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Study on acute burn injury survivors and the associated issues

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ABSTRACT

Objective: To explore the phenomenon of surviving burn injury and its associated issues and concerns.

Methods: A cross sectional survey approach was utilized to obtain data from one hundred burn survivors who were purposely selected. Descriptive statistics and content analysis were used to analyze data.

Results: Findings from the study indicate that burns from flames stood out as a major cause of burns. Physical discomfort/pain, anxiety, needing assistance in meeting self-care needs, financial and social limitations were identified as the major impact of the injury. Furthermore, participants perceived the existence of societal stigma. In addition, hope in God or a spiritual being as well as family support were the two key resources participants relied on to cope effectively.

Conclusions: Surviving burn injury is associated with varied physical, social and psychological factors and survivors may need professional assistance to fully adjust after discharge.

1. Introduction

Occurrence of burn injury can be very devastating to its victims as well as relatives, community and the nation as a whole. Victims of burns usually suffer great losses such as disturbed body image due to disfigurement, loss of personal properties and loved ones, and ability to work as well. Burns management has generally experienced significant strides in various aspects notably fluid resuscitation, early grafting among others[1]. Today, burn victims with greater total body surface area involved in the injury can survive, and the survival rate may even be higher in young adults[2]. However, this success has led to protracted stay in the hospital as well as repeated reconstructive surgeries and physiotherapy[1]. It has been indicated that only few studies have been conducted beyond the time of hospitalization[3] and in the Ghanaian community, the period following discharge remains unclear.

This mandates the need to explore the impact of the injury which led to hospitalization and other treatment modalities as it has been demonstrated that a patient's subjective perceptions and expectations can influence the state of well-being after discharge[1]. Thus, there is an urgent need to assess the impact of the burn injury and treatment modalities from burn survivors' perspective so as to determine ways of providing professional assistance.

2. Materials and methods

2.1. Study setting

The Komfo Anokye Teaching Hospital (KATH) in Kumasi is the second largest hospital in Ghana and the only tertiary health institution in the middle belt of the country. It is the main referral hospital for the Ashanti, Brong Ahafo, the northern, upper west and upper east regions of the country. The hospital was built in

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The study protocol was performed according to the Helsinki declaration and approved by School of Medical Sciences/KATH Committee on Human Research, Publications and Ethics, Kwame Nkrumah University of Science and Technology, Kumasi. Informed consent was obtained from participants.

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1954 and affiliated to the School of Medical Sciences, the Kwame Nkrumah University of Science and Technology. The hospital currently has 1000 beds, with an annual hospital attendance of about 679050 patients made up of both out- and in-patients[4].

2.2. Ethical clearance

The study protocol was performed according to the Helsinki declaration and approved by School of Medical Sciences/KATH Committee on Human Research, Publications and Ethics, Kwame Nkrumah University of Science and Technology, Kumasi. The study rationale was explained to participants in order to make an informed decision. Participants who agreed to partake in the study either signed or thumb printed the consent form before proceeding with the study. Participants were also informed that they could withdraw from the study at any point in time without incurring any loss. Parental/guardian consent as well as individual consent was sought for participants aged below 18 years before proceeding with the study.

2.3. Data collection

Purposive sampling approach was utilized to obtain 100 burn survivors receiving outpatient care at KATH within Kumasi metropolis from 1st October, 2013 to 30th September, 2015 (2 years). These patients were previously on admission but have been discharged home based on satisfactory clinical progress, and come for periodic reviews as scheduled. A structured questionnaire comprising open- and closed-ended questions was used to obtain needed data. No missing answers were noted. Prior to the actual study, a pilot project was carried out with 10 patients yet to be discharged from Ward D2C (burns ward) and burns intensive care unit. Appropriate corrections were made to the questionnaire thereafter.

2.4. Data analysis

Analysis of answers for open-ended questions was performed using content analysis and quantitative data entered into Microsoft Excel version 2010 to generate descriptive statistics. Closed ended questions were also analyzed using Microsoft Excel version 2010.

3. Results

The demography of participants and injury/hospitalization details are showed in Tables 1 and 2.

Table 1
Demography of participants.

Characteristics		Frequency	%
Age (years)	15–30	64	64
	31–45	24	24
	46–55	12	12
	Total	100	100
Marital status	Married	76	76
	Single	24	24
	Total	100	100
Religion	Christian	94	94
	Muslim	6	6
	Total	100	100
Educational level	None	20	20
	Primary	24	24
	Secondary	30	30
	Tertiary	26	26
	Total	100	100
Occupation	Unemployed	10	10
	Government employee	30	30
	Artisan	40	40
	Farmer	20	20
	Total	100	100

Table 2
Injury/hospitalization details.

Detail		Frequency	%
Cause of burn	Gas explosion	84	84.00
	Hot water	9	12.00
	Hot oil	4	4.00
	Acid burns	2	2.00
	Electrical burns	1	1.00
	Total	100	100.00
Burn classification	Second degree	38	38.00
	Third degree	18	18.00
	Mixed thickness	44	44.00
	Total	100	100.00
Total burned surface area	10%–25%	68	68.00
	26%–45%	27	27.00
	46%–55%	5	5.00
	Total	100	100.00
Length of stay	5 days–1 month	92	92.00
	2 months–4 months	8	8.00
	Total	100	100.00
Surgical interventions	Debridement	38	63.33
	Skin grafting	20	33.33
	Escharotomy	2	3.33
	Total	60	100.00

3.1. Social functioning

From the data obtained 79 (79%) indicated that they felt socially limited and the key finding was the presence of scars and keloids that are visible even in clothes as well as perceived societal discrimination. In addition, 90 (90%) indicated that the burn injury has affected their professional lives as they experienced decreased energy levels and physical discomfort which interferes with day to day activities; 98 (98%) participants indicated that the burn injury has affected their family lives and the key finding was that the family's financial base has been depleted due to their care; 60 (60%) stated that the burn injury has had an impact on their sexual performance such as decreased libido and energy levels.

3.2. Level of dependence

In the aspect of mobility, 52 (52%) indicated having slight problems moving around and needed some forms of assistance. In addition, 37 (37%) indicated having slight problems in meeting self-care needs whilst 30 (30%) respondents specified having moderate problems in meeting this requirement; 56 (56%) indicated having slight problems with participation in usual activities (leisure, study) and 20 (20%) respondents specified having moderate problems with these activities.

3.3. Physical health

All respondents indicated having some level of pain/discomfort and that it affected their sleep and rest patterns; 64