2025
FORT HAYS STATE UNIVERSITY

DOCTOR OF NURSING PRACTICE PROJECTS

2025 DNP Graduates

BSN to DNP

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Brooke Carson
Katelyn Darnell
Madison Hanzlick
Claire Kringen
Mara Pounds
Sarah Powers
Lauryn Rayfield

MSN to DNP

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DNP, APRN, FNP-C

On average, over 20% of college students suffer from food insecurity (FI), which can drastically affect students' physical and mental health, as well as negatively impact students' education. FI was identified as a problem on a college campus in Kansas, and although many resources were available to students, many were not utilized. The purpose of the study was to identify the FI rate on the college campus, as well as educate students on FI, food budgeting, and the available resources. Students completed an anonymous questionnaire which consisted of demographic questions and the Hunger Vital Sign screening tool. The Hunger Vital Sign is a validated screening tool used to identify FI risk. Data was collected over four months in the Fall of 2024. To educate students about FI, food budgeting, and available resources, a presentation was viewed in multiple college courses. 194 students completed the demographic survey and Hunger Vital Sign screening tool. Overall, 34.54% of the college students who participated in the survey reported they worried their food would run out before they had the money to buy more, and 27.84% of students reported they sometimes or often ran out of food before buying more. A total of 117 students participated in viewing the FI educational presentation. The findings identified a high FI rate on the college campus, regardless of available student resources.

Keywords: food insecurity, college campus, food insecurity screening tool, college students

Food Insecurity on the College Campus

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Fort Hays State University, Department of Nursing

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Background

Background

The US Department of Agriculture (USDA) defined food insecurity (FI) as the limited or uncertain availability of nutritionally adequate foods or the uncertain ability to acquire these foods in socially acceptable ways (U.S. Department of Health and Human Services, 2020). In 2021, compared to the US FI rate of 10.4%, Kansas had a lower rate of 9.9% (Matters, 2022). The college student's FI rate was over twice as high compared to the national FI rate. Approximately 23% of college undergraduates and 12% of college graduate students were experiencing FI. Students who are first in the family to attend college, Pell Grant recipients, non-white, international students, living independently, working, LGBTQIA+, and women are at increased risk for food insecurity (McKibben et al., 2023). Food-insecure students had an average GPA of 3.33 out of 4.0, while food-secure students had an average GPA of 3.51. 44% of food-insecure students completed their undergraduate degrees compared to 68% of their food-secure counterparts (Wolfson et al., 2021). Many colleges and universities have responded to their students' food needs by establishing campus food pantries, but unfortunately, food-insecure students often do not take advantage of food pantries or other resources (Frank, 2020).

Statement of the Problem

FI was identified as a problem on a Kansas college campus, although the actual food insecurity rate was not known. Although many resources to combat FI were made available to students, many were not utilized.

Purpose

This quality improvement project aimed to identify the FI rate on the college campus and educate students on FI, food budgeting, and the available student resources.

1. 40 students will complete the Food Insecurity Survey at the Back-to-school picnic on August 19. 2024.
2. From September to December 2024, 25 students will complete the Food Insecurity Survey available at the Food Pantry each month.
3. 50 students will attend/view the Food Insecurity Educational Presentation.

Population/Setting

Project Setting

The study was conducted on a Kansas college campus with an attendance rate of approximately 10,000 students throughout the Fall of 2024. This college had a food pantry and garden where students in need could access fresh and healthy food options. Students could fill out the FI survey at the back-to-school picnic and throughout the semester at the food pantry. An educational presentation on FI, food budgeting, and resources available was shown in two separate courses on campus.

Project Population

The project population included students who attended the college in the Fall of 2024. Participants had to be over 18 years of age and give consent to be included in the project. Students in HHP 230: Principals of Nutrition and FIN 205: Principles of Personal Finance viewed the food insecurity presentation.

Methods

Project Interventions

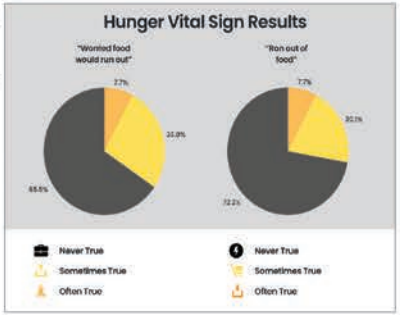
There were three phases of the project

1. Back-to-school picnic: Students could scan a QR code and fill out a food insecurity survey that contained demographic questions and the *Hunger Vital Sign* food insecurity screening tool.
2. Food Pantry: The same QR code and food insecurity survey was displayed outside of the on-campus Food Pantry. Students could answer the survey questions from September 2, 2024, to December 2, 2024.
3. Food Insecurity Educational Presentation: Students in two separate courses on campus viewed an educational presentation discussing food insecurity, food budgeting and student resources available.

Outcomes

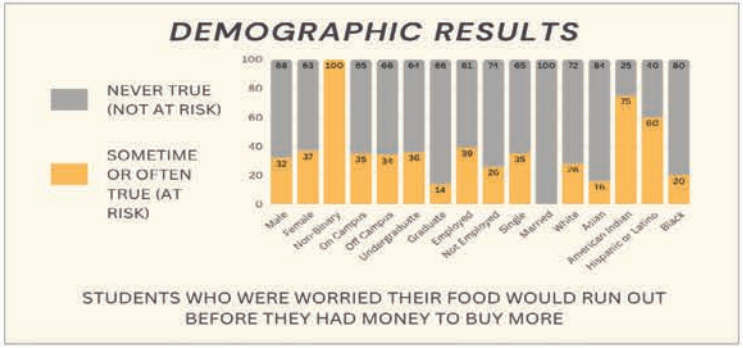
Food Insecurity Survey

- Between the Back-to-school picnic (80 students) and food pantry(114 students), a total of 194 students participated in the survey. This met the original goal.
- 67/194 (34.53%) students stated they "sometimes or often worried their food would run out before they had the money to buy more"
- 54/194 (27.84%) of students stated they "sometimes or often ran out of food before they had the money to buy more"



Food Insecurity Educational Presentation

117 students viewed the Food Insecurity Educational Presentation, which discussed food insecurity, food budgeting, and the resources available. Initial Goal was met.



Recommendations

It would be useful to have a larger study population, or more students from each demographic to get a more accurate result. In the future, it would be beneficial to send the survey to the entire student body. If another survey was collected, asking how often students utilized resources, especially the food pantry and garden would be a useful statistic. Lastly, in retrospect, it would have been beneficial to collect survey results further in the semester, instead of the first day of school at the back-to-school picnic. Students may have been more financially stable on the first day of school, which could have altered results.

Conclusions

The key results of this study show that 27-35% of students who attend the Kansas college suffer from or are at risk of food insecurity. This study indicates the students at the highest risk of food insecurity are employed, working at least 20 hours a week, undergraduate, single, American Indian or Alaska Native. More females worried they would run out of food, but ultimately, more men reported running out of food before they had the money to buy more. These results were consistent with previous studies. There is sufficient data to support college students are at a higher risk of food insecurity than the national average.

Acknowledgments

I'd like to thank my DNP classmates, as well as the FHSU instructors who have supported me for the last four years. I'd like to thank my project instructor Dr. Jenny Manry, Robert Duffy, Dr. Jessica Phelan, Dr. Christina Glenn, and the Tiger Money Mentors for their assistance, time, and effort on this project. Lastly, I'd like to thank my family. Dalton, my husband, thank you for your constant love and support while I chase my dreams. I love this life we are building together. Wyatt, Charlie, Palmer, and Baby Belzer #4, thank you for making me a Mom. I do all of this for you. I can't wait to watch each of you accomplish your goals and grow into exactly who you were meant to be. My biggest life accomplishment will forever be each of you.

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This Doctor of Nursing Practice (DNP) quality improvement project aimed to reduce appointment nonattendance among adult primary care patients with diabetes mellitus in a Midwest clinic, where missed appointments contribute to poor disease management and increased healthcare costs, addressing a gap in follow-up care amid high diabetes prevalence. Using the Model for Improvement and Plan-Do-Study-Act (PDSA) cycles, the project introduced a new clinic process to address patient nonattendance, incorporating nurse-led telephone reminders for missed appointments and diabetes education materials distributed from August to December 2024. The DNP student educated staff on this process, which included: providing patient handouts, tracking no-shows, and conducting bi-weekly phone follow-ups with attendance data compared to the previous year. Results revealed a slight increase in mean active clinic day visits from 8.69 (SD = 4.459) in 2023 to 9.08 (SD = 4.709) in 2024, yet the Mann-Whitney U test showed no significant difference (U = 3287.5, p = .524), indicating the interventions did not markedly enhance attendance. The project concludes that, despite lacking statistical significance, it highlights the multifaceted nature of nonattendance, suggesting a need for tailored, patient-centered strategies to improve diabetes care outcomes in primary care settings.

Keywords: diabetes mellitus, appointment nonattendance, nurse-led intervention, diabetes education, primary care, quality improvement

Brooke Carson

DNP, APRN, FNP

Implementation of Interventions to Reduce Appointment Nonattendance in Adult Primary Care Patients with Diabetes Mellitus

Brooke Carson
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Background

The Centers for Disease Control and Prevention (CDC) describes that the number of deaths from diabetes is 103,294 annually in the United States. Diabetes exerts a considerable financial toll on individuals, organizations, and society (Centers for Disease Control and Prevention, 2023) . A report from Parker et al. (2023) found that the yearly cost of diabetes was $412.9 billion in 2022. Despite the crucial role that regular medical appointments play in managing diabetes and preventing complications, a portion of patients continue to fail to attend their scheduled appointments.

Appointment nonattendance is a major issue in diabetes management, leading to poor disease control, increased healthcare costs, and potential complications.

Problem Statement

A Midwest primary care clinic faced a high rate of no-show appointments among diabetic patients, with 28 missed appointments recorded in one quarter.

Discussion with the clinic team on clinic needs revealed that the clinic had no current process for contacting patients who do not attend their appointments. Additionally, there were no interventions to provide education to diabetic patients or to track patient appointment no-shows.

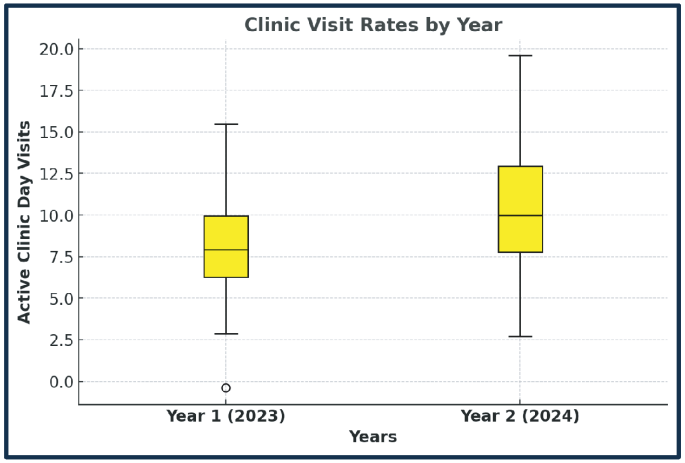
Project Objectives

- Increase appointment attendance among diabetic patients from August 2024 to December 2024.
- Implement process for tracking patient appointment no-shows.
- Implement patient education and nurse-led telephone calls for missed appointments.
- Improve patient outcomes and clinic operations through structured interventions.

Methods

Framework: Model for Improvement and Plan-Do-Study-Act (PDSA) cycle
Setting: Midwest rural primary care clinic
Population: established adult patients with diabetes
Intervention:
- Diabetic education materials provided at each visit
- Nurse-led phone calls for missed appointments

Evaluation: Comparison of appointment attendance rates before and after intervention



Results

- No statistically significant difference in appointment adherence between pre- and post-intervention periods ($p = .524$).
- Slight numerical increase in mean clinic visit rates.
- Identified barriers such as socioeconomic challenges and clinic workflow constraints.

Conclusions & Recommendations

Nurse-led telephone interventions and patient education improved patient engagement but did not significantly impact appointment attendance.

- Future strategies should include multimodal interventions such as digital reminders, transportation support, and tailored patient outreach.
- Continued refinement of appointment attendance strategies is necessary to improve diabetes management outcomes.

Clinical Relevance

- Addressing appointment nonattendance is critical for effective diabetes management.
- Structured interventions can enhance patient engagement and clinic efficiency.
- Further research is needed to optimize intervention effectiveness in primary care settings.

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Katelyn Darnell

DNP, APRN, FNP-C

Falls are a prominent health issue for the older adult population. They are a leading cause of injuries, healthcare-related expenses, morbidity, and mortality in older adults. As the size of the elderly population grows, the importance of fall prevention increases. This project aimed to identify and educate older adult patients at risk for falling by implementing clinical staff education, a fall risk screening tool, and patient education at an urban family medicine clinic. Staff at the clinic were educated on implementing a fall risk screening and education protocol for patients aged 65 and above who came to the clinic for a Medicare Annual Wellness Visit or a fall-related appointment. The project was implemented over eight weeks. A paper screening tool and data collection form were utilized to track and document the data. A total of 55 fall risk screenings were completed. 36.4% of patients screened at risk for falling, and 63.6% screened not at risk. 100% of patients who screened at risk received education. More fall risk screenings were completed during the project intervention than during the pre-intervention period. As a result, more patients were identified as at risk for falling and provided with fall prevention education. The project results imply that the clinic should continue implementing the protocol and demonstrate the importance and effects of incorporating fall prevention practices into routine outpatient care.

Keywords: older adults, falls, fall risk screening, education

Implementing an Older Adult Fall Risk Screening and Education Protocol in an Urban Family Medicine Clinic

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Introduction

Background & Problem

- 1 in 4 older adults report falling annually (CDC, 2024).
- In 2020, the United States' healthcare expenditure related to nonfatal falls was $80 billion (Haddad et al., 2024).
- The number of Americans aged 65 and older will increase by 47% from 2022 to 2050 (Mather & Scommegna, 2024).
- Many healthcare providers (HCPs) do not prioritize assessing for fall risk or educating community-dwelling older adult patients on fall prevention (Ortmann et al., 2023).
- Urban clinic identified falls as an issue.

