



Adolescents involved in an iron and folic acid supplementation programme in India

TALENT Collaboration: Exploring adolescent diet and physical activity in India and sub-Saharan Africa



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The authors would like to acknowledge their funders, the Global Challenges Research Fund and the University of Southampton Global Challenges Research Fund.

COTE D'IVOIRE, ETHIOPIA, INDIA, SOUTH AFRICA & THE GAMBIA

What this article is about: This article describes the findings from the TALENT Consortium stakeholder engagement, survey and focus group discussions regarding adolescent diet, physical activity and health.

Key messages:

- The study found that all adolescents knew about healthy lifestyles but a range of other factors often led them to make unhealthy choices.
- Food choices and opportunities to engage in physical activity differed between rural, urban and peri-urban areas and were sometimes area of conflicts between adolescents and parents/caregivers.
- Interventions to improve adolescent diet and physical activity need to be context-specific and responsive to changing environments.

Background

The Transforming Adolescent LivEs Through NutriTion (TALENT) Consortium, established in 2018, comprises biomedical scientists (epidemiology, nutrition, laboratory science, intervention development), social scientists (psychology, sociology, social geography) and experts in policy and public engagement from the United Kingdom, four African countries (Cote d'Ivoire, Ethiopia, South Africa and The Gambia) and four locations in India (Dervan, Pune, Mumbai and Mysore) (Figure 1). TALENT includes eight sites (in five different low- and middle-income countries (LMICs)) at different stages of economic and nutrition transition. TALENT recruited participants from both rural (Dervan in India and Keneba in The Gambia), urban (Abidjan in Cote D'Ivoire, Mumbai in India, Mysore in India and Soweto in South Africa) and peri-urban (Jimma in Ethiopia and Pune in India) settings (Figure 1). TALENT aimed to share expertise and build capacity amongst biomedical researchers in qualitative research through train-

ing and mentorship and by leveraging local funding. A further aim was to provide new insights into ways to address the double burden of malnutrition amongst adolescents living in LMICs by affording opportunities for young people to discuss their own lived experiences and views of diet and physical activity.

Methodology

A series of stakeholder engagement sessions, survey data collection and focus groups was conducted to answer the following research questions:

1. What do young people and parents/caregivers think about diet, physical activity and health and how important are these to them?
2. What and who decides and shapes their eating and activity habits?
3. What might engage adolescents in changing their diet and physical activity?

The qualitative research was conducted by local researchers already embedded in each setting.

Focus groups were conducted with 480 adolescents and their parents/caregivers using creative techniques such as a photograph sorting activity where adolescents were invited to categorise different food types. The views of parents/caregivers were also sought as we considered these to be important in understanding the challenges and for developing solutions. In addition to the qualitative data collection, we collected small-scale contextual quantitative data from approximately 40 boys and 40 girls in each site (Fall et al, 2020). We used surveys to generate data on adolescent diet, body composition and socioeconomic status. Three systematic reviews were also conducted, including one qualitative evidence synthesis (Wrottesley et al, 2020; Jesson et al, 2020; Hardy-Johnson et al, 2021).

Main Findings

The qualitative research captured rich and nuanced data on adolescents' everyday lived experiences. It highlighted the complexity of diet and physical activity influences and demonstrated

