

A review of technical discussion on en-net: Recurring questions and gaps experienced by programmers

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Location: *Global*

What we know: There is demand for timely and systematic nutrition technical support to countries during emergencies. en-net is an online technical moderated platform established in 2009 to help address this.

What this article adds: A Global Technical Assistance Mechanism for Nutrition (GTAM) will be launched in 2019 to meet country-level technical needs; where possible leveraging technical support that already exists. A review of issues discussed on four en-net thematic areas (infant and young child feeding interventions; prevention and treatment of severe acute malnutrition; prevention and treatment of moderate acute malnutrition (MAM); and assessment and surveillance¹) was synthesised and analysed for themes and gaps to inform GTAM priorities and ways of working. The most popular thematic area was assessment and surveillance; the least activity was seen on MAM. A broad range of challenges was identified for each forum area that may reflect evidence or guidance gaps or poor awareness, application and accessibility of what is available. en-net technical discourse is a rich, ongoing resource for the GTAM. Recommendations support the planned integration of en-net within the mechanism and advise future en-net/GTAM collaboration to better address unresolved technical questions and technical discord, strengthen knowledge management, and increase country-level engagement in responses.

Background

For the past few years, Global Nutrition Cluster (GNC) partners have sought to identify a solution to the gap in provision of timely and systematic nutrition technical support to countries during emergencies. A GNC Task Force was formed in 2016 to address this and, following extensive consultation, the concept of the Global Technical Assistance Mechanism for Nutrition (GTAM) emerged. This was subsequently endorsed in a GNC meeting in 2017 and will be launched in 2019. The GTAM's main functions are to provide technical advice, facilitate consensus-driven guidance, and improve access to technical expertise to address unresolved technical issues once country and regional capacities are exhausted. It will seek to leverage existing technical support mechanisms wherever possible.

To take stock of issues commonly faced by practitioners working in emergencies and so inform GTAM priority technical areas, a review of the four most commonly used technical forums on the Emergency Nutrition Network (ENN)-hosted online technical forum, en-net², was undertaken by the Technical Rapid Response Team (Tech RRT³) between June and October 2018, overseen by ENN and UNICEF. This is one of several reviews conducted by the GTAM in preparation for its launch (GTAM, 2019). This article provides an overview of the findings of this review.

Objectives and methodology

The aim of the review was to synthesise discussion on en-net to identify key learning and gaps in guidance and evidence/research, as viewed by programmers. Specific objectives addressed were to:

1. Review and classify content of the en-net thematic categories by technical theme;
2. Analyse the content of en-net forum exchanges, pulling together discussions which complement each other, address a common theme and which may build a body of experience around a topic;
3. Determine the degree to which technical questions have been addressed.

Four thematic areas were reviewed: infant and young child feeding (IYCF) interventions; prevention and treatment of moderate acute malnutrition (MAM); prevention and treatment of severe acute malnutrition (SAM); and assessment and surveillance. Questions posted from 2009 onwards were exported into Excel, categorised by sub-theme and type of post, and analysed in terms of the number of replies, whether a definitive answer was provided (classified as 'fully' or 'partially' answered) and whether there was consensus or disagreement. As the review spans almost nine years, apparent gaps in earlier posts may have been resolved since the question was posted. The approach to data analysis was adapted per theme due to the varying nature of questions and responses by forum. Forum areas were reviewed according to the Tech RRT's desk-based (non-deployment) availability.

¹ The 'assessment' thematic area on en-net has since been renamed 'assessment and surveillance'

² www.en-net.org and www.fr.en-net.org

³ The Tech RRT is an emergency response mechanism formed in 2015, led by International Medical Corps in a consortium with Save the Children and Action Against Hunger, that aims to improve the quality and scale of nutrition humanitarian responses. It is funded by USAID/OFDA, Irish Aid and SIDA and works in close collaboration with the GNC and UNICEF Program Division and is part of the GTAM.

