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ORIGINAL ARTICLE

EVALUATION OF FEELINGS HELPLESSNESS AND BODY IMAGE IN PATIENTS WITH BURNS

AVALIAÇÃO DOS SENTIMENTOS DE IMPOTÊNCIA E IMAGEM CORPORAL EM PACIENTES COM QUEIMADURAS

EVALUACIÓN DE LOS SENTIMIENTOS DE IMPOTENCIA E IMÁGEN CORPORAL EN PACIENTES CON QUEMADURAS

Maria Cristina Porto e Silva[1], Geraldo Magela Salomé[2], Priscila Miguel[3], Carolina Bernardino[4], Cremilda Eufrásio[5], Lydia Masako Ferreira[6]

ABSTRACT

***Objective*:** to evaluate feelings of helplessness and body image in patients with burns. ***Method*:** this was a clinical, primary, descriptive, analytical, and prospective study based on interviews with patients who have suffered burns, through the application of three questionnaires including demographic and clinical data, the Helplessness Feelings Measurement Tool, and the Brazilian version of the Body Investment Scale. ***Results*:** most participants were females, married, and suffered burns at home, older than 20 years old, with 2 years of evolution since the burn, and with the main cause of burns being alcohol. The average total score of the Body Scale Investment instrument was 29.4 and that of Helplessness Feelings Measurement Tool was 52.7. ***Conclusion*:** patients presented alteration in their body image and feelings of helplessness. ***Descriptors*:** Nursing Practice; Body Image; Burns; Quality of Life.

RESUMO

***Objetivo*:** avaliar o sentimento de impotência e imagem corporal em pacientes com queimadura. ***Método*:** estudo clínico, primário, descritivo, analítico, prospectivo, realizado a partir de entrevistas com pacientes que sofreram queimaduras, no qual foram aplicados três questionários: sobre os dados demográficos e clínicos, instrumento de Medida do Sentimento de Impotência e a versão brasileira da *Body Investment Scale*. ***Resultados*:** a maioria dos participantes era do sexo feminino, casados, sofreu a queimadura em domicílio, faixa etária maior que 20 anos, tinha 2 anos de evolução da queimadura e a principal etiologia das queimaduras foi o álcool. A média de escore total do instrumento *Body Investment Scale* foi de 29,4 e no instrumento Medida do Sentimento de Impotência o escore médio foi de 52,7. ***Conclusão*:** os pacientes apresentaram alteração da sua imagem corporal e sentimentos de impotência. ***Descritores*:** Enfermagem Prática; Imagem Corporal; Queimaduras; Qualidade de Vida.

RESUMEN

***Objetivo*:** evaluar el sentimiento de impotencia e imagen corporal en pacientes con quemaduras. ***Método*:** estudio clínico, primario, descriptivo, analítico, prospectivo, realizado a partir de entrevistas con pacientes que sufrieron quemaduras, en los cual fueron aplicados tres cuestionarios: sobre los datos demográficos y clínicos, instrumento de Medida del Sentimiento de Impotencia y la versión brasileña del Body Investment Scale. ***Resultados*:** la mayoría de los participantes era del sexo femenino, casados, sufrió quemadura en su domicilio, grupo mayor que 20 años, tenía 2 años de evolución de la quemadura y la principal etiología de las quemaduras fue el alcohol. La media de puntuación total del instrumento Body Investment Scale fue de 29,4 y en el instrumento Medida del Sentimiento de Impotencia de la puntuación media fue de 52,7. ***Conclusión*:** los pacientes presentaron alteración de su imagen corporal y sentimientos de impotencia. ***Descriptores*:** Enfermería Práctica; Imagen Corporal; Quemaduras; Calidad de Vida.

