Rehabilitation 2030:
Workforce strategies to address unmet needs for rehabilitation services in low and middle income countries

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Rehabilitation 2030

80%

20%

‘Global trends in health and aging require a major scaling up of rehabilitation services in countries around the world and in low- and middle-income countries in particular’,

WHO 2017
The impact of disability

- Worse education outcomes
- Reduced livelihood opportunities
- Greater healthcare spend
- Stigma and discrimination
- Social isolation
- Carer stress
- Limited access to rehabilitation and social services
- Poverty

References:
- WHO World Disability Report
- Crosbie et al, (2014)
‘A set of measures that assist individuals who experience or who are likely to experience disability to achieve and maintain optimum functioning in interaction with their environment’

Definition of Rehabilitation , (WHO 2011)
Human Resources for Physical Rehabilitation
Who are the workforce?

- Ministries for health
  - Physiotherapist/
    Occupational Therapists/
    Prosthetists Orthotists/
    Physical medicine physicians
  - Community Based Rehabilitation Workers/ PT-OT assistants/
    Exercise professionals
  - Family members & care givers
Challenges in Physical Rehabilitation Workforce Planning

- Lack of Rehabilitation Workers
- Integration into Health Systems
- Financial Resources
- Governance
- Education and Training
Evidence informed practice in physical rehabilitation in low and middle income settings....

.......... ‘Reverse evidence’

“A child with mild CP who has never had rehab with contractures, no independent function and not going to school, a patient with stroke discharged after 2 days in hospital that spends the next 6 months in bed deteriorating when they could have been up and mobile, an amputee with contractures and pain and no chance of a prosthesis”.
Rehabilitation for children with Cerebral Palsy
(Mullins et al, 2017, paper in preparation)

<table>
<thead>
<tr>
<th></th>
<th>Participants (n)</th>
<th>Pre-intervention GMAE score (%)</th>
<th>Post-intervention GMAE score (%)</th>
<th>Mean difference Improvement (%)</th>
<th>p-value</th>
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<tbody>
<tr>
<td>Total</td>
<td>67</td>
<td>29.49 ± 15.50</td>
<td>34.36 ± 14.97</td>
<td>4.87 ± 5.80</td>
<td>*0.00000002</td>
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<tr>
<td>Male</td>
<td>34</td>
<td>33.54 ± 16.35</td>
<td>36.97 ± 16.89</td>
<td>3.43 ± 5.34</td>
<td>*0.000395</td>
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<tr>
<td>Female</td>
<td>33</td>
<td>25.32 ± 13.56</td>
<td>31.67 ± 12.39</td>
<td>6.35 ± 5.96</td>
<td>*0.000014</td>
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<tr>
<td>GMFCS Level 2</td>
<td>4</td>
<td>51.30 ± 11.74</td>
<td>56.05 ± 11.22</td>
<td>4.75 ± 2.48</td>
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<td>GMFCS Level 3</td>
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<td>42.75 ± 18.75</td>
<td>3.66 ± 4.65</td>
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<td>GMFCS Level 4</td>
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<td>41.47 ± 9.58</td>
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<td>GMFCS Level 5</td>
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<td>21.29 ± 13.01</td>
<td>26.71 ± 11.30</td>
<td>5.42 ± 5.77</td>
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<tr>
<td>Rural</td>
<td>29</td>
<td>31.71 ± 13.41</td>
<td>35.13 ± 13.70</td>
<td>3.42 ± 5.64</td>
<td>*0.002</td>
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<tr>
<td>Urban</td>
<td>38</td>
<td>27.79 ± 16.89</td>
<td>33.77 ± 16.03</td>
<td>5.98 ± 5.75</td>
<td>*0.000001</td>
</tr>
</tbody>
</table>
Rehabilitation post spinal cord injury.

...A case example
“The blind spot of contemporary science is experience, if we only use the past as our guide, it is impossible to envision and create a better future”.

Francisco Varela
(1946 – 2001)
The way forward

Policy

Governance

Integration into existing health services

Different cadres of rehabilitation workers

Strengthen rehabilitation research within health systems research

Strengthen education and training

• GOVERNMENT COMMITMENT
• STANDARDS AND COMPETENCIES
• PARTNERSHIPS
THANK YOU

QUESTIONS?
Mr Jean Damascene Gasherebuka, Physiotherapist, Rwanda
Mr Joseph Capo-Chichi, Physiotherapist, Benin
Dr Seini Baro, Physiotherapist, Niger
Mr Herman Kazibwe, Physiotherapist, Uganda
Ms Cornelia Barth, ICRC, Switzerland
Ms Uta Prehl, Handicap International, Burkina Faso
Mr Pete Skelton, Handicap International, UK
Dr Mike Landry, Duke University, US
Dr Emma Stokes, President, World Confederation for Physical Therapy

Acknowledgements
References

- O’ Dowd J, MacLachlan M, Khasnabis C, Geiser P. (2015) ‘Towards a Core Set of Clinical Skills for Health-Related Community Based Rehabilitation in Low and Middle Income Countries, Disability, CBR and Inclusive Development. 26 (3)