Cyprus University of Technology
Faculty of Health Sciences

Bachelor's Thesis

Contemporary Communication Rehabilitation After Total Laryngectomy

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The approval of the thesis by the Department of Rehabilitation Sciences does not imply necessarily the approval by the Department of the views of the writer.

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ABSTRACT

Background: Total laryngectomy (TL) is the surgical removal of the larynx, resulting in the loss of natural voice. Although several evidenced-based communication rehabilitation methods exist, their availability and use vary across countries according to income level.

Aims: This review aims to (1) identify and map the existing communication rehabilitation methods following TL, and (2) compare these rehabilitation approaches according to country income level.

Methods: A systematic review methodology was conducted by three independent researchers based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. This systematic review was registered on the PROSPERO website. The search strategy involved using MESH Terms 'laryngectomy' AND 'communication' AND 'rehabilitation' across 7 databases as follows: CINAHL, Embase (via Ovid), MEDLINE, PsycInfo, PubMed, Scopus, and Web of Science. The review was conducted using the Covidence software.

Results: Out of 3465 titles identified, 63 studies met the criteria: 51 studies (81%) were from high-income countries, eight (13%) were from upper–middle-income countries, and four (6%) were from low–middle-income countries. No studies were published in low-income countries. Tracheoesophageal puncture (TEP), esophageal speech (ES) and electrolarynx (EL) are the most commonly used methods.

Conclusion: Communication rehabilitation approaches following TL vary according to country income level. No studies reporting rehabilitation methods are available from low-income countries, while limited evidence is available from low- and upper-middle-income countries. Tracheoesophageal puncture (TEP) is the most commonly reported method across all income level countries, whereas esophageal speech (ES) and electrolarynx (EL), varies across countries.

Keywords: total laryngectomy, communication rehabilitation methods, tracheoesophageal puncture, esophageal speech, electrolarynx, country income level