Community-Academic Partnership in Milwaukee County: A Model For Improving Veteran Healthcare Nationally

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Introduction

Veteran community engagement is a nascent area of scholarship mixing traditional Community-Based Participatory Research (CBPR) strategies with veteran beliefs. Much work on community engagement and CBPR has been conducted at a local level, yet there is a dearth of work that can better assess the progress of an intervention over several years and can therefore provide a more complete assessment of the impact. Key-informant interviews, aimed to assess collective impact, have been shown to provide a starting point for understanding the partnership, track the development of the partnership over time, and assist in interviewing topics, and analyzed patterns across the interviews. Codes were designed based on patterns of codes that were used to analyze the data. We then provide specific quotes from interviews to expand upon the codes.

Methods

This study used a mixed-methods approach including document and grant review, as well as key-informant interviews, in order to examine the impact of a community-academic partnership on health and access to care. The study employed both qualitative and quantitative data collection methods to provide a comprehensive understanding of the partnership. The study included a variety of stakeholders, including veterans, nonveterans, and key informants. The data collection methods included semi-structured interviews, focus groups, and document and grant reviews. The data were analyzed using qualitative methods, including content analysis and thematic analysis.

Document and Grant Review

The successes of the partnership can be measured by its extensive funding, community events, and organization achievements outlined in the timelines below.

Results

<table>
<thead>
<tr>
<th>Key informant Interview Thematic Analysis</th>
<th>Document and Grant Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in community and physician perception of veteran mental illness</td>
<td>A big success is Quick Reaction Force manual. I want to go all over the country and talk about this. The VA is on board with it. This is recognized nationally. In Wisconsin, we kick-started innovative peer mentoring services and training modules that were recognized by legislators and national groups.</td>
</tr>
<tr>
<td>1st Veteran Community Engagement Coalition (2013)</td>
<td>When local impacts were discussed, all partners mentioned the need for more impact studies. The largest local impact was increased community understanding and awareness of the干活 organization. The immediate goal of the partnership was to improve understanding and awareness of the organization.</td>
</tr>
<tr>
<td>Jesse Brown VA in Chicago, IL utilizes the Quick Reaction Force Manuel</td>
<td>Nottingham Partners Program begins at DryHootch and at Milwaukee County Department of Family and Community Medicine. A number of service delivery models were chosen to further de-escalate situations and hand-off veterans in crisis to the VA.</td>
</tr>
<tr>
<td>1st Coalition of veteran community partners</td>
<td>“Not everyone wanted to seek services from the VA. The Warrior Summits were the vehicle for community populations to understand the organization.” [veteran partner]</td>
</tr>
<tr>
<td>When national impacts were discussed, partners mentioned the need for more impact studies. The largest national impact was increased community understanding and awareness of the organization.</td>
<td>Major Policy Points:</td>
</tr>
<tr>
<td></td>
<td>1. After the Vietnam War, disillusionment with United States Department of Veterans Affairs (VA) services led to community-based Veteran Centers and veteran-led mental health services.</td>
</tr>
<tr>
<td></td>
<td>2. Although veteran-led community academic partnerships achieve qualitative results, additional funding, particularly from philanthropic and governmental sources, is required.</td>
</tr>
<tr>
<td></td>
<td>3. VA assistance for veteran-initiated healthcare projects could expand care to veterans who don’t use or are unable for VA services and better address veteran needs.</td>
</tr>
<tr>
<td></td>
<td>4. Policymakers who advocate for veteran-initiated initiatives can appear vulnerable who do not wish to seem active in and promote social economic.</td>
</tr>
</tbody>
</table>

References

BACKGROUND

A community-academic partnership launched the Milwaukee Prevention of Opioid Misuse with Peer Training (PROMPT) project designed to equip Veteran peer support specialists with knowledge to prevent and reduce opioid abuse among military Veterans. This community-engaged research (CEnR) study was based on the belief that a comprehensive, community-engaged prevention and intervention effort is needed to prevent opioid use disorder (OUD) among Veterans.

