Exploring Predictors of First Appointment Attendance at a Pain Management Service

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Chronic Pain

- Complex biopsychosocial condition
- Between 10 and 55% experience chronic pain worldwide
- 20% of people living with chronic pain seeks treatment in England
- 300 pain management services (PMS) in UK
- 12% of people is likely to not attend when appointment is provided
- As today, no study have explored why people are more likely to not attend
What’s a PMS?

• The PMS, a multidisciplinary service which provides care to individuals (age 16 and over) who present with chronic pain lasting for a minimum of three months, aims to improve quality of life through evidence-based approaches.

• It is attended mostly by women, individuals who are unemployed, individuals who were between 35 to 49 years old, and three-quarters of clients presented with a psychological difficulty.
Literature so far..

Who DNA NHS?
• male, younger, financially disadvantaged, and longer of appointment waiting time.
• Potential barriers for non-attenders have been found to be lack of transportation, time restrictions, varying beliefs in the severity of personal state, level of need for care, and poor communication skills

Who is less likely to engage with pain management programme? (drop out)
• higher levels of difficulty
• less responsiveness to treatment
• less social support, physical ability, motivation, and openness to treatment
• higher levels of distress, pain severity, and life interference due to pain
So, why is it important to know who does not attend PMS?

• the Chronic Pain Policy Coalition recognised that there is a need for redesign of NHS assistance to ensure that a person-centred approach to care is utilised

• As yet there are no studies that analyse directly the characteristics of individuals who are more likely to not attend once referred.

• Non-attendance not only reduces clinic and service productivity, but increases health care costs and affects access to care

• Implementation of evidence-based service improvements (improving accessibility)
Research questions

• “What factors predict whether or not a client attends their first assessment appointment with pain management service?”

• “What are the differences between service users who attend the service and service users who do not?”
Method

Sample
• 523 participants
• the mean age was 54.64 years (SD = 15.89),
• 33.84% of the service users were male
• and 14% of the sample did not attend the service.

Procedure
• The service routinely collects the information that was analysed in this study at time of referral
• Data were anonymised and transferred to a password-protected database
• Data were analysed with SPSS
Method

### Variables

<table>
<thead>
<tr>
<th>MSPQ* (2)</th>
<th>Duration (8)</th>
<th>Pain type (14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zung (3)</td>
<td>Sex (9)</td>
<td>Smoking (15)</td>
</tr>
<tr>
<td>PSEQ** (4)</td>
<td>Days after referral (10)</td>
<td>Time of the day (16)</td>
</tr>
<tr>
<td>McGill (5)</td>
<td>Age (11)</td>
<td>Employment (17)</td>
</tr>
<tr>
<td>Worst pain (6)</td>
<td>Places of pain (12)</td>
<td>Use of Alcohol (18)</td>
</tr>
<tr>
<td>Best pain (7)</td>
<td>Referral service (13)</td>
<td>Attendance</td>
</tr>
</tbody>
</table>

*MSPQ: Modified Somatic Perceptions Questionnaire
**PSEQ: Pain Self Efficacy Questionnaire

### Design and stats

- Retrospective quantitative analysis based on observational data
- Two groups: attenders vs non-attenders
- Correlations
- Logistic regression
- Mann-Whitney U
Results

Regression model
• \( \frac{p}{1-p} = 1.787 + 1.003 \times \text{smoking} - 0.772 \times \text{time of the day} \)

Significant predictors and differences
• Smokers are less likely to attend
• Individuals provided with a morning appointment are less likely to attend
• Non-attenders score significantly higher on the MSPQ (higher levels of somatic pain)
Conclusions

- Sample presented with similar characteristics in terms of referral, but non attendants did not show similar characteristics to who did not engage in previous research (e.g. depression was not significant) or to who did not attend NHS services → Unique population?
- Smokers are less likely to attend → Cognitive dissonance and avoidance strategies
- The time of the appointment provided influences attendance
- Non attenders scored higher on the Modified Somatic Perceptions Questionnaire → Higher levels of anxiety increase pain perception
Recommendations

• Flexibility at time of the appointment (multiple appointment options)
• Reminders for individuals who are less likely to attend (based on the model) which include acknowledge of possible cognitive dissonance or avoidance related strategies
• Further research which includes variables consistent with previous literature, analysing different services, and introducing more “psychologically” related variables
• Clinical psychologist to apply theory to practice by formulating considering self-perpetuating fear-avoidance cycles and tackle them to improve attendance
Questions?

Thanks.

Insert puppy picture here. Puppy picture not found.