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Contested evolution of nutrition for humanitarian and development ends

Report of an international workshop

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Introduction

The aim of the workshop was to explore and debate how and why humanitarian and development nutrition came to be dominated by medical science, what the effects have been for aid agencies and beneficiaries, and how historical conditions have shaped humanitarian and development practices more broadly. The workshop was organised by the Food Studies Centre at SOAS, University of London (Susanne Jaspars and Lizzie Hull), and the Refugee Studies Centre at Oxford University (Tom Scott-Smith). It was held at SOAS. The workshop brought together nutritionists, humanitarians, historians, sociologists, political scientists, economists and anthropologists, including academics and practitioners (see Annex 1 for complete list of participants).

Over the past century malnutrition has become increasingly medicalised. Current interventions, as expressed in policy documents and agency guidelines, tend to treat malnutrition as a decontextualized, biological problem amenable to the technical administration of nutrients. The main approaches to addressing malnutrition now include the provision of specialised food products, new agricultural technologies, and the promotion of behaviour change in feeding and hygiene practices. The undoubted success of new treatment methods in the early 2000s, such as Community Managed Acute Malnutrition (CMAM) and Ready to Use Therapeutic Foods (RUTF) such as Plumpy'nut, has diverted attention from alternative approaches to nutrition, particularly social nutrition. Social nutrition, which took a more holistic approach by examining its social, political and economic causes, was prominent in the 1930s and again in the 1980s and 1990s but has been in decline since. Medicalised, technical and behavioural approaches are now widely promoted as part of global Public Private Partnerships (PPP) such as the Scaling Up Nutrition (SUN) movement and the New Alliance for Food Security and Nutrition, formed in 2010 and 2012 respectively. Most donors and aid agencies see these approaches as progress, in part because they have been justified by a series of papers in the *Lancet* in 2008 which reported that a standard set of nutrition interventions at individual or household level could lead to substantial reductions in undernutrition (see for example Black et al., 2008). Medicalised approaches have been criticised because they focus on nutrition itself as the object of policy rather than its wider social and political causes, for preventing more flexible and people-centred approaches, and because new nutrition and agricultural technologies promote the interests of business rather than the malnourished (see for example, Scott-Smith, 2013; Street, 2015; Vercillo et al., 2015; Sathyamala, 2016; Jaspars, 2018). These issues were the subject of discussion at the workshop.

Lizzie welcomed participants to the SOAS food studies centre. Susanne then opened the workshop by reflecting on her own experience of emergency nutrition over the past 35 years. Emergency nutrition has changed a lot during this time. Current medicalised approaches are very different from the social nutrition she was taught as part of her MSc in Human Nutrition in 1986. These contemporary nutrition practices are critiqued by social scientists and human rights organisations but perhaps not so much within the nutrition community. She reminded the participants of a paper written by Philip Payne and Peter Cutler in 1984 (Payne and Cutler, 1984) entitled *Measuring Malnutrition: Technical Problems and Ideological Perspectives*. This paper argues that different ways of thinking about nutrition, or different paradigms, can lead to varying estimates of malnutrition and to very different proposed interventions. For example, one model (genetic potential) leads to recommendations for nutrition education and supplementary feeding to improve work and growth capacity. The other (adaptability) looks beyond the biological causes, to deprivation and the nature of resource constraints. The authors concluded that in most societies people holding different paradigms co-exist and that creative conflict between different paradigms

is a way of advancing knowledge. This can be seen as one purpose of the workshop. Tom continued the introduction by raising the challenges of bringing together academics and practitioners. Academics are concerned with structures, discourse and critique, whereas practitioners want to discuss what produces results and what can be done. The job of academics is to look beyond what is possible at the moment, beyond the policy box, to things that do not immediately lead to results. At the same time, anthropology and historical analysis produces an inventory of alternatives. Maybe this is another aim of the workshop: look at what we did in the past, what happened, and what we could be doing.

This report summarises the presentations and discussions at the workshop. The workshop was divided into four sessions, each with three or four presentations followed by a discussion. The first section had papers on the long history of malnutrition, going back to the 19th century. This was followed by a session in which presenters described current approaches and the more recent history. Session three discussed the social, political and organisational dynamics of nutrition practices and discourse over the past thirty to fifty years. Finally, the fourth session examined the role of social nutrition and in particular the value of anthropological, or ethnographic, approaches in understanding the social context in which malnutrition occurs. The workshop ended with a presentation by Barbara Harris-White highlighting the key issues arising from the workshop.

Session 1: Where have we come from? The long history of humanitarian nutrition

The treatment of starvation has always been changing, and dominant practices have morphed many times over the centuries. In this session we looked at the main transformations since the start of the 19th Century, when the soup kitchen model first came to dominate relief. We discussed early missions overseas, the impact of colonial science, and the development of modern procedures such as the MUAC (Mid-Upper Arm Circumference) band. The session explored how prevailing approaches to emergency nutrition reveal a great deal about wider socio-political trends, and cannot be explained purely by reference to scientific progress.

Tom Scott-Smith. On an empty stomach: humanitarian approaches to hunger

Tom presented some elements of his forthcoming book on the history of humanitarian nutrition from 1790 to 2000. Key moments during this period include the emergence of the soup kitchen as a technology of emergency feeding, the rise of nutritional science during the Victorian period, the use of nutrition as a tool of colonial rule, the dominance of military practices after the Second World War, and the establishment of the current paradigm around the time of the Biafran war. This is a complex story and we should resist looking at it as a long history of linear progress. In his analysis, Tom identified changing approaches, historical disjunctures, and the influence of politics and culture. The general trend is one of rationalisation, medicalisation, individualisation, and also from seeing nutrition as a social problem (whether in a good or in a bad way) to seeing it as a medical problem. There has been a change from providing everyday foods to providing specialised and technical foods, from admission based on patronage to admission based on anthropometry. Different ways of organising feeding reflected the culture of the age in which they occurred.

In the 1790s, American scientist Benjamin Thompson began a series of designs for helping the poor and malnourished. One of these was the standardised and regularised soup kitchen, which included designs for fuel efficient stoves, a book of economical recipes, and a large soup kettle to make food cheaply and quickly. The soup kitchen spread around the world in the early 19th Century and became the dominant technology in food relief for nearly 150 years. The basic features included admission by patronage, feeding in communal kitchens, broadly local organisation of relief, and the distribution of common foods. Now these characteristics have been upended. Admission is dominated by anthropometry, foods are distributed primarily to individuals, aid agencies have an international reach, and there has been a rise of technical, fortified foodstuffs. The aim is to treat nutritional deficiencies, not moral failings, and malnutrition is tackled primarily at the biological level.

So how did we get from there to here? The rise of nutritional science was crucial in bringing about this change (1843–1880). In the 1840s, there were lots of theories about what made a food nutritious, but the rise of biochemistry put an end to these theories and changed the relationship between those who were fed and those who were doing the feeding. Before this, food and diet was very much a personal matter, interpreted within the framework of classical dietetics, theories that went back to ancient Greece. The rise of nutritional science, however, was accompanied by new ideas about diet and new structures of governance. Negotiations over minimum requirements began in the 1880s, with many industrialists in the US driving research, influenced by Taylorism to make inputs and industrial processes as cheap and efficient as possible. In the colonial world there were surveys of different ethnicities; a hierarchy of dietaries and human races was developed in India, and malnutrition was viewed as a source of collective failure and social weakness. Recommendations were to emulate the diet of certain more muscular and ‘masculine’ groups.

Meanwhile in Europe, the establishment of the League of Nations led to a highpoint of social nutrition in the 1930s. Audrey Richards introduced the idea that nutrition was a matter of cultural practices, agricultural systems, and political organisation, and John Boyd Orr connected nutrition with public health, productivity, economic growth, trade, and peaceful global relations. Nutrition was thought to hold the key to everything. The Second World War then heralded an era of nutrition reductionism. In the face of massive needs there emerged a militaristic mind-set and the development of new, technical foods. Hunger and nutrition became a medical and biological issue. This was the start of the medicalised paradigm and included an attempt to produce starvation treatments: for example protein hydrolysates for concentration camp survivors after World War Two.

The 1950s and 1960s were the era of high modernism, promoting new foods manufactured in clean facilities without the need for agriculture, dirt or work: the best example is Single Cell Protein. This was followed by a decline of high modernism and the emergence of ‘low modernism’, with more practical and commercial leanings, which generated products such as Corn-Soy Blend and the contemporary design of the Mid-Upper Arm Circumference band. Biafra was the transitional moment when contemporary practices were rolled out.

Each of these dominant narratives on how to treat starvation has been shaped by much broader cultural and social practices. High modernism was associated with faith in science and technology, and low modernism with neoliberalism and commerce. The League of Nations joined nutrition with other sectors, and the Second World War became associated with the efficient provision of basic necessities through militarised means. Dominant ideas are as much a reflection of prevailing social and political circumstances as they are of scientific discoveries.