Complex problems require community input. A CEnR approach positioned this community-academic research team to engage community members as co-investigators and collaborative partners in the design. Engaging Veterans and community organizations provided a robust framework through focus groups and the collaborative development of a training curriculum. Support groups allowed peer mentors, who had shared lived experiences with the participants, to debrief. The psychological team adapted to the needs of the group. The Milwaukee PROMPT project offers an important example of how a community engaged approach can tackle OUD among military Veterans.

PURPOSE

The interlocking factors of physical injuries, psychological injuries, post-traumatic stress disorder (PTSD), stigma, and unwillingness to seek care are some of the multifaceted contributors to OUD and OUD-related deaths among Veterans. Integrating research with community input and partnerships optimizes the opportunity to address the psychological, social, and physical aspects of pain experienced by Veterans.

METHODS

Milwaukee PROMPT was a multi-phased project that prioritized the importance of a CEnR approach.

- During Phase 1, Veterans who experience OUD, professionals who work with substance abuse populations, and friends/family members who support Veterans participated in focus groups. Focus group questions were developed with community input.
- During Phase 2, the research team reviewed and categorized the themes that emerged from the focus group content analysis to collaboratively create a peer-delivered training curriculum.
- During Phase 3, PROMPT peer mentors were trained to use the training curriculum, recruited and worked with research participants experiencing OUD, and met regularly with a psychological team to debrief their peer mentoring experiences in a support group.

RESULTS

The Phase 1 focus groups allowed for expression of nuanced perspectives, identified service gaps within the Veteran population, and informed the Phase 2 creation of the peer-delivered training curriculum. During Phase 3, the team developed a process to debrief and mitigate emotional distress that peer mentors may experience while mentoring research participants experiencing OUD. The team developed a process that addressed peer mentors’ needs for regular debriefing and support. This support involved regular meetings with a psychological team for peer mentors to debrief their experiences in their roles. Conversations with the peer mentors indicated that the focus group themes and resulting modules resonated with their experiences.

CONCLUSION

Complex problems require community input. A CEnR approach positioned this community-academic research team to engage community members as co-investigators and collaborative partners in the design. Engaging Veterans and community organizations provided a robust framework through focus groups and the collaborative development of a training curriculum. Support groups allowed peer mentors, who had shared lived experiences with the participants, to debrief. The psychological team adapted to the needs of the group. The Milwaukee PROMPT project offers an important example of how a community engaged approach can tackle OUD among military Veterans.
NEGATIVE RESULTS? Modest increases in clinical symptoms. This may be due to the reflective nature of the activities and increase in Vets’ ability to name and connect with feelings associated with moral injury.

<table>
<thead>
<tr>
<th>Discussion Series</th>
<th>Moral Injury Pre-test (mean)</th>
<th>Moral Injury Post-test (mean)</th>
<th>P-value (significance .01)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series 1&amp;3 Shakespeare Scenes</td>
<td>46.84</td>
<td>47.8</td>
<td>0.95</td>
</tr>
<tr>
<td>N=20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Series 2&amp;4 Graphic Novel</td>
<td>44.57</td>
<td>45.5</td>
<td>0.54</td>
</tr>
<tr>
<td>N=14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Data Combined</td>
<td>45.7</td>
<td>46.65</td>
<td>0.62</td>
</tr>
</tbody>
</table>

Vets became comfortable talking about MI with others, able to better express their MI and wanted to continue the dialogues. A majority welcomed the opportunity to share “radical truths” and some used insights as bridge to therapy.

Many Vets feel alienated from engaging in war work. Ethical and spiritual dialogues are key to making sense of war trauma and humanities programs offer options, but physicians/funders want data that speaks their language.

METHODS
Pre/post changes in clinical symptoms:
1. Collected data from population
2. Tested it with X process.
3. Illustrated your methods if you can.
4. Try a flowchart!

RESULTS
MISS-M-SF scores modestly increased symptoms while ability to identify, talk about, understand MI improved.

WARRIORS PATH AIMS
• create space for Vets to explore and gain a deeper understanding of spiritual and moral impacts of war
• provide a language to talk about Moral Injury
• express feelings, first through characters, then with each other, using Shakespeare’s plays, graphic novels and war poetry as an entry point

RECONCILING +/- RESULTS
Participants and community partners CONCERN over “Clinical Symptom” results:
Do not tell the whole story
Can misrepresent outcomes
Perceptions of “real” evidence

DISCUSSION
Should we assess non-clinical community-based interventions with measures created for medicine?