Purpose

- Identify and educate older adult patients at risk for falling through…
    - Clinical staff education
    - Patient fall risk screening
    - Patient fall prevention education

Objectives & Framework

Objectives

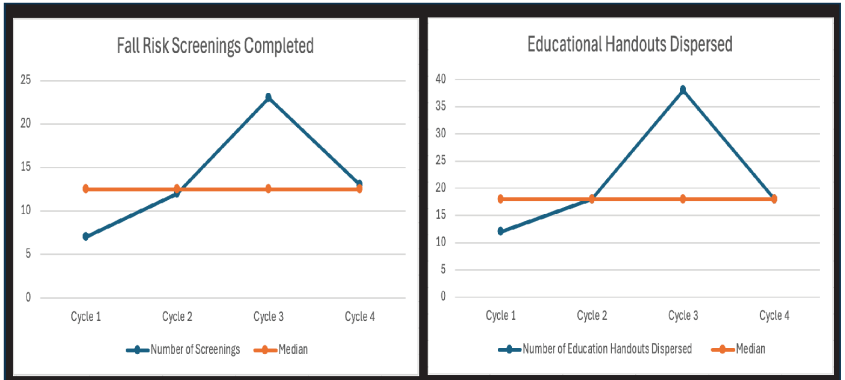
- By October 25, 2024, complete fall risk screenings on 30 patients 65 years and older who come to the urban family medicine clinic and see one of the three participating HCPs for a Medicare Annual Wellness Visit (MAWV) or a fall-related appointment.
- By October 25, 2024, disperse educational resources to 75% of the patients 65 years and older who see one of the three participating HCPs at the urban family medicine clinic for a MAWV or a fall-related appointment that screens as at risk for falling.

Framework

- Plan-Do-Study-Act (PDSA) cycle. One cycle = 2 weeks
- Used to evaluate project's progress

Methods

- Design: Quality improvement (QI)
- Setting: Urban family medicine clinic
- Population: 6 clinic staff members (3 HCPs, 3 medical assistants (MAs))
- Intervention: Population members were educated on fall risk screening/education protocol through a video presentation sent via email. MAs conducted fall risk screenings for target patients. HCPs provided education to patients who screened as at risk for falling. Emails were sent to population after each PDSA cycle that discussed cycle's results and reviewed education. 4 cycles total over the 8-week project. Pre-intervention data on screenings completed at MAWVs during same time frame in 2023 audited to be used for comparison in data analysis.
- Tools: CDC's Stay Independent questionnaire, data collection form



Results

Fall Risk Screenings

- 55 screenings performed (51 MAWVs, 3 fall-related, 1 unmarked)
- At-risk: 20 patients (36.4%)
- Not at-risk: 35 patients (63.6%)
- Most screenings completed in 3rd PDSA cycle (23 screenings)

Educational Handouts

- 100% of at-risk patients received education
- 12 not at-risk patients still received education (34.3%)
- Most handouts dispersed in 3rd PDSA cycle (38 handouts)

2023 Fall Risk Screening EMR Audit

- 11 screenings performed (all MAWVs)
- 1 at-risk patient, 10 not at-risk patients

Discussion

Findings

- Both objectives were exceeded
- Protocol resulted in 5x increase in fall risk screenings performed compared to 2023
- Protocol was clinically significant

Limitations

- Small sample size, resulting in smaller data pool. Unable to measure statistical significance

Recommendations

- Clinic should continue implementing protocol
- Integrate screening tool into EMR to promote convenience and sustainability of protocol
- Expand population size, inclusion criteria, and lengthen project time for future projects

Conclusion

- Project fulfilled purpose of identifying and educating at-risk older adult patients
- Results demonstrated staff education and implementing a standardized protocol was effective in increasing the number of fall risk screenings performed and at-risk patients identified
- Clinic should continue to implement the protocol in routine clinical practice, but make modifications to promote sustainability
- Further research and QI initiatives on this topic are warranted

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Madison Hanzlick

DNP, APRN, FNP-C

Falls are the leading cause of injury in older adults. It is estimated that 1 in 4 older adults admit to falling each year. Fall related deaths are continuing to rise in the United States. Fall screening and education is a simple measure that can be completed in primary care to enhance awareness of and prevent falls. This quality improvement project took place in a rural primary care that was not completing fall screening. Patient care staff was sent weekly emails and education regarding fall prevention and encouraged to complete STEADI fall screenings. The first objective of this project was that 60% of older adults at annual wellness visits (AWV) would complete STEADI fall screening with the patient care staff. The second objective was that out of those found at risk for falls, 75% would be provided fall prevention education. The results of the study exceeded the objectives set. From September 2, 2024, to October 31, 2024, 39 AWV occurred. The results showed 82% fall screening completion (32/39 screenings completed). 100% of patients found at risk for falling were provided education on fall prevention. As fall screenings were not previously completed it can be inferred that there were far more screenings completed than prior. The results of the project imply that fall screening and education is a beneficial measure to continue implementing within the primary care setting. It allows fall risk to be recognized and acted on, preventing negative effects from occurring.

Keywords: Falls, fall prevention, fall screening, fall education, STEADI, older adults

Enhancing Fall Risk Screening and Education in Rural Primary Care

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Project Faculty: Dr. Jenny Manry

FORT HAYS STATE UNIVERSITY

Purpose

To identify and educate patients at risk for falls by implementing the CDC STEADI fall screening tool and education.

Background

Falls are the leading cause of injury and injury related death in adults (65+). Over 14 million older adults report falling yearly in the U.S. [2]

78/100,000 older adults had a fall related death in 2021 which was the most recent fully calculated data. Increasing injury and death can be addressed in primary care by screening and intervening [2]

Risk factors for falls: age, female gender, chronic diseases, polypharmacy, impaired gait, impaired cognition [3].

Fall prevention methods: fall screening, patient education, caregiver education, provider education, coordinated care [1].

The CDC provides various resources and educational measures within STEADI initiative.

Methodology

Setting

Rural, medically underserved, primary care clinic in Midwest Kansas

Population

All hands-on clinic staff (CNAs, Nurses, APRNs)

Implementation period

September 2, 2024, through October 31, 2024

Interventions

Weekly staff email reminders and education utilizing CDC STEADI fact sheets, videos, and handouts.

Staff completion of STEADI fall screening at Medicare AWV

Utilization of STEADI education brochures for patients deemed at risk for falls

Objectives

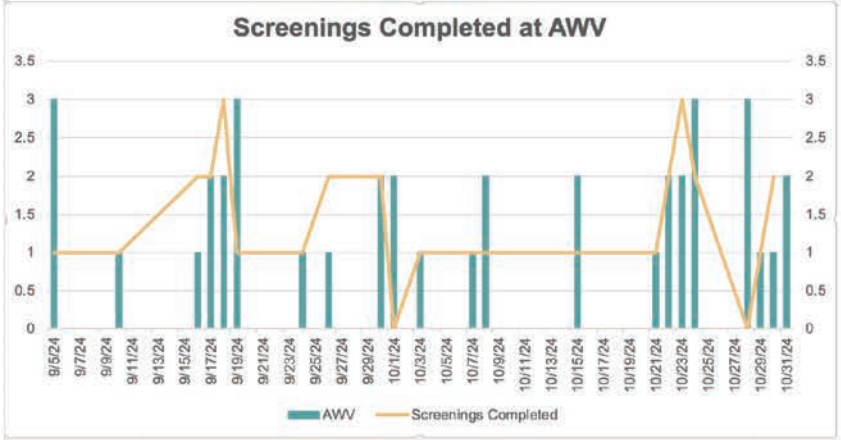
60% of patients over the age of 65 who are in for a wellness exam between September 2, 2024, and October 31, 2024, will receive a STEADI fall assessment from the clinic staff

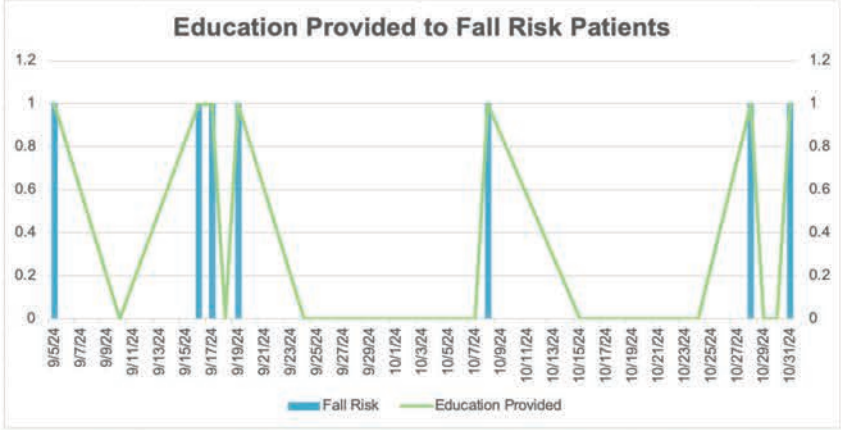
Educate 75% of the individuals deemed at risk for falls, utilizing printed STEADI brochures, between September 2, 2024, and October 31, 2024

Evaluation

Chart audits were completed every third Thursday of the project implementation period. These audits assessed screening completion at AWV. Additionally, chart audits were completed to evaluate if CDC STEADI fall education was provided to the patients. Run charts were then completed within Microsoft Excel.

Results





Outcomes

The total number of AWV = 39
32/39 patients had STEADI fall screening in the chart

82% screening completion rate

7 patients met fall risk criteria
7/7 patients had documented completion of fall education

100% education completion rate

Conclusions

Project outcomes exceeded objectives set prior to project implementation.

Proper screening, risk factor analysis, and educational measures can decrease falls in this population.

These simple, easy to implement, measures increase fall awareness and prevention in the older adult population.

Recommendations

Continue to incorporate fall screening at Medicare AWV and as needed. Screening is simple and easy to do with long term sustainability.

In addition to the project outlined other measures can be included to build upon the quality measure. This may include exercise programs in the community, referrals to senior center, referrals to physical therapy, etc.

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Claire Kringen

DNP, APRN, FNP-C

Human Papillomavirus (HPV) is a prevalent sexually transmitted infection that can lead to anogenital warts and various cancers. The HPV vaccine has lower vaccination rates than other childhood vaccines. Appropriate recommendations for the HPV vaccine among teenage and young adult women can increase vaccination rates in this population, increasing herd immunity. This quality improvement (QI) project aimed to improve HPV vaccination rates within the implementation clinic among females aged 13 to 26. A chart review was completed to identify patients who were not vaccinated against HPV, and a note was made in their chart to alert providers of the need for patient education. Interventions included educating providers and nurses on promoting the HPV vaccine using provider conversation sheets and patient education handouts. These educational materials were distributed to eligible patients during office visits and mailed to eligible patients during project implementation. A syringe magnet was placed on the exam room door to identify patients needing project education. A vaccine afternoon was planned to provide vaccines to patients not scheduled during the QI project. Increased provider recommendations and education surrounding the HPV vaccine increased the vaccination rate within the implementation clinic from 51% initially to 61% after the QI project amongst targeted females. The number of HPV vaccines and change in the target population's vaccination rate were used to measure project success. These results support previous studies demonstrating that provider recommendations and patient education improve HPV vaccination rates.

Keywords: Human Papillomavirus, catch-up vaccination, sexually transmitted infections, cervical cancer, herd immunity

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Catch-Up HPV Vaccination

Claire Kringen, RN, BSN, DNP student

Department of Nursing

Introduction/Background

- Human Papillomavirus (HPV) is a widely transmissible sexually transmitted infection (STI) that can lead to more severe health sequelae after infection. Long-term health implications of HPV infection can include anogenital warts & a variety of cancers, including vulvar, vaginal, oropharyngeal, penile, cervical, and anal cancers (Dong et al., 2021).
- Gardasil, the vaccine preventing four subtypes of HPV, has been approved by the FDA since 2006, and it was indicated in female pediatric patients. In 2014, the indications for administration were expanded to include males up to age 21 and females up to age 26, and the vaccine was modified to provide coverage against nine subtypes of HPV, known as Gardasil 9 (Food and Drug Administration [FDA], 2018).
- Based on a needs assessment conducted by the implementation clinic, the rate of HPV vaccination among young women aged 11 to 26 was 56%, compared to the national average of 62.6% of adolescents vaccinated nationally (United Health Foundation, 2024).

Population/Setting

- The implementation clinic is located in a small urban city in the Midwest. The family practice clinic has 15 providers: 12 physicians and three physician assistants.
- Catch-up vaccination involves vaccinating women ages 13 to 26 against HPV using a two—or three-dose series of Gardasil 9 (Daniels et al., 2021; Glenn et al., 2021). This strategy aims to increase the number of women vaccinated, thereby improving herd immunity against HPV.
- This Quality Improvement (QI) project was designed to increase the HPV vaccination rate among females aged 13 to 26 at the implementation clinic from September 5, 2024, to December 5, 2024.
- Clinic providers and nursing staff participated in this quality improvement project. The DNP project involved an educational and workflow process change within the implementation clinic.

Acknowledgements

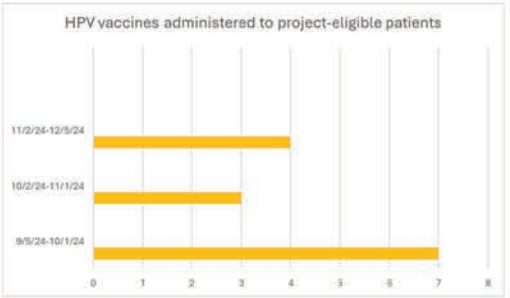
- Thank you to the implementation site nursing staff and providers for their patience, flexibility, and support during project planning and implementation.
- Thank you to the project team physician for her unwavering encouragement and enthusiasm
- Thank you to Dr. Cathryn Priesner for her support and guidance during this project.
- Finally, thank you to my parents and my boyfriend, Nick, for their unyielding support.

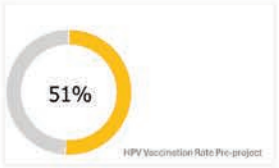
Methodology

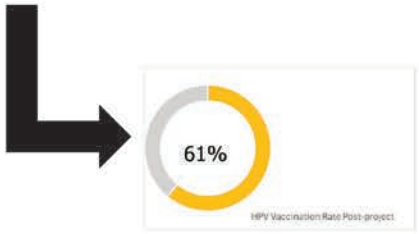
- A chart review was conducted to determine the HPV vaccination rate among females aged 13 to 26 who were seen during the 18 months preceding the project's implementation.
- If the patient had not received the HPV vaccine elsewhere, this was noted in the Electronic Health Record (EHR) to indicate that the patient required targeted education.
- Implementation clinic providers and nursing staff were educated by the DNP student on promoting the HPV vaccine and introduced to the project's educational materials.
- A vaccine afternoon was planned and scheduled, aiming to promote HPV vaccination by providing flexible and ample time for immunization.
- The provider or nurse counseled the patient using a fact sheet during the patient's appointment, regardless of whether the patient was well or ill.
- The vaccine was administered using the clinic's existing practice and documented in the EHR per the established workflow process.
- Patients eligible for the project education but who did not have an appointment during the project timeframe received targeted mailings with the age-appropriate education sheet and the vaccine afternoon flyer, which included instructions on how to schedule their vaccine.
- The syringe magnet on the doorframe of the exam room indicates the need for project education.
- A weekly chart review was conducted throughout project implementation to determine which patients had been educated and subsequently vaccinated.

