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Quality of life of people with chronic wounds

Qualidade de vida de pessoas com feridas crônicas

Calidad de vida de personas con heridas crónicas

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Keywords
Evaluation; Quality of life; Wounds and injuries; Self concept; Nursing

Descritores
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Descriptores
Evaluación; Calidad de vida; Heridas y lesiones; Autoimagen; Enfermería

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Abstract
Objective: To evaluate the quality of life of people with chronic wounds.
Method: Cross-sectional study carried out with 176 people with chronic wounds in outpatient and home care in a public health service. The following instruments were used: a sociodemographic, clinical and therapeutic characterization form and the Cardiff Wound Impact Schedule questionnaire for measuring quality of life. The analysis was descriptive and inferential and used the Student's t-test, the ANOVA test and the Mann Whitney and Kruskal-Wallis tests.
Results: Among patients in home follow-up, the predominant characteristics were lower limb ulcers, persisting for more than 12 months and with an area of up to 25 cm^2. In the outpatient environment, lower limb ulcers and traumatic wounds prevailed, with a maximum duration of six months and size of up to 25 cm^2. The clinical factors associated with quality of life were: duration of wound, wound etiology, larger size, type of exudate, presence of odor and pain. The QoL domain "well-being" was the most affected by the presence of the wound.
Conclusion: Clinical factors directly influenced the QoL domains, and it is necessary to use differentiated strategies in order to reduce the impact of wounds on QoL, since the factors can be attenuated or avoided by evaluating the wound and choosing the appropriate treatment.

Resumo
Objetivo: Avaliar a qualidade de vida de pessoas com feridas crônicas.
Métodos: Estudo transversal realizado com 176 pessoas com feridas crônicas em acompanhamento ambulatorial e domiciliar em um serviço público de saúde. Foram utilizados: formulário para a caracterização sociodemográfica, clínica e terapêutica e o questionário *Cardiff Wound Impact Schedule* para a mensuração da qualidade de vida. As análises foram descritivas e inferenciais empregando-se os testes *t de Student, ANOVA, Mann Whitney e Kruskal-Wallis.*
Resultados: Dentre as pessoas acompanhadas em domicílio, predominaram lesões de origem vasculogênicas, com tempo de existência superior a 12 meses e área de até 25 cm^2. No ambiente ambulatorial, prevaleceram feridas vasculogênicas e traumáticas, com tempo máximo de seis meses e extensão de até 25 cm^2. Os fatores clínicos associados à qualidade de vida foram: tempo de duração da lesão, etiologia da lesão, grande extensão, aspecto do exsudato, presença de odor e de dor. O domínio de QV "bem-estar" apresentou maior impacto negativo decorrente da presença de lesão.
Conclusão: Os fatores clínicos influenciaram diretamente os domínios de QV, sendo necessária a utilização de estratégias diferenciadas com o intuito de reduzir o impacto na QV por se tratarem de aspectos que poderiam ser atenuados ou evitados mediante a avaliação da lesão e a escolha do tratamento adequado.

Resumen
Objetivo: Evaluar la calidad de vida de personas con heridas crónicas.
Métodos: Estudio transversal realizado con 176 personas con heridas crónicas con seguimiento ambulatorio y domiciliario en un servicio público de salud. Se utilizó: formulario para la caracterización sociodemográfica, clínica y terapéutica y el cuestionario *Cardiff Wound Impact Schedule* para la medición de la calidad de vida. Los análisis fueron descriptivos e inferenciales y se aplicaron las pruebas *t de Student, ANOVA, Mann Whitney y Kruskal-Wallis.*
Resultados: Entre las personas con seguimiento domiciliario, predominaron lesiones de origen vascular, con tiempo de existencia superior a 12 meses y área de hasta 25 cm^2. En el ambiente ambulatorio, prevalecieron heridas vasculares y traumáticas, con tiempo máximo de seis meses y extensión de hasta 25 cm^2. Los factores clínicos asociados a la calidad de vida fueron: tiempo de duración de la lesión, etiología de la lesión, extensión grande, aspecto del exudado, presencia de olor y dolor. El dominio de CV "bienestar" presentó mayor impacto negativo como resultado de la presencia de la lesión.
Conclusión: Los factores clínicos influyeron directamente los dominios de CV y es necesaria la utilización de estrategias diferenciadas con la intención de reducir el impacto en la CV por tratarse de aspectos que podrían ser atenuados o evitados mediante la evaluación de la lesión y la elección del tratamiento adecuado.