Norbert Gotz. Crisis and nutrition: the 1809 Swedish mission of Wilhelm Friedrich Domeier

Norbert presented his research on Domeier's observations on food and healthcare during a relief mission to Sweden in 1809 following reports of mass mortality. This was the soup kitchen era. In 1809, Sweden was the UK's only remaining ally in the Napoleonic wars. The London-based 'Committee for Relieving Distressed Inhabitants of Germany and Other Parts of the Continent' was engaged in relief activities. It sent money and goods, including seed corn and clothing. It also sent former court physician Wilhelm Domeier, who distributed medicine, surgical instruments and food. For example, he handed out 'portable soup', which was delivered in small cakes and after cooking in boiling water turned into the 'most excellent and wholesome soup'. He visited hospitals, barracks and poor houses and distributed relief. He also advised his Swedish colleagues and wrote reports to the London Committee, to the Commander of Sweden's Western Army and the governor of Stockholm. These letters addressed issues of hygiene, efficiency, staff competence and also positive examples and Swedish best practices (covering the military and the institutions of the 'welfare state' of the time). One report stated for example that the diet was not good; nothing but water, no vegetables and 5 ounces of meat and indigestible bread. Significant food related issues included: food hygiene, nutritional control, and quality of nutrition. Domeier's conclusions were as follows:

- 1) **Food hygiene:** Food was kept in inappropriate places, in beds on window sills. Some food was damaging to health (e.g. mouldy bread). This was linked to lack of tables or storage space for food. Dirty dishes were not removed. Investigations also included Stockholm's slaughter house which was found to be dirty and lacking a separate sales room. Food handling was not sufficiently detached from other functions. There were hygiene problems, issues with tools and health issues related to copper. He also highlighted the need for individual drinking vessels and criticised the employment of male cooks.
- 2) **Nutrition control:** Patients ate their own food, for example cheese and spirits. Domeier thought self-catering was a disorderly practice and that patients should be prevented from consuming anything their physicians were not aware of. He suggested a journal for each patient and the establishment of different feeding schedules in different places.
- 3) **Quality of nutrition:** Domeier highlighted the lack of vegetables, which was an issue particularly for those suffering from scurvy. This was a major problem at the time. He suggested a vegetarian diet for these patients, and fresh meat for other patients. He also commented on bread for Russian prisoners of war in one place, as good solid food, as an example of good practice.

In summary, in this early 19th century humanitarian episode the main issue was the standardisation of food intake and nutrition based on a system of functions and differentiations. A medical aid worker advocated transparency and control for medical and other authorities based on: 1) type and quantity of food consumed; 2) uniformity through adoption of best practices; 3) separate facilities and dishes for food; 4) for diet to be an integral part of medical treatment. This was raised as a general critique of inefficient health care: low competence, low accountability, overstaffing, nutrition healing and alimentation practices, and overlong hospitalisation. It was a quest for enlightened efficiency. It also illustrates the concept of moral economy: this concept has mostly been appropriated in a narrow way along the lines of E.P. Thompson's ideas about anti-market resistance of the 'crowd', but it is a good tool to analyse the co-existence of different types of rationality in the humanitarian sector. An ultimate rationale of nutrition standardisation is

illustrated by the following statement by Domeier: ‘as long as the soldier is in hospital he is not a soldier of the state’. In other words, maintaining the army was a key aim.

Joel Glasman. Measuring malnutrition: a short history of MUAC tape

Joel presented his analysis of the history of the MUAC (Mid-Upper Arm Circumference) tape (Glasman, 2018). It has become one of the main tools for assessing nutritional status in emergency situations (together with weight-for-height). The MUAC tape has been used in contexts as different as Afghanistan, South Sudan, Syria, and for purposes such as emergency screening, needs assessment and crisis mapping. It is used in refugee camps and local clinics, with its most recent form as a colour-coded strip to identify whether a child is malnourished or not. MUAC has been promoted because it is quick and easy, and because it can be used anywhere.

His analysis traces the history of MUAC measurement back to the 1960s, when it was used during the Biafra war. The purpose of the analysis is not to critique or defend the MUAC strip but bears in mind that technology is not neutral. How has it shaped our understanding of malnutrition and how does it fit into the individualisation of the humanitarian base? In the 1950s, clinical signs were used to detect malnutrition. But Jelliffe and his team found that clinical signs were very different from county to county, from society to society, which caused problems in determining whether a child is malnourished (Jelliffe, 1966). Every child could present with another clinical sign, depending on local factors such as disease, cultural habits etc. This meant there was a need for other measures, for example clinical tests and anthropometry. They used a combination of signs to identify malnutrition. The tipping point came in 1969, with the first large-scale use of MUAC during the Biafra famine by ICRC. They screened 75 children in every village but the problem was they did not know the age of the children. They used height as a proxy for age. Height for age had been used since 1954 in London. Another problem was that there were no standards; i.e. no MUAC data for healthy children in Nigeria. They used a dataset from Warsaw, and considered <80% (of the Polish standard) as malnourished. From the 1970s to the 1990s, studies showed that weight-for height and MUAC showed different results for malnutrition. They identified different groups as malnourished. In 1974, an important development was the development of the 3-coloured strip, which used a single cut-off for all ages and gender. It was quicker and easier, because there was no need to assess the child’s exact age. However, it was also less accurate.

Two final remarks: First, tools changed our perception of malnutrition. MUAC makes some things visible and others invisible. This is the famous ‘law of instruments’. If you only have a hammer, everything looks like a nail. The MUAC strip can be used anywhere, without regard for the environmental, economic or cultural background. But this comes with a price. Second, the definition of malnutrition changed over time. The cut-off points changed. A boy who would have been severely malnourished in 1969 (<13 cm), would not have been malnourished in 2007 (>12.5). This is why we need to look at our tools with the lens of history. There is no magic bullet for malnutrition assessment. An historical analysis helps us question the emancipatory potential of universal standards.

C. Sathyamala. Of norms and standards of nutritional status: a critique

Sathya presented some of the findings of her PhD research, in which she examines nutrition as a social problem, as a public health problem, and as a developmental problem. In this presentation, she started by looking at the interwar period when the need to standardise, categorise and quantify hunger was articulated for the first time, by the League of Nations. The period was associated with a stockmarket crash, economic recession, high unemployment, and widespread hunger. However, contrary to expectations, mortality rates actually came down in the affected countries. The League of Nations Health Organisation (LNHO) was tasked with investigating the health impact of economic depression. They had to develop indicators sensitive enough to assess early effects of food deprivation (i.e. food deprivation in a situation which has not led to famine and starvation deaths). Initially, the LNHO tried to project hunger as a socio-economic problem (based on a study in the US), but the final conclusion (under pressure from both the American and British governments) was that ‘as far as death rates are reliable indices of people’s health’ there were no apparent negative effects. This was based on purely anthropometric rather than social effects and thus signalled a medical approach to nutrition.

Within the League of Nations, there was also a need to find a solution to the other side of the crisis: overproduction of food. Hunger in the midst of plenty. How to link health and agriculture? One option was to persuade Americans and Europeans to consume more food. The League of Nations therefore developed the concept of an optimum diet and escalated the minimum dietary requirements. This is when the term malnutrition came into play, not undernutrition but malnutrition which defined the problem of not eating sufficiently to eating ‘wrongly’. ‘Scaling up nutrition’ became the proposed strategy even at this time. The League of Nations scaled up requirements to 3000 kcals/person/ day. Before, that the discourse had been a to work out minimum diet for prisoners and an optimum diet for soldiers. Now there were also separate categories of children, pregnant and lactating women. This was also the first time we hear about child nutrition. By increasing requirements, it meant that a higher percentage of individuals could be declared malnourished. The need for universal yardsticks was also identified at this time. The purpose of all this was to deal with overproduction of food. Since impoverished people affected by the economic depression could not afford the higher dietary recommendations, the state needed to step up and provide subsidised food as part of its ‘welfare’ measure. The population could now be shown as ‘hungry’ through the yardstick of universal requirements. Food was transformed into a commodity and the state was given a caring role to subsidise capital. It led to the start of school feeding programmes. But there were dual standards: colonial settings were completely different. Here, it was acceptable to recommend a minimum diet – to reduce calorie intake for bare survival.

Anthropometry became established to measure malnutrition. These measures were initially social constructs based on arbitrary statistical cut-off points. In the early 1970s, WHO adopted the weight-for-age classification to describe the problem of malnutrition in developing countries. Statistical cut-offs began to have physiological significance. In India, it led to a multiplicity of deficiencies with many causes. In conclusion: while the risk of dying is higher among those with severe undernutrition than among those with some undernutrition, the overall contribution of undernutrition to childhood deaths is overwhelmingly larger as a co-factor in disease causation and outcome. Nutritional status is a marker of specific outcomes, but includes several determinants, meaning there is no single effective measure to address undernutrition. Food is only one determinant, which is easy to discount if it is politically expedient.

