



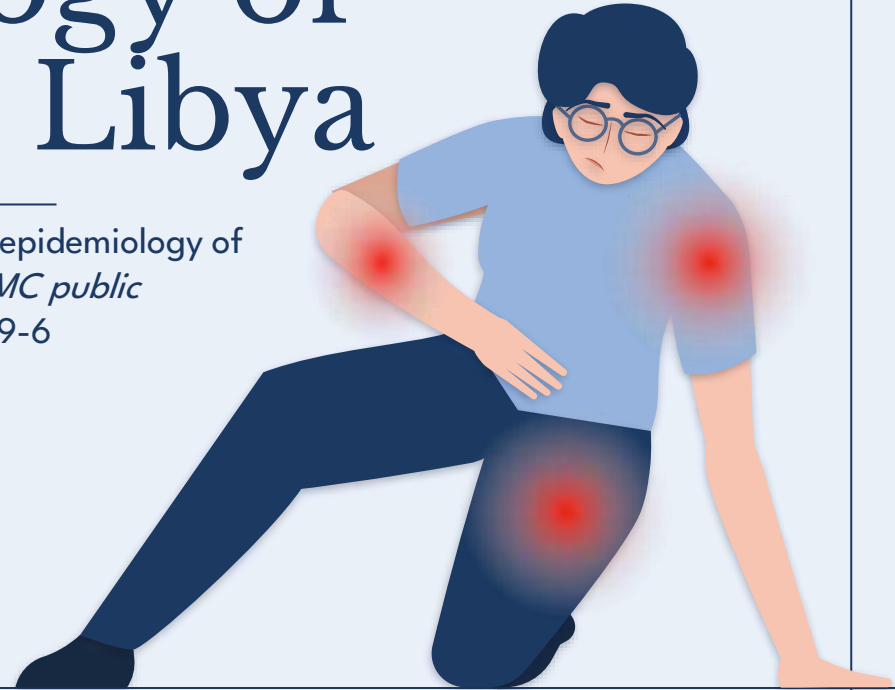
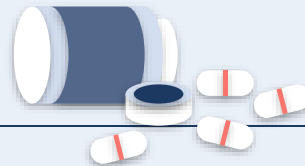
RESEARCH ARTICLE

# The epidemiology of chronic pain in Libya

Elzahaf, R. A., Johnson, M. I., & Tashani, O. A. (2016). The epidemiology of chronic pain in Libya: a cross-sectional telephone survey. *BMC public health*, 16(1), 776. <https://doi.org/10.1186/s12889-016-3349-6>

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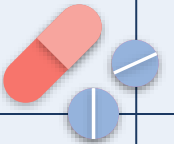
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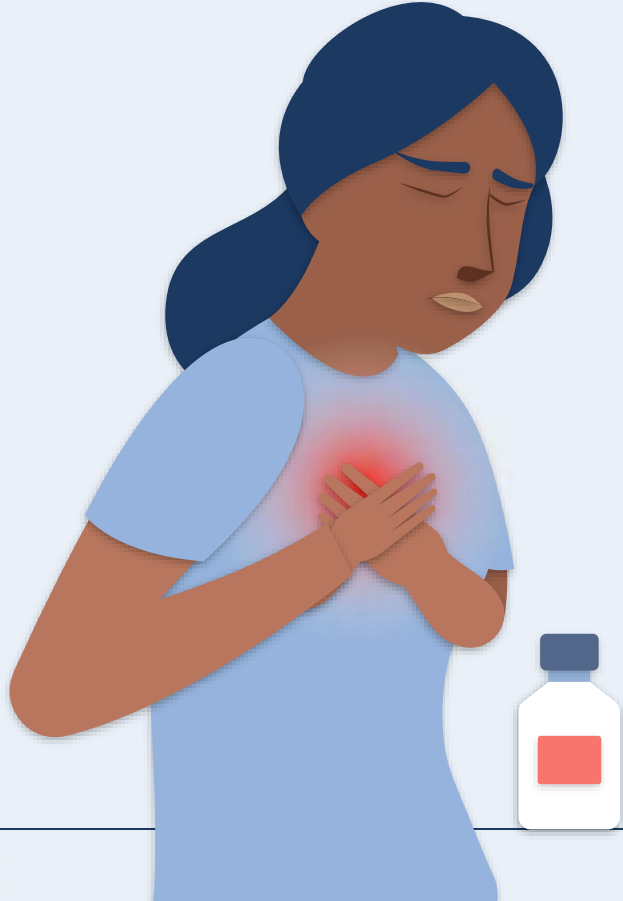
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# Introduction

Fatma Bugrein 3502





# Introduction

Chronic pain is a global public health concern due to its high prevalence, economic costs, and impact on quality of life. In the Middle East and North Africa (MENA), limited research exists on chronic pain epidemiology, despite indications of its high prevalence. Factors such as healthcare resources and disease burden contribute to variations in chronic pain within MENA countries. In Libya, chronic pain presents significant challenges, including limited opioid availability and absence of pain-related policies. Our study aims to explore chronic pain prevalence and characteristics, to inform targeted interventions and policy changes.



