British Journal of Medicine & Medical Research
13(12): 1-15, 2016, Article no.BJMMR.23614
ISSN: 2231-0614, NLM ID: 101570965

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Experiences of Parents of Children with Burn Injuries in a Tanzanian Referral Hospital: A Qualitative Consideration

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Authors' contributions

This work was carried out in collaboration between all authors. Authors ESK and SB designed the study, wrote and conducted the protocol as part of an academic assignment. Authors ESK, MAV and SB did initial analysis and validation of the findings plus contributed to an early draft of the article. Author PMP verified the findings and managed the editing of the article for publication in collaboration with author MAV. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/BJMMR/2016/23614
Editor(s):
(1) Medhat Emil Habib, Department of Plastic and Reconstructive Surgery, Zayed Military Hospital, Abu Dhabi, UAE.
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Reviewers:
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(3) Radha Yeshwant Aras, Yenepoya University, India.
Complete Peer review History: http://sciencedomain.org/review-history/13381

Original Research Article

Received 10th December 2015
Accepted 6th February 2016
Published 22nd February 2016

ABSTRACT

Aims: Burns injuries are the most common causes of physical and psychological trauma in both children and parents globally. It is characterized by prolonged hospitalization, as well as reduced productivity of parents due to family conflicts and economic implications. This study aimed to reveal the experiences of parents of children with burn injuries in a developing context to inform future care directions and improvements to care.
Study Design: A qualitative exploratory study design was used.
Place and Duration of Study: The study was conducted at Muhimbili National Hospital, Tanzania in early 2014 over a 4 month time period.

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Methodology: Four female participants were recruited via purposive sampling method. They participated in in-depth interviews as well as semi-structured questionnaires. All interviews were audio-recorded and transcribed verbatim later. Data analysis was done using a modified version of Colaizzi's (1978) seven step approach, whereby themes and sub-themes were identified.
Results: Based on a thematic analysis of the transcripts of interviews, it was revealed that parents of children with burn injuries experienced a mix of positive and negative feelings and challenges associated with the medical procedures, nursing care, hospital environment, coping mechanisms, and impacts of hospitalization. The participants spoke of the balance of parents (i.e., skills, coping, assets), people (i.e., others for support, comfort); professionals (skills, compassion, resources) and place (i.e., hospital network and resources).
Conclusion: Parents of children with burn injuries experience a range of challenges immediately after the burn injury and during the hospitalization period. Thus, psychological support from a range of sources (personal, external, professional, social) is necessary to address, identify, and minimize these challenges, thereby improving the health care experience and overall well-being of the child and their parents.

Keywords: Childhood burn injuries; developing countries; Tanzania; psychological impacts; parents.

1. INTRODUCTION

Although childhood burns leave an indelible mark on all involved, they are generally preventable and, with commitment from parents, caregivers, and health care providers, the number of cases globally could be significantly reduced. However, burn injuries among children remain one of the most common causes for childhood hospitalization with 56% of cases being in children under 5 years of age. Moreover, burn injuries are more common in low income countries than developed countries due to poor living condition, crowding, lack of safe place for play, and absence of child care options which combine to put children at risk [1]. In sub-Saharan Africa, childhood burns account for between 18 000 and 30 000 deaths annually [2]. To provide an international comparison, burn prevalence showed geographic variance from a rate of 4.4/100 000 burns in North America [3] to 8.0/100 000 in Asia up to 10.8/100 000 in Africa [4].

A burn injury is tissue damage that results from direct contact with or exposure to any thermal, chemical, or radiation source [5]. Perhaps more significantly, burns cause long-term physical, psychological, emotional, and economic issues. It is noted that patients with burn injuries receive primarily physical treatments; however, psychological support from health care providers is limited, despite evidence which suggests that many patients suffer psychologically after burn injuries [6]. Burn injuries in a child are accompanied by an emotional burden on the family, as well as feelings of guilt, anger, and worry for the future of their child and their family.