Discussion

The discussion centred on different ways of viewing history. One way is to consider key changes, for example key moments in the individualisation of aid were when malnutrition was recognised as a medical condition (kwashiorkor) where one did not exist before, followed by post-war hunger studies which showed it to be a biochemical process. In 1950, the UN declared that all humans can be considered equal. This is when politics became important as humans could now be compared.

In studying historical change, it is important not to romanticise the past. Change can be seen as positive from a medical sense but have social and political effects at the same time. With new bureaucracies and technologies, it becomes possible to treat more people but at the same time the personal connection is lost. The changes in MUAC cut-offs can be seen as the science getting better. It can help identify people at risk of dying. However, it has effects that go beyond the medical and its development was not only influenced by a desire to improve the science. Whatever paradigm you are in, you create alliances. It is difficult to disentangle politics and science. There are scientific paradigms but there are also disjunctures in knowledge production, leading into a different paradigm. Change need not necessarily be seen as good or bad but is also not neutral. We need to consider how we study conflicting paradigms. One way is to start with the literature and examine the forces at particular points in time which influence science. But even today, who is speaking on behalf of poor people?

Session 2: Contemporary practices – why we do what we do

In this session we discussed the different contemporary practices and approaches to addressing malnutrition, and how they emerged in the past five decades. We discussed in detail the origins of Community-based Management of Acute Malnutrition (CMAM) and the Scaling Up Nutrition (SUN) Movement, and the evolution of different practices and approaches within them.

Jody Harris, speaking for Stuart Gillespie. Different approaches to nutrition in the past five decades

Jody gave Stuart's presentation on approaches and experiences in tackling malnutrition in the past five decades (Gillespie and Harris, 2016). They had worked on this project together. They reviewed published papers on the history of humanitarian and development nutrition. Each paper looked at different aspects of this history, reflecting different paradigms. Most papers start around the 1950s, even though, as we have seen, the history of nutrition goes back a lot further. Looking at these different eras over time, it was clear that in different political and scientific contexts different conclusions were made about what was needed to address malnutrition. In some eras, a lot of different approaches were reviewed, in others less. In the 1970s, for example, multi-sectoral planning was identified as a key approach by many different people; other issues, like rights-based paradigms in the 1990s by only a few. This analysis provides *a* history rather than *the* history of malnutrition.

A summary of the main paradigm changes is as follows. In the 1960s, there was a focus on hunger and famine. Protein deficiency was considered a problem by many but not all, although this ended in the great protein fiasco. In the 1970s, there were lots of paradigms, one of which was multi-sectoral planning, which recognised that food or health was not the only issue, but that there were

many issues that needed to be addressed together. It was part of a broader era of development planning, involving coordination between government departments. In the 1980s, you can see a real divergence between two main paths: in one path the emergence of community nutrition programmes, for example UNICEF's programme in Iringa, Tanzania; and on the other path multi-sectoral planning which was not accepted by all and led to a trend towards single sector action – nutrition isolationism. In the 1990s, UNICEF's work in Iringa led to the UNICEF framework on causes of malnutrition. This looked at immediate, underlying and basic causes of malnutrition and highlighted that all were important issues to be addressed. This framework persists today in various different forms. But the 1990s also saw the advent of the concept of nutrition transition; i.e. that it was not only hunger and starvation that needed to be addressed but also overnutrition and chronic dietary disease. The 2000s saw real advances in addressing acute malnutrition; there were lots of international conventions; and the *Lancet* nutrition series (in 2008) had a major impact, including extending the UNICEF framework. In the present period, it is more difficult to know what the paradigms are. They have not played out yet. Many nutritionists feel that nutrition had been neglected in development debates until the last 10 years. There are now all kinds of different paradigms that people talk about, about politics, about investment, and the right to nutrition for example. Many things have happened in the past 10 years. This analysis is just a history, but it shows that the way in which nutrition is framed by different groups matters, it determines what we do and what is seen as valid to do, and recognising that is important. But where are the malnourished themselves in this? What are their frames?

Steve Collins. The treatment of Severe Acute Malnutrition (SAM): the origins of CMAM

Steve presented the history of Community Managed Acute Malnutrition (CMAM) but started by going back further. Arguments about medicalised and social nutrition can become quite emotional. Doctors and aid workers work with different ethical frameworks. Doctors tend to focus on the 'duty of care' to give the best treatment possible to their patients. Aid workers are more concerned about rights and equality of access; how to treat a crowd of people with equity and cost-effectiveness. That jars, because these two paradigms are in conflict. In addition, medics tend to expect patients to be passive and do as they are told: 'we will treat you'. This is the supply side. Social nutrition is much more about creating understanding and demand; the demand for good nutrition.

At the start of CMAM, the medical side very much dominated as people with SAM are often very sick. Every function of the body goes wrong, so you are often dealing with very difficult medical problems – it became very medicalised. But at the same time, mortality rates [for severely malnourished children] were high, on the order of 20–30% in district hospitals and had not changed since the 1960s. These were higher mortality rates than many cancers, and in the face of this, there was increasing pressure for more intensive treatment. With the development of more effective nutritional products, such as F100, mortality rates plummeted in well run NGO programmes and this reinforced the medical model and the benefits of increasing the intensity of medical interventions and specialist nutritional products. However, the public health and social side got lost in this and although cure rates improved and mortality rates dropped, at the same time, the coverage of feeding programmes remained extremely low with only about 5% of those who required treatment ever receiving care. Most people were not getting treated. With Community Therapeutic Care (as CMAM was first known), we tried to get this balance back. Valid International worked to develop a programme approach that could increase the coverage, while maintaining the intensity of treatment required to achieve high cure rates. Could medicalised nutrition be provided in a community? In many communities severe malnutrition was attributed to

spirits or the breaking of taboos, and mothers were always too busy doing a range of things to go to inpatient centres for weeks on end with their children. Almost everywhere clinics and hospitals were too far from those who required treatment. That was why the medical model did not work. The new programme started with anthropology, participation and mobilisation to create understanding of what severe malnutrition was and how it could be cured. Then started outpatient treatment but also a supplementary feeding for those less severely affected, and once coverage was high, a stabilisation centre, for people who need more intensive care. Community engagement was absolutely crucial and the foundation for effective programming so that cases came for treatment early, at a time when they could be treated easily as outpatients.

The initial model promoted local production of Ready to Use Therapeutic Foods (RUTF) out of locally grown ingredients. This was the approach used in Malawi; local farmers were encouraged to produce peanuts for the RUTF and a small district hospital was set up to manufacture RUTF. The approach always aimed to have positive feedback embedded into people's daily lives – trying to de-medicalise, including a hearth programme to facilitate better nutrition. When emergencies came, the aim was to scale up resources to increase production. Unfortunately, when the UN took it on in 2007 (and called it CMAM), the local production of therapeutic food was dropped from the model and the focus shifted to more supply-side interventions. The UN introduced quality standards for the production of RUTF that effectively precluded small-scale local production, despite the fact that there had been no problems in the four preceding years with the small decentralised plants in Malawi. Gradually these standards have risen and moved towards pharmaceutical standards requiring industrial level production and highly certified factories that hugely disadvantage producers in those countries affected by severe malnutrition. These changes have taken food security and other livelihood interventions out of the CMAM model, tending to push them into being standalone projects without a connection with local food security agencies or local food factories. The UN historically has tended to buy lower cost therapeutic products in France or America. Following pressure to buy more from lower income countries, it committed to buy more than 50% of the RUTF they use from developing countries, but in reality this has been more developed economies such as South Africa and India. By disconnecting treatment from food security and prevention they effectively broke the CTC (Community-based Therapeutic Care) model and reverted to the more usual supply-side medicalised approach. The lesson is that when things scale up, the tendency is to go back to the tangible hard indicators – assessing how much Plumpy'nut (an RUTF) you ship and distribute is easier than measuring how well you integrated into the community or engaged with those afflicted. For these softer but equally important aspects of successful programming, it is much less easy to tick the boxes.

Megan Pennell. Progress and challenges in the scaling up nutrition movement

Megan provided a brief overview of the Scaling Up Nutrition (SUN) Movement, in particular the civil society network for which she is Country Support Adviser. The SUN Movement takes a multi-sectoral, multi-stakeholder approach to tackling malnutrition. Led by a government focal point in each SUN country, the SUN Movement unites multiple stakeholders (donors, the UN, business and civil society) in a collective effort to tackle malnutrition, specifically the World Health Organisation's Global Nutrition targets and Sustainable Development Goals. The SUN Movement also brings together actors across both nutrition-specific and nutrition-sensitive interventions. Nutrition-specific interventions are those that directly affect nutrition. Nutrition-sensitive interventions include those that address wider issues, such as water and agriculture. The SUN Movement also has an increasing focus on the multiple burdens of malnutrition; overnutrition (overweight and obesity) as well as undernutrition (stunting and wasting).

