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Healthcare practitioners' perspectives on barriers to early identification of refeeding syndrome in hospitalised children with severe acute malnutrition: a qualitative descriptive study

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Introduction: Reducing severe acute malnutrition in children is central to the Sustainable Development Goals, yet severe acute malnutrition remains a leading cause of childhood mortality in developing countries. Refeeding syndrome in children with severe acute malnutrition is a poorly understood, potentially fatal complication during stabilisation. Early detection is essential to prevent adverse outcomes. However, healthcare practitioners inconsistently recognise refeeding syndrome, particularly in resource-limited public hospitals, where severe acute malnutrition is common, but the condition itself remains understudied. The objective of this study was to explore healthcare practitioners' experiences of identifying refeeding syndrome among hospitalised children aged 6 to 59 months with severe acute malnutrition in public hospitals in the City of Tshwane, South Africa.

Methods: A qualitative descriptive study design was employed. Using purposive sampling, 20 healthcare practitioners (paediatricians, medical doctors, nurses, and dieticians) from paediatric wards in public hospitals within the City of Tshwane were recruited. Semi-structured interviews were audio-recorded, transcribed verbatim, and anonymised. Data were analysed using reflexive thematic analysis following Braun and Clarke's approach, supported by NVivo 15 software. An inductive coding strategy allowed themes to emerge. Trustworthiness was established using Lincoln and Guba's criteria. Ethical approval was obtained from the University's ethics committee, and all participants provided written informed consent.

Results: Fivethemes were developed:: (1) Awareness vs. practice: "known on paper," but under-recognised; (2) Reactive rather than proactive identification; (3) Managing RFS through standard SAM care; (4) Interprofessional collaboration is essential but fragile; and (5) Health system constraints undermine early identification. Participants emphasised the need for clearer clinical guidance and strengthened multidisciplinary collaboration.

Conclusion: Participants' accounts suggest that knowledge, organisational and resource constraints may hinder early identification of refeeding syndrome in children with severe acute malnutrition. The findings identify priorities for developing and evaluating context-sensitive guidance, multidisciplinary training and service support; the effectiveness of these strategies was not assessed.

KEYWORDS

healthcare practitioners, paediatric nutrition, refeeding syndrome, resource-limited settings, severe acute malnutrition

1 Introduction

Severe acute malnutrition (SAM) remains a major contributor to morbidity and mortality among children younger than five years, particularly in developing countries (1, 2). Although nutritional rehabilitation is essential for recovery, the reintroduction or substantial increase of nutritional support may cause refeeding syndrome (RFS), a potentially fatal metabolic complication characterised by rapid fluid and electrolyte shifts following a period of starvation or inadequate nutritional intake (3–5). These changes most commonly involve phosphate, potassium and magnesium and may result in cardiac, respiratory, neurological and haematological complications if they are not recognised and managed promptly (5). Early diagnosis of RFS is therefore crucial to prevent potentially deadly consequences. However, research has repeatedly shown that healthcare practitioners' (HCPs) awareness and understanding of RFS remain limited, leading to underdiagnosis and inconsistent clinical management, especially in paediatric settings (4, 6).

Identifying RFS in children with SAM is challenging because its biochemical and clinical manifestations may overlap with malnutrition, infection, dehydration and other complications of critical illness (7). Variation in definitions, inconsistent monitoring practices, and the absence of standardised screening approaches further contribute to uncertainty in clinical care. Although international recommendations, including the 2020 ASPEN consensus, have improved conceptual clarity, paediatric-specific validation and day-to-day implementation remain uneven, particularly in resource-limited hospital settings (6, 8, 9). Recent paediatric evidence demonstrates substantial variation in reported RFS occurrence across populations. Blanc et al. (2022) reported probable RFS in 7.4% of critically ill children overall and 46.7% of undernourished children considered at risk when ASPEN criteria were applied (8). Similarly, a systematic review of children with SAM in sub-Saharan Africa reported prevalence estimates ranging from 8.7% to 34.8%, with variation related to differences in RFS definitions, electrolyte thresholds and monitoring practices (10). This diagnostic variability may contribute to inconsistent recognition of RFS in routine clinical practice.