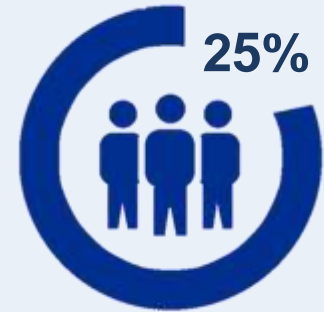


# Introduction

## Pilot Study in Libya:

- Arabic version of Structured Telephone Interviews Questionnaire on Chronic Pain used
- Estimated prevalence of chronic pain in Libya: 25%
- Approx. 50% of chronic pain cases were neuropathic in origin

*(Elzahaf RA, Tashani OA, Unsworth BA et al.2013).*



# Aim

- The aim of the present study was to estimate the prevalence of chronic pain in Libya with particular reference to neuropathic pain. The study was designed to evaluate the relationship between the chronic pain and socio-demographic factors; to describe the pain characteristics among people who suffer from chronic pain; and to gather information on etiology, diagnosis, severity, duration, impact on quality of life, treatments and attitudes about living with chronic pain.





# 02

## Methods

Naima Tarik 4302







# Methods

## 1. Sample population and size

The 2005 census revealed 97% of Libyans were Arab with 3% being , Italian, Egyptian, Pakistani, Turkish, Tunisian. Data was collected from capital cities with advanced telephone systems. They were:

- a) Tripoli, the nation's capital within the Tripolitania
- b) Benghazi, the capital of Cyrenaica
- c) Sabha, the capital of Fezzan

## 2. Data collection and processing

1.The survey involved household residents aged 18 and over who answered a telephone call.

2.Data was collected using computer-generated random numbers and a random digit dialing system. Respondents were asked if there was more than one adult in the house at the time of the call.



# Methods

## 3. Telephone interviews

The study involved conducting telephone interviews with potential participants from June 2010 to September 2010.

- That was conducted in Arabic by Libyan nationals using Libyan dialects and scripts.
- The first point of contact was the principal investigator and two academic staff members from the Faculty of Medical Technology in Derna.

## 4. Screening

The study utilized an Arabic translation of the Structured Telephone Interviews Questionnaire on Chronic Pain to assess its prevalence, cause, and treatments among respondents with pain  $\geq 3$  months.



# Methods



## 5. In-depth interview

The principal investigator conducted in-depth interviews using the Arabic version of the Structured Telephone Interviews on Chronic Pain to collect information about pain, treatments, and attitudes.

## 6. Data analysis and quality control

The study utilized SPSS data analysis, focusing on (demographics, pain location, cause, duration, intensity, and treatment methods) Univariate and multivariate analyses were performed





# 03

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## Results

Abdalaziz Hussam 4162





# Results

Out of 2500 attempted telephone calls, 1226 were unsuccessful due to various reasons such as invalid numbers, no answer, or engaged tones. Of the 1274 answered calls, 1212 individuals consented to participate in the survey, resulting in a response rate of 95.1%. The mean age of participants was 37.8 years, with a higher percentage of females participating.

## 1. **Multivariate analysis**

In multivariate analysis, the crude odds ratios indicated that sex and age were the most significant factors associated with chronic pain. Additionally, being married, retired, or unemployed also increased the odds of chronic pain. However, when other factors were considered in logistic regression and mutually adjusted, being married or retired no longer posed a significant risk ( $P = 0.173$ ,  $P = 0.603$ ).



# Results

## 2. Body location of pain

Among respondents with chronic pain ( $n = 236$ ), 91.5% reported pain in one body site, while 6.8% reported pain in two sites. The most common locations of pain, based on responses to the question "Where is your pain located?" were the back (24.6%) and the knee (13.1%). Additionally, unspecified pain and pain in the lower back and upper back were reported. There was no significant difference in the number of pain sites across age categories.