Defining a psychological disorder includes patterns of behaviors or symptoms related to thoughts, perceptions, and feelings which impair or impede an individual's ability to function in a normal manner [7-8]. Variables that predispose individuals to psychological maladjustment following burn injuries are personality and developed coping strategies [9]. Early detection is recommended to identify a person at risk for psychological problems and to initiate interventions. Further, those who are identified as high risk should get specialized care, which will range according to the intensity and type of psychological problems as every individual has different perceptions and coping mechanisms [9]. Common psychological disorders identified included anxiety in 13-47% of cases, depression in 23-61% of cases, and post-traumatic stress disorder in 30% of cases [10]. These startling numbers indicate the need for consideration of psychological support during nursing care to mitigate or prevent the likelihood of such conditions developing. Past research [11] recommended that during the management period of a child with burns, the family and immediate caretaker should be involved and supported psychologically to minimize stress associated with this event. Psychological disorders associated with burn injuries in the patients have been studied extensively [12-13]. A number of articles have indicated that parents and/or caregivers of children with burn injuries are at risk for stress [14-15], depression [16-19], anxiety [19-20], post-traumatic stress disorder [17,21-22], as well as a range of other physical and psychological impacts [23-27]. However, the experiences of the parents and/or caretakers in developing contexts has not been extensively

studied. This study aimed at exploring experiences of parents of children with burn injuries admitted at Muhimbili National Hospital in Dar es Salaam, Tanzania after the injury and during hospitalization period.

2. METHODOLOGY

2.1 Study Design

A qualitative exploratory descriptive study design was used. The researchers selected this method to obtain richness and depth of information in alignment with the intent of the study to explore behaviours, experiences, perspectives, and feelings [28].

2.2 Study Setting

The study was conducted at the Burn Unit in the Paediatric Block of Muhimbili National Hospital which is located in Ilala Municipality in Dar es Salaam, Tanzania. This setting was selected because of the number and intensity of burn injuries among children admitted from different parts of the country. This setting enabled the researchers to explore the experiences with parents from different geographic locations and cultural groups, which potentially provided more insights and broadened the range of parental experiences and perceptions.

2.3 Study Population and Sample

The targeted population in this study were parents of children who sustained burns between ages of one to five years, who were admitted during the study period to the Burn Unit.

Through a purposive sampling strategy, the research involved four (4) participants who were with their children admitted in the Burn Unit. Participants were selected through a non-probability approach in order to gain access to participants who were most likely to provide rich information with respect to the phenomenon under study [28]. Given the exploratory nature of the study, a small sample was anticipated as the study group is heterogeneous, limited selection criteria, and a special interest group [29]. It is recognized that a small sample is acceptable within qualitative research of this type due to the in-depth nature of the study. The sample size was determined based on data saturation of findings.

The study sample included biological parents of children with burn injuries aged one to five years, limited to scald burns only, parent(s) in attendance of a conscious child, and willing to participate in the study. In addition, the study excluded parent(s) of critically ill children and caretakers who were non-biological parents.

2.4 Data Collection

The researchers used in-depth, face to face interviews to collect data. Each interview took between forty five and sixty minutes. The researchers obtained permission from the Muhimbili National Hospital authority, reported to the ward 'in charge', and provided information about the study and participant criteria required. The recommended patients files were reviewed, selected, and parents were contacted individually about the potential to participate in this study. As the individual parents were interviewed one at a time, the researchers provided and read the consent form including providing any explanations or responding to questions. Following voluntary agreement, the time for an interview was arranged and the interview process commenced.

2.4.1 Data collection instrument

Prior to commencing the study, the research instrument was pilot tested with one participant to ensure the integrity and understandability of the questions. No changes were made as a result of this experience and the data collected were not included in this research analysis.

The research instrument included a semi-structured questionnaire as the interview guide. Seven open-ended questions were asked using Swahili, which is the national language and enabled full interaction with the participants. Face to face interviews were conducted in a private, quiet area in order to increase the comfort level of the participants. To improve quality control of the data, the questions were translated into Swahili by native speakers and written in simple language to avoid misinterpretation. Careful transcription from audio to text was maintained by dual entry. Data storage, both paper and electronic, complied with ethical requirements.

2.5 Data Analysis

The data analysis was an iterative and a continuous process. In accordance with the seven steps (although modified) suggested by Colaizzi [30], the first step is to take the verbatim

transcription, which were read independently by the two principal researchers, and become familiar with the thoughts and ideas. During the second step, the key statements related to experiences of the parents were extracted and compared by the two researchers. In Steps 3 and 4, the researchers developed initial categories of meaning and subsequently grouped them into themes which encompassed multiple categories. During Steps 5 and 6, the researchers worked collaboratively to confirm, define, and refine each theme and exemplars to provide the richness of the data related to the theme and remove any duplications. Researchers had not conduct member checking as per Step 7 simply because of the transient nature of the population (i.e., released from hospital) and lack of phone contacts.

