience (or stories of others' experience) with providers. Finally, the role of household power relations governs how all the other factors are weighted in decision-making. As Scott et al. (2014: 294) note:

Care seeking is a socially negotiated process where factors such as cultural norms, beliefs about disease aetiology, the acceptability of interventions, perceptions about the quality of care provided, household power relations and social networks interact to inform household care-seeking pathways.

Below, we map out how health seeking behaviour tends to occur in the three research sites we visited, attempting to capture how the above factors play out in an illustrative if not systematic fashion. Importantly, the dominant paths recorded in each site vary. This is not surprising given the different contextual factors in each community, however it does raise challenges for the GoSL and development partners due to the diversity of behaviours that are apparent even within one district – let alone across the country more broadly.

4.3.1 Research site 1



CHW used only for minor issues. Often not mentioned until explicitly asked.

In this community, the traditional healer is clearly the first port of call when children are sick. Where this does not result in improvement or recovery, community members go either to the PHU or directly to the district hospital.

This path is influenced by the particular constellation of factors at play within the community (these are crudely captured in the table below). In this case, the PHU fares particularly poorly – being distant from the community, charging patients for services, and being rude and unfriendly towards patients. The traditional healer (and in the case of pregnancy, the TBA) is conversely located within the village and perceived to be cheaper due to leniency in payment terms. However, the PHU was still considered more effective, on balance, vis-à-vis the traditional healer who was considered effective in some, but not all, cases. The dissatisfaction with the PHU is further highlighted by the fact that many respondents reported bypassing the PHU entirely to go straight from the traditional healer to the district hospital, where they felt they received a better service. Finally, the CHW sits somewhat apart from the rest of the health system within this community and was rarely mentioned unless specifically asked about. The CHW is seen as more of a first aid officer and useful for only minor issues, suggesting these roles might not be as linked into the health system as the Ministry of Health and Sanitation and development partner policies would suggest.

Factors influencing use of health service	PHU	Traditional healer/TBA
Proximity	5-6 kilometres	Within village
Associated costs	Cash payments for service	Cash or in-kind payments for service
Tradition	No link	Link
Perceived effectiveness	Effective	Moderately effective
Manner in which users are treated by providers	Poorly treated by PHU staff	Neutral

4.3.2 Research site 2

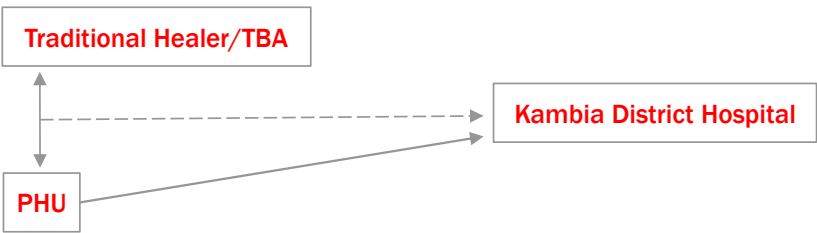


CHW not mentioned until explicitly asked. Used only for minor issues.
TBA supported mothers but worked with PHU so that all mothers delivered at the clinic.

In site 2, the PHU was clearly the preferred health provider in the first instance. If a child remained ill following treatment at the PHU, the traditional healer or a larger PHU (a CHC) two hours away by boat is used. Some also mentioned the district hospital in Kambia but this is more costly to get to. In this community, the benefits of the PHU were clear – there was an MCHP located within the village that did not charge fees for service, treated patients well and was largely seen to be effective. One mother interviewed who has five children between the ages of five and fifteen (and is pregnant again) had given birth to all her children at a PHU and would never consider not using this service. She reports never having taken any of her children to the traditional healer. In contrast with the PHU in this community, the traditional healers charge a small fee for service and were considered only sometimes effective in treating illness. Again, as in site 1, the CHW was not mentioned as a significant health provider without being specifically asked about. The CHW was seen as useful only for minor issues, although reportedly carried out tests for malaria. It is perhaps to be expected that the CHW plays a small role in this community because of the strong PHU presence. Indeed, it is telling that the CHW himself described his role as a ‘motivator for the PHU’. TBAs were more utilised and cooperated closely with the PHU – for instance bringing labouring women to the clinic for delivery.