[1]RN, Master's degree student in University Teaching, Graduate School Program at the National Technological University /UTN. Buenos Aires, Argentina. Professor, Nursing Collegiate, Vale do Sapucaí University/UNIVÁS. Pouso Alegre (MG), Brazil. E-mail: portocriss@hotmail.com; [2]RN, Professor Ph.D. (Post-doctoral level), Vale do Sapucaí University/UNIVÁS. Pouso Alegre (MG), Brazil. E-mail: salomereiki@yahoo.com.br; [2]RN, Samuel Libaneo General Hospital, Pouso Alegre (MG), Brazil. E-mail: priscila.enff@hotmail.com; [3]Student at the Nursing School, Vale do Sapucaí University/UNIVAS. Pouso Alegre (MG), Brazil. E-mail: bernardinocarolina@gmail.com; [4]RN, Professor, Master's degree in Nursing and Bioethics, Nursing Collegiate, Vale do Sapucaí University/UNIVÁS. Pouso Alegre (MG), Brazil. E-mail: cremildae@yahoo.com.br; [5]Plastic Surgeon. Full Professor and Coordinator of the Plastic Surgery discipline at the Federal University of São Paulo. São Paulo (SP), Brazil. E-mail: lydiamferreira@uol.com.br

INTRODUCTION

Burns are among the leading external causes of death recorded in Brazil.[1] The second-degree burn has been classified as superficial and deep, and its evolution will depend on this degree of depth and occurrence of complications; infections are the most frequent causes of worsening, both in the topic and systemic scopes. Second and third-degree burns will have to undergo a debridement process that consists in the removal of devitalized tissue. This process may take longer and requires more intervention depending on the depth and extent of the burn. Burns initially classified as second degree can deepen with the coexistence of local infections.[2]

The importance of the prevention of burn injuries is due not only because of its frequency but especially because of its ability to cause functional, aesthetic, and psychological sequelae, which may result in consequences affecting the individual's quality of life, compromised self-esteem, self-image, which lead the burned patient to anxiety and depression.[3]

At first, the sudden interruption of the day to day activities pales against the struggle for survival. The care of a patient who has suffered burn injuries involves daily changes of dressings, debridement, and grafting. If on one hand the graft is a hope of wound healing, on the other hand, it may involve creating another very painful wound in the donor area including performing anesthesia. Thus, a high level of anxiety and fear often accompanies the patient throughout the treatment period.[4] Often the wound presents an exudate, odor, and pain leading the patient to social and family isolation. These feelings render the patient helpless to perform daily activities with difficulties in the social and family life.

Feelings such as fear, grief, and helplessness are common in patients with wounds, remembering that in a society where independence is valued, relying on others can generate fear, emotional disorganization, frustration, and hopelessness. These feelings cause a period of conflict, doubts, and unexpected reactions in the patient, leading them to have feelings of helplessness and lose hope on their improved health.[5,6]

The wound affects the individual's quality of life, leading to changes in behavior and routine of daily lives, it leads to loneliness and social and family isolation because the patient experiences moments of pain, deformity in the body region that suffered the burn, and injuries with exudate and odor. All this generates limited mobility. These factors may cause the patient to lose hope in healing and to experience feelings of helplessness.

The North American Nursing Diagnosis Association (NANDA) defines feelings of helplessness as "the perception that the individual's action would not significantly affect the outcome; a lack of perceived control over the current situation or an immediate event."[7]

Considering that sickening processes can lead to a situation of loss of control on the current situation, the feeling of helplessness can be seen as a loss. If the loss of control is the focus of unsuccessful attempts to modify self-concept, the feeling of regret (early or dysfunctional) can be accepted as the most appropriate diagnosis. However, if the perception is that anything the person does would not alter the course of events, then, the feeling of helplessness may be the most appropriate diagnosis.[8]

Body image in contemporary times may be related to youth, beauty, vitality, integrity, and health and those that do not correspond to this concept may experience a significant sense of rejection.[9] Body image is the mental image that the individual makes of his body, wrapped in the sensations and experiences acquired throughout life. It is a type of "mental picture" that the person makes about his physical appearance and attitudes, and feelings toward this image.[10] The individual maintains an internal balance through his body image while interacting with the world.[10] When the individual has a healthy body image, he faces the situation that he is living with ease and can continue to lead his life without trauma.

