Int J Burn Trauma 2022;12(6):241-250
www.IJBT.org /ISSN:2160-2026/IJBT0142448

Original Article

Upper extremity functions, social relationships, and factors associated with poor quality of life in patients with burns at kiruddu hospital

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Received February 19, 2022; Accepted December 7, 2022; Epub December 15, 2022; Published December 30, 2022

Abstract: Object: Burn is the major cause of disability in developing countries, and most burn patients have burns involving the upper limbs. Upper limb burns can result in scarring, contractures, and weakness, leading to limitation of wide range of movements and social well-being, hence reducing the quality of life. General objective: To determine the quality of life among patients with burns of the upper limbs at KNRH. Methods: This cross-sectional study recruited 108 participants of 5 years and above during their first six months post-discharge from Kiruddu National Referral Hospital with burns to upper limbs. Recruitment was consecutive from the burns unit clinic following ethical approval from the School of Medicine Research and Ethics Committee (SOMREC). Participants were given a burn-related QOL questionnaire. Data were then entered into Epidata 4.2 and imported into STATA 15.1 for analysis. Factors associated with poor quality of life were determined by modified Poisson regression to generate prevalence ratios with 95% confidence intervals. Results: A total of 108 participants were recruited for the study; 97 (89.8%) were adults and responded to the adult QOL questionnaire, while the rest were pediatrics. The mean age of the adults was 28 years (SD=8.6), while the median age of the pediatrics was eight years (IQR=6-10), and 61.1% were male. The upper extremity function (physical) quality of life was good, while the social relationship quality of life was poor. The factors associated with poor quality of life were degree (deep) of burns, multiple surgeries, age above 55 years, and being divorced. Conclusions: There is generally poor upper extremity function or physical QOL among adults and children, while there is generally good social relationship QOL among adults and children.

Keywords: Upper extremity functions, burns, quality of life, factors associated

Introduction and background

A Burn is an insult or wound to the skin and underlining tissue due to heat, exposure to radiation, electricity, friction, or chemical agents. The upper limbs have a significant role in body movements; It carries out many functions, such as prehension, manipulation, and a wide range of movements that play an essential role in successful integration into society and professional life [1]. Burns are one of the most common causes of disability in LMICs [2]. The United States was 1130 per 100,000 per year, with 38.4% of these injuries involving the fingers. Burn injuries accounted for 1.6% of all upper limb injuries [3]. A study on the epidemiology of injuries in Uganda noted that burn injuries account for 16.7% of total injuries at Mulago National Referral Hospital [4].

A study in Kampala found that 5% of all severe injuries were attributed to burns in children under five years old. In contrast, severe burns were the second cause of injuries amongst adolescents and young adults. The same study reported that 39% of all injuries involved the extremities and pelvic bone [5]. Similarly, a study done in rural and urban Uganda said that 6% of injuries in a rural setting were due to fatal burn injuries, while 9% of all severe injuries were due to fatal burns [6].

In the past, the death rate of burn victims was high. However, the remarkable improvement in

the medical field occasioned an increased number of burn survivors. Burn patients can develop pain; dermatological problems from scars; therefore, burn injuries negatively impact burn victims' lives and their families. These necessities necessitate physical, psychological, and social rehabilitation, so it's essential to recognize their demands and address them properly [7].

During the first year post-injury, most burn patients with body changes and scars reported being absent from the workplace and isolated themselves from people close to them. Such body changes and scars contribute to a low social quality of life [8].

According to Nanayakkarawasam, upper limb burns affect an active range of movements, significantly limiting daily activities and making the patients dependent on others. He also reported that patients with upper limb burns could not reach an object at a higher place and had difficulty carrying heavy objects, reducing their physical quality of life [9].

Identifying how burn injuries may affect the movement of the upper limbs is crucial to improving long-term rehabilitation for patients with burns to the upper limbs.

The information generated from the study will help in the prediction of someone's future ability to conduct daily activities and identify and address limitations and impairment; in addition, the study will focus on the importance of long-term follow-up and physiotherapy.

Methods

Study design

This was a cross-sectional study.

Study setting

This study was carried out in the burn and plastic unit of Kiruddu National Referral Hospital (KNRH). Kampala, Uganda.