Factors influencing use of health service	PHU	Traditional healers/TBA
Proximity	Within village	Within village
Associated costs	Free	Cash or in-kind payments for service
Tradition	No link	Link
Perceived effectiveness	Effective	Only effective for limited cases
Manner in which users are treated by providers	Treated well by PHU staff	Neutral

4.3.3 Research site 3



CHW not mentioned until explicitly asked.

There is a high number of health providers in site 3, including a CHC (the highest level of PHU), approximately 18 CHWs, and multiple traditional healers and TBAs. There is also at least one trained M2M Group. People generally seem to use either the PHU or the traditional healer as their first port of call, but often described going to the other afterwards if they felt they had not received adequate treatment. Evidence suggests quite a mixed picture in terms of which provider is approached straight away: while male discussants claimed that women preferred the traditional ‘country merecin’, a number of female discussants openly stated a preference for the PHU. In any case, after both options are exhausted, people will travel to the District Hospital in Kambia Town. Despite the relatively high number of CHWs in the community, these were rarely – if at all – mentioned by respondents. Given that the CHWs were described by the Community Health Officer of the town’s CHC as playing an important and visible role in raising awareness about clinic attendance, and in cementing links between PHU and community, this is both surprising and problematic. Our research also suggests that relationships between the PHU and wider community are either poor or non-existent. Interviewees routinely complained about being treated badly by PHU staff or being charged for things they believed should be free. Relationships between PHU and other health providers, such as the traditional healers, are also weak, and evidence from our previous research in Kambia (see Denney et al., 2014) suggests a complete lack of connection between the PHU and M2M Group.

Factors influencing use of health service	PHU	Traditional healers
Proximity	Within town	Within village (multiple)
Associated costs	Reports of paying for under-5 cards, registration cards and FCHI drugs	Cash or in-kind payments for for service (not always compulsory)
Tradition	No link	Link
Perceived effectiveness	Effective	Effective in some cases
Manner in which users are treated by providers	Poorly treated by PHU staff	Neutral

5 Coming back to capacity: translating findings into action

The SLRC Sierra Leone research programme – of which this paper is one part – is concerned with state capacity to prevent malnutrition and with what development partners can do to support this. While state capacity has not been an explicit focus of this paper, the above discussion demonstrates some of the social factors that influence inadequate care for women and children and healthcare decisions that capacity building efforts need to engage with. In this final section, we draw out the implications of this particular phase of research by, first, reflecting on what our findings mean for efforts to prevent malnutrition, and second, identifying policy recommendations aimed at the GoSL and development partners.

5.1 What does this mean for efforts to prevent malnutrition?

The five implications outlined below demonstrate the importance of a deep understanding of what drives behaviour at a local level, and offer insights into how interventions can better prevent malnutrition on the basis of this understanding.

- 1 Efforts to prevent malnutrition need to engage with the **evolving nature of traditional beliefs and practices**. The importance of ‘tradition’ (acknowledging the limitations of this term) is frequently highlighted by the nutrition community in Sierra Leone. This includes issues surrounding food taboos, feeding infants bitter medicine and *banfa*, which all affect child and maternal nutrition in important ways. Yet, it is also important not to treat these beliefs and practices as immutable. Our research found that while these beliefs and practices are clearly important, they are also dynamic in nature (in part, this is likely the result of health information being modified and misinterpreted as it passes along the chain). Thus, keeping watch of how ‘traditional’ beliefs change is as critical as acknowledging their existence in the first place.

For example, while food taboos exist in many communities, some communities do not appear to have any food taboos (such as site 2). Those taboos that do exist in the sites we visited are quite

specific – driven in part by local opinion leaders – and certainly did not extend to the many taboos that are frequently cited by the nutrition community (we heard none of the beliefs about certain foods turning children into liars or thieves, for instance).



Husbands provide money to their wives for rice but rarely for other ingredients. As a result women fish, use garden farms or the small income they have to purchase meat, fish and vegetables.