Results

- Results for this DNP project were quantified in two ways: the number of HPV vaccines administered during the implementation period and the HPV vaccination rate in the clinic after the project was completed.
- Scheduled clinic visits were reviewed to document office visits for project-eligible individuals. These patients' charts were then reviewed to track the distribution of project education materials and subsequent vaccinations.
- Fourteen doses of Gardasil were administered during the project's implementation. Of these 14 doses, one participant received two doses of the vaccine during implementation, per the recommended vaccination timeframe.
- The vaccination rate against HPV among women aged 13 to 26 in the implementation clinic increased from 51% in August 2024 to 61% in February 2025.
- Approximately 220 patients received targeted mailings with project educational materials.







Conclusions

Key Takeaways

- Increased HPV vaccination by providing healthcare providers and nursing staff with education on the importance of HPV vaccination and reviewing barriers that affect vaccine uptake.
- Increased provider recommendation and patient education together promote the acceptance of catch-up vaccination.

Sustainability

- The education materials used in this project are continuing to be used for patient education within the clinic.
- The clinic continues to use the syringe magnets to indicate that a patient needs vaccination.
- Vaccine events are a routine occurrence at this clinic for select vaccines.

Recommendations

- Thorough vaccine reconciliation can improve vaccination rates within a practice setting; this is crucial to complete at a patient's initial visit.
- High-quality, factual patient education materials and increased provider recommendations lead to higher vaccine uptake.
- Individuals are more likely to choose vaccination after receiving a recommendation from a healthcare provider.
- Addressing vaccination frequently during office visits promotes vaccination.
- The decision to be vaccinated is a joint decision made between the patient and their healthcare provider.
- Promotion of dialogue regarding the HPV vaccination, which can be stigmatized, reduces misinformation.
- Encouraging informed decision-making in healthcare promotes patient autonomy.
- This QI project demonstrated that increased provider education and recommendations, paired with accessible patient education materials, can promote HPV vaccine uptake in the female catch-up population.

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Annual Wellness Visits (AWV) and preventive care are increasingly important as the aging population grows. Preventive care seeks to decrease chronic diagnoses and improve quality of life. This project aimed to educate on AWV, increase immunizations, use of the wellness center, improve eating habits, and decrease the risk of falls in a rural community. The number of individuals who attended, participated, and signed up for the activities offered at the three educational meetings was assessed. Quantitative data assessed the number of community members. The goal was that an increase in attendees would occur. The project reviewed whether education led to participation in available free preventive measures. While each meeting had fewer attendees, most of the attendees either participated in the activities available or already had participated prior to the meeting. Meeting one, fall prevention, did not assess an activity. However, two participants rearranged their houses to decrease their fall risk. 30% of participants at meeting two, immunizations, had already received the influenza vaccination. 43% of the remaining attendees received the vaccine offered by the local health department, and nine percent stated they planned to receive it from their providers. 76% of participants at meeting three, wellness and nutrition, either exercised or were interested in starting. The project showed the importance of education, and it was evident that a lack of education can be a barrier to preventive care.

Keywords: Annual Wellness Visits, preventive care, rural health, quality improvement, education

Mara Pounds

DNP, APRN, FNP-C

Educating Patients on Medicare's Annual Wellness Visits and the Components of Fall Prevention, Immunization, and Wellness and Nutrition

FORT HAYS STATE UNIVERSITY

Mara Pounds, BSN, RN | Doctorate of Nursing Practice Student | Department of Nursing

FORT HAYS STATE UNIVERSITY

Introduction

Background:

Healthcare transitioning from tertiary to preventive.

Annual Wellness Visits (AWV) offer preventive screening for the older population

"Welcome to Medicare" is offered during the first 6 months of joining Medicare, followed by AWV every 12 months.

Many older adults do not know about AWV, or they have not received the recommended screening and preventive care

Rural residents were impacted significantly by AWV, especially falls [6]

Purpose:

Increase immunizations, use of the wellness center's exercise classes, and decrease the risk of falls in a rural community by assessing the number of individuals who attend, participate, or sign up for the activities offered following educational meetings.

Literature Synthesis:

Focuses on screen patients, update immunizations, perform care coordination with a multidisciplinary team, and preventive measures

An average of $418 reduction in price for first-time users during the 11 months following the AWV [1]

AWV is linked to a 4% reduction in falls, an 8.2% decrease in fractures from falls, and earlier diagnoses of chronic diseases [4, 5, 6]

AWV offers preventive services more frequently than routine physical visits [3]

Lowest rates of AWV performed in rural areas [2]

Concerned AWV are causing excessive screening and unnecessary worry, leading to an increased cost in care

8 in 10 Americans have questions regarding their health and would like more education at their level of understanding [7]

Lack of education is a barrier to receiving care

Methodology

Population/Setting:

A small rural community in north central Kansas with roughly 2,000 people. Adults of all ages were recruited to attend the meetings.

Intervention:

Meeting 1:
Educate community members on AWV and fall prevention strategies within their homes

- Videos provided by the CDC and CMS and handouts provided by the CDC and ACP

Meeting 2:
Educate community members on recommended immunizations for their age and assess how many individuals receive the influenza immunization offered by the Health Department following the meeting.

- Video provided by Alliance for Aging Research and handouts provided by the CDC

Meeting 3:
Educate community members on the importance of nutrition and exercise as you age and assess how many individuals would like to participate in the free exercise class offered by the local wellness center.

- Video provided by AARP, presentation given by local cardiac rehabilitation RN, and handouts provided by the USDA, HHS, and the ODPHP.

Outcomes

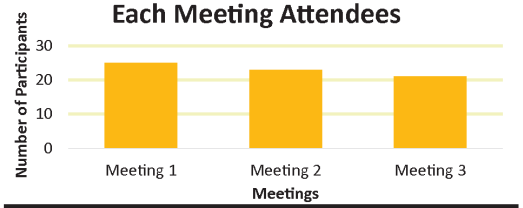
Meeting 1:
Total participants: 25

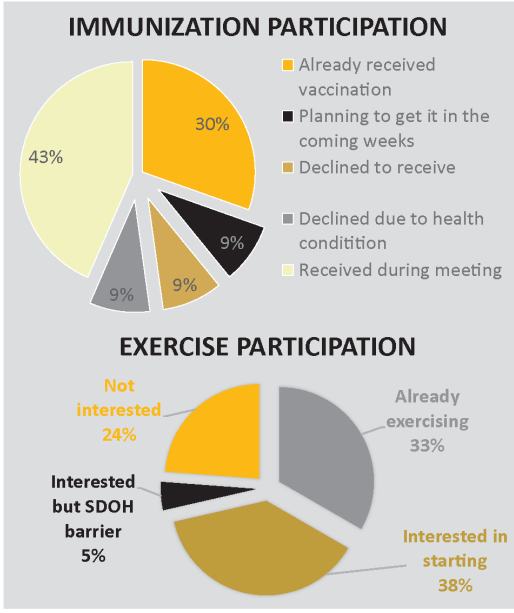
- Two stated they rearranged their houses following the meeting

Meeting 2:
Total participants: 23

- Seven already received the vaccination, ten received it following the meeting, two planned to get it from their PCP, and four declined the vaccination

Meeting 3:
Total participants: 21
Seven already exercised, six did not want to participate (5/6 believed they were too old, and 1/6 said they did not have transportation), and eight were interested in participating in the free exercise class





Recommendations

Implement topics quarterly

- Bring in local experts to help educate and participate

Topics for future discussion:

- Advanced Directive paperwork
- Avoiding scams
- Colonoscopy and mammography importance
- Meals on Wheels program and qualification

Conclusions

Many attendees participated in the available activities following the educational meeting, showing the importance of education in improving quality of life and encouraging participation in preventive healthcare. While limitations occurred, this project showed that many patients were unaware of the available resources and opportunities to improve their health and reduce the cost of aging.

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Acknowledgments

I want to thank the local senior center for allowing me to present at their facility, the local extension office for providing me with the projector, and the local health department and wellness center for presenting and/or offering opportunities for patients to improve their health. Thank you to Dr. Manry for helping me get my project going and being a mentor throughout the implementation. Finally, I want to thank my family for supporting me for the past 4 years!

Sarah Powers

DNP, APRN, FNP-C

Sexual assault (SA) remains a pervasive issue on college campuses in the United States, often compounded by underreporting and a lack of knowledge about available resources. This Doctor of Nursing Practice (DNP) project aims to educate first-year college students about SA, sexual consent, and available resources to empower students in preventing assaults and seeking help when needed. The intervention, which was integrated into mandatory freshman seminars at a four-year university, was guided by Knowles' Adult Learning Theory. A presentation provided critical information, and knowledge gains were assessed through pre- and post-presentation surveys. Initial findings indicated significant increases in understanding of SA definitions, consent, and resource availability. This project shows the importance of early education and institutional collaboration in addressing sexual violence on campuses, with the potential for sustained impact through ongoing program implementation.

Keywords: sexual assault, sexual consent, sexual violence, campus resources, first-year college students freshmen education, Title IX

Defining Sexual Assault, Consent, and Resources to Empower Students: A DNP Project

FORT HAYS STATE UNIVERSITY

Sarah Powers, Doctor of Nursing Practice Student
Faculty Advisor: Dr. Cathryn Preisner
Fort Hays State University-Department of Nursing

Introduction

Background: 1 in 5 undergraduate women experience sexual assault (SA) during college (Bednarchik et al., 2022; Bynion et al., 2022; Stepleton et al., 2019). SA often goes unreported due to stigma, fear, and lack of knowledge (Stepleton et al., 2019; Bynion et al., 2022). Additionally, first-year college students are at higher risk of assault in the first weeks of college while adjusting to college life.

Problem Statement: Sexual assault remains prevalent on college campuses, and underreporting puts survivors at risk for negative outcomes. Despite available resources, many students lack awareness of how to access them, highlighting the need for educational interventions.

Purpose: Increase awareness and knowledge among incoming college freshmen on SA, consent, and available resources.

Framework: Guided by Knowles' Adult Learning Theory emphasizing relevance and problem-centered approaches.

Methodology

Setting: Mandatory freshman seminar (UNIV 101) at a four-year university. Information was incorporated into the University's Title IX presentation.

Participants: n=779 freshmen; 526 pre-survey responses; 307 post-survey responses.

Intervention: A 30-minute presentation was presented in collaboration with the Title IX coordinator to cover the following topics: what SA is, the meaning of consent, and the resources available for survivors. To assess the session's effectiveness, students were asked to complete a brief survey both before and after the presentation to measure their learning.

Tools: QR code-enabled surveys using Google Forms with five Likert scale questions and one open-ended question.

Discussion

Impact: There were significant improvements in awareness of resources and reporting procedures. However, persistent barriers such as stigma and fear highlight areas that require further intervention

Challenges: Modest improvement in consent understanding is likely due to high baseline knowledge.

There was a 41.6% response drop-off between pre-and post-surveys.

Results

Knowledge Gains (Pre vs. Post Surveys)

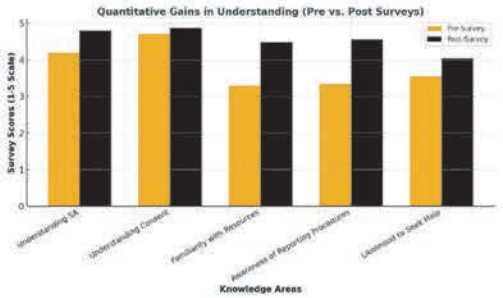
Understanding SA: +0.60 (4.19 → 4.80) (↑14.5%)

Understanding Consent: +0.15 (4.71 → 4.87) (↑3.4%)

Familiarity with Resources: +1.20 (3.29 → 4.48) (↑36.2%)

Awareness of Reporting Procedures: +1.21 (3.34 → 4.56) (↑36.5%)

Likelihood to Seek Help: +0.48 (3.55 → 4.04) (↑13.8%)



Notable Themes- Barriers to Seeking Help After Assault:

Fear: Judgment, exposure, retaliation.

Embarrassment and Shame: Stigma and guilt.

Lack of Knowledge: Uncertainty about resources.

Social Reactions: Worries about friends or family responses.

Normalization: Not wanting to "be another statistic."

Conclusion

Key Takeaways: Educational interventions effectively enhance awareness and preparedness among students.

Future programs should address emotional and systemic barriers, emphasizing consent education and interactive learning.

Sustainability: The presentation can be integrated into ongoing Title IX training with periodic updates.

Acknowledgments

I want to thank Dr. Cathryn Preisner for her guidance and support throughout this project. I want to extend my deepest gratitude to my project team for helping me with this project and for everything you do in our communities for survivors of assault. This work isn't easy, but you show up with strength and kindness to ensure no one walks this path alone.

Lastly, thank you to my husband, Austin, for your unwavering support during the last four years. I couldn't have done this without you.

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Lauryn Rayfield

DNP, APRN, FNP-C

Purpose. Asthma is a leading cause of school absenteeism, reduced participation in activities, and long-term health complications if not well controlled during childhood (Isik et al., 2020; Pegoraro et al., 2022; Simoneau et al., 2019). Asthma Action Plans (AAPs) are evidence-based tools to guide asthma management by outlining baseline status, symptom progression, and medication use. This project aimed to increase the number of AAPs on file for students with asthma and to enhance asthma education among school staff and students to improve asthma self-management. ***Methods.*** A review of student health histories identified students with asthma in an urban elementary school in Kansas. AAPs were requested from healthcare providers for all students requiring medication at school. School staff received in-person instruction and an educational handout on asthma symptom recognition, while health office staff completed online asthma training. Students were educated on inhaler use and symptom monitoring as needed. ***Results.*** Eight of the 23 students identified with asthma required medication at school and AAPs were obtained for each. However, incomplete or missing documentation limited the AAPs' effectiveness in guiding asthma care in the school setting. ***Conclusion.*** The project improved AAP collection and asthma education; however, barriers to full implementation underscore the need for increased provider collaboration and standardized AAP completion. Addressing these challenges could enhance asthma management in schools, bridging the gap between research and practice.