In South African public hospitals, HCPs managing children with SAM must often work within settings characterised by staffing pressures, delayed laboratory results, stock shortages, and overlapping SAM-related complications (11–13). One study reported that blood tests were performed at variable intervals without a specific protocol and were not routinely repeated; consequently, early biochemical changes could be missed or attributed to other SAM complications, delaying the recognition of RFS (14). These constraints may limit the timely identification of RFS and complicate decisions around feed initiation, monitoring, and escalation of care. This is important because RFS is identified partly by new or worsening reductions in serum phosphate, potassium and/or magnesium following the initiation or substantial increase of nutritional support. Baseline and repeat blood tests during the early refeeding period can alert clinicians to evolving RFS before severe clinical manifestations develop (9, 10, 14). Although a systematic review and meta-analysis has highlighted the clinical importance of RFS (10), less is known about how HCPs understand and navigate this challenge in daily paediatric practice. This study therefore explored and described the experiences of HCPs regarding the assessment, identification, and management of RFS in hospitalised children aged 6–59 months diagnosed with SAM in public hospitals in the City of Tshwane, South Africa. The aim was to illuminate practical barriers, enablers, and context-specific opportunities for improving early identification and care.

2 Methods

2.1 Study approach and design

A qualitative descriptive design was used to explore and describe the experiences of HCPs in assessing and identifying RFS in children under five years of age diagnosed with SAM. This design was appropriate because the study aimed to provide a comprehensive description of routine clinical realities in identifying and managing RFS in inpatient children with SAM, rather than to develop abstract theory and generate context-specific insights to inform practice and policy.

2.2 Target population and study settings

The study was conducted in the paediatric medical wards in public hospitals in the City of Tshwane Metropolitan Municipality, Gauteng, South Africa. It included eligible HCPs such as paediatricians, medical doctors, nurses, and dieticians directly involved in inpatient care for children with complicated SAM.

TABLE 1 Characteristics of participating healthcare practitioners ($N = 20$).

Professional group	n (%)	Female, n	Male, n	Age, median (range), years	Experience caring for children with SAM, median (range), years
Paediatricians	5 (25%)	3	2	44 (35–50)	10 (2–15)
Medical doctors	5 (25%)	5	0	31 (29–48)	7 (3–14)
Dieticians	5 (25%)	5	0	36 (25–51)	7 (2–11)
Nurses	5 (25%)	5	0	32 (27–44)	3 (3–5)
Overall	20 (100%)	18	2	35.5 (25–51)	5 (2–15)

2.3 Sampling and sample size

Criterion-based purposive sampling was used to recruit HCPs with at least one year of direct experience working in medical wards of children with SAM. These criteria ensured that participants had sufficient experience to provide information-rich accounts of RFS identification and management. An initial sample of 30 participants was planned, informed by the literature (15). During ongoing review of the interviews, participants' accounts became increasingly repetitive, with no substantively new information or codes identified by the 14th interview. Six (6) additional interviews were conducted to assess whether further perspectives would be identified and to achieve equal representation across the four professional groups. The final sample comprised 20 HCPs 5 paediatricians, 5 medical doctors, 5 dieticians and 5 nurses, who were identified a priori, recruited and interviewed. Table 1 shows that most participants were female (n = 18; 90%). The median age was 35.5 years (range: 25–51), and the median experience caring for children with SAM was 5 years (range: 2–15). Seventeen participants (85%) had more than two years of SAM-related experience. Median experience varied across professional groups, from 3 years among nurses to 10 years among paediatricians. Saturation was assessed across the overall sample and not separately within each professional cadre.

2.4 Data collection

Semi-structured individual interviews were conducted in English by the principal researcher. Each interview lasted approximately 30 min. The interviews followed an interview schedule developed by the principal researcher from the broader study objectives. With participants' consent, interviews were recorded using a voice recorder.