The focus on engagement with the private sector has been a contentious aspect of the SUN Movement approach. For example, civil society may not want to engage in a multi-stakeholder platform because of the involvement of local business networks. However, the private sector has an unavoidable impact on nutrition and therefore the SUN Movement believes that progress will be achieved by working with the private sector, not by excluding them. As a start, the business network is working to ensure businesses at global and national level adopt commitments to improve the nutrition of their workforce. However, there is still further work to do to improve the effectiveness of multi-stakeholder platforms; addressing power dynamics, ensuring equal participation from all stakeholders, and building trust between stakeholders.

The civil society network has over 3000 member organisations (from grassroots organisations to large INGO) and national civil society coalitions in 40 countries. It works to coordinate the implementation of nutrition programmes as well as strengthen national nutrition policies to ensure they address the experiences of those impacted by malnutrition. They do a lot of work to amplify the experiences of women, children and excluded communities as well as building the capacity of civil society. They also monitor implementation of national plans and policies, for example documenting and reporting local violations of the WHO Breast Milk Substitutes marketing code. A lot of the work of the civil society network has focussed on building political will to prioritise nutrition. This can be difficult as governments sometimes do not see a role for nutrition. Much work to build political will has focussed on making the economic argument for investing in nutrition.

Humanitarian work is quite new to SUN. The focus has been more on longer term nutrition planning. There has been limited tailored attention to how the SUN Movement functions in fragile and conflict-affected states and the needs of civil society in these contexts. Yet, it is well recognised that civil society is an essential partner in the delivery of both humanitarian aid and development interventions. With national civil society alliances forming in a growing number of fragile and conflict-affected states (e.g. South Sudan, Somalia, and Afghanistan), the civil society network could help to play a role in bridging that divide. The civil society network is looking to develop research into the role of civil society in various aspects of humanitarian response. The SUN Movement also needs to address how its function differs in countries in protracted crisis.

Discussion

The discussion centred on the nature of the supply and demand side of nutrition, who has the right to prioritise, and the role of resistance to new approaches. The difference between CTC and CMAM reflected a shift from a demand to a supply model. The emphasis on locally manufactured food and on mobilisation and participation was dropped. WFP's programmes face similar issues, as there is often little knowledge of what people do in their own community. There are books on what to eat, or washing hands, rather than on what is possible. In addition, WFP often works with government medical staff who may not have a nutrition background. Criticising the supply side also provides a perfect illustration of moral economy as it inroads into humanitarian issues. The balance may actually be the crucial thing. The determinants of supply and demand were duty of care and rights. You could also use a financial and economical frame. The crucial thing is recognition of how rights claims become operative. Who are the actors that recognise rights? Who are the actors to recognise duty of care? How do these processes work?

The question about authority to periodise came up because there appeared to be things missing from the histories we heard about. Some predominant discourses were not covered. For example, the famines of the 1970s and 1980s had a huge impact on nutrition policy. Also, at the end of the Vietnam war, there was a huge switch in aid volumes from Asia to Africa. Rather than nutrition isolationism, these are examples of the opposite; nutrition has always been very complicated. There is a need to look at what is lost and ignored in existing studies of the evolution of nutrition. Just because it is not covered in published papers, does not mean that it did not happen. What is lost or not included in prevailing nutrition narratives may actually be more interesting.

In terms of theorising the opposition to new approaches, for CMAM this was initially the medical establishment and NGOs. Now, it is the activists in India who fear the commercialisation of child feeding. They associate the treatment of severe malnutrition with normal child feeding. For this reason, they do not want to allow specialised food products for severe malnutrition into the country. In other places, it can be interests from governments. On the whole, however, it has been rolled out in 65 countries and is fairly well accepted. A related question was about the stakeholders in SUN. Do they only include those in favour or also those who do not agree? The answer was that SUN stakeholders are selected based on the change the SUN Movement would like to see, and who is needed to achieve that change. One of the key things is principles and ethics guidance, and there are clear rules not to engage with violators of the WHO Breast Milk Substitute Marketing code. This means that SUN does not engage with some of the big companies that have a huge impact on nutrition. How we can change their practice is a big question. At the same time, some participants argued that we need to learn from big business, as they are very good at reaching the most isolated places (for example Coca Cola). We also need to make sure that the people affected are involved. In reality, getting to know the social dynamics of the population you are working with can be difficult. It is very difficult to get funding for an anthropological investigation up front.

Session 3: Recent changes in nutrition practices: social and political dynamics and effects

In this session we discussed the shifts in nutrition practices and discourse in the last thirty to fifty years from a social and political perspective. We explored the recent shift towards medicalised and behavioural practices, and the political and organisational factors that have influenced this shift. We also analysed the political effects of medicalised nutrition and of the increased role of the private sector in the diagnosis and treatment of malnutrition.

Susanne Jaspars. Resilience or abandonment? The evolution of nutrition practices in Darfur

Susanne presented part of her analysis of the history and politics of food aid in Sudan (which was her PhD research and now a book; see Jaspars, 2018). The focus of her presentation was about changes in nutrition practices in Darfur but they reflect practices globally. Darfur has a long history of drought and famine. Since 1984, it has experienced emergencies and international food aid responses; from 2003 food aid was in response to conflict and large-scale displacement. In 2004, the UN Humanitarian Coordinator called Darfur the world's worst humanitarian crisis and this was soon followed by the world's largest food aid operation. The conflict is ongoing and the latest national nutritional surveys show a high prevalence of acute malnutrition in Darfur. At the

same time, agencies are withdrawing food aid, and have only limited access to crisis-affected populations. Susanne analysed historical change using ‘regimes of food aid practices’. These are very similar to paradigms, and involve analysing sets of linked practices and their underlying ideologies. The research also looked at the actual effects of these regimes of practices. The role of nutrition science was analysed as part of this. From the 1950s, it is possible to identify three regimes: state support, livelihood support, resilience promotion. In the state support regime, all assistance was state-centred and not much went to Darfur, just like the existing development process in Sudan.

A big change occurred in the 1980s, when emergency nutrition started to be seen as a social science. Nutrition was looked at within its social and political context. How did this come about? Pacey and Payne wrote that ten years after the 1970 food crisis, nutrition education and feeding programmes had no impact (Pacey and Payne, 1985). They suggested a new social nutrition which looked at food systems, livelihoods, and epidemiology. Such an approach was widely adopted in emergency nutrition in the 1980s and 1990s. The UNICEF conceptual framework on causes of malnutrition promoted a similar approach. This was part of the livelihoods regime, which was characterised by the involvement of NGOs and influenced by their experience of responding to famine and refugees in these decades. At international conferences, aid workers and academics discussed the failure of aid in response to these crises and the role of donor political priorities, and that even though aid had failed, crisis-affected people had developed their own strategies. It was accepted that nutrition had to be interpreted within the social, political economic context. The 1980s and 1990s saw a whole new range of practices, including famine early warning systems, ways of targeting assistance, and the adoption of an emergency threshold (of the prevalence of wasting) for response. At the end of the 1990s, however, much famine early warning failed, and much higher levels of acute malnutrition were needed to get a response. The proliferation of practices also led to a split between nutrition, food security and food aid, which in turn led to a narrowing of nutrition – a more individual approach.

For the last 10 years or so, we have been in the resilience regime. One aim of food aid practices is now to promote resilience, to be able to adapt to shocks. The other characteristics of this regime are a shift to quantitative assessment methods, behaviour change, and treatment. Nutrition moved from a population-based to an individualised approach, and was seen as key to resilience. If people are well-nourished, they are stronger, and can work harder. Nutrition itself became the object of intervention. What brought this about? Globally, fears of instability due to the War on Terror and the global food crisis. It was also influenced by the Global Alliance for Food Security and Nutrition, and by SUN, which were in turn influenced by the *Lancet* articles which focussed on feeding and behaviour. Even in Darfur, where conflict continues, malnutrition is now considered a result of culture and behaviour. The *Lancet* articles exclude emergencies, however, so why would agencies be interested in adopting a medicalised approach in emergencies? It is seen as cost-effective, donors have linked it to security and foreign policy, and for the private sector a motivation can be profit. In Sudan, however, perhaps the most important thing is that it is an anti-political tool. If malnutrition is a result of behaviour and can be treated with specialised food products it is no longer controversial. The functions of medicalised nutrition were also influenced by other developments in Sudan. Access to crisis-affected populations is limited and what is common in all these new approaches is that much can be done remotely. Also, when combined with quantitative food security indicators, you get a picture which delinks nutrition from food security. The food consumption score often shows low or unchanging food security, but other assessments show high levels of malnutrition, which makes it easier to interpret malnutrition as due to behaviour. What these practices have done is created some kind of parallel reality, where

malnutrition is the result of behaviour, rather than the ongoing conflict. It allows agencies to maintain a presence but it hides the ongoing conflict and facilitates the government's counter-insurgency strategy. Together with the lack of large-scale food aid response to malnutrition, this can be seen as an abandonment of crisis-affected populations. Agencies are no longer looking at the wider causes of malnutrition, and this makes them complicit.