Figure 1 Percentage of questions posted 2010-2018 by thematic area reviewed

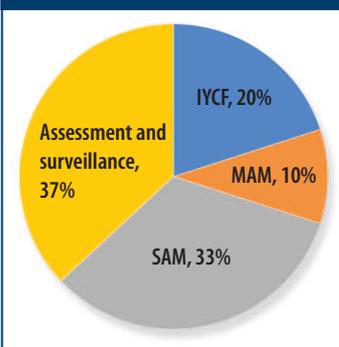
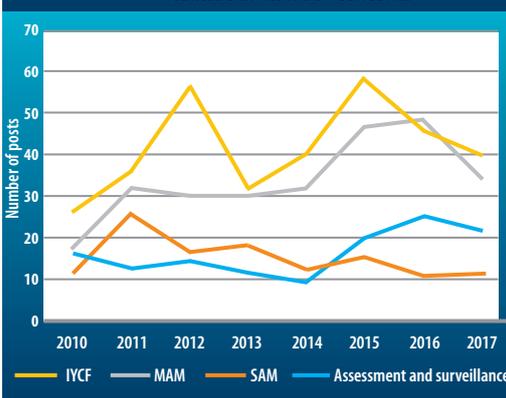


Figure 2 Number of new questions over time posted 2010-2018 by thematic area reviewed



Findings

A total of 984 questions were analysed that generated 3,939 replies and 2,570,220 views between 2009 and 2018. Overall activity by theme is summarised in Table 1. 'Assessment and surveillance' was the most commonly used forum (40% posts, 2009 -2018, 42 posts/year), followed by the 'prevention and treatment of SAM' forum (37% of posts, 34/year); see Figure 1. As shown in Figure 2, questions related to assessment and surveillance rose over time (from 26 in 2010 to 40 in 2017), with peaks in 2012 (57) and 2015 (59). The 2012 peak involved numerous questions related to mid-upper arm circumference (MUAC) that coincided with the 2012 launch of the SMART website.⁴ Questions related to SAM rose from 17 in 2010 to 35 in 2017. Questions on MAM peaked at 26 in 2011, which coincided with the introduction of Supercereals in 2010 (Annan, Web and Brown, 2014) (almost half the questions on the MAM forum in 2011 were on treatment), then gradually declined to 11 in 2017. The number of questions on IYCF remained relatively low between 2010 and 2014 but rose from 2014 onwards, with issues arising from the European refugee crisis (there was also a lot of activity around Ebola programming in West Africa during this period, but this was only generated from two questions). While the IYCF and MAM forums attracted equivalent numbers of questions and replies, the IYCF forum attracted many more 'views'. Although there were fewer questions posted in some months, this is not necessarily indicative of a lack of activity as lively debate is often generated in the form of replies to individual questions and 'old' discussions continue to attract views over time.

Infant and young child feeding interventions

The IYCF forum was well used and most questions were adequately answered (74% fully and 6% partially). Common question topics included: breastfeeding issues; management of non-breastfed infants; support for mothers; monitoring and evaluation for IYCF interventions; effective interventions to address or prevent stunting; dietary diversity; and complementary feeding practices. A discussion thread on IYCF in the context of the Ebola virus in 2014⁵ generated 78 replies and 18,225 views and catalysed rapid, consensus-based interim guidance on this topic and subsequent World Health Organization (WHO) guidance (WHO, 2016). Several posts (n = 6) exposed potentially harmful IYCF practices in the media or in partner reports. When these involved reports by a non-governmental organisation (NGO) or United Nations (UN) agency, the IYCF community moved to communicate directly with them to resolve the issue. It appears that mainstream media/news outlets were not contacted directly. Key IYCF programming challenges reflected in en-net discussions are summarised in Table 2.

Prevention and Treatment of MAM

Questions on the MAM forum were commonly related to a specific treatment/approach (29%) (e.g. *Can Plumpy-Sup be used for blanket supplementary feeding (BSFP) in the absence of Plumpy/Doz?*) or involved a request for a specific document or guideline (28%). Discussions relating to admission and discharge criteria in special circumstances were also common (17%); for example, using MUAC-only for admission and discharge (see Figure 3). The majority (72.4%) of questions were successfully answered (17.3% were not resolved, 10.4% partially resolved). Disagreement was detected in 6% (n = 7) of questions.

