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# Current situation and accessibility of somatoprosthesis services worldwide

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Román-Galeano, NM; Aguilar-Machado, DS; Constante-Amagua, MV.

**Corresponding author:**
Daniela Aguilar

dani20saralue@hotmail.com

**Author Affiliation:**
Universidad Internacional del Ecuador.

**ADMINISTRATIVE INFORMATION**

**Support -** Not applicable.

**Review Stage at time of this submission -** The review has not yet started.

**Conflicts of interest -** None declared.

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**Amendments -** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 16 April 2026 and was last updated on 16 April 2026.

## INTRODUCTION

**Review question / Objective** P Maxillofacial prosthetic services and providers C Availability, accessibility, capacity and geographic distribution of maxillofacial prosthetic care C Global healthsystems.

**Background** Over time, a certain transformation has been evident regarding maxillofacial prostheses, which have become an efficient alternative for replacing extraoral and intraoral structures lost due to congenital defects, diseases, or trauma.
It is important to note that worldwide, certain services exist that offer procedures such as surgeries and maxillofacial prosthesis design in associations, institutes, and hospitals, providing assistance to individuals with maxillofacial deformities who wish to improve their quality of life.
The lack of access to reconstructive treatments, the shortage of specialized professionals, and the absence of centers equipped to address this need have become a global problem. Furthermore, the high cost of treatments and limited public health systems exacerbate the inequity in access to these services.
The insufficient availability of services for the production of maxillofacial prostheses has a significant negative impact on the right to comprehensive care, thus limiting the patient's quality of life and physical rehabilitation.

**Rationale** Oral and Maxillofacial Prosthetics (OMP), also known as anaplastology or somatoprosthetics, is a branch of dentistry focused on the functional and aesthetic restoration and rehabilitation of oral and facial areas with tissue loss. Through the use of specialized prostheses and devices, it aims to restore masticatory and speech functions, as well as facial appearance, thus contributing to the patient's well-being, self-esteem, and quality of life.
Regarding the availability of maxillofacial prostheses, evidence shows that the highest concentration of these units is found in developed countries with more robust healthcare systems.

In certain parts of the world, the demand for facial rehabilitation services is related to high rates of cancer, especially of the head and neck.
Similarly, this demand can be contextualized within the context of armed conflicts, which often result in the loss of facial structures or limbs.
Globally, numerous institutions, associations, and hospitals offer specialized services that perform surgeries and design maxillofacial prostheses, providing a valuable opportunity for individuals with deformities in this area and ensuring a better quality of life.
Given this reality, this research aims to analyze and describe the availability of maxillofacial prosthesis services in healthcare facilities worldwide, considering aspects such as human resources, associations, clinics or offices that allow these procedures to be carried out, and their geographical distribution. The goal is to improve coverage, quality, and equity in the care of patients who need facial rehabilitation due to a congenital deformity, disease, or trauma.

## METHODS

**Strategy of data synthesis** The database chosen for the study is: Pubmed
((((((((((((Health Services Accessibility[MeSH Terms]) OR (Healthcare Disparities[MeSH Terms])) OR (Health Equity[MeSH Terms])) OR (Health Services Needs and Demand[MeSH Terms])) OR (access[Title/Abstract])) OR (accessibility[Title/Abstract])) OR (availability[Title/Abstract])) OR (coverage[Title/Abstract])) OR (unmet needs[Title/Abstract])) OR (inequity[Title/Abstract])) OR (barriers to care[Title/Abstract])) OR (health system capacity[Title/Abstract])) OR (((((((Health Services[MeSH Terms]) OR (Delivery of Health Care[MeSH Terms])) OR (prosthetic services[Title/Abstract])) OR (rehabilitation services[Title/Abstract])) OR (specialist care[Title/Abstract])) OR (service provision[Title/Abstract])) OR (service delivery[Title/Abstract])))) AND ((((((((MAXILLOFACIAL[Title/Abstract]) AND (Prosthodontics[MeSH Terms])) OR (Maxillofacial Prosthesis[MeSH Terms])) OR (maxillofacial prosthetics[Title/Abstract])) OR (Maxillofacial Prosthesis[Title/Abstract])) OR (facial prosthetics[Title/Abstract])) OR (craniofacial prosthetics[Title/Abstract])) OR (extraoral prosthesis[Title/Abstract])) OR (somatoprosthesis[Title/Abstract])).

