

Community Matters

A Community Research Poster Forum



Project Presentations

THURSDAY, SEPTEMBER 24, 2020

THURSDAY, OCTOBER 8, 2020



Welcome from our Campus Dean

MATTHEW HUNSAKER, MD



I hope you enjoy exploring the scholarly projects that our medical students have completed in partnership with local community organizations.

The student projects link medical education with the resources and needs of Green Bay-area communities to promote health in northeastern Wisconsin. This unique MCW experience is designed to cultivate medical skills and interests, deepen ties to the community, and provide an appreciation for the physician's potential role and impact on local health needs.

I would like to recognize the partner organizations and community mentors who volunteered with our medical students on these projects. You are a critical element to their medical education and we could not have accomplished this work without your support. ■

Welcome from our Pathway Course Director

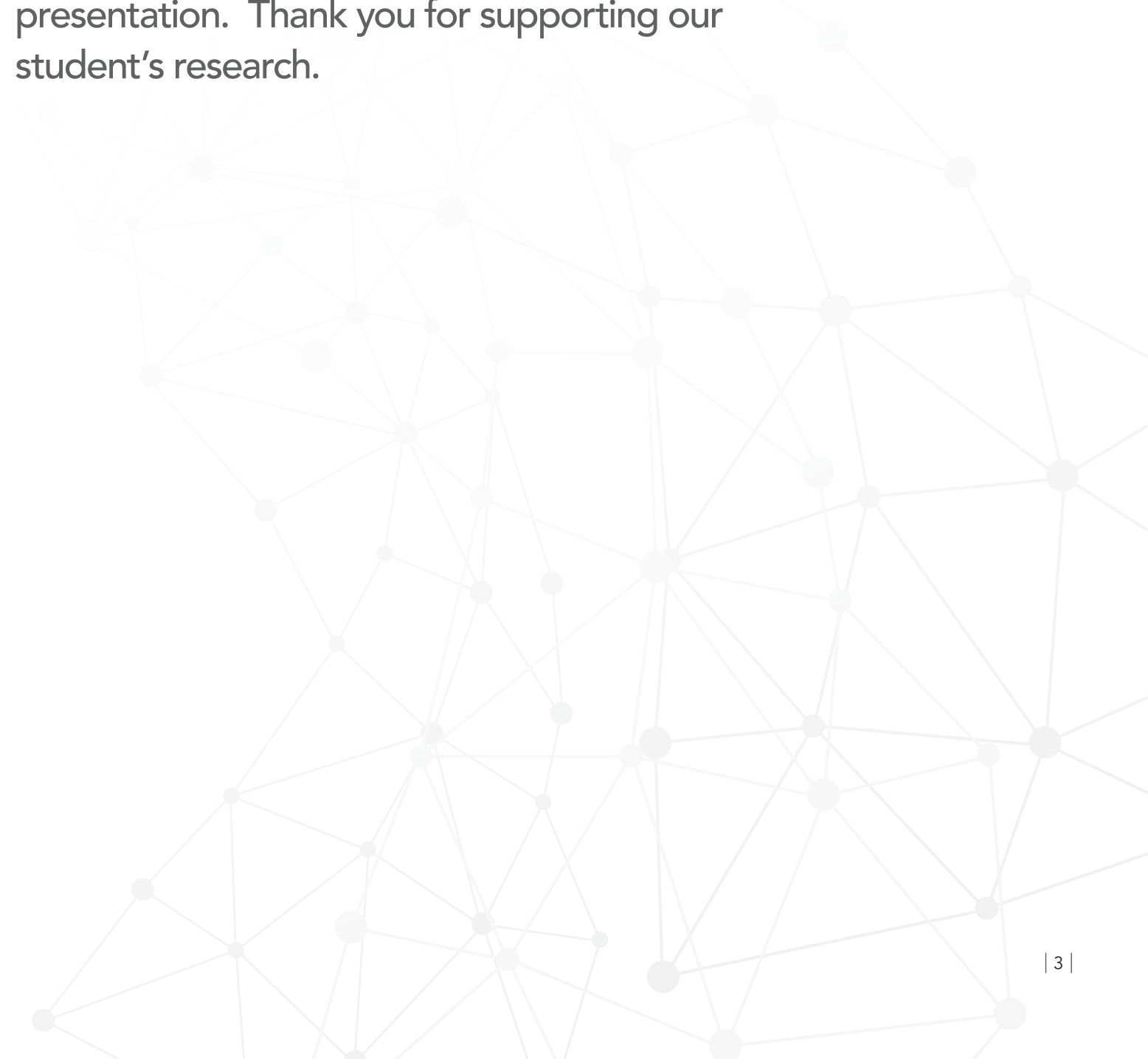
KATRINA ROSCULET, MD, MA



Welcome to the fourth annual MCW-Green Bay community research poster forum. Our medical students complete a Community Oriented Primary Care (COPC) scholarly research project. COPC emphasizes a systematic approach to community and individual health, combining elements of epidemiology, primary care, preventive medicine and health promotion. Through the Physicians in the Community Pathways Course and other aspects of the curriculum, our students establish relationships with many local organizations who are directly involved with the well-being of the population, and thus identify health needs, design appropriate interventions, and assess the effects of the interventions from a "boots on the ground" perspective, finally resulting in a public poster presentation. Our goal is to help students become community engaged physicians, moving us from the care we have, to the care we need.

Many thanks to Chrystal Woller, BSN, RN, St. Norbert College, Senior Director, Health and Wellness Services, for her assistance in working directly with the students to get their projects off the ground. Our appreciation goes out to all of our community partners; those represented in the poster presentations, as well as those who give generously of their time and expertise in countless other ways to help MCW-Green Bay achieve our lofty goals. Please enjoy the surprising variety of community projects. ■