Samuel Hauenstein Swan. The effect of funding and operational challenges on changes in nutrition practices

Samuel presented his reflections after 20 years of working in emergency nutrition, first with MSF and later with ACF. His first experience in Malange (Angola) (in 1999) was an old-style emergency approach: they flew everything in and had thousands of children in feeding centres. He next went to Chechnya, where they tried to use RUTF but could not bring people to the hospital because they were targets. The end of the Cold War had brought about big changes, in particular in terms of access as they suddenly went to more places and treated more children. The adoption by UNICEF of the CMAM approach facilitated this. The 2008 food crisis provided new challenges; hunger was no longer seen as an outcome of a crisis but as an issue that can be addressed through a multi-sectoral approach, in which CMAM played a major role. However, the funding did not allow for sustainable scale up in many contexts. The new WHO growth standards for classifying Severe Acute Malnutrition (SAM) increased numbers of clinical cases, and hence the total cost of treating the ill children. Organisations had to prioritise between treating the severely malnourished and keeping supplementary feeding and nutrition-sensitive interventions (such as water and sanitation, nutrition education, and food security) going. It became easier to prioritise when the *Lancet* gave a list of 13 interventions to address malnutrition. Food security came closer to nutrition in nutrition-focused NGOs such as ACF as they could pick some of the nutrition-sensitive interventions to support therapeutic feeding. But funding for food security and nutrition did not come from the same sources, and it was hard to have a programme with a nutrition core and food security programmes around it. At the same time, emergencies became more difficult to work in, particularly conflict-related emergencies. The aid sector also expanded, with more actors entering the nutrition sector, complicating coordination and complementary programming. ACF worked in some of the most difficult places; there were 10 wars in 2015 and ACF was operating in all these conflict areas with the exception of North Sudan (where all 'French' organisations were expelled at the time). According to the 2015 Annual Progress Report, 37% of the organisation's money was spent in 10 conflict zones, while the remaining 38 country missions accounted for 63% of funding spend. Supporting the 10 missions was expensive because they faced a number of operational constraints. Where access was limited, ACF trained and supervised local teams, but remotely operating coordination teams still had to report back on how the money was spent and ensure quality of care.

In Somalia, donors adopted a consortium approach a year ago, which led to the Somalia nutrition programme with the big three nutrition NGOs in south-central Somalia coordinating and executing one project together with a number of local partners on the ground. The lead agency received funding for programme monitoring, evaluation and coordination which enabled them to cover the overhead cost of its office in Kenya. The partner agencies operate in the field. They also had to supervise expenditures and quality of care remotely but received less compensation and funding for Kenya-based staff. Funds were also limited for placing many staff in very insecure places. This meant the funds for support costs had to be found in programme savings or had to be added from the partners own funds. To maintain core capacity is difficult and costly for all but consortium leads. This is particularly the case in contexts such as Somalia where coordination is spaced over

three locations: field, capital and safe location, in this case Nairobi and partner organisations often ended up supplementing the funding provided by donors to ensure sound nutrition programming.

Given the complicated communications between the consortium partners, learning capacity was suboptimal and the capacity to absorb lessons from each other and from the field was slow. Programmes just focussed on areas of consensus. What it meant is that in south-central Somalia, standard programmes were being implemented but room for being creative was limited.

Jean-Herve Bradol. Challenging the shift towards medicalised and behavioural practices

Jean-Hervé spoke about his experience in three different situations with MSF. The first was in 1989 in Northern Uganda in a nutrition rehabilitation centre. The region was very poor, but malnutrition was not common, and they mostly looked at medical causes. Sometimes the cause was lack of food, in which case they could buy food with their own money or ask relatives or friends to buy it for them. Malnutrition was treated individually, this was a medicalised approach.

Then in 1991, he worked in Somalia during the famine. The situation was frustrating because it was all about access; about military and political decisions. It was difficult to carry out medical activities. As a consequence, interventions to treat malnutrition were poor. They could not be efficient because they had to deal with obstructive authorities and warlords which caused delays. While they were waiting, the vulnerable died.

A third type of situation was Niger in 2005, which was characterised by hotspots of undernutrition, associated with high mortality rates. There were too many underweight children every year. How to prioritise was a big issue, and most of the resources went on screening. As a consequence, the budget was dominated by huge personnel costs. If food insecurity was severe, many children were likely to be underweight. Most resources were spent in attempts to catch the very moment when undernutrition becomes acute and severe, as a condition to treat a child.

Without a new form of intervention, it is difficult to have success. But the product price of commercially produced RUTF is more than €2/kg. This is the first reason why the access to new products is restricted to acute and severe cases. This is not surprising, as since the mid 1970s big public health moves have been a matter of policy – there is no market waiting for this. If you compare it with vaccines, the cost went down with a policy for mass vaccinations; at market conditions it would have been impossible. It was the same for contraception, for smallpox (which had to receive huge grants), and for HIV. Today, there is little political will to copy this situation for ideological reasons. The code against the distribution of breastmilk substitutes is an example of things being banned for ideological reasons. For most families, supplementary foods such as oil and sugar are a luxury and could not be consumed only by the child. In addition, we organise restricted access to the new generation of products for both ideological and economic reasons. In rich countries, we simply supply families that cannot correctly feed toddlers with free products. The problem is that we are asking the poorest section of the world population to do better than the poor in rich countries.

Jody Harris. Stunting as a buzzword: strategic ambiguity in nutrition discourse

Jody presented a paper (Harris, forthcoming) from her PhD research in which she examined the last several decades of international nutrition, through the lens of critical anthropology of development. Various written reports and academic writing, particularly over the past ten years, have moved nutrition forward in the development funding and action agenda, promoting key organising concepts for the nutrition community such as the importance of reaching children in the first 1000 days between conception and age 2, and the monitoring of stunted growth as a key indicator of chronic malnutrition and development more broadly. The influential *Lancet* undernutrition series (in 2008 and 2013) called for interventions: nutrition-specific to address immediate causes; along with nutrition-sensitive, multi-sectoral, interventions to have an indirect effect on nutrition through food, health and care.

This raises issues of communication and language between the different sectors responsible for these different interventions. In development discourse, using the right ‘buzzwords’ signals understanding and belonging to a community of practice, but buzzwords can also serve to obscure or broaden definitions so much that all viewpoints can be included or no specific agenda can be advanced. Where several competing senses exist, they can create *strategic ambiguity*. Conceptual ambiguity in language can create a false sense that we are all involved in the same unproblematic endeavour. Multiple actors can follow their own divergent interests but in pursuit of the same stated goal. They can negotiate but at the same time hold multiple interpretations of the same concepts, yet all sides can claim to be motivated for the same purpose.

Strategic ambiguity is used by international agencies whether consciously or not when signing up to reduce malnutrition. The concept of child stunting is currently the dominant concept in international nutrition, and this paper explores why stunting is winning the buzzword war. Measurement of and action for child stunting has overtaken all other nutrition issues (from hunger and wasting to obesity and deficiencies), even though stunting is not the most prevalent or the most problematic issue in every context. But why is stunting getting more attention and funding? Stunting is useful because it reflects overall development: everything needs to have gone well in a young child’s life to have avoided stunting. But it is also useful because it is all-encompassing and so speaks to the goals and interests of many diverse development actors. The multiple causes and consequences of stunting mean it can be aligned with a number of issues. This malleability is an advantage politically in bringing multiple actors on board with nutrition, but while the feeling of common endeavour is often genuine, this sense of common purpose can also mask conflicting interests and contradictory actions. For example, breastfeeding advocates and infant formula companies both claim to be working towards stunting reductions but promote opposing actions.

While stunting appeals in a global context and is used to frame multiple actions and to bring different actors on board, it is this ‘all things to all people’ property of the concept that limits progress on the same cause when participants are pulling in different directions. To conclude: there is a need to critique the ideas and norms established by the international community. Why do particular concepts have influence? We need to reflect on the assumptions we hold in our work. A lack of attention to different framings and preferences limits our legitimacy. We need to think about concepts, framing and the actions that this allows. It might not change what we do immediately, but maybe attention to language can create greater clarity and start to move agendas in more useful ways.