2.5 Data management and analysis

Audio recordings were transcribed verbatim and anonymised using unique participant identifiers. Reflexive thematic analysis was conducted following Braun and Clarke's (2019) (16) approach, supported by NVivo version 15 to facilitate systematic coding. An inductive coding strategy was adopted, whereby themes were developed through the researcher's iterative engagement with the data rather than being imposed by pre-existing theoretical frameworks. Consistent with Braun and Clarke's reflexive thematic analysis, theme development involved active interpretation of patterns of meaning across participants' accounts.

2.6 Researcher reflexivity

The principal researcher had prior knowledge of severe acute malnutrition and refeeding syndrome through her doctoral research. As she initially had limited experience in qualitative research, she received training from a qualitative research expert in conducting semi-structured interviews and analysing qualitative data. Some participants worked in the paediatric wards where she had collected data for the preceding quantitative phase. Although this provided familiarity with the study setting, she had not engaged these healthcare practitioners in detailed discussions about that research during the preceding phase.

The researcher recognised that her knowledge of refeeding syndrome and familiarity with the setting could influence interview prompts, follow-up questions and interpretation of participants' accounts. During analysis, she consulted the supervisory team and participated in debriefing discussions to critically examine coding decisions and developing themes. These discussions supported an inductive approach grounded in participants' accounts, rather than organising the findings around pre-existing expectations about refeeding syndrome. Consistent with reflexive thematic analysis, themes were developed through active, iterative interpretation of the data. These practices supported reflection on the researcher's assumptions while acknowledging that her prior knowledge remained part of the interpretive process.

2.7 Trustworthiness

Trustworthiness was established using Lincoln and Guba's criteria of credibility, transferability, dependability, confirmability), operationalised through practical strategies adapted from Ahmed (2024) (17). Credibility was enhanced via careful development and piloting of interview questions, probing during interviews, and iterative engagement with the data. Dependability and confirmability were supported through code-recode procedures, supervisory review of coding decisions, and peer debriefing to reduce interpretive bias. Transferability was

addressed through thick description of the participant sample and study context.

2.8 Ethics statement

Ethical approval was obtained from Sefako Makgatho University Research Ethics Committee in September 2019 (REF-SMUREC/H/271/2019: PG) and from the University of Stirling in January 2023 (REF- NICR2023-75819855). Permission to conduct the study was obtained from the Chief Executive Officers of the participating hospitals in the City of Tshwane Metropolitan Municipality. All participants provided written informed consent before the interviews were conducted. Confidentiality and anonymity were maintained through transcript anonymisation, secure data storage, and use of participant identifiers in all reporting. The study was conducted in accordance with the Declaration of Helsinki.

3 Results

Twenty healthcare practitioners (HCPs) participated in the study. Most were female, and most had more than two years of experience working with children with SAM, particularly in paediatric wards. Participants were drawn from public hospitals across Tshwane and represented a range of professions involved in the multidisciplinary management of inpatient SAM. Five themes (with sub-themes) were identified, with representative quotations by participants. Figure 1 presents a thematic map summarising HCPs' experience of the early identification and management of RFS in hospitalised children with SAM and illustrates the relationships among the five themes.

3.1 Theme 1: awareness vs. practice: "known on paper," but under-recognised

The participants widely reported that they are aware of RFS as a concept but have not encountered it in their daily practice. They also noted that it is a topic seldom discussed or reported explicitly unless a child deteriorates or demises, and they do not actively look for it. Three sub-themes have emerged from this theme, and they are: (a) Under-recognised/under-reported, (b) under-discussed and (c) Confusion with general SAM deterioration. Below are the codes that support these subthemes.

> "Yes, I think it is. Both are underdiagnosed, not recognised, or are not normally reported. I'd say it's not normally reported, yeah. And most of the people are not aware of it, and it's dangerous." **(P6)**

> "To be honest with you, it's not a topic that we discuss often. I think it's something that we're probably missing, or we are overlooking. It's not something that we discuss often." **(P16)**

> "Sure. I honestly don't think we, like, we don't report refeeding syndrome or recognise it's separate. So it's not that someone will write SAM with the risk of refeeding syndrome. So, it's not that it's a separate statement. I think for me, refeeding syndrome is always connected to SAM." **(P17)**

