

Nearly half of children under-5 admitted with sickle cell disease are affected by malnutrition

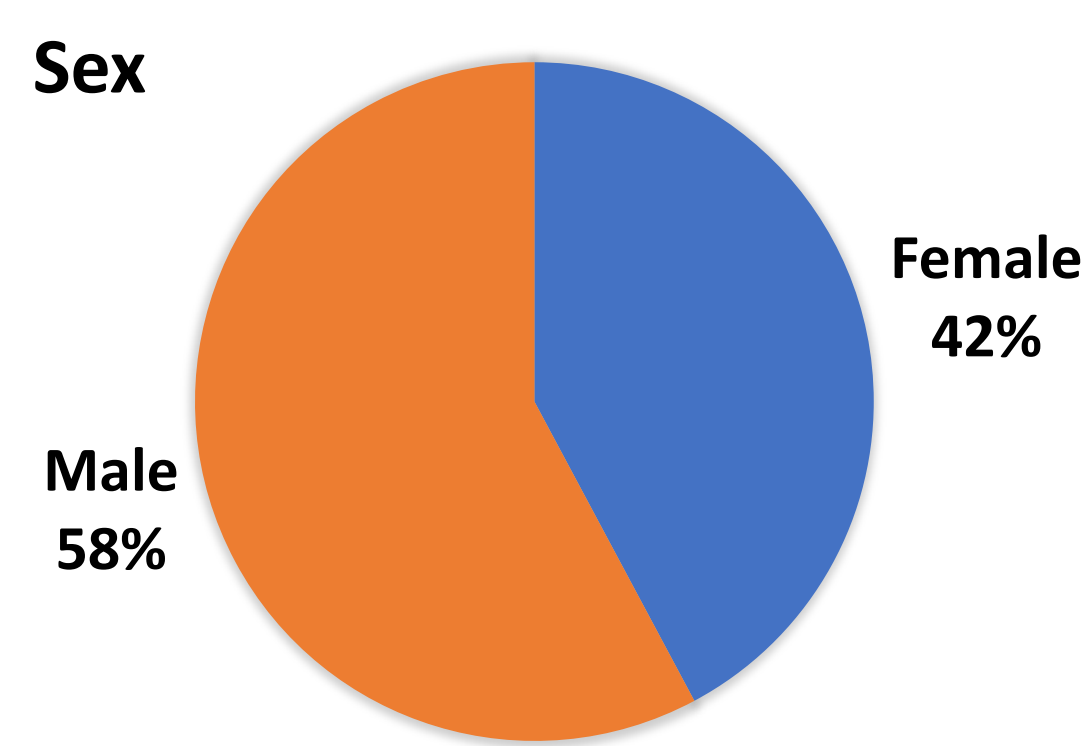
