

The use of dietary supplements/natural products among patients with chronic pain and the capture of this data





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Introduction

Little is known about the use of dietary supplements and natural products(DS/NP) among patients with chronic pain in the United States and how best to capture patients' dietary supplement use.

Testing the dietary supplement interview and label visualization method for data collection will help determine the feasibility of this approach. Previous methods of data collection have included approaches such as home visits and intake of information over the phone.

The purpose of this research is to improve DS and natural product collection in the OPTIMUM Trial, a virtual RCT of mindfulness vs usual care for chronic low back pain.

Methods

A mixed methods approach will be used. First, we will use data from previous clinical trials at Boston Medical Center to capture common supplements used among patients with chronic pain.

Next, we collect information from the OPTIMUM study (an RCT for MBSR in Chronic low back pain) by conducting individual interviews using an interview guide adapted from the National Health and Nutrition Examination Study.

We will report on our testing of the dietary supplement/natural product use questions, in addition to testing the user-friendly digital capture of supplement label information (smart phone pictures, email, text message).

Preliminary Interview Data

Interview Number	Dietary Supplement/Natural Products Used for Pain	Method of Label Retrieval
1	Menthol Patch; Menthol Roll On	Text Message
2	Capsaicin	Text Message
3	CBD Drops; CBD Ointment; Cannabis	Retrieval In Progress; Verbal Description
4	Frankincense & Myrrh Neuropathy Oil; Vitamin B12; Vitamin D; Cod Liver Oil	Text Message
5	Salonpas (Camphor and Menthol) Patches	Retrieval In Progress
6	Glucosamine; Turmeric	Text Message
7	IcyHot Lidocaine + Menthol Spray	Text Message

7 participants reported no DS/NP use

Examples of Interview Questions:

"Other than medications, what are you using to manage your pain?"

"In the past 30 days, have you taken any products containing herbal or botanical ingredients like ginkgo or ginseng? Botanicals may also include medicinal teas."

"In the past 30 days, have you used any CBD or natural cannabis products? Are you using Kratom?"



Vitamin D3, Turmeric, and Capsaicin labels sent by OPTIMUM Trial Participants

Results

Out of 159 participants with chronic pain at the Boston Medical Center, 136(86%) of participants were female, 91(57%) were Black, and 77(48%) had a household income between \$5K and \$29.99K. Common vitamin supplements included multivitamins (41.5%) and Vitamin D (49.7%). Common mineral supplements included Calcium (25.8%) and Iron (20.1%). Additionally, non-vitamin, nonmineral supplements often used were Green Tea (48.4%), and Garlic (42.1%).

Data from 14 preliminary OPTIMUM Study interviews shows 50% of participants use DS for their pain. Out of 7 patients, 14 different products were used for chronic pain. 10 labels were texted, 1 label was verbally described, and 3 labels are still in process of retrieval from participant.

Conclusion

Data from Boston Medical Center found that patients with chronic pain use a variety of different dietary supplements to manage their pain. OPTIMUM Trial preliminary interviews suggest that half the participants are using DS/NP to manage their chronic pain.

With such a large variety of DS/NP, it can be difficult to identify products. Searching Google, along with the Office of Dietary Supplements' Label Database can help with the identification of products, although more consolidation of labels on the website is needed. Methods of digital collection, such as text message and email, aim to create more convenient data collection for patients.

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Optimizing Pain Treatment in Medical Settings Using Mindfulness