Keywords: Asthma, school-aged, communication, school nurse, asthma action plan

Implementation of an Asthma Action Plan to Improve Care for Elementary Students

Lauryn R. Rayfield, BSN, RN, DNP student
Faculty Advisor: Dr. Cathryn Preisner
Department of Nursing

FORT HAYS STATE UNIVERSITY

Background

- Asthma is one of the most common chronic childhood illnesses affecting children and their families worldwide (Gibson-Young et al., 2020, Kindi et al., 2021).
- The impact of asthma on school attendance and performance has been studied extensively, but few evidence-based interventions to improve attendance, performance, and ability to take part in activities have been supported by research at this time (Hughes, 2020; Isik et al., 2020; Lundholm et al., 2020; McClure et al., 2018).
- Improving asthma care in schools is a necessary step to prevent illness related absences. Asthma contributes to more than 10 million missed school days each year contributing to poorer school performance for those students (Center for Disease Control, 2018).
- Prior to this project, the site was not utilizing an evidenced-based intervention or tool to improve asthma care for students.
- The absence of AAPs can lead to inconsistent care and increased health risks. To address this issue, this project aims to obtain AAPs for all affected students by directly requesting them from healthcare providers by November 1, 2024."

Asthma Action Plans

- Asthma action plans (AAPs) are written instructions that are tailored to an individual asthma sufferer and provide measurable guidelines regarding control, prevention, and treatment (Pegoraro et al., 2022).
- An AAP provides an algorithmic approach for responding to respiratory symptoms, escalating the level of care, and allows objective measurements of asthma control with the use of peak flow meter readings.

Population/Setting

- The project location is a K-5 elementary school in urban Kansas.
- The site is one of six elementary schools in the district.
- Total student enrollment of 358 students and 58 staff members.
- The health office staff, one RN and one unlicensed health clerk, implemented the project changes to increase the number of AAPs on file.
- 24 students were identified by parents/guardians as having asthma
- 9 students indicated they would keep medication at school

Methods

This project utilized the Model for Improvement which provides a framework for assessment and the workflow changes needed to meet the goals of the project (Institute for Healthcare Improvement, n.d.).

The project started with school staff education on August 12, 2024, and ended after the first 12 weeks of school on November 1, 2024.

- Parents/guardians fill out school provided health history
- Health office staff identified students with asthma
- Requested parents/guardians fill out asthma history and indicate if medication is needed at school
- Requested order for medication and AAP from provider
- Create individual health plan from AAP and asthma history forms
- Paperwork reviewed every two weeks for the duration of project

A plan-do-study-act (PDSA) model was developed for the initial project implementation and revised as needed throughout the project timeline.

Outcomes

Objectives for this project included increasing the number of AAPs on file and providing education to the health office staff, classroom staff, and the student.

On August 22, 2024, eight students with asthma required medication at school, while one with reactive airway disease kept medication at school but did not meet the criteria for an AAP.

- There were **no** AAPs on file at this paperwork review

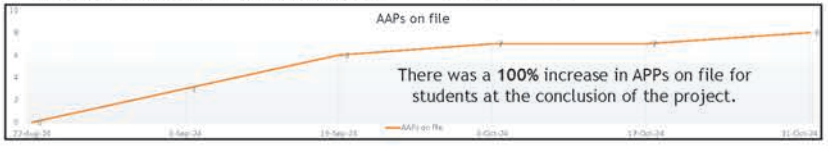
On November 1, 2024, there were 8 students identified as having asthma who needed medication at school.

- There were **8** AAPs on file at this final review

August 12, 2024: Signs and symptoms of asthma exacerbations and when to send a student to the health office for treatment were reviewed with school staff.

September 23, 2024: Asthma education was presented to the health office staff on.

Students received individualized education focusing on proper inhaler use, symptom recognition, and when to come to the health office as needed.



Recommendations

While the project succeeded in obtaining AAPs, it highlighted *significant barriers* that impacted the effectiveness of the collected documents in guiding optimal asthma care.

To understand discrepancies in AAP completion research could:

- Compare the type of providers (MD, DO, APRN, DNP) filling out the forms
- Explore provider familiarity with AAPs
- Assess if peak flow meters (PFM) are routinely used in primary care

Future research could also evaluate the effectiveness of incorporating PFM readings into school asthma management practices and how real-time data can enhance individualized care plans.

Conclusions

While efforts to obtain AAPs were successful in terms of collection, significant barriers prevented their full implementation for the school.

- Of the eight AAPs submitted, only one could be used as a medication order, with the most common issue being the absence of provider signatures.
- Discrepancies in prescribed versus available medications and the lack of PFM readings limited the effectiveness of these documents in guiding asthma care.

The project enhanced asthma awareness among health staff, school personnel, and students. Health office staff completed structured asthma training, while school staff received resources on identifying respiratory distress. Students were taught proper inhaler use and symptom monitoring to strengthen self-management skills. The initiative emphasized the importance of asthma education, AAPs, and PFMs, reinforcing their priority in future DNP practice.

Acknowledgments

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Adelagun O. Adelaja

DNP, MSN, APRN, PMHNP-BC

Healthcare disparities are a growing problem in America. The differences in healthcare outcomes for people of different racial and socio-economic statuses are significant. They cannot be overlooked as they affect other areas of healthcare, including satisfaction with healthcare, healthcare quality, cost of healthcare, and even life expectancies. The main drivers behind these disparities are non-health-related factors that are known to influence health outcomes. These factors include employment, housing, utilities, transportation, and food security, to name a few. These factors are social or socio-economic determinants of health (SDOH). This quality improvement project aims to screen individuals for socio-economic conditions that put them at risk for worsened health outcomes. This project was conducted in an outpatient clinic setting for 10 weeks. The Protocol for Responding to and Assessing Patient's Assets, Risks, and Experiences (PRAPARE) questionnaires were given to respondents 18 and older. 235 respondents completed the questionnaires. One thousand and four hundred SDOH risk factors were identified among the respondents. The mean is 93.33, the median is 70, and the mode is 8. All the individual SDOH risk factors screened for were present among the respondents. The findings of this quality improvement project suggest there are individuals in this community with socio-economic statuses that put them at risk for adverse health outcomes.

Keywords: SDOH, PRAPARE, social needs screening, housing, employment, health outcomes.

Addressing Health Disparities Through Social Needs Screening

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Introduction/Background

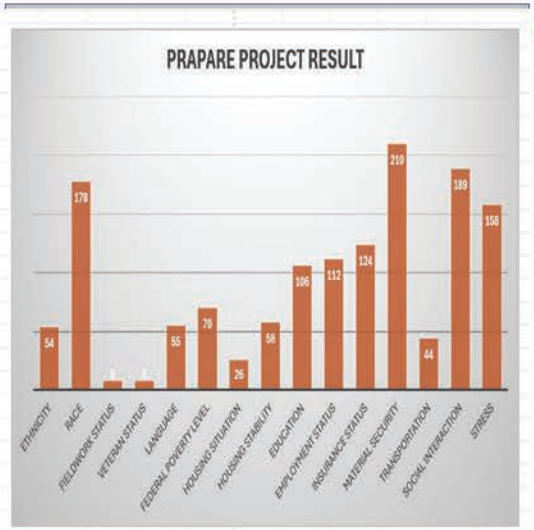
Healthcare disparities are a growing problem in America. The differences in healthcare outcomes for people of different racial and socio-economic statuses are significant. These disparities are palpable in all areas of healthcare, including satisfaction with healthcare, healthcare quality, cost of healthcare, and even life expectancies. The drivers of these disparities are known as social determinants of health. They include employment, housing, utilities, transportation, and food security. This quality improvement project aims to screen individuals for socio-economic conditions that put them at risk for worsened health outcomes.

Population/Setting

This project was conducted in an outpatient clinic setting for 10 weeks. The population includes adults 18 and older.

Acknowledgements

Special thanks to Professor Jo Gubitoso. Your support and kindness through this journey were invaluable.

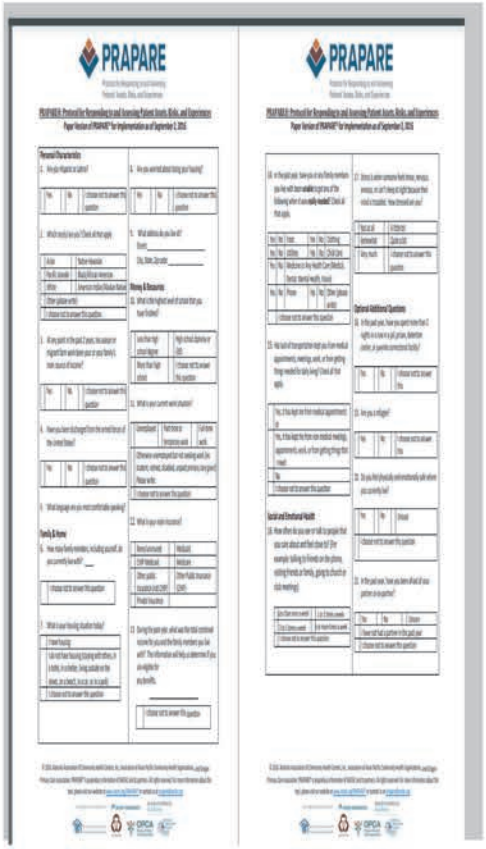


Methods

The Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE) questionnaires were given to respondents 18 and older. 235 respondents completed the questionnaires. The Model for Improvement, which incorporates the Plan-Do-Study-Act, was employed to implement the project.

Results

1400 individual SDOH risk factors were identified among the respondents. The mean is 93.33, the median is 70, and the mode is 8. All the individual SDOH risk factors screened for were present among the respondents.



Conclusions

The findings of this quality improvement project indicate that there are individuals in this community with socio-economic statuses that put them at risk for adverse health outcomes

Recommendations

Healthcare organizations must align with this practice and make a policy change that supports social needs screening because not doing so may hinder the positive outcome of their medical interventions. Also, health educators and stakeholders in health promotion and disease prevention must create opportunities to learn about social needs screenings and encourage routine assessment.

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Loneliness has profound effects on individual and societal well-being, contributing to mental health disorders such as depression and anxiety, as well as chronic conditions like cardiovascular disease (Hodgson et al., 2020). These effects are particularly pronounced among older adults, who may experience cognitive decline and an increased risk of chronic illness due to loneliness from social isolation (Barbosa Neves et al., 2019). This Doctor of Nursing Practice (DNP) project aimed to address loneliness through a sustainable, evidence-based fellowship program within a local faith-based community. By implementing structured social engagement activities, the program sought to foster meaningful connections, enhance emotional well-being, and improve health outcomes for participants. The initiative also highlighted the critical role of advanced practice nurses in leading community-based interventions and promoting population health. Developed with a focus on long-term sustainability, the program was designed to continue beyond the project's initial implementation, ensuring ongoing community engagement and the potential for replication in other faith-based settings. This DNP project underscores the importance of addressing social determinants of health through community-driven initiatives, emphasizing the value of fostering social support systems for vulnerable populations.

Keywords: Loneliness, Community Loneliness, DNP project, Interventions for loneliness

April Samene Amartey

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Improving Loneliness Through Socialization

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Introduction

Loneliness represents a significant public health concern with profound effects on individual and societal well-being. Research indicates that loneliness contributes to mental health disorders such as depression and anxiety, as well as chronic conditions including cardiovascular disease (Hodgson et al., 2020). These effects are particularly pronounced among older adults (aged 65 and older) who can experience accelerated cognitive decline and increased risk of chronic illness due to social isolation (Barbosa Neves et al., 2019).

Key findings

National Statistics:

- In the United States, over 43% of adults aged 60+ report feeling lonely (Crowe et al., 2021)Social isolation increases the risk of premature death by 29% (Hodgson et al., 2020)
- Loneliness is associated with a 50% increased risk of dementia (Ward et al., 2021)
- During COVID-19 lockdowns, rates of loneliness increased by 20-30% among older adults (Bu et al., 2020)
- Socially isolated adults face a 29% higher risk of heart disease and 32% increased risk of stroke (Kraav et al., 2020)

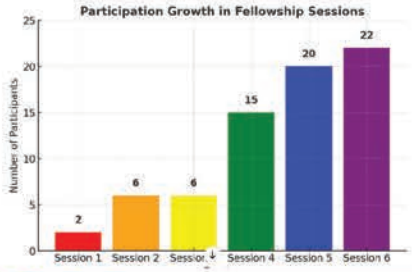
Methods

- **Setting:** Program was implemented at a Central Ohio church serving diverse socioeconomic and multiracial backgrounds
- **Population:** Church members across multiple age groups, with primary focus on older adults at increased risk for loneliness
- **Framework:** Plan-Do-Study-Act (PDSA) model guided implementation and continuous improvement

Interventions

Interventions: Six structured social engagement sessions over 12 weeks (October-December 2024)

- Session 1: Jeopardy-style board game
- Session 2: Modified Jeopardy after PDSA review
- Session 3: Off-site bowling activity
- Session 4: Community potluck dinner
- Session 5: "Paint with Praise" art session
- Session 6: Movie charades with prizes



Data Analysis

- Descriptive statistics tracked participation levels across sessions
- Frequency tables documented attendance patterns
- Informal feedback collected from participants and church leadership
- PDSA model facilitated iterative program refinement between sessions

Success measured against SMART objectives:

- Increase participation by at least 50%
- Achieve 70% growth in participation by program completion
- Establish sustainable intervention program to maintain 50-70% continued participation beyond completion

Continuous data collection throughout the project allowed for real-time modifications

Comprehensive evaluation report compiled after final session to assess overall impact

Modifications between sessions were documented to identify effective strategies

Results

Results

Participation Growth:

Session 1: 2 participants

Session 2: 6 participants (200% increase)

Session 3: 6 participants (maintained)

Session 4: 15 participants (150% increase)

Session 5: 20 participants (33% increase)

Session 6: 22 participants (10% increase)

Qualitative Outcomes:

Participants reported reduced feelings of loneliness

Potluck dinner and art sessions received highest positive feedback

Intergenerational connections were established

Church leadership endorsed positive impact during dissemination

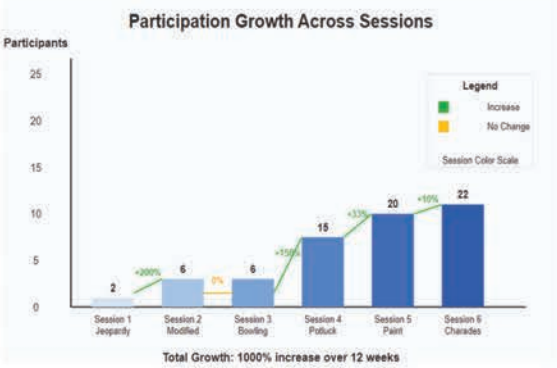
Limitations:

Initial low engagement required program adjustments

Logistical challenges with off-site activities

Resource constraints for materials and outreach

Some participants faced scheduling conflicts



Conclusions

- This DNP project successfully implemented an evidence-based community fellowship program that effectively addressed loneliness within a faith-based setting. The intervention demonstrated significant growth in participation, with attendance increasing from 2 to 22 participants over six sessions. Using the PDSA model allowed for continuous quality improvement and responsive program adaptation.
- The project highlights the critical role of advanced practice nurses in leading community-based interventions and addressing social determinants of health. Developed with a focus on long-term sustainability, the program was designed to continue beyond the project's initial implementation, ensuring ongoing community engagement and potential for replication in other faith-based settings.
- Results suggest that structured social engagement activities can foster meaningful connections, enhance emotional well-being, and potentially improve health outcomes for participants experiencing loneliness. This initiative underscores the importance of community-driven approaches to addressing loneliness as a public health concern and demonstrates the value of fostering social support systems for vulnerable populations.

