Evaluation of a musculoskeletal physiotherapy service: The Police Treatment Centres

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Harrogate

Auchterarder

Physical and psychological rehabilitation (residential)
Objectives

1. To investigate if physiotherapy aides a reduction in the time to return to work
2. To investigate if PTC physiotherapy service is cost effective
3. To investigate effectiveness of PTC physiotherapy service
Method

• Systematic review

• Mixed method study

  – Quantitative [pre-physio (baseline), at end of 2 week stay & 6 weeks after leaving PTC (online survey)]

  – Qualitative (6 weeks after leaving PTC)
Quantitative:

- Current PTC outcomes - RTW + Physiotherapy outcome measures
- Work participation – Work Ability Index (single item on work ability)
- Disability – Pain Disability Index
- Quality of life – EuroQol-5D
- Pain intensity - NRS
- Fatigue - NRS
Quantitative results - demographics

- 644 officers (68% male, mean age 44 years)
- 51.4% Auchterarder v 48.6% Harrogate
- 40% soft tissue injury
- Lumbar spine (back), knee & shoulder main problem areas
## Quantitative results

<table>
<thead>
<tr>
<th>Outcome measure</th>
<th>At discharge from PTC (n=644)</th>
<th>At 6 weeks post-discharge (n=104)</th>
<th>Statistical significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work status</td>
<td>Improved</td>
<td>Improved</td>
<td><strong>p&lt;0.001</strong>*</td>
</tr>
<tr>
<td>Work ability</td>
<td>Improved</td>
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<td><strong>p&lt;0.01</strong></td>
</tr>
<tr>
<td>Physiotherapy measures</td>
<td>Improved</td>
<td>-</td>
<td>10 out of 11 measures significant <strong>p&lt;0.001-0.036</strong></td>
</tr>
</tbody>
</table>
Qualitative:

• Purposive sampling (20 officers per PTC site)
• 41 participants (67 approached)
• Telephone interviews with semi-structured guide
• Thematic analysis
Qualitative results

• Themes
  – Physiotherapy at PTC (expectations, treatment received, previous physiotherapy experience)
  – Work status
  – Economics (costs, value for money)
  – Overall PTC experience
Qualitative results

• Overwhelmingly positive
  – Quality of service, individualised treatment, facilities/environment, time out for them, being with professional group

“More than met my expectations. He was clearly interested in getting me better and he could see that I was going in the gym doing my exercises and that I wanted to improve”

“I have only briefly encountered physio in the past and I wasn’t a fan. I was deeply impressed. Everyone I spoke to was extremely knowledgeable, very approachable, personable and seemed capable.”
Economic analysis

- Quality adjusted life years (QALYs)
  - Baseline score 0.67 (higher than back pain literature)
  - Comparable post-treatment results (0.78) to back pain literature (0.11 mean improvement, 16%)

- Cost benefit analysis
  - £28,079.33 saving as result of PTC attendance (Updated 2009 analysis), ratio = 3.66
  - £16,861.31 saving as result of PTC attendance (from 6 week follow up), ratio = 0.892

- Qualitative comments
  - Value for money, “5 star service”
Conclusion

- Physiotherapy service at PTC is effective, highly regarded and cost-effective in the short term
- Further research required on long term outcomes
Thank you

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