The Health Determinants of Accessibility to Clubfoot Treatment: A Global Observational Study

S. Sheik-Ali [1], W. Johnson[2], C. Lavy [3], S. Navarro[3], D. Spiegel [4]

[1] Oxford University Hospital Foundation Trust, Oxford, United Kingdom, [2] Global Initiative for Emergency and Essential Surgical Care, World Health Organisation, Geneva, Switzerland, [3]Nuffield department of Orthopaedics, Rheumatology and Musculoskeletal sciences, University of Oxford, Oxford, United Kingdom, [4]Children's Hos- pital of Philadelphia, Orthopedic Surgery, Philadelphia, USA

Background: Less than 15% of patients with Clubfoot (CTEV) will access treatment in Low and Middle income Countries (LMICs). This study provides important data analytics on the reasoning behind non-management of CTEV in LMICs and explores current and future methods of addressing the lack of CTEV management.

Methods: A cross-sectional study of 1,489 medical institutions in 62 LMICs. Data was evaluated from the "World Health Organisation Situation Analysis tool" database.

Results: 72.7% (1083/1395) of institutions did not manage CTEV. Lack of sufficient skills was the cited reason for not treating CTEV in 92.1% (668/725) ($p<0.001$). Skills ranged from non-invasive and surgical approaches. 39.4% (286/725) of institutions also cited lack of functioning equipment as a reason ($p<0.001$). 39.6% (287/725) of institutions also cited lack of medical supplies/drugs as a reason ($p<0.001$). Non-management differed among the level of facilities with level 3 institutions being more likely to facilitate CTEV treatment compared to non-level 3 institutions (OR 12.3).

Conclusions: The study provides insight into the lack of management of CTEV by 62 LMICs. Reasons include lack of skills and medical equipment. Increasing the capacity of sustainable training programmes to a wide range of health care providers in LMICs may reduce the present available skill deficit in treating CTEV.