

## EMPIRICAL RESEARCH QUALITATIVE OPEN ACCESS

# Paediatric Pain Management Experiences of Parents of Children in Botswana Referral Hospitals

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## ABSTRACT

**Aim:** To describe the experience and understanding of paediatric acute pain management practices by parents/guardians' of hospitalised children in Botswana.

**Design:** Descriptive qualitative study.

**Methods:** Face-to-face semistructured interviews were conducted in two public hospitals. Data were transcribed verbatim and analysed using thematic analysis.

**Results:** A convenience sample of 19 parents/guardians, two fathers, one grandmother and 16 mothers who were recruited in 2019. Six major themes were identified with several subthemes. The themes were as follows: 'soldiering on with hope'—representing the parents/guardians overall general positive outlook; 'facing adversity'—highlighting parents/guardians responses to acute pain management; 'acceptance to nonacceptance of the reality of care'—parents/guardians view on the quality of pain care they received measured against their expectations; 'smiles to unending nightmares'—parents/guardians visualisation of the pain treatment outcomes; 'perceptions of child pain'—parents/guardians' knowledge of pain assessment and treatment strategies that they used or were being used by healthcare providers to their children and 'guarded empathy'—highlighting the intricacies of each child's response to pain. Parents/guardians in Botswana have both positive and negative experiences regarding child pain management in referral hospitals and recognise the need to adequately manage paediatric pain.

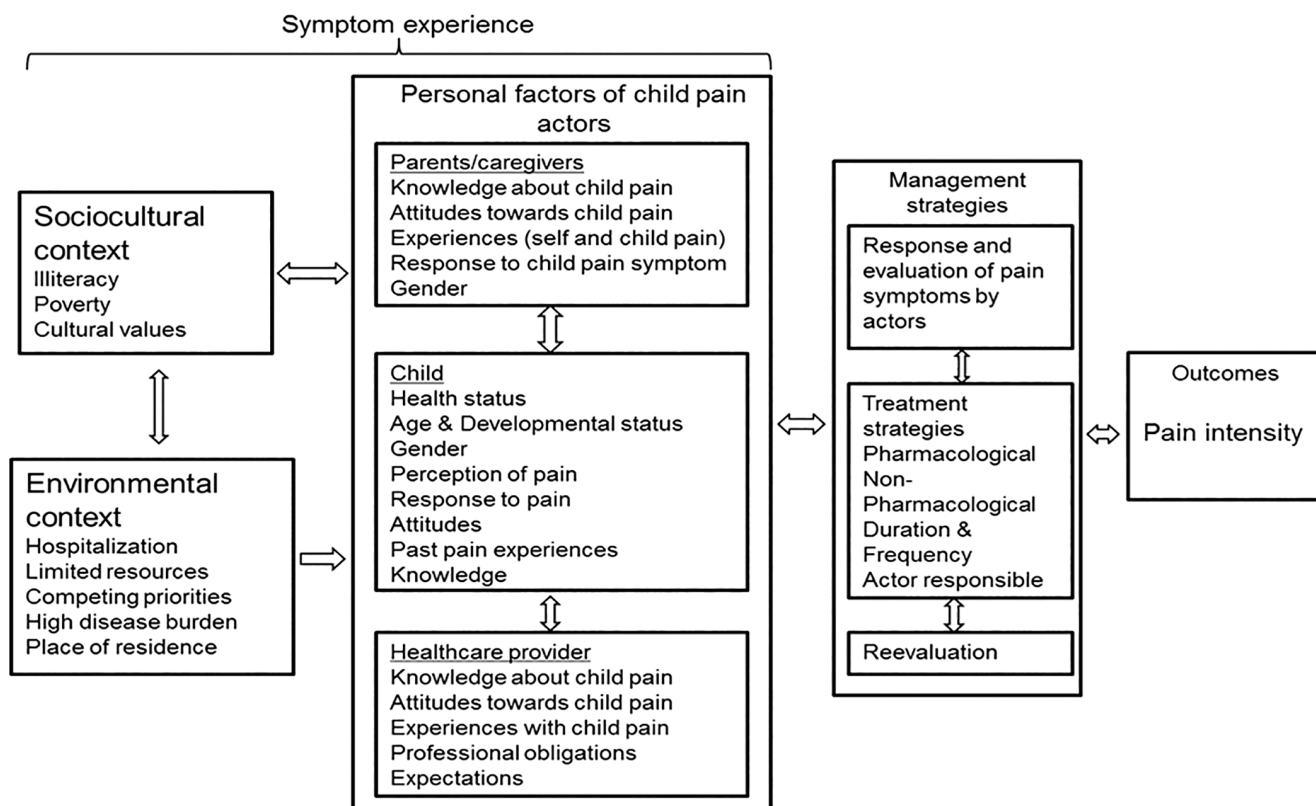
**Patient or Public Contribution:** The results show that parents/guardians in LMIC equally understand the children's pain management and should be involved in decision-making regarding pain management as equal partners. It further highlights the challenges faced by parents due to poorly and inadequately treated acute paediatric pain in hospital units and pushes for hospital policies that ensure that pain is adequately managed for all children.

