The Role of the Clinical Psychologist in the Acute Pain Team:

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<u>Aim:</u>

This pilot pain psychology project aimed to examine the effectiveness of an inpatient psychological assessment and brief intervention service for patients with problematic pain and high levels of pain-related distress.

Background:

It is normal for people in pain to become distressed when they experience uncertainty regarding their diagnosis, the cause of their pain or doubt their ability to cope. Unfortunately this pain-related distress causes further exacerbation of pain via sympathetic arousal of the autonomic nervous system. This can be misinterpreted by patients as deterioration to their underlying medical condition, causing further pain related distress, in a vicious circle.

A recent systematic review found that psychological interventions are effective in reducing pain, disability, psychological distress and catastrophic thinking about pain (Williams, Eccleston and Morley 2013). The strongest evidence base is for Cognitive Behavioural Therapy (CBT) and interventions typically include: correcting any misunderstandings about causes of pain, psycho-education regarding the natural bodily stress reaction to pain and training in behavioural stress reduction strategies, cognitive techniques for challenging negative thoughts, problem formulations, graded exposure to feared situations, problem solving and goal setting.

Methods:

20 consecutive patients with problematic pain and pain-related distress were offered psychological assessment and brief psychological intervention during their inpatient admission. Suitable patients were identified by the acute pain team during ward rounds if they presented with high levels of pain-related distress. Psychometric screening data was collected; health economic data included number of hospital admissions and number of bed days. The control group (n=20) received treatment as usual (medical and nursing care).

Results:

Complete data was collected for 39 patients, 20 control and 19 intervention cases. Mean psychologist intervention time = 139.5 minutes (range 30-960 minutes)

Descriptive Statistics	Duration of pain years (range)	Age (range)	Gender	Work status	Type of pain
Control (n=20)	4.9 (0.1 – 16)	36.32 (21 – 48)	14 female (70%) 6 male (30%)	12 unemployed 5 employed 2 employed – off sick	
Intervention (n=19)	3.85 (0.1 - 14)	31.89 (17 – 50)	17 female (89.5%) 2 male (10.5%)	11 unemployed 3 employed 3 students 2 employed – off sick	10 – abdominal 4 – spinal 1 – fibromyalgia 1 – ear pain 1 – headache 1 – stump pain 1 – Desmoid tumours

Table 1: Demographic data

Category	Control	Interventi	Total
CESD		on	
Non-case	1	1	2 (5.13%)
Mild	3	5	8 (20.52%)
Moderate	7	7	14 (35.90%)
Severe	8	6	14 (35.90%)
Missing data	1	0	1

Table 2: Levels of clinical depression found on screens (based on CESD category)

72% people had pre-treatment moderate or severe depression, likely to impact on their adherence to medical care, their ability to engage in self-management and prevent further A&E admissions in crisis



Table 3: Post-treatment Mean Admissions x Bed Days

Variable	Pre	Post
Admissions (Range)	2.74 (1-9)	0.68 (0-4)
Inpatient bed days (Range)	47.26 (4-199)	4.74 (0-58)
Mean bed days / admission	23.52 (5-99.5)	1.68 (0-19.33)





Analysis of health economic data shows a significant reduction in subsequent admission rate, inpatients bed days and days per admission

Discussion:

This pilot pain psychology project found that brief psychological assessment and intervention was effective in reducing subsequent admissions and inpatient bed days. Modal intervention time was 150 minutes and focused upon brief CBT-based techniques. Pre-treatment psychometric screening identified a high prevalence of moderate to severe depression in over two thirds of patients who were likely to require psychological intervention to prevent difficulties in engagement with medical care. This confirmed the opinion of the acute pain team that inpatients were presenting with high levels of pain-related distress requiring intervention.

Some patients with pain-related distress were highly resistant to psychological intervention and were focused upon a biomedical approach to pain. Communication skills are essential to feeding back "good news" when scans show nothing abnormal detected. This can have the paradoxical effect of inoculating patients against psychology; treatment needs to be matched to patient expectations. Future research should focus upon collecting post-treatment outcome measures and training non-psychologists to deliver brief psychological interventions.