OBJECTIVE

- To evaluate the feelings of helplessness and body image in patients with burns.

MÉTHOD

This article was part of the Monography << Feelings of helplessness and body image in patients with burns >> presented to the Graduate Program in Nursing at the Vale do Sapucaí University/UNIVÁS. Minas Gerais (MG), Brazil, in 2012.

This was a clinical, primary, descriptive, analytical, and prospective study. It was conducted at the Nursing Assistance and Teaching Center of the Samuel Libânio Clinical Hospital and the Plastic Surgery Clinic of the Federal University of São Paulo. Data were collected from June of 2012 to January of

2014. The sample was selected in a non-probabilistic way by convenience. Thirty subjects participated in the study. Data collection was conducted by the researchers after the signing of the Voluntary Informed Consent Form by the patients. The inclusion criteria were: age over 18 years, patients with II and III degree burns, and those receiving outpatient care. The exclusion criteria were: patients with syndromes, dementias, and/or other conditions that prevent them from understanding and responding the questionnaires. Three instruments were used for data collection.

The demographic and clinical data questionnaire were applied first, and subsequently, the Helplessness Feelings Measurement Tool and the Brazilian version of the Body Investment Scale were applied.

The Helplessness Feelings Measurement Tool was validated, and its reliability was evaluated. It was applied in 210 patients and, composed of 12 items with three areas: ability to perform behaviors (Chombach = 0.845), perceived ability to make decisions (Chombach = 0.834), and emotional response to the control of situations (Chombach = 0.578). These instruments indicate scores that can be added by domains and the total results allows interpreting that the higher the score, the more intense the feeling of helplessness.[8,11]

The Brazilian version of the Body Investment Scale, or Body Investment Questionnaire (BIS), consists of twenty items divided into three factors (body image, body care, and body touch). The responses are arranged on a Likert scale of five points ranging from "I strongly disagree" (1 point) to "I strongly agree" (5 points). The higher the score, the more positive feelings are present about the body. The data were submitted to Exploratory Factorial Analysis with Varimax rotation. Out of the original 24 items, 20 items were kept on the Brazilian scale; four factors explained 36.3% of the total variance of the scale. Factor 1 (called Body Image) presented a = 0.81. Factor 2 (called body care) presented a = 0.70. Factor 3 (called body touch) obtained internal consistency of a = 0.66. The fourth and last factor (called body protection) obtained a = 0.37.[12]

The data results were entered and analyzed using the SPSS-8.0 statistical program. The Chi-square test was used in the statistical analysis of the socio-demographic and clinical variables. The Kruskal-Wallis test and Spearman correlation were used in the analysis comparing the Helplessness Feelings Scales and Body Image. The significance level of 5% ($p \leq 0.05$) was considered in all statistical tests. The development of the study met the national and international standards of ethics in research involving human subjects. The study was approved by the Research Ethics Committee of the Dr. José Antonio Garcia Coutinho College of Medical Sciences at the Vale do Sapucaí University (UNIVÁS) under protocol number 55262.

RESULTS

Table 1. Demographic characteristics of individuals with burns.

Gender	n	%	Valid %	Accumulated %	p Value
Female	22	73.3	73.3	73.3	0.037
Male	8	26.7	26.7	100	
Total	30	100	100		
Age range	N	%	% Valid	% Accumulated	p Value
< 20 years	2	6.6	6.6	6.6	0.356
20-40 years	14	46.7	46.7	53.3	
> 40 years	14	46.7	46.7	100	
Total	30	100	100		
Marital Status	N	%	% Valid	% Accumulated	p Value
Married	13	43.3	43.3	43.3	0.405
Separated	10	33.3	33.3	76.7	
Single	7	23.3	23.3	100	
Total	30	100	100		

Table 1 shows that the majority of participants were females (73.3%) and were placed in the age range over 20 years old; 43.3% of the participants were married while 33.3% were separated.