## 1 | Introduction

Pain relief in hospitalised children is a significant quality of care issue that impedes the delivery of atraumatic care (Roessler De Angulo et al. 2024; Gai et al. 2020; Souza et al. 2024). Despite the importance of pain management, children in low- and middle-income countries (LMIC) continue to suffer from inadequately recognised and managed pain (Gai et al. 2020; Grunauer et al. 2021; Shah and Siu 2019). Pain is defined as ‘an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage’, (Raja et al. 2020). While acute pain is ‘the physiologic response and experience to noxious stimuli that can become pathologic, is normally sudden in onset, time limited and motivates behaviors to avoid actual or potential tissue injuries’. (Tighe et al. 2015). Acute pain in this study is defined as pain relating to the current acute child diagnosis that led to the admission. Significant barriers to providing effective acute pain management in children include the complexity of pain management in children, dilemmas in care provision, healthcare providers’ knowledge, attitudes, practices and availability of resources (Albertyn et al. 2009; Grunauer et al. 2021; Ismail 2016; Mencia et al. 2022; Souza et al. 2024; Williams 2017; Wuni et al. 2020). While barriers are acknowledged in the literature, the role of the child and the parent in acute pain management is not always emphasised, particularly in diverse cultures as seen in LMIC (Clews et al. 2022; Rosales et al. 2016; Smith et al. 2018). Furthermore, widely held parental beliefs (and misbeliefs) about pain coupled with fears of medication dependence or addiction, have been

reported as major determinants of child pain management and subsequent outcomes (Rosales et al. 2016).

Past experiences of children with pain and their parents/guardians will inform their future understanding of pain in children. More importantly, these experiences influence how they react and their expectations for how well pain is managed in specific settings and situations (Chaw et al. 2019; Egberts et al. 2018; Kristjansdottir et al. 2018; Pope et al. 2017; Sng et al. 2017). According to a model derived from the tenets of Symptom Management Theory (Figure 1), paediatric pain experience and management depend on symptom experience, management strategies and outcomes. Parents/guardians play a crucial role in both symptom experience, management and outcomes. Parents/guardians are influenced by a number of factors, including the child’s factors, healthcare providers’ interactions, knowledge and their own beliefs, experiences and attitudes (Matula et al. 2018). Currently, limited evidence exists addressing pain and pain management experiences of children and their parents/guardians (Zhang et al. 2023). This lack of evidence is especially relevant in many LMIC (Matula et al. 2018). In particular sub-Saharan Africa, where the largest burden of childhood diseases and diagnoses occur at an advanced stage, accompanied by high mortality, little is known about pain assessment, pain management and the related experiences of children and their parents/guardians (Albertyn et al. 2009; Bond 2011; Matula et al. 2018; Ren et al. 2022; Wuni et al. 2020). Evidence shows that children and parents/guardians in other LMIC regions are aware of the child’s acute pain and care and often employ strategies unique to each



**FIGURE 1** | Shows the conceptual model derived from the Symptom Management Theory by identifying factors under the broad three tenets of the theory.

setting and cultural norms to control pain (Kristjansdottir et al. 2018; Pope et al. 2017; Sng et al. 2017). Therefore, investigating parents'/guardians' experiences regarding acute child pain management practices in Botswana addresses a gap in knowledge that currently exists in sub-Saharan Africa. It also highlights the role of parents/guardians in pain care and sensitises healthcare providers and researchers in this key domain. The purpose of this study is to describe the experiences of parents/guardians with paediatric pain management practices for their children hospitalised in Botswana's two largest referral hospitals.

## 2 | Methods

### 2.1 | Approach

Through in-person focused interviews, a descriptive qualitative study sought to answer the research question: what are the parents/guardians experiences regarding how their children's pain is managed in Botswana health facilities? The specific questions were how the parents/guardians felt about, how they managed and what they thought should be done about their child's pain. It also explored the reasons for these feelings, practices and thoughts (Colorafi and Evans 2016). A descriptive qualitative study was an essential first step to tackle this subject, given the evidence gap on paediatric pain management practices in sub-Saharan Africa in general, and focused on Botswana (Colorafi and Evans 2016; Matula et al. 2022a, 2022b).