Discussion

The discussion included an elaboration on the organisational issues that influenced nutrition practices, the issue of language and buzzwords, and why behaviour change has become so popular in nutrition. In terms of organisational issues, working in consortia and situations of limited access influences what can be done. In Yemen and Syria, it has been hard even to just to do one thing. Crises like Somalia, Yemen, CAR, and South Sudan are difficult places with lots of needs – it is difficult to do ‘the whole package.’ Consortia impose organisational pressures which means that they are often reduced to interventions that have been tested. You have to show value for money. People are reluctant to acknowledge if there is a problem. Participants also discussed what constitutes a buzzword – is ‘measuring malnutrition’ or ‘hunger’ a buzzword? You can define these things biochemically, clinically, or socially, which are all different ways of doing this. Food may be considered differently when given to staff or given as treatment. At what stage does food become medicine? The use of the word stunting itself also needs to be analysed. It used to be called nutritional dwarfism. Why is low weight-for-age underweight, and low height-for-age not underheight? It created a debate on stunted countries – particularly India. On behaviour, it appears that most agencies are now working on behaviour change. These interventions are often based on quantitative measures to understand knowledge, which is very superficial, and then implementing top down education programmes which are framed as behavioural change. We also need to look at the social and cultural environment. Nutrition education is often put into WFP projects even before it is known that knowledge is a problem. In any case, knowledge may not lead to behaviour change but it is useful for creating posters and other educational materials. This is how malnutrition is being talked about in Sudan, but in Darfur it seems mad that anyone would think that malnutrition is due to poor infant feeding. It excludes things like access to land, to employment, coercion. The thing is that it works politically but gives a very false picture. Furthermore, the danger of the behavioural change narrative is very much that it speaks to the individualisation and depoliticisation of nutrition outcomes. Behaviour change aspects of projects are often very simplistic and fail to take on board structural factors. These issues were discussed in more detail in session 4.

Session 4: The dangers of simplification and the role of social nutrition

In this session we discussed in more detail the advantages of more context-specific approaches and what has been lost with increased simplification and standardisation of nutrition practices. We examined the complexities of malnutrition causality with examples from different contexts, and explored what role social nutrition can play in analysing and addressing nutritional problems in development and emergency settings.

Sara Stevano and Deborah Johnston (presented by Deborah). Better decisions are not enough: a study of food decision-making and practice among schoolchildren in urban Ghana

Deborah presented findings from her and Sara’s research in Ghana. The research concerned the issue of choice and who is making the choices about what food to eat. It also aimed to inform the conceptual links between urban food provision and consumption which are still very under-developed in policy. The study shows the need to pay attention to children and to street food. It looks particularly at consumption practices of young adults. Nutrition education programmes put

emphasis on the role of mothers in providing healthy home-grown or prepared food, however the practices of young people suggest a different picture. Ghana itself shows a picture of a double burden: some people are overweight and some underweight. The debate in Ghana has been about agricultural diversity and engineering nutrients in agricultural products, and the right foods to eat, but with very little focus on nutrition transition. Yet WHO shows a high consumption of soft drinks amongst junior and secondary school children.

The research involved studying the quality of the diet of children in two private and two public schools, representing different socio-economic groups. Quantitative and qualitative data were collected. It found that the poorest children have high consumption patterns of street food. This countered assumptions about nutrition transition. The middle group ate the most packaged and processed food, and the richest group was mixed. It shows that nutrition transition is not straightforward. Furthermore, the children said they made their own choices. The poorest did not have breakfast at home – mothers had no time because they work – so they got money to buy food on the way to school. They used the cash to buy something in the school canteen or from food vendors around the school. At home they might cook for themselves. The wealthier children were driven to private schools, and their parents pre-paid for their food. They did not choose their own food. The researchers also asked about food knowledge: most children had good knowledge about food, especially in state schools as it is part of their curriculum, but there was no association between food knowledge and subsequent dietary diversity or food consumption patterns. Taste (which was affected by advertising), affordability and accessibility were key factors in decision-making. Children knew that food sold by vendors at the school gates was probably not hygienic but they felt they did not have a choice. It is therefore important to consider the context of decision-making: the way that children went to school, advertising, aspirations for continental food, but at the same time scepticism about the claims of the nutritional contents of the products (they usually did not believe the claims made by food companies). Food companies make use of nutritional narratives but their claims are subject to little scrutiny. Policy is usually focussed on women but they may not be the ones making choices. The study highlights a need to consider whether nutrition education is targeted at the right groups, and the importance of affordability, accessibility, and aspirations in food choices.

Lauren Blake. The wrong focus: malnutrition, gender and interventions in Guatemala

Lauren presented findings from her postgraduate research in rural Guatemala. Guatemala is in the top five countries for chronic malnutrition, despite being richer than neighbouring countries and having high levels of agricultural production. Paradoxically, the people who produce the food are also the least nourished. Even though you can see lots of vegetables and fruits in the markets, there are micro-nutrient deficiencies. Simultaneously, there are high rates of diabetes across all stratum of society. In her research, Lauren looked at several nutrition intervention programmes in three communities, using ethnography, interviews and focus group discussions as methods.

Interventions to address chronic malnutrition included nutrition and health education, cookery workshops and supplementary feeding but there was limited uptake and positive impact. Children were weighed on a weekly basis, their mothers were given food staples as an incentive to attend, and education was given at the same time. The clinic also trained local health reps and delivered workshops to improve malnutrition for targeted families. The assumed causes of malnutrition were: lack of education, cultural norms, and lack of resources. All interventions were targeted at women, on the basis that women do all the food preparation and feeding. However, the workshops were poorly attended and there was reluctance around the weekly weighing/measuring and talks, despite food aid.

The main study finding was that all the responsibility was put on women but their power to create change was limited. This society had incredibly entrenched gender norms, and men were pretty much banned from the kitchen. But women were proud to be there; the important cultural role of maize and how they prepared it gave them a sense of identity and value. Preparing tortillas by hand is a source of pride and authority for the Maya, and women are taught from a young age how to make them. Therefore, when women were told that their children were malnourished and that they needed to learn how to cook, they felt a sense of failure, of shame, and felt insulted. Even if they wanted to cook differently, they did not really have the power or resources. Fruits, vegetables and animal source foods were expensive and often targeted for export, and besides, men largely controlled the finances anyway and their food preferences took priority. Furthermore, men were reluctant for the women to be away from the kitchen to attend educational sessions. These interventions also ignored wider issues of socio-economic power relations, the reality of poverty, and issues related to the role of the state such as lack of clean water and waste management, which contribute to malnutrition. One key conclusion was that a qualitative approach can explore and illuminate such issues, nuances and dynamics. An anthropological approach supports a participant-based perspective and the relationship between knowledge, behaviour and power structures.

Lizzie Hull. The influence of medicalised knowledge regimes on South Africa's school feeding programme

Lizzie Hull presented an issue on which she would like to do research: how delivery structures for school-feeding in South Africa shape understanding of malnutrition. Since the 1980s, school-feeding has become very popular. It is often a country's first nutrition policy, even though the evidence of impact on nutrition is patchy. South Africa's National School Nutrition Programme reaches over 9 million children daily. South Africa generally has a high level of state support and a large system of social protection, compared to neighbouring countries, but there are still high rates of under- and over-nutrition. Lizzie's project aims to look at the role of middle-men, or brokers, that operate along the supply chain for school-feeding programmes. The government uses semi-formalised middle-men to supply food according to a standardised menu set at provincial government level by nutrition experts. This is one paradigm. On the other hand, there is a competing paradigm that suggests what is really needed is for local farmers to be incorporated into this supply chain. The latter entails a different understanding of nutrition that is perhaps more holistic, and reflects more concern for local agricultural production and local livelihoods. One thing to consider is how these different ways of approaching the scheme are informed by different ways of thinking about nutrition.

The history of nutrition in South Africa generally is of more medicalised and standardised approaches rather than holistic. In her book *Starving on a Full Stomach* (2001), Diana Wylie argues that science discourse was used paternalistically by the apartheid government, and reflected the racist attitude that viewed Africans as ignorant, people without science, which justified social engineering. Prior to apartheid, clinics set up by mission doctors had a more preventative approach; they tried to understand agriculture in relation to nutrition. These approaches also drew on paternalist discourses that could be depoliticising – encouraging people to help themselves. There is a long history of different kinds of approaches. Coming from the discipline of economic anthropology, it is interesting to think about these different paradigms as mediated by middle-men on the ground. In anthropology, brokers and middle-men are seen as an interesting category of person, who mediate between different realms: state bureaucracies, formal markets and local communities. These middle-men are harbingers of the standardised medicalised approach, yet they are also intervening in a whole array of transactional relationships that perhaps suggests

multiplicity in interpretations between food, livelihood and nutrition. A key question is therefore: who are the brokers that navigate between the different paradigms? How do the different paradigms mobilise in practice? How are the logics of nutritionism extended into particular settings? These loose value chains tend to be ignored in policy and tend not to be analysed in school-feeding programmes but they are important to consider because of the institutionalised settings that feeding programmes operate in. An anthropological approach can explain how particular paradigms are operationalised and what determines this.

Nick Nisbett. Nutrition, systems and embodiment: a review of current models in policy and critical thought

Nick presented his analysis of what can be learnt from the history of nutrition policy and social theory (Nisbett, forthcoming). Fundamentally, nutrition can be seen as the embodiment of intergenerational and systemic inequality. This is sometimes implicit and sometimes explicit in public health writing. In this presentation, Nick explored what is implicit and explicit, and examined what has been shunted aside and what social determinants influenced this. This is little studied in nutrition science. Whereas social science focusses on the social and the political, medical science focusses on the material, medicinal, and the physical manifestations of illness. Lacking a common language to discuss complex social and biological ideologies has led to accusations of blunt reductionism by social scientists. At the same time, it is possible to see advances in critical and scientific thought which show stronger connections between social and material causes of malnutrition without perpetuating this cartesian divide. For example, if you consider the original thinking that went into it the UNICEF Framework [on the causes of malnutrition], it encompassed considerations of power and gender relations, other social determinants, as well as food, health and care. However, the problem as argued in Nisbett et al. (2014) is not so much with the model but with the fact that until recently the basic causes were put in a 'black box' which ignores the political economy. How did those underlying causes get there in the first place? More broadly, this is just one model out of many. There are models which include agri-value chains, food production, climate change, international trade, and many more. Mapping those models can be a bit bewildering.