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Introduction

Chronic wounds can be defined as any disruption in the normal continuity of a body tissue, regardless of size, associated with trauma or clinical conditions and with a difficult healing process, persisting for more than six weeks.[1,2]

This condition may be associated with different factors, such as vascular impairment, diabetes mellitus, systemic arterial hypertension, neuropathies, prolonged immobility, neoplasia and nutritional alterations, and it requires specialized treatment based on continuous, accurate and objective evaluation.[3,4]

This type of wound, which is considered a public health problem, affects 5% of the adult population in Western countries and generates high costs for health services, since it requires home care, prolonged hospitalizations, complex treatments and adjuvant therapies, and is associated with high recurrence rates.[5,6]

In this context, people with chronic wounds experience alterations in body image, mobility impairments, self-care deficit, inability to perform activities of daily living, pain and discomfort, all leading to negative impacts on Quality of Life.[7]

According to the World Health Organization, QoL is "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns".[8]

The QoL evaluation is used as an indicator of treatment response among people with chronic wounds, considering physical, psychological and social aspects, functional status and vision of life. To this end, validated tools, instruments and scales are used to assess the effects of disease and treatment on human life.[6]

Studies of this nature allow identifying clinical factors that influence QoL and comparing the results with scientific evidence, favoring the development of Nursing interventions and public health policies focused on improving the care of people with chronic wounds.

Therefore, the objective of this study was to evaluate the quality of life of people with chronic wounds.

Method

This is a quantitative and cross-sectional study carried out in two environments: an outpatient clinic specialized in the treatment of complex wounds and the household of people with chronic wounds followed up by Primary Health Care, in the city of Teresina, from February to June 2017.

After surveying the number of people with chronic wounds, 255 records were identified in the city, of which 161 were registered as home follow-up in the Family Health Strategy and 94 were in outpatient care. Among these, 79 participants were excluded because they presented syndromes: dementias and/or other conditions that impaired cognition and prevented the completion of the questionnaires or because they did not reach the minimum score (seven) in the mental health questionnaire for people aged 60 years or over. Thus, 176 people participated in the study, 74 in outpatient care and 102 in home follow-up. The participants were 18 years old or over and the wounds had a minimum duration of six weeks.

The survey for people with chronic wounds in home care was carried out by contacting the Family Health Strategy teams in the city of Teresina. Then, home visits were scheduled with the health workers to collect the data. In the outpatient clinic, data from all the patients who were in treatment during the data collection period and who met the inclusion criteria were collected.

A form was used for sociodemographic and clinical characterization and the Cardiff Wound Impact Schedule (CWIS) questionnaire was used to evaluate QoL.[9,10] This instrument, validated in Brazil with good internal consistency (Cronbach $\alpha = 0.920$), presents 47 items distributed in three domains: well-being (7), physical symptoms and daily living (24) and social life (14).[11] Items in the scale can be classified in a five-point Likert-scale that measures the frequency or intensity of each response. There are also two items that ask for a self-assessment of QoL, classified from one to ten. All domains are then transformed into a scale from zero to 100, where higher scores represent better quality of life. There is no single over-

all score for the CWIS and there are no cutoff values.[10]

The data were analyzed in the Statistical Package for Social Sciences (SPSS), version 22. The sociodemographic, clinical and therapeutic characteristics of people with chronic wounds were analyzed through descriptive statistics, frequency, mean and standard deviation. The associations between the clinical characteristics and the QOL domains were evaluated by Student's t-test, the ANOVA test and the non-parametric tests *U-Mann Whitney* and *Kruskal-Wallis*. When a significant difference was detected in the ANOVA or Kruskal-Wallis tests, the Post Hoc and Mann-Whitney tests were respectively conducted, with the Bonferrone correction. For all statistical tests, a significance level of 0.05 ($P<0.05$) was adopted.

The research was approved by the Research Ethics Committee of the Federal University of Piauí - UFPI protocol CAAE: 62181716.0.0000.5214. All participants signed the Informed Consent Form.