Table 2. Characteristics of the burns.

Etiology of the burn	n	%	Valid %	Accumulated %	p Value
Boiling water	7	23.3	23.3	23.3	0.345
Alcohol	13	43.3	43.3	66.7	
Electricity	2	6.7	6.7	73.3	
Fire	4	13.3	13.3	86.7	
Oil	4	13.3	13.3	100	
Total	30	100	100	100	
Time since the burn	n	%	% Valid	% Accumulated	p Value
1	5	16.7	16.7	16.7	0.234
2	14	46.7	46.7	63.3	
3	10	33.3	33.3	96.7	
4	1	3.3	3.3	100	
Total	30	100	100		
Reason	N	%	% Valid	% Accumulated	p Value
Work accident	8	26.7	26.7	26.7	0.039
Home accident	18	60	60	86.7	
Suicide	4	13.3	13.3	100	
Total	30	100	100		

Chi-square test of independence ($p \leq 0.05$)

Table 2 shows that alcohol was the main cause of burns in 43.3% of cases. A total of 46.7% of the patients had 2 years of evolution since the burn, and the burn occurred due to a home accident in 60%.

Table 3. Average scores in the *Body Investment Scale* and Helplessness Feelings Measurement Tool in patients with burns.

Score	Average	Median	Standard Deviation	p Value
Body Investiment Scale	29.4	29	7.6	0.003
Helplessness Feelings Measurement Tool	52.7	55	5.3	

Kruskal-Wallis test and Spearman correlation ($p \leq 0.05$)

Table 3 shows that the average score in the Body Investment Scale was 29.4, characterized as a low average and indicating that these patients had less positive feelings about the body. The average score in the Helplessness Feelings Measurement Tool was 52.7, which means that these individuals had a great feeling of helplessness.

Table 4. Average scores in the *Body Investment Scale* and Helplessness Feelings Measurement Tool in relation to domains.

Instrument	Helplessness Feelings Measurement Tool			*Body Investment Scale*			
Domain	Emotional response to the control of the situation	Ability to perform behaviors	Perceived ability to make decisions	Body image	Body care	Body touch	P Value
Average	52.1	51.7	52.5	27.8	30.17	29.5	0.002
Median	55	54	54.5	25	32.5	32.5	
Standard Deviation	4.838	5.006	4.554	6.306	7.149	5.999	

Chi-square test of independence ($p \leq 0.05$)

Table 4 shows that the average of domains in the Helplessness Feelings Measurement instrument was between 51.7 and 52.5 featuring that these individuals do not respond emotionally to the control of situations, do not have the ability to perform behaviors, and do not have the ability to make decisions, i.e., they feel very helpless. Considering the three domains in the Body Investment Scale, body image, body care, and body touch, the average was between 27.8 and 30.17, which is considered as a low average, meaning that the participants had negative feelings in relation to their bodies.

DISCUSSION

Burns represent an important agent that causes life-threatening damages and biological, psychosocial, emotional alterations; however, they also represent important functional and aesthetic stigmas in the survivors of thermal lesions. When affecting people who were previously healthy, burns determine losses, as occupational absenteeism, given the high prevalence of affected young adults who are economically active.[3]

Burn patients are also victims of social rehabilitation because they see the changes caused by burns as negative on their self-

image and inability to work, which can compromise the quality of life and result in psychological suffering.[13]

Lesions caused by burns are still responsible for most of the wounds and deaths from external causes in Brazil, and are also responsible for a large number of work removals and functional and aesthetic sequelae, especially in the male population. In this study, most participants were females (73.3%) in the age over 20 years old, and 43.3% were married while 33.3% were separated.