⁴ <https://smartmethodology.org/>

⁵ www.en-net.org/question/1445.aspx

Table 1 en-net activity by thematic area

	IYCF interventions	Prevention and treatment of MAM	Prevention and treatment of SAM	Assessment and surveillance
Dates analysed	February 2009 to June 2018	February 2009 to Oct 2018	February 2009 to September 2018	Feb 2009 to June 2018
Total no. of questions	149	143	316	376
Total no. of replies	614	558	1,063	1,704
Total no. of views	394,816	400,526	823,610	996,268

Table 2 Key programming challenges discussed on IYCF interventions en-net forum

Breastfeeding support: A common topic (20% of questions) centred on the need for appropriate advice for women with low milk supply concerns, beyond advice on "frequent suckling". While a wealth of global knowledge and guidance exists, it has not necessarily been adapted to emergency realities (e.g. limited resources, client access and counsellor capacity). There were also discussions around wet nursing and relactation in emergencies, where operational guidance with practical suggestions on intervention design and clear protocols are lacking.

Support for non-breastfed infants: Multiple questions were raised around the sourcing and stock management of ready-to-use infant formula (RUIF), on upholding the International Code of Marketing of Breast-milk Substitutes (the Code)⁶ while supplying breast-milk substitutes (BMS), and how to appropriately handle intercepted donations or expired products. Discussions on supporting non-breastfed infants indicate a lack of clarity in how to put the recommendations of Operational Guidance on Infant and Young Child Feeding in Emergencies (OG-IFE) into practice in particular situations or contexts.⁷

Monitoring and reporting Code violations in emergencies: Discussion reflected a lack of clear global channels for reporting Code violations during an emergency, as well as a lack of clarity on specific actions to take in-country to prevent and act on Code violations.

Cultural reasons or barriers leading to inappropriate breastfeeding practices and how to address these during emergencies: This also appeared to be a knowledge gap; evidence and case studies seemed to be lacking that link IYCF to behaviour change and that examine what is feasible to achieve in various stages of an emergency response.

The difference between IYCF corners and mother-baby areas (MBAs)/baby-friendly spaces: Several guidance documents exist on MBAs but are based on individual agencies' programme designs and harmonisation is lacking. Confusion exists with regard to differences in terminology, functions and minimum requirements.

Mother-to-mother support groups and care group models: Global guidance on the implementation of these models exists; however, questions remain around the differences between them and how to effectively lead support group discussions beyond simply providing messaging.

Monitoring and evaluation (M&E) of Infant and Young Child Feeding in Emergencies (IYCF-E) programmes: Continued challenges were on assessing the outcomes and impact of IYCF-E interventions (tools, indicators, appropriateness of survey methodologies) and training. See Table 5 for IYCF-E questions in the assessment forum.

Complementary Feeding: Questions raised on en-net (on cooking demonstrations and impact of kitchen gardens) were addressed, but a consolidated body of evidence and experiences available to easily refer to appears to be lacking.

Direct impact of IYCF interventions on the reduction of stunting and wasting: Questions on impact were not answered, which may be due to a lack of existing or easily available collated evidence.

Table 3 Key programming challenges discussed on MAM en-net forum

Expected caseload for targeted supplementary feeding programme (TSFP) recipients: Discussions raised the need for a standardised template to take account of factors such as estimated change in population, coverage and prevalence in order to estimate caseloads and forecast supply needs.

Exit types: Discord was detected on definitions and timelines for different exit types from a MAM programme.

Use of nutritional products for the prevention of MAM: The issue was whether there is a place for products in the prevention of MAM and if so, how, for how long and whether they should be reserved for humanitarian responses and/or specific groups of vulnerable persons. Discussions suggested the need for more evidence and clear guidance.

Changes in MUAC during supplementary feeding: In the case of MUAC-only admissions, questions were raised on how MUAC evolves over the course of MAM treatment to help benchmark progress and recovery of children.

Admission of pregnant and lactating women (PLW) with MAM: Discussion highlighted that pregnant women with MAM are often not admitted into treatment programmes during their first trimester of pregnancy, a critical phase of foetal development.

Table 4 Key programming challenges discussed on SAM en-net forum

MUAC: MUAC measurements were a common topic, including discussions on cut-off points and MUAC-only admission and discharge criteria. Calls were made for more sharing of evidence and experiences and the need for clear guidance on protocols for MUAC-only programming.