This year our student poster forum will be presented virtually due to the pandemic. In this way, our students will be able to share the results and stories of their community health-related research projects safely, and still gain important presentation skills. There will be time for live question and answer sessions after each presentation. Thank you for supporting our student's research.



WELCOME & INTRODUCTION

Thank You!

A special thank you to our many community partners for your time and investment in our students.

- 1 Froedert & MCW Milwaukee, Marcie Berger, MD, FACC
- 2 Aurora Baycare, Bob Zemple MD, Rachel Reas BSN, RN
- 3 Bellin Health
- 4 House of Hope
- 5 St. John Nepomucene School, Little Chute, WI
- 6 Aging and Disability Resource Center
- 7 Milo C Huempfer VA Outpatient Clinic
- 8 N.E.W. Community Clinic
- 9 Brown County Rescue Services
- 10 Family Services of NE Wisconsin, Sexual Assault Center
- 11 Green Bay Oncology, Brian Burnette MD
- 12 Wisconsin Medical Society
- 13 Bellin Health, Paul Casey, MD
- 14 Rise Together
- 15 Jackie Nitschke Center
- 16 St Norbert College

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Dimensions of Left Atrial Appendage in Patients Who Have a Left Atrial Appendage Thrombus vs. Patients Who Have Not

OSAYD ASSAD



Introduction

Patients with atrial fibrillation (AF) take blood thinners to lower the risk of intracardiac thrombus and embolic events. Because most intracardiac thrombi in AF form in the left atrial appendage (LAA), catheter-based occlusion of the LAA also reduces stroke risk in patients unable to tolerate chronic oral anticoagulation.

We conducted a retrospective study of AF patients comparing LAA dimensions in those with and without documented left atrial appendage thrombus. Implanting the watchman device requires a procedure which comes with risks; therefore, the study strives to assess which patients are good candidates for the watchman cardiology device.

Methods

We identified a list of patients with a history of AF and a diagnosis of confirmed Left Atrial Appendage (LAA) thrombus based on transesophageal echo (TEE) imaging. Using the TEE, we then measured the LAA ostial and length dimensions from several orthogonal views (in at least 2-3 views- 0/45/90/135 degrees). We gathered our data in an excel sheet and a scatter plot was made. We have omitted variable bias by selecting patients through randomization.

Results

There was a significant statistical difference in the diameter of the os of the LAA between the control and study group ($p = 0.021838553$). The depth did not have any significant difference ($p = 0.790363051$).