2.6 Trustworthiness of Study

The researchers maintained the study's rigor in accordance with the 4 criterion of credibility, transferability, dependability and confirmability [31]. Credibility, which strives to base data and interpretation in the situation rather than researcher construction [32], was achieved through the purposive sampling of individuals with unique insights and contributions as parents of children with burn injuries. Transferability was maintained through the attention-whereby the researchers directly observed the participants during interviews to note any non-verbal communication and word to word was transcribed as recorded. Dependability, contributed to the consistency and stability of the study [33] and was achieved through the use of direct quotations from the participants and the use of a detailed audit trail. Lastly, confirmability was maintained through the efforts of having the two researchers variably independently and together reviewing, assessing, and reflecting on the data.

2.7 Ethical Consideration

Ethical approval was sought from Aga Khan University Ethics Review Sub-committee. Permission to conduct the study was obtained from Executive Director of Muhimbili National Hospital. The researchers used the following four ethical principles to ensure no harm to participants. Beneficence and non-maleficence stressed that the researchers ensure the proposed study findings was beneficial and caused no harm to participant. This was achieved through the use of a psychological support counsellor and no physical harm was expected in this study. Autonomy was reflected in the researchers' respect of the human rights of free choice to join or refuse to participate in study. Written informed consent was obtained from participants prior to participation in the study. In terms of justice, the researchers ensured that all findings and results presented were collected in the interview process and no false information was provided. Confidentiality was stressed by the researchers through the use of codes instead of identifiable participant information. Privacy was maintained, data collected were secured in locked cabinets, and no names were recorded during interview process. Data was transcribed and stored in folder with password protection and backup external hard disc file was stored with access by the researchers only.

As the researchers were aware that the nature of this study can be associated with emotional disturbance and upset, they secured the involvement of the hospital counsellor in advance. During the interview process, three participants expressed their feelings in a painful manner (including crying); when this happened, the interview stopped, moral support was given and therapeutic communications strategies were used to show empathy. All participants were able to tolerate and did not request consultation from the counsellor. The researchers also faced emotional disturbances due to interviewing participants with painful experiences. All such experiences were noted in the audit trail in order to facilitate bracketing.

3. RESULTS AND DISCUSSION

3.1 Sociodemographic Data

The findings obtained through conducting four in-depth interviews, each interview took 45 to 60 minutes and was conducted between January 9th and 29th, 2015. Interviews were taken from mothers of the children with burns, as they were the caregivers present in the hospital during the data collection period. The range of ages of the children were between one to five years old (i.e., 1, 3, 4, 5), Both genders of children were involved. Three of four participants were self-reported as Christians, low to middle class, and with primary school education only. The children's stays, at the time of the interviews, were between two weeks to one month. Most of the children experienced burns to between 20 and 30% of their bodies. All of them were on

treatments including antibiotics, dressings, and skin grafting.

Data was analyzed manually as described previously. The researchers identified six major themes including: 'What I feel/felt as a parent'; 'If nurses care…'; 'When hospital becomes home…'; 'Who makes/made a difference …'; 'What it means to us'; and 'If you want to make a difference'. Each of these themes is more fully explored below.

3.2 Theme One – What I Feel / Felt as a Parent …

Participants expressed the range of feelings which they encountered immediately after their children received a burn injury as well as those experienced during the hospitalization period. Immediate feelings expressed were pain, shock, confusion, fear, powerlessness, nervousness, and 'heart hurting'. One of the participant said: "When my baby got burn I was shocked and I felt powerless. I started shivering, crying, and shouting with high voice" (004, 18-19). Other participants presented other immediate feelings such as 'feeling crazy', incontinence, anxious, experiencing pains (i.e., throbbing and contraction), disappointment, loss of direction, feeling pressure, puzzled, upset, and full of dread. This was evidenced by the statement from one participant:

> I felt very disappointed I lost direction and I felt like pressure because the way my baby get burn it was very surprising. (005, 20-21)

Apart from these immediate feelings expressed by participants, they also expressed different feelings experienced during hospitalization, such as depression, fear of death, fear of disability, and fear of the unknown as evidenced in the following statement:

> Within three days of admission fear about death of my baby was greater than before, because the baby was swollen all (over) the face, and she could not open the eyes. (004, 36-38)

Some positive feelings were also expressed during the hospitalization period including being: hopeful, comfortable, glad, thankful, grateful, and peaceful. In the words of one of participants:

> As time goes I slowly started to get hope especially when the swelling decreased. During dressing of my baby, I feel comfortable I really feel glad and thank God for their care. (004, 55, 82-83)

3.3 Theme Two – If Nurses Care…

Nursing care, as discussed by the participants, was categorized into four sub-themes, which are 'nursing attitude', 'communication', 'treatments / procedures', and 'health education'. Each sub-theme is described herein.