3.2 Theme 2: reactive rather than proactive identification

Participants described identification practices that relied heavily on electrolytes, especially phosphate, magnesium, calcium, and potassium at admission. However, they also reported that this is not done to deliberately detect RFS, as the phrase "we do not actively look for it" was repeatedly mentioned. There was widespread uncertainty regarding the clinical signs of RFS, as they are often confused with those of general SAM, and many HCPs are unsure how to use these signs effectively for identification. A recurring concern was the absence of a simple screening tool or checklist to prompt early identification. Three sub-themes have emerged from this theme, and they are: (a) Lack of a screening tool, (b) Electrolytes, the first point of reference, (c) Clinical-sign uncertainty. Below are the codes that support these subthemes.

> "Unfortunately, as far as I know, I could be wrong. There are no screening criteria or tools established by the department. Maybe when you read other books, you can easily find it. But as far as putting it as a protocol on how to manage, to look for it, manage it, not that I know of. **(P1)**

> "CMPs. So, your calcium, magnesium, potassium and phosphate. That's what we look at. To see if they are deranged. If there's a deficiency in that. If they are not normal, then that is our marker for refeeding syndrome." **(P4)**

> That's very interesting. I've actually never known that you can see refeeding syndrome clinically. I obviously know the SAM ones, but maybe oedema because it will be a fluid shift. That would be my best bet. Maybe clinical signs like, I don't know, vomiting, things like that. That's my guess. **(P11)**

3.3 Theme 3: managing RFS through standard SAM care

In interviews, some HCPs explicitly stated that since RFS is not something they actively look for (or diagnose) [P6], neither is the management. The inpatient management of SAM follows the WHO SAM Protocol. The primary goal is never to treat or manage something that has not been diagnosed [P9], as one participant noted. In the absence of RFS-specific guidelines, HCPs described relying on standard SAM protocols. When complications occur, typically electrolyte imbalances, we "correct" those electrolytes. If other complications develop, they are treated and managed individually because there is no specific section in the SAM management protocol that addresses RFS. Two sub-themes have emerged from this theme, and they

