# Barriers and Facilitators in Accessing Orthotic and Prosthetic Services: A Qualitative Systematic Review

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# **Introduction & Aim**

Access to rehabilitation services is crucial for preventing loss of functional abilities in high-risk groups, with orthotic and prosthetic services requiring effective communication and follow-up for optimal function(1). There are some barriers to accessing these services which can lead to various psychosocial issues, including mental health challenges and reduced motivation(2-3).

This systematic review investigates the obstacles, challenges, and enabling factors in accessing prosthetic and orthotic services to identify key barriers and solutions for better patient outcomes.

# Method

#### **Search Strategy**

Databases: followed the PRISMA 2021 guidelines; PubMed, Scopus, Web of Science, Google Scholar, Cochrane Library

Data Extraction & Quality
Assessment

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Framework: PICOS
Quality Assessment: CASP

## **Study Selection**

Included:

Qualitative/mixed-methods studies

**Screening:** Two independent reviewers, a third reviewer for conflicts

**Data Synthesis** 

Method: Thematic analysis Framework: WHO's 6-block framework

## Results

Countries: 8 low-income countries (e.g., Iran, South Africa, Germany, Cambodia, Kenya, Australia, East-South-Southeast Asia).

**Focus**: 80% on prosthetic services, 20% on orthotic and prosthetic services.

Recruitment: 67% used purposive sampling, 22% used convenience sampling, and 11% used both.

**Data Collection**: Semi-structured interviews and focus groups.

Analysis: 80% used thematic analysis, 20% used content analysis.

Stewardship

Lack of policy support for P&O services.

Service Delivery

Limited specialized centers available.

**Financing** 

Lack of insurance coverage.

#### Human Resources

Shortage of trained prosthetists.

Information System

Poor awareness of prosthetic services.

Technology & Materials

Lack of materials and components.

# **Discussion**

#### □ Barriers

All studies

scored

above 80%

by the CASP

checklist.

✓ Facilitators



9

studies

were

selected

- ☐ Lack of clear policies and governance
- ☐ Dependence on NGOs for funding
- ✓ Legislative reforms (e.g., German Participation Act)
- ✓ Prosthetists addressing psychosocial needs



- ☐ Few specialized centres, long distances
- ☐ Poor insurance coordination
- ✓ Supportive relationships with family and peers
- ✓ Child-friendly, engaging prosthetic environments



- ☐ Unemployment and financial instability
- ☐ Rising prosthetics costs causing insurer conflicts
- ✓ Social workers securing financial aid
- ✓ NGO and charity involvement



- ☐ Shortage of trained prosthetists (esp. women)
- ☐ Staff burnout and bureaucratic employment issues
- ✓ Patient-centred care models
- ✓ Investment in training and assistive tech



- □ Poor awareness of services
- ☐ Lack of structured communication
- ✓ Structured follow-up and reminders
- ✓ Improved data tracking of service outcomes



- ☐ Overreliance on imports
- ☐ Basic/unsuitable technologies
- ✓ Telehealth for remote service access
- ✓ Specialised telehealth training for clinics

# Conclusion

Improving access to orthotic and prosthetic services requires:

Stronger policies and infrastructure

Increased funding and trained personnel

Support for psychosocial and economic needs

# References

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- 2. Nabizadeh et al. 2024. Prosthet Orthot Int.
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- 4. Dillon et al. 2024. Disabil Rehabil.