### 2.2 | Population and Settings

The study population was inpatient parent/caregiver-child dyads at the two largest referral hospitals in Botswana. Based on Botswana health guidelines, a paediatric age refers to children aged between 0 months and 13 years. The study was conducted in the paediatric units of two tertiary referral hospitals in Botswana's two largest cities. The first hospital is a 525-bed hospital with 110 beds allocated to children, while the second is a 550-bed hospital with 98 beds allocated to children. These public hospitals serve as the two most important paediatric centres across the country, have a diverse paediatric population and average of 6000 children admitted annually between the two hospitals.

### 2.3 | Participant Eligibility

Participants were included in the study if they were: (a) a parent-child dyad with the child being aged 2 months–13 years and inpatient in a paediatric unit (medical and surgical) and (b) able to communicate in English or Setswana. Participants were excluded if: (a) it had been 2 months or less since neonatal pain, which requires a different approach; (b) children were admitted solely for nutritional rehabilitation, nonmedical grounds, such as awaiting transfer to other hospitals, abandoned children and forensic cases; (c) the child or parent had apparent developmental delay or cognitive impairments as per the Denver Developmental Test; (d) the child was admitted for observation for less than 24 h or (e) admitted to the Intensive Care Unit.

## 2.4 | Ethical Considerations

The study was approved by the University of Pennsylvania (830264) and the University of Botswana (UBR/RES/IRB/BIO/105) Institutional Review Boards (IRB), the Botswana Ministry of Health and Wellness Health Research and Development Committee (HRDC) (REF: HPDME 13/18/1) and the ethics review committees of Nyangabwe Referral Hospital (REF: NRH 1/2/170) and Princess Marina Referral Hospital (REF: PMH5/79) (464–12,018) respectively.

## 2.5 | Data Collection and Management

Purposive sampling was used, and participants were approached by the bedside, and if willing to participate, a time convenient for the family was set and an empty room within the unit was used for interviews while a sitter was used for the child while the parent attended interviews, or when convenient, the parent brought the child with them to the interview. After obtaining written informed consent from the parent/guardian, face-to-face interviews were conducted in a private space away from the unit by the researcher (SM) using a semistructured interview guide. The interview guide was developed from literature, and face validity and construct validity were tested using experts in the area of qualitative research and the Botswana context for cultural appropriateness (Sandelowski 2010). Furthermore, the first interview was coded to ensure that the interview captured all aspects of parent/guardian pain management experiences using the study model. The questions covered the areas of one's pain experience to judge the understanding of pain experience and compare it to the perceived child experiences, the changes noticed in the child due to the current illness, the child pain experience, concerns and what went well with pain management, what they thought should have been done, and staff response to child pain (including treatment options discussed) (see supplemental material). The sample size was determined by data saturation (Sandelowski 1995; Thompson et al. 2022). Qualitative studies require interactive data collection and analysis; due to the purposive nature of the study and to ensure representativeness of the data to different hospitals, units and various age categories, the sample size was determined by a modified data saturation. Recurrent themes indicating data saturation started to emerge at 12 interviews, but additional interviews were conducted to ensure sample representativeness and to ensure that no data are missed due to age, hospital or unit, leading to 19 interviews where the team was comfortable to terminate recruitment and interviews as no new data were emerging. Interviews lasted 60 min or less, and were conducted anytime from recruitment after two out of four successful pain assessments by the research team. Interviews were recorded using two voice recorders, transcribed verbatim and translated to English by an experienced independent transcriber. Posttranscription and translation, the researcher listened to the interviews and cross-checked with the transcription to ensure the translated scripts were consistent with the audiotapes and to ensure context was maintained for credibility to ensure rigour (Sandelowski 2010). Where there were disagreements, the researcher flagged the interview and sent it back for re-translation. Field notes were written down and incorporated into the translated transcripts to bring them into context.

## 2.6 | Data Analysis

The Atlas.ti software package version 8.4 (ATLAS.ti Scientific Software Development GmbH, Berlin, Germany) was used to organise and manage the data for analysis. Thematic analysis was used for data analysis (Colorafi and Evans 2016; Vaismoradi et al. 2013). The primary coder (SM) and an expert in qualitative research (JD- secondary coder) developed the codes together for the credibility and trustworthiness of the codes (Colorafi and Evans 2016; Vaismoradi et al. 2013). The primary coder coded the first interview and shared it with the second experienced peer who went through the coding to establish rigour and reduce bias. Only one discrepancy in coding was noted, and this was resolved to the satisfaction of the second coder. Five additional interviews were reviewed by the secondary coder postcoding and were found to be consistent. First-level coding was achieved through quotes, and then second-level coding was achieved through grouping the primary codes to create subcategories, followed by the development of categories and eventual subthemes and final themes. Initial data saturation was reached after 12 interviews were coded, but coding was done for 19 interviews to ensure representativeness of the sample (Thompson et al. 2022).

