

Survey data exploring the prevalence of concurrent wasting and stunting in Southern Angola

This article features a snapshot of the burden of concurrent wasting and stunting in Angola using prevalence data from survey data in two provinces.

Gertrude Wafula is a Nutrition Specialist at World Vision Angola.

Robert Jan Bulten is the Lead for Multilateral Grants at World Vision Angola.

Colleen Emery is a Senior Technical Advisor for Nutrition at World Vision International.

Information on the prevalence of concurrent wasting and stunting (WaSt) in Angola is very limited. However, there is a growing awareness globally that this condition is common and is of public health significance as children with WaSt have an increased risk of death compared to being either stunted or wasted (Garenne et al, 2018). This article describes the prevalence of WaSt among children aged 6-59 months from two provinces, Cunene and Huila, in southern Angola.

Cunene and Huila provinces have predominantly rural and peri-urban populations that have experienced chronic malnutrition for more than a decade. World Vision Angola (WVA), with support from ECHO, conducted a nutrition survey in these provinces in 2016 to inform on-going emergency nutrition programming. To contribute to the understanding of the prevalence of WaSt in Angola, a secondary analysis of this survey data was conducted. Stunting, wasting and underweight were defined as < -2 SD using World Health Organization (WHO) growth standards, height for age, weight for height and weight for age. WaSt was defined as being concurrently wasted and stunted (height for age and weight for height z-score < -2 SD WHO growth standards).

From a sample of 1,226 children 6-59 months of age, 45.8% (95% CI 43.0-48.6%) were stunted, 6.6% (95% CI 5.3-8.2%) were wasted and 15.8% were underweight (95% CI 13.8-18.0%). The prevalence of low mid-upper arm circumference (MUAC) (< 125 mm) was 23.2% (95% CI 20.9-25.7%). The prevalence of WaSt was 3.1% (95% CI 2.2-4.2%) and the proportion of children with concurrent underweight, wasting and stunting was equal to that of WaSt. There was a higher prevalence of WaSt among males (3.9%) compared to females (2.3%) although not statistically significant. The relationship between WaSt and age was explored by looking at the prevalence of WaSt across two age groups, 6-23 and 24-59 months. WaSt was higher among younger children (4.1%) compared to 2.3% in the older age group; however, this was not statistically significant. Among those children with WaSt, 92.1% also had low MUAC (< 125 mm).

In different regions of the world, including Africa, WaSt prevalence is reported to range be-

tween 0% to 8% (Myatt et al 2018). While there is no agreed global threshold determining the public health significance of WaSt, 5% has been quoted as a level of concern given the high mortality risk associated with this condition. While the prevalence of WaSt found in this analysis was below this threshold, it is evident that WaSt is of concern in Angola.

The Government of Angola (GOA), in collaboration with partners such as WVA, UNICEF and the World Food Programme continued to address the issues of wasting and stunting through various programmes. Long term interventions to improve food security and agriculture have been the main focus from 2019 to 2022 with the strategy aiming to address the underlying factors such as food security, poor infant and young child feeding practices through educating mothers and caregivers, and early screening and referral for malnutrition. Additionally, strategies have focused on training health professionals to manage and treat both wasting and stunting. However, the current focus has been mainly on wasting with most programmes responding to the emergency situation with life-saving interventions. Stunting, however, also remains a significant concern with a prevalence of 38% reported in the most recent national survey (Angola National Institute of Statistics, 2016). Previous assessments between 2016 and 2020 show an average prevalence of stunting of 35% in the southern region, including Huila and Cunene, classifying it as very high according to WHO thresholds.

There is a need for specific strategic approaches to address WaSt including addressing the data and programmatic gaps. There is not much data available in the country on the prevalence of WaSt nor surveillance in programme delivery.

Unfortunately, WaSt prevalence has not been reported within recent nutrition surveys. In 2019, UNICEF partnered with WVA and the GOA for the implementation of two SMART surveys. The prevalence of acute malnutrition (weight-for-height < -2 SD) was 10.8% for Huila and 10.6% for Cunene. Recent data from a survey conducted in 2021 in Cunene by WVA, UNICEF and the GOA found a combined global acute malnutrition (GAM) (weight-for-height < -2 z-score and/or

MUAC < 125 mm and/or oedema) prevalence of 12.4% (CI 10.1-15.2) among children 6-59 months of age. In Huila, combined GAM prevalence was 19.2% (CI 15.6-23.3). Neither of these surveys included WaSt as an indicator of interest.

Future programmatic implementation should include WaSt in programme assessments and should include children with WaSt as a priority group for treatment. A secondary analysis of recently surveys from 2019 and 2021 should be conducted to estimate WaSt prevalence and compare the trends in Cunene and Huila since 2016. There is a need to raise awareness among stakeholders in Angola on the issue of WaSt and its public health significance. In addition, there is a need to investigate the potential determinants such as food security, dietary intake, child age, sex and morbidity as these have been reported to influence WaSt (Garenne et al 2018). In Angola, understanding these factors will inform prevention and treatment strategies. Broader determinants such as poverty and economic status should also inform future approaches.

Nutrition partners in Angola should work with the GOA to determine the underlying drivers of WaSt leading to strategic programming approaches for the prevention and management with the overarching goal of reducing malnutrition-related child mortality. This analysis serves as an important reminder that malnutrition must be prevented and treated in a more comprehensive manner rather than through siloed programmes that consider one form of malnutrition independently from another.

For more information, please contact Gertrude Wafula at gertrude_wafula@wvi.org

References

- Angola National Institute of Statistics (2016) Angola 2015-16 Multiple Indicator and Health Survey (IHMS). <https://dhsprogram.com/pubs/pdf/SR238/SR238.pdf>
- Garenne M, Myatt M, Khara T, Dolan C, Briend A (2018) Concurrent wasting and stunting among under-five children in Niakhar, Senegal. *Maternal & Child Nutrition*, 15, 2, e12736.
- Myatt M, Khara T, Schoenbuchner S, Pietzsch S, Dolan C, Lelijveld N et al (2018) Children who are both wasted and stunted are also underweight and have a high risk of death: a descriptive epidemiology of multiple anthropometric deficits using data from 51 countries. *Archives of Public Health*, 76, 28, s13690-018-0277-1