Novice therapists in a developing context:
Extending the reach of hand rehabilitation

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Introduction

Hand injuries common

- Road accidents
- Interpersonal violence
- Work-related injury

Poverty
Introduction

Severe inequality:
Health care & Hand-care

\[8-10\]

\[11-12\]
Introduction

Compulsory Community Service \cite{13,14}
- Rural & underserved
- Hospital / community (clinics)
- Limited supervision / mentorship
Objectives

• Hand rehabilitation services provided by novice occupational therapists in South Africa
• Supports and barriers for these services
• Therapists’ perceptions of being equipped for hand rehabilitation
Method

- Descriptive cross-sectional
- Online questionnaire – all occupational therapists in first year of practice 2013 (n=240)
- Stata 12 & IBM SPSS Statistics 21.0
- Open-ended responses – post coded
- Ethical approval (UCT HREC: 551/2013)
Results

• 43.3 % response rate (n=104)
• 44.7% located rurally
• Median 3 sites (range: 0-26) serviced
• Supervision:
  • 89.6% had a supervisor
  • Median 1 hour supervision / month
  • 65.9% dissatisfied with supervision
• 73.9% communication difficulties
Results

• Satisfaction from interacting with clients (75.0%)
• Proud to be an occupational therapist (66.7%)
• Occupational therapy is poorly recognised (63.5%)
• Frustrated (58.3%)
• Challenged (54.2%)
  
  “Hand injuries was thus far the most challenging field to work in as I never had an (fieldwork) blocks as a student to assist me with any physical injuries”

• A need for specific knowledge in assessment & treatment (43.8%)
  
  “In terms of hands, I would like more knowledge on treatment protocols in a setting where most hand injuries present very late, and surgery is usually not a realistic option”
Results

• Median of 20 hand rehabilitation clients / month (Range: 0-225)

• Conditions treated *at least monthly* by >50%:

- Central nervous system: 91.3%
- Bone & joint: 72.8%
- Arthritic: 72.4%
- Thermal: 58.9%
- Tendon: 58.0%
- Complex: 51.1%
Results

Modalities used most frequently:

- Home programmes: 84.1%
- Manual therapy: 81.8%
- Exercise: 80.4%
- Activity as a means/end: 79.8%
- Activities of daily living: 78.6%
- Strengthening: 76.2%
- Education: 71.9%
Results

Resources to support hand rehabilitation:

<table>
<thead>
<tr>
<th>Resources</th>
<th>Yes (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to a computer at work</td>
<td>70.5</td>
<td>29.5</td>
</tr>
<tr>
<td>Access to a telephone / fax at work</td>
<td>76.4</td>
<td>23.6</td>
</tr>
<tr>
<td>Access to the internet at work</td>
<td>30.3</td>
<td>69.7</td>
</tr>
<tr>
<td>Adequate equipment</td>
<td>27.0</td>
<td>73.0</td>
</tr>
<tr>
<td>Appropriate work area</td>
<td>65.2</td>
<td>34.8</td>
</tr>
<tr>
<td>Access to research / literature / evidence</td>
<td>44.8</td>
<td>55.2</td>
</tr>
<tr>
<td>Member of professional association</td>
<td>37.1</td>
<td>62.9</td>
</tr>
<tr>
<td>Mentor to guide professional development</td>
<td>40.2</td>
<td>59.8</td>
</tr>
<tr>
<td>Professional development opportunities</td>
<td>66.3</td>
<td>33.7</td>
</tr>
<tr>
<td>Sufficient undergraduate preparation</td>
<td>47.1</td>
<td>52.9</td>
</tr>
<tr>
<td>Sufficient supervision</td>
<td>32.6</td>
<td>67.4</td>
</tr>
<tr>
<td>Sufficient support at work</td>
<td>71.3</td>
<td>28.7</td>
</tr>
</tbody>
</table>
Results

Desired resources to support hand rehabilitation practice:

– Continuous professional development courses (93.4%)
– Access to guidelines & protocols (86.8%)
– Regular support/supervision (83.5%)
– Improved undergraduate exposure (80.2%)
Results

Evidence to support practice:

• 44.8% access to up-to-date evidence
  – undergraduate education (93.4%)
  – textbooks (82.4%)
  – personal clinical experience (79.1%)
  – internet searches (75.8%)
  – advice from colleagues (69.2%)
## Results

Descriptors of hand rehabilitation practice (*frequency*):

<table>
<thead>
<tr>
<th>Descriptors</th>
<th>No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fearful of harming my patient</td>
<td>38 (41.8)</td>
</tr>
<tr>
<td>Upper limb rehabilitation is a specialised area</td>
<td>59 (64.8)</td>
</tr>
<tr>
<td>I need to <em>learn by doing</em></td>
<td>70 (76.9)</td>
</tr>
<tr>
<td>I am not confident</td>
<td>33 (36.3)</td>
</tr>
<tr>
<td>A heightened sense of responsibility</td>
<td>40 (44.0)</td>
</tr>
<tr>
<td>Overwhelmed</td>
<td>37 (40.7)</td>
</tr>
<tr>
<td>Enthusiastic</td>
<td>44 (48.4)</td>
</tr>
</tbody>
</table>
Results

Preparedness for practice:

• 50 competency areas
  – High levels of perceived preparedness
  – Majority *somewhat equipped/prepared*

• 78.9% level competence
• 64.4% level of confidence
Results

Competent

- *enjoy treating clients with hand conditions*  
  (AOR: 85.94, 95% CI:4.72-1564.58, p=0.003)

- *undergraduate fieldwork placement*  
  (AOR: 265.73, 95% CI:1.23 – 57548.30, p=0.042)

Confident

- *enjoy treating clients with hand conditions*  
  (AOR: 28.21, 95% CI:2.47-322.74, p=0.007)

- *adequate practical skill*  
  (AOR: 7.86, 95% CI:1.63-37.82, p=0.010)
Conclusion

• Demand for novice therapists in South Africa to deliver hand rehabilitation
• Conditions seen similar to other studies\textsuperscript{12}
• Contextual features
  – equipment\textsuperscript{15-21}
  – supervision/mentoring\textsuperscript{22}
  – communication difficulty\textsuperscript{23-24}
  – CPD opportunities\textsuperscript{25}
  – access to evidence limited\textsuperscript{26-32}
• Competent and Confident? \textsuperscript{33-40}
Conclusion

• **Strengths & limitations**
  
• Specialist expertise cannot reach the greatest need
  
• Novice therapists providing services require:
  – experienced supervision
  – mentorship
  – CPD opportunities

• Strategic planning of *hand-care* services
References

References