Conclusions

Overall, there was a significant difference in the diameter of the os in patients with thrombus versus those without. ■

Assessing Efficacy of Pre-Hospital Providers in Correctly Identifying CVA in De Pere and Ashwaubenon WI, A Retrospective Study

Introduction

CVA has long been a significant cause of morbidity and mortality in humans. Because of its insidious nature and acute presentation, it is a silent killer that places a large amount of financial and industrial burden on the healthcare system. There has been considerable work done in recent decades to improve the outcomes of CVA's via earlier identification and development of more effective therapeutics.

The Los Angeles Motor Scale (LAMS) is a pre-hospital stroke scale developed for the purpose of earlier identification of CVA. Aurora BayCare Medical Center (ABMC) is the only Level 1 Comprehensive Stroke Center in the greater Green Bay area and is thus the standard destination for suspected CVA's.

Methods

This study sought to investigate the efficacy of the LAMS scale in identifying CVA's in the pre-hospital setting in De Pere and Ashwaubenon, WI, from 2016-2019 through the cross-referencing of de-identified patient records from the respective pre-hospital EMR's with those of ABMC.

Results

This study demonstrated an 80% sensitivity for CVA across both departments, in line with the 81% national average. Furthermore, our study demonstrated very similar efficacy of the LAMS tool in both De Pere and Ashwaubenon. The positive and negative predictive values of LAMS were 84.2% and 42.9%, respectively.

Conclusions

The results provide further support for both the efficacy and utility of the LAMS stroke scale in pre-hospital stroke identification. ■

PATRICK BEST



JAYME NELSON



Pedometer Health Implications in Type 2 Diabetes Mellitus Patients

MEAGHAN CARNEY



Introduction

Type 2 Diabetes Mellitus is a public health and economic issue in the United States and all around the world. The American Diabetes Association recently published data regarding the efficacy of exercise as a treatment option for type 2 diabetes from multiple randomized trials.¹ Metabolic benefits of aerobic exercise are impressive but are short lasting. Therefore, an ongoing exercise program is required for positive health outcomes derived through exercise.¹ One means of motivating sedentary individuals is using pedometers, which are inexpensive fitness tracking devices.

Methods

The project was conducted at Bellin Health Ashwaubenon. Participants were recruited from a pool of Type 2 diabetic patients under the care of several family medicine physicians. Patients were pre-randomized into a control and test group, with pedometers only being given to those in the test group. A pre-survey was given to each patient assessing their level of activity, perception of their health, and control over their diabetes management. A post survey was conducted at their 6 month follow up visit, and the results were analyzed.

Results

Results TBD pending results data

Conclusions

Conclusion TBD pending results data ■

CONNOR MCCARTHY



Vaccination Rates and the Associated Barriers Among Green Bay Children

Introduction

While total vaccination rates in the United States continue to remain high, vaccination rates in pediatric patients have declined substantially in the last 15 years. In order to improve vaccination rates in underserved children, access must be improved for uninsured and underinsured persons and education must be provided to parents regarding vaccination schedules and the purpose of each administered vaccine.

Methods

The project was conducted at House of Hope Green Bay. Surveys were administered to mothers upon their admission to House of Hope, which addressed the vaccination statuses of her children. Upon completion of the survey subjects were provided with an easy-to-read pediatric vaccination schedule, which included a description of each vaccine and its associated significance. The survey results and data were analyzed.

Results

Among those who took the survey more than 50% of the subjects reported that they were either unsure of the vaccination status or that their children were not vaccinated. In addition, greater than 60% of subjects were unaware of the specific vaccines their children needed.

Conclusions

With a small sample size ($n=11$), it is challenging to make generalizations about the population at large, with any level of certainty. However, the data displays patterns, suggesting potential gaps in access and knowledge, which must be studied further. ■

NICK GIBSON



The Effect of Electronic Use on the Moods of Elementary School Children

EMILY GONNERING



Introduction

Children today are growing up with unlimited access to electronics. If not careful, technology can negatively impact their mental health. Previous studies have linked childhood electronic use to emotional and behavioral problems and clinical depression.

Methods

This study was performed at St. John Catholic School in Little Chute, WI. Students in grades 1-3 and their parents filled out daily surveys for 14 days which inquired about the child's daily mood, electronic use, and sleep.