3.3.1 Sub-theme one: Nursing attitudes

Participants told of their experiences with nurses' attitudes being both positive and negative. Positive attitudes were described as being courageous, trustworthy, considerate, lovely, committed, kind, sympathetic, caring, and supportive. One participant stated:

> I thank very much the nurses of Muhimbili National Hospital, because they really take care of my baby. They're courageous, sometimes they even come during the night and wake us up to feed our babies... I like that because they help us much, because sometimes we forget to feed our babies due to deep sleep. (004, 43-46)

Two participants described negative attitudes, especially from nurses' at other health facilities, which referred them to Muhimbili National Hospital, such as not caring, angry, negligent, and irritable. As one participant said:

> When they failed to find the vein the nurses did not return back to me, also did not tried again to insert it seems that was discouraged with extent of burn but they did not tell me. That thing made me to feel panic that my baby is going to die...When I reminded them about to open vein they told me hold your baby and bring him at our office, I told them I cannot manage to lift him please help me... They refused and told me you have to lift him like others do, no option we are busy we cannot get time to treat and lift the patient. (002, 24-28)

3.3.2 Sub-theme two: Communication

Participants indicated communication was an important component of care which brought both positive and negative experiences from first contact to referral level. Health workers with good communication skills were seen as more

educated and more informative for the parents. These observations were supported by comments such as:

> In general, the care at Muhimbili in this ward is very better because nurses always direct us what to do, what to give our baby when you follow their advice you succeed. (005,129-130)

Many participant appreciated such positive communications; however, some of the participants told of negative communications, especially with nurses from other facilities they passed through, such as poor communication, harsh language, and abusive language which was evidenced in the statement of one participant who indicated:

> …some of them are very irritated when you make a small mistake. They abuse you in front of other patients. This is not good because we are adults. (003, 55-58)

3.3.3 Sub-theme three: Treatments/ procedures

Participants expressed their mixed experiences (i.e., positive and negative) in terms of the dressing procedure as the main procedure to burned children, on medication administration, insertion of nasal gastric tube and catheterization and skin grafting.

3.3.3.1 Dressing procedure

The participants expressed both positive and negative experiences about this procedure. Two individuals experienced the dressing procedure in a positive way narrating that it is very helpful in the wound healing process and they felt comfortable whenever the procedure was done despite of the pain their children experienced during dressings. As one participant said

> During dressing of my baby I feel comfortable because I know when the dressing is done is the wound is healing faster. (004, 55-56)

The remaining two participants reported experiencing dressings in a negative way, describing this as the most painful and distressing procedure because it exposed the burned area, which brought out feelings of fear. This is reflected in the following statement:

> During dressing I really feel my heart is hurting and always shed tears because when the wound is open it very upsetting because my baby has a severe burn in a large area...When I see how my baby is screaming in pain and sometimes blood is coming out I feel tenderness in my heart. (005, 49-52)

Many women described their discomfort about how dressing were not scheduled in the unit which made them feel stranded while waiting for the dressing. One participant said:

> Another thing which I don't like in dressing is that there is no proper time when the baby is going to be dressed...they always start dressing late which affect us because you have to wait for a long time without knowing which time will be called to dress, I think they need to improve on that. (002, 42-44)

3.3.3.2 Medication administration

Medication is an essential part of the nursing care provided to children with burns during hospitalization. Parents spoke of the cost of the medication as a concern, suggesting that it was important for the government to make sure the medication is provided for free instead of telling the patients' families to buy. As one participant suggested that

> Nurses are very kind during dressing, but sometimes it is very amazing to see the national hospital does not have enough medication for dressing. We parents are supposed to buy medication for dressing... This is not good because there are some parents who fail to buy that medication and as the result dressing is not done. (002, 39-42)

Other participants felt that medication is an important tool for reducing pain especially during the dressing procedure in order to provide comfort. However, other participants experienced that medication also induced sleep for long hours, so they were afraid of the medications and relied on education from the nurses to remove these fears. One mother said:

> Sometimes they give her medication to reduce pain but I don't like it because it makes my baby to sleep all the day. The first time when that drug was given I was afraid because my baby did not wake up, I went to the office and told them my baby is getting

> serious cannot wake up, cannot eat please nurse came and see her, the nurse came ...and told me do not worry it is because of drug given during dressing it will be over. (004, 58-65)

3.3.3.3 Tube insertions

The participants acknowledged different experiences related to naso-gastric tube (NGT) and catheter insertion procedures. Individuals who had more favorable perspectives on these procedures indicated that they helped their child to improve in terms of getting required nutrition and to avoid contamination of burned areas. Although most participants were not familiar with these procedures, they gained insights throughout the hospitalization period and expressed appreciation of the need for these procedures to facilitate their child's improvement. Two participants said

> They inserted my baby's feeding tube which is very helpful to my baby because he was not able to feed himself. Also the catheter they put into my baby is helpful because the wound in his private part cannot became contaminated with urine. (002, 50-50)

Despite finding these procedure to be very helpful and important in caring for children with burns, one participant expressed her experience as negative in the context of her previous experiences.