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Adebisi Ayodele

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The stigma associated with mental health consists of anticipated, actual, internalized, perceived, and endorsed stigma. It hinders people's willingness and ability to seek necessary mental health care, which has widespread consequences for individuals, families, and society at large. Thus, it is essential to combat the stigma associated with mental health in the community to reduce inequality and enhance well-being. This quality improvement project addressed mental health stigma by establishing a culturally tailored mental health awareness program within an immigrant faith-based organization. This program sought to increase participation, acceptance, and awareness of mental health issues with the long-term goal of reducing mental health stigma and improving help-seeking behavior. The Plan-Do-Study-Act framework was employed for planning. A project team was established from members of the organization, and to act as examples of how the program would function, two educational seminars on mental health awareness were presented to the membership. Attendance was used to determine interest in understanding mental health and stigma, and the project team vote was used to determine commitment among the organization's members to address mental health stigma. For the first seminar, 59 of 120 attended, and for the second seminar, 39 of 120 attended. Six project team members voted to adopt the project. This initiative ultimately sought to diminish the stigma associated with mental illness within immigrant communities by promoting a sense of awareness, unity, and resilience.

Keywords: mental health awareness, mental illness, African immigrants, cultural beliefs and mental health, religious practices and mental health, African American community.

Breaking Barriers: Establishing a Culturally Tailored Mental Health Awareness Program to Combat Stigma in the Immigrant Community

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Background

- Mental illness substantially contributes to the overall burden of disease (Patel et al., 2018).
- Stigma often discourages individuals from seeking help for mental health conditions (Kapadia, 2023).
- In the African immigrant community, factors like cultural beliefs, traditional healing, religious practices, and family honor contribute to underuse of mental health services (Kamran et al., 2022).

Problem Statement

- Mental disorders affect over 970 million people globally (World Health Organization, 2022).
- Lack of mental health awareness perpetuates stigma, leading to underuse of mental health services.
- At the project site, an African immigrant faith-based organization (church), mental health stigma is prevalent among members.
- Combating mental health stigma through education that aligns with this population's cultural norms, attitudes, and beliefs may help to dispel cultural myths and misconceptions.

Project Aims

Implement two 30-minute informational sessions about mental health and stigma at an African immigrant church:

- At least 50% attendance at both sessions
- At least 75% attendance from project team
- At least 10% increase in participation between sessions

Project team votes to adopt project as part of regular quarterly activities:

- At least 75% vote to adopt the project

Population & Setting

- Almost all members (99%) of this church are immigrants of African descent; about 80% are from Nigeria, 10% are from Sierra Leone, 7% are from Cameroon, and 3% are from Liberia.
- The total church membership is 300 individuals, and 120 individuals are regular Sunday attendees.
- All seven members of the project team were solicited from the church's health ministry.

Methods

- The church's associate pastor invited all church members (N = 300) to attend two 30-minute mental health awareness seminars on October 6 and November 17, 2024, designed and led by the project team, located on the church premises.
- The first seminar's topics consisted of mental health, mental illness, and myths about mental illness. The second seminar's topics consisted of mental health stigma, the impact of stigma, and an overview of mental health treatment.
- The number of attendees were noted at each seminar, including attendee gender, for data analysis.
- On December 8, 2024, the project team (N = 7) met to vote on whether to adopt the mental health seminars into regular quarterly church activity or to abandon the project.

Outcomes

Category	Total Members	Males	Females	% of Total Members	% Regular Attendees
Total Church Membership	300	90	210	100	N/A
Regular Sunday Attendees	120	35	85	40	100
First Seminar					
Congregation Attendees	52	17	35	17.3	43.3
Project Team Attendees	7	3	4	2.3	N/A
Total Attendees	59	20	39	19.7	49.22
Second Seminar					
Congregation Attendees	32	9	23	10.7	26.7
Project Team Attendees	7	3	4	2.3	N/A
Total Attendees	39	12	27	13	32.5

- First seminar attendance:
  - 52 of 120 (43.3%) **(NOT MET)**
  - 7 of 7 team members (100%) **(MET)**
- Second seminar attendance:
  - 32 of 120 (26.7%); **(NOT MET)**
  - 7 of 7 team members (100%) **(MET)**
- 38% decreased participation between sessions **(NOT MET)**

Response	Count	% vote
Yes	6	85.7
No	0	0
Absent	1	14.3

- Six team members participated (86%) and unanimously voted to adopt the project **(MET)**.

Recommendations

- The timing of the seminars may not have been conducive for members with young children; future research could change or vary the timing of seminars.
- Future research or practice could involve assistance or input from other community organizations or agencies, either to create more interest among attendees or find support/funding for the project.
- Collecting additional demographics from the sample could have helped to analyze whether certain qualities, such as age, income, education level, or time since immigration, were associated with seminar attendance.
- The greater level of attendance among female members of the congregation may have been related to the general composition of the church. Future research could look into this dynamic.
- There was strong support among leadership, but challenges meeting the attendance goal among the congregation. Future research could look into reasons, including prevalence of stigma, lack of understanding of relevance, or need for additional outreach.

Conclusion

- This project implemented a sustainable, practical change to support mental health awareness at the project site.
- The project found that leadership was highly supportive of mental health but encountered challenges with attendance among regular church attendees.
- Further nursing research could build on the strong embrace by church leadership and investigate reasons for attendance challenges, particularly related to mental health knowledge and stigma in the African immigrant community.

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Guy Biakop

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The city of San Bernardino, situated within San Bernardino County, the largest county in the United States, is confronting an escalating mental health crisis among its homeless population. Many individuals experience significant barriers to accessing mental health services due to stigma, logistical challenges, and systemic fragmentation. This DNP project aimed to improve mental health service utilization among homeless individuals by 25% through targeted outreach strategies, including QR code distribution, strategic partnerships, and direct engagement efforts. The project followed the Model for Improvement framework, using the Plan-Do-Study-Act (PDSA) cycle to refine outreach strategies continuously. Despite challenges such as displacement from public spaces and low response rates, the initiative provided valuable insights into the complexities of engaging this vulnerable population. The findings highlight the need for sustained funding, less restrictive policies, adaptive outreach strategies, and stronger partnerships to enhance mental health service accessibility and build trust within the community.

Keywords: Homelessness, mental health services, outreach, San Bernardino County, quality improvement

TITLE: Improving Mental Health Service Access for Homeless Populations in San Bernardino

Author: Guy Biakop

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Background

Homelessness impacted approximately 1417 individuals in 2023 within the city of San Bernardino and 4200 individuals around the County (San Bernardino County, 2023).

Homeless populations experience higher rates of mental illness and substance use disorders, yet face significant barriers to care (Goldman et al., 2023).

Traditional outreach models fail to connect individuals due to distrust in healthcare systems and frequent displacement from public spaces.

This project utilizes targeted interventions to reduce barriers to mental health care access and create sustainable service pathways for homeless populations.

Population/Setting

Adult homeless residing in transitional housing, shelters, and public spaces. Participants experienced co-occurring mental illness and/or substance use disorders.

Improve mental health service utilization among the homeless population by 25% through: Direct outreach in shelters and public spaces, QR code flyers for anonymous access to services, and building trust through trauma-informed engagement.
Limited access to transportation and healthcare. Distrust of public systems and providers. Frequent displacement due to legal enforcement and encampment clearings.

Methods

A quality improvement project using the Model for Improvement and PDSA cycle to refine outreach. QR codes, combined with trauma-informed strategies, improve service engagement and access (Park et al., 2022).
Team: PMHNP, social worker, and two volunteers
Outreach Interventions:
-QR code flyers linking to mental health services were distributed.
-Direct engagement with homeless individuals to provide referrals.
-Community partnerships with shelters and local organizations.
-Goal of 25 scans per month
Data Collection:
-QR code tracking measured engagement (QR.IO tracking)
-Referral logs tracked service utilization.
-Stakeholder feedback assessed barriers and facilitators.

Outcomes

- Thirteen QR code scans were recorded, with four successful mental health service enrollments (30.7% conversion rate)
- Direct engagement proved significantly more effective than passive QR strategy
- Barriers identified: Limited trust/cooperation, insufficient funding, community restricting access, removal of outreach materials by public code enforcement, encampment displacement disrupting follow-ups, and restrictive policies.

Recommendations

•Strengthen shelter partnerships to establish on-site mental health referrals.
•Advocate for policy change to reduce restrictive ordinances that disrupt homeless outreach.
•Expand trauma-informed training for community stakeholders to increase trust and engagement.
•Increase funding for digital outreach tools like mobile apps and telehealth services.

Conclusions

•Structured outreach effectively increased mental health service engagement among homeless individuals.

•Persistent challenges include systemic barriers, policy constraints, and trust deficits.

•Future efforts should prioritize policy advocacy, funding, integration of mental health services within communities, and development of sustainable outreach models.

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Stacey Bless

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A significant number of preterm neonates require the placement of an endotracheal tube for invasive mechanical ventilation, which increases morbidity. The inadvertent displacement of the endotracheal tube, known as unplanned extubation (UE), increases the morbidities associated with intubation. Available literature shows UE rates less than 1 per 100 ventilator days decreases the risk of long-term complications associated with UE such as bronchopulmonary dysplasia and retinopathy of prematurity. This can be accomplished by implementing standardized care bundles to guide staff in caring for intubated babies to prevent UE. A Midwestern level 3 neonatal intensive care unit with high rates of unplanned extubation had no interventions in place to reduce the frequency of their occurrence. A Quality Improvement project to implement a care bundle for standardization of care of intubated neonates was hypothesized to decrease the rate of plan exhibition within the unit. Using a convenience sample of all intubated neonates, a total of 3000 ventilator days were accounted for over the course of one year using qualitative analysis. The implementation of a standardized care bundle led to a decrease in the rate of UE, and the three months post intervention were below the goal rate of 1/100. The care bundle was made part of the standard care treatment for intubated infants, minimizing the risks associated with UE in future patients.

Keywords: neonates, unplanned extubation, mechanical ventilation, care bundle

Reducing Unplanned Extubation in the NICU

FORT HAYS STATE UNIVERSITY

Stacey Bless, MSN, NNP-BC

Department of Nursing

Introduction/Background

- Unplanned Extubation (UE) is the inadvertent dislodgement of an endotracheal tube
- Associated with increased complications in the neonatal population
  - Bronchopulmonary dysplasia (BPD)
  - Retinopathy of Prematurity (ROP)
  - Increased length of stay
  - Increased duration of mechanical ventilation
  - Increased risk of tracheostomy
- No guidelines in place to prevent UE in study unit

Setting

Suburban Level III Neonatal Intensive Care Unit (NICU) with over 3000 ventilator days per year

Timeline

- Educational planning May/June 2024
- Education for proper NeoBar use June 2024
- Care bundle education for nursing staff July/August 2024
- Care bundle implementation September 1, 2024
- Data collection through December 31, 2024

Methods

Population: all intubated neonates within the study period

Design: Qualitative data collection

Tools: UE chart in respiratory therapy office and unit debriefing form

Intervention: care bundle

- Two-person handling of all intubated neonates
- Improved taping strategy for endotracheal tubes
- Formal debriefing
- ETT position ordering and frequent tube verification

Outcomes

Within 3 months of care bundle implementation:

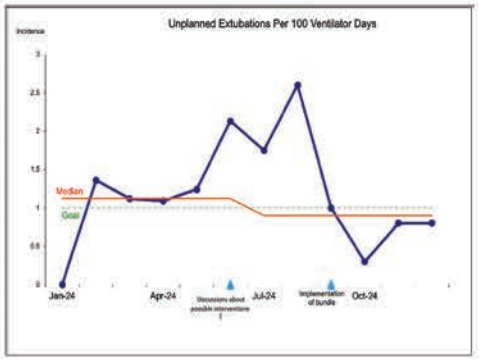
- 30% reduction in UE incidence
- 20% reduction in ventilator days

Results

Pre-intervention UE rate: 1.24/100 ventilator days (January-August)

3 months pre-intervention (June-August): 2.16/100 ventilator days

Post-intervention (September-December): 0.8/100 ventilator days



Conclusions

Standardization of ET tube care in the neonatal population reduced the incidence of UE.

Standard education across disciplines ensures consistency in care.

Nursing staff gained valuable clinical skills in the care of intubated neonates.