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Moreover, some of the taboos appeared not to be culturally specific, but rather practical responses to health concerns. For instance, a belief in one community about not eating mangoes that have fallen from trees appeared to be connected to health warnings about bats carrying the Ebola virus that feed on the mangoes. This taboo is thus more time-bound to a current risk, rather than connected to cultural beliefs in that community.

Similarly, a belief in *banfa*, while still strongly held by the overwhelming majority of mothers we spoke to, does not appear to be respected *in practice*. Many mothers reported having sex while breastfeeding, for various reasons, despite their belief that this is not good for the child. In most cases, this seemed not to have led to early cessation of breastfeeding (in part because there was little else to feed the child). A small number of women have embraced a more practical approach to the challenge, with one mother in site 1 shrugging and telling us 'I just make him wear a condom'. There was a diversity of views as to whether

having protected sex while breastfeeding can cause a suckling child to become ill: some felt that this solved the problem, while others did not. In any event, it was apparent that the influence of a belief in *banfa* on behaviour is highly variable.

Where we found perhaps the most resilient traditional belief was in the use of bitter medicine to calm infants' stomachs and help them sleep. This remained common practice in all three research sites and was not viewed as problematic by any community members we spoke with. Yet even here some degree of variation was apparent. While in sites 1 and 3 it remained common for mothers and grandmothers to feed infants warm water, as well as bitter medicine, in site 2 everyone was well informed that warm water was not appropriate for children under six months (and no one reported using it). Despite this, community members there did continue to use bitter medicine (which is mixed with water and therefore still poses a risk). It is unclear exactly why these practices persist despite mass sensitisation campaigns, although a combination of factors are probably at play. These include: distrust of the source from which the information is coming; the resilience of past practices and beliefs; a person's inability to act on information due to their weak position within the household; and recourse to risky practices in the face of limited alternative options.

These examples suggest that policies and programmes seeking to accommodate traditional beliefs in efforts to prevent malnutrition need to engage with their changing dynamics and local specificity in order to be meaningful. This not only means acknowledging that beliefs can be strongly held, but also that these beliefs are both continually evolving and are just one of a number of factors that influence behaviour and decision-making.

- 2 Efforts to **support households during lean seasons** need to consider when these occur for different communities and the dynamics that shape coping strategies. Importantly, our research found that the 'lean season' is not limited to the rainy season experienced throughout the country between June and September, but also extends to other times of the year depending on harvest times in particular communities. As a result, site 2 in our research also experienced a lean season in November and December, ahead of the rice harvest in January. Understanding the variation in food security across

the year in different localities is central in being able to support households to cope during these times.

In addition, the sheer lack of available coping strategies was particularly striking. Most people were unable to rely on neighbours, who face similar difficulties, so ultimately come to depend on loans from traders. These traders charge very high rates of interest (sometimes up to 100%), locking borrowers into a cycle of debt and dependence that extends much longer than just the lean season. In turn, it is often in lean seasons that the demand for labour increases, putting pressures on women, which then has knock-on effects for the nutritional status of their children. Interventions to support food security during lean seasons need to engage with these coping mechanisms and open up space for alternative options (such as a wider range of credit sources).

- 3 Preventing malnutrition clearly requires **improving PHU performance** in order to ensure that more households receive proper messages on IYCF practices and proper treatment for illnesses that can exacerbate malnutrition. Our findings suggest multiple ways in which this can be done. First, greater public awareness is needed regarding what is covered, and what is not, in the FHCI package. This will help to alleviate dissatisfaction resulting from households having to pay for medicines outside of the FCHI that they think are meant to be free.

Second, the way in which PHU staff treat patients – their ‘bedside manner’ – appears to influence the likelihood of future attendance. Negative experiences at the PHU – being made to wait all day, being ‘looked down upon’, and so on – sometimes deters repeat visits. In sites 1 and 3 this was a particular challenge, with communities even bypassing the PHU and going straight from the traditional healer to the district hospital due to poor treatment by PHU staff. This connects with the findings of the first SLRC Sierra Leone report (Denney et al., 2014), which found ‘softer’ capacities around human interaction and communication are overlooked by dominant training approaches, which have a stronger focus on technical capacity. This is understandable given the centrality of technical capacity to effective healthcare, but this technical capacity is only effectively operationalised in conjunction with other, softer, capacities. If people are deterred from coming to PHUs because they are not treated well by staff, then the technical knowledge

is of limited use.