Programming where SAM and MAM treatment are not both in place: Discussions included the use of expanded criteria for therapeutic treatment in emergencies and combined protocols, such as MAM and SAM management using one protocol and product. Users sought practical recommendations on these new approaches and protocols for when MAM or SAM treatment are not in place.⁸

Coverage: Practitioners regularly report difficulties in achieving levels of coverage to adhere to SPHERE standards, raising challenges related to programme quality and implementation.

Stock shortages of therapeutic products: Questions regarding appropriate responses to stock shortages in stabilisation centres (SCs), outpatient therapeutic programmes (OTPs) and supplementary feeding programmes (SFPs) were common, as well as questions on modified treatment protocols, rations and reporting. Specific questions included how to treat malnourished pregnant women in the absence of corn-soy blend (CSB), what to do in the absence of therapeutic milks (stabilisation centres), and guidance on longer supply of ready-to-use therapeutic food (RUTF) in poorly accessible areas.

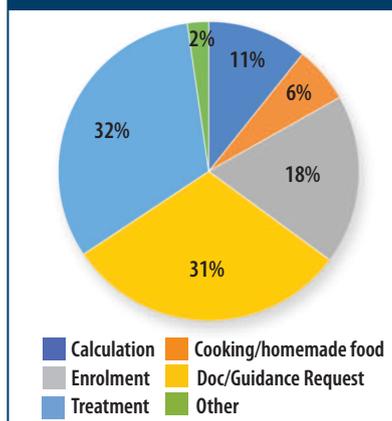
Procurement of therapeutic products based on caseload estimation: While procurement tools for various countries and programmes were shared on en-net, many questions remained around calculating the number of people affected by malnutrition for programme planning purposes. The need for a global procurement tool for all products was also raised.

Community-based management of acute malnutrition (CMAM) transition strategies: There was disagreement in discussions around how to handle closure of NGO-supported CMAM programmes (exit strategies).

Local production of therapeutic products for use in outpatient care: Several posts were made on this topic, with shared examples and recipes from India and Bangladesh; however, there is no global guidance on local production of RUTF.

SAM and cholera treatment guidance: While this is an area of attention and guidance development, appropriate nutritional care of cholera patients who are acutely malnourished continues to present significant challenges for practitioners.

Figure 3 Topics of questions on the MAM en-net discussion forum



Technical gaps most commonly fell under the sub-themes of 'enrolment' (n=7) and 'specific treatment/special cases' (n=6). The main programming challenges discussed are summarised in Table 3.

Prevention and Treatment of SAM

The most popular question themes were on programme implementation and monitoring (38%) and products used to treat SAM (23%). Under these themes, the most common questions were on MUAC (cut-off points and MUAC-only admission and discharge) and incompatibility between SAM and MAM programmes (such as limited co-location of SAM and MAM programmes and ineffective referral systems between programmes). There was also a significant number of questions on stock procurement and shortages. Clinical questions on specific treatment protocols and questions on research methodology or requests for background information to inform research made up 11% and 5% of technical questions respectively. Questions raised regarding community-based management of infants under six months old prompted the development of a dedicated en-net forum on management of at-risk mothers and infants less than six months old (MAMI). Prominent issues within the SAM forum area are listed in Table 4.

Assessment and surveillance

The assessment and surveillance forum was the most frequently used forum, with several posts generating significant debate. Half of the discussions were specific to surveys and how to put guidance into practice. Around one third of questions (29.2%; n=110) were general questions or discussions related to assessment, while 20.7% (n=78) were general survey questions (see Figure 4).

The most common themes discussed were anthropometric indicators (42.4%), assessment methodology/type of assessment (35%), and statistical tests, formulas, data and thresholds (27.9%). Prominent and recurring discussions have included when and how to use and interpret the various anthropometric indicators (MUAC, weight-for-height z-score (WHZ), weight-for-age z-

score (WAZ) and MUAC-for-age); the pros and cons of knowledge, attitude and practice (KAP) surveys; how to achieve a sample large enough to examine IYCF indicators when conducting a nutrition/ SMART survey; and how to evaluate programme impact (see Table 5). Additional questions covered included ones on software-based analysis, assessment in pastoralist populations, urban settings, nutrition surveillance, and assessment of adults and older people.