Models describe how things work together but in practice are often just used to produce checklists. There is a tension between a simplified model which may miss important details, and more complex models which lose analytical utility the more complex they become. The role of critical and social science is to think in terms of complexity and non-linearity. Non-linearity is at the heart of systems thinking, which focuses on not only the current system state but also its historical and political context. This is lost in static models; systems thinking is rarely applied in public health nutrition, which is a missed opportunity. Another way to think about complexity is to go back to thinking about the body – the body as visual and collective experience within social and political systems. Medical anthropologists argue that the medical representation of the body feeds underlying political structures. Nutritionism has replaced other ways of thinking. More recently, new materialist approaches such as that of Jane Bennett, which see food/nutrition as an assemblage of physical, political, material and ideological process, gives us a new language which promises exciting new ways to analyse such nutritional inequalities in future. We need to be alive to the possibilities of further dialogue between social and natural sciences in these areas; though all the while being alert to the risk of falling back on tired old ruts of reductionist, individualised and medicalised interventions on one side and theoretically obscure debates on the other. To conclude, both systemic thinking and anthropology have shared projects in questioning the barriers between natural and social science. The way to understand nutrition is to pay attention to systemic thinking but without falling back on exhaustive systemic depictions. Nutritional inequalities are

amongst the most fascinating examples of a health issue linking bodily processes at a molecular level to wider human and broader natural systems of food production, taste, economic distribution and political control.

Discussion

Issues of discussion were decision-making in communities, the lack of debate about nutrition paradigms, and policy implications. On decision-making one issue was gender roles. Do women need more time in food production or food preparation? The reality of this is a really complex political project. What does more time mean? How does it happen? What are the aspirations of women themselves? In CTC, there was also a need to look carefully at who is making decisions within communities. This was much more difficult for chronic rather than acute malnutrition. Everyone can see acute malnutrition, so it is easier to stimulate positive behaviour change. On nutrition paradigms, an issue is that there are lots of changes happening quickly within the aid industry and within the food industry; and the speed of change means it is difficult to pin it down academically. What does not seem to be happening enough is pushing back against ignorance as a cause of malnutrition and that specialised products are the solution. This is a long-running debate, which flared up a great deal in the 1880s and 1890s, especially in America, where malnutrition in the working population was often attributed to ignorance by managers, and to poor wages by unions. The negotiation of minimum dietary standards became part of the struggle over the social product, but many of the ruling classes dismissed hunger as the result of poor dietary choices rather than poverty (Aronson, 1982). Also, specific measurements or diagnosis contribute to particular paradigms, for example, considerations for assessing nutritional status of adults were initially ignored, BMI in children was suggested but inappropriate, and diabetes, contrary to popular discourse that it is associated with obesity, in India is being diagnosed in deprived undernourished populations. This also fits well with Barker's hypothesis of the foetal origins of diabetes/hypertension etc.

In response to questions about policy recommendations, presenters emphasised that the studies were not evaluations so did not give particular recommendations. There would be a need to think at different levels, for example behaviour change needs wider social and cultural change. Involving men more in intervention projects and household tasks would be one intervention at the household level. In Guatemala, a project which gave cash direct to women (for hosting international students for meals) tended to be more effective in improving diets, but this was a unique case and not an easily repeatable intervention. Influencing government policy is important but much more difficult. There is also a need to look at food advertising, to think about the vendors, not only the food sellers. The informal sector overlaps with industrialised food. We also need to look deeper than advertising: how is the neoliberal environment influencing various enterprises?

Session 5: Thoughts and discussion on key issues - Barbara Harris-White

Barbara presented her thinking on the key issues arising from the presentations and discussions during the day, and highlighted areas which need further reflection and analysis.

Nutrition has always been very disputatous, with debates about concepts and approaches. Back in the 1980s, when Barbara taught social nutrition at the London School of Hygiene and Tropical Medicine, the scope of nutrition policy was the subject of great debate, and it still is. The weighting of the medical and scientific approach versus a social scientific approach to nutrition policy was also debated at that time, exemplified by Sukatme's concept of malnutrition as failure to adapt versus Gopalan's concept of malnutrition as failure to acquire a decent diet (reviewed in chapter 4, Pacey and Payne, 1985).

What is distinctive about nutrition? Barbara framed the issues raised during the day using a critical approach to public administration, first imagined by Bernard Schaffer (1984), combining discourse (Apthorpe and Gasper, 2014) with a critical legal-institutional approach to policy (Alston, 1994) and a political economy of resources (Dickson, 1988). This is an expanded framework for understanding policy in which what we think and what we do as researchers and policy-makers is a constant churning of discourse, of political factors and interests which result in different priorities, all of which influence the public policy agenda. And then additionally the politics of law and procedures, of finance and money, and of people's varied access to the state.

First, discourse. The focus of the workshop has been on concepts, ideas and words. Over time, concepts have excluded some things as well as making certain ideas possible. In 35 years, nutrition has seen a proliferation of sub-fields and paradigms. This process is going on in science as well as in social science. In nutrition, we have also seen a proliferation of experience and knowledge of what works. In our discussions we have covered five different dimensions of nutrition, each with their own vocabulary: 1) medical versus social; 2) humanitarian versus development; 3) time, because we are interested in how nutrition has evolved in different periods and in response to different historical forces; 4) space, which encapsulates society and economy and politics – many participants spoke of the importance of specificity and locality; and lastly, 5) an immense discursive realm, with a plurality of concepts, in which we have to place our understanding of various functions, processes and responses to malnutrition. And we have to have reasons for that placing.

Everyone talked about international nutrition. What is this in contrast to? Not in contrast to national or local nutrition. It is actually the UN, nation and aid industry's agenda. Sometimes the nutritionist needs to set that agenda against an understanding of very localised and intimate intra-household behaviour which is shaped by a great range of micro and macro practices if s/he wishes to figure out 'what is to be done'.

There were a number of papers on norms and standards. There is pressure for convergence and consensus, just as there is a pressure towards international nutrition. Norms and standards are part of a 'donative' approach to development, with NGOs or the state doing something to help people who are struggling to meet food needs, but they also highlight an unwillingness to be combative and even innovative. Concepts and standards constrain possibilities, and we need to consider what the implications of these constraints are. Statistically derived norms drive concepts such as severe or moderate malnutrition which in turn drive policies and so on and so forth. What we need to discuss is whether these norms are liberating or constraints.

There was also much discussion about fuzzy concepts and buzzwords, and about strategic ambiguity. Fuzzy concepts mask disputes. A fuzzy concept is something about which we all can have our own private understandings. So much so that we may not even be aware that we are agreeing to disagree. Policy turns out to be a fuzzy concept. There is another kind of concept

which is precise, but where meaning has changed over time: the state is one such concept. What can be done by way of what we understand by nutrition policy is mainly determined by what we understand by the state. The relation between ideas of policy and of the state needs developing. Regimes of practice are one way of looking at policy. There may be multiple regimes of practice, not all supportive of nutrition. Biopolitics and other Foucauldian concepts were behind a lot of the workshop discussion and need to be made more explicit. Bio-politics enables the control and management of human bodies. Biopolitics is of central importance for the nutrition of women, infants and children.

Different approaches to knowing were opened up at the workshop: empiricism, positivism, and often suffocating and implicit and undeclared theoretical complexities in the social sciences. Nutrition has a particular complexity because it bridges science and social science.

Presentations also revealed a set of concepts and discursive categories for the nutrition agenda itself, rather than about pathologies of malnutrition or policies to address them. Categories included: sensitive and specific nutrition interventions, direct and indirect causes of malnutrition, the biology of physiological and psychological deterioration, interpretive, multi-disciplinary or social approaches to nutrition, and many complicated models which try to order a multiplicity of factors which may or may not cause malnutrition. So nutrition still has to navigate a lot of complexity – maybe even more than 35 years ago. What was missing from the workshop discussion is whether the search for consensus is a matter of discursive hegemony (as in the case of the UN approach and the desire to get everybody involved in the field of nutrition to sing happily from the same hymn sheet) or is it domination (forcing an agenda on others – say through funding conditions – who might disagree)? Does everyone have an interest in speaking the same language or are there alternative or suppressed discourses around the table? How do people theorise, or do they think about theorising causes of changes at all? What kind of concepts are mobilised to think about the causes and effects of malnutrition? What do undernourished people themselves consider the causes of their distress? Amartya Sen's Food Availability Decline and Food Entitlement Decline were hardly mentioned but are great devices to help scientists understand society. No one talked about capitalism either, reflecting a remarkable reluctance to look at structures of conflicting interest (see Harriss-White, 2006).