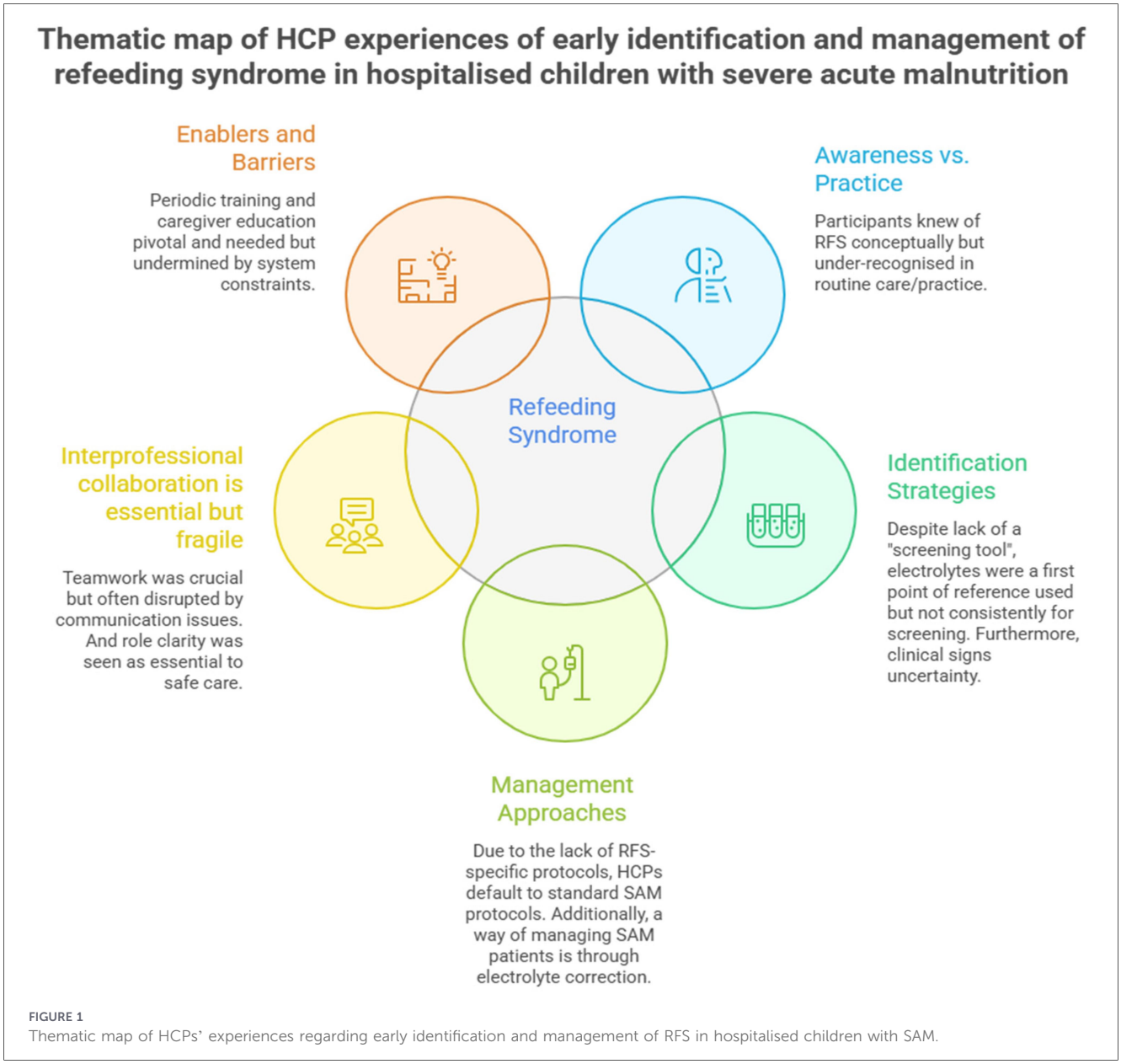


FIGURE 1
Thematic map of HCPs' experiences regarding early identification and management of RFS in hospitalised children with SAM.

are: (a) Default to SAM Protocol, (b) Electrolyte correctness. Below are the codes that support these sub-themes.

> "I'll follow the SAM protocol. I'll also look at the patient, like the clinical signs that the patient is presenting to me, and then when I start the feeds, I'll look at the amount of feeds that I'm giving, depending on the clinical appearance of the patient, and progress based on how the patient is tolerating and if there are any improvements, and if the appetite is improving, and the patient is not quite irritable, there's no need to look at those things to progress the feed so that I don't overfeed the patient" **(P9)**

> "Okay. So, just to make sure. My first approach basically would be checking for phosphate, magnesium and potassium, right, in managing these children. Yeah, because it's part of the management in any case. Just that they don't specifically say, this is for this syndrome. It's part of the SAM management." **(P3)**

3.4 Theme 4: interprofessional collaboration is essential but fragile

Participants emphasised the importance of multidisciplinary teamwork (MDT) among doctors, nurses, and dietitians in managing children with SAM. Participants did not describe an interprofessional process specifically established for the identification or management of RFS. Instead, they discussed collaboration within the broader management of children with SAM, involving paediatricians, medical officers, nurses and dieticians. Good communication and role clarity were seen as essential to safe care. At the same time, participants described

this collaboration as important but fragile, particularly when responsibilities were unclear, note-sharing was incomplete, handovers were inconsistent, or treatment changes occurred after hours. These weaknesses may limit opportunities to bring together the clinical, biochemical and nutritional indicators required to recognise RFS early. This theme therefore describes the interprofessional conditions within routine SAM care that may enable or hinder RFS identification, rather than an existing RFS-specific model of teamwork. Two sub-themes have emerged from this theme, and they are: (a) Positive MDT culture, (b) Clear roles matter. Below are the codes that support these sub-themes.

