

# Lateral Epicondylitis Prevalence and Functional Consequences of the Condition in Occupational and Clinical Populations: Systematic Review of Observational Studies

KAUR LOVEPREET<sup>1</sup>, TEGH SUKHVINDER SINGH<sup>2</sup>

## ABSTRACT

**Introduction:** Lateral epicondylitis is a degenerative tendinopathy of the common wrist extensor origin that leads to lateral elbow pain, reduced grip strength, and difficulty with activities of daily living and work. Although numerous epidemiological and clinical studies have been published, the overall prevalence in working populations and its specific impact on hand function remain fragmented across individual observational reports.

**Aim:** To systematically review observational studies reporting the prevalence of lateral epicondylitis and its effects on hand and upper-limb function in community and occupational populations.

**Materials and Methods:** A systematic search of published observational studies was performed in major databases, supplemented by manual searching of reference lists. Eligible studies included cross-sectional, cohort, and case-control designs that reported point or period prevalence of clinically diagnosed lateral epicondylitis and at least one quantitative measure of hand function (e.g., grip strength, wrist extensor strength, or patient-reported functional scales). Data on population characteristics, diagnostic criteria, functional outcomes, and key risk factors were extracted, and findings were synthesised narratively. Prevalence and factors

associated with lateral epicondylitis among hospital healthcare workers were assessed.

**Results:** Across working and general adult populations, the reported prevalence of lateral epicondylitis ranged approximately from 1% to over 10%, with higher values in physically demanding or repetitive upper-limb occupations such as healthcare workers, agricultural labourers, and food-service workers. Affected individuals showed consistently lower grip and wrist-extension strength on the symptomatic side and greater self-reported pain and disability on instruments such as the patient-rated tennis elbow evaluation. Age, smoking, dominant-side involvement, manual labour, and concurrent shoulder pathology were frequently identified as associated factors.

**Conclusion:** Lateral epicondylitis is a frequent work-related disorder that substantially compromises hand function and work capacity. Standardised diagnostic criteria and core functional outcome sets are needed to enable pooling of data and to inform preventive and rehabilitative strategies.

**Keywords:** Elbow tendinopathy, Functional disability, Grip strength, Hand function, Occupational health, Tennis elbow, Work-related musculoskeletal disorders.

### PARTICULARS OF CONTRIBUTORS:

1. MPT (Ortho) Student, Department of Physiotherapy, University Institute of Allied Health Science (UIAHS), Chandigarh University, Mohali, Punjab, India.
2. Assistant Professor, Department of Physiotherapy, University Institute of Allied Health Science (UIAHS), Chandigarh University, Mohali, Punjab, India.

### NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Lovepreet Kaur,

MPT (Ortho) Student, Department of Physiotherapy, University Institute of Allied Health Science (UIAHS), Chandigarh University, Mohali-140413, Punjab, India.  
Email: kaffylubana99@gmail.com