Recommendations

- Continued tracking of UE to establish patterns of UE incidence
- Long-term tracking of mechanical ventilator days to determine if downtrend will occur with longer stretch of low UE incidence
- Ongoing nursing education to ensure consistency in care for intubated neonates

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Research has shown that preoperative anxiety can negatively affect a patient's rehabilitation after a total joint arthroplasty (TJA). Offering patients education prior to surgery can give them the tools needed to reduce preoperative anxiety for a successful rehabilitation. This project assessed the effectiveness of a preoperative education course on patients' anxiety levels. A one-hour in-person educational course was offered. Information provided in the course included a review of anatomy, common causes for a total joint arthroplasty, home safety tips, preoperative exercises, postsurgical realistic expectations, pain reduction modalities including non-pharmacological and pharmacological, day of surgery expectations, physical therapy after surgery, and other additional information for a successful postoperative recovery. The State Anxiety Inventory Questionnaire (SAIQ) was given to patients before and after the class to measure the participant's anxiety levels. The goal of this project was that by December 31, 2024, 60% of patients who attended the TJA educational course will report reduced preoperative anxiety. Data from the SAIQs was analyzed using the Mann-Whitney U test to compare survey scores before and after the course. Results indicated that post-intervention scores (mean rank = 35.61) were significantly lower than pre-intervention scores (mean rank = 59.39), $U = 545.50$, $Z = -4.29$, $p < .001$ and there was a 70% increase in ratio from pre to post intervention. This suggests that the course had a significant effect on patients' anxiety levels before and after the course. Information from the project was disseminated first to the orthopedic team and then throughout the facility for others to use as reference in their specific departments for their educational program

Keywords: total joint arthroplasty, preoperative anxiety, educational course, The State Anxiety Inventory Questionnaire (SAIQ)

Angela Ekblad

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Implementing a Total Joint Arthroplasty Education Course to Improve Patients Preoperative Anxiety

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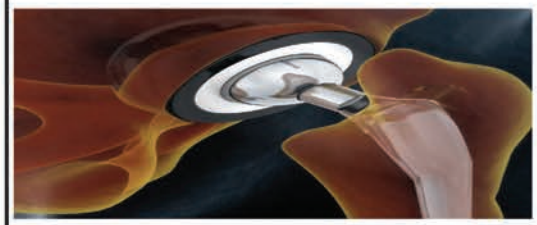
Introduction/Background

The rate of joint replacement is increasing in the United States due to longer life spans, injuries, an aging population, comorbid medical conditions, and higher obesity rates. Orthopedic surgery carries the potential of unfavorable outcomes, including discomfort, limited mobility, and diminished function with daily activities without the proper preoperative education. Patient education is a crucial part of healthcare as it gives patients the best tools for recovery (Keener & Howell, 2022). Implementing a total joint arthroplasty (TJA) educational program prior to surgery to improve patient's preoperative anxiety levels can give patients more confidence leading to better postoperative outcomes.

Population/Setting



The population involved in this project were patients scheduled to have a TJA. The orthopedic team involved in this project were two nurse practitioners, an orthopedic surgeon, a registered nurse (RN), a technology technician, and a certified nurse assistant. The setting for this project was in an outpatient rural healthcare clinic in the upper Midwest. Patients attended the education class in the community room of the clinic. There was not an option for online viewing of the course, but this may be possible in the future.

Methods

Purpose Statement -The goal of this project was by December 31, 2024, 60% of patients who attended the TJA educational course will report reduced preoperative anxiety.

Specific Aims-The specific aims of this project:

- to create an hour-long, in-person educational class.
- assess patient's anxiety levels with the State Anxiety Inventory Questionnaire (SAIQ) before and after the course.
- evaluate the SAIQ to consider the effectiveness of the course in decreasing the patient's preoperative anxiety levels.

Course Content-

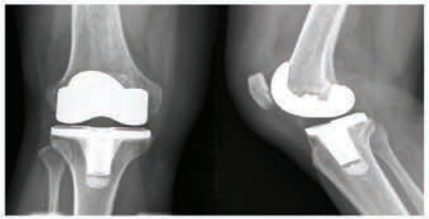
- Review anatomy, common causes for a total joint arthroplasty, home safety tips, preoperative exercise, realistic expectation, pain reduction modalities, day of surgery expectation, and physical therapy.
- The first course was held September 26, 2024, with 16 participants; the second course was offered October 24, 2024, with 9 participants; the third course was held November 21, 2024, with 10 participants; and the final course was held December 5, 2024, with 12 participants.

Outcomes

Data from the SAIQ was evaluated after completion of all four educational sessions using the Mann-Whitney U test. The independent variable was the education received, and the dependent variable was the score on the SAIQ. Results indicated that post-intervention scores (mean rank = 35.61) were significantly lower than pre-intervention scores (mean rank = 59.39), $U = 545.50$, $Z = -4.29$, $p < .001$ and there was a 70% increase in ratio from pre to post intervention. The outcomes from this study suggest that the course had a significant effect on patient's anxiety levels before and after the course. Information from the project was disseminated first to the orthopedic team and then throughout the facility for others to use as reference in their specific departments for their educational program.

Conclusions

Implementing a TJA educational program before surgery can significantly improve patient outcomes postoperatively. This education can empower patients by addressing psychological factors, promoting realistic expectations, supporting pain control, and encouraging early mobility (Causey-Upton et al., 2020a). A one-hour in-person educational course was offered using the SAQI tool to measure patients' anxiety before and after the class. The results show the course had a significant effect on patients' anxiety levels. This project can aid future research to evaluate such programs for improved preoperative anxiety, overall patient satisfaction, and better patient postoperative outcomes.



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Oluchi Eke

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Metabolic syndrome (MetS), a cluster of interrelated metabolic abnormalities, poses a significant health risk, particularly among individuals receiving atypical antipsychotics (AAPs). MetS side effects associated with AAPs include large waist circumference, high cholesterol, elevated blood glucose, and high blood pressure. Despite the recognized MetS risks and well-established screening guidelines, routine monitoring for MetS among psychiatric providers remains inconsistent. The purpose of this quality improvement project was to implement a protocol for monitoring MetS in patients prescribed AAPs in an outpatient behavioral health clinic, based on the American Diabetes Association (ADA) and American Psychiatric Association (APA) guidelines. As a result, referrals and early interventions could be initiated to reduce risks and improve outcomes for these patients. Six psychiatric providers received educational sessions to review ADA/APA guidelines for metabolic screening in patients treated with AAPs. The providers were provided with a copy of the MetS screening protocol. A retrospective chart review was performed monthly for three months post-implementation to assess how many providers used the protocol. Run chart was used to monitor screenings per provider. Cumulative summary statistics were used for pre- and post-implementation comparisons. Results demonstrated an upward trend in MetS screenings and referrals to primary care over three months post-implementation, suggesting that the new protocol was effective in improving MetS screening and management. Through the implementation of this protocol, psychiatric providers addressed metabolic risks early, optimizing patient outcomes by mitigating the adverse metabolic effects associated with AAPs.

Keywords: metabolic syndrome, psychiatric, providers, antipsychotics, screening tests, atypical antipsychotic, adults.

Implementing a Protocol to Monitor Patients for Antipsychotic Metabolic Syndrome

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Background

- Studies have established patients prescribed atypical antipsychotics (AAPs) are at a higher risk for developing metabolic syndrome (MetS).
- MetS is characterized by large waist circumference, high cholesterol, elevated blood glucose, and high blood pressure (Carli et al., 2021).
- Studies have established a strong connection between early metabolic disturbances and the development of weight gain in patients treated with atypical antipsychotic medications (AAPs).
- Despite well-established guidelines from the American Psychiatric Association (APA) and American Diabetes Association (APA), metabolic monitoring in psychiatric settings remains inconsistent.
- Metabolic disturbances are amenable to modification, highlighting the importance of conducting baseline screenings and ongoing monitoring for patients prescribed antipsychotics.
- This proactive approach enables early detection and intervention when necessary. This can help mitigate the adverse effects and improve outcomes for a high-risk patient population (DeJongh, 2021).

Population/Setting

- Northeastern region of the United States.
- Outpatient behavioral health center that provides psychiatric and mental health treatment to adults eighteen years old and above.

Participants: 6 Psychiatric providers (1 psychiatrist & 5 Psychiatric NPs) who prescribe atypical antipsychotics

Objectives

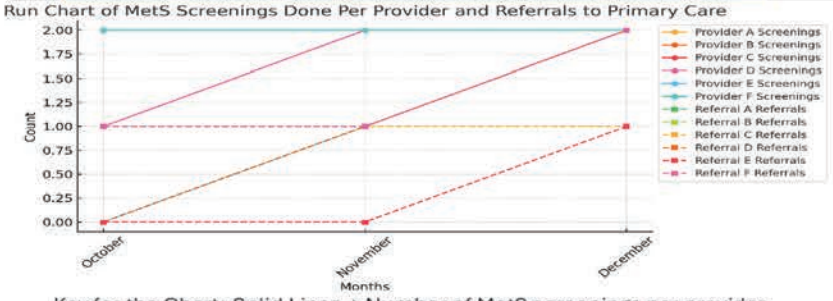
- To implement a protocol for metabolic syndrome monitoring of patients prescribed atypical antipsychotics, and as a result, referrals and early interventions could be initiated to reduce risks and improve outcomes for these patients.
- Improve screening rates among patients on atypical antipsychotics
- Ensure timely referrals for at-risk patients

Methods

- A 45-minute educational session intervention on ADA/APA guidelines for metabolic screening in patients treated with atypical antipsychotics was conducted via Microsoft Teams on 8/31/2024 and 9/5 /2024, with three providers participating on each date.
- The providers were provided with a copy of the MetS screening protocol.
- **Screening parameters**: personal/family history, baseline weight, blood pressure, fasting blood glucose, waist circumference, body mass index (BMI) and fasting lipids panels.

Data collection/Analysis

- EHR Chart audits occurred before and monthly for 3 months after intervention.
- In August 2024, performed a baseline pre-implementation review of two patient charts per provider. Retrospective chart audits were performed in October, November, and December 2024. Two charts per provider were reviewed each month.
- Evaluation measured the number of completed MetS screenings and the frequency of primary care referrals, providing a comprehensive assessment of protocol adherence and overall intervention effectiveness.
- Run chart was utilized to visually monitor trends in MetS screenings over time.
- Cumulative summary statistics were used for pre/post-implementation comparisons.



Key for the Chart: Solid Lines → Number of MetS screenings per provider
Dotted Lines → Number of referrals to primary care per provider

Outcomes/Results

• Pre-implementation phase (August 2024):

A baseline review of 12 patient charts (2 per provider) revealed that no metabolic syndrome screenings or primary care referrals were conducted.

• Post-implementation phase (October–December 2024):

A total of 36 charts (6 per provider) were reviewed over the three-month period. Of these, 32 screenings were completed, reflecting significant improvement following the intervention.

•Providers A, B, C, and F: Completed all 6 screenings (100%), Provider D: Completed 5 screenings (83%) while Provider E: Completed 3 screenings (50%)

Cumulative screening rate:

- There was an 89% overall completion rate across all providers (32 out of 36 charts).

- Before the intervention, no metabolic screenings were conducted. After implementing the protocol, an average of 5.33 screenings per provider was completed.

- Number of MetS screenings and referral to primary care by psychiatric showed a gradual increase over the three months, indicating improved adherence to the new protocol.

Recommendations

- The project successfully met its objectives by increasing MetS screenings, enhancing provider adherence to evidence-based guidelines, and improving referral rates for patients needing primary care interventions.
- Findings support the sustainability of standardized metabolic monitoring protocols in psychiatric care settings.
- Future efforts should focus on long-term tracking, provider education reinforcement, and EHR integration to ensure continued success.

Conclusions

- Routine MetS monitoring helps identify metabolic syndrome abnormalities to help decrease the morbidity and mortality risks associated with MetS complications.
- This QI project demonstrated significant value in improving metabolic syndrome (MetS) monitoring in a behavioral health setting, aligning with evidence-based guidelines to enhance patient outcomes.
- Findings revealed that implementing a standardized MetS screening protocol led to increased screening rates and improved referrals to primary care, addressing a critical gap in preventive healthcare.

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Acknowledgments

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Alison Henry

DNP, MSN, CRNA

Healthcare facilities within the United States continue to seek ways to provide the safest care at the lowest cost. However, anesthesia-related medication errors remain the most common-anesthesia-related event, with 85% deemed preventable. These errors reduce margins of safety and care quality while increasing costs for both the hospital and the patient. In an effort to protect both the budget and the patient, pharmacy-prepared ready-to-administer (RTA) syringes have slowly started to occupy the space of traditional medication vials of commonly used medications in our pediatric anesthesia pyxis'. This study aims to show if the use of RTA dexmedetomidine syringes increases its availability while remaining cost-effective. Evaluation of current dexmedetomidine usage was determined through a manual chart review of a 30-day calendar period. A comparative cost analysis and survey of pediatric anesthesia providers further helped to evaluate provider satisfaction, as well as other comparable metrics. Evaluation and analysis of data determined that RTA dexmedetomidine syringes are more cost-effective, with increased ease of use, perceived high level of safety, and decreased waste. The implications of these findings support robust financial and safety advantages while harmonizing with current evidenced-based recommendations to promote safer medication administration processes and purposeful advancement in anesthesia practices and care.

Keywords: Dexmedetomidine, ready-to-administer syringes, pre-filled syringes, perioperative medication events, health care waste, pediatric anesthesia.

A Cost Minimization Analysis of Ready-To-Administer Dexmedetomidine Syringes in the Pediatric OR

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Introduction & Background

The pediatric operating room is routinely monitored for safety and efficiency improvements. Although patient safety is central to healthcare, medical errors remain the third leading cause of death in the U.S. (Leahy et al., 2018). To enhance medication safety, anesthesia teams are collaborating with pharmacy services to introduce pharmacy-prepared ready-to-administer (RTA) syringes. These syringes have been shown to reduce errors, waste, and costs (Larmene-Beld et al., 2019). This project evaluated whether pre-filled dexmedetomidine syringes improved availability, perceived safety, and cost-effectiveness in the pediatric OR.

Population & Setting

The population of this project consisted of anesthesia providers, including certified registered nurse anesthetists (CRNA), resident and attending physicians, pediatric OR pharmacists, and pharmacy technologists. While anesthetized pediatric patients were under the care of the providers, they were not participating in the project. The setting of this project was a prominent academic facility with an attached children's hospital.

Methods

The project team leader met with members from the OR pharmacy and Anesthesia leadership throughout the duration of the project. Data collection consisted of a 30-calendar day manual chart review to determine each patient that received dexmedetomidine intra-operatively, the dose, and in which OR. A cost analysis was conducted to evaluate the annual expenditure associated with increasing the number of dexmedetomidine vials in anesthesia Pyxis units compared to implementing four RTA syringes as a replacement. Lastly, a survey was anonymously administered to pediatric anesthesia providers to provide qualitative data regarding ease of use, safety, and waste associated with the current vials versus the RTA syringes.

Outcomes

Pediatric OR metrics identified that each OR administers dexmedetomidine to an average of three patients daily, with an average dose of 11 mcg (2.75 ml). The cost analysis results is shown below in Table 1. Fourteen providers responded to the survey, and 100% of them agreed that RTA syringes are very safe. Moreover, at least 70% of providers agree RTA syringes are safer, easier to use, and produce less waste than the current vial method.