## 3 | Findings

Nineteen participants were recruited, of which two were fathers, one grandmother and 16 mothers. Nine parents/guardians were from NRH, with five from the medical unit and four from the surgical unit respectively. Ten participants were from PMH, five from the medical unit and five from the surgical unit respectively. The common diagnoses for children were acute gastroenteritis, trauma—including fractures, wounds—including burns and postsurgery, pneumonia and cancers. Six major themes were identified, some with subthemes (Table 1).

### 3.1 | Soldiering on With Hope

Soldiering on with hope is a theme representing the overall general positive outlook exhibited by parents/guardians. Under this theme, parents/guardians tended to focus on the bigger picture and regarded pain as part of a whole illness episode rather

than an entity that needed to be isolated and addressed independently. By so doing, parents/guardians tended to focus on the diagnosis and management of the underlying causes and were willing to sacrifice the child being in pain for the time being as long as they knew there was hope from the promised interventions or recovery. Also, under this theme, parents/guardians acknowledged pain, but it was regarded as a transient symptom of less significance, with no obvious short- or long-term consequences on childcare and recovery.

*‘...I believed them when I was told the surgery that was to be done would totally ensure that the pain will reduce, so even though we were waiting I knew something better was coming...there is still some pain, but it’s from the surgery as they had to cut some bone, but in comparison you can see that he is getting better even the pain killers make some difference now that he can even move his toes....’ PMHS-1-M*

### 3.2 | Facing Adversity

The facing adversity theme highlights parents/guardians were able to identify that their children were going through the worst due to poorly controlled pain. Under this theme, there was a departure from minimising the impact of pain on children with an emphasis on the need to adequately treat pain. Pain was regarded as a nondesirable thing, and children would not stop crying or complaining unless their pain was adequately addressed. Both the short and long-term impacts of pain were considered, and parents/guardians recommended that children’s pain be treated with urgency. Parents/guardians also indicated that when children reported pain, it was authentic, and most of the time, when the child reported pain, it was already severe because they tended to ignore pain until it was unbearable.

*‘...a child would want to be helped and the pain to go away immediately. I have heard them complaining before that even when given medication it is not helpful because they want the pain to be gone immediately....’ NHRM-9-M*

**TABLE 1** | Themes and subthemes.

Number	Theme	Subthemes
1	Soldiering on with hope	
2	Facing adversity	
3	Accepting to nonacceptance of the reality of care	i. The quality of pain care ii. Trusting the system and the healthcare providers iii. Accessibility of pain services
4	Smiles to unending nightmares	
5	Perceptions of child pain	i. Measuring and assessing pain ii. Nonpharmacological pain control approaches iii. Pharmacological pain control approaches
6	Guarded empathy	



‘...for children is a different story when they tell you they are in pain they literally mean it and cannot do anything about it....’ PMHS-1-M

While paediatric acute pain was regarded as a bad thing that needed to be treated urgently, some parents/guardians acknowledged that not all parents/guardians agreed with this view. Some parents/guardians reported that there was little they could do as parents/guardians when faced with the adversity of paediatric acute pain and suffering. Also, some parents/guardians reported that watching their children deal with the pain was not easy, and it often produced negative emotions and sometimes rendered them feeling helpless while their child suffered.

‘...From when he was admitted, it was very painful to the point where as a parent it really affects you too, but I had to encourage him and give him hope...Yes, you become helpless because you are just there...even if your child is in excruciating pain,...But they did assure me that they have not forgotten about him....’ PMHS-1-M

### 3.3 | Accepting to Nonacceptance of the Reality of Care

This theme depicted the views on the quality and expectations of pain care. It also presented how the larger hospital context influenced the parents/guardians’ views on quality and expectation, thereby linking pain management to a range of responses from satisfied to dissatisfied with other services and vice versa. The theme was further divided into three subthemes: (1) the quality of pain care, (2) trusting the system and the healthcare providers and (3) accessibility of pain services.

#### 3.3.1 | The Quality of Pain Care

This subtheme represented views on the quality of pain care. Parents/guardians believed that the healthcare providers were making an effort to treat each child’s pain, citing the use of either pharmacological or nonpharmacological measures or a combination of the two. The response of the healthcare providers was regarded as a significant source of satisfaction. Despite some satisfaction, others indicated that the services were not always satisfactory, mostly citing nursing services and the lack of consistency in the information received.