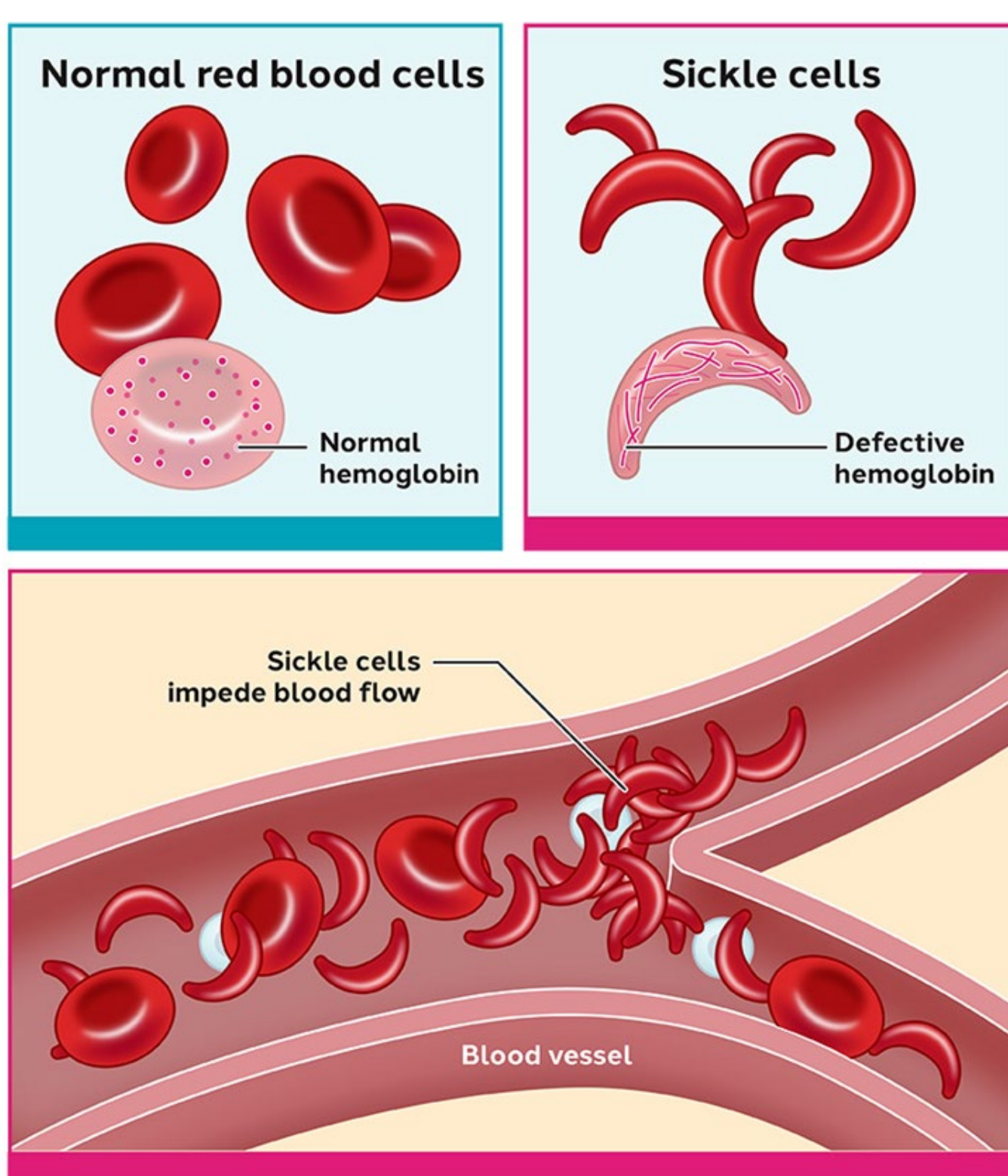
Burden and Clinical Profile of Paediatric Sickle Cell Disease in Al-Qanawis Mother and Child Hospital, Yemen