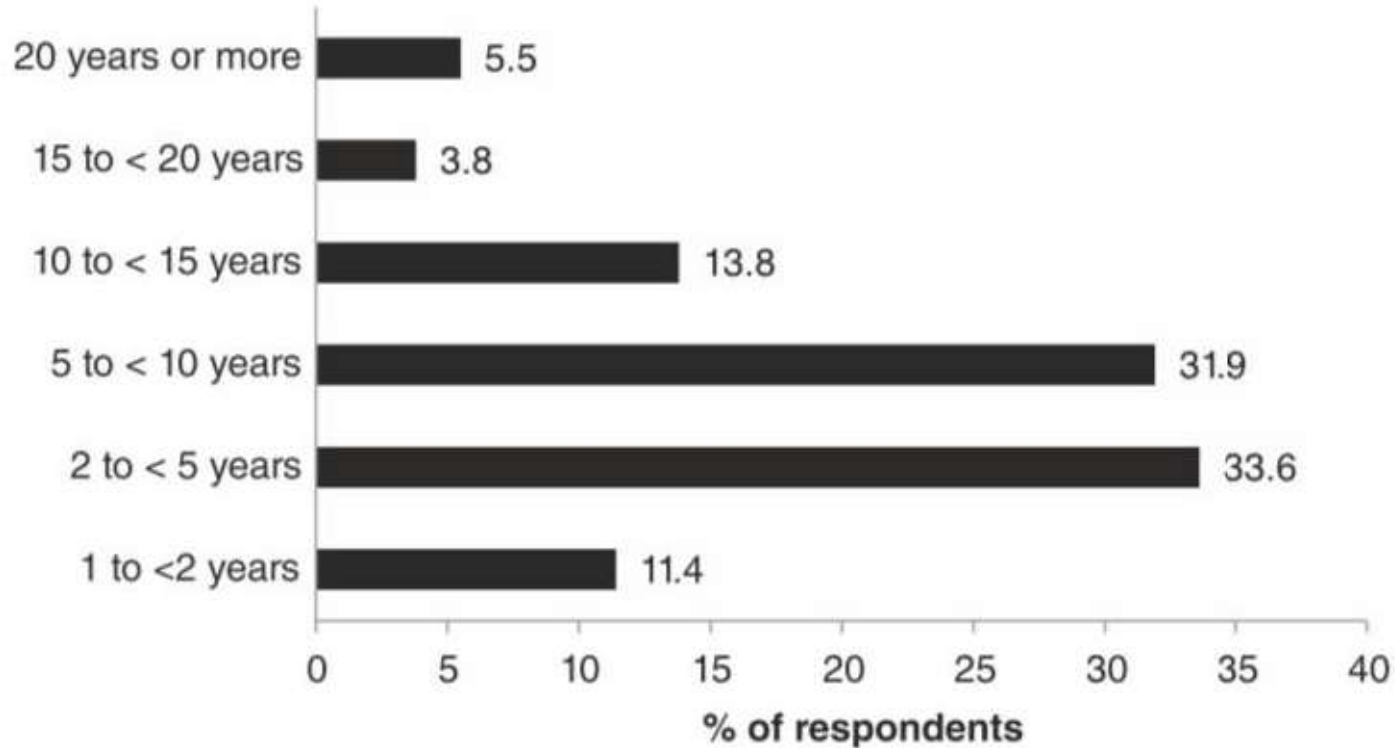




# Results



# Results



Variations in duration of chronic pain of respondents. Data collected from answers to question 6 “For how long have you suffered from pain due to your illness or medical condition?”





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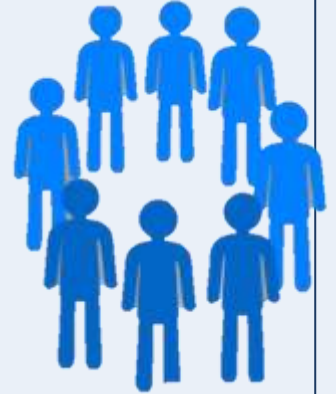
# Discussion

Samar Moein 4313



# Discussion

- It was found that the prevalence chronic pain in adult general population was 19.6 %.
- The Libyan estimate for chronic pain was lower than in the Middle East and North Africa and lower than estimates of individual countries in the region e.g: Lebanon and Turkey.
- The Libyan estimate was also comparable to the overall prevalence of chronic pain in Europe and Canada which gathered data using the same Structured Telephone Interviews Questionnaire on Chronic Pain.
- The main causes of chronic pain in Libya were back pain, rheumatoid arthritis and headaches.
- It was found that in Libya women were more likely to have chronic pain than men, the demographic factors which were associated with an increased likelihood of having chronic pain in Libya were being a woman, of advanced age and unemployed is probably not a strong risk factor for chronic pain but she be a part of it, and higher chronic pain in individuals older than 60.





# Discussion

- A large proportion of Libyan adults with chronic pain reported taking prescription medicine to treat their pain with non-steroidal anti-inflammatory drugs being the most common class of analgesic medication used.
- A minority of respondents reported that they had tried to treat their pain with olive oil , cupping (Hjama),and local herbal concoctions.

## Limitations

- The study on chronic pain in the general population has limitations, including the risk of recall bias and the potential for poor accuracy in specific diagnoses like "disc problems.
- The questionnaire was designed for European countries and translated and culturally adapted for Libya, but some questions could have been misunderstood by Libyan respondents.
- Future research should focus on conducting a post-conflict follow-up study to provide valuable information about chronic pain prevalence in conflict-affected regions.