Katinka Hooyer, PhD, MCW; Nancy Smith-Watson, FoC; Leslie Ruffalo, PhD, MCW
INTRODUCTION

• Harps of Comfort began with a tweet. On March 31, 2020, Dr. Jennifer Mackinnon of Froedtert Hospital and The Medical College of Wisconsin reached out to music-thanatologist and author Jennifer Hollis on Twitter, saying, "I am a harpist and doctor. I want to see how we can bring music into the ICUs when patients are dying alone. Let's work together and see if we can make this happen."

• Shortly thereafter, we brought together a group of harpists – all highly trained palliative musicians – to meet weekly on Zoom. These harpists come from all across the United States, Canada, and Australia, and many have decades of experience offering live music in medical settings.

• We developed a shared vision, chose a name, built a website, answered initial questions about funding, and tested microphones and equipment to ensure excellent sound quality over remote platforms.

• Harps of Comfort began playing for patients at Froedtert Hospital on September 21, 2020.

As of early November 2020, Harps of Comfort has played 42 music sessions. Some patients have received repeat music sessions.

METHODS

• Each week, two harpists are on-call M-F, 12noon-5pm to play music for isolated patients with COVID-19.

• By using iPads and a safe secure virtual platform, WebEx, the musicians are able to play for 30-45 minute Patients were in the CVICU and available during Harps of Comfort on-call time (M-F, 12-5pm)

• Nursing staff offered Harps of Comfort to patients and got consent for music sessions.

• Harpists offered music sessions over WebEx for 30-45 minutes

• Patients, nursing staff, and harpists offered qualitative feedback about music sessions

• During music sessions, harpists have observed decreased respiratory and heart rates, increased relaxation and sleep, and have heard positive feedback from family members.

• Qualitative analysis of musicians virtual encounters with patients review.

• Extraction of themes

Harpists report that the remote platform, WebEx, provides a unique and robust opportunity to provide excellent patient care. "It has been an amazing experience for me to be able to bring comfort and support to Covid-19 patients with my harp and voice and to see how close the virtual platform brings us to the patient's bedside. It is like being right there with them." (Bonita Wood, CMP, RN, BMus)

RESULTS

• Patients, nursing staff, and harpists have heard positive feedback from family members.

• Observation of patients with COVID-19

• More study of the impact of the music sessions will be forthcoming via validated research surveys before and after the music sessions.

• This research will include the effects of music on the well-being of ICU staff as well as loved ones attending the music sessions remotely

• Harps of Comfort may in the future collaborate with palliative care in addition to ICU

• Harps of Comfort’s method of offering remote music sessions for isolated COVID-19 patients could be a model for other hospitals and nursing facilities in the community.

CONCLUSIONS

• Initial observations indicate that remote music sessions can provide symptom relief, increased relaxation and sleep, care and support for patients and their loved ones in isolation with COVID-19.

• More study of the impact of the music sessions will be forthcoming via validated research surveys before and after the music sessions.

• This research will include the effects of music on the well-being of ICU staff as well as loved ones attending the music sessions remotely

• Harps of Comfort’s method of offering remote music sessions for isolated COVID-19 patients could be a model for other hospitals and nursing facilities in the community.

• References

• "Investigating the physiological responses of patients listening to music in the intensive care unit" in The Journal of Clinical Nursing

• "Receptive music therapy to reduce stress and improve wellbeing in Italian clinical staff involved in COVID-19 pandemic: A preliminary study" in The Arts in Psychotherapy

• "Family members’ views on the benefits of harp music vigils for terminally-ill or dying loved ones” in Palliative and Supportive Care