> At the burn unit the baby had a NGT inserted for feeding and a catheter. I was scared and cried much during that procedure, because I never witnessed these procedure especially NGT, and I believed that when the patient has an NGT introduced it is last stage so I thought even my baby was in the last stage. (004, 32-35)

3.3.4 Sub-theme four: Health education

The participants spoke of health education offered to them during the hospitalization period. Many spoke about education on feeding practice and types of food to give their children. Participants said that, at first, it was difficult for them to feed their children by using feeding tubes, but the nurses helped them to overcome these difficulties. Learning was in areas of how and how much to feed via the NGT. One participant recalled that:

> Since my baby has the NGT inserted, nurses from the burn unit always came and directed me how to feed the baby because I did not know how to feed through NGT... They direct me how to avoid air in the stomach, because I heard that air is not good. I make sure I do not introduce air when I feed the baby. (004, 49-52)

Another health education topic was on coping mechanisms. The participants said that this information helped them to cope with the situation by encouraging parents to help each other and support each other. As one participant said:

> Nurses always visit us and encourage us to interact with each other and as parents share experiences and avoid loneliness which causes us to have too much bad feelings. (002, 55)

3.4 Theme Three: When Hospital becomes Home …

Participants often spoke of their experiences in the hospital environment based on the service provided at the first contact which included the transfer between one health facility to another and the second contact which is the referral hospital (i.e., Muhimbili National Hospital). At the first contact health facilities (which was likely a local dispensary or health centre), most participant described experiences of negligence and poor services, such as:

> On third day the condition of my baby was getting worse, she could not pass urine, the doctors and Nurses started to argue themselves whether the baby should be referred to Muhumbili Hospital, while others were saying not to refer. I was confused to see such a situation without telling me anything. I do not like X hospital`s services and I do not want to remember those days when we stayed at X hospital. (002, 32-34)

At the referral hospital, participants generally commented on three aspects, which were resources, food, and cleanliness. With regard to resources, the participants indicated there were difficulties in getting enough sleep due to the hot weather, especially during the night because many fans are not working. Also, they were not comfortable to share beds because it brought misunderstanding among them due to differences in behaviours, such as personal

hygiene. They suggested increasing beds and fixing the fans to keep a more conducive environment for healing. As stated by one participant:

> Generally, when you are admitted, you need to cope with everything even the environment. Here the fans are not working, and the burn wound in a hot environment does not heal fast. The babies are sweating much during the night... until all linens became wet. Another thing which is not good is that the beds are very few because we are sleeping two parents with our babies in one bed. That is not good. You cannot sleep properly even if your baby is doing well. (004, 112-117)

With regard to hospital food, especially for those coming from upcountry without having relatives to supply food regularly, there were issues expressed. The participants spoke of poor quality and quantity of food. They spoke of food being not tasty and not appetizing especially for a sick person. They went beyond this, and said the food they provided is like a punishment for those coming from upcountry. In the words of one participant:

> They have good care but when it comes to hospital food I think they need to improve because being far from home does not mean to be punished to give food like we are in prison... I feel grateful to my relatives when they bring us food and money, because several times I have to buy my baby food from canteen because he refuses to eat such food given from the hospital. (005, 75-79)

Cleanliness of the hospital environment was also addressed with most participants indicating that the wards were clean and comfortable during their period of hospitalization. Some participants indicated negativity on this matter citing bad smells, flies, and noises in the ward which hindered their sleeping. One mother said:

> Due to the burn wounds, the smell in the room is not good, and sometimes flies are there...so all these make someone to think and result in remembering home and bring in bad feelings. (003, 96-98)

3.5 Theme Four: Who Makes/Made a Difference…

The participants talked about this theme as three distinct sub-themes – individual strategies, group support, and family/community support.

3.5.1 Sub-theme one: Individual strategies

Participants indicated that when they felt overwhelmed with bad feelings they used to fall asleep, talking on the telephone, or moved with their child - from their bed to a neighbour's bed to exchange ideas.