Burns and Plastic unit comprises two modalities; Burns and Plastic surgery, with a total In-patient bed capacity of 60.

Study population

All patients of 5 years and above with burns to upper limbs during their first six months post-discharge were previouslymanaged, discharged, and attended the outpatient clinic.

Eligibility criteria

Inclusion criteria: 1. 5 years and above patients with upperlimb burns. We included children in our study because most burn victims in Uganda were children. 2. Must have been discharged at KNRH and attended burns outpatient clinic at KNRH. 3. Must have been in the first six months post-discharge, given consent and assent for those above eight years.

Exclusion criteria: Any mental disabilitymay limit the patient's understanding of instruction.

Sampling procedure

All patients with upper limb burns who met inclusion criteria were consecutively recruited until the sample size was attained and files were retrieved to obtain further information.

Study variables

Independent variables were Age, Gender, Duration after burns, Employment status, marital status, Education level, Depth and Percentage of burn, and Time and Number of hospital stays. These independent variables were obtained from the file.

Dependent variable upper extremity function and social relations aspect quality of life of upper limb burns patients by using.

Burn outcome questionnaire

Is an age-specific tool designed for assessing the quality of life in post-burn victims according to their age? American Burn Association and Shriners Hospitals for Children burn Hospital developed the Burn Outcomes Questionnaire for children to improve the quality of burn victims. The burn outcome questionnaire measures physical and social function in different aspects.

The following are BOQ 5-18 years' subdomains; upper extremity function, physical function and sport, transfers and mobility, pain, itch, appearance, compliance, satisfaction with the current state, emotional health, family disruption, parental concern, and school re-entry. Each do-

main has score ranges of easy (1), little hard (2), very hard (3), and can't do (4); the lower the score, the better quality of life.

The Burn Specific Health Scale-Brief (BSHS-B)

BSHS-B is a primarily used tool for assessing the quality of life post-burn injury. This tool aimed to determine the burden of burns in burn victims [10]. The Burn Specific Health Scale Brief (BSHS-B) is the only multidimensional instrument for assessing various QOL domains in burn patients. It has previously been translated and validated in different languages over the globe [11].

The BSHS-B consists following nine domains, heat sensitivity (HS), affect (A), hand function (HF), treatment regimens (TR), work (W), sexuality (S), interpersonal relationships (IR), simple abilities (SA), and body image. BSHSB has a total of forty items; each item has a score ranging from zero to four, where 0 (extremely), 1 (quite a bit), 2 (moderately), 3 (a little bit), and 4 (not at all) the higher mean score for each domain the better quality of life. In my study, I have focused on the questions that address upper extremity function and interpersonal relationships.

Data management

Data collection tool: This study used standard burn-specific tools, internationally accepted BSHS-B for patients above 18 years old, and a burn outcome questionnaire for patients 5 to 18 years old.

Data collection procedure: The participants were recruited from the outpatient clinic, and consent and assent were obtained. Patients' files were retrieved to obtain full information regarding the patient; then, a questionnaire was administered.

Data analysis: The collected data were checked for completeness and consistency before the participant left the interview room. Data were coded and entered into electronic Epi Data Version 4.2.

The cleaned data was then exported to Stata Version 15.1 for analysis.

Normally distributed continuous variables were summarized by mean and standard deviation, while skewed continuous variables were by median and interquartile range.

For categorical variables, frequency and graphs were used. Logistic regression was run to determine the factors independently associated with the poor quality of life, and a *P*-value of less than 0.05 was considered statistically significant.

Ethical approval: Permission to carry out the study was sought from the Department of Surgery at Makerere University and ethical approval from the School of Medicine Research and Ethics Committee (SOMREC) of Makerere University.

Results

Description of study participants

A total of 108 participants were recruited for the study; 97 (89.8%) were adults and responded to the adult QOL questionnaire, while the rest were pediatrics. The mean age of the adults was 28 years (SD=8.6), while the median age of the pediatrics was eight years (IQR=6-10). The mean burn surface area for adults was 27.2% (SD=12.8), while the median burn surface area for pediatrics was 22% (IQR=16-28), as shown in (**Table 1**).

Most participants presented with second-degree burns and moderate severity according to total burn surface area (11%-30%), as shown in (**Figure 1**).