> "Multidisciplinary work is very important. No one can treat SAM by themselves… What helped was when we all came together, because everybody had an input on how we go forward with the patient. Sometimes people don't read each other's notes, so working together really helped." **(P1)**

> I think it's important because if we work together, we know that the dieticians do this, and then the doctors, the nurses, we need each other to provide care to the patient and maybe if someone picks something from the child, and they tell you, you can also look at that and maybe you'll be able to manage the patient compared to if you don't manage as a team. **(P6)**

3.5 Theme 5: enablers and barriers to early RFS identification and safe refeeding

This theme captures the tension between what helps and what hinders early RFS identification and safe refeeding in SAM care. As emerged from the interviews, HCPs described the principal barriers as health-system constraints, including delayed laboratory results and limited availability of therapeutic feeding products. HCPs also identified potential enablers, particularly RFS-focused training for HCPs, practical ward-based guidance and education for caregivers regarding prescribed therapeutic feeding. Below are the codes by HCP's.

> "Yes, definitely, frequent training is needed. And it shouldn't be for doctors only. It should also include the nurses and, yeah, because the nurses are the ones who spend most of the time with the patients, and they're able to give reports and feedback sessions, kind of." **(P16)**

> "Sometimes it is a challenge…having to educate the mother: this is the kind of feed the child needs to take and this is why the child is supposed to take it. Sometimes mothers are in a rush to discharge, and they end up doing what they are not supposed to be doing while you are trying to stabilise the patient." **(P9)**

> "Government hospital. Okay. Big challenge. That would be the products. Yes. If we don't have the F75, then we need to substitute with something else." **(P4)**

3.6 Comparison of perspectives across professional groups

Across professional groups, participants described overlapping concerns about limited RFS recognition, unclear guidance and multidisciplinary communication. Differences were mainly in emphasis: paediatricians and medical doctors discussed diagnostic uncertainty and laboratory investigations; dietitians highlighted feeding progression and therapeutic-feed availability; and nurses described bedside monitoring, feed administration and feeding tolerance. These perspectives were complementary rather than clearly divided by profession. Variation in perceived staff awareness and the adequacy of existing SAM protocols also occurred between individual participants. These comparisons are descriptive and should not be interpreted as views shared uniformly within each profession.

4 Discussion

This study provides context-specific accounts of how HCPs understand and identify RFS in children hospitalised with SAM in two South African public hospitals. Participants described conceptual awareness of RFS alongside limited recognition of it as a distinct condition in routine care. Their accounts suggest that difficulties in early identification involve knowledge, clinical uncertainty and the organisation of care. These findings concern reported experiences and do not establish the frequency of missed diagnoses or directly observed practice.

The findings of this study demonstrate that although clinicians conceptually recognise RFS, it has not been translated into routine clinical practice as a distinct diagnostic entity. Instead, HCPs described managing children according to established SAM protocols, with electrolyte abnormalities corrected as they arise rather than through a proactive identification of children at risk of developing RFS. These findings suggest that the challenge is not simply one of knowledge, but rather of implementation. Existing knowledge about RFS is insufficiently embedded within routine clinical workflows, resulting in missed opportunities for early identification during the critical stabilisation phase. From an implementation science perspective, this disconnect reflects the well-recognised gap between evidence and practice. Clinical guidelines alone rarely change practice unless supported by practical implementation strategies, including clear screening tools, clinician training, workflow integration, and organisational support. Participants consistently reported that they "do not actively look" for RFS because no structured protocol, checklist, or explicit diagnostic pathway exists within routine inpatient SAM management. Consequently, clinicians default to familiar practices embedded in existing workflows. This finding illustrates how healthcare providers often rely on established systems rather than individual knowledge when managing

complex conditions. Even where clinicians understand the theoretical concept of RFS, the absence of practical implementation mechanisms limits translation of this knowledge into routine patient care.