> When I feel overwhelmed with many feeling I always move from my bed to others beds to talk and exchange ideas...Sometimes when I feel overwhelmed with feelings, I decide to fall sleep and it helps me to feel good. (003, 86-89)

3.5.2 Sub-theme two: Group support

The second mechanism used by the participants was to gain support from other parents. They shared experiences when they stayed on the ward for a long time and supported each other when they identified someone was struggling or not in a good mood. Participants described getting psychological support from health providers, who would give them advice on how to cope with stress, regular visits, and encouraging words. One participant stated.

> Psychological support which I get here is when nurses came in our room and talk with us – like to feed the baby - and sometime to tell us that when we follow their advice our baby will improve very fast... and other nurses when they came and see some mothers are feeling sad, or crying they tell her that, do not cry or feel sad. Believe your baby will get better and tell us to take care of your fellow parents especially those who are new in the ward, do not let them cry; interact with them and try to make them comfortable. (003, 122-127)

3.5.3 Sub-theme three: Family / community support

Participants reported getting psychological support from relatives during the period of hospitalization. Many stated they felt supported by relatives coming and visiting them on hospital regularly, contributing to hospital expenses, and regular supportive communications. This networking helped them to avoid bad feelings. One participant told us:

> I also have very good support from my family side because my husband's families are very far at Tanga. I get everything I want for child

> care. I thank God for our family, we have good solidarity... They always organize to come every day to provide food and other requirements. I have one and half months without getting tired to visit us, I like that because when I see them I feel happy and encouraged. Also I have support from my friends they visit me regularly I like them also. (002, 61-65)

Community member involvements and supports were also seen as the most important in providing psychological support especially immediately after the burn injury of the child by providing first aid care, and transfer to hospital for further management. A participant said

> When my baby got burned I was shocked and I feel powerless...My neighbour came and told me to stop crying, let us take her to the hospital. (004, 18-20)

Lastly, the participants expressed getting psychological support from religious sources, when relatives came and encouraged them to pray and from their own beliefs.

> My conscience tells me that we should not have too much thinking as the word of God says. When I remember that automatically I feel good. I always take my bible and read the word of God and it gives me power and courage. (005, 83-86)

3.6 Theme Five: What It Means to Us …

The participants told of how prolonged hospitalization affects different levels of the family. They spoke of the impacts on themselves 'being admitted with their child', the father, the child, and the family, in general, as explored in the following subthemes.

3.6.1 Sub-theme one: The mother's perspective

The participants described the immense impacts of prolonged hospitalization due to family separation and decreased income generation for the family. For the participants who were not working, they also experienced negative impact of hospitalization as they missed family care including their children left at home. As one of participant said:

> When I think about my husband he cannot manage to stay one month without women, he will be looking for other women to satisfy his body...this is not good for me because being at hospital can result to my husband to marry other women or to acquire diseases like HIV and other sexually disease. I always alert him to take care. (003,108-112)

3.6.2 Sub-theme two: The father's perspective

Participants felt that their husbands were affected by this event in different ways. Some suggested that their husbands were waking up earlier in the morning to prepare porridge and food for their child and wife at hospital. Those activities were causing them to become fatigued due to poor sleep. Also, participants indicated that prolonged hospitalization was impacting on their husbands in work performance as they were to come every day to hospital to visit. As well, participants expressed concerns that hospitalization of their children made many fathers work overtime to increase family income to manage hospital expenses. One woman told the researchers that:

> My husband was also affected much because once the child got burn, for one month he did not go to his job; he was in shock, confused, visiting us now and then...Also, he has to increase work so as to get extra money to buy medication and other requirements because he has two families now, which is those who are in hospital and the normal family which is our home. This increases expenses in terms of food, medications and transport". (002, 77-80)

3.6.3 Sub-theme three: The child's perspective

The child was most directly affected by prolonged hospitalization, according to the mothers, due to immobility, disability, and school absence.

> Prolonged hospitalization also affected my baby because he was supposed to start Standard One…When he got relief (from his pain) he asked me if he can get the examination and perform it while he is at hospital as that when he will get discharged he will continue with his fellow students... This also make me experience regret, because my baby is going to feel bad when he will sees that he fails to continue with school due to his burn". (005, 120—125)

3.6.4 Sub-theme four: The family's perspective

Participants also expressed the impact of hospitalization at the family level, whereby they said siblings missed parental care and became anxious, worried, and fearful about the outcomes of the injury. Also, other siblings needed to leave their own home and shift to another family member for care. As one participant said:

> Also being here affects very much my baby who I left at home. I do not know how my child is coping living with the absence of mother. I really feel discomfort when I think about him". (004, 92-94)

3.7 Theme Six: If You Want to Make a Difference …

During the interviews, some participants suggested improvements and recommendations about hospital services. Participants showed concern about having scheduled time for dressings, requested also to have modification on hospital food for those coming from upcountry, maintenance of beds and fans which are not working, and to increase the numbers of nurses on the Paediatric Burn Unit. As one participant suggested:

> Also, it is better to increase number of staff in order to start the dressings at morning time. (002, 44)

4. DISCUSSION

During this study, frontline caregivers of children with burns were only mothers and nurses. In the context of East Africa, women have a traditional role of being primary caregivers to their children and families [34], especially when they are admitted to the hospital. Other researchers [35-36] emphasized that these caregivers need to be recognized as important members of the care team, who are under studied with respect to their stress levels and mental health needs.