Results

40% of parents reported that electronic use appears to have a negative impact on their child's mood, while 30% of parents believe that sleep plays a larger role in mood than electronics. Children reporting a worried mood spent the most time on electronics that day. However, positive moods overall were associated with a higher amount of electronic use. Parent data shows that children with positive moods obtained a more sleep the prior night than those with negative moods.

Conclusions

92% of parents already had established rules regarding their child's electronic use, and most kids spent 1 hour or less per day on electronics. This may account for the lack of negative mood associations with electronic use. However, the study does suggest that sleep plays a role in a child's mood. Further studies should evaluate a larger and more diverse sample size with a greater range of electronic usage as well as a balance of children with and without household electronic use rules. ■

Brain is Time

Introduction

Strokes are the fifth leading cause of death in America and contrary to belief up to 80% of strokes are preventable with early recognition and intervention.

Methods

The aim of this project is to educate the Green Bay community on basic stroke prevention and detection so that strokes can be detected earlier. A presentation was given on stroke signs, symptoms and risk factors, with a pre-test gauging knowledge, and a post-test assessing improvement.

Results

We compared the overall performance change ($n=22$) on the 10-question test. Mean test scores rose from 64% (pre seminar) to 84% (post seminar). Statistical analysis using a paired t-test computed a p-value of 0.0063.

Conclusions

Overall the presentation was effective at raising awareness of stroke symptoms and prevention in the local Green Bay community. ■

TIM GUTHRIE



ABOUDI MOUNIR



Tai Chi for Pain

ANDREW JARZEN



Introduction

The nation has been in the midst of an opioid epidemic for several years. The major contributor to this is the overuse and abuse of prescription opioids. While prescribing practices and guidelines have improved greatly, this leaves many patients suffering from chronic pain who need another option. This pilot project aims to study the effectiveness of Tai Chi exercises at reducing the use of any pain-relieving medications, as well as improving the mental status of chronic pain sufferers.

Methods

The project was conducted at the Milo C. Huempfer VA Outpatient Clinic in Green Bay, WI, where a three month Tai Chi class is offered to veterans to improve mobility and relieve pain. Participants were enrolled prior to the beginning of their first Tai Chi session and given surveys to fill out. A follow up survey at the conclusion of the class was then given to assess outcomes. Unfortunately, the class was cut short due to the instructor needing surgery, and therefore participation was limited to 9 people.

Results

The results of survey analysis showed lower pain scores in 5 participants, reduced use of medications in 2, and improved mental status in 8.

Conclusions

Despite the limited number of participants and unfortunate illness of the instructor, as well as the time constraints, the results appear promising and warrant further investigation in a follow up study with more participants. ■

Adverse Childhood Experiences in the Green Bay Adult Homeless Population

Introduction

In 2018, 4,907 people in Wisconsin experienced homelessness. With each adverse childhood experience (ACE), risk of homelessness increased by a factor of 8. It was suggested the ACE test be used to screen at risk populations and design more specific interventions.

Methods

Case managers distributed the standardized ACE survey developed by Kaiser Permanente to adult patients of the N.E.W. Community Clinic. 54 completed surveys were collected.

Results

The mean cumulative ACE score among participants was 3.81. The three most prevalent ACEs identified were divorced/separated parents, substance abuse in home, and mental illness in home.

Conclusions

Cognitive behavioral therapy has shown the most reliable, positive outcomes for individuals having suffered ACEs. Decreased depression, PTSD, and substance use along with improved quality of life were reported the most significant. Additional resources identified for ACE survivors included 211 Wisconsin and community referral to Vivent Health. Survey of patients at additional clinic sites and collection of demographic data were suggested as future research directions to further develop interventions based on population needs. ■

EMMA MEETZ



JESSICA WARFFUEL



Evaluating Medical and Basic Spanish Knowledge of EMS providers in Brown County

SEAN O'NEIL



Introduction

Almost 2% of the Brown County population is Spanish speaking with “Low English Proficiency” (LEP). This population may be experiencing significant linguistic barriers to healthcare in addition to numerous cultural and socioeconomic barriers. In order to decrease language barriers, improve the quality of care, and decrease adverse outcomes for this group of patients, the healthcare system in Brown County needs to respond by increasing the number of healthcare providers who are competent in fundamental and medical Spanish language skills.