Results

Among the participants in home follow-up, most were male (51%), were 60 years old or older (50%), were married or in a stable union (62.7%), had a low level of education (54.9%) and were retired (76.5%). In the outpatient clinic, most were male (52.7%), between 41 and 59 years old (41.9%), had a partner (50%), had a low level of education (51.4%) and were retired (43.2%).

Regarding the clinical characteristics of the participants evaluated at home, 96.1% changed dressing daily, 51% had wounds persisting for more than 12 months, 31.4% had lower limb ulcers and 70.6% had wounds of up to 25 cm^2. Regarding the wounds, 62.8% were mostly made of granulation tissue, 86.2% had dermal and epidermal involvement, 51% had a small amount of exudate, 28.4% presented purulent/seropurulent exudate, 79.4% had no odor and 41.2% of patients reported severe pain. Regarding the patients evaluated in the outpatient environment, 67.6% changed dressing one or two times a week, 45.9% had wounds persisting for up to six months, 35.1% had lower limb ulcers, 35.1% had traumatic wounds and 47.3% had wounds of up to 25 cm^2. Regarding the wounds, 74.3% presented epithelial tissue, 70.3% were epidermal and dermal wounds, 54.1% had a moderate amount of exudate, 51.3% presented serous exudate, 90.5% had no odor and 31.1% of patients reported mild pain (Table 1).

Table 1. Clinical characteristics of patients with chronic wounds (n=176)

Characteristics	Home follow-up (n=102) n(%)	Outpatient care (n=74) n(%)
Dressing changes		
Daily	98(96.0)	9(12.1)
Alternate days	2(2.0)	6(8.2)
Once or twice a week	2(2.0)	50(67.6)
Intervals of more than a week	-	9(12.1)
Duration of wound		
Up to 6 months	29(28.4)	34(45.9)
Between 7 and 12 months	21(20.6)	11(14.9)
More than 12 months	52(51.0)	29(39.2)
Type of wound		
Lower limb ulcer	32(31.4)	26(35.1)
Diabetic ulcer	31(30.4)	10(13.5)
Pressure ulcer	21(20.6)	4(5.4)
Leprosy ulcer	7(6.8)	3(4.1)
Traumatic wound	5(4.9)	26(35.1)
Erysipelas	6(5.9)	5(6.8)
Wound size		
Up to 25 cm^2	72 (70.6)	35 (47.3)
25.1 - 50 cm^2	13 (12.7)	10 (13.5)
50.1 - 100 cm^2	9 (8.8)	11 (14.9)
Larger than 100 cm^2	8 (7.9)	18 (24.3)
Predominant tissue		
Epithelial	9(8.8)	1(1.4)
Granulation	64(62.8)	55(74.3)
Sloughy	25(24.5)	16(21.6)
Necrotic	4(3.9)	2(2.7)
Wound depth		
Epidermis/dermis	88(86.2)	52(70.3)
Fascia	2(2.0)	2(2.7)
Muscle tissue	5(4.9)	11(14.8)
Tendon	1(1.0)	7(9.5)
Bone	6(5.9)	2(2.7)
Amount of exudate		
Small	52 (51.0)	22 (29.7)
Moderate	22 (21.6)	40 (54.1)
Large	18 (17.6)	12 (16.2)
No exudate	10 (9.8)	-
Type of exudate		
Serous	26(25.5)	38(51.3)
Sanguineous	12(11.8)	8(10.8)
Serosanguineous	26(25.5)	25(33.8)
Purulent/seropurulent	29(28.4)	3(4.1)
No exudate	9(8.8)	-
Odor		
Present	21(20.6)	7(9.5)
Absent	81(79.4)	67(90.5)
Pain intensity		
No pain	39(38.2)	13(17.6)
Mild pain	11(10.8)	23(31.1)
Moderate pain	10(9.8)	20(27.0)
Intense pain	42(41.2)	18(24.3)

The mean CWIS score among the participants interviewed at home was lower in the "well-being" domain, with a score of 43.9 (SD 13.8). The "physical symptoms and daily living" domain had a higher mean score, 57.2 (SD 16.7). Regarding the participant's self-assessment about their QoL, the mean value of the question "how good is your QOL" was 7.8 (SD 2.7) and in the question about "satisfaction with QoL" it was 7.9 (SD 2.7). In the outpatient clinic, the participants had a lower mean score in the "well-being" domain, with 33.2 (SD 17.2). The "physical symptoms and daily living" domain had a higher score, 66.9 (SD 17.5). The self-assessment scores were 7.2 (SD 2.4) in the question "how good is your QoL" and 7.6 (SD 2.1) in "satisfaction with QoL" (Tabela 2).