The children in this study were admitted with scald burns and were in the age range of one to five years, which aligns with the global trends for burns [3]. Although Delgado et al. [6] found that nearly three quarters of burn cases occurred in the close, overcrowded domestic settings, lack of parental knowledge related to burn prevention was identified as the primary contributing factor to burns [37-38]. All participants in this study belonged to low and middle socio-economic classes. Bartlett [1] found that burn injuries were more common in developing countries than developed countries due to lack of safe place for child to play and absence of child care options.

4.1 Reframing the Themes

All the participants had experienced prolonged hospitalization of a child with a burn injury. From their contributions, five major themes were identified.

As we reflected on the first theme of 'what I feel/felt as a parent…' it was clear that the emotions were intense and heartbreaking and similar to the other findings [9,39]. We heard that the feelings during hospitalization became increasingly confident and hopeful because of the care provided in the hospital. A previous study [40] reported that parents develop psychological disorders during hospitalization due to witnessing their child's during painful surgical and medical procedures.

The second theme – 'if nurses care…' encapsulated four sub-themes. In terms of nurses' attitudes, the study participants indicated a mix of positive and negative experiences, which was reflected in the literature as well. For example, Nyakanda [41] found that patients were highly satisfied with their burn care and often returned to the ward post-discharge to express thanks and appreciation. Bäckström [42] spoke of negative experiences including non-support, being treated in an insensitive manner, negativity of the staff, and inflexibility. With respect to communication, our study again suggests a continuum from positive to negative interactions. Within the literature, a previous study [13] reported that effective communication is required to minimize the traumas association with burn injuries; whereas another [43] spoke of neglect as well as verbal and physical abuse from the nurses. Treatments/procedures were seen by participants as necessary but distressing, at times, a finding affirmed in the literature [40] that parental stressors during hospitalization can be influenced by witnessing their child`s painful surgical and medical procedures.

The third theme, 'when hospital becomes home', reflected participants' perceptions regarding limited space, resources, and equipment maintenance. The findings resemble those in a previous study [44] regarding conditions at the Kilimanjaro Christian Medical Centre Hospital in

Moshi, Tanzania. In our study, the conditions and services related to the first contact health facilities were greatly criticized, which is similar to findings in a study [45] conducted at the Bugando Medical Centre where burn patients were presented too late to the hospital due the negligence of initial contact health workers and transportation costs. Participants also cited noise as a disturbance in the hospital environment which aligns with other literature [32] which speaks to excessive noises with alarms, telephones, staff interactions, and roommate noises.

'Who makes/made a difference...' is the fourth theme focusing on people (i.e, other parents, family, nurses, and community members), who supported the participants during the hospitalization journey. One of the key supports were the other parents of children in the unit which mirrors previous findings [10] which reported ancillary resources, such as support groups and peer counselling by burn survivors are important services. Health providers, especially burn unit nurses, were seen by the participants to be significant supports through their presence and advices. Nyakanda [41] found that good nursing care and commitment was important to achieving health improvements in the patients. The work of Wiechman and Patterson [10] validates our findings that family and community supports are imperative as a buffer against development of psychological problems.

The impacts of the hospitalization experiences have different meanings to the various stakeholders (i.e., child, mother, father, family), which is encompassed by the fifth theme of 'what it means to us…' The participants showed that the extent of challenges and uncertainties resulting from this experience. Mothers and fathers were seen to experience separation, body fatigue, and decreased economic status of the family. These findings were similar to other studies [46-47] which revealed prolonged hospitalization not only has economic implications but also affects functional status. Participants spoke of the anxiety and concerns for siblings and family, in general. Paediatric critical illness as a stressor for the entire family is also evident in the research [48].

Finally, the sixth theme 'if you want to make a difference…' spoke to the observations and recommendations of the participants for preferred futures in the burn unit experiences. These elements were very specific to the unit such as equipment repairs and accommodation arrangements. However, as in most recent literature, there is an expressed need to have more qualified nurses in these areas.

