



ENHANCED EVALUATION OF AN EDUCATIONAL NUTRITIONAL CURRICULUM AMONG ADOLESCENT GIRLS IN ZAMBIA

Population Council, Zambia

The Challenge

Adolescence is an important age when girls develop into young women and transition into adult roles. In Zambia, girls aged 15 to 19 face numerous sexual and reproductive health risks, including being sexually active (49%) as well as early child bearing (29%). Nutrient deficiencies can have a significant impact on maternal and child health. For instance, the rate of stunting in children under five is 40% in Zambia.¹ To stop the cycle of malnutrition, empowering adolescent girls by providing appropriate nutrition education and knowledge is key for themselves and their future children.



PATH/Mike Wang

The Intervention

The Population Council's Adolescent Girls Empowerment Programme (AGEP) aimed to change the traditional trajectories of adolescent girls by addressing early marriage and pregnancy, educational attainment, nutrition and risk of sexually transmitted infection. The programme included three components: weekly girls' group meetings led by trained mentors conducted over two years, provision of a health voucher to access ten general health services, and an adolescent friendly bank account. The girls' groups included a nutritional education curriculum with information on healthy dietary practices, anaemia, infant and young child feeding and early child development.

The Evaluation

The AGEP randomised cluster evaluation was conducted in ten sites across four provinces of Zambia, with observation over four years. Eligible participants at baseline were never married females age 10 to 19 who were socioeconomically vulnerable. The study had three intervention arms: girls' groups only, girls' groups plus health voucher, and girls' groups plus health

voucher and savings account. A control arm received no intervention. Approximately half of the girls' groups were randomised to receive the nutritional curriculum, serving as the basis of the embedded nutritional assessment. Five nutritional domains were evaluated: nutritional knowledge, dietary practices, growth indicators, anaemia and child development.

The Results

The results indicate that nutritional knowledge among adolescent girls was incomplete. Only 50% could correctly answer that it is good to eat more of specific healthy foods and 63% could correctly answer that one should eat less of specific unhealthy foods. Anaemia knowledge was also limited. While 79% of girls had heard of anaemia, fewer could accurately name a single cause (48%) or a symptom (57%). Among girls 15 years and older, 94% knew that it was more important to eat healthy food while pregnant. However, knowledge of good infant feeding practices was scarcer: 64% knew to exclusively breastfeed for 6 months, and only 20% knew that

breastfeeding should continue to 24 months of age. High rates of anaemia in both adolescents (22%) and their children (50%) were observed. Stunting was also highly prevalent among children under 5 years (42%). No differences were observed between those receiving the nutritional education curriculum and those not for knowledge, undernutrition, being overweight or anaemia status for the adolescent girls or their children.

The Lessons Learnt

This study assumed that nutritional education in the context of an adolescent empowerment programme would be sufficient to improve nutritional knowledge, behaviour and outcomes. The results did not support this claim. Future programmes should consider other factors related to adolescent girls' nutrition, such as food insecurity, knowledge and behaviour of parents and spouses, and access and control over nutritional resources. Further, interest and engagement in adolescent programmes should not be assumed, as 26% of intervention girls never attended a meeting. This can influence the ability to assess programme impact.

Looking Ahead

These results suggest a significant need to improve knowledge and feeding practices, as well as a need to address anaemia and growth for the youngest children in Zambia. The data suggest that information about breastfeeding and child nutrition is typically obtained after childbirth and may miss a critical period to address nutrition during pregnancy. Interventions with adolescent girls need to solidify knowledge of exclusive breastfeeding through six months and extend the promotion of continued breastfeeding through two years.

References

¹Central Statistical Office (CSO), Zambia Ministry of Health, and ICF International. *Zambia Demographic and Health Survey 2013-14*. Rockville, Maryland: CSO, and ICF International; 2015. Available at <https://www.dhsprogram.com/pubs/pdf/FR304/FR304.pdf>.

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