The finding that RFS remains "known on paper" but rarely recognised in practice is consistent with international literature demonstrating persistent under-recognition of RFS despite growing awareness. In a German survey, only around one in five physicians correctly identified a classical RFS presentation, leading the authors to conclude that RFS remains largely unknown, under-recognised and undertreated in clinical practice (18, 19). Similarly, fewer than half of physicians in Saudi Arabia demonstrated adequate knowledge of RFS diagnosis and management despite acknowledging its clinical importance (20), while a descriptive study among ICU nurses reported low awareness levels and uncertainty about which patients are at risk, highlighting an important gap between guidelines and frontline knowledge (21). However, the findings of our study extend this literature by demonstrating that under-recognition cannot be explained solely by knowledge deficits. Participants described systemic barriers including competing clinical priorities, overlapping presentations of SAM complications, protocol limitations, and resource constraints that make it difficult to distinguish RFS as a separate clinical condition. This suggests that underdiagnosis reflects both cognitive and organisational challenges rather than inadequate clinician knowledge alone.

The South African context provides additional explanation for these findings. Unlike many high-income settings, public hospitals managing children with SAM frequently operate under significant resource constraints, which include delayed laboratory turnaround times and stock interruptions of therapeutic feeds. Under these conditions, clinicians understandably prioritise immediate stabilisation of children with SAM complications using established WHO SAM protocols. Introducing an additional diagnostic process for RFS may therefore be perceived as impractical when existing systems already demand rapid decision-making with limited resources. Consequently, electrolyte abnormalities are often managed as isolated clinical problems rather than recognised as a surrogate marker for RFS. This contextual reality highlights why implementation strategies developed in high-income countries cannot simply be transferred into low-resource settings without adaptation.

An important finding was participants' reliance on electrolyte monitoring, particularly phosphate, potassium, magnesium and calcium, as the principal means of identifying possible RFS. While biochemical monitoring is an essential component of RFS management as per the literature, participants acknowledged that electrolyte testing was performed primarily because it forms part of routine inpatient SAM care rather than as part of a structured RFS risk assessment. International consensus recommendations advocate combining biochemical monitoring with assessment of established risk factors, including recent starvation, significant weight loss, baseline nutritional status and ongoing clinical monitoring following refeeding to improve early identification (22). The absence of similar structured approaches within the participating hospitals suggests that current practice remains reactive rather than preventive. From an implementation perspective, this finding reinforces the need for simple, context-appropriate bedside screening tools that integrate easily into existing admission and feeding protocols rather than introducing additional complex assessments. Such tools could enable clinicians to identify high-risk inpatient children with SAM before biochemical deterioration becomes clinically apparent.

Participants also expressed considerable uncertainty regarding the clinical manifestations of RFS because many of its early features overlap with the presentation of SAM itself. Symptoms such as oedema, vomiting, diarrhoea, respiratory compromise and altered neurological status are common in children with complicated SAM and may therefore be attributed to infection, fluid imbalance or progression of SAM rather than evolving RFS. This diagnostic uncertainty reflects the broader paediatric literature, where RFS has long been recognised as a syndrome with non-specific clinical manifestations (10, 23, 24). Importantly, these findings suggest that the difficulty lies not only in recognising RFS but also in differentiating it from conditions that frequently coexist during nutritional rehabilitation. This reinforces the need for practical clinical guidance that combines biochemical monitoring with structured clinical assessment to support diagnostic decision-making in complex inpatient settings.

The study further highlights the critical role of MDT collaboration in the safe management of children with SAM. Participants consistently described doctors, nurses and dieticians as having complementary responsibilities throughout nutritional rehabilitation, emphasising that successful management depends upon effective communication and coordinated decision-making. However, they also described this collaboration as fragile, with documentation incomplete, ward rounds poorly coordinated, or roles not communicated clearly. These findings align with previous studies from South Africa and Ethiopia demonstrating that communication failures and poorly coordinated multidisciplinary care contribute to suboptimal SAM management (11, 25). Within an implementation science framework, these organisational factors represent important determinants of successful guideline implementation. Clinical interventions are unlikely to improve patient outcomes unless supported by systems that facilitate communication, shared decision-making and coordinated documentation across professional groups.

