

# INPLASY

## Prevalence of Low Back Pain in Saudi Arabia: A Systematic Review and Meta-analysis

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### ADMINISTRATIVE INFORMATION

**Support** - None.

**Review Stage at time of this submission** - Piloting of the study selection process.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY2024100124

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 28 October 2024 and was last updated on 16 January 2025.

### INTRODUCTION

**Review question / Objective** What is the prevalence (current, week, year, lifetime) of low back pain among people living in Saudi Arabia?

**Condition being studied** Low back pain.

### METHODS

**Participant or population** People with low back pain living in Saudi Arabia, regardless of age and gender.

**Intervention** No intervention.

**Comparator** No comparator.

**Study designs to be included** Cross-sectional prevalence studies.

**Eligibility criteria** Cross-sectional full-text studies, conducted in Saudi Arabia, written in English, and

investigating the prevalence of low back pain and/or musculoskeletal pain including low back pain among people living in Saudi Arabia.

**Information sources** The following databases were searched for relevance studies: MEDLINE Ovid, Web of Science, CINAHL, Arab World Research Source, Global Index Medicus, and ScienceDirect. The references of the retrieved articles were also searched for additional potential studies. Search included studies written in English only.

**Main outcome(s)** Prevalence of low back pain in Saudi Arabia.

**Additional outcome(s)** Prevalence rates based on gender, age, population, data collection period, and location in SA.

**Data management** Data extraction form will be used to extract the characteristics of the eligible studies, including study design, method, location,

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setting, sample description, inclusion and exclusion criteria, outcome measure, and prevalence rates.

**Quality assessment / Risk of bias analysis** Risk of bias will be assessed using the risk-of-bias tool developed by Hoy et al (2012).

**Strategy of data synthesis** Separate meta-analyses will be conducted, and forest plots will be generated to obtain pooled prevalence rates and for each prevalence period and subgroups using the Comprehensive Meta-Analysis version 4.

**Subgroup analysis** If possible, the prevalence and risk factors will be analyzed according to age, gender and other population categories individually.

**Sensitivity analysis** Sensitivity analyses will include comparing the prevalence estimates based on the quality of the studies, calculating the variation in the overall event rate by “one-study-removed” approach, and by computing the relative weight of each study in the overall event rate.

**Language restriction** English studies only.

**Country(ies) involved** Saudi Arabia.

**Keywords** low back pain; prevalence; Saudi Arabia.

**Dissemination plans** The results of this review will be published in a peer-reviewed journal.

#### **Contributions of each author**

Author 1 - Hamad Al Amer - Performing the literature search, data extraction, data analyses, and writing and revising the manuscript.

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