Background: Sickle cell disease (SCD) is a common inherited blood disorder causing many complications, particularly in children, such as pain, anaemia, infections and strokes. While effective preventive treatments are globally recognized as standard care, they often remain inaccessible in humanitarian settings including Yemen. This study described the burden and clinical profile of inpatient paediatric SCD hospitalizations at Al Qanawis Maternity and Child Hospital, in a humanitarian context without national SCD ambulatory care programming.

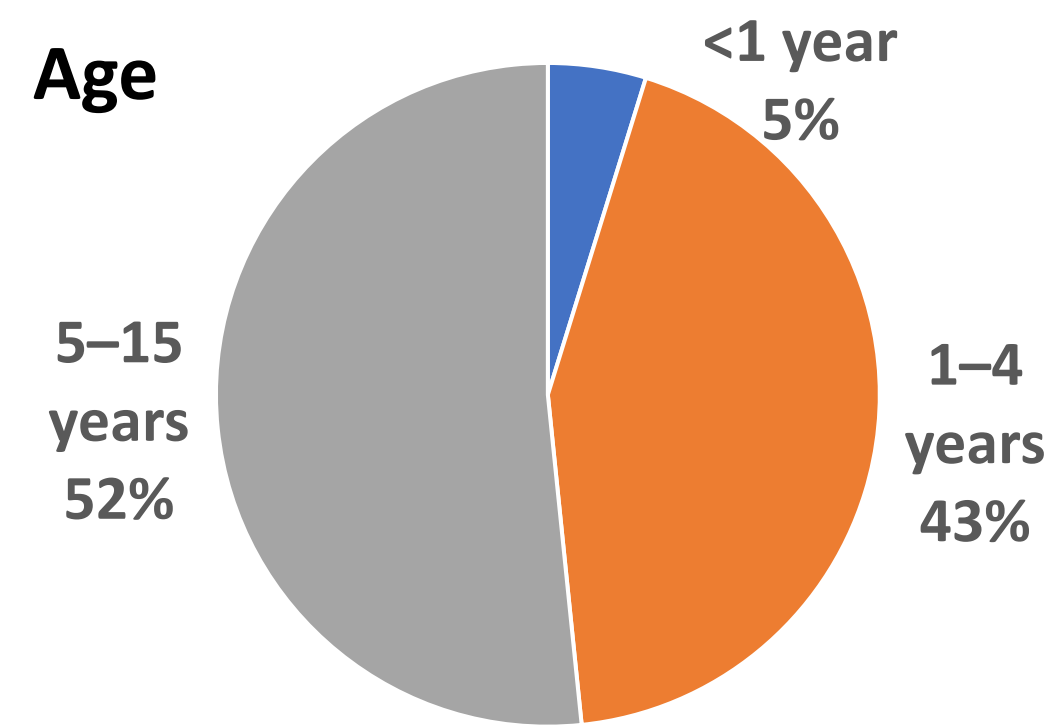
128 children were admitted with SCD-related complications during the eight-month period

