

# Title: Alarming Prevalence of Acute Malnutrition in Rural Sindh, Pakistan – Food for Thought

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## Introduction

The global burden of Severe Acute Malnutrition (SAM) in children is 20 million with 1 million childhood deaths annually (1). In Pakistan, the figures are staggering with 33% of all children underweight, 15% wasted, and 44% stunted (2). There has been a recent shift in the management of SAM from a health facility-based approach to a community approach allowing for prompt detection and treatment.

## Aims

The objective of our study was to identify the prevalence of SAM in the underserved community of rural Sindh.

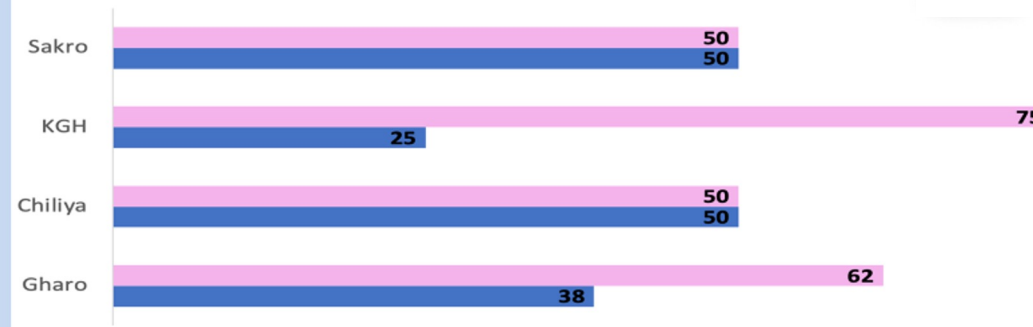
## Methods

Random screening was conducted by Community Health Workers (CHW) on children aged 6-months to 59-months in Malir and Thatta District. From September 2022 till January 2023, the CHWs used a Mid- Upper Arm Circumference (MUAC) scale to assess malnutrition. SAM was classified if the MUAC reading was below 11.5cm (red zone) while Moderate Acute Malnutrition (MAM) was between 11.5cm to 12.5cm. Hypothesis testing was conducted to assess the association between demographic variables and malnutrition. A p-value of 0.05 and below was considered significant.

## Results

A total of 607 screenings were conducted out of which 150 children were diagnosed as malnourished making the prevalence 25%. The mean age of malnourished children was 20 months where majority (58%) of the cases were female. SAM was observed in 66 children and 84 children were diagnosed with MAM. Association between gender and malnutrition was tested where continuity correction test showed a p-value of 0.05 that signifies there is an association between gender and malnutrition.

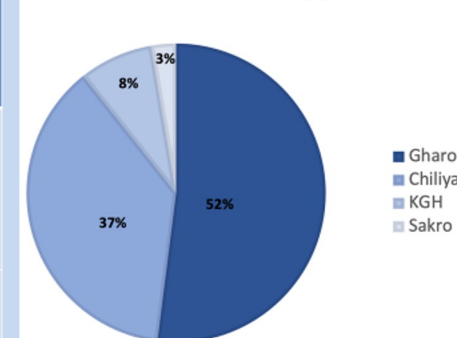
Age Distribution of Malnourished cases in Sindh (%)  
{Blue - M | Pink - F}



Variable	Male N(%)	Female N(%)	P-Value
Malnourished	63	87	<0.05 <sup>δ</sup>
Healthy	233	224	

Note: p-value <0.05 was considered significant.  
Key: <sup>δ</sup> continuity correction

MALNOURISHED CASES IN SINDH (%)



## Conclusion

Our study suggests, one in four children is suffering from acute malnutrition in rural Sindh. There is a dire need to ensure food security for the future generation. Nationwide screening and awareness campaigns need to be initiated to prevent permanent stunting and developmental delay. If timely action is not taken another public health threat will add on to the crumbling healthcare system of Pakistan.

## References

1. World Health Organization. Community-based management of severe acute malnutrition: a joint statement by the World Health Organization, the World Food Programme, the United Nations System Standing Committee on Nutrition and the United Nations Children's Fund. World Health Organization; 2007.
2. Asim M, Nawaz Y. Child malnutrition in Pakistan: evidence from literature. Children. 2018 May 4;5(5):60.

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