"A patient’s wife had stated that she felt that the Harps of Comfort visit helped lower her husband's blood pressure, and she herself appreciated the music – she made sure that each day they played and she was here at the hospital, that she was in the room the whole time for it as she found it comforting as well.” "Still another patient had been very restless, anxious and short of breath for much of the shift; he agreed to try the Harps of Comfort playing for him and the bedside RN reported that the patient fell asleep within 5 minutes of them starting to play because he was so relaxed!” -Jennifer Popies, MS, RN, CCRN-K, ACNS-BC, Clinical Nurse Specialist in the CVICU

"Family members’ views on the benefits of harp music vigils for terminally-ill or dying loved ones” in Palliative and Supportive Care

REFERENCES

• "Investigating the physiological responses of patients listening to music in the intensive care unit" in The Journal of Clinical Nursing

• "Receptive music therapy to reduce stress and improve wellbeing in Italian clinical staff involved in COVID-19 pandemic: A preliminary study" in The Arts in Psychotherapy

• "Family members’ views on the benefits of harp music vigils for terminally-ill or dying loved ones” in Palliative and Supportive Care
Enhancing patient-centered medical care through life story work (LSW).

Sai Suma Samudrala1; Justin Laridaen1; Seth Jovaag2; Thor Ringler, MFA, MS2; Michael McBride, MD, MS3; Bertrand Berger, PhD3

1-Medical College of Wisconsin, Milwaukee, WI  2-William S. Middleton Memorial Veterans Hospital, Madison, WI  3-Zablocki Milwaukee VA Medical Center, Milwaukee, WI

Introduction
The patient-provider relationship plays an essential role in patient-centered care, however, because of clinical time restraints, providers are often unable to engage in conversations that extend beyond the patient’s presenting health concerns. Veterans especially benefit from such practices as an understanding of their past experiences may uncover important clinical information that influences their overall health profile. One way to have these conversations is through life story work (LSW).

Objective
The “My Life, My Story” (MLMS) program at the Milwaukee VAMC will be used to determine if LSW enhanced trainee empathy, fostered stronger patient-provider relationships, and contributed to effective patient-centered care.

Methodology

1. Pre-
   - Recruit student volunteers (pre-health trainees).

2. Interview
   - Veterans share life story experiences.
   - Recruit/consent Veterans for interview.
   - Trainees write a narrative in Veteran’s voice.
   - Set up in-person or virtual interview.

3. Post-
   - Veteran’s story is added to their medical record.
   - Story is read back to Veteran for approval.
   - Feedback is used to improve the program.

Results
Preliminary MLMS program feedback at the Milwaukee VAMC is similar to the feedback received by the Madison and Boston VAMCs’ MLMS programs. All Veterans reported that they felt confident that their stories would enable providers to give better medical care. All trainees also reported increased comfort in speaking and connecting with Veterans.

Conclusions
Engaging in LSW outside of clinical visits improves trainee comfort and contributes to increased Veteran satisfaction. These stories further transform a VAMC into a community where Veterans feel accepted and understood.

Future Directions
- Encourage pre-health trainees and Veterans to participate in the program.
- Increase community awareness of MLMS.
- Optimize post-interview survey questions that are given to trainees and Veterans.
- Obtain feedback from healthcare providers.
- Host regular Read-a-thons.
- Incorporate MLMS into trainee curriculum.
- Assess implementation of MLMS into other aspects of clinical care.

Madison VAMC Results

Veterans’ Responses to MLMS

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Providers’ Responses to MLMS

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>30%</td>
<td>15%</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Milwaukee VAMC Results

MLMS Veteran Surveys July 2019 - September 2020

- The process of sharing my story was worthwhile.
- Having my medical care team read my story will help them provide me with better treatment.
- Being involved in the MLMS program improved my comfort with my providers.
- Telling my story let me look back at my own life.
- I am glad I participated in the My Life My Story Program.

MLMS Student Surveys July 2019 - September 2020

- This program helped me better connect with veterans.
- This interaction had a meaningful impact on my rotation.
- I am glad I had the opportunity to participate in the My Life My Story Program.
- Being involved in this program improved my empathy for patients.
- Being involved in this program improved my comfort talking with interviewing patients.

Feedback from other MLMS programs, including the Madison VAMC (pictured above) and the Boston VAMC, identified that Veterans, trainees, and providers unanimously benefitted from this LSW.