Third, and related to improving the ways staff treat patients, is ending staff demands for payment from patients for services and medicines that are meant to be covered under the FHCI. This was reportedly a problem in sites 1 and 3 and played a strong role in deterring people from relying on PHUs. Charging fees for services that are meant to be free poses a number of problems. First, it can deny treatment to those who need it and neglect an opportunity to pass on appropriate IYCF messages. Second, it creates a bad reputation for the PHU, deterring future use by those affected and those who hear about it. Third, it can potentially undermine state-society relations, with communities feeling let down by a state-provided service that they put their trust in. Recent evidence from Sierra Leone suggests, for example, that variations in the quality of decentralised service delivery helps explain why some people view local government officials as trustworthy political authorities when others do not (Sacks and Larizza, 2012). Altering this behaviour requires a consideration of PHU staff incentives and why such demands persist in some places and not in others. In particular, the four-monthly performance-based financing system from central government needs to be strengthened so that financing is timely and sufficient. It is unrealistic to expect small-scale demands for payment at the local level to stop when financing from the centre remains unreliable. In addition, working conditions for PHU staff should also be taken into account. While it may not be immediately possible to increase salaries, finding ways in which PHU staff can feel rewarded and recognised for their work can help to deter the charging of informal user fees (as might ensuring that health professionals have access to necessary equipment – something the recent Ebola outbreak has highlighted is not always the case).

Addressing these issues will help in overcoming some of the constraints communities face in accessing PHUs. Yet, the constraints around proximity and associated costs of travel are more difficult to overcome in the short-term. In part, CHWs were devised to help plug this gap, yet our research found that in many places, **CHWs are not readily seen as a key part of the health system** but rather as first aid officers to be used in only limited circumstances. This was always going to be a challenge given that CHWs are community volunteers with other jobs. If

they continue as they are, then it may be unrealistic to expect them to play much more of a role. If their roles are to be enhanced, then they require better training in more areas of healthcare, as well as a clearer connection to PHUs. This means ensuring they actually attend the monthly trainings at PHUs by providing them with incentives or assistance to travel there. Recognition, either through payment or other incentives, should also be considered so that CHWs themselves invest in their role and promote it within the community.

- 4 Our research also points strongly to the need to factor in nuanced understandings of **household power dynamics** in interventions to prevent malnutrition. In all research sites gender, and to a lesser extent age, was a critical component of decision-making about all aspects of nutrition – from decisions around breastfeeding, what to eat, how food is apportioned and where to take a sick child. Gendered power dynamics mean that women are rarely able to enforce their own views, and their own views are also often colonised by the same power dynamics, meaning that some female respondents did not feel it was their right to make such decisions in the first place. This means that targeting mothers – a popular focus in many efforts to prevent malnutrition – is of limited use when they are not able to enforce their decisions. It is also important, therefore, to engage with husbands, mothers-in-law and community elders, who can act as important gatekeepers.

In part, this is about **getting beyond nutrition as a ‘women’s issue’**. Because of the centrality of women as life-givers and primary carers, the nutrition community has understandably centred their attention on mothers. Yet this misses the important ways in which mothers are embedded within a wider network of relationships and power structures that they cannot act outside of. As a result, changing women’s behaviour is dependent on changing the power structures that delimit their behaviour in the first place. This means reframing nutrition as not just a women’s issue, but as a community-wide challenge that men and women, young and old, all play a role in addressing. For instance, M2M Groups might better be labelled Family Support Groups to encapsulate this message.

In addition, it is also important to understand how polygamous settings, common in northern Sierra Leone in particular, influence household power



Where women have to travel long distances to reach a PHU, they will only do so for what they consider to be serious health matters.

