Barriers Affecting Provision and Use of Mobility Assistive Technology Devices in Low-, Lower-Middle- and Upper-Middle-Income Countries: A Systematic Review

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More than 1 billion individuals worldwide experience lifelong disability

- Persons with disabilities (PwD) experience inadequate access to health care, employment, and education
- Use of a mobility assistive technology device (MATD) can help PwD regain independence and enable more participation with family, friends and community

Only 5-15% of individuals who could benefit from MATD actually possess one in low-, lower-middle-, and upper-middle-income countries (LMIC)

Financial
- Cost of Equipment and Repairs

Physical and Environmental
- Public Buildings and Spaces
- Home
- Transportation
- Poor Quality of Equipment

Educational
- Lack of Training and Follow Up
- Lack of Trained Personnel
- Limited Awareness of Services Offered

Identify barriers affecting the provision and effective use of low-tech MATD such as wheelchairs, walkers, and prosthetics by PwD in LMIC

Discuss current and potential efforts to overcome these barriers to meet the basic human rights of all PwD

Inclusion Criteria:
(i) conducted in a low-, lower-middle-, and/or upper-middle-income country;
(ii) pertains primarily to low-tech mobility devices,
(iii) identifies barrier to provision or use of mobility device; and
(iv) provides full-text articles published within the past 15 years

3 step screening process conducted by 2 individual researchers until consensus

12 studies included in final analysis

Locations of Included Studies

Latin America and the Caribbean: Haiti
Sub-Saharan Africa: Botswana, Malawi, Namibia, Sierra Leone, South Africa, Sudan
Europe and Central Asia: Turkey
East Asia and the Pacific: Indonesia, Thailand
South Asia: Bangladesh

Clinical Relevance


Access to assistive technology is a human right.

MATD provides personal mobility and independence, creating meaningful change in the user’s life.