Adult Burn Specific Health Scale Brief (BSHS-B)

Most participants responded with extremely or quite a bit for the two questions assessing the upper extremity function and social aspect quality of life among adults, as shown in (**Table 2**).

Reliability test for the questionnaire:

Average interitem covariance: 0.96

Number of items on the scale: 20

Scale reliability coefficient: 0.97

Children Burn Outcomes Questionnaire (BOQ)

Most children responded a little hard and couldn't do questions assessing upper extrem-

Table 1. Sociodemographic characteristics of the 108 study participants

Characteristic	Frequency (n)	Proportion (%)
Age		
5-18	11	10.2
18-35	80	74.1
36-55	16	14.8
>55	1	0.93
Sex		
Female	42	38.9
Male	66	61.1
Education		
None	7	6.5
Primary	40	37.0
Secondary	42	38.9
Tertiary	19	17.6
Employment		
Employed	21	19.4
No formal employment	26	24.1
Self-employed	38	35.2
Student	23	21.3
Marital status		
Divorced	3	2.8
Married	43	39.8
Single/Unmarried	53	49.1
Widowed	9	8.3

ity function, as shown in (**Table 3**). While they most of them responded as same to the question assessing social aspects and quality of life, as shown in (**Table 4**).

Upper extremity function and social aspect quality of life

The mean upper extremity function (physical) quality of life among adults was 54.7 (SD= 10.9), while the mean social aspect quality of life among adults was 61.9 (SD=10.3). Out of the 97 adult participants, 56 had upper extremity function (physical) quality of life above the mean, representing 57.7% (95% CI 47.3-67.7). No statistical difference exists between the upper extremity function QOL among men and women, 53.3 vs. 57.0 *P*-value =0.1072. While 51 adult participants had a social aspect QOL below the mean, giving a proportion of 52.6% (95% CI 42.2-62.8). There is no statistical difference between the social aspect quality of life among men and women, 62.9 vs. 61.3 *P*-value =0.4488.

The mean upper extremity function (physical) quality of life among the children was 63.9 (SD=12.4), while the mean social aspect quality of life among children was 55.6 (SD=18.0). Among the children, 63.4% (95% CI 30.8-89.1) had upper extremity function below the mean, and 54.6% (95% CI 23.4-83.3) had social aspect QOL below the mean.

Bivariate analysis for the factors associated with diminished upper extremity function and social aspect quality of life

In bivariate analysis, age, marital status, burn depth, prolonged hospital stay, and multiple surgeries were significantly associated with upper extremity function. The same factors were significantly associated with social aspects of quality of life, as shown in (**Table 5**).

Multivariate analysis for the factors associated with poor upper extremity function and social aspect quality of life

In multivariate analysis, burn depth and number of surgeries were significantly associated with upper extremity function. In contrast, age above 55 years, marital status, burn depth, and the number of surgeries was significantly associated with the social aspect of quality of life (**Table 6**).

Discussion

In this study, we determined the quality of life among patients with burns to the upper limbs at Kiruddu National Referral Hospital.

Description of study participants

In our study, the mean age of the adults was 28 years (SD=8.6), while the median age of the pediatrics was eight years (IQR=6-10), and the male:female ratio was 1.6:1. Most participants (74.1%) were between 18-35 years old. These results are consistent with findings from Iran [2, 12] and in Australia, where most participants were 18-30 years old; however, this study had more females than males [13].

Upper extremity function and social aspect quality of life

In our study, the mean upper extremity function (physical) quality of life among adults was 54.7