References
Evidence-Based Decision Making: Marathon County Pre-trial Project

Natalie Weeks

MCW Faculty Advisor: Dr. Corina Norrbom

Abstract

Marathon County is 1 of 6 Wisconsin counties chosen through an application process to partner with the Wisconsin Department of Justice and National Institute of Corrections (NIC) in the Evidence-Based Decision Making in State and Local Criminal Justice Systems Initiative (EBDM). Decreasing recidivism rates and crime within the community are public health priorities in Marathon County. My goal in this project was to partner as a representative of the Medical College of Wisconsin with a team of community members on the local Evidence-Based Decision Making Team to implement practices that improve the local justice system in Marathon County.

Background/Purpose

The purpose of this project is to help build a systemswide framework to guide Marathon County justice system starting from the initial arrest through final disposition and discharge to result in more collaborative evidence-based decision making and practices in state and local criminal justice systems. Recidivism is the tendency of a convicted criminal to reoffend. The pre-trial period is the timeframe of the initial arrest to before the case disposition, and this is when key decisions are made about releasing, citing, detaining, charging, and bail. Even short periods of incarceration significantly impact health. Information gathered through project knowledge can be applied to: reduce pre-trial misconduct and offender recidivism; reduce harm in our communities; meaningfully engage the public; build true partnerships across jurisdictional boundaries.

The results from the Marathon County Pre-trial Project will help guide additional Wisconsin counties in the future if they choose to implement a pre-trial program. The outcomes/data/ performance measures of this project should be monitored ongoing and considered in context of the unique defendant demographics in this project.

Methods

All the information gathered for my part of this project was obtained through public records on the WI Circuit Court Access (CCAP). To get the best assessment of average need and level of risk for the Marathon County system, individuals with an offense that occurred recently in Marathon County were compiled into a list otherwise chosen by random sampling. The individuals (n=250) were scored with the Public Safety Assessment Tool supplied by the Arnold Foundation and the PSA Matrix created by the State of Wisconsin. This matrix gave a score of 1–4 after compiling all these factors used to score individuals:

- Age at current arrest
- Current violent offense and prior violent offenses
- Pending charge at time of offense
- Previous misdemeanors or felonies
- Prior failure to appear to court dates
- Prior jail sentence

The scoring works based on the premise that level 1 individuals are at the lowest risk of reoffending and failing to appear to court. Level 4 is the highest risk. Some recommendations for supporting individuals based on their risk level include:

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face-to-Face Contact</td>
<td>No</td>
<td>1x/month</td>
<td>Every other week</td>
</tr>
<tr>
<td>Alternative Contact</td>
<td>No</td>
<td>1x/month</td>
<td>Every other week</td>
</tr>
<tr>
<td>Supervised Conditions</td>
<td>No</td>
<td>As Authorized</td>
<td>As Authorized</td>
</tr>
<tr>
<td>Court Date Reminder</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Criminal History/CJIS</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Conclusions

Decisions about whether to incarcerate can be tailored to the individual’s needs and risk level, with the goal of being as least restrictive as necessary. The intervention should match the risk level of the individual. Evidence-based decisions help balance the need for public safety and the consequences for the individual being held while giving equal opportunity for pre-trial release to all persons, regardless of race, gender, and SES. Solid pre-trial support services improve court appearance rates, transparency and accountability in prosecutors’ offices, and evidence-based workload limitations for public defenders. Decreasing recidivism rates has harm reduction effects on the entire community. It helps minimize the negative health outcomes of incarceration on individuals and their families.

Future Directions

The long-term goal of the EBDM team is to implement this scoring system on each pre-trial detained inmate for evidence-based decision making on new cases. As more individuals are scored with the matrix, more information will be available about the amount of services and resources needed to best support those within the local justice system.

The results from the Marathon County Pre-trial Project will help guide additional Wisconsin counties in the future if they choose to implement a pre-trial program. The outcomes/data/ performance measures of this project should be monitored ongoing and considered in context of the unique defendant demographics in this project.