Table 1
Cost Analysis and Intervention Comparison

Intervention	Current Practice (2) 20ml vials per OR	3 vials per OR	4 RTA syringes ($2 per syringe labor cost)	4 RTA syringes ($2.50 syringe labor cost)	4 RTA syringes ($3 syringe labor cost)
Cost per OR per day	$19.18 per OR	$28.77	$17.59	$19.59	$21.59
Total cost per day	$153.44	$230.16	$140.72	$156.72	$172.72
Total cost per year	$38,666.88	$65,552.76	$35,461.44	$38,737.44	$43,525.44
Yearly cost savings or increase	N/A	$26,885.88 Increase	$3205.44 Savings	$70.56 Increase	$4,858.56 Increase

Recommendations

Our recommendation for practice change favors implementing four RTA syringes of dexmedetomidine in each anesthesia Pyxis. The resilient safety profile of RTA syringes combined with the potential of budget neutrality or savings, makes RTA syringes an attractive, financially self-sustaining option, with increased ease of use and provider satisfaction.

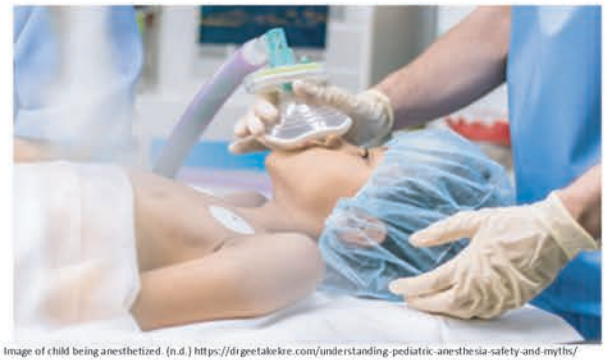

Image of child being anesthetized. (n.d.) https://drgeetakelre.com/understanding-pediatric-anesthesia-safety-and-myths/

Conclusion

Despite ongoing safety efforts, medication events remain the most common anesthesia-related event, with 85% deemed preventable, 47% almost undoubtedly preventable, and another 33.6% likely preventable (Hache et al., 2020). RTA syringes have proven to be a safer and potentially more financially efficient way of administering intravenous medication. By demonstrating the institutional value of RTA syringes in the OR, this project has the potential to influence future policy and practice change, promote safer medication administration and handling practices and drive meaningful improvements in anesthesia care and systems-based healthcare settings.

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Cosmo Joseph Nylander

DNP, FNP-C

Urinary Tract Infections (UTIs) are a leading cause of hospital readmissions in long-term rehabilitation facilities, increasing healthcare costs and patient morbidity. This quality improvement project aimed to reduce UTI-related rehospitalizations in a 200-bed rehabilitation facility in Pennsylvania by implementing the National Healthcare Safety Network (NHSN) UTI Checklist. Using the Plan-Do-Study-Act (PDSA) cycle, the project involved training nurses on early UTI detection, hydration protocols, catheter management, and infection control measures. Data was collected for four months before and after the intervention to measure its impact. The UTI rehospitalization rate decreased from 77% before the intervention to 11% after implementation. A Z-test analysis confirmed statistical significance ($p < 0.0001$), demonstrating the effectiveness of the intervention. Implementing the NHSN UTI Checklist significantly reduced hospital readmissions, improved infection control practices, and enhanced nursing staff competency. Future research should explore multi-site studies, long-term impact assessment, and EHR integration to sustain these improvements. This project highlights the importance of evidence-based strategies in reducing preventable UTI-related rehospitalizations in long-term care settings.

Keywords: Urinary tract infections, rehospitalization, NHSN UTI Checklist, long-term care, infection control, quality improvement.

Reducing Re-hospitalization for UTIs in Acute/Long-Term Rehabilitation Center

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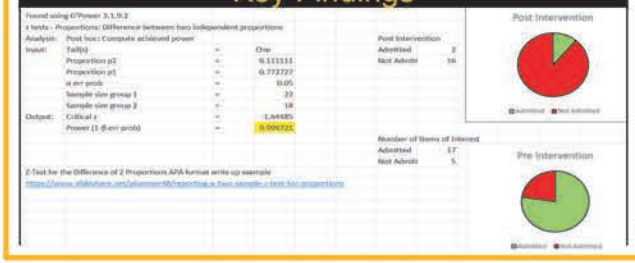
Introduction

- Rehospitalization rates for urinary tract infections are a significant health issue with significant effects on the patient's finances and quality of life outcomes (Advani et al., 2017).
- There is an urgent need for hospitals to adopt early diagnosis approaches for evidence-based treatment to reduce rehospitalization rates among long-term care facilities (Babich et al., 2016).
- A lack of knowledge among healthcare professionals about early UTI detection has been the leading cause of the high rehospitalization and readmission rates being witnessed in long-term care facilities.
- The National Health Care Safety Network Checklist has been developed to help identify and reduce UTI-related rehospitalization cases (Allen-Bridson et al. 2015).
- This project aims to reduce the rates of UTI rehospitalization by 15% within 120 days using the NHSN Checklist within a long-term care facility.

Methods

- **Setting:** Implemented in a 200-bed rehabilitation facility in Pennsylvania.
- **Project Population:** Nurses and care providers at the facility were enrolled in the project.
- **Recruitment:** In coordination with the director of nursing, nurses and care providers received rigorous training on using the NHSN-UTI checklist for all shifts to identify and reduce cases of UTI rehospitalization.
- **Project Interventions:** The PDSA cycle was used to determine what to modify during the project implementation phase and how to plan and act on UTI rehospitalization risks.
  - The nurses also had 1-hour training sessions on how to use the NHSN criteria.
  - Nurses and care providers were trained on new UTI management protocols and early UTI detection methods.
- **Project Timeline:** The initial project intervention took place on the first floor, followed by expansion to other floors after evaluation and adjustments.
- **Progress Indicators:** The leading key indicators that were used to assess the project outcomes include:
  - Reduced UTI rehospitalization rate by 15% within 120 days.
  - Improved nursing staff's UTI prevention and management practices (Bagchi et al., 2020).
  - Compliance with new protocols (Behera et al., 2020).

Key Findings



Analyses

- **Data Collection**: Nurses marked criteria sheets daily by checking X on the boxes corresponding to any listed criteria the patient fulfills on the sheet and handing them to unit managers at the end of each shift.
- **Data Compilation**: Unit managers collected updated NHSN and McGeer criteria sheets for all shifts daily.
- **Weekly Analysis**: Collected sheets were analyzed weekly to assess the effectiveness of intervention strategies.
- **Effectiveness Evaluation**: The rehospitalization rates for UTIs from four months before the project intervention were compared with the rehospitalization rates for UTIs four months during the intervention period.
- **Comparison Method**: The lower tail Z-test was used to compare the results of the two proportions.
- **Outcome Measurement**: Assessed practicality of NHSN UTI checklist and McGeer criteria in reducing rehospitalization rates.
- The lower tail Z-test for the difference of two proportions was used to compare the results of how well the new protocol reduced rehospitalization.

Key Findings

Lower Tail Z Test for the Difference of Two Proportions- A directional form of the Chi-Square test

Data	
Hypothesized Difference	0
Level of Significance	0.05
Post Intervention	
Number of Items of Interest	2
Sample Size	18
Pre Intervention	
Number of Items of Interest	17
Sample Size	22
Intermediate Calculations	
Group 1 Proportion	0.111111111
Group 2 Proportion	0.772727273
Difference in Two Proportions	-0.66161616
Average Proportion	0.4750
Z Test Statistic	-4.1687
Lower-Tail Test	
Lower Critical Value	-1.6449
p-Value	0.0000
Reject the null hypothesis	

Confidence Interval Estimate of the Difference Between Two Proportions

Data	
Confidence Level	95%
Intermediate Calculations	
Z Value	-1.9600
Std. Error of the Diff. between two Proportions	0.1161
Interval Half Width	0.2275
Confidence Interval	
Interval Lower Limit	-0.8891
Interval Upper Limit	-0.4341

Results

- **Study Period:** Four months during the project intervention
- **UTI Admissions:** 2 out of 18 residents contracted UTIs and were admitted during the study period.
- **Pre-Project Admissions:** 17 out of 22 residents contracted UTIs and were admitted before the project.
- **Effectiveness:** Statistically significant reduction in hospitalization rate using the NHSN-Checklist. Residents who were diagnosed using the NHCSN -Checklist for UTI during the four-month intervention period in a long-term care facility had a statistically greater reduction in hospitalization rate 0.11, than the residents who were diagnosed with UTI four months before the intervention period without using the NHSN UTI criteria checklist (Z=-4.1687, P=0.000).
- **Outcome:** Greater reduction in rehospitalization for residents diagnosed with the NHSN-UTI checklist compared to those diagnosed without it.

Conclusions

- Long-term care facilities have recorded a significant increase in the number of UTI rehospitalization cases due to a lack of quick diagnostic tools like the NHSN checklist.
- UTIs are better treated if diagnosed earlier.
- Cranberry juice, changing catheters, and better perineal care can reduce UTIs in LTC
- The PDSA improvement model can be useful in remodifying a UTI project for a better outcome
- At the end of the intervention period, rehospitalization rates were lower for residents diagnosed using the NHSN-UTI checklist than those diagnosed without it.
- This evidence highlights the need for LTCs to use a dedicated NHSN checklist to help reduce UTI rehospitalization cases.
- The use of structured, evidence-based protocols like the NHSN UTI checklist can help reduce cases of UTI rehospitalization rates.

Acknowledgments

- Sincere thanks to the Director of Nursing for their unwavering support and invaluable guidance throughout the project.
- I am grateful to the administrator for providing the structure and resources essential for implementing the NHSN UTI Checklist.
- I'd like to express my heartfelt appreciation to the nurses and care providers for their dedication and commitment to improving patient care through early detection and effective management of UTIs.
- Thanks to the nurse practitioners at the facility for their collaboration and expertise in enhancing the intervention strategies.
- Thank you, especially to all the nursing staff who participated in the training sessions and diligently applied the new protocols.
- Lastly, I would like to acknowledge the entire healthcare team's collective effort in reducing UTI rehospitalization rates and improving patient outcomes.

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Falls among nursing home residents pose a significant threat to patient safety, often leading to injuries, increased healthcare costs, and diminished quality of life. This Doctor of Nursing Practice (DNP) project aimed to implement a structured fall prevention program to improve staff compliance with evidence-based interventions and reduce fall rates. The project interventions included staff education, the Bedside Mobility Assessment Tool (BMAT), sit-to-stand exercises, and rounding sheets to document fall prevention efforts. Data collection methods consisted of fall incident reports, staff surveys, and adherence tracking of implemented strategies. The results demonstrated improved staff compliance with rounding sheets, though adherence to BMAT and sit-to-stand exercises remained inconsistent. Despite these challenges, fall rates decreased from 12 falls in the four months before project implementation to seven falls after implementation, reflecting a positive trend in patient safety. Staff surveys also indicated increased awareness and engagement in fall prevention strategies. The findings emphasize the need for continued staff education, leadership reinforcement, and workflow integration to sustain progress. This project highlights the impact of structured fall prevention initiatives in reducing fall risks and improving patient outcomes. Future research should explore methods to enhance long-term compliance and incorporate digital tracking for efficiency.

***Keywords*:** Fall, prevention, safety, interventions, compliance, staff

Rene J. Punsal

DNP, MSN, APRN, FNP-C

Fall Prevention in a Nursing Home

Rene Punsal MSN, FNP-C
Department of Nursing, NURS 959 DNP Project III

FORT HAYS STATE UNIVERSITY

Background

- Falls are a leading cause of injury among nursing home residents, significantly impacting their safety and quality of life (Centers for Disease Control and Prevention [CDC], 2021).
- Many falls are preventable through evidence-based interventions and improved staff compliance with fall prevention protocols (Lizama-Perez et al., 2023).
- Previous attempts to reduce fall rates often lacked consistent implementation and staff engagement, limiting their overall effectiveness (Gabele et al., 2023).
- This project aims to address gaps in adherence to fall prevention protocols by introducing structured interventions, staff training, and continuous monitoring.
- The project was conducted in a 56-bed nursing home in New Jersey, focusing on increasing staff compliance and improving patient safety outcomes.

Settings/Population

Setting

- Implemented in a 56-bed skilled nursing facility in New Jersey.
- The skilled nursing facility included residents aged from 60 to 90+ with varying levels of mobility and cognitive function

Target population

- Interdisciplinary team including registered nurses, licensed practical nurses, certified nursing assistants, and physical therapist

Purpose

- Purpose of this project is to implement a structured fall prevention program to enhance safety and reduce fall rates in a nursing home
- Key objective is to improve staff compliance with fall prevention strategies using evidence-based interventions.

Methodology

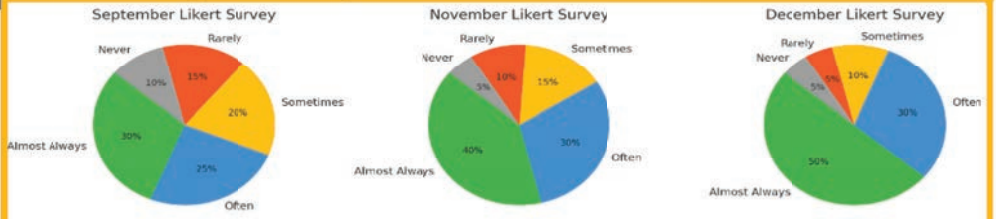
This fall prevention project was conducted in a 56-bed nursing home, aiming to reduce fall rates and improve staff adherence to fall prevention protocols. The project targeted staff education, implementing structured interventions based on evidence-based practices.

Interventions Implemented:

- **Staff Education:** Staff received training on fall prevention strategies, proper use of mobility aids, and environmental safety measures.
- **Bedside Mobility Assessment Tool (BMAT):** Nurses conducted daily mobility assessments to identify residents at higher risk of falls
- **Hourly Rounding:** Staff completed regular rounding using documented checklists to monitor residents' needs and environmental hazards.
- **Sit-to-Stand Exercises:** Physical therapists led individualized mobility exercises aimed at improving balance and strength.

Data Collection and Measurement:

- **Rounding Sheets:** Monitored staff adherence to hourly rounding.
- **Fall Incident Reports:** Tracked and recorded fall incidents before and after project implementation.
- **Staff Surveys:** Likert scale surveys were administered monthly to assess staff engagement and compliance with fall prevention strategies.
  - The Likert survey measured staff adherence to fall prevention protocols and their perceptions of the interventions.
  - Responses ranged from *Almost Always* to *Never*, allowing assessment of compliance and engagement over time.
- **Timeline:**
  The project ran from September 2024 to December 2024. Data collection began immediately after staff training, with regular reviews conducted throughout the implementation period to track compliance, adjust interventions, and provide additional staff support when necessary.