‘...For other kid being hospitalized, I have noticed that they are in pain, but the doctors and nurses are really trying hard to assist them and even respond timely when called...’ NRHM-12-G

‘...Some nurses even when you tell them that a patient is in pain they are not keen and will be busy on their phones especially when the doctors have knocked off, so they take time to attend to patients which at times leads to arguments....’ PMHM-10-M

‘...They come with different opinions on what should be done, so you are never sure of who is saying what because they have different views....’ NRHM-13-M

This subtheme also reflects the parents’ and the patient’s journey in the healthcare system. The positive experiences were often associated with better satisfaction with pain care, while the negative interactions often led to dissatisfaction with pain care. Quality of care was also an end product of what transpired during the first encounter with the healthcare system and/or events leading to hospitalisation. That is, the first contact with the healthcare system was often used as a reference point for the quality of services including pain care.

‘...When we arrived at the emergency unit, it was around three, but we were only helped at 8 when we were already complaining, on the other hand, the child was screaming...Since it was a referral they had already given him paracetamol at the clinic, but the delay here wearied off the paracetamol from his body, and the pain came back....’ PMHS-2-F

#### 3.3.2 | Trusting the System and Healthcare Providers

This subtheme was derived from the parent’ or guardians’ expectations of care during hospitalisation. Most indicated that at least their child was not sent back home when they came looking for help, and they had hope that since the child was in the hospital, the child would become well.

‘...[T]he thing is just that I am happy they took the situation in the right way....’ NRHM-7-M

‘...[T]hough there was a delay its better than being sent back and being told to come tomorrow without being attended to....’ PMHS-2-F

Parents/guardians also indicated that they trusted that just like the response they got when they came asking for help, pain would be addressed either through the treatment of the underlying condition or by adequately managing it. Participants placed their hope on healthcare providers to do the right thing. When the expectations were not met, parents/guardians tended to become proactive and requested services they deemed appropriate to manage their children’s pain.

‘...I even ask some mothers to call the nurses when I see that the child is in too much pain....’ PMHM-11-M

‘...since the child cannot voice their discomfort, the doctors and nurses will find a way to help ....’ NRHM-13-M

#### 3.3.3 | Accessibility of Pain Services

This subtheme depicts the balanced views on resource availability and their children’s needs. Parents/guardians often concentrated

on what they thought were priority needs and the resources available; most of the time, this relegated pain care to the background. Parents/guardians focused on the recovery of the child, and pain was regarded as a transient symptom that a child must endure to get access to other services. Participants also believed that healthcare providers should focus on issues they considered essential and likely to cause danger to the child's life.

‘...When he is in pain, I just lift him up as there is not much I can do....’ PMHM-9-M.

‘...[S]he is overly tired, sleeps a lot and headaches... they know what to do with him...I really appreciate what they did they helped us a lot at times I did not believe my child would still be alive....’ PMHM-10-M.

Resource availability, particularly resource limitation, was cited as a determining factor for child pain management. Parents/guardians were cognisant of the shortage of resources in the institutions and often sympathised with healthcare workers; they mostly considered that healthcare providers were doing their best to help their child cope with pain. Some advocated for hospitals to help, allowing for partnerships with them where resources were limited, even through cost-sharing measures.

‘...I have realized that they do try, but the problem is that our country does not have resources...I feel everything would be fine because we would not have to go to different places to find help....’ PMHM-9-M

‘...So far everything went well ...at times you observe the situation in the hospital and come to terms with it, as there may be a shortage of doctors. But in the end, we were assisted...Yes, you become helpless because you are just there, and you have to wait for your turn to be assisted even if your child is in excruciating pain....’ PMHS-1-M

‘... I also believe for those who can afford to go to private hospitals they should do it instead of waiting for a long time at government hospital while your child is in pain, at times we have to meet the government halfway...’ NRHS-11-M

### 3.4 | Smiles to Unending Nightmares

This theme describes how parents/guardians visualised the outcomes of pain treatment or lack thereof. The theme presented the parents' understanding of the consequences of well-managed and inadequately managed pain. Participants indicated that some of the progress their child made was attributed to properly managed pain. Others shared that their children had gone through harrowing experiences that had left them with negative consequences of inadequate pain management, such as complex pain syndromes which were also not being adequately managed and made their lives into nightmares.