SCD remained among the top causes of paediatrics admissions every month

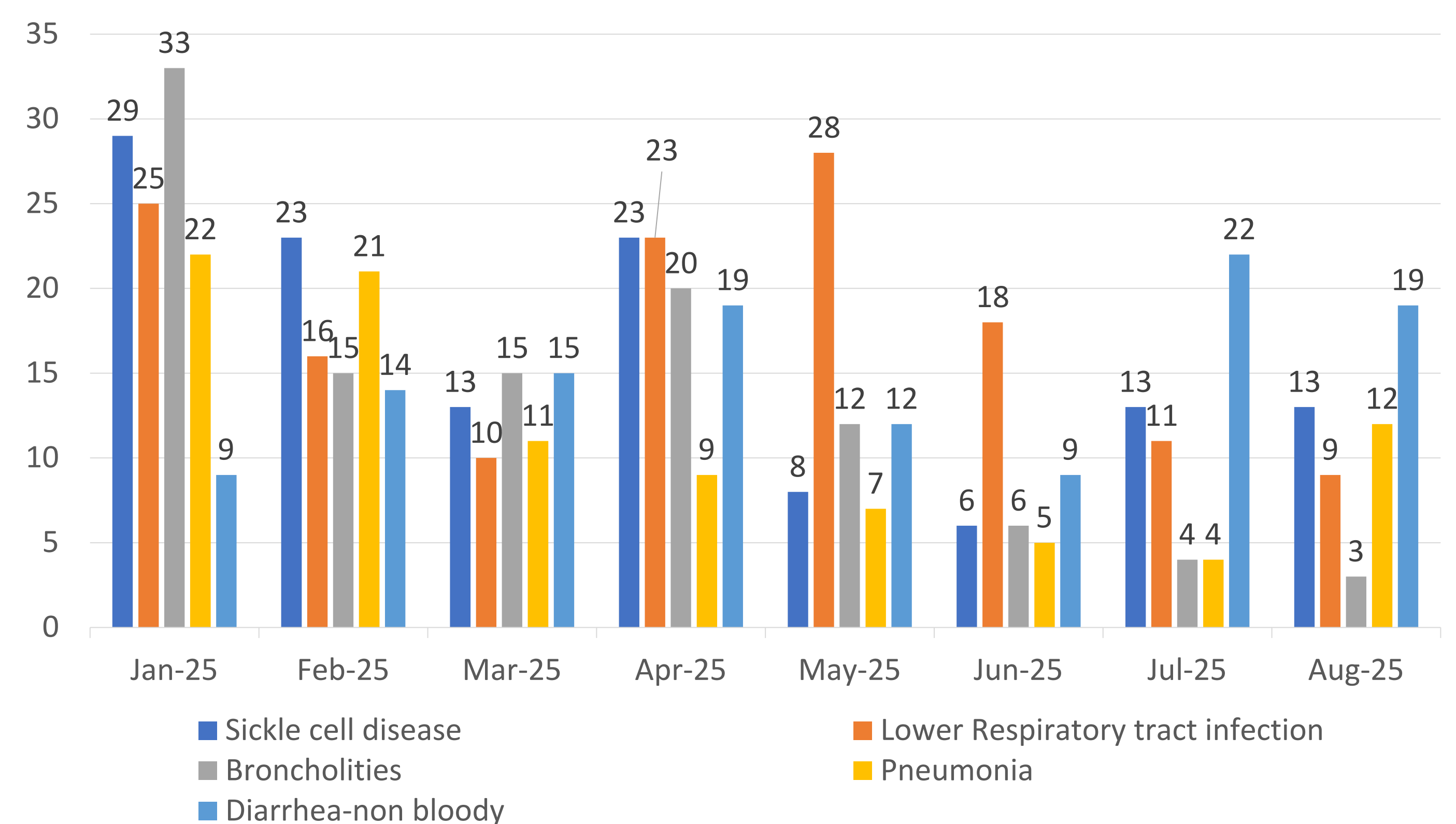
What are sickle cells?



SCD admissions were more common in boys than girls.



Half of the patients were aged 5-15 years (52%), 43% were 1-4 years old, and only 5% were under 1 year.



Over the eight-month period, SCD remained one of the leading causes of pediatric hospital admissions. The lower numbers observed in May and June coincide with the two hottest months - characterized by stable temperatures when children tend to fall sick less often - as well as with the festive season and school holidays, during which fewer patients are typically admitted.