Methods

In this study, EMS providers from all four departments across Brown County were asked to take a Qualtrics survey assessing demographic data and their knowledge in both basic and medical Spanish. They were also asked to provide feedback on an “EMS Spanish Cheat Sheet” and state whether this would be useful to them.

Results

Overall, EMS providers scored poorly on the assessment as I had predicted, with the average score of around 40% on both the Basic and Medical Spanish components of the assessment. Additionally, most EMS providers affirmed that the Spanish cheat sheet that I proposed would be useful.

Conclusions

EMS providers overall lack Spanish language knowledge but are receptive to the implementation of some form of Spanish learning. I believe that implementing a sustainable form of Spanish language education in healthcare systems in Brown County will aid in improving linguistic understanding and cultural competence among providers and thus improve provider/patient interactions and health outcomes. ■

Pouring From an Empty Cup: Vicarious Trauma in Sexual Assault Crisis Workers

Introduction

Sexual violence is a public health issue that places tremendous burden on survivors, families, and healthcare systems. The multi-disciplinary team that supports survivors (healthcare, law enforcement, social work, etc) are at risk of developing vicarious trauma (AKA compassion fatigue). This study aims to measure levels of vicarious trauma in sexual assault crisis workers.

Methods

The project was conducted at the Sexual Assault Center of Family Services of Northeast Wisconsin. The ProQOL Survey, which measures effects of helping others who experience trauma, was distributed to 14 workers. Participants were scored as Low, Moderate, or High in 3 categories: Compassion Satisfaction, Burnout, and Secondary Traumatic Stress (STS). Data was analyzed using the ProQOL scoring guide.

Results

The results showed that the majority of participants (12 of 14) have Moderate levels of STS related to their work. No participants scored as High for Burnout or STS. Notably, all participants scored a Moderate or High level of Compassion Satisfaction.

Conclusions

This study demonstrated a majority of Sexual Assault Center team members have Moderate levels of Secondary Traumatic Stress and Burnout, indicating that supportive interventions may be beneficial. The most interesting finding was that, despite associated stress, all participants have moderate/high satisfaction in their work. Avenues for future research include the factors behind these high levels of compassion satisfaction, as well as the efficacy of various supportive interventions in alleviating secondary traumatic stress. ■

BRITTNI PLATO



Depression in Women Receiving Hormone Therapy

BRITTANY RUPP



Introduction

Higher rates of cancer patients report poor mental-health related quality of life compared those without cancer. We know that estrogen modulates mood via serotonergic pathways. Decreased estrogen can lead to decreased serotonin levels which can contribute to depression. Studies show that younger woman report higher rates of depression compared to older adults. This study aims to identify whether woman taking hormone therapy during or following breast cancer report higher rates of depression compared to before they started treatment.

Methods

This project was conducted with Green Bay Oncology. Patients fill out PHQ2 questionnaires on their first visit and approximately every 3 months. Women between the ages of 30-90 who were taking tamoxifen, exemestane or anastrozole who had PHQ2 questionnaires from when they started treatment and 4-8 months after were included in the study. They were split into two groups: less than 60 years old and greater than 60 years old.

Results

Scores were analyzed according to how many women recorded changes to their responses on their initial PHQ2 questionnaire compared to 4-8 months following hormone therapy. The majority of women reported no change in the number of days they experienced having little interest or pleasure in doing things or feeling down, depressed or hopeless.

Conclusions

No statistically significant data was uncovered in this study. Increasing the sample size would provide more power to study. Some studies suggest that the effects of hormone therapy on mood take at least 10 months to manifest. Looking at PHQ2 responses from women who have been on therapy for at least 1 year might provide statistically significant data. ■

Wisconsin Physician Gender Bias

Introduction

Physician gender bias has been shown to exist across the medical field. Numerous studies have shown that female physicians are likely to experience gender bias in regard to sexual harassment, compensation, promotion, and in relationships with patients and allied health staff.