The vast majority (88%) of questions were successfully answered; 7% were not successfully answered and 5% only partially answered. Gaps in knowledge or guidance most commonly identified were those under the themes 'different types/methodology of assessment' (n=14) and 'planning, sampling, questionnaire/indicators and analysis' (n=12).

Recommendations and potential links with the GTAM

This analysis provides a valuable snapshot of technical challenges faced by practitioners in frontline nutrition programming. Questions on en-net often relate to issues where no firm guidance exists, where assistance is needed to translate or adapt existing guidance into practice or a specific context, or where there is a lack of awareness of what global/country-level guidance exists. Answers from en-net peers/moderators may provide practical illustrations of what is happening elsewhere or a steer that is based on respondents' knowledge or the opinion of the technical expert moderating that area.⁹ It was beyond the scope of this review to comprehensively determine which of the outstanding/recurring questions on en-net are true evidence or guidance gaps and which reflect poor awareness/application/accessibility of what is available. However, the findings have identified key technical areas that warrant more scrutiny and insights into future ways of working for en-net and the GTAM.

Handling unresolved technical questions

A key challenge identified in this review is how to handle unresolved technical questions, both within en-net and, looking ahead, via the GTAM. Within en-net, questions are only escalated to technical moderators when there is contention or lack of resolution or if the question is critical or urgent. This is to make the most of the limited time that these committed individuals have. In general, unan-

⁶ www.who.int/nutrition/publications/code_english.pdf

⁷ Since the en-net review took place, a paper has been published, Considerations regarding the use of infant formula products in IFE programmes (Gribble & Fernandes, 2018), which could be used as a starting point.

⁸ A dedicated forum on simplified approaches to acute malnutrition that includes combined SAM/ MAM treatment approaches was launched on en-net in July 2019.

⁹ It is important to note that more straightforward questions to en-net are handled 'offline' by the en-net moderator to retain the online forum for discourse regarding challenging issues benefiting from peer and technical expert inputs.

Table 5 Key programming challenges discussed on assessment and surveillance en-net forum

Deciding on which measures or combination of measures (MUAC and WHZ to use for programme admission and discharge): There were many questions on en-net debating which method is best used for determining acute malnutrition, particularly the influence that body shape has on these measures.

Inclusion of infants 0-5 months old in nutrition surveys: There is lack of clarity on when infants age 0-5 months should be included in surveys and methodological/practical implications.

Assessing nutritional status of pre-adolescents and adolescents: Discussions reflected a lack of consensus on the most appropriate anthropometric indicators to assess school-age children and adolescents.

Assessing nutrition status of PLW: Discussions debated the most appropriate approach to assess nutritional status and admit PLW into treatment programmes, given divergent measurement approaches and their interpretation (e.g. different countries use different MUAC cut-offs).

Inclusion of IYCF indicators in SMART surveys: Practitioners carrying out SMART surveys found it difficult to determine which additional IYCF indicators can be included while maintaining a sufficiently high degree of precision to inform programme decisions.

KAP surveys: Ten discussions were generated around this topic, particularly around the need for clarity on when it is appropriate to conduct a KAP survey (objectives) and how to do so (questions on sample-size calculations (n=4) and how to combine with SMART methodology). This indicates that available guidance may not be sufficiently detailed or practical and the need for indicators and standardised questions for various sectors.

Advanced analyses on nutrition surveys: Examples included issues on stratifying clusters, cross-tabulations when analysing nutrition surveys and how to implement weight factor for survey results. Frequent requests for SMART survey training were also noted.

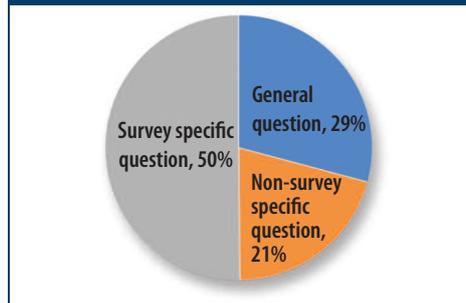
Sampling frames where population-size information is unavailable: While the SMART methodology provides guidance, many questions were raised about sampling and determining population size in contexts where there is no reliable population-size data.

Flags (extreme values): Discussions reflected a lack of consensus around what flags should be used for analysis of MUAC data, due to the lack of a MUAC reference population.