Methods & Additional Results

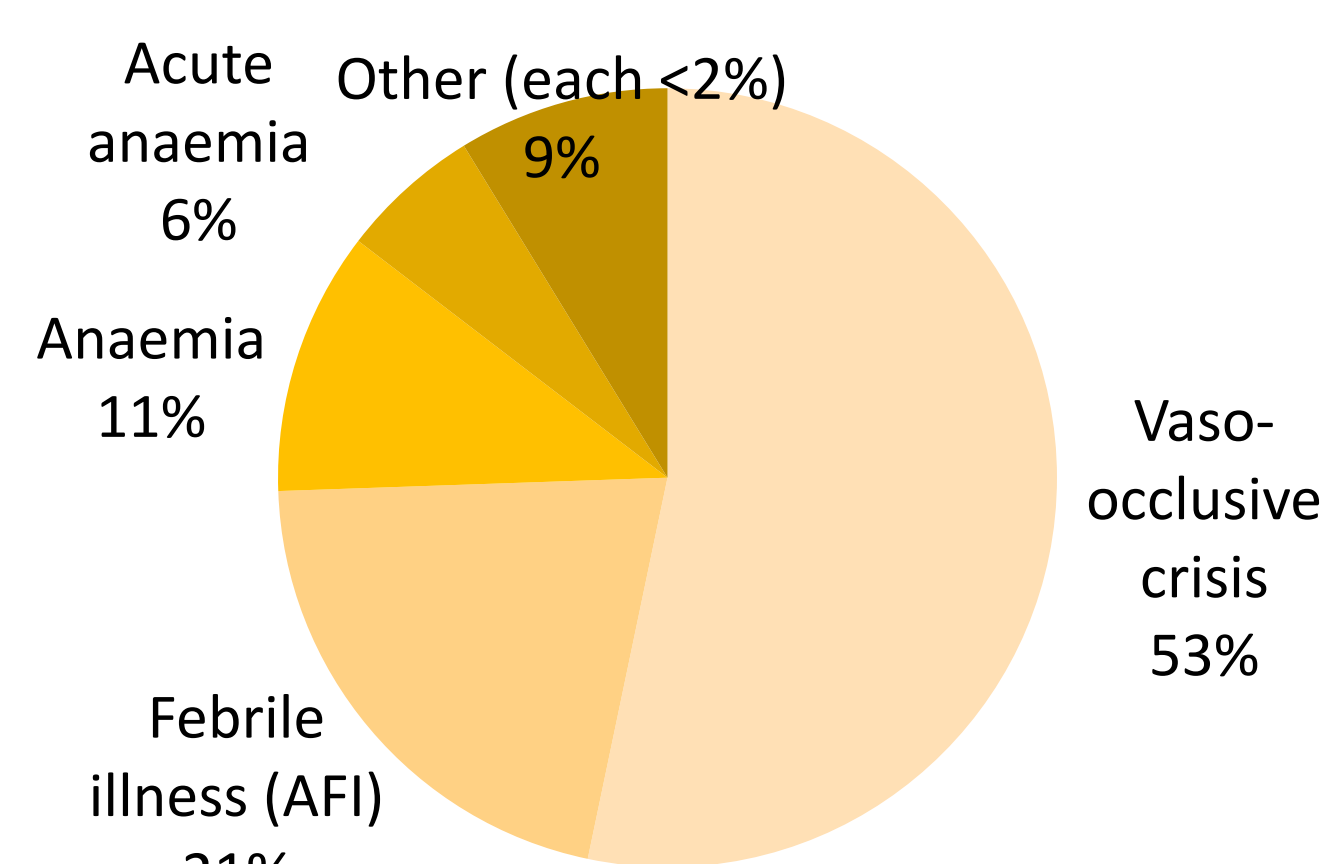
This descriptive analysis uses routinely collected hospital admission data from an SCD line list, presenting findings from January to August 2025. The inclusion criteria: 1. Patient with SCD admitted due to symptoms associate with SCD; 2. Patient who has been admitted to Emergency room, Isolation, paediatrics and ITFC ward; 3. Patient aged more than 28 days. Categorical variables are summarized as frequencies and proportions, and continuous variables as medians with interquartile ranges, as appropriate.