Table 2. Comparison of the domains of the instrument Cardiff Wound Impact Schedule between patients with chronic wounds in home follow-up and in outpatient care (n=176)

Environment	WB	PSDL	SL	QoL Self-Assesment	
				How good is your QoL	Satisfaction with Qol
	Mean± SD	Mean± SD	Mean± SD	Mean± SD	Mean± SD
Home	43.9 ± 13.8	57.2 ± 16.7	55.5 ± 17.6	7.8 ± 2.7	7.9 ± 2.7
Outpatient	33.2 ± 17.2	66.9 ± 17.5	65.6 ± 19.7	7.2 ± 2.4	7.6 ± 2.1

WB – Well-Being; PSDL – Physical Symptoms and Daily Living; SL – Social Life; QoL – Quality of Life

In the home environment, significant associations between type of wound and the QoL "well-being" domain (p = 0.015) differed statistically between pressure ulcers and traumatic wounds (p = 0.033). The variable wound depth was associated with the domains "physical symptoms and daily living" (p = 0.049) and "social life" (p = 0.028). The type of exudate was associated with the "well-being" domain (p = 0.004) and purulent exudate was significantly different from serous (p = 0.035) and sanguineous (p = 0.007) exudates. An association between odor and the "well-being" domain (p = 0.029) was also observed, as well as between pain intensity and the three domains, "well-being" (p = 0.006), "physical symptoms and daily living" (p <0.001) and "social life" (p = 0.041), as shown in table 3.

In the outpatient environment, the variable duration of wound was associated with the domain "social life" (p = 0.016). There was also a significant association between wound depth and the domains "well-being" (p = 0.028) and "physical symptoms and daily living" (p = 0.049). The analysis of pain intensity showed an association with the domains "well-being" (p = 0.011), "physical symptoms and daily living" (p <0.001) and "social life" (p=0.005).

Table 3. Association between wound characteristics and quality of life domains (n=176)

Variables	Wounds in home follow-up			Wound in outpatient care		
	WB Mean ± SD p-value	PSDL Mean ± SD p-value	SL Mean ± SD p-value	WB Mean ± SD p-value	PSDL Mean ± SD p-value	SL Mean ± SD p-value
Dressing changes						
Daily	43.7 ± 13.8	57.2 ± 16.8	55.6 ± 17.5	23.8 ± 15.5	65.4 ± 20.5	58.1 ± 20.8
Alternate days	41.1 ± 17.7	53.7 ± 13.9	51.8 ± 10.1	32.7 ± 9.4	78.3 ± 12.2	77.4 ± 9.8
Once or twice a week	55.4 ± 7.6	57.8 ± 25.7	54.5 ± 36.6	34.9 ± 17.9	65.7 ± 15.9	64.6 ± 20.6
Intervals of more than a week	- (0.362[k])	- (0.924[k])	- (0.958[k])	33.3 ± 17.9 (0.176[k])	67.7 ± 25.0 (0.408[k])	70.6 ± 14.9 (0.293[k])
Duration of wound						
Up to 6 months	38.6 ± 16.2	62.7 ± 17.4	57.8 ± 17.7	32.9 ± 16.1	68.0 ± 17.0	62.0 ± 18.1
7 - 12 months	41.6 ± 14.8	66.1 ± 17.7	65.1 ± 19.1	39.6 ± 20.5	71.3 ± 16.3	77.9 ± 18.6
More than 12 months	39.2 ± 16.8 (0.883[k])	58.3 ± 17.5 (0.088[k])	59.0 ± 20.0 (0.411[k])	31.2 ± 17.3 (0.196[k])	64.0 ± 18.6 (0.538[a])	65.1 ± 20.6 (0.043[k])
Type of wound						
Lower limb ulcer	41.7 ± 13.1	52.9 ± 17.0	57.0 ± 17.9	33.8 ± 18.2	66.5 ± 19.3	66.5 ± 19.3
Diabetic ulcer	43.3 ± 12.7	58.9 ± 15.2	55.9 ± 18.5	42.5 ± 17.9	68.0 ± 16.1	68.0 ± 16.1
Pressure ulcer	50.3 ± 14.8	60.7 ± 18.9	55.0 ± 16.7	21.4 ± 11.3	67.2 ± 20.8	67.2 ± 20.8
Leprosy ulcer	51.0 ± 15.2 27.7	67.1 ± 10.0	57.4 ± 20.5	19.0 ± 5.5	56.2 ± 15.4	56.2 ± 15.3
Traumatic wound	± 8.4	47.6 ± 18.9	40.6 ± 17.4	33.8 ± 16.3	65.5 ± 17.1	65.5 ± 17.1
Erysipelas	38.7 ± 8.9	58.3 ± 13.3	57.4 ± 11.8	39.3 ± 25.0	68.0 ± 27.1	68.0 ± 27.1
Fournier gangrene	- (0.015[a])	- (0.118[k])	- (0.668[a])	33.9 ± 2.5 (0.223[k])	82.3 ± 11.8 (0.824[k])	82.3 ± 11.8 (0.855[a])
Wound size						
Up to 25 cm	41.3±14.3	63.1±16.4	60.3±19.6	34.5±16.8	68.7±18.5	68.7±19.4
25.1 - 50 cm	34.9±18.2	56.5±20.0	54.4±18.3	25.7±12.3	67.0±14.3	63.6±18.3
50.1 - 100 cm	37.0±22.1	56.7±15.6	57.7±19.1	30.5±24.8	59.4±14.7	56.8±23.7
Larger than 100 cm	37.6±16.0 (0.716[k])	61.7±21.4 (0.081[k])	63.6±17.5 (0.313[k])	36.5±14.8 (0.252[k])	68.1±18.7 (0.516[a])	66.0±18.1 (0.642[k])

