Psychological Interventions in In-patient Settings

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Normal psychology of Pain
Why this is heightened in acute hospital
Iatrogenic Distress

My role in central Manchester
What I actually do on the wards

Does it work?
Health economic outcomes from Pilot
Inpatient Pain Psychology Project
Acknowledgements

Many thanks to my hard working colleagues in the Inpatient Pain Team. It was two years in the planning stages.... This is their Pain Psychology Project, and it wouldn’t have been possible without their support and enthusiasm!
Normal Psychology of Pain

Pain-related anxiety
- Normal to be fearful of the pain, its cause and uncertain about the future

Pain-related depression
- Normal to feel down when pain stops you doing things that make you proud of yourself

Pain-related disability
- Over time more and more areas of life are affected, reduced functioning

These are “normal” psychological responses to being in pain but exacerbate pain and makes a bad situation much worse
Pain is hard to understand

Essential to elicit patients’ understanding:
- cause of their pain
- treatment expectations
- readiness for self-management

Ask two key questions:
1) What do you think is wrong?
2) What do you think would help?
Pain Education

- Explaining pain is crucial because “common sense” only applies to acute pain
- Opportunity to correct any catastrophic misunderstandings about cause of pain
- Address unrealistic and passive expectations for a cure
Pain Psychology in Acute Hospital

- Common misunderstandings tend to be heightened in acute setting
- Lots of staff involved so opportunity for conflicting advice
- “Normal” response is exacerbated by stress of being away from home, without usual coping strategies
Iatrogenic distress

- Common on hospital wards
- Patients frequently report fear, upset or anger caused by what they believe they have been told about the cause of their symptoms and likely prognosis

Iatrogenic Distress = distress caused by the actions or treatment of healthcare workers
Why is iatrogenic distress common?

- Busy ward environment
- Multiple demands on staff time
- Numerous staff involved in care so opportunity for conflicting opinion
- Patients jump to conclusions based on how they are feeling, making catastrophic assumptions
Impact on the wards

- Causes problems with non-compliance and poor engagement with care
- Demanding and disruptive behaviour, staff time dealing with complaints

Iatrogenic distress can present as any strong emotion: fear, upset or anger
Impact on complex pain

- Often leads to stressful staff patient interactions with opportunities for further misunderstanding
- Exacerbates pain via stress response / increased autonomic arousal
Catastrophising and Inpatients

Pain is a sign of ongoing harm
The operation went wrong
This treatment isn’t working
These staff don’t know what they are talking about & can’t be trusted
The staff don’t care about me
I will die soon
Poor engagement

- Demand more investigations, more pain medication, more staff time...
- Requiring more hands on help
- Resisting movement, not engaging in physio or other rehab
- Family distressed and complaining
Background to my inpatient role

- Audit of referrals to the inpatient pain team
- 38% of patients had a history of chronic pain or substance abuse

This is a group with complex needs, presenting specific challenges such as multiple admissions and prolonged length of stay.
Needs Assessment Phase

- Measure pain-related distress in patients who do not respond well to standard care
- Psychometric screens
  - RMDQ Pain-related disability
  - PASS Pain-related anxiety
  - CES-D Depression
High level of severe need

Found High levels of severe pain-related distress and severe pain-related disability
- 75% clinically significant depression
- 85% clinically significant disability
- 90% clinically significant anxiety
Pilot Inpatient Pain Psychologist

- CBT of proven value in outpatient chronic pain management
- Not much published data on psychological intervention in the inpatient pain setting
- Managers agreed to pilot project of clinical psychologist for complex pain

Focus on health economics outcomes (No. of admissions and Length of Stay)
Brief Psychological Intervention

- Identify misunderstandings & iatrogenic distress
- Offer plausible alternative explanation for “safe” pain, synaptic plasticity etc.
- Explain stress / pain cycle
- Teach simple self-management behavioural techniques (diaphragmatic breathing, relaxation)
- Liaise with medical teams
- Signpost onto PMP if need MDT care

Mean duration of inpatient psychological intervention = 139.5 minutes (range 30-960)
Methods

• Complex Patients identified by inpatient pain team
• Psychometric screening questionnaires offered as opt-in to seeing the clinical psychologist

• 94 completed inpatient psychometric screens
• 64 patients with 12 month Pre & Post intervention data
Methods ...