Paediatric ward team reviewing SCD admissions data



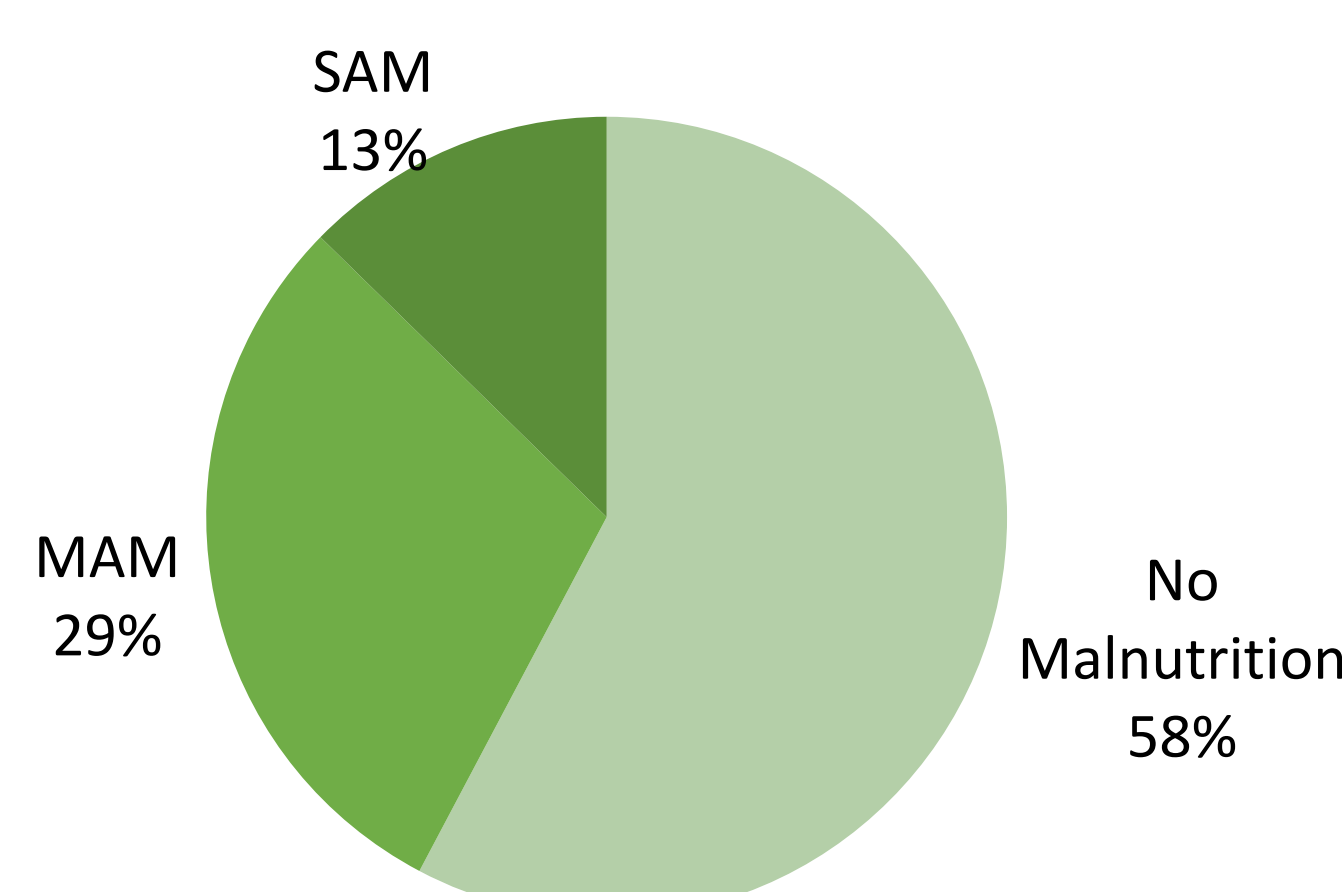
Re-admissions were observed among SCD patients: six patients were re-admitted within one month, of which one was admitted a total of four times and another a total of three times within the study period.