# 05

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# Conclusion

Ekhlass Younis 4391



# Conclusion

The prevalence of **chronic pain**  $\geq 3$  months in the general adult population of 3 major cities in Libya was estimated to be 19.6 % (95 % CI = 14.6 % to 24.6 %) with the prevalence of **neuropathic pain** being 3.9 %, (95 % CI: 2.8 to 5.0 %). This suggests that chronic pain is a public health problem in Libya with a prevalence comparable to Europe.

## ❖ Risk factor

1. Were being a woman
2. Advanced age
3. Unemployment



# Conclusion

## ❖ Improvement

There is a need for improved pain **management** policies in Libya to ensure that patients with chronic pain receive effective **treatment**.





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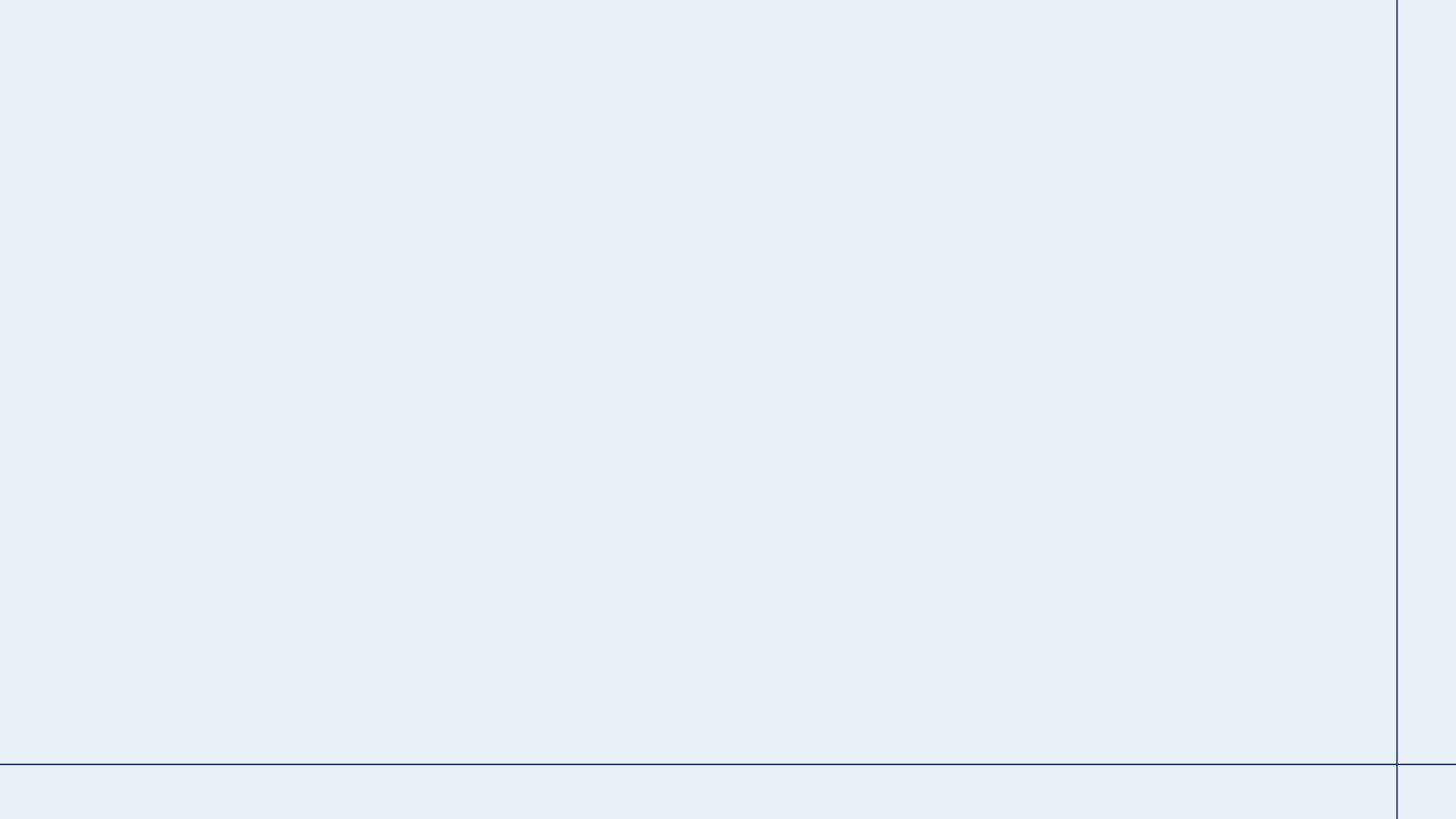
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thank  
you for  
listening