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dynamics. Where a mother has a co-wife, the latter can be an important source of both support (allowing for burden-sharing) and conflict (triggering competitive behaviour). Mothers-in-law are also an important factor, at times preferring one wife over another and thus skewing power relations within the household. Interventions to prevent malnutrition need to be aware of how they can be impacted by these dynamics. For instance, the often privileged position of ‘first wife’ can mean that where a household benefits from a project, it is only part of that household that benefits. This was evident in an interview with a second wife in site 2, for example. Her connections with a Lebanese businessman afforded her privileged access to goods that she then traded within the village, making a small income. Yet her mother-in-law thought this an unfair advantage over the first wife, who the mother-in-law thus tried to ensure received better access to other forms of support, causing conflict within the household. Without being aware of these dynamics, development programmes risk having limited impact, or even doing harm.

5 Our research across all three sites clearly demonstrates an **interactive network of plural health providers** that Sierra Leoneans navigate on the basis of a number of factors, related to proximity, cost, perceived effectiveness, experience of personal treatment by the provider and connection with ‘tradition’, all governed by the gendered ways in which decisions about health access are made within households. This supports similar findings by Scott and colleagues (2014) conducted in 2010, indicating that the plurality of health providers does not appear to have diminished since the introduction of Sierra Leone’s FHCI. While cost has been highlighted as an important factor influencing decisions about uptake of health services, this suggests that alleviating cost alone does not lead to a reduced reliance on non-state health providers. This is not to suggest that the FHCI has not been critically important – it has – and it is apparent that where other factors allow, households tend to use PHUs as a first preference. That is, where proximity is not an issue, treatment by PHU staff is considered good, and illness is understood as being due to biomedical (rather than spiritual) causes, ensuring PHU access is free clearly maximises usage. But it does not, of course, solve all the other access issues at one fell swoop.

Importantly, the providers that make up the system are not necessarily competitive, but cooperate and are often used in conjunction or in sequence, with providers referring cases to different parts of the plural health system. For those seeking to strengthen Sierra Leone’s health system, this means it is critical to understand the interactive nature of the system and the multiple entry points that can be used to help prevent malnutrition. Too often reforms focus on understanding delivery systems from a top-down perspective, capturing only the formalised providers and focusing on agents and organisations (Denney et al., 2014). This helps explain why the dominant approaches to capacity development are built around staff trainings and resource transfers. What is missing is an understanding of the entire health system from an ‘end-user’ perspective – that is, from the perspective of those who actually use the system (Luckham and Kirk, 2012). From this view, it is possible to capture the diverse range of providers – both formal and informal – and, critically, the ways they interact. In this way, interventions in the health system may more appropriately engage with the ways in which people actually use the system, rather than how reformers would hope to

see the system used in an ideal setting. In doing so it is important to remember that these health systems are highly complex spaces and that, as stated by the WHO (2009: 19): ‘Every intervention, from the simplest to the most complex, has an effect on the overall system, and the overall system has an effect on every intervention’.

5.2 What does this mean for policy?

To conclude, we translate the above key findings into series of policy recommendations for those working on the prevention of malnutrition in Sierra Leone.

Overall

- **Recognise that the ways in which communities use health facilities and access food varies from community-to-community and tailor interventions accordingly.** While it is not possible to have bespoke programming for each community, all those working in the nutrition sector in Sierra Leone should undertake that community-level staff will assess the relevance of programming approaches to their particular communities and adapt these approaches to the context to make interventions more effective. This includes understanding how communities access healthcare and food, local beliefs and levels of adherence, how power is allocated within households, and so on. These features are central to how malnutrition unfolds in a community and interventions that can adapt to these dynamics will prove more successful than those that overlook them.

Improving local capacities for care

- **From Mother Support Groups to Family Support Groups.** Evidence suggests that the participation of men and elders – and not just women – in behaviour change interventions and community groups can have positive effects on child health. As our analysis has shown, nutrition is not simply a ‘women’s issue’. Addressing malnutrition therefore means also engaging the actors we know to be powerful when it comes to decision-making within the household and community. More often than not, this is not young mothers. Research from other sub-Saharan African countries, such as Malawi, supports this recommendation (Kerr et al., 2007). Transforming Mother Support Groups into Family Support Groups and encouraging participation from fathers and mothers-in-law, amongst others, is an important step

in recognising that malnutrition is a community-wide responsibility.

