

Reply to R Dasgupta et al.

Dear Editor:

We were happy to see the response to our article (1) by Dasgupta et al., and although we appreciate the many important and relevant themes that were made in the letter, we disagree with some of the points made. The model described in our article is not an “MSF [Médecins Sans Frontières] model”; on the contrary, it reflects the standard community-based management of acute malnutrition (CMAM) model that is already established in other countries in Asia (2). The nuance is how we define “community”; in this respect, we agree that the closer to the community the better; however, contextual constraints need to be taken into account when planning programs where resources are limited and numerous systemic challenges exist.

The ultimate purpose (and spirit) of a CMAM program is to reduce mortality in children with severe acute malnutrition (SAM) and to provide services close to the patients, while fostering the support and involvement of the community. This, in turn, reduces the financial impact on caregivers while improving outcomes of children through reduced default rates. As our colleagues noted, the mortality rate across all SAM treatment programs in India appears to be quite low; however, as our data showed, the risk of death rises exponentially with a mid-upper arm circumference (MUAC) <110 mm and also in the nearly 10% of children with complications. As such, this has to be balanced against the ability of frontline health workers such as Anganwadi workers to effectively detect and refer children with complications, which can be notoriously challenging without adequate training and supervision. We also have concerns as to the capacity of the Anganwadi workers and centers in Bihar to effectively manage such a high burden of cases in its existing format (3), and whether they are accessible and sufficiently used by the community they serve (4). Indeed, our experience suggests that, in this context, CMAM could be considered a safety net for those children whose severe wasting has failed to be addressed by the Anganwadi system.

Despite these issues, we agree that, in principle, the Integrated Child Development Services is the perfect host for the community component of the CMAM model, in which the majority of children are “uncomplicated,” and due focus should be placed on community engagement and outreach. The use of Anganwadi workers to routinely screen children for SAM using simple tools such as MUAC is a crucial element in ensuring the maximum numbers of cases are detected at early stages, because this, in turn, will decrease the number of children ultimately requiring inpatient care. Indeed, our own data support the importance of the Anganwadi worker in the overall management of malnutrition; analysis of the long-term outcomes of children exiting our CMAM program showed that not availing Anganwadi services was an independent risk factor for relapse in children discharged as cured and for nonrecovery in children defaulting from the program while still severely wasted (5). In addition, children identified and referred into our program by another critical member of the “continuum of care” framework in Bihar, the Accredited Social Health Activist, had 10-fold lower odds of defaulting, supporting a central role for these community workers in future CMAM initiatives in India.

Recently published qualitative data of health-seeking behavior and community perceptions of CMAM in Bihar concluded that the choice of whether to access and continue care was linked more to the perception of SAM as a disease entity, which would determine the importance of how much money and time caregivers would be prepared to spend on treatment (6). This may have been reflected by more than half of children admitted into our program regularly commuting from outside the block to attend the ambulatory clinics; however, these children had a far higher default rate (43%) than those residing within the block (28%), supporting the need for facilities closer to caregivers and a better understanding of SAM (1).

The key conclusions from our article are principally that the use of an MUAC cutoff <115 mm was an effective way of screening and identifying children with SAM, which was effectively performed at the community level with accuracy and ease by Accredited Social Health Activists, Auxiliary Nurse Midwives, and General Nurse Midwives alike. A higher proportion of girls and younger age groups were admitted with the use of these criteria, the latter of which is crucial when addressing Dasgupta et al.’s suggestions with regard to the importance of preventing stunting, or “severe chronic malnutrition” as described in the letter. We, of course, fully endorse our colleagues’ enthusiasm about the importance of the detection and prevention of severe stunting in the Indian context.

However, from a programmatic perspective, where a high prevalence of severe wasting is seen in a context of a high prevalence of severe stunting, there is increasing evidence that severe wasting in early infancy is a predictor of stunting and severe stunting in late infancy and early childhood (7, 8). As such, early detection and treatment of severe wasting, in contexts in which the prevalence is as high as seen in India and South Asia, should also be seen as part of a more holistic, large response to the prevention of stunting in early childhood. As our colleagues also alluded to, such a comprehensive response requires the incorporation of promotive and preventive measures such as poverty reduction, hygiene promotion, clean water and sanitation, promotion of maternal nutrition and health, prevention of prenatal macro- and micronutrient deficiencies, and the promotion of appropriate infant and young-child feeding practices.

The description of the MSF’s experiences in supporting a CMAM program in Bihar were not meant to suggest a one-stop or an either/or solution to what is indeed a complex and challenging problem facing Indian policy makers; on the contrary, it was to show that achieving reasonable results with high numbers of children is possible when treating SAM at the community level. We would hope that others are able to improve on our results and take more concrete steps toward establishing cost-effective and state-specific innovative solutions that facilitate the widespread treatment of undernutrition in India; to paraphrase Rittel and Webber—there is no immediate and no ultimate test of a solution to a wicked problem.

None of the authors had a conflict of interest related to the contents of this letter.

Sakib Burza
Raman Mahajan
Elisa Marino
Temmy Sunyoto
Prince Mathew
Geoffroy Duqué
Nuria Salse
REFERENCES