Methods

An electronic survey was sent out through the Wisconsin Medical Society's newsletter. The survey consisted of 12 questions asking about demographic information and gender bias. Responses to the statements were gathered using a Likert scale ranging from strongly agree to strongly disagree. The last question on the survey was a write in option if participants wished to share personal stories or opinions about physician gender bias.

Results

A total of 96 Wisconsin physicians responded to the survey. The results of this study show that physician gender bias exists in Wisconsin. Of the response, 48% of female physicians reported that they strongly agree to having experienced gender bias whereas 41% of men reported that they disagree to having experienced gender bias.

Conclusions

Overall, the results from the survey show that gender bias exists among Wisconsin physicians. Female physicians across the state have expressed many areas of discrimination that they felt was related to their gender. Future studies are needed to look at solutions to creating gender equality in medicine. ■

BRITTANY SCHULTZ



KRISTIN TISCHER



Emergency Department Utilization

KAITLYN SONNENTAG



Introduction

Past research on emergency department (ED) utilization found lack of access to affordable and convenient care outside of the ED and patients' perceptions of the acuity of their conditions being inconsistent with perceptions of the ED providers are reasons why patients come to the ED for non-emergent conditions.

Methods

The project was conducted at Bellin ED when urgent care locations were open. Patients who received an acuity level of 4 or 5 by ED providers were considered for the survey. At the end of the survey, patients were asked if they would like an informational handout on criteria for coming to an ED or seeking care elsewhere, as well as locations of urgent care and primary care physician facilities in the area.

Results

The results showed that patients' perceptions of the acuity of their conditions are inconsistent with providers' perceptions with 75% of patients rating their problem as more severe than providers did. 86% of patients stated that their problem was an emergency or that the problem could not wait for a doctor's appointment, which is inconsistent with ED providers' perceptions.

Conclusions

Majority of patients stated that they would use reliable alternatives to getting care outside of the ED if these existed, so there is lack of access to or knowledge about alternatives. Half of the patients stated they wanted the informational handout, suggesting that with education, some patients would be willing to change their practice of using the ED for non-emergent conditions. ■

Wisconsin Views on Addiction and Mental Health

Introduction

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

Methods

Surveys were distributed via the Brown County Alcohol & Drug Coalition 4 Change, and collected using the online survey platform, Qualtrics. Data was interpreted to match answer patterns with self-proclaimed demographics.

Results

Approximately 88% of participants agree that addiction is a mental illness. Less than 50% believe that factors like education level and income contribute to addiction, while more than 50% believe family history and where the person grew up do contribute to addiction. Approximately 90% of participants do not believe addiction is the result of a character flaw or personal choice.

Conclusions

The majority of people who were surveyed 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.

There appears to be no correlation between any one demographic and views on addiction, however small sample size and 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. ■

NATHAN STAIDL



Efficacy of Audio-guided Meditation on Craving, Compassion, and Trait Mindfulness in Substance use Disorder Rehabilitees

NIGEL TOURDOT



Introduction

Extant research supports the use of mindfulness-based interventions (MBI) in the treatment of substance misuse and abuse. The current study investigates the efficacy of a low-cost, practical MBI as an ancillary treatment for alcohol use disorder (AUD).

Methods

AUD rehabilitees enrolled in the Jackie Nitschke Center's inpatient treatment program (ITP) were assigned to either an audio-guided mindfulness meditation group (n=12) or classical music group (n=20) that met five days a week for 15-minutes. Participants completed self-reported assessments of cognitive and affective mechanisms related to relapse risk (i.e., mindfulness, impulsivity, and self-compassion) during enrollment and the exit process. Alcohol craving levels were assessed on day 7 and day 21 of the 28-day ITP.

Results

Pending

Conclusions

Results from this study may reveal insights into the potential utility of a low-cost, easily implementable MBI in resource burdened AUD ITPs. ■

Therapy Assistance Online

Introduction

Research has shown that undergraduate students experience immense amounts of stress and mental health changes throughout their education. Therapy Assistance Online (TAO) is an online program that allows users to obtain mental health assistance, complete educational modules, and access useful coping skills. TAO was made available to all St. Norbert College (SNC) students in 2018 through Counseling and Psychological Services (CAPS). This study examines student knowledge and usage of this program.