- Pre-treatment data - all admissions in the 12 months preceding brief psych intervention
- Post-treatment data related to the following 12 months
- Data for control patients related to 12 months preceding & following admission when completed psychometric screens

**Intervention group:**
34 pts had completed 12m post-tx

**Control group:**
30 pts identical screens but no psych input
## Demographics

<table>
<thead>
<tr>
<th>Descriptive Statistic</th>
<th>Duration of pain</th>
<th>Age (range)</th>
<th>Gender</th>
<th>Work Status</th>
<th>Type of Pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control (n=30)</td>
<td>4.9 years (0.1 -16)</td>
<td>36.32 (21-48)</td>
<td>21 female (70%) 9 male (30 %)</td>
<td>18 unemployed 9 employed 3 employed – off sick</td>
<td>15 – abdominal 8 – spinal 3 – chest 2 – shoulder 2 - hip</td>
</tr>
<tr>
<td>Intervention (n=34)</td>
<td>3.85 years (0.1-14)</td>
<td>31.89 (17-50)</td>
<td>30 female (89.5%) 4 male (10.5%)</td>
<td>21 unemployed 6 employed 3 students 4 employed – off sick</td>
<td>16 – abdominal 7 – spinal 3 – fibromyalgia 1 – ear pain 1 – headache 1 – stump pain 1 – Desmoid tumours</td>
</tr>
</tbody>
</table>
**Results:**

**Admissions 12months post-treatment reduced 60%**

**Pre-treatment:**
No significance difference between groups

**Post-treatment:**
Significant difference for no. admissions in the intervention group
(t=121.95, df=33 \(p<0.000\))
Control group show small but significant increase (7%)
(t= -36.127, df=29 \(p<0.000\))

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**Psychological Interventions in In-patient Settings**
Results:
Length of Stay (LOS) 12 months post-treatment reduced 84% 

Pre-treatment: 
No significance difference between groups.

Post-treatment: 
Significant difference for length of stay 
Intervention: (t=1334, df=33 \(p<0.000\)) 
Control: (t=367, df=29 \(p<0.000\))
Conclusions:

The introduction of a clinical psychologist to the inpatient pain team led to a significant reduction in re-admissions.

This represents a total cost saving of £7,038 per patient per year.
Clinical Implications

On average this meant 84% reduction in LOS or 34.5 fewer bed days in the twelve months following brief psychological intervention as part of the inpatient pain team.

Widening access could lead to greater cost savings and improved quality of life for patients with complex needs.
Limitations

This was an opportunity sample

- Patients were not randomly allocated
- Patients were offered intervention if they were in hospital on the day the psychologist is based with the team.

Cost savings have not taken into account the cost of follow-up appointments offered to some of these patients.
Patient Feedback

- Anonymous postal survey to all patients seen by psychologist for brief intervention during project
- Stamped Addressed Envelope
- 45% responses rate
- MIXED feedback
Positive Feedback

“I found I could talk to her about anything”
“I found her very approachable and helpful”
“helpful to know someone was listening”
“to get some help with relaxation and know there is someone to help me through this pain and make my family see what it is like”

44% reported “completely satisfied”
Negative Feedback

“I didn’t see the point in having a pain psychologist”
“extremely brief introduction and no follow up”
“the service was useless”

33% reported “not at all satisfied”
Take home message: What to ask

• Ask two key questions to elicit misunderstandings and expectations
• Listen out for catastrophic beliefs and unrealistic treatment expectations

Ask two key questions
What do you think is wrong?
What do you think would help?
Take home message: What to do

- Offer a plausible explanation of pain that it is not dangerous, safe to move
- Normalise pain-related distress & disability (this is not all in your head)
- Offer realistic possibility of improving function & mood as realistic targets for PMP
  “getting your life back despite the pain”

Then offer two things:
- Pain education
- Realistic hope for improved function & mood rather than pain reduction

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