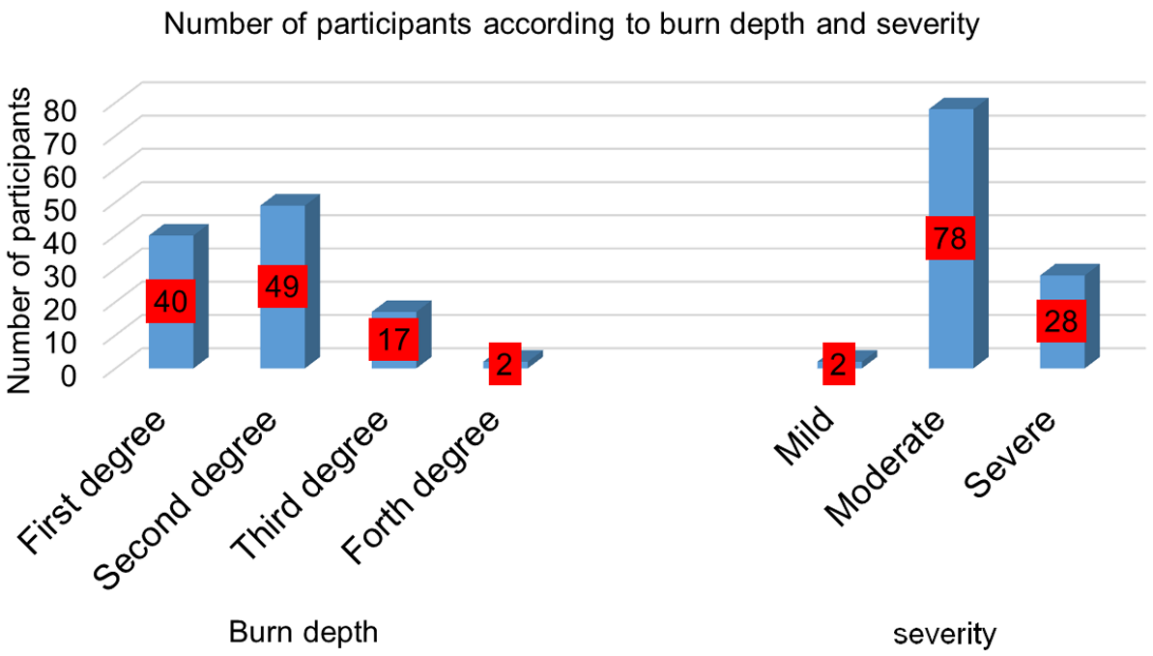

Figure 1. Bar graph showing the number of participants according to to burn depth and severity.

Table 2. Adult Burn Specific Health Scale Brief (BSHS-B) Items score for the 97 participants

BSHS-B scale items	Response N (%)				
How much difficulty do you have?					
	Extremely	Quite a bit	Moderately	A little bit	Not at all
Bathing independently	42 (43.3)	23 (23.7)	19 (19.6)	12 (12.4)	1 (1.0)
Dressing by yourself	35 (36.1)	28 (28.9)	19 (19.6)	14 (14.4)	1 (1.0)
Getting in and out of a car	21 (21.7)	19 (19.6)	30 (30.9)	18 (18.6)	9 (9.3)
Signing your name	41 (42.3)	18 (18.6)	18 (18.6)	16 (16.5)	4 (4.1)
Eating with utensils	28 (28.9)	28 (28.9)	17 (17.5)	20 (20.6)	4 (4.1)
Tying shoelaces/bows etc.	35 (36.1)	25 (25.8)	11 (11.3)	22 (22.7)	4 (4.1)
Picking up coins from a flat surface	23 (23.7)	31 (32.0)	15 (15.5)	19 (19.6)	9 (9.3)
Unlocking a door	12 (12.4)	20 (20.6)	26 (26.8)	21 (21.7)	18 (18.6)
Performing your duties	28 (28.9)	26 (26.8)	15 (15.5)	15 (15.5)	13 (13.4)
To what extent does each of the following statements describe you?					
	Extremely	Quite a bit	Moderately	A little bit	Not at all
feelings of loneliness	17 (17.5)	28 (28.9)	15 (15.5)	27 (27.8)	10 (10.3)
often feel sad or blue	17 (17.5)	32 (33.0)	16 (16.5)	24 (24.7)	8 (8.2)
emotional problem	10 (10.3)	24 (24.7)	18 (18.6)	33 (34.0)	12 (12.4)
Loss of interest in things	6 (6.2)	26 (26.8)	28 (28.9)	25 (25.8)	12 (12.4)
I don't enjoy visiting people	7 (7.2)	25 (25.8)	32 (33.0)	19 (19.6)	14 (14.4)
no one to talk to about my problems	6 (6.2)	23 (23.7)	16 (16.5)	35 (36.1)	17 (17.5)
feelings of being caught or trapped	7 (7.2)	24 (24.7)	22 (22.7)	29 (29.9)	15 (15.5)
My problems have put me further away from my family	4 (4.1)	26 (26.8)	19 (19.6)	24 (24.7)	24 (24.7)
rather be alone than with my family	5 (5.1)	25 (25.8)	19 (19.6)	24 (24.7)	24 (24.7)
Don't like the way my family acts around me	2 (2.1)	12 (12.4)	28 (28.9)	30 (30.9)	25 (25.8)

