

# Headache in chronic pain patients interviewed by the Pain Unit, Central Hospital of Maputo, Mozambique\*

*Cefaleia em pacientes com dor crônica entrevistados na Unidade de Dor do Hospital Central de Maputo, Moçambique*

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## SUMMARY

**BACKGROUND AND OBJECTIVES:** Chronic pain approach in Maputo, capital of Mozambique, has gained space in recent years with the opening of the Central Hospital's Pain Unit. There are few epidemiological studies on chronic pain in Africa. In Mozambique, no previous study has been published. This study aimed at describing and analyzing headache features in chronic pain patients interviewed in the above-mentioned hospital.

**METHOD:** Chronic pain patients according to International Association for the Study of Pain (IASP) criteria, aged over 18 and fluent in Portuguese were included. Demographics, chronic pain features and presence of headache were investigated.

**RESULTS:** Participated in this study 118 patients. From these, 79 (66.9%) were females and 39 (33.1%) were males, with mean age of 52.4 years. Headache was frequent among such patients (53/44.9%), although this was not necessarily their primary pain. Headache was the major second pain site. Migraine was diagnosed in 14 (11.9%) patients, tension headache in 28 (23.8%) and cervicogenic headache in 9 (7.6%).

**CONCLUSION:** Data show that the prevalence of headache among chronic pain patients of the Pain Unit of the Central Hospital of Maputo is similar to

that described for general population by other studies.

**Keywords:** Africa, Chronic pain, Headache.

## RESUMO

**JUSTIFICATIVA E OBJETIVOS:** Nos últimos anos, a abordagem da dor crônica em Maputo, capital de Moçambique, ganhou espaço, com a construção da Unidade de Dor do Hospital Central. No continente africano existem poucos estudos epidemiológicos sobre dor crônica. Em Moçambique, nenhum estudo prévio foi publicado. O objetivo deste estudo foi descrever e analisar as características da cefaleia em pacientes com dor crônica entrevistados no referido hospital.

**MÉTODO:** Participantes com dor crônica de acordo com critérios da International Association for the Study of Pain (IASP), maiores de 18 anos, fluentes em português foram incluídos. Dados demográficos, características da dor crônica e presença de cefaleia foram investigados.

**RESULTADOS:** Cento e dezoito pacientes foram avaliados. Destes, 79 (66,9%) eram mulheres e 39 (33,1%) eram homens, com média de idade de 52,4 anos. Presença de cefaleia foi frequente entre estes pacientes (53/ 44,9%) embora esta não fosse necessariamente sua dor principal. Cefaleia foi o principal segundo sítio de dor. Migrânea foi diagnóstico em 14 (11,9%) pacientes, cefaleia tensional em 28 (23,8%), cefaleia cervicogenica em 9 (7,6%).

**CONCLUSÃO:** Os dados revelam que nos pacientes com dor crônica na Unidade de Dor do Hospital Central de Maputo há prevalência de cefaleias semelhante àquela descrita na população em geral por outros estudos.

**Descritores:** África, Cefaleias, Dor crônica.

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## INTRODUCTION

Mozambique is going through dramatic changes for the last 50 years. Poor country and assaulted by colonial exploration, it is striving for social, politic and economic stabilization since its independence in 1975<sup>1</sup>. Chronic pain approach in Maputo, capital of Mozambique, has gained space in recent years with the opening of the Pain Unit of the Central Hospital of Maputo, with technical and financial support of the French non-governmental organization Douleur Sans Frontières. This unit has a multidisciplinary team with anesthesiologists, clinicians, psychologists, social workers, nurses and independent administration, assisting inpatients and outpatients suffering from chronic oncologic and non- oncologic pain<sup>3,4</sup>.

According to internal statistical data from 2009, most patients seen by this unit had musculoskeletal pain, including low back pain (approximately 39%), followed by cancer and human immunodeficiency virus (HIV) pain (approximately 27%)<sup>4</sup>. The access to drug treatment and invasive procedures is increasingly gaining space. On the other hand, a large part of the population is still strongly linked to cultural roots and looks for local witchdoctors to relieve their physical and emotional pain. These symbolic sources are still the basis for the beliefs of the population, however a more organized and efficient pain management is increasingly being developed in the country.

Headache epidemiology among Africans has not been totally described. Most studies show that Afro-Americans have lower tolerance to painful stimulations as compared to Caucasians, including pain by cold and hot stimulations and ischemia<sup>5,6</sup>. A different study has shown lower prevalence of migraine among Afro-Americans, as compared to Caucasians<sup>7</sup>. So, this study aimed at describing headache characteristics of chronic pain patients seen by this unit, in a partnership between the School of Medicine of Ribeirão Preto – University of São Paulo and the Pain Unit of the Central Hospital of Maputo.

## METHOD

This study was carried out in the Pain Unit of the Central Hospital of Maputo, Mozambique. This hospital serves the Maputo population (1099102 people) and neighbor areas. There are two Pain Units in Mozambique, one in Maputo and the other in Beira. The study was carried out from October 2010 to July 2011. Inclusion criteria were patients with chronic

pain according to International Association for the Study of Pain (IASP) criteria, aged above 18 years and fluent in Portuguese.