References


Acknowledgments

Yarie, L. and Kischel, D. of Marathon County Justice Administration Marathon County EBDM team National Institute of Corrections Arnold Foundation

EBDM Framework Principles

EBDM Principle 1: The professional judgment of criminal justice system decision makers is enhanced when informed by evidence-based knowledge.

EBDM Principle 2: Every interaction within the criminal justice system offers an opportunity to contribute to harm reduction.

EBDM Principle 3: Systems achieve better outcomes when they operate collaboratively.

EBDM Principle 4: The criminal justice system will continually learn and improve when professionals make decisions based on the collection, analysis, and use of data and information.


diagram showing final recommendation score breakdown with level 1: 41%, level 2: 17%, level 3: 10%, level 4: 22%
Wisconsin Views on Addiction and Mental Health

Nathan Staidl, MS2

INTRODUCTION
• Growing up in a very rural and conservative portion of Wisconsin, I found addiction and mental health were traditionally ignored.
• I have often wondered if there is a correlation to certain social demographics and views on addiction.

PURPOSE
• Discover the people of Wisconsin’s views as they pertain to substance abuse and mental illness.
• Evaluate opinions of varying demographics throughout Wisconsin, to compare with modern, widely accepted scientific research on addiction.
• This research may help lead to improved public opinion, state policies, and legislation with regards to how we care for people living with addiction.

METHODS
• Surveys were distributed via the Brown County Alcohol & Drug Coalition 4 Change, and collected using the online survey platform, Qualtrics.
• Data interpreted to match answer patterns such as whether they believed addiction was a mental illness, and what they thought were increased risk factors, with certain self-proclaimed demographics including whether they or someone they knew suffered from addiction, participant’s age, education level, income, where they grew up/live now, and political views.

RESULTS

Average Participant*:

<table>
<thead>
<tr>
<th>Age</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>26-40</td>
<td>18%</td>
</tr>
<tr>
<td>41-65</td>
<td>76%</td>
</tr>
<tr>
<td>&gt;65</td>
<td>6%</td>
</tr>
<tr>
<td>Did Not Answer</td>
<td>0%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
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</thead>
<tbody>
<tr>
<td>Ass/ Tech</td>
<td>18%</td>
</tr>
<tr>
<td>Bachelor's</td>
<td>76%</td>
</tr>
<tr>
<td>Masters</td>
<td>6%</td>
</tr>
<tr>
<td>Did Not Answer</td>
<td>0%</td>
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</table>

<table>
<thead>
<tr>
<th>Household Income</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>&lt; $80,000</td>
<td>20%</td>
</tr>
<tr>
<td>$80,000 - $240,000</td>
<td>33%</td>
</tr>
<tr>
<td>&gt; $240,000</td>
<td>5%</td>
</tr>
<tr>
<td>Did Not Answer</td>
<td>12%</td>
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<table>
<thead>
<tr>
<th>Area Raised/Live</th>
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<tbody>
<tr>
<td>City/ Suburban</td>
<td>88%</td>
</tr>
<tr>
<td>Rural</td>
<td>12%</td>
</tr>
<tr>
<td>Did Not Answer</td>
<td>0%</td>
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</table>

<table>
<thead>
<tr>
<th>Political Views</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Liberal</td>
<td>6%</td>
</tr>
<tr>
<td>Moderate-Liberal</td>
<td>47%</td>
</tr>
<tr>
<td>Moderate</td>
<td>24%</td>
</tr>
<tr>
<td>Moderate-Conservative</td>
<td>12%</td>
</tr>
<tr>
<td>Very Conservative</td>
<td>0%</td>
</tr>
<tr>
<td>Did Not Answer</td>
<td>12%</td>
</tr>
</tbody>
</table>

*Approximately 88% of participants know someone who experiences addiction, 24% experience addiction themselves, and 6% do not experience nor know someone who experiences addiction.

CONCLUSIONS
• The majority of people who were surveyed in Wisconsin do see alcohol and drug addiction as a mental illness.
• Some people still fail to recognize social factors such as education and income as high-risk determinants of addiction, while placing more influence on family history and where the person grows up.
• There appears to be no correlation between any one demographic and views on addiction, however the small sample size and general lack of diversity among participants may be contributing to false representations, as well as participants selecting “self-proclaimed” demographics which may be subjective.
• Other limitations may include selection bias due to the organizations I worked with giving access to participants who may have already been seeking to change views and policies on substance abuse. People with this stance may skew results towards a more progressive outlook.