Table 3. The Children Burn Outcomes Questionnaire (BOQ) upper extremity function items scores for the 11 participants

BOQ scale items				
Upper extremity function: During the last week, has it been easy or hard for this child to				
	Response N (%)			
	Easy	A little had	Very hard	Can't do
Pour a half gallon of milk?	1 (9.1)	5 (45.5)	2 (18.2)	3 (27.3)
Use fork or spoon?	0	6 (54.5)	2 (18.2)	3 (27.3)
Comb his/her hair?	2 (18.2)	4 (36.4)	2 (18.2)	3 (27.3)
Button buttons?	1 (9.1)	5 (45.5)	1 (9.1)	4 (36.3)
Pull on a shirt or sweater over his/her head?	1 (9.1)	5 (45.5)	1 (9.1)	4 (36.3)
Turn his/her neck to look back over his/her shoulder?	5 (45.5)	2 (18.2)	2 (18.2)	2 (18.2)
Get on and off toilet or chair?	5 (45.5)	1 (9.1)	4 (36.4)	1 (9.1)
Get in and out of bed?	5 (45.5)	1 (9.1)	5 (45.5)	0
Turn door knobs?	3 (27.3)	3 (27.3)	5 (45.5)	0
Bend over from a standing position and pick up something off the floor?	5 (45.5)	3 (27.3)	3 (27.3)	0

Table 4. The Children Burn Outcomes Questionnaire (BOQ) social relations items scores for the 11 participants

BOQ scale items: School reentry/in assessing social relations					
Following this child's return to school after the burn injury, how would you rate					
	Response				
	Much better now	Somewhat better now	Same	Somewhat worse now	Much worse now
Acceptance by classmates?	1 (9.1)	1 (9.1)	4 (36.4)	3 (27.3)	2 (18.2)
Acceptance by teachers?	1 (9.1)	2 (18.2)	6 (54.5)	2 (18.2)	0
Ability to perform school work?	0	0	3 (27.3)	3 (27.3)	5 (45.4)

(SD=10.9) and 63.9 (SD=12.4) for children. There was no statistical difference in the mean QOL between males and females. Most participants fell within the mean QOL, half the highest score of 100. Similar results have been reported by [13]. Australia, with grouped physical QOL, mean of 71.3. Although this value is slightly higher than what we found in our study, this could result from the difference in healthcare services between the two populations and the accessibility of healthcare. However, lower physical QOL means have been reported by [14] and [15] in Sweden.

In our study, the mean social aspect quality of life among adults was 61.9 (SD=10.3) and 55.6 (SD=18.0) among children. There was no statistical difference in the mean QOL between men and women. This result means most of the participants were above the median value of 50, representing a better social functioning generally for all the participants and equality between men and women.

Factors associated with poor upper extremity function (physical) quality of life

In this study, burn depth was associated with the poor physical quality of life. Participants who presented with second-degree burns were 3.89 times more likely to have poor physical QOL as compared to those who presented with first-degree burns. Similarly, participants who presented with third-degree burns were 3.96 times more likely to have a poor physical quality of life. In contrast, those who presented with fourth-degree burns were 3.67 times more likely to have poor physical QOL than first-degree burns. This means upper extremity function diminished with increasing burn depth; having second, third- or fourth-degree burns resulted in almost four times more likely to have poor upper extremity function. This can be explained by the scarring, adhesions, and physical deformities that come along with healing from third and fourth-degree burns that might limit the functionality of the limbs. This result is consis-

Table 5. Bivariate analysis for the factors associated with diminished upper extremity function and social aspect quality of life