‘...In terms of his pain, a person can only explain better what he feels, but I am happy that now he can play around compared to when he was normally asleep, he can even joke about other kids who are awaiting surgery....’ PMHS-1-M

‘...[I]t was the first time to witness a child undergoing operation without any sedation or anesthesia, they cut the leg open and washed it and left the wound uncovered, once they thought they had it under control the infection went to the other side, and they had to repeat the procedure again, but then it went to the feet...pain[showing that this was really disturbing]...with me pain...I think with regards to pain a local anesthetic has to be administered before most procedures are done like unwrapping bandages because the nurses just normally rip it off but we do understand, currently my child does not want to be injected because he is still traumatized by the fact that he was injected in the wound..., so all medications are being done through a cannula because it takes a team of 12 nurses just to give him an injection...’ PMHS-4-F

## 3.5 | Perceptions of Child Pain

The theme emanated from parents'/guardians' knowledge of pain assessment and treatment strategies that were self-employed or being used by healthcare providers to help children cope with pain. This theme was further divided into (1) measuring and assessing pain and (2) nonpharmacological and (3) pharmacological approaches to pain control subthemes.

### 3.5.1 | Measuring and Assessing Pain

This subtheme reflected how parents/guardians understood the presentation of pain in children, how pain was assessed/measured, and their role in identifying and reporting pain symptoms. Parents/guardians showed an understanding of symptoms associated with paediatric acute pain, mainly crying. They also identified additional symptoms associated with pain, such as fever, restlessness, lack of sleep and changes in behaviour. Some said they just knew that the child was in pain and were aware that a child can be reluctant to admit when having pain in fear of treatment. They commented that some children tried to cope with pain without informing their parents/guardians.

‘...So basically they can hide their pain fearing the pain from medicines...It not many occasions where a child would say they are in pain when they are not...He normally does not play and gets in a somber mood...’ NRHM-9-M

‘...I believe we do because whenever a child cries, the parents/guardians would immediately ask what

could be wrong...you can just notice the difference because when he is crying due to pain, you can see the difference from when is due to hunger and sometimes when they are in pain end up with fever also....' PMHM-9-M

'...[S]he cries you will see if she is in pain if you hold the hand if it is painful she will show that it is painful she will cry, and she will even show that resistance....'NRHM-7-M

'...It depends really as a parent I know my child behavior patterns so I can tell if there are some changes to him....' NRHM-13-M

While parents/guardians suggested that often someone could tell when a child was in pain, many acknowledged the difficulty of deciphering the child's pain as a significant barrier to pain treatment. Furthermore, some parents/guardians indicated the limitations of the methods used to assess and measure pain in children due to the subjective nature of pain.

'...There is a big difference because a child cannot fully explain where they feel the pain they can just say they have a tummy ache without specifically mentioning what is wrong ....' NHRS-8-M.

'...They do say what they want, but when they are in pain they do not say anything ....' NRHS-14-M

'...There are no averages in pain, it is like when someone tells you that they have problems you cannot understand how big that problem is, the person is the only one who can perceive it, just like that pain is like that, you can't say it has average because you can't feel it for another person....' PMHS-4-F

### 3.5.2 | Nonpharmacological Pain Control Approaches

The subtheme summarises the practices parents/guardians use and knowledge regarding nonpharmacological pain treatment in children. Being there for the child and giving them love was the most important strategy applied to help the child cope with pain. In addition, some physical and psychological measures were applied to manage pain, including massage, cuddling, distraction, prayer and providing encouragement and reassurance. Participants also indicated that they utilised indigenous strategies such as consulting with traditional healers and using herbs to manage pain.

'...I talked to him and comforted him and told him that he will be fine and at times, prayer....' NRHS-14-M

'...I can give him my phone to play with it, so he listens to music or plays games to distract him from the pain

when there is no any pain killers, also just staying next to the child and keep on comforting them...When it is like that, as a parent you have to give the child love, I have to comfort the child and massage them and make them feel at ease and reassure them that everything will be fine and the child will be better....' PMHS-6-M

'...He went to the hospital first, but they could not help him as they did not know how to extract the snake venom, so he went to the doctor[traditional] who had the know-how....' PMHM-5-M

### 3.5.3 | Pharmacological Pain Control Approaches

The subtheme encompasses the experiences with the use of pharmacological measures to manage pain. Parents/guardians understand the use of pharmacological measures and expect these measures to be used. They also believe that stronger analgesics are needed when the child is in severe pain. On the contrary, some parents/guardians are worried about the frequency with which analgesics are given and about their impact on the child.