Methods

Participants included SNC undergraduate students. Surveys were distributed to students at various locations on campus. These surveys asked about knowledge, usage, and likeability of TAO. Student demographic information was not collected.

Results

Of the 200 students surveyed, only 22 students had heard of and used the TAO program. Of these 22, only 5 students had used the TAO program more than once. Many students that had used TAO stated they liked the format and had used the educational or self help modules.

Conclusions

The majority of SNC students have never heard of the TAO program. Students who have heard of the program learned about it via CAPS. SNC students that have utilized TAO have also utilized CAPS as a resource. This study was a first look at the ongoing conversation on the SNC campus about student mental health and wellbeing. ■

SHELBY VAN ROSSUM



Qualitative Assessment of Barriers to Meeting Infant Motor Development Milestones

KRISTIN PAWLAK



Introduction

Safe sleep and awake positioning have been studied extensively resulting in the “Back to Sleep Campaign” and “Tummy Time” guidelines, which has decreased incidence of Sudden Infant Death Syndrome (SIDS). Despite overall improvement, studies show less progress in lower socioeconomic classes due to lack of resources. In addition, a concern that overusing infant carrying devices can inhibit normal motor development has sparked new research on this topic.

Methods

The project was conducted at the Brown County Library. Pre-presentation surveys were distributed to participants. The participants were informed of the American Academy of Pediatrics (AAP) recommendations and about the risk of delayed motor development with overuse of baby carriers. A handout was given to demonstrate the typical developmental milestones. After the presentation, participants received a second survey. Results were collected and data were analyzed.

Results

The results show that the De Pere community has a strong understanding of developmental milestones and safe infant positioning. Most participants were following current guidelines on tummy time, which they received from a variety of sources. The average time spent in a baby carrier was 1.3 hours per day.

Conclusions

Overall, the studied population is well-educated on infant positioning. Confusion exists regarding appropriate length of time in infant equipment.

Research shows a correlation between equipment use and motor development, but recommendations have not been defined by the AAP. Continuing research includes repeating the project with a different socioeconomic class to assess allocation of educational resources. ■

Evaluation of STI Screening Recommendation Compliance and Expedited Partner Therapy Use in Northeast Wisconsin: A Tool to Educate Providers

Introduction

STI incidence is rising in the United States after decades of steady decline. Ensuring providers are knowledgeable about screening and treatment recommendations is one way to potentially combat this growing public health issue.

Methods

A survey was designed that includes a pre-test, an educational brochure, and a post-test to assess provider knowledge on chlamydia and gonorrhea screening recommendations as well as the use of expedited partner therapy (EPT) in practice. The survey was distributed to health departments in Northeast Wisconsin, who then distributed the survey to providers in the counties they serve.

Results

In total, 85 surveys were collected from providers in 17 counties. The majority of providers were knowledgeable of the chlamydia and gonorrhea screening recommendations, but fewer knew the retesting protocols. A majority of the providers also reported that they did not use EPT regularly in their practice.

Conclusions

Several potential gaps in STI prevention were identified. Low test scores on retesting recommendations and low usage of EPT in practice are potential targets for intervention to stop the increasing spread of STI's in Wisconsin. ■

BEAU RIGSTAD



Music and Health: Exploring the Social, Emotional, & Cognitive Benefits of Music through 10-weeks of Group Harmonica Lessons

GRETA SCHMITT



Introduction

By 2040 the number of adults aged 65 and older in Wisconsin will increase by 72%. Unaddressed social, emotional and cognitive aspects of aging lead to loneliness, increasing the risk of depression, dementia and early death. Research shows individuals actively engaged in group music-making report higher levels of well-being. Harmonica for Beginners is a 10-week group harmonica class developed to provide opportunities for aging adults to learn a new instrument, create group music, and contribute to the limited research evaluating the social, emotional and cognitive effects of music on aging adults.