As we reviewed the various themes, it became apparent that there was an emerging relationship between themes. Specifically, themes 1 and 5 relate to parents; whereas theme 4 relates to people and supports. Themes 2 and 6 relate to professional practices and practitioners. Theme 3

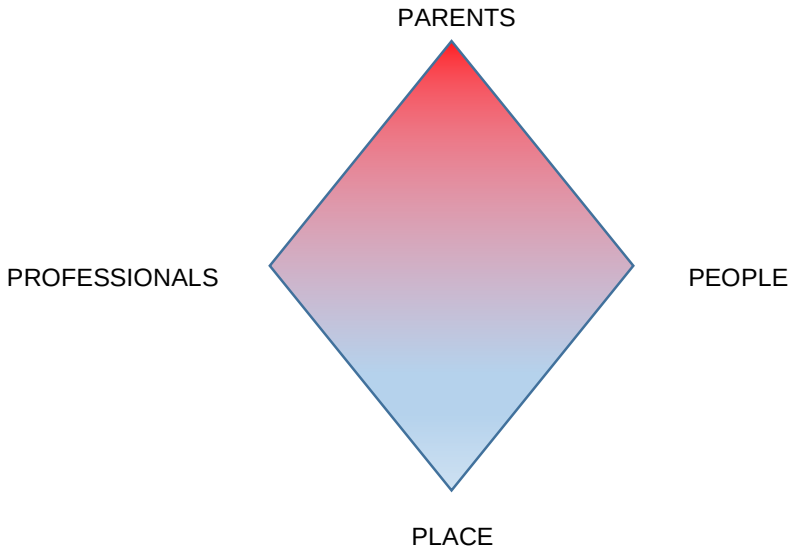

Fig. 1. The diamond of balance for parents of children with burns

is about place. As these themes emerged and merged, we found that visually the use of a diamond (see Fig. 1) symbolized the strength gained from having all these pieces come together for the benefit of the psychological wellness of the participants. Each component was critical to achieving holistic well-being and avoiding psychological stressors for the participants.

It would be interesting to further explore a number of the issues and challenges uncovered in this research. Specifically, there is a need for further studies of parental needs, as this is a small sample in a single site. There is also a need to assess the psychological impacts in the longer term as we were considering the short-term impacts only in this study. Also, we would recommend a validation of the proposed diamond of balance including determination of whether these are indeed the critical elements to achieving the desired balance and if they are symmetrical as depicted by our 'straw model'. If this diagram is to be useful it would allow nurses and allied health professionals to consider the strengths and or weaknesses of each component in order to determine potential interventions or strategies for support.

5. LIMITATIONS OF THE STUDY

Many of the participants were very emotional about their child's condition which may have impacted on the areas of emphasis and resultant themes. As this study involved a small sample in a single interview it is limited in terms of the depth of the information. Hence a replication study with an expanded sample group is indicated. The environment for the interviews was hot and poorly ventilated which may have limited participants' contributions. Furthermore, the seventh step of Colaizzi's [15] method was eliminated due to time limitations and movement of the participants.

5.1 Strengths of the Study

The knowledge generated in the present study may be of relevance in similar contexts, especially in low resourced or developing contexts. The strength of this study lies in the richness of information gathered which has strong implications for understanding the parents' experiences. Moreover, the study explored the experiences of the parents rather than the child with burns which is novel and extends the knowledge.

5.1.1 Challenges

The major challenge was the emotional and distraught presentation by the participants as they conveyed and shared their feelings. Many participants were crying and expressing their experience in a painful manner. Another challenge was that the participants were still in the process of 'living the experience' and this interview process may have brought to the forefront undesirable and distressing memories and thoughts. There are numerous challenges with burn injuries that lie outside the individual or even the family. Many burns are related to social and community conditions and risks which must be managed through stronger prevention and awareness efforts.

6. CONCLUSION

This study was unique in the Tanzanian context as it uncovered parents' experiences related to their children's burn injuries. The study explored the psychological impacts and protective mechanisms of parents of children with burn injuries. Most of the comments by participants expressed appreciation for the health care providers on the Paediatric Burn Unit for the care and support which they rendered. The study findings affirmed that this is an emerging area requiring further consideration and research. It emphasized the need for the inter-play of the parents, (other) people, professionals and place (i.e., the hospital unit) to support the psychological wellbeing of these parents through a serious health challenge for their children. It reiterated the imperative for health care providers to consider psychological support as a daily need to parents of these children.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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Peer-review history:
The peer review history for this paper can be accessed here:
http://sciencedomain.org/review-history/13381