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Continuation.

Predominant tissue						
Epithelial	43.7 ± 9.8	59.6 ± 12.6	51.4 ± 14.7	42.9 ±	77.1 ±	78.6 ±
Granulation	45.8 ± 13.6	60.1 ± 15.9	56.7 ±18.0	32.9 ± 16.7	68.3 ± 17.0	65.4 ±19.5
Sloughy	39.7 ± 14.5	50.1 ± 19.2	55.4 ± 18.2	34.6 ± 20.4	62.8 ± 20.0	65.1 ± 22.4
Necrotic	40.2 ± 14.4	49.5 ± 9.1	45.1 ± 13.4	25.0 ± 10.0	57.3 ± 13.3	67.0 ± 3.7
	(0.254[k])	(0.072[k])	(0.497[k])	(0.669[k])	(0.615[a])	(0.801[k])
Wound depth						
Epidermis/dermis	41.8 ± 15.1	62.9 ± 16.6	61.3 ± 18.8	37.2 ± 17.4	68.9 ± 17.5	67.7 ± 20.0
Fascia	34.8 ± 14.7	63.5 ± 25.7	67.4 ± 19.1	33.9 ± 2.5	78.1 ± 20.6	75.0 ± 12.6
Muscle	28.6 ± 18.1	53.6 ± 17.7	53.7 ± 20.2	23.1 ± 12.1	58.9 ± 14.2	60.1 ± 21.2
Tendon	26.4 ± 20.4	57.7 ± 15.8	56.9 ± 15.9	20.4 ± 12.5	56.7 ± 16.8	57.9 ± 16.9
Bone	34.4 ± 13.6	50.4 ± 27.9	43.3 ± 18.3	30.4 ± 27.8	85.4 ± 10.3	59.0 ± 12.7
	(0.245[k])	(0.049[k])	(0.028[k])	(0.018[k])	(0.049[k])	(0.268[k])
Amount of exudate						
No exudate	41.1 ± 7.2	57.2 ± 14.3	53.0 ± 17.9	-	-	-
Small	42.8 ± 14.0	63.5 ± 15.4	58.9 ±20.3	32.6 ± 11.0	68.4 ± 16.2	63.6 ± 22.0
Moderate	36.1 ± 17.9	61.5 ± 19.0	63.4 ± 18.2	34.1 ± 20.5	66.2 ± 18.4	67.0 ±19.2
Large	37.6 ± 18.1	56.3 ± 21.4	54.8 ± 17.5	31.3 ± 15.5	66.5 ± 18.2	64.3 ± 17.8
	(0.204[k])	(0.116[k])	(0.586[a])	(0.795[k])	(0.936[a])	(0.814[k])
Type of exudate	41.3 ± 7.6	55.0 ± 13.2	48.8 ± 12.6			
No exudate	40.7 ± 15.0	67.6 ± 16.7	64.2 ± 20.1	-	-	-
Serous	41.3 ± 15.3	60.2 ± 15.1	59.4 ±17.5	36.4 ± 14.9	71.4 ± 17.1	70.3 ± 18.4
Sanguineous	39.6 ± 19.8	60.9 ± 17.4	59.2 ± 19.6	31.3 ± 10.0	66.5 ± 7.2	65.0 ±13.5
Serosanguineous	34.8 ± 13.9	51.8 ± 18.4	54.8 ± 17.1	30.4 ± 21.7	61.4 ± 19.7	58.7 ± 22.8
Purulent/ seropurulent	(0.004[k])	(0.214[k])	(0.568[k])	21.4 ± 12.9	57.6 ± 8.7	64.9 ± 4.5
				(0.218[k])	(0.084[k])	(0.065[k])
Odor						
Present	35.0 ± 15.8	53.5 ± 19.5	56.2 ± 15.9	26.5 ± 16.2	61.7 ± 20.8	63.0 ± 17.2
Absent	40.3 ± 16.1	62.8 ± 17.0	60.4 ± 19.6	33.9 ± 17.3	67.5 ± 17.2	65.8 ± 20.0
	(0.029[u])	(0.165[u])	(0.671[t])	(0.152[u])	(0.439[u])	(0.597[u])
Pain intensity						
No pain	46.9 ± 15.7	71.3 ± 13.1	65.7 ± 17.2	42.0 ± 19.7	81.4 ± 7.7	77.8 ± 11.8
Mild pain	40.0 ± 14.4	67.5 ± 16.0	64.9 ± 16.6	36.2 ± 14.0	72.6 ± 15.7	70.8 ± 14.1
Moderate pain	34.9 ± 17.5	58.9 ± 15.5	55.1 ± 18.4	29.5 ± 17.7	60.5 ± 16.5	58.1 ± 19.5
Intense pain	34.8 ± 14.5	50.3 ± 16.8	53.9 ± 20.3	27.2 ± 16.4	56.3 ± 16.6	58.3 ± 24.6
	(0.006[k])	(<0.001[k])	(0.041[k])	(0.011[k])	(<0.001[a])	(0.005[a])