Methods

A 10-week Harmonica for Beginners course was developed for 20 participants consisting of basic techniques, classical songs, and Blues improvisation licks. Pre-and post surveys consisting of questions from the CASP-12 Quality of Life Survey and De Jong Geriveld Loneliness scale were administered at the start and end of the course. Survey results were compared with 20 participants in a 10-week course titled Brain Enrichment. This group served as a non-musical control. Both classes are taught at the Brown County Aging and Disability Resource Center.

Results

Both the music-making and non-music-making groups showed an average increase in quality of life questions concerning control and Harmonica for Beginners participants reported an average decrease in emotional loneliness compared to the non-musical group.

Conclusions

While music-making enhances enjoyment, personal development and empowerment in adults, both music and non-music making activities can enhance well-being. ■

Smoking and Opioids

Introduction

The United States is currently in an opioid crisis. There are nearly two million persons in the U.S. who are involved in drug treatment centers each year and 80% of people being treated for opioid addiction are either using or have used tobacco in the past. Research suggests that people who smoke while also using other drugs and then attempt to quit are more likely to relapse if they continue to use tobacco. This project will examine the possible connections between opioid use and smoking at the Libertas addiction recovery center in Marinette, Wisconsin.

Methods

A review of records of patients who have, are, or will undergo treatment at the Libertas opioid recovery program. Patients were surveyed at initial assessment and then again 30 days after participation in opioid recovery treatment program.

Results

Tobacco had the largest increase in risk of use with a three-point increase. There was also an 11.8% increase in assessed patients as being in the high-risk category. Other findings of note included a significantly higher use of illicit substances among people who had a coexisting mental health condition compared to their counterparts, with Heroin having a much higher usage.

Conclusions

There is a statistically significant increase in tobacco use risk from the first to the second assessment. There is also an increase in the severity of the use risk. Treating the nicotine addiction while treating the other substance use problems can help dissuade the substitution of one substance for another. ■

MATTHEW TORBENSON



Delete

MATTHEW WOLF

CONTENT ■

NOTES:



MCW

Green Bay



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Assessing Efficacy of Pre-Hospital Providers in Correctly Identifying CVA in De Pere and Ashwaubenon WI, A Retrospective Study

PATRICK BEST



Introduction

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The Los Angeles Motor Scale (LAMS) is a pre-hospital stroke scale developed for the purpose of earlier identification of CVA. Aurora BayCare Medical Center (ABMC) is the only Level 1 Comprehensive Stroke Center in the greater Green Bay area and is thus the standard destination for suspected CVA's.

Methods

This study sought to investigate the efficacy of the LAMS scale in identifying CVA's in the pre-hospital setting in De Pere and Ashwaubenon WI from 2016-2019 through the cross-referencing of de-identified patient records from the respective pre-hospital EMR's with those of ABMC.

Results

This study demonstrated an 80% sensitivity for CVA across both departments, in line with the 81% national average. Furthermore, our study demonstrated very similar efficacy of the LAMS tool in both De Pere and Ashwaubenon. The positive and negative predictive values of LAMS were 84.2% and 42.9%, respectively.

Conclusions

The results provide further support for both the efficacy and utility of the LAMS stroke scale in pre-hospital stroke identification. ■

JAYME NELSON



Pedometer Health Implications in Type 2 Diabetes Mellitus Patients

Introduction

Type 2 Diabetes Mellitus is a public health and economic issue in the United States and all around the world. The American Diabetes Association recently published data regarding the efficacy of exercise as a treatment option for type 2 diabetes from multiple randomized trials.¹ Metabolic benefits of aerobic exercise are impressive but are short lasting. Therefore, an ongoing exercise program is required for positive health outcomes derived through exercise.¹ One means of motivating sedentary individuals is using pedometers, which are inexpensive fitness tracking devices.

Methods

The project was conducted at Bellin Health Ashwaubenon. Participants were recruited from a pool of Type 2 diabetic patients under the care of several family medicine physicians. Patients were pre-randomized into a control and test group, with pedometers only being given to those in the test group. A pre-survey was given to each patient assessing their level of activity, perception of their health, and control over their diabetes management. A post survey was conducted at their 6 month follow up visit, and the results were analyzed.

Results

Results TBD pending results data

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MEAGHAN CARNEY



CONNOR MCCARTHY