These findings have important implications for clinical practice and health policy. Improving early identification of RFS in children with SAM is unlikely to be achieved through educational interventions alone. Instead, a multifaceted implementation strategy is required that embeds RFS risk assessment into routine SAM care. This strategy will include context-appropriate bedside screening tools, practical multidisciplinary training, clearer documentation of feeding progression and electrolyte monitoring, integration of RFS assessment within existing SAM protocols, and strengthened health-system support to ensure reliable availability of therapeutic feeds and timely laboratory investigations. Importantly, these interventions will be designed specifically for low-resource paediatric settings rather than adapted directly from adult or high-income guidelines. Future research will focus on developing and validating practical RFS screening tools suitable for local hospital settings while evaluating

implementation strategies that improve adoption within routine clinical practice.

4.1 Implications for practice

Participants' experiences identify priorities for consideration in the participating services: clearer RFS-related guidance, practical multidisciplinary education, shared documentation of feeding and monitoring plans, and reliable access to laboratory investigations and therapeutic feeds. Caregiver education was also raised by HCPs, although caregivers' own perspectives were not collected in this study. These are implications drawn from reported experiences, not interventions demonstrated to improve recognition or clinical outcomes. Any proposed changes should be developed with local teams and evaluated before wider adoption.

4.2 Recommendations and directions for future research

Prospective multicentre studies should evaluate clearly specified paediatric RFS criteria in children with SAM, with serial biochemical and clinical assessment during early nutritional rehabilitation. Such studies could characterise the timing and occurrence of RFS and inform appropriate monitoring schedules.

A context-sensitive identification and monitoring framework could be co-designed with paediatricians, medical doctors, nurses and dieticians. Initial evaluation should assess feasibility, acceptability and usability. Subsequent studies should distinguish the validation of risk prediction from the accuracy of identifying an established RFS episode, and assess whether use of the framework changes recognition, escalation of care or patient outcomes. The framework should complement established SAM care.

Implementation studies could evaluate multidisciplinary education, clearer responsibilities and shared documentation, using outcomes such as monitoring completion, communication of feeding changes and time to escalation. Further qualitative and mixed-methods work should include rural and regional services and incorporate observation, record review and laboratory turnaround data. Caregiver interviews would provide perspectives absent from the present study and help contextualise HCPs' accounts of prescribed feeding.

4.3 Strengths and limitations

The inclusion of multiple professional groups provided varied perspectives on RFS identification within inpatient SAM care. The qualitative descriptive design supported a context-sensitive account of reported clinical and organisational challenges. However, participants were recruited from two public hospitals in one metropolitan municipality, which limits the range of settings represented. The sample was considered collectively, and the study did not establish data sufficiency within individual professional groups. Comparisons between professions should therefore remain descriptive and sensitive to the accounts available.

Several limitations were also acknowledged. The findings rely on self-reported experiences and may be influenced by recall and social desirability. They do not establish directly observed practice, the incidence of RFS or the effects of proposed service changes. The researcher's prior engagement with the topic may also have shaped data collection and interpretation. Caregiver perspectives were not collected directly. Transferability should be assessed in relation to the professional and service characteristics of other settings.

5 Conclusion

Healthcare practitioners in two public hospitals described a gap between conceptual awareness of RFS and its explicit identification during inpatient SAM care. Their accounts highlight clinical uncertainty and organisational and resource constraints affecting assessment and monitoring. These findings can inform the development and evaluation of context-sensitive approaches to early identification, but do not establish the effectiveness of screening tools, training or service changes.

Data availability statement

The datasets generated and/or analysed during the study are not publicly available because of the sensitive nature of the interview data and the need to protect participant confidentiality. Participants did not consent to the public release of their full interview transcripts. De-identified and redacted data may be available from the corresponding author upon reasonable request, subject to ethics committee approval and participant consent requirements.

Ethics statement

The studies involving humans were approved by Sefako Makgatho University Research Ethics Committee (Ref: SMUREC/H/271/2019: PG). The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

TM: Project administration, Formal analysis, Methodology, Writing – review & editing, Conceptualization, Writing – original draft, Visualization, Funding acquisition, Resources. AV: Writing – review & editing, Conceptualization, Supervision. NR-S: Conceptualization, Writing – review & editing, Supervision, Methodology. SG: Writing – review & editing, Supervision, Methodology, Conceptualization.

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Conflict of interest

The author(s) declared that this work was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fped.2026.1934144/full#supplementary-material

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