WB – Well-Being; PSDL – Physical Symptoms and Daily Living; SL – Social Life; Tests: k – Kruskall Wallis; a – Anova; u – Mann-Whitney U test ; t – Student's t-test

Discussion

Regarding the QoL scores, in both environments the "well-being" domain was the most affected by the presence of chronic wounds, while the highest scores were on the "physical symptoms and daily living" domain. These results demonstrate that the presence of cutaneous wounds has negative effects on well-being, regardless of the place of care, and is directly associated with the emotional response to physiological conditions and health-related aspects.[11-14] The well-being domain includes the level of anxiety in relation to the outcome of the injury and can be influenced by the presence of symptoms, the treatment methods or any changes in physical, psychological and social functioning.[10,13]

Among the clinical characteristics, the variable "duration of wound" was associated with the domain "social life" in the outpatient environment. This result may be related to the prevalence of injuries with up to six months, which can be associated with a lower degree of adaptation or acceptance and fear of being stigmatized, leading patients to develop problems related to social isolation and fear of exposing and even looking at the wound.

The variable "type of wound" was associated with the "well-being" domain, with statistical difference between pressure ulcers (PU) and traumatic wounds. The onset of PUs is associated with diseases that restrict mobility and impedes the execution of certain activities. Thus, the impact on the QoL of these individuals may be associated with other factors related to the physical illness, and not to wound itself. However, PUs have a large impact on the QoL of the general population, especially in people who have chronic conditions, but are able to act in their daily life, since the onset of the injury causes them substantial impairment and difficulties.[15]

Traumatic wounds, which were frequent in the outpatient environment, were associated with a lower score in the well-being domain, with statistical difference from the pressure ulcer. According to the

literature, the presence of traumatic wounds is widely related to the progressive increase of traffic accidents and urban violence, which can cause extensive injuries and prolonged immobility, with young people as the most common victims.[16] In relation to the age range of trauma victims, a study performed with people with traumatic brain injury in the Northeast found a mean age of 42.5 years, with the majority of cases in the age group of 20 to 29 years.[17]