'...The only pain killer they have been giving him it is Morphine...my thoughts on this are that pain gradually increases and will be treated according to its severity...stronger medicines for greater pain....' PMHS-1-M

'...I really do not know what they could do because during the night all children will be crying so I do not know if there has to be an alternative because even after being given Paracetamol (acetaminophen) they continue to cry so I think Paracetamol is no longer effective...There is an orange medication. I do not know if it is Brufen (ibuprofen)....' PMHS-2-F

'...They should be given pain-relieving medication though it should not repeatedly be ...hahaha [laughs] there are medications that are only to be taken three times a day, so we do not want to overdose....'NRHS-11-M

## 3.6 | Guarded Empathy

This theme was inductively derived from the perceived child risk factors. Most of the parents/guardians were sympathetic to their child's pain and wished they could trade places with them because as a child they did not have enough coping skills. The general child health outlook influenced how parents/guardians viewed the child's pain. Parents/guardians of healthy children who experienced an acute illness regarded their child's pain as severe and the illness condition as a cause of concern. Also, children with high acuity illnesses were in severe pain, mainly due to perceived suffering; children whose illness was considered

improved were thought to be in less pain. Also perceived child developmental capabilities such as child's age, developmental milestones, and the ability to communicate their needs led to parents/guardians being more empathetic to the child's pain and suffering.

'...[He was not able to move his leg] at all...yesterday he took a wheelchair to the loo, but when he got there and could limp a few steps...last week he could not have done it...' PMHS-1-M

Some parents/guardians believed that because children were aware of their conditions, they exaggerated their pain experience by exhibiting behaviours that showed they were in severe pain when, in reality, they had less pain.

'....Because he is a child even when you touch his finger, he cries if it was an adult he could explain, but now as a child, he does not want to be touched....,moreover, because he is a child, he also fantasizes just because of the injury and thinks he is in pain....' PMHS-2-F

## 4 | Discussion

This is the first study to explore parents/guardians' experiences regarding their child's pain management in referral hospitals in Botswana. Botswana's healthcare system provides a unique context due to mainly being public health and the country known to have high financing for healthcare system and culture of people of Botswana, where children are raised to be strong, thereby providing insights that may not be deduced from other contexts (Tapera et al. 2018). The study showed the complexity of parental responses to their children's pain and reactions to its treatment that are seemingly contradictory, that is, relative satisfaction coupled with a range of abilities to interpret the pain cues of their children. Taken as a whole, the results do not align with the expected results based on literature which emphasises strong cultural barriers including stoicism in similar cultures and context (Clancy 2014; Finley et al. 2009; Ismail et al. 2018; Jongudomkarn et al. 2012). Also, the results provide important new understandings to both the science and care of children experiencing pain, their families and the systems that serve them.

### 4.1 | Soldiering on With Hope

Parents/guardians expressed that they focus on the bigger picture of the illness and the hope of pain improving with time. This longer-range positive outlook affected how they interpreted pain by reducing the significance of pain and focusing on the ultimate goal of treating or recovering from the illness. Such thoughts prove to be beneficial in acute conditions when there are planned interventions or resolving conditions. However, these same thoughts may be detrimental to children with extended sick days or chronic conditions and with potentially painful repeated procedures. Similar findings were reported by Jongudomkarn and colleagues, who found that children

and parents/guardians in Thailand denied having pain due to the cultural beliefs that pain can be seen as acceptable (Jongudomkarn et al. 2012). Also, Angelini and colleagues reported similar results in Sweden among adults with orthopaedic conditions (Angelini et al. 2018). In addition, this theme may be supported by the results of a study by Matula and colleagues, which indicated that pain is rarely rated as severe in this population (Matula et al. 2022b).

### 4.2 | Facing Adversity

The theme of facing adversity provides insight into how children and parents/guardians deal with acute pain during the child's hospitalisation. While still holding to the bigger picture view, children and parents/guardians argue that acute pain should be adequately treated as it is not desirable and has adverse effects on child behaviour, healing and well-being (Dunwoody et al. 2008). Similar findings were reported by Twycross and Finley, where both children and parents/guardians demanded that their pain be treated adequately (Twycross and Finley 2013). The results also suggest that parents/guardians believe their children when they say they are in pain. This contradicts the assertions that children in sub-Saharan Africa are stoic and often do not report pain symptoms or ask for pain relief (Bosenberg 2007). The findings also show parents' helplessness when dealing with poorly managed child pain, which has also been reported (Lim et al. 2012; Valizadeh et al. 2016).

### 4.3 | Acceptance to Nonacceptance of the Reality of Care

The acceptance to nonacceptance of the reality of care theme addresses the quality of pain care and whether the expectations of parents/guardians are met, as well as access to the resources for pain treatment and general care provided. Overall, parents/guardians were happy with the care they received, despite reporting that their children were in pain. They believed healthcare providers were doing everything in their power to address their children's pain or their needs. Similar findings were reported by Twycross & Finley, where children reporting severe pain also acknowledged that the care was optimal (Twycross and Finley 2013). Resource availability and access to services were considered significant issues in paediatric acute pain care, but healthcare providers were considered experts, trustworthy and perceived as trying their level best despite limited resources (Idvall et al. 2008). While the limited resources and access to pain care were similar to findings from Clancy, the current study findings contradict the assertions that parents/guardians are often not willing to let their child's pain be treated due to sociocultural norms (Clancy 2014).

