The HealthCare Determinants of Accessibility to Congenital Talipes Equinovarus Treatment: Global Observational Study

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INTRODUCTION

The management of Clubfoot or Congenital Talipes Equinovarus (CTEV) in newborn infants involves a relatively simple, non-invasive manipulation, without which much more extensive corrective surgery is required when a child is older. For a condition that can be primarily managed non-surgically if identified early with basic training, it is still a common problem in LMICs in which less than 15% of patients with CTEV will access treatment. This study provides an analysis on the current state of CTEV management in LMICs.

METHODS

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

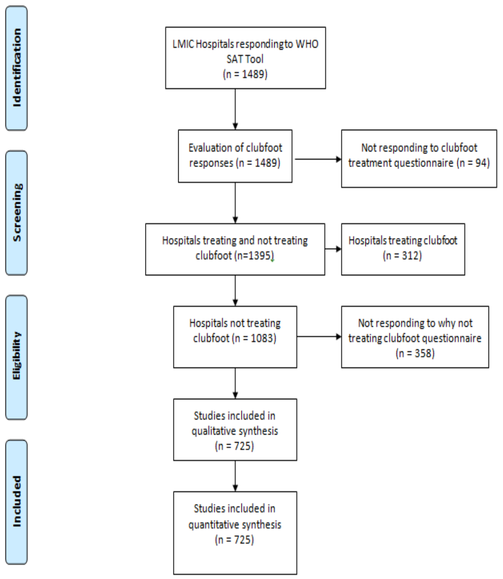

Figure 1: Approach to study

RESULTS

72.7% (1083/1395) of institutions did not manage CTEV. The majority were level 1 or 2 institutions/hospitals who referred on to level 3 institutions. Lack of sufficient skills was the cited reason for referral 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).

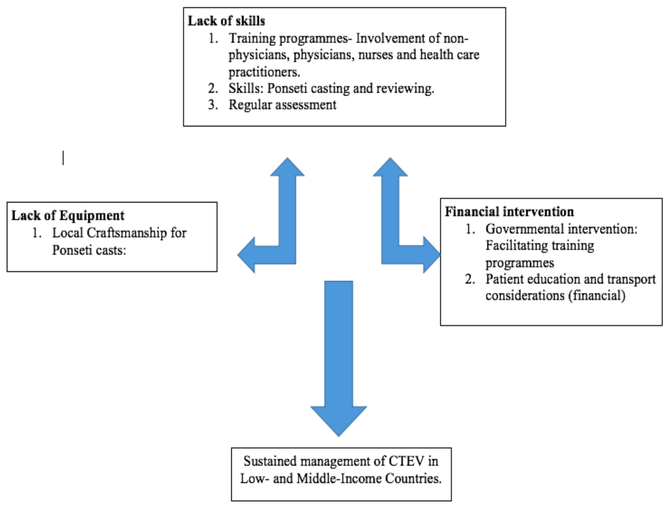

Figure 2: Addressing the reasonings for non-management of CTEV

DISCUSSION .

This study highlights a snapshot of institutions in low and middle income countries that lack sufficient management of CTEV. Shortage of appropriate skills in handling club foot was cited as the most common reason. Other factors included lack of appropriate equipment and medical supplies. Although CTEV can be managed with minimal, non-surgical training, a large proportion of patients are not being managed in local or district hospitals.

This study further supports the notion that the major challenge for the availability of surgical services for children in LMICs worldwide is low skilled workforce and infrastructure (1, 2).

Conclusion

•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 that teach basic manipulative methods to a wide range of health care providers in LMICs may reduce the present available skill deficit in treating CTEV in LMICs.

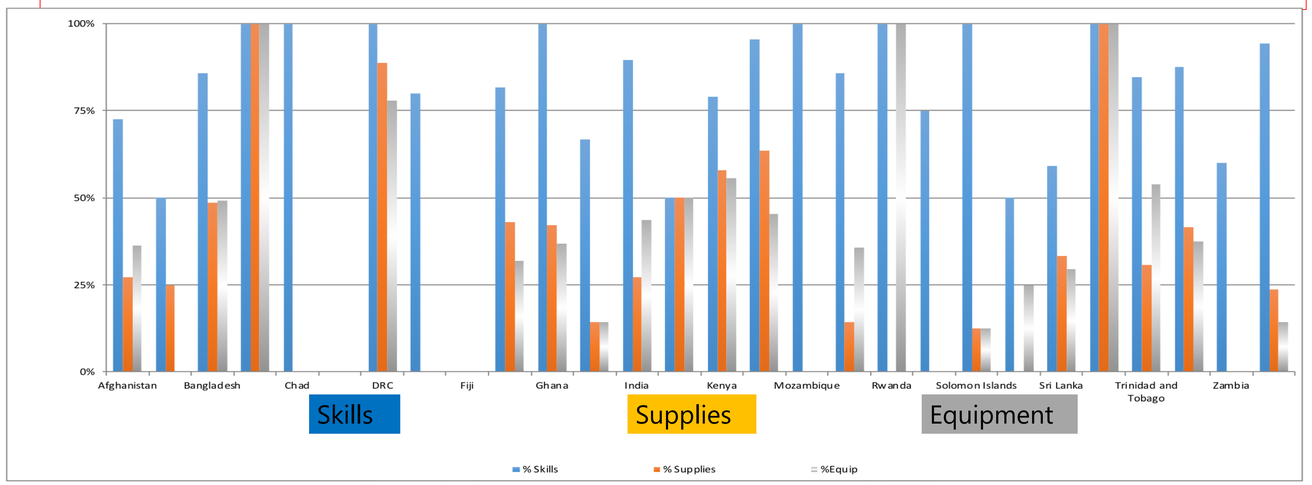

Figure 3: Reasoning for non-management of CTEV

Authors report no conflict of interest

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