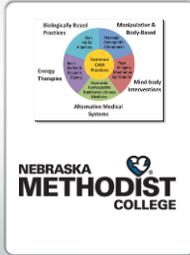


### Complementary and Alternative Medicine: Managing Chronic Pain and Preventing Analgesic Misuse in the Community

Sophie Feng, MD, PhD; April Horstman-Reser, PhD; Jeanine Kernen, MA; Dean Manternach, PhD; Harsha Sharma, PhD and Courtney Caron




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### Introduction

Chronic pain is one of the top causes of disability in the United States. Repeated use and/or large dosages of analgesic medications increase the risks of side effects, misuse, and possible dependency. When the pain control cannot be achieved at a satisfactory level, patients may seek complementary and alternative medicine (CAM). Little is known about the correlation of CAM within the chronic pain population, particularly in underserved communities. There is a dearth of evidence-based practice research to show the effectiveness of CAM in reducing analgesic use. This pilot study provides evidence to increase awareness of using CAM to improve community health, and offers nonpharmacological interventions in pain management along with the prevention of analgesic misuse.




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### Introduction

Complementary and alternative medicine (CAM) is defined as a non-mainstream practice used together with conventional medicine (complementary medicine), or in place of conventional medicine (alternative medicine) (NCCIH, 2017).

Our goal is to conduct a literature review to evaluate the effectiveness and limitations of CAM in the prevention and treatment of rUTI relapse and recurrence.




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### Methods

This study was designed as a comparative, community based participatory research. The study was performed at InCommon Development Community at Omaha, NE, between December 2018 and March 2019.

There were two phases in this study. In phase I, we offered a presentation of complementary and alternative medicine (CAM) use for the low income US adults.

Phase II started with a recruited group of 16 participants given written informed consent before the inclusion. Inclusion criteria were participants who have experienced chronic pain with using analgesics on a regular basis. The numerical rating pain scale and an anonymous questionnaire.

All participants then received six sessions of education and treatments including sessions on: acupuncture, guided imagery, music therapy, aromatherapy, Yoga, diet, hydration and supplemental vitamins, reflexology, biofeedback, meditation, and prayer approaches.



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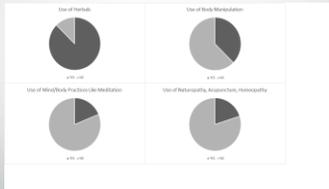
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### Results and discussion

Participants who practiced CAM in past 12 months



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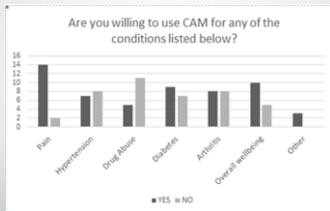
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### Results and discussion

CAM uses with specific health conditions



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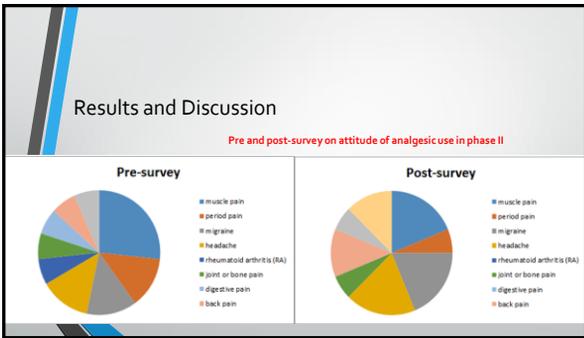
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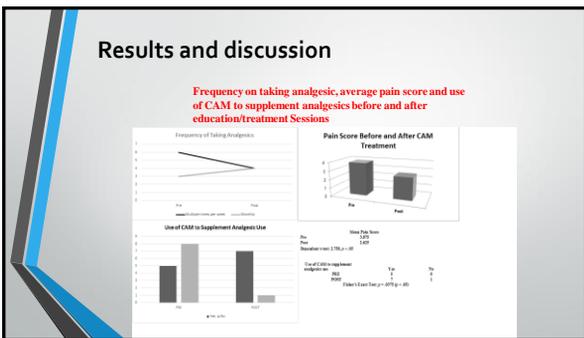
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### Conclusion

- Overall, our findings contribute to the growing body of literature exploring the role of CAM on chronic pain management and analgesic misuse prevention. We ascertain that underserved community gained knowledge and positive attitude after CAM training. Propose of education has been well benefited as evident by implementation of CAM approaches. After the sessions, the participants realized the importance of communication with their providers, and the risk and benefits before and after they adopt CAM. After six sessions of CAM treatments and education, participant's pain level and analgesic usage decreased significantly. The outcomes of this study are a good example of a successful intervention that can contribute to the debate about the effectiveness of CAM approaches on chronic pain and analgesic misuse management.

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### Limitation

There were limitations with this quantitative research. Although every effort was made through rigorous recruiting process, it was challenging for all participants to attend all the six sessions due to personal reasons and in phase II the number of participants dropped to eight. In some instances, participants did not answer all the questions on the questionnaire since the surveys are anonymous. In addition, there is no control group being selected, however, the data provide valuable insights into CAM approaches that articulates with modern medicine to improve chronic pain management and prevention of analgesic misuse.

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### Implications and future directions

After reviewing the research database, there is a clear indication that little is known about CAM approaches on chronic pain management, especially on analgesic misuse prevention among the underserve community.

The plan is to recruit more community partners and increase the study sample size for future projects.

In addition, we will still use these multidomain strategies as an intervention tool. However, we will add more strategies to assess the relationship between the use of each modality and its outcome, and as well as to identify the best modalities.

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**Acknowledgement**

Methodist Foundation provided grant funds to initiate the research.

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**Questions???**

Thank you for coming

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