Participants have signed the Free and Informed Consent Term (FICT) and were interviewed by a neurologist. After demographic data collection, chronic pain characteristics and presence of headache were investigated.

Data were processed by the SPSS program of the Statistics Department, School of Medicine of Ribeirão Preto – University of São Paulo.

This study was approved by the Bioethics for Health Committee, Mozambique, under process 247 CNBS/2010.

## RESULTS

We have interviewed 123 people with pain. Patients meeting the criteria were included. Five people were excluded: one did not speak Portuguese, three did not meet chronic pain criteria and one refused to participate. At the end, 118 patients were evaluated. From them, 79 (66.9%) were females and 39 (33.1%) were males, with mean age of 52.4 years. One hundred and seven patients (90.7%) were Africans and 11 (9.3%) were non-Africans. As to education, 36 (30.5%) had up to four years of education and 82 (69.5%) had more than 4 years of education. Those in stable union/married were 79 (66.9%) and 39 (30.1%) lived alone (single, widows and divorced). Most frequent occupations were domestic (36 – 30.5%), autonomous (32 – 27.1%) and public servants (19 – 16.1%).

Most frequent pain topography was lumbar (including mechanical low back pain and lumbosciatic pain by radiculopathy) (43 – 36.4%) patients, followed by lower limbs (15 – 12.7%) and pelvis (11 – 9.3%). Among pain diagnoses, 40 patients (33.9%) had musculoskeletal pain with prevalence of low back pain, 40 patients (33.9%) had neuropathic pain, 17 patients (14.4%) had oncologic pain, 8 patients (6.8%) had HIV-related pain and 13 patients (11%) had other types of pain.

Headache was frequent among such patients (53 – 44.9%) although it would not be necessarily their primary pain. In just one patient (0.8%) headache was the primary pain. A second pain site was found in 53 patients (44.9%), being headache the second primary pain site for 36 patients (30.5%). Headache was the

third primary pain site for 16 patients (13.5%). Migraine was diagnosed in 14 patients (11.9%), tension headache in 28 (23.8%), cervicogenic headache in 9 (7.6%) and other types (stabbing pain / autonomic pain) in 2 (1.7%) patients. Two patients (1.7%) have reported visual aura (Tables 1 to 3).

Table 1 – Pain diagnosis.

	Frequency	%
Osteomuscular	40	33.9
Neuropathic	40	33.9
Cancer	17	14.4
AIDS	8	6.8
Miofascial	6	5.1
Visceral	6	5.1
Headache	1	0.8

AIDS = acquired immunodeficiency syndrome.

Table 2 – Headache in chronic pain patients.

	Frequency	%
1 <sup>st</sup> pain site	1	0.8
2 <sup>nd</sup> pain site	36	30.5
3 <sup>rd</sup> pain site	16	13.5

Table 3 – Headache characteristics.

		Frequency	%	Total
Type	Migraine	14	11.9	53
	Tension	28	23.8	
	Cervicogenic	9	7.6	
	Other	2	1.7	
Site	Bilateral	35	29.7	53
	Unilateral	9	7.6	
	Cervical	9	7.6	
Aura	Visual	2	1.7	
Photo		15	12.7	
Phono		13	11.0	
Nausea		12	10.2	

## DISCUSSION

There are few epidemiologic studies on chronic pain in the African continent. In Mozambique, no previous study has been published.

Epidemiologic data of this study confirm data of previous studies on chronic pain patients, with mean age from 45 to 65 years. Mean age in our population was 52.4 years.

As to pain location, most international studies have found lumbar pain as major topography<sup>8-10</sup>. Another important data is the presence of a second pain site in the same patient because most studies report that respondents had pain in more than one site<sup>8-10</sup>. Headache was the major second pain site in our study.

Headache brings distress, incapacity and losses in quality of life, being one of the most important chronic pain causes in the population<sup>11,12</sup>. Its epidemiology in Africa has not been totally described. The prevalence of headache in general adult population is 47%, being 10% for migraine, 38% for tension headache and 3% for chronic headaches lasting more than 15 days. Social costs related to headache in general, including medical leaves and expenditures with treatment are high. Among chronic pain patients in our study, headache was a frequent complaint, but not the primary one. It seems to be a prevalence similar to that described for general population in other studies, with prevalence of 44.9%, with 11.9% of patients with migraine and 23.8% of patients with tension headache, although a previous study has described lower migraine prevalence among Afro-Americans as compared to Caucasian individuals<sup>7</sup>.

Chronic pain is a severe public health problem worldwide, generating physical incapacity and social, emotional and economic losses. The first step for a more effective problem approach is to recognize its prevalence and uniqueness in each region to establish management strategies, since pain has different characteristics for different cultures. The possibility of exchanging experiences to explain population and clinical aspects related to chronic pain may bring mutual benefits, especially for countries still marked by basic differences and major disparities in income distribution, such as Brazil and Mozambique.

## CONCLUSION

Data have shown that in chronic pain patients seen by the Pain Unit of the Central Hospital of Maputo there has been headache prevalence similar to that

described by other studies for general population, in addition to the presence of a second pain site in the same patient, although headache has been the second primary pain site in this study.

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