Characteristic	Physical QOL N (%)			Social aspect QOL N (%)		
	Above mean	Below mean	Crude PR (*P*-value)	Above mean	Below mean	Crude PR (*P*-value)
Age						
18-35	37 (46.3)	43 (53.7)	1.00	43 (53.7)	37 (46.3)	1.00
36-55	4 (25.0)	12 (75.0)	1.40 (0.062)	8 (50.0)	8 (50.0)	1.08 (0.780)
>55	0	1 (100)	1.86 (<0.001)	0	1 (100)	2.16 (<0.001)
Sex						
Female	18 (50.0)	18 (50.0)	1.00	21 (58.3)	15 (41.7)	1.00
Male	23 (37.7)	38 (62.3)	1.25 (0.260)	30 (49.2)	31 (50.8)	1.22 (0.399)
Education						
None	3 (42.9)	4 (57.1)	1.00	6 (85.7)	1 (14.3)	1.00
Primary	14 (45.2)	17 (54.8)	0.96 (0.911)	18 (58.1)	13 (41.9)	2.94 (0.259)
Secondary	14 (35.0)	26 (65.0)	1.14 (0.712)	17 (42.5)	23 (57.5)	4.03 (0.139)
Tertiary	10 (52.6)	9 (47.4)	0.83 (0.647)	10 (52.6)	9 (47.4)	3.32 (0.213)
Employment						
Employed	9 (42.9)	12 (57.1)	1.00	12 (57.1)	9 (42.9)	1.00
No formal employment	10 (38.5)	16 (61.5)	1.08 (0.763)	11 (42.3)	15 (57.7)	1.35 (0.329)
Self-employed	14 (36.8)	24 (63.2)	1.11 (0.659)	21 (55.3)	17 (44.7)	1.04 (0.890)
Student	8 (66.7)	4 (33.3)	0.58 (0.233)	7 (58.3)	5 (41.7)	0.97 (0.947)
Marital status						
Divorced	0	3 (100)	1.00	0	3 (100)	1.00
Married	17 (39.5)	26 (60.5)	0.60 (<0.001)	23 (53.5)	20 (46.5)	0.47 (<0.001)
Single/Unmarried	21 (51.0)	21 (50.0)	0.50 (<0.001)	22 (52.4)	20 (47.6)	0.48 (<0.001)
Widowed	3 (33.3)	6 (66.7)	0.67 (0.087)	6 (66.7)	3 (33.3)	0.33 (<0.001)
Burn depth						
First degree	29 (85.3)	5 (14.7)	1.00	34 (100)	0	1.00
Second degree	0	2 (100)	5.21 (<0.001)	0	2 (100)	4.81 (<0.001)
Third degree	11 (23.4)	36 (76.6)	6.31 (<0.001)	16 (34.0)	31 (66.0)	3.17 (<0.001)
Forth degree	1 (7.1)	13 (92.9)	6.80 (<0.001)	1 (7.1)	13 (92.9)	4.47 (<0.001)
Severity of burns						
Mild	1 (50.0)	1 (50.0)	1.00	1 (50.0)	1 (50.0)	1.00
Moderate	33 (48.5)	35 (51.5)	1.03 (0.968)	37 (54.4)	31 (45.6)	0.91 (0.898)
Severe	7 (25.9)	20 (74.1)	1.48 (0.585)	13 (48.2)	14 (51.8)	1.04 (0.961)
Length of hospital stay			1.02 (<0.001)			1.02 (<0.001)
Number of surgeries			1.64 (<0.001)			1.79 (<0.001)

tent with what was reported by the academic hospital of Padova in Italy [16].

In this study, the number of surgeries performed was associated with poor upper extremity function. An increase in the number of surgeries performed was associated with a 29% more likely to have poor upper extremity function. This means participants with one or no surgery had better upper extremity functioning. This could result from contractures and scaring that may come with wound healing after surgery that would limit joint motilities and hence the upper extremities in general. Our findings are consistent with what was reported by [17] in Italy, where 90% of the participants underwent surgery and still reported low physical QOL.

