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The Difference is Research

Background

- Chronic non-cancer pain (CNCP) is a global common complaint.
- CNCP is associated with poorer physical health, lower quality of life and more mental health problems.
- In recent decades, there has been a considerable increase in the prescription of opioids for the treatment of chronic pain.
- Comorbid CNCP and problematic opioid use is a growing concern that presents challenges to long-term opioid treatment for pain.

Aims

- To examine the demographic, clinical and treatment characteristics associated with current opioid dependence among persons prescribed opioids for the treatment of CNCP.
- To examine health service utilisation of people who have been prescribed opioids for the treatment of CNCP.

Method

The Pain and Opioids IN Treatment (POINT) study is a large national prospective cohort study of 1,514 persons prescribed strong opioids for CNCP. This is a cross-sectional study using data collected at the 12 month follow-up, N=1,117.

Key Measures

- SDS:** Severity of Dependence Scale, adapted to measure the severity of pharmaceutical opioid dependence experienced by users of different types of drugs. Cut-off for opioid dependence was a score of 5 or more, which is the equivalent of Severe DSM V Substance Use Disorder (Bruno et al, in preparation).
- SF12:** Medical Outcomes Short Form survey (12 items) calculates a physical and mental health score, where a lower score reflects poorer health (Schofield et al, 1998).
- BPI:** Brief Pain Inventory, two subscales used were pain severity and pain interference (Cleeland and Ryan, 1994).
- ORBIT:** Opioid-Related Behaviours in Treatment scale (a 10-item measure of aberrant behaviour; Larance et al, 2016).
- PODS:** Prescribed Opioids Difficulty Scale (a patient-centred measure of problems and concerns about prescribed opioids; Banta-Green et al, 2010).
- Depression and generalised anxiety were measured by the **PHQ-9** and **GAD-7** modules of the Patient Health Questionnaire (Spitzer et al, 1999).
- OME:** Oral Morphine Equivalent dose in mg/day was calculated using participants' reported opioid use in the past week (Neilson et al, 2015).

Data Analysis

Chi-square analyses were conducted on categorical data and logistic regressions were used on continuous variables to compare demographic, clinical and treatment characteristics among those who met criteria for opioid dependence on the SDS versus those who did not. Odds ratios and 95% confidence intervals are reported.

	Total N=1238	Did not meet SDS criteria for current opioid dependence n=738	Met SDS criteria for current opioid dependence n=379	OR (95% CI)
Mean age (SD)	58 (17.3)	59 (13.8)	55 (23)	0.98 (0.97-0.99)***
% Male	43.9	41.8	49.2	1.35 (1.05-1.73)*
% unemployed	75.5	76.5	74.5	0.89 (0.66-1.22)
Physical Health				
Median SF 12 physical health score (IQR)	28.8 (12)	29.5 (13.8)	27.4 (9.8)	0.97 (0.95-0.98)***
Median SF 12 mental health score (IQR)	47.7 (20.4)	50.7 (17.7)	41 (19.4)	0.95 (0.94- 0.96)***
Mean BPI Severity score (SD)	5.3 (1.9)	5.2 (1.9)	5.6 (1.8)	1.11 (1.04-1.19)**
Mean BPI Interference score (SD)	5.7 (2.4)	5.4 (2.3)	6.4 (2.2)	1.2 (1.14-1.27)***
Median no. chronic past 12m pain conditions (IQR)	3 (2)	3 (2)	3 (2)	1.2 (1.1-1.31)***
Mental health				
% moderate-severe anxiety	21.4	14.6	35.6	3.24 (2.41-4.36)***
% moderate-severe depression	42.6	32.9	63.8	3.58 (2.76-4.65)***
Medications				
Mean Total opioid dose OME mg/day (SD)	114.1 (122.8)	98.7 (115)	145 (134.9)	1.00 (1.00-1.00)***
% opioid dose less than 90	57.7	66	42.2	0.37 (0.28-0.49)***
% opioid dose 90-199 OME mg/day	27.6	22.1	38.1	2.16 (1.62-2.88)***
% opioid dose >200mg OME/day	14.7	11.8	19.8	1.83 (1.28-2.63)**
% Used (past week) a benzodiazepine	25.7	23.7	29.8	1.37 (1.03-1.81)*
% endorsing 1+ item on ORBIT scale	44.8	38.1	57.9	2.24 (1.73-2.90)***
% intermediate- high PODS score	45.8	29.9	79.4	9.03 (6.72-12.12)***
Health Service Utilisation				
% accessed Psychologist (last 12 months)	14.1	12	17.2	1.53 (1.03-2.26)*
% accessed GP (last month)	90.9	89.8	94.5	1.93 (1.15-3.22)*
% Lifetime AOD treatment for opioids	5.6	4	9.8	2.62 (1.55-4.41)***
% Lifetime AOD treatment for other substances	5	4.3	8.1	1.96 (1.15-3.35)*
% Lifetime OST Methadone	3.1	2.6	5	2.03 (1.05-3.83)*
% Lifetime OST Buprenorphine	1.1	0.7	2.4	3.57 (1.19-10.72)*

*p<0.05, **p<0.01, ***p<0.001

Results

Of the total sample, 34% met criteria for current opioid dependence (score of 5 or more on the SDS adapted for pharmaceutical opioid dependence).

Demographics, physical health, pain and mental health

Compared to the rest of the sample, those who met criteria for opioid dependence were significantly more likely to:

- be male,
- be younger,
- report higher pain severity and interference scores,
- meet criteria for current moderate to severe depression and/or anxiety, and
- report a larger number of chronic pain conditions in the past 12 months.

Opioid treatment and indications of problematic use

Opioid dependence was significantly associated with reporting:

- higher opioid doses (in OME mgs/day),
- past week benzodiazepine use
- 1+ aberrant opioid-related behaviour (ORBIT)
- intermediate to high scores on the PODS scale.

Health service utilisation and AOD treatment seeking

Opioid dependence was significantly associated with reporting:

- seeing a psychologist and a GP (past month)
- lifetime use of AOD services for opioids and/ or other illicit drugs.
- lifetime use of methadone or buprenorphine treatment for opioid dependence.

However, overall access to treatment services was **low**. Of those who met criteria for opioid dependence;

- 36% had seen a medical specialist in the past 12 months,
- 10% had ever accessed AOD services for opioids, and 8% for other substances,
- 3% had ever been in Opioids Substitution Therapy, and
- 3% had ever seen an addiction specialist.

Limitations

The SDS is a five-item measure of dependence used for different types of drugs. Although the scale has been validated for use in identifying severity of heroin dependence, there is limited evidence identifying the best cut off for pharmaceutical opioid dependence. It is possible the SDS may be over-specifying the levels of pharmaceutical opioid dependence in this cohort (further work examining this issue is currently underway).

Conclusion

People living with co-occurring CNCP and opioid dependence had poorer mental and physical health than people with CNCP alone, yet the utilisation of treatments for opioid dependence was low.

Multidisciplinary interventions for this group are important, including pain and addiction specialists. Treating opioid dependence in this group may result in improved physical health, mental health, psychosocial functioning and pain outcomes.

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