CAS 2023 Annual Meeting

Chronic Pain Abstracts

Contents

The Role of Family Practice Anesthetists in Rural Chronic Pain Management: A Cross-sectional Survey

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INTRODUCTION

Chronic pain is a national public health emergency, affecting one in five adults.[1] The burden of chronic pain is disproportionally higher in rural communities, where low socioeconomic status, location, and limited access to health services contribute to poor health status.[1,2,3]

With limited access to specialist resources, a generalist approach to rural health care has become popular through Family Physicians with Enhanced Skills.[4,5] Family Practice Anesthetists (FPAs) may have the capacity to support chronic pain services given their training in pain management and established role in rural surgical and obstetrical programs.[2,4,5] While their contribution to anesthesia care is known, limited knowledge is available regarding their role in rural chronic pain management (CPM).[2]

Accordingly, we distributed a survey to FPAs practicing in rural communities to investigate: (1) FPA experiences during training and practice; (2) biopsychosocial chronic pain therapies FPAs offer; and (3) challenges FPAs experience with rural CPM.

METHODS

With institutional ethics board approval and informed consent, we conducted an internet-based, cross-sectional survey, distributed to FPAs practicing in rural settings. The survey was developed from a literature review we previously conducted on rural CPM. Findings from the review were discussed with a panel of three FPAs and survey questions assessing FPA capacity to support CPM were generated with their guidance. Questions were organized into four domains: FPA characteristics (e.g., level of CPM training), nature of pain practice (e.g., multidisciplinary clinic), CPM treatment modalities offered, and challenges/areas of improvement in CPM.

Two researchers pilot-tested the questionnaire to assess logic branching, flow, and question complexity. After revision, three FPAs tested the survey to evaluate clinical relevance, face validity, and comprehensiveness. Data collection occurred between February and March 2022. Two reminders to complete the survey were sent within this collection period.

Our study involved both quantitative and qualitative analyses. Nominal and ordinal data were described using frequencies and percentages. Free-text responses were qualitatively analyzed by two independent researchers using a thematic analysis involving an inductive

coding approach; discussions continued until a consensus was reached.

RESULTS

From an FPA population of 129, we received 17 survey responses (13.2% response rate). We found that 58.8% (10/17) of surveyed FPAs participated in chronic pain practices. Among FPAs practicing chronic pain, 80.0% (8/10) offered procedural (e.g., facet joint injections) and pharmaceutical services (e.g., non-opioid analgesics) while 50.0% (5/10) offered psychosocial therapies (e.g., cognitive behavioural therapy). All respondents acknowledged the importance of a biopsychosocial approach to CPM involving a multidisciplinary team. Content analysis of free-text responses revealed the following themes which made biopsychosocial CPM difficult in rural communities: (1) under-preparedness due to limited chronic pain training; (2) poor accessibility to multidisciplinary care; and (3) FPA consultation time restrictions.

DISCUSSION

Our cross-sectional study found that FPAs have the capacity to support rural chronic pain care. Study participants expressed an understanding of biopsychosocial CPM and exhibited skillsets for procedural, pharmaceutical, and psychosocial management of chronic pain. However, FPAs face barriers that make the biopsychosocial management of chronic pain difficult, including limited training, poor multidisciplinary care access, and consultation time restrictions. These challenges need to be addressed to better support rural chronic pain services. Potential solutions may include enhancing physician training through CPM networks, telemedicine to improve multidisciplinary care accessibility, and implementing physician payment models that compensate for CPM time demands.

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The use of Psychedelics for pain: A Scoping Review.

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INTRODUCTION

Chronic pain is a significant cause of disability and disease burden, affecting approximately 1.5 billion people globally.[1] A variety of analgesics are used to treat pain. However, the use of opioid analgesics for chronic pain is controversial and often associated with opioid-use disorder, negative affective states, and opioid-induced hyperalgesia.[2,3]. Similarly, non-opioid analgesics are associated with decreased efficacy over time and prone to adverse effects.[4] Therefore, novel agents with a low side-effect burden and risk profile are needed to fill the therapeutic gap in chronic pain management. Psychedelics are a class of psychoactive substances that alter mood, perception, and cognitive processes. While their exact mechanisms of action remain unclear, psychedelics may confer analgesic benefits through direct 5HT2A agonism, anti-inflammatory pathways and altered functional brain connections.[5] The ability of psychedelics to operate in this neuropsychiatric domain uniquely positions them to quell the physical and psychological symptoms of pain.