Vaso-occlusive crisis accounts for more than 50% of diagnoses



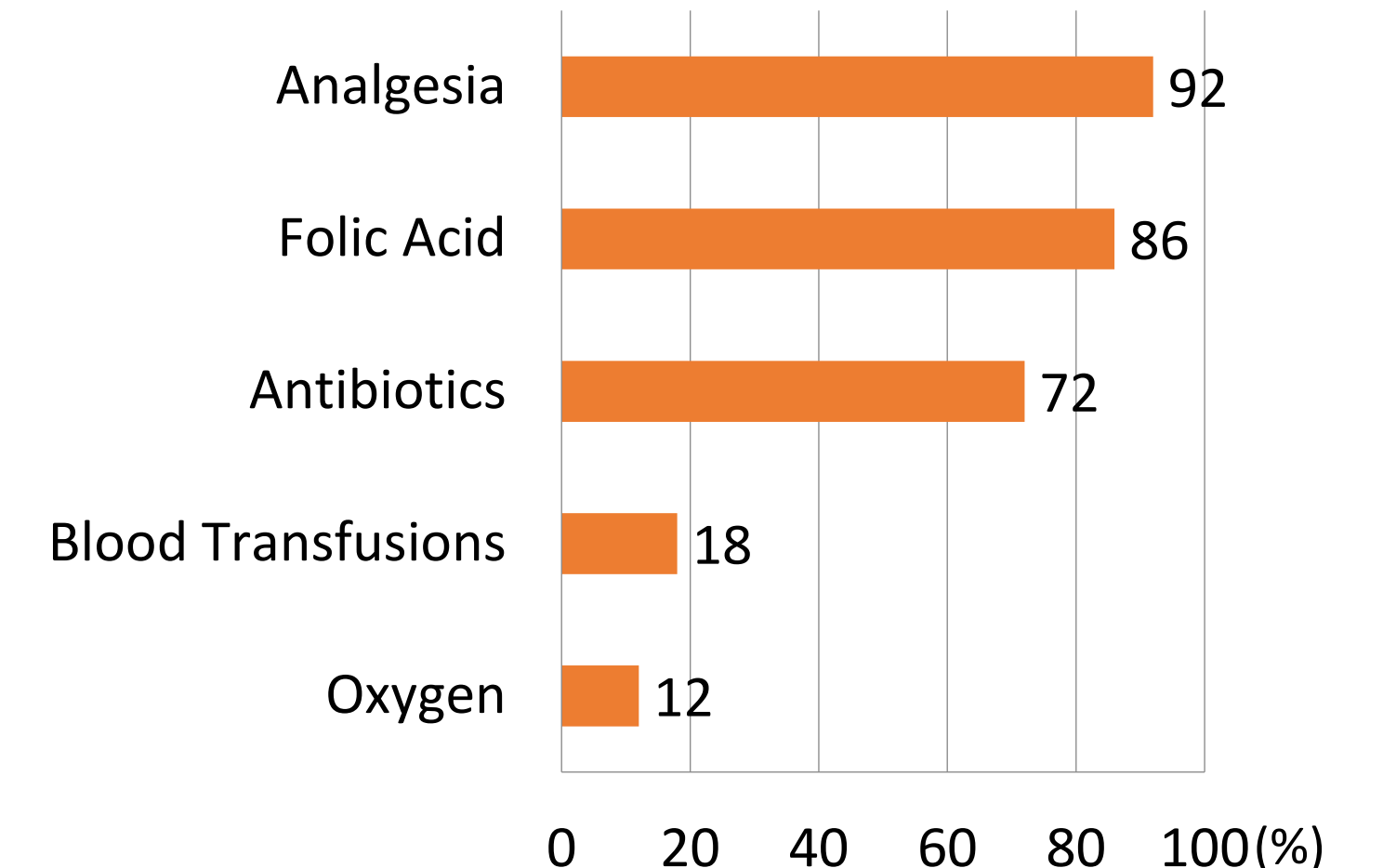
Note: The cases of stroke, acute chest syndrome, etc. are referred based on the MSF referral criteria. Therefore, they are not included in this data.

Malnutrition affects nearly half of under-5 children admitted with SCD



Severe acute malnutrition (SAM) and moderate acute malnutrition (MAM) account for 42%.

Pain management and antibiotic administration dominate SCD care



18% of paediatric SCD patients required a transfusion. All cases except one required a single transfusion. Most patients required supportive therapy.

Conclusions: SCD poses a serious health program challenge, particularly in the coastal area of Al Qanawis. The findings highlight the continued need to advocate and establish free, accessible, SCD preventive programs, particularly in high burden governorates across Yemen.

Limitations: This study is limited to inpatient data over an eight-month period and relies on routine clinical documentation.