### 4.4 | Smiles to Unending Nightmares

The smiles or unending nightmares theme encompassed both positive results for adequately managed acute pain and negative results associated with poorly managed acute pain. Parents/guardians understood both the positive and negative outcomes of pain, with a departure from the perspective that



treatment of the underlying condition was the priority. Similar findings were reported by other studies where parents/guardians associated the negative and positive outcomes with acute pain (Lim et al. 2012; Twycross and Finley 2013). Interestingly, data from the present study yielded findings from parents/guardians who believed that a child should be patient with enduring pain since there is hope from the management of the underlying disease, despite understanding the ramifications of inadequately managed pain. The results of the current study were also a departure from the prevailing narrative in the literature that, due to low levels of literacy, parents/guardians in LMIC have a minimal understanding of the consequences of pain, thereby tolerating paediatric pain because of cultural influences (Bosenberg 2007; Clancy 2014; Valizadeh et al. 2016).

#### 4.5 | Perceptions of Child Pain

Parents/guardians showed an understanding of paediatric pain assessment and treatment approaches. Parents/guardians understood the pain symptoms and pain assessment strategies that can be used to identify paediatric acute pain. In addition, parents/guardians demonstrated a wealth of experience with pain management strategies, often citing multimodal approaches and an ability to be in control of their child's pain management. The results of the current study are similar to those reported in other studies that explored parent and child understanding of pain management strategies (Lim et al. 2012; Sng et al. 2013; Twycross and Finley 2013). However, the current findings are not consistent with the reports of low knowledge levels of pain assessment and management strategies expected in this population (Clancy 2014; Madadi et al. 2012; Matula et al. 2022a).

#### 4.6 | Guarded Empathy

The guarded empathy theme indicated that parents/guardians were largely sympathetic to their child's pain experience, particularly those children whose health status was in a critical state; parents/guardians wanted to trade places with their children. Also, children were not considered to be able to cope with pain, and parents/guardians demanded immediate relief. Lim et al. (2012) reported similar findings in their study, where parents/guardians wanted to trade places with their children. In contrast, Jongudomkarn and colleagues reported that parents/guardians sometimes believed that pain brought life experience, and children had to go through it in order to learn (Jongudomkarn et al. 2012).

### 5 | Limitation of the Study

There are limitations to this study that include the small sample size per hospital unit. While these findings may be transferable to a similar population on overall experiences and perceptions of paediatric acute pain, they should not be interpreted at the hospital unit level due to the possibility of a lack of representativeness of the sample. Furthermore, the results may have been influenced by the patient's views on other aspects of childcare during hospitalisation and not necessarily

or solely on pain care. Therefore, caution is needed when interpreting the results, particularly regarding transferability to other countries with different healthcare delivery systems than those found in Botswana.

The interviews were conducted and mainly coded by a local experienced paediatric nurse, who is also a parent; therefore, likely to bring their own bias into the study. To ensure that the researcher's views were not influencing the interviews, the researcher followed the interview guide at the beginning of the interview, but mainly followed the flow of the conversation to ensure that the views/thoughts of the parents/guardians were not disturbed. Furthermore, the interviewer clarified unclear statements and made field notes, which were used to help in coding the data. The interviewer employed data audits and triangulation in data analysis to ensure that the themes reflected the data and not the researcher's bias.

### 6 | Conclusion

The findings show that parents/guardians have a range of experiences with child pain management in referral hospitals in Botswana. Also, largely parents/guardians were extremely knowledgeable and expected pain to be adequately treated while taking into account the limitations the healthcare provider had in care delivery. Parents/guardians trusted healthcare providers to do the right thing for the children and their families in relation to pain and pain management while poor or negative encounters were usually generalised to all other services provided. Therefore, healthcare providers should engage parents/guardians in managing children's pain, including on the application of nonpharmacological measures and pain identification and assessment. Child pain management during admission should take priority where resources allow to ensure the children and parents do not suffer unnecessarily by introducing standards on children's pain management and availing resources necessary to manage pain.

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#### Author Contributions

All listed authors meet the authorship criteria and are in agreement with the content of the manuscript.

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#### Conflicts of Interest

The authors declare no conflicts of interest.

#### Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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### Supporting Information

Additional supporting information can be found online in the Supporting Information section.