**Eligibility criteria** Inclusion Criteria:
Year: No restrictions
Language: English, Spanish, and Portuguese
Access to full text
Population: Humans, no age restrictions
Type of studies: No restrictions
Quantitative
Qualitative
Mixed methods
Previous reviews
Studies addressing maxillofacial or facial prostheses (surgical, oncological, traumatic, congenital)
Studies analyzing at least one of the following dimensions:
Access to services
Availability of care
Professional training
Distribution of services
Health policies
Structural or social barriers

Exclusion Criteria:
Subjects that do not focus on maxillofacial prosthetics
Plastic and reconstructive surgery
Subjects that focus exclusively on:
Materials of maxillofacial prostheses
New technologies (3D printing, CAD/CAM)
Conventional oral rehabilitation
Dental prostheses
Dental implants
Restorative dentistry
Information not in the chosen language
Purely biomechanical studies
Studies of materials without a clinical-social context
Clinical cases without discussion of the healthcare system
Academic background
History of maxillofacial prostheses
Theses
Subjects that do not address any dimension of services, access, training, or context.

**Source of evidence screening and selection** The data collection process will follow the methodology proposed by Arksey and O'Malley (2005), structured in six fundamental stages: identification of the research question, search for relevant studies, study selection, data extraction, information synthesis, and consultation with researchers.
In the first stage, the research question and the PCC (Population, Concept, and Context) framework will be clearly defined. This framework will guide the search strategy and the inclusion and exclusion criteria.
In the second stage, a systematic search will be conducted in databases such as PubMed, using combinations of keywords and Boolean operators such as "anaplastology," "maxillofacial prosthesis,"

"accessibility," "South America," and their English equivalents.
The third stage will consist of selecting the studies through a peer review of titles, abstracts, and full texts, applying the previously defined criteria. A documented registration and exclusion process will be used, represented in a PRISMA-ScR diagram, to ensure transparency.
In the fourth stage, data extraction will be performed using a matrix or table designed in Microsoft Excel, which will include variables such as: author, year, country, study type, population, objectives, main findings, and identified barriers.
In the fifth stage, the data will be organized and synthesized in a narrative and descriptive manner, identifying patterns, knowledge gaps, and research opportunities related to the development and accessibility of anaplastology or maxillofacial prosthetics worldwide.
The sixth stage includes a search of websites of associations, faculties, and private practices that offer maxillofacial prosthetic services to obtain valuable information not found in the literature.

**Data management** The search results will be exported to a reference manager (Rayyan) to remove duplicates and organize the sources.
Articles will be reviewed first by title and abstract, and then by full text according to the eligibility criteria.
A data extraction spreadsheet in Excel will be used with variables such as first author, year, country, publication type, focus, participants, concept, context, and main findings.
The files will be stored in a secure digital folder on Google Drive.

**Reporting results / Analysis of the evidence** In recent decades, the development of maxillofacial prostheses has provided effective solutions for replacing intra- and extraoral structures lost due to congenital causes, disease, or trauma. Worldwide, various institutions and hospitals perform prosthetic surgeries and rehabilitations aimed at improving the quality of life for people with facial deformities. However, the factors that prevent these individuals from receiving rehabilitation include: a shortage of specialists, a lack of well-equipped centers, and high costs, which limit access to these treatments, creating inequality in care and hindering the patient's comprehensive rehabilitation.

**Presentation of the results** The data collection process will be carried out following the methodology proposed by Arksey and O'Malley (2005), structured in six fundamental stages: identification of the research question, search for relevant studies, selection of studies, data extraction, synthesis of information, and consultation with those exposed.

**Language restriction** English, Spanish and Portuguese.

**Country(ies) involved** Ecuador - Universidad Internacional del Ecuador.

**Other relevant information** Data will be collected from associations, private practices, and faculties that offer maxillofacial prosthesis services around the world.

**Keywords** Health Services Accessibility; Healthcare Disparities; Health Equity; Health Services Needs and Demand; access; accessibility; availability; coverage; unmet needs; inequality; barriers.

**Dissemination plans** Academic journal publication, oral presentation before an academic audience, and poster presentation.

**Contributions of each author**

Author 1 - Daniela Saralue Aguilar-Machado - Conceptualization; Data curation; Formal analysis; Investigation; Methodology; Project administration; Resources; Software; Validation; Visualization; Writing – original draft; Writing – review & editing.
Email: dani20saralue@hotmail.com
Author 2 - María Victoria Constante-Amagua - Conceptualization; Data curation; Formal analysis; Investigation; Methodology; Project administration; Resources; Software; Validation; Visualization; Writing – original draft; Writing – review & editing.
Email: constantevictoria2004@gmail.com
Author 3 - Náthaly Mercedes Román-Galeano - Conceptualization; Data curation; Formal analysis; Investigation; Methodology; Project administration; Resources; Software; Supervision; Validation; Visualization; Writing – original draft; Writing – review & editing.
Email: nathalyroman0001@gmail.com