REFERENCES
• Lane JB. Addiction Medicine: Closing the Gap between Science and Practice. New York, NY: National center on addiction and substance abuse (CASA); 2012.
Factors Associated with Tobacco use in Homeless Adults
Benjamin Wrucke (M2); Lauren Bauer, MD, MPH; Rebecca Bernstein, MD, MS
Department of Family & Community Medicine, Medical College of Wisconsin, Milwaukee, WI

Introduction

Background:
- Those who are homeless are four times more likely to smoke cigarettes than the general US population [4]
- Previous studies have separately investigated quantitative factors and personal experiences associated with tobacco use in homeless individuals [1-3, 5]
- A more complete understanding of the interaction between these factors is needed in order to improve tobacco use prevention and cessation outreach

Objectives: Investigate factors associated with tobacco use and develop a theory for tobacco use and cessation in this homeless population

Hypothesis: Homeless smokers show lower self-efficacy, greater social isolation, poorer perception of therapy, and greater levels of chronic homelessness than non-smokers

Phase I Methods

Design: Quantitative cross-sectional analysis of a homeless shelter and service agency’s counseling clinic data bank

Data Collection: Clients of the counseling clinic completed three assessments via counselor interview. Data was collected from 2014 to 2019.

Study Population: 97 individuals who indicated a history of homelessness

Statistical Methods: Logistic regression performed in RStudio using a generalized linear model. Independent variables were analyzed to predict a current status of smoker or non-smoker.

Phase I Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR (95% CI)</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Level of Education (n = 97)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some high school or less</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>High school, GED, HSED</td>
<td>0.05 (0.002-0.39)</td>
<td>0.01</td>
</tr>
<tr>
<td>Technical training, some college or greater</td>
<td>0.07 (0.003-0.49)</td>
<td>0.02</td>
</tr>
<tr>
<td>Do you currently have health insurance provided by the state of WI? (n = 97)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>0.11 (0.005-0.91)</td>
<td>0.07</td>
</tr>
<tr>
<td>No</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

How many times have you received substance abuse treatment (before this time)? (n = 97)

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR (95% CI)</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>No prior tx</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1 to 2</td>
<td>3.54 (0.90-15.27)</td>
<td>0.08</td>
</tr>
<tr>
<td>3+</td>
<td>4.17 (1.19-15.81)</td>
<td>0.03</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR (95% CI)</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social isolation score (n = 97)</td>
<td>1.02 (0.95-1.10)</td>
<td>0.56</td>
</tr>
<tr>
<td>Self-efficacy score (n = 97)</td>
<td>1.41 (0.53-3.87)</td>
<td>0.49</td>
</tr>
<tr>
<td>I see the value in therapy (n = 95)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Agree</td>
<td>1.38 (0.43-4.76)</td>
<td>0.55</td>
</tr>
<tr>
<td>Neutral</td>
<td>2.18 (0.41-16.28)</td>
<td>0.40</td>
</tr>
<tr>
<td>Have you been homeless continuously for the last 12 months or more? OR Have you been homeless 4 or more times in the past 3 years? (n = 97)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2.46 (0.79-8.02)</td>
<td>0.12</td>
</tr>
<tr>
<td>No</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Conclusions

Results suggest that smoking cessation programs could benefit from:
- Tailoring information to the education level of their audience
- Discussing health insurance, barriers to treatment, and affordable treatment options
- Highlighting how smoking cessation could improve ability to quit other substances. [6]

Reference(s)

Acknowledgements
Thank you to The Guest House of Milwaukee for being our community partner!
Fellowship funded by the Department of Family & Community Medicine

• The odds of being a current smoker was higher for those with a low level of education
• The odds of being a current smoker was lower for those with state health insurance
• The odds of being a current smoker was higher for those with prior substance abuse treatment
• Social isolation, self-efficacy, perception of therapy, and chronic homelessness did not seem to impact smoking status