Second, nutrition politics, the institutions and politics that make the subjects that we talked about today important. Why did they bubble up to the top of the agenda? The entire day's discussion was marked by a distinction between humanitarian and development objectives. Are they really separate? The presentations and discussions highlighted that there is a much longer non-humanitarian (sometimes military) record that has generated the humanitarian agenda, including war, the deliberate creation of famine, epidemics, and extreme events like the depression of the 1920s. All of that has been alluded to today, as influencing the development of humanitarian nutrition. Medicine has been a rapid reactor and a stimulant of the science of starvation. Later, medical approaches to nutrition stimulated moves towards *both* low tech and high tech approaches to humanitarian interventions. When we have such unstable institutional coalitions to address disasters and malnutrition, how and where is social-nutritional knowledge maintained over time? There is a problem of institutional memory and of being able to absorb the learning from the 1980s and not repeating the errors, or trials and errors, ever after, in universities and NGOs. The difficulty of preserving institutional memory and best practice is exacerbated by the fact that humanitarians often work in extremely difficult, remote, inaccessible and sometimes rapidly changing and dangerous conditions on temporary contracts that do not allow for reflection. What

was not discussed much today was the role of new technologies, for example remote sensing, in generating data useful for interventions – and in preserving that data.

We also did not discuss whether the neoliberal economy is disaster-ridden and if so, what to do about its tendencies to create disasters. This does not mean to say that socialist economies have not been disaster-ridden, but few societies remain socialist now. We did not discuss the global economy's inherent tendencies towards crisis. Ecological crises are a kind of disaster manifestly on the increase and their nutritional ramifications need to be taken more seriously.

Who drives the priorities for action on nutrition? The UN and international finance, aid agencies, large NGOs, large companies and their research, produce a tension between globality and local specificity. Nutrition is spread across many government departments and is often of low priority in all of them. What is understood as nutrition policies has become much more complex. The field of nutrition policy has evolved and expanded to include health, food and agriculture (and the food industry), sanitation and waste, human development and education, labour and social security – all of which has implications for public expenditure and the treasury. Multidimensional competences, and coordination skills, are more necessary than appreciated but such bureaucratic skills are costly to the state. During the day the nutrition agenda included supplementary feeding, nutrition education, social deprivation and poverty, agricultural production and distribution, new diseases, obesity, patriarchal cultures, and childhood socialisation, nutraceuticals, multinationals, and the interests and engagement of the media. We also heard about scaling up nutrition, low tech and high tech linkages between nutrition and agriculture. How do the various powerful drivers of nutrition policy change their relative influence on the elements of such an agenda?

Third, aspects of law and procedure. What is the enabling environment for policy? What are the institutions that need to be in place for a policy to work as intended? Underneath a lot of the discussion today is the assumption that the enabling environment is not a problem, or that if the 'procedure' (meaning codified ways of operating, including law) is in place then things will happen as intended. But it is important to think about law and procedure as generating a separate kind of politics from that of the agenda and its discourse. Law is an arena of politics in which policy intentions must be expected to slip. Law is also a source for capture by interested parties – and defence by their enemies. Law is also a set of processes. An example is about operationalising rights-based approaches, as with the right to food, how to make such rights work in law. We have talked a lot about codification, measurement, categories, but after that the state has to feel obliged to provide that right. The state has to declare that it is the legitimate bearer of that duty, and people have to be able to challenge the state for not provisioning/not complying with that duty. After that, an institution is needed to arbitrate or to judge those challenges. And the judgements made have to be enforceable and enforced. All these things have to be in place for a rights-based approach to be operationalised.

In the discussion we also focussed on different scales at which policy operates, which raises another issue. In many countries, e.g. India, there is reform after reform, but previous policy-making is not actually destroyed. Policy then sediments like rock. Like alluvium, there is a process of deposition of bureaucrats, agencies skills, procedures, budgets and interests that sediments over time. In nutrition policy you cannot take its absence for granted, you have to understand the policy sediment, negotiate with it or capture it, navigate it or avoid it. Never ignore it.

Fourth, aspects of finance. Difficulties in implementation were followed by calls for political will, commitment and action. But nothing gets done without funding. How those funds are raised is as important to policy and to research as anything else. What we heard today is the importance of social cost benefit analysis as the mode of claim for nutrition funding. Nutrition is not the only field where things that cannot be valued in dollar terms nevertheless have to be valued as such in order to qualify for funding. How do you value a life? How do you value the opportunity cost of different states of health? These were questions we mulled over in the 1980s. They remain huge problems in mainstreaming nutrition in the policy whirlpool. But is this the right way to justify policy? Are there alternatives? The private sector is now offered as an alternative, sometimes in the concept of ‘partnership’. When people evoked synergy between the private and public sectors, plus NGO funds in consortia or in partnerships, the assumption is that funds coming from different sources will work at the same pace, and with the same aim. Is this a reasonable assumption? Let us always remember when we think about collective action and scaling it up, that civil society and NGOs have their own strange paradoxes. They may address social problems which need a concerted effort but at the same time they each need their own separate identity in order to gather funding.

Fifth, is the question of access. Who is eligible? People have multiple identities. Sen has written a lot on this (Sen, 2007), some people present their identities quite partially according to the labels of the state in order to be eligible for resources. A hungry, post-menopausal woman labourer presents herself as a mother – for mother-child interventions. Even when eligible for nutritional benefits, political struggles develop around the resources flowing from the state. What happens to the eligible in times of austerity? A lot of evidence has built up about access to benefits: queues and their disciplines: whether people can exercise ‘voice’ (influence or power) to get the queues to function in a way that serves their interests. The discussions today about the informal economy and informal politics are very relevant to the question of how eligible people get access to nutrition interventions. There are informal alternatives by which people get the resources they need. And all these practices of access still need systematic analysis: to understand how and why intended beneficiaries become victims and vice versa (Fernandez, 2012). Have the ‘rules of access’ changed for malnourished people, while the agenda gyrates, develops and becomes more sophisticated?

The issues Barbara raised gave participants a lot to think about. On the one hand, some issues are similar to those in the past, but at the same time nutrition policy has become more complicated. What is clear, however, is that there is a need to think more critically about the nutrition approaches being used today, and that a historical analysis and disciplines outside of nutrition (anthropology, development studies, economics, history, politics) can help with this. The discussions raised some big questions, some practicalities and theoretical ideas. While some participants were more concerned with practical applications, others raised the importance of realising that interventions can create a kind of anti-politics (which could be defined as an international reasonability that ignores national development politics and which turns malnutrition into a technical problem). The national political specificity that Barbara talked about continually creates the contexts where aid agencies or other development actors then have to intervene. That is why it is important to think beyond the question how to best intervene medically. Going back to soup kitchens: more soup kitchens arrived at times of food crisis and riots, and they were a means of social control as well as an intervention to provide food to the poor. Practitioner presentations raised social and political issues such as: that the change from CTC to CMAM enabled more business involvement in the production of specialised nutritional foods, that working in consortia leads to a tendency to work with more simplified standardised nutrition packages, and that high rates of malnutrition in places like Niger are unlikely to be solved by market-based approaches. It

is always possible to look at things from a medical or nutritional perspective, and from a social and political perspective. When medical or nutritional interventions are effective in saving lives, they will have wider social, political and economic effects. The workshop highlighted the importance of understanding the different ways of framing the nutrition policy context, the value of using a historical lens, and the different perceptions of the problem that result.

Annex 1: Participants

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Barbara Harriss-White	Emeritus Professor of Development Studies, Oxford University
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Joel Glasman	Professor, African History, Faculty of Cultural Studies, University of Bayreuth, Germany
C. Sathyamala	Academic Researcher, International Institute of Social Studies, Erasmus University Rotterdam, The Netherlands
Jody Harris	Post-Doctoral Researcher, Institute of Development Studies, Sussex
Steve Collins	Founder and Chairperson of Valid Nutrition
Megan Pennell	Country Support Adviser, Scaling UP Nutrition Civil Society Network
Samuel Hauenstein-Swan	Freelance Humanitarian Expert
Jean-Hervé Bradol	Director of Studies, MSF-CRASH (Centre de Réflexion sur l'Action et les Savoirs Humanitaires)
Deborah Johnston	Professor in Development Economics, Pro-Director (Learning and Teaching), SOAS, University of London
Lauren Blake	Postdoctoral Researcher, Royal Veterinary College / LCIRAH
Nicholas Nisbett	Research Fellow, Health and Nutrition Cluster, IDS, Sussex
Yana Manyuk	Program & Policy Officer, Behavior Change Communications, WFP, Regional Bureau for the Middle East, North Africa, Central Asia & Eastern Europe
Lorena Lombardozi	Senior Teaching Fellow and PhD student, Department of Economics, SOAS

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