Factors associated with poor social aspect quality of life

In our study, age was associated with poor social aspect quality of life. Participants above 55 years old were 51% more likely to have poor social aspect quality of life than those aged 18 to 35. This means younger participants had better social functioning than the older ones; the different social connections that young people have in various activities, such as internet use, can explain this. Our results are consistent with what was reported among burns

Table 6. Multivariate analysis for the factors associated with diminished upper extremity function and social aspect quality of life

Characteristic	Physical QOL			Social aspect QOL		
	Adjusted PR	95% CI	*P*-value	Adjusted PR	95% CI	*P*-value
Age						
18-35	1.00			1.00		
36-55	1.03	0.79-1.36	0.810	0.86	0.59-1.25	0.430
>55	1.14	0.93-1.40	0.210	1.51	1.13-2.00	0.005
Marital status						
Divorced	1.00			1.00		
Married	0.81	0.51-1.28	0.359	0.61	0.40-0.91	0.016
Single/Unmarried	0.80	0.52-1.23	0.304	0.81	0.56-1.16	0.252
Widowed	1.46	0.79-2.69	0.224	0.83	0.42-1.66	0.605
Burn depth						
First degree	1.00			1.00		
Second degree	3.89	1.63-9.29	0.002	3.38	2.14-5.34	<0.001
Third degree	3.96	1.62-9.70	0.003	4.03	2.64-6.15	<0.001
Forth degree	3.67	1.45-9.29	0.006	4.58	2.68-7.84	<0.001
Length of hospital stay	1.01	0.99-1.02	0.885	0.99	0.98-1.01	0.082
Number of surgeries	1.29	1.11-1.51	0.001	1.22	1.06-1.41	0.006

patients in Concord Repatriation General Hospital, Sydney, Australia, between March 2007 and February 2009 [14].

In our study, marital status was associated with poor social aspect quality of life. Married participants were 61% less likely to have a poor social aspect quality of life compared to the divorced. This means that divorced participants had a poor social quality of life compared to married ones; this might be because of a lack of enough social support that married ones get from their spouses. Similar findings have been reported by [15], where the marital status of an individual determines the social quality of life.

Burn depth was associated with poor social aspect quality of life in this study. Participants who presented with second-degree burns were 3.38 times more likely to have poor social aspect QOL than those who presented with first-degree burns. Similarly, participants who presented with third-degree burns were four times more likely to have poor social aspect quality of life, while those who presented with fourth-degree burns were 4.6 times more likely to have poor social aspect QOL compared to first-degree burns. This means social aspect QOL diminished with increasing burn depth; having second, third- or fourth-degree burns resulted in almost four times more likely to have poor social aspect QOL. This can be explained by the scaring, adhesions, and physical deformities that come with healing from third and fourth-degree burns and the pain that might limit functionality and social interaction, especially in games or perceiving not to be liked. This result is consistent with what was reported by [18], where burn depth was associated with disability and social functioning in young adults.

In our study, the number of surgeries performed was associated with poor social aspect quality of life. An increase in the number of surgeries resulted in a 22% likelihood of an individual's poor social quality of life. This means the less or no surgeries, the better the social aspect quality of life. This might be because of body disfiguration due to a scar that comes with wound healing after surgery and a prolonged hospital stay, reducing an individual's social interaction. This result is consistent with what has been reported by [19]; burn surgeries have been associated with infections and contractures, which might reduce patients' social interaction.

Reliability of the questionnaire

The questionnaire used for this population had a reliability coefficient (Cronbach's alpha)

of 0.97 which means the questionnaire was reliable for the population.

Limitations

It would have been better to do a prospective study and, for a more extended period, at least a year, to describe trends in the quality of life in these patients. This study, being a cross-sectional study, will not give a clear picture of policy change compared to the prospective study.

Conclusions and recommendations

Conclusions

There is generally poor upper extremity function or physical quality of life among adults and children attending Kiruddu National Referral Hospital who have suffered from burns.

Adults and children attending Kiruddu National Referral Hospital who have suffered from burns generally have good social aspects and quality of life.

Both men and women have similar quality of life after burn injuries while age above 55 years, marital status (divorced), burn depth, and the number of surgeries was significantly associated with poor quality of life.

Recommendations

Practice recommendations: We recommend a multidisciplinary team approach while managing children and adults who have suffered from upper limbs burns, and this team should include; plastic surgeons, social workers, and physiotherapists.

We recommend early physiotherapy and social support, including occupational therapy and family support in patients with third and fourth-degree burns, prolonged hospital stay, and multiple surgeries. We recommend giving special attention to old and divorced burn patients regarding social support.

Acknowledgements

First, I thank Allah for everything; secondly, I would like to thank anyone who has contributed to this work.

Disclosure of conflict of interest

None.

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