Within this context, it is observed that traumatic wounds are more frequent among young people with an active working life. Thus, the wound causes problems in their activities of daily living and financial difficulties, since they have to be absent from work, which leads to financial losses, impairment of QoL, and feelings of loss of social identity.[18]

In the home environment, the variable wound depth was associated with the domains "physical symptoms and daily living" and "social life", while in the outpatient environment it was associated with the domains "well-being" and "physical symptoms and daily living". These results may be associated with the presence of a large amount of exudate in deep wounds, which favors the development of infections and increases disabilities, causing discomfort, pain, physical limitations and difficulties in activities of daily living.[19]

The type of exudate and the odor were related to the "well-being" domain, with statistical significance. These variables are among the worst characteristics associated with the chronic wound, and they can cause embarrassment and lead patients to exclude themselves from society in an attempt to avoid moments of repression, generating feelings of solitude and depression.[20]

Wound exudate is an excess of leaky fluid that usually builds up in the injured tissue. Exudation is a serious problem due to the presence of proteases that destroy the tissue and directly contribute to the increase of the wound size.[21] Some dressings prevent leakage, are comfortable, have high absorbency and a good use time; however, there is not enough evidence on the best indications and these are usually high cost dressings.[19]

The foul odor associated with some wounds can be attributed to a combination of factors such as necrotic tissues and bacteria. Characterized as an extremely stressful factor, research reports that this characteristic causes problems such as poor diet, gagging, vomiting and weight loss, which affects social behavior due to feelings of marginalization, consequently influencing well-being.[22,23]

There is evidence on the efficacy of interventions to reduce wound odor by using products that absorb or trap the volatile organic compounds that produce fetid wound odors or reduce fetid odors by lowering bacterial bioburden in the wound.[24]

Pain intensity was associated with the three domains: "well-being", "physical symptoms and daily living" and "social life". Other studies have also highlighted pain as a negative factor for QoL, since it causes discomfort and limits daily and social life activities.[25-27] In addition to impairing wound healing, pain causes decrease in quality of life, difficulty in activities of daily living, changes in lifestyle, frustration and immobility, which may result in social isolation.[6]

Thus, it is essential to conduct other studies that investigate the etiological factor of pain in patients with wounds and evaluate the care measures and the methods adopted, since the technological innovations developed to minimize this aggravation are increasing.[15] It is necessary to use pharmacological and non-pharmacological strategies that allow proper wound management by providing healing, pain relief and, consequently, improvement in QoL.[13]

Care for people with wounds requires special attention from health professionals. The role of the nurse stomatherapist should be highlighted, since this professional has the knowledge, skills and managerial competencies to care for any type of injury, is an essential part of the health team, and should assume the functions of this area, providing better results in the individual and collective scope and, consequently, in QoL.[28,29]

It is interesting to emphasize that health professionals should focus on the health of people with chronic wounds, identifying changes in well-being and quality of life and offering the necessary support to help them cope with the difficulties in their recovery.[30] In addition, it is essential to qualify professionals to provide care for patients with wounds, since assessing QoL is as important as wound care,

and clinical factors that compromise QoL can be modified with effective treatment.

As limitations of the study, the lack of an updated database of patients with wounds followed up in basic health care, as well as the lack of knowledge about the cases of people with wounds, may have influenced the number of study participants. The study developed here can improve the care of the patient with chronic wounds, optimizing the aspects associated with the improvement of QoL and stimulating the development of new studies in the area, considering that the study design did not allow establishing relations of cause and effect.

Conclusion

The results showed that chronic wounds compromised quality of life and the "well-being" domain was the most affected, especially when associated with clinical factors. Among the clinical conditions associated with worse QoL, duration of wound, type of wound, wound depth, type of exudate, odor and pain were highlighted. Given the above, it is important to have differentiated strategies to reduce the impact caused by the clinical factors of the wounds, since these are aspects that can be attenuated or avoided by the health professionals through the evaluation of the wound and the choice of the appropriate treatment.

Collaborations

Oliveira AC, Rocha DM, Bezerra SMG, Andrade EMLR, Santos AMR, Nogueira LT declare that they have contributed in the design of the project, analysis and interpretation of data, critical review of intellectual content and approval of the final version to be published.

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