- **Ensure awareness raising on exclusive breastfeeding includes specific reference to risks of warm water and bitter medicine.** Despite long-standing campaigns to promote exclusive breastfeeding in the first six months, we found that the vast majority of households continue to feed infants warm water and bitter medicine – and do not perceive this to compromise ‘exclusive’ breastfeeding. Messaging needs to tackle this directly and assessments of rates of exclusive breastfeeding in future should ensure mothers are not just asked if they exclusively breastfeed, but also whether they feed their children water or bitter medicine so as to obtain an accurate picture of progress.
- **Provide support to agricultural communities to help them cope during the lean season – and pay attention to when lean seasons actually occur in different communities.** Times are toughest in Sierra Leone’s lean seasons, when food access is more limited, environmental hygiene is worse, and the labour demand spikes. The government should consider a range of possible measures to support rural households during this time, including: low-interest or interest-free credit to improve food access; expansion of WASH services to improve environmental sanitation; and agricultural mechanisation to reduce labour demand during harvest. Sub-national variations in crop production should be taken into account when planning these, as ‘the most difficult time of year’ varies from place to place and does not always map onto the rainy season alone.

Improving the local health system

- **Work more systematically through non-state, informal actors.** In plural health systems – as in rural Sierra Leone – people rarely use government health providers exclusively. Efforts to prevent malnutrition and respond to the illnesses that can exacerbate it must build on an understanding of how users actually navigate the health system before them, rather than on preconceived ideas about how a modern health system ought to work. This means promoting greater work with traditional healers, traditional birth attendants, drug peddlers and secret societies – recognising that these are utilised health providers and that bringing them into the conversation about preventing malnutrition is more effective than sidelining them in the hope that they will disappear.

One way to do this is through CHWs, who have an in-depth understanding of how things work within local communities (see Theobald et al., 2014).

- **Invest in CHWs and integrate them into the health system.** Community health workers are relied upon to fill important gaps in Sierra Leone’s health sector – yet our research found they are often underutilised, undertrained and unconnected to other health providers. Yet CHWs are well-placed to assist in a number of areas – including providing important local context to those wanting to strengthen local health systems. But in order to fill their intended role, CHWs need significantly more training and incentives (either through reward or recognition) so that they, and their communities, take the role seriously.
- **Build community trust in PHUs.** Our evidence suggests that, in some places, negative community attitudes towards PHUs discourage attendance. This is particularly problematic given that PHUs are one of the main channels through which IYCF and other health messages are disseminated. Negative attitudes may arise for a number of reasons: some community members in our study complained of mistreatment and of being ‘looked down upon’, while others were put off by being charged for items they believed should be free. There are four ways in which community trust in PHUs could be strengthened:
 - 1) Clarify exactly what is and what is not covered by the FHCI so that communities are fully aware of what they are entitled to and what they must pay for. This will help to manage expectations.
 - 2) Stamp out the practice of PHU staff illegally charging for items that are technically covered by the FHCI. Such practices should be considered extremely damaging to the relationships between health seekers and health providers. Part of this will involve ensuring that PHU staff are paid on time and that they are appropriately incentivised in their day-to-day work. It will also require strengthened monitoring, at least in the short term.
 - 3) Ensure that PHU staff receive training in patient care/bedside manner. In two research sites communities pointed to poor treatment by PHU staff as a key factor deterring them from utilising PHUs. This is an unnecessary obstacle. While technical training is clearly critical, this must be complemented by the softer people skills necessary in providing healthcare, particularly to communities sceptical, to varying degrees, of modern medicine.

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- 4) Improve the efficiency of drug supply chains between Freetown and remote PHUs. People often have to travel significant distances just to access a PHU, taking time out of an already busy schedule. When drugs are not available at the PHU when they arrive, they are sent back home and told to return in a few days. Not only does this potentially undermine trust and confidence in the formal health service, but it also encourages the use of unregulated drug peddlers

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