The main causes of burns were alcohol and boiling water, in 43.3% and 23.3%, respectively. Most participants had 2 years of evolution since the burn, and household accidents were the main reason. In a study of 687 people who suffered burns, 62.5% of hospitalized patients were males with a mean age of 29 years; 66% were from Belo Horizonte and 34% from the countryside or other states. Alcohol was the most common etiological agent (34.4%), the cause of the most extensive burns (average of 28% of body burned surface) and responsible for most deaths (52.7%). The intentionality was distributed as 79% accidental burns, followed 12% attempts to self-extermination, and 9% aggression. The average length of hospital stay was 23.5 days with a 16.3% mortality rate, which has been falling steadily. A total of 984 debridements and 584 skin grafting were performed during the follow-up period. The obtained data were consistent with data from national and international literature in which the obtained results were similar to ours.[14]

A predominance of males (61.41%) was observed in another study, with the highest concentration of burnt individuals over 16 years of age (54.86%). The hospitalization stay was observed as less than fifteen days, accounting for 64.18%. The rate of hospital discharges was of 93.96% and the death rate of 6.04%. With regard to etiological factors, the highest concentration was of cases of burns caused by alcohol flames, making up 18.93% of cases.[3]

In a study designed to interpret the meanings of the quality of life of individuals who have suffered burns, patients and family members reported quality of life changes that were introduced by physical limitations, alterations in self-image, feelings of helplessness, and psychological issues caused by the burn. The quality of life associated with the performance of social roles is structured around family, work, autonomy, normality, and social integration.[15]

In a culture where physical appearance is highly valued, visible disfigurement can adversely affect the reactions of people in relation to the individual with body image alterations.[16]

Body image in contemporary times may be related to youth, beauty, vigor, integrity, and health and those that do not correspond to the concept of physical beauty may experience a significant sense of rejection.[9] The body image is the mental image that the individual makes about his body, surrounded by the sensations and experiences throughout life. It is a type of "mental picture" that the person makes of his physical appearance, attitudes, and feelings toward the image.[9]

In this study, the average score of the Body Investment Scale was 29.4, characterized as a low average, demonstrating that these patients had their body image altered. With regard to Helplessness Feelings Measurement instrument, the average score was 52.7 indicating that these individuals had a great sense of helplessness.

The individual, who suffered burning, has alterations in his body image and begins to live different conditions that are associated with disability and loss. He begins to feel useless, helpless, and ashamed of others and end up isolating himself from family, friends, and leisure activities resulting in alterations in his well-being and quality of life.

According to a study investigating the changes experienced by the burned patient, there is a phantasmic and relational process installed in the individual who questions and seems to be bound to a relational reworking process (family and significant others) that occurs in a more or less long time in which three stages are recognized: 0-2 months, 2-12 months, and over 12 months. At first, the shock and denial are enhanced surrounding the individual and his significant relations, as well as the self-image loss or distortion. In the intermediate stage, depression and the restructuring of relationships and life priorities occur. In the final stage, the integration of the new body image and stabilization of the surrounding relationships seems to take place. The results point out to the (re)construction of a new personal, relational, and phantasmic paradigm of the burnt individual.[16]

The burn causes an almost always irreversible change in the individual. In certain situations, the individual may not tolerate the changes that occur within him or in reality, threatening his self-identity feeling and, consequently, its representations and/or relations with the outside world. This threat

leads to anguish before the change that reveals the need for the individual to acquire the reassurance that there is consistency in the significant figures, that all remains, and that the structures do not change.[16]

CONCLUSION

The study participants presented negative feelings about their own body, with alterations in their body image, and moreover, they feel helplessness in the face of adversities caused by the burn.

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Corresponding Address

Maria Cristina Porto e Silva
Universidade do Vale do Sapucaí
Departamento de Enfermagem
Rua Paula Augusta Garcia, 50
Bairro Colina Santa Barbara
CEP 37550-000 – Pouso Alegre (MG), Brazil