Danish University Colleges

Patients with disabilities of the arm, shoulder or hand - and problems in occupational performance

Lauridsen, Sussi; Bendixen, Hans Jørgen

Publication date: 2014

Document Version
Pre-print: Det originale manuskript indsendt til udgiveren. Artiklen har endnu ikke gennemgået peer-review (fagfællesbedømmelse) og redigering.

Link to publication

Citation for published version (APA):

General rights
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Download policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.
Patients with disabilities of the arm, shoulder or hand – and problems in occupational performance

Sussi Lauridsen, OT associated professor, MSc. OT, Faculty of Occupation Therapy, Metropolitan University College, Copenhagen, Denmark, sula@phmetropol.dk.

Hans Jørgen Bendixen, OT researcher, M.Sc.OT, Occup. Ther. & Physiother. Dep., Copenhagen University Hospital, Gentofte, Denmark, habe@phmetropol.dk

Objectives
- To identify the patients problems in occupational performance before and after OT intervention
- To examine relationship between change in occupational performance ability and demographic factors: age, gender, civil status, and work
- To enhance the activity based perspective in the orthopaedic OT service at Copenhagen University Hospital, Gentofte, Denmark in cooperation with dep. for Occupation Therapy at Metropolitan University College, Copenhagen, Denmark

Conclusion
- Patients with lesions in the wrist or forearm improved their occupational performance ability significantly, compared to patients with finger fractures (p < 0.02) and arthroplastics (p < 0.05)
- Patients living alone may improve the occupational performance ability more than people living together with someone (p < 0.07)
- No significant association between QuickDASH-diff. and gender (r = 0.029), educational level (p < 0.8) and working status (p < 0.5)
- Research is needed in how people with orthopaedic arm, shoulder or hand lesions manage daily life, when working and when living alone
- Also, further research is needed to improve occupational therapy intervention to people with orthopaedic arm, shoulder or hand lesions

Design and method
- A time series "before and after" study
- Participants were asked to fill in a data sheet questionnaire regarding demographics before OT intervention
- Participants were asked to fill in a Quick DASH Questionnaire before and after OT intervention

Material
- At Copenhagen University Hospital, Gentofte 82 outpatients in occupational therapy because of orthopaedic hand-, wrist- or forearm-lesion were included from August 2011 until April 2012.
- Thirty six were excluded due to lack of data or non completed study procedure

Participant characteristics – type of lesion

<table>
<thead>
<tr>
<th>Type of lesion</th>
<th>Total (n=16/33)</th>
<th>Female (n=12/19)</th>
<th>Male (n=4/14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finger fracture</td>
<td>20.4 (22.5/16.7)</td>
<td>13.3 (16.8/11.0)</td>
<td>7.1 (7.4/5.7)</td>
</tr>
<tr>
<td>Tendon rupture(s)</td>
<td>30.8 (29.3/40.9)</td>
<td>28.2 (28.3/40.9)</td>
<td>8.4 (15.0/6.6)</td>
</tr>
<tr>
<td>Wrist and forearm</td>
<td>62.6 (64.6/54.0)</td>
<td>59.6 (62.4/49.3)</td>
<td>5.0 (49.3/3/8.0)</td>
</tr>
<tr>
<td>Arthroplastics(s)</td>
<td>66.7 (68.7/54.9)</td>
<td>53.7 (44.3/42.8)</td>
<td>13.0 (14.7/6.7)</td>
</tr>
<tr>
<td>Miscella-nesus</td>
<td>18.2 (19.2/16.1)</td>
<td>16.3 (16.5/15.9)</td>
<td>1.6 (1.6/1.6)</td>
</tr>
</tbody>
</table>

The Quick DASH questionnaire
- The Quick Disabilities of the Arm, Shoulder and Hand questionnaire is a self reporting questionnaire, validated for use in patients with impaired arm, shoulder or hand
- Eleven questions regarding occupational performance are to be evaluated using a 5-point nominal scale
- The questionnaire addresses
  ✓ Opening a jar
  ✓ Heavy Household
  ✓ Carrying a shopping bag
  ✓ Washing your back
  ✓ Cutting your food
  ✓ Recreational activities
  ✓ Social activities
  ✓ Work/regular activities
  ✓ Pain
  ✓ Tingling
  ✓ Sleep
- The assigned values for all questions are summed and transformed to a score out of 100
- The “DASH diff” is the difference between before- and after-score

Type of lesion / DASH diff (mean)

<table>
<thead>
<tr>
<th>Type of lesion</th>
<th>Total</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finger fracture</td>
<td>20.4</td>
<td>13.3</td>
<td>7.1</td>
</tr>
<tr>
<td>Tendon rupture(s)</td>
<td>30.8</td>
<td>28.2</td>
<td>8.4</td>
</tr>
<tr>
<td>Wrist and forearm</td>
<td>62.6</td>
<td>59.6</td>
<td>6.0</td>
</tr>
<tr>
<td>Arthroplastics(s)</td>
<td>66.7</td>
<td>53.7</td>
<td>13.0</td>
</tr>
<tr>
<td>Miscella-nesus</td>
<td>18.2</td>
<td>16.3</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Living alone or not / DASH diff (mean)

<table>
<thead>
<tr>
<th>Living alone or not</th>
<th>Total</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alone</td>
<td>20.4</td>
<td>13.3</td>
<td>7.1</td>
</tr>
<tr>
<td>Together</td>
<td>30.8</td>
<td>28.2</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Working status / DASH diff (mean)

<table>
<thead>
<tr>
<th>Working status</th>
<th>Total</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>At work</td>
<td>20.4</td>
<td>13.3</td>
<td>7.1</td>
</tr>
<tr>
<td>Sick leave</td>
<td>30.8</td>
<td>28.2</td>
<td>8.4</td>
</tr>
<tr>
<td>Unemployed</td>
<td>62.6</td>
<td>59.6</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Thank you to patients and OTs at Copenhagen University Hospital, Gentofte – Orthopaedic dep. Z

The study has been supported financially by The Danish Occupational Therapy Association