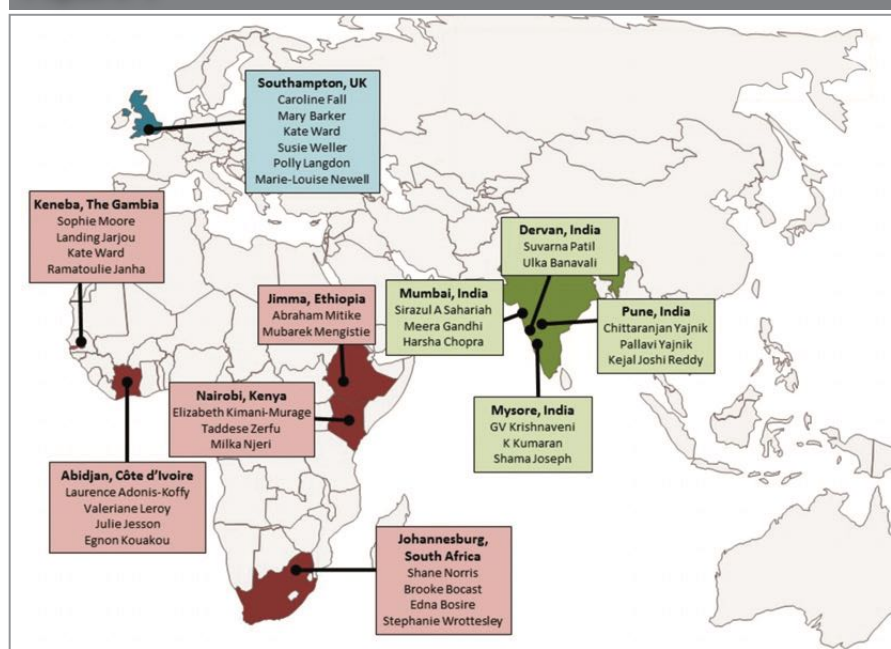
the importance of the broader contexts and processes that shape adolescent health in transitioning societies. A cross-site analysis of the pooled qualitative data (Weller et al, 2020) identified three themes

The first theme focused on *transitions in generational nutrition education and knowledge*. Adolescents, even in resource-poor settings, knew about healthy diets and lifestyles. They wanted to have energy, feel happy, look good and live longer but their desire for autonomy, a need to 'belong' in their peer group, plus vulnerability to marketing campaigns that exploited their aspirations, often led them to make unhealthy choices. Across all sites, participants displayed a good level of nutritional knowledge that was often underestimated by parents/caregivers who felt it was their job to educate their young people on such matters.

The second theme, *transition in caregiver-adolescent power balance*, described how adolescents and caregivers discussed power imbalances related to diet and physical activity. In the more urbanised settings, both adolescents and caregivers described the frequent negotiations and, in some instances, conflict that would occur regarding food options/choices and physical activity. For example, in Mumbai, caregivers expressed immense frustration that their children preferred 'outside' junk food to their home-cooked 'healthy' food. In contrast, adolescents felt constrained by their parents and expressed joy in the social element of eating outside food with their friends. In Indian sites such as Mysore, adolescents described pressure from adults to excel in exams which meant that academic studies often squeezed out physical activity time.

The final theme, *the implications of societal and economic transition for diet and physical activity*, depicts the differences between the rural and urban sites in relation to food choice and the opportunities to engage in physical activity. For example, urban adolescents in sites such as Soweto had easy access to calorie-dense, unhealthy foods bought outside the home whereas junk foods were only beginning to permeate rural sites such as Keneba. Across

Figure 1 TALENT collaborating sites



the sites, it was clear that rural and urban transition influenced the types of foods that were available, where those from more urbanised sites had more choice.

The data generated far exceeded expectations; 13 journal articles have been published on adolescent nutrition in LMICs. The added value produced from this relatively small award is a testament to the extraordinary collaboration we have established.

Next steps

Through TALENT, primary investigators and early career researchers have been trained in qualitative methods and now have experience in applying social science methodologies to the study of adolescent nutrition. The TALENT teams are keen to use these newly developed skills to develop interventions to improve adolescent nutrition which will need to be context-specific and responsive to transitions at the in-

dividual, economic and societal levels. Solutions need to acknowledge gender inequalities in different contexts and structural and cultural influences on diet and physical activity in resource-limited settings. Programmes need to be effective in engaging and reconciling the perspectives of adolescents and caregivers. Consequently, there is a need for action at both the community household level and through policy. In the next phase of work, the TALENT Consortium will use community engagement and participatory research techniques by employing groups of adolescents to develop and implement interventions to improve adolescent nutritional status.

Find out more information about TALENT through Twitter [@GCRF_TALENT](#) and [TALENT publications](#)

For more information about this article, please contact Polly Hardy-Johnson at phj@mrc.soton.ac.uk

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