METHODS

While there have been previous studies and reviews that explore the use of psychedelics for pain, to date there have been no formal systematic reviews conducted. Accordingly, the primary objective of this scoping review was to assess the effects of psychedelics in alleviating pain, and determine the most commonly studied diagnoses, frequencies, routes of administration, dosage, and overall efficacy. A detailed search strategy (Appendix 1) was used to answer the proposed clinical questions. Two authors independently assessed titles, abstracts and full-text English articles from 1946 to July 31st, 2022 using the Ovid Medline, Cochrane Database of Systematic Reviews, APA Psychinfo and EMBASE databases. The authors adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) for reporting studies included in this review. Studies were included if they included adult participants (18 years or older), reported on original data and explored the short and long-term effects of psychedelics on acute, subacute, acute-on-chronic, and chronic pain. Articles were excluded if they involved animal subjects, analyzed the isolated use of methysergide, cannabinoid-based substances or ketamine, or if they did not measure a clinically important outcome. The search did not include grey literature, conference abstracts, dissertations, or books.

RESULTS

Twenty-one articles were selected for this review. Eight studies explored the use of psychedelics for migraines and headaches—the most frequent diagnoses in this review. The remaining studies explored fibromyalgia, phantom-limb pain, malignant pain, and mixed pain states. Lysergic acid diethylamide (LSD) and psilocybin were the most analyzed psychedelics. Specifically, 14 studies reported on LSD, 13 reported on psilocybin, while 5 reported on MDMA, and 6 reported on DMT. There was great variability in dosing and route of administration. LSD doses ranged from 5μg to 200μg and was typically ingested orally. Doses below 50μg were deemed sub-hallucinogenic, while hallucinogenic doses ranged between 50μg to 200μg. Psilocybin was typically ingested orally, with sub-hallucinogenic doses below 0.5g and hallucinogenic doses between 2g to 3g. Only 1 of 5 studies with MDMA reported oral dosing (50mg to 150mg). DMT was inhaled in 2 studies, but none of the studies commented on specific dosing.

DISCUSSION

Overall, psychedelics appear to show promise for analgesia in patients with migraines, headaches, phantom-limb pain, and cancer pain. Psychedelics were generally well-tolerated with mild side-effects and produced substantial pain relief that often out lasted the acute psychedelic phase. However, the present scarcity of clinical trials and small sample sizes in this review limit their application for clinical use in various pain syndromes. Future clinical trials should assess the effectiveness of various psychedelic agents in chronic pain management, especially considering the limited efficacy and complex side effects associated with existing treatment options.

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All Ovid Medline <1946 - present>
1 exp Pain/ 440763
2 (acute pain or chronic pain).af. [all fields] 64312
3 exp analgesia/ 47949
4 (pain adj3 (acute or back or cancer or chronic or Intractable or musculoskeletal neck)).ti,ab,kf. 156811
5 analgesia.ti,ab,kf. 73347
6 Arthralgia.ti,ab,kf. 7711
7 arthritis.ti,ab,kf. 200787
8 fibromyalgia.ti,ab,kf. 11849
9 exp headache disorders/ 38705
10 headache.ti,ab,kf. 83258
11 Neuralgia.ti,ab,kf. 14934
12 neuropathic.ti,ab,kf. 33720
13 Nociceptive.ti,ab,kf. 25820
14 (pain adj3 manag*).ti,ab,kf. 45343
15 pain relief.ti,ab,kf. 35608
16 (phantom limb or limb ischemia).ti,ab,kf. 10753
17 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 890676
18 exp Hallucinogens/ 27550
19 psychedelic*.ti,ab,kf. 1792
20 hallucinogen:.ti,ab,kf. 3942
21 exp N-Methyl-3,4-methylenedioxyamphetamine/ 4152
22 n-dimethyltryptamine.ti,ab,kf,nm. 1016
23 dimethyltryptamine.ti,ab,kf,nm. 1113
24 MDMA.ab. 4187
25 DMT.ab. 2724
26 exp Ketamine/ or ketamine.ti,ab,kf,nm. 22712
27 (calipsol or calysol).ti,ab,kf,nm. 18
28 kalipsol.ti,ab,kf,nm. 27
29 (ketalar or ketemine or ketanest or ketaset).tw. 253
30 LSD.ab. 4856
31 exp Lysergic Acid Diethylamide/ 5176
32 Lysergic.tw. 2190
33 methylenedioxymethamphetamine.ti,ab,kf,nm. 3057
34 exp Psilocybin/ 955
35 Psilocyb:.ti,ab,kf,nm. 1463
36 empathogen*.tw. 53
37 (methylthiophenyl adj2 aminopropane).ti,ab,kf,nm. 8
38 entactogen.tw. 46
39 psychostimulant.tw. 4095
40 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 62951
41 17 and 40 5608
42 limit 41 to english language 5037
43 limit 42 to animals 1459
44 42 not 43 3578

Appendix 1: keywords used for search strategy