

# A DISCUSSION OF THE CURRENT LANDSCAPE OF PROSTHETIC LIMB PROVISION FOR CHILDREN IN LOW TO MIDDLE INCOME COUNTRIES (LMICS).

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It is well known within the P&O community that provision for persons with limb loss in LMICs is lacking, with only 5-15% receiving the prosthetic devices they require. What is not clear are the specific challenges children face from point of amputation through prosthetic provision onto continued rehab in adulthood.

Childhood is defined by growth and yet it is their very growth that sets them more complex additional challenges to overcome than the adult amputee. In low resourced environments it is difficult to purchase one prosthetic therefore it becomes near impossible to gain all the prosthetic iterations required throughout childhood to maintain a comfortable and functional fit. Combining this with changing biomechanics, the possibility of bone overgrowth post amputation and the differences in growing up within different cultures results in a unique set of challenges that deserve discussion and much further research. Despite this there is currently a lack of focus on gaining measurable outcomes and data from paediatric amputees independent of adult data.

This discussion will focus on increasing the conversation in this field and emphasising the need to relearn instead of repeat what we know in the adult sector in the paediatric space. We will explore the following questions with a focus on LMICs recognising that much of this discussion is also applicable and relevant to provision in high income settings.

1. What is the current landscape of prosthetic provision for children in LMICs?
2. How does amputation affect growth?
3. How does growth affect prosthetic design?