



Effect of telerehabilitation in patients with orofacial pain during the COVID-19 pandemic

Efeito da telerreabilitação em pacientes com dor orofacial durante a pandemia de COVID-19

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INTRODUCTION

The COVID-19 pandemic has impacted public and private health services, replacing face-to-face care with tele-rehabilitation as an alternative to assisting the population. Despite studies on the influence of self-efficacy on adherence, implementation of the therapeutic plan and health promotion behaviors, there is little national scientific data on the impact of telerehabilitation on self-efficacy and health care for patients with orofacial pain. Thus, the objective of this study was to evaluate the effect of telerehabilitation on self-efficacy and health care of patients with orofacial pain during the COVID-19 pandemic^{1,2}.

METHODOLOGY

The study was approved by the Research Ethics Committee of the State University of Bahia (UNEB) (CAAE No. 56069122.3.0000.0057). An open clinical trial was carried out, whose population consisted of nine individuals with complaints of orofacial pain and aged over 18 years treated in a university extension project. Sociodemographic and clinical variables related to pain intensity, self-efficacy belief and mandibular range of motion were studied. The appointments were recorded using the Microsoft Teams platform and occurred over a period of six weeks, in which anamnesis, inspection and physical examination were performed and then the therapeutic program was designed with manual therapy, warm or cold compresses, active and passive kinesiotherapy, pain and health education (Figures 1,2,3 and 4).



RESULTS AND DISCUSSION

The majority of patients were female. Table 1). After performing the physiotherapeutic interventions, the patients showed a significant improvement in the intensity of pain in the masticatory muscles and TMJ ($p < 0.05$), as well as a clinically important decrease ($> 30\%$) (Table 2). The correlation presented between the score of the Functionality and Pain Control domains of the Self-Efficacy Belief Scale with the pain intensity in the left and right Lateral Pterygoid and left Masseter muscles before the intervention were inversely proportional strong and statistically significant ($p < 0.05$) (Table 3).

Corroborating the association of these therapies and the results obtained, Serna et al. when conducting a randomized clinical trial in 2020 found that the application of cervico-mandibular manual therapies in combination with exercises and education led to better results when compared to the application of exercises or education alone³. Another randomized clinical trial conducted with individuals who had TMD complaints showed that the use of muscle relaxation and myofascial release methods reduced tension and pain intensity in the temporal and masseter muscles.⁴

The highest score in the domain of self-efficacy for functionality was corroborated by a cross-sectional observational study with the participation of patients with TMD that in the domains of self-efficacy for pain control and self-efficacy for functionality the score of the individuals was considered median⁵. It was also described in a descriptive study that the highest score obtained among the domains of the Self-Efficacy Scale was in the Self-Efficacy and Functionality item, in which people with chronic pain had greater beliefs to be able to perform daily activities even in the presence of pain⁶.

Tabela 1. Características sociodemográficas dos pacientes atendidos no projeto de extensão "Programa de Assistência a pessoas com Disfunções Temporomandibulares, Dores Orofaciais e Cefaleias" da Universidade do Estado da Bahia, Salvador, Bahia, 2022.

Características	n	%
Sexo		
Feminino	9	100,0
Masculino	-	-
Idade		
De 20 a 30	7	77,7
De 31 a 50	2	22,3
Cor de pele		
Preta	4	44,5
Branca	3	33,3
Parda	1	11,1
Amarela	1	11,1
Ocupação		
Estudante	5	55,6
Professora	3	33,3
Nutricionista	1	11,1



Tabela 2. Características clínicas pré e pós-tratamento fisioterapêutico em pacientes atendidos no projeto de extensão "Programa de Assistência a pessoas com Disfunções Temporomandibulares, Dores Orofaciais e Cefálicas" da Universidade do Estado da Bahia, Salvador, Bahia, 2022.

Características Clínicas	Pré-intervenção	Pós-intervenção	Valor de p
	Média - Desvio padrão	Média - Desvio padrão	
Intensidade da dor			
Masseter direito	4 ± 3	1 ± 1	0,010
Masseter esquerdo	4 ± 3	1 ± 1	0,006
Temporal direito	7 ± 2	1 ± 1	0,000
Temporal esquerdo	5 ± 2	1 ± 2	0,001
Pterigóideo lateral direito	4 ± 3	2 ± 2	0,038
Pterigóideo lateral esquerdo	5 ± 2	2 ± 2	0,003
ATM	4 ± 2	1 ± 2	0,005
Amplitude de movimento	37 ± 4	43 ± 4	0,004
Crença de autoeficácia	532 ± 60	602 ± 31	0,013
Controle da dor	391 ± 44	438 ± 37	-
Funcionalidade	820 ± 110	853 ± 51	-
Lidar com outros sintomas	388 ± 88	518 ± 34	0,005

ATM: articulação temporomandibular; p: Test t pareado.

Tabela 3. Correlação entre a crença de autoeficácia e a intensidade da dor nos músculos pterigóideo lateral e masseter esquerdo pré-intervenção em pacientes atendidos no projeto de extensão "Programa de Assistência a pessoas com Disfunções Temporomandibulares, Dores Orofaciais e Cefálicas" da Universidade do Estado da Bahia, Salvador, Bahia, 2022.

Intensidade da dor pré-intervenção	Crença de autoeficácia pré-intervenção - (Valor de p)		
	Controle da dor	Funcionalidade	Lidar com outros sintomas
Masseter Esquerdo	-0,661 (0,053)	+0,159 (0,684)	+0,192 (0,620)
Pterigóideo Lateral Direito	+0,481 (0,190)	-0,879 (0,002)	-0,842 (0,04)
Pterigóideo Lateral Esquerdo	+0,692 (0,039)	-0,788 (0,012)	-0,695 (0,038)

ATM: articulação temporomandibular; p: Test t pareado.

CONCLUSION/FINAL CONSIDERATIONS

When natural phenomena affect inhabited areas causing them human and material losses of great proportion with difficulty of management, the situation is considered a disaster (TOMINAGA et al, 2015). Among the major negative impacts caused by cyclones in Mozambique, human lives including housing are the most affected. Despite some difficulties in the Mozambican meteorological system, and the vulnerability of the population living in rural areas, several actions are being taken by government entities as well as



researchers to reduce the disaster situation by acting on prevention, capitalizing on the disaster information system for the prevention of disasters including cyclones in Mozambique.

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