Gender considerations in measuring malnutrition: An unresolved debate remains on en-net on the apparent higher prevalence of undernutrition in boys, including whether the WHO Child Growth Standards themselves preferentially identify boys.

Measuring feeding practices and diet quality of children over two years of age: Questions remain on which indicators are appropriate (and in which contexts) for determining feeding practices and diet quality for children over two years of age (minimum acceptable diet (MAD) indicator focused on children under two years old).

Figure 4 Challenging questions on the assessment and surveillance forum



answered or unresolved questions may be due to poorly phrased questions, lack of moderator availability, inability by users/moderators to answer the question, low relevance to other users, no need for a response (e.g. announcement), and/or users being less willing to reply to anonymous users (e.g. 41% of questions on the MAM forum). There may also be wider influences. For example, the prevention and treatment of MAM forum was the most underused thematic area on en-net and 17% of posts had no reply. This may reflect the lack of attention to and evidence on MAM programming more generally in the nutrition sector (Shoham and McGrath, 2019), or possibly a lack of moderator capacity on this particular forum.

Moving ahead, we propose that en-net questions that have not received a reply within a defined timeframe are systematically flagged to technical moderators for review and response. Where moderators or the en-net community are unable to provide an answer (definitive or otherwise) or moderators judge that further consultation and consensus-gathering on an issue would be beneficial, the GTAM may play a role through its interaction with global thematic working groups to formulate a response. The IYCF in the context of Ebola experience shared earlier is a good example of a working model for such escalation in order to develop consensus-driven guidance in collaboration with an expert group and country stakeholders.

While technical debates on en-net and experience and knowledge of forum moderators are highly valued, outstanding technical disagreement or uncertainty may confuse and not serve the immediate practical needs of programmers. To help address this, we suggest that ENN and the GTAM collaborate to summarise difficult discussions, identify gaps in knowledge and guidance, and provide interim direction to programmers where needed.

Knowledge management

A wealth of advice, knowledge and experiences are shared on en-net. Users often use the search function to find previous discussions pertaining to the technical issues they are interested in. When first established, it was anticipated that questions when answered would be 'closed'; in practice, topics often remain current, are revisited and hence all discussion threads remain 'live'. The GTAM could use en-net as an open-resource on an ongoing basis to identify key technical issues facing programmers and synthesise learning from them. The GTAM could also use en-net to identify potential country case studies to examine technical challenges in more depth and facilitate cross-country learning.

Strengthening country networks and connections

The GTAM should only be used once country and regional capacities have been exhausted. en-net is used as a means to locate country-specific resources. For example, several Francophone and country-specific materials were provided in response to a request from the Democratic Republic of Congo for training materials.¹⁰ There is a potential role for the GTAM to play in strengthening this inter- and intra-country-level networking by directing country-specific questions to appropriate in-country contacts; this should help widen the en-net user base and the geographical spread of users. In other instances, country-specific questions are posed on en-net specifically because questions could not be answered in-country. An example of this is a request for assistance in interpreting the International Code of Marketing of Breast-milk Substitutes (the Code) in Bangladesh, where definitions are not aligned with global standards. In such cases, the GTAM could facilitate technical advice and expertise through (for example) escalating the issue to experts on the Code. An important area for ongoing examination by the GTAM will be how to determine if country and regional avenues have been explored and if there are gaps in technical assistance available at this level; whether due to evidence gaps or shortfalls in regional/country capacity. This raises the bigger question as to the role of GTAM and existing mechanisms in compensating for capacity shortfalls in the immediate and longer term.

Next steps

en-net is a well-used resource and has become the 'go-to' place for rapid, practical technical support. These findings substantiate the decision to integrate en-net within the GTAM service platform. Looking ahead, the authors recommend that the GTAM continues to monitor en-net to identify potential gaps and inconsistencies in knowledge and guidance and to help determine key challenges facing programmers.

Findings of this review should be triangulated with other reviews and existing knowledge and guidance to confirm whether a technical gap truly exists and to help inform initial priorities as the GTAM prepares to start providing technical advice, producing consensus-driven guidance and linking experts with implementers to ensure critical gaps are filled.

For more information, contact: Tamsin Walters, en-net moderator, tamsin@ennonline.net

¹⁰ www.ennonline.org/question/3629.aspx

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