Outcomes

- **Specific:** Increase staff adherence to fall prevention strategies through education and consistent use of interventions.
  - *Outcome:* Partially met — Staff compliance with rounding sheets improved, though BMAT and sit-to-stand exercises were inconsistently used.
- **Measurable:** Achieve a **20% increase** in staff compliance with fall prevention protocols within four months.
  - *Outcome:* Met — Staff compliance improved by 20% through increased use of rounding sheets and proactive monitoring.
- **Achievable:** Implement targeted staff training sessions and provide ongoing support.
  - *Outcome:* Met — Staff received training and support throughout the project.
- **Relevant:** Enhance resident safety by addressing fall risk factors such as mobility limitations and environmental hazards.
  - *Outcome:* Met — Fall rates decreased from **12 falls** before implementation to **7 falls** after intervention.
- **Time-bound:** Execute interventions over a four-month period, with ongoing evaluations through rounding sheet completion rates and staff surveys.
  - *Outcome:* Partially met — Interventions were partially implemented, and evaluations were conducted utilizing rounding sheets and Likert Surveys.

Conclusion

- The fall prevention project effectively reduced fall rates and enhanced staff compliance with safety protocols.
- Challenges included inconsistent use of BMAT assessments and incomplete rounding sheet documentation.
- Overall staff engagement and adherence to fall prevention strategies showed significant improvement.
- Structured interventions, staff education, and continuous monitoring proved essential for success.
- Ongoing training and leadership support are crucial for sustaining long-term improvements in resident safety.

Recommendations

- Provide ongoing staff training on fall prevention strategies.
- Transition to digital documentation to improve rounding sheet compliance.
- Expand the program to other high-risk areas within the facility.
- Conduct research on barriers to staff compliance.
- Monitor long-term outcomes to ensure sustained fall reduction.

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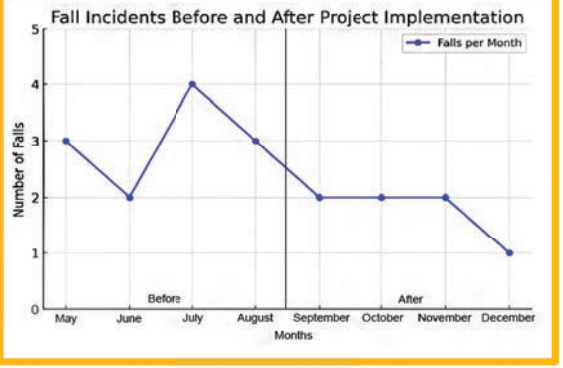

Sandra Rivera

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Background: The need for advanced care planning (ACP) is crucial in ensuring that individuals can specify their medical care preferences, especially in scenarios of incapacitation, underscoring the importance of respecting their wishes. However, ACP remains underutilized in healthcare. This project involved implementing an ACP day at a senior center to increase discussions about advanced directives. The project targeted all adults at a Senior Center located in Northeast, Pennsylvania, aiming to educate them on ACP's significance through structured sessions covering advanced directives, legal considerations, and communication strategies. Question and answer sessions fostered engagement and understanding among participants, encouraging them to share personal experiences and concerns.

Methods: The project was open to all persons who visited the senior center. The Plan, Do, Study, Act (PDSA) cycle was utilized after each education session. The sessions were implemented once a month over three months. The outcome measured was attendance at the ACP day. The participants' privacy and confidentiality were maintained since identifiers did not form part of the collected data. Descriptive statistics was used to analyze the attendance data.

Results: Twenty-six people attended the event across three months, with 10, 8, and 8 people gracing the event in September, October, and December, respectively (M=8.6; SD = 1.1).

Conclusion: The project set a foundation for future ACP campaigns at the senior center. Health practitioners should create more awareness about ACP through continued discussions with elderly patients.

Keywords: Advanced care planning, advanced directives, end-of-life care, senior center, PDSA model

Advanced Care Planning Day at a Senior Citizen Center

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FORT HAYS STATE UNIVERSITY
Forward thinking. World ready.

Background

- Advanced Care Planning (ACP) is an important issue in care of senior population.
- ACP ensures wishes of patients are documented and respected (Auriemma et al., 2020).
- ACP is underutilized
- About 76% of senior citizens not willing to engage in any form of end-of-life decisions (Motley, 2013).
- Lack of awareness is a barrier to participation in ACP
- Project aimed to implement an ACP day at a senior center

Population/Setting

- The setting was a senior citizen center located in the northeast of Pennsylvania
- Project population was all individuals who visited the senior center
- Senior citizens use the center for social activities
- Program information shared through flyers and word of mouth

Outcomes

- 10 people attended the first ACP day
- 8 attended the second ACP day
- 8 attended ACP day in November 2024
- Total of 26 participants across the three days
- Mean number of participants was 8

Methods

- Quality improvement design
- Plan-Do-Study-Act model used to implement and test ACP education
- **Plan:** Provided participants with resource materials before each session, such as handouts, guides, and online resources. Educational content was designed to incorporate interactive learning strategies.
- **Do:** ACP education sessions were conducted monthly over three months (Sept, Oct, and Nov 2024) at the Senior center. Use of interactive activities such as group discussions, PPT presentation, and case studies to engage participants. Discussions led by DNP student.
- **Study:** Reflected after each session on participant and staff feedback highlighting key insights such as, "The pamphlets provided were invaluable information .", "The event highlighted the need for clear communication within my family", "This is a much-needed topic to discuss for everyone." Observations indicated increased participant engagement and willingness to discuss ACP.
- **Act:** Made necessary improvements to delivery methods, incorporating participant feedback to enhance the sessions. Ensured the education session did not conflict with the senior center's monthly activities to attract a more significant number of participants. Such as changing a session from Thursday to Tuesday.
- Data collected included participation counts, and it was recorded in an MS Excel Sheet.
- Descriptive data analysis using frequency distributions was performed to assess participant attendance trends.

Source: BC Association of Community Response Networks https://bccrns.ca/event/acp-day-2024

Recommendations

- Use of simple terms and messages
- Increase training on ACP among nurses and healthcare providers
- Make ACP education a continuous conversation
- Continue to encourage individuals to attend ACP sessions.

Conclusions

- Project played a role in creating ACP awareness
- Multidimensional factors responsible for low attendance
- Project sets a foundation for future ACP awareness campaigns
- Senior Center to integrate ACP days in routine activities

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Acknowledgments

- Administrative staff and direct care staff at the Senior Center
- Project Chair/DNP Advisor for the guidance
- My family for their moral support

Jenna Sander

DNP, CNM

More than one of five pregnant persons will undergo a medically indicated induction of labor. Induction of labor can increase the risk of additional interventions and complications during labor, such as cesarean section, longer hospital length of stay (LOS), and reduced patient satisfaction with their birth experience. Cervical ripening is an established practice that reduces these risks and improves outcomes for patients requiring labor induction. Intracervical single-balloon Foley catheter (FC) placement is a standard cervical ripening method often used in the outpatient setting. This project was designed to implement a process change within an obstetrics clinic to offer eligible patients outpatient FC cervical ripening before inpatient hospital admission for induction of labor. The patients who chose outpatient FC placement, n=13, experienced a 15.64% lower risk of cesarean section and a 1.81-hour shorter hospital LOS, on average, when compared to baseline data for inpatient induction of labors. Provider participation was lower than expected, contributing to the low sample size; because of the low sample size, statistical significance for the outcome measures could not be established. Continued data collection at this clinic is recommended to assess the significance of findings.

Keywords: balloon, catheter, Foley balloon, Foley catheter, cervical ripening, outpatient, induction of labor, cesarean section, hospital length of stay

Clinical Process Change:
Foley Catheter for Outpatient Cervical Ripening

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Background

More than twenty percent of pregnant persons in the United States undergo induction of labor. Of these patients, an estimated fifty percent will need a medically induced cervical ripening process (Levine, 2020). Compared to spontaneous labor, induction of labor increases the rate of interventions, such as cesarean section, and increases hospital LOS (Wise et al., 2020). Cervical ripening, regardless of method, results in a decreased rate of cesarean birth. Implementing cervical ripening in the outpatient setting results in maternal and neonatal outcomes comparable to inpatient cervical ripening, with the benefit of reduced hospital LOS and improved patient satisfaction.

The incidence of medically indicated induction of labor has been steadily increasing. With this increase in induction, patients are experiencing an increased rate of medical interventions and subsequent complications of labor. Most patients will benefit from cervical ripening as part of their induction of labor process. Cervical ripening is generally a long process, sometimes taking up to 36 hours or longer, and patients often express a desire to be home as long as possible before being admitted to the hospital. Outpatient protocols for cervical ripening have great potential to impact patients, families, and healthcare systems positively.

Population/Setting

The setting for this project was a private practice obstetrics clinic. The population for this project included the providers, the patients, and the patients' families, all of whom could benefit from the process change implementation. Providers in this clinic offered only inpatient cervical ripening and labor induction for pregnant patients. The concept for this project emerged from several influencing factors, including provider interest, patient interest and preference, and limited local hospital labor room availability. With an outpatient cervical ripening process, these providers were able to offer patients the first step in the induction of labor process in the comfort of their own home while also reducing the incidence of inappropriate use of hospital labor rooms for non-laboring patients and decreasing the patients' risk for unnecessary interventions.

Methods

With the Lean Approach as the framework, Plan-Do-Study-Act cycles guided the implementation and any revisions that were required. Providers offered outpatient FC to eligible patients with indications for induction. Providers counseled patients on the risks, benefits, and alternatives to the intervention and obtain informed consent verbally and written, with the signed consent form retained as part of each patient's medical record, as is customary for any routine outpatient procedure. There was no compensation for provider or participant participation. Thirty patients who opted for inpatient induction were randomly chosen for comparison, baseline outcomes. Thirteen patients opted for outpatient FC placement, a lower than anticipated sample size. Nine additional patients desired outpatient FC but were unable due to spontaneous labor prior to appointment or advanced cervical dilation not requiring FC for cervical ripening (Table 2).

Table 1

Provider Participation

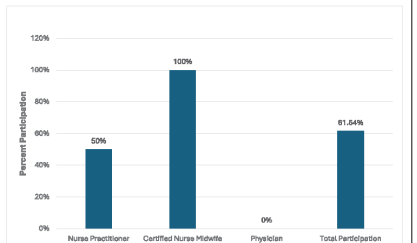


Table 2

Patient Participation Data

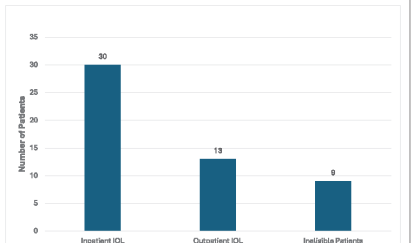


Table 4

Outcomes: Hospital Length of Stay

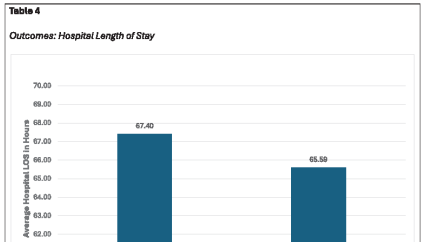
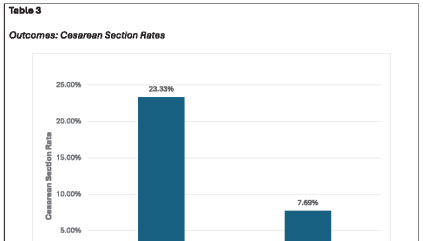


Table 3

Outcomes: Cesarean Section Rates



Outcomes

The purpose of this project was for 70% of this clinic's providers to offer eligible patients the outpatient FC cervical ripening protocol with specific objectives to decrease hospital LOS by an average of 0.5 days, decrease cesarean rates by 5%, and increase satisfaction by 20% outpatient versus inpatient groups by December 15, 2024, following three months of implementation.

Despite support of the process change, only 61.54% of the providers in the clinic participated. All the Certified Nurse Midwives participated, only 50% of the Women's Health Nurse Practitioners participated, and none of the physicians participated (Table 1). Fewer patients participated than we anticipated during the project implementation phase. The low sample size limited our ability to statistically analyze the outcomes, although the data does show outcomes in alignment with our predictions.

There were no maternal or neonatal adverse outcomes in the FC patients, and the rate of cesarean section was lower in this group than in the inpatient IOL group. The rate of cesarean section in the inpatient IOL group was 23.33%, while the rate of cesarean section in the outpatient FC group was 7.69% (Table 3). However, because of the lower-than-expected sample size for patients electing the outpatient FC, the outcome data for cesarean section versus vaginal birth cannot be evaluated with statistical analyses and can only be interpreted using descriptive statistics. The overall goal of reducing cesarean section by 5% was met.

On average, inpatient IOL patients had a longer hospital LOS in hours (M = 67.40, SD = 21.47) than outpatient FC patients (M = 65.59, SD = 22.54). An independent-samples t-test indicated this difference, d = 1.81, 95%CI [12.80, 16.42], was not statistically significant, $p < 0.05$. Due to the small sample size, the power analysis showed a small probability of there being a statistically significant difference between the two groups, $p=0.057$. The average hospital LOS for inpatient IOL patients was 67.40 hours, while outpatient FC patients stayed an average of 65.59 hours (Table 4). The goal of reducing hospital LOS by 12 hours was not met.

Conclusions

While each goal was not met as anticipated, we appreciated notable differences in the outcomes for patients who chose outpatient FC placement. Provider participation was lower than expected at 61.54%, which likely impacted patient participation. Hospital LOS for the outpatient FC patients was lower than for inpatient, but only by an average of 1.81 hours, and was not statistically significant. Cesarean rates for the outpatient FC patients were 15.64% lower than inpatient, although due to the low sample size the statistical significance could not be established. Patient satisfaction was not able to be measured with surveys due to organizational decisions. Because of the low cost of the intervention and the ability to attain reimbursement for these procedures in office, the outpatient FC placement for pre-induction cervical ripening is simple and sustainable for the organization. The organization has decided to adopt the process change, and providers will be able to continue offering patients outpatient cervical ripening with FC, utilizing the practice policy and consent forms designed during project development.

Recommendations

Through the implementation of a clinical process change encouraging providers to utilize FC for pre-induction cervical ripening, the outcomes of patients requiring an induction of labor can be improved. This Doctoral Nursing Program project resulted in a lower-than-expected rate of provider participation, and the sample size and patient data was not large enough to show statistical significance, resulting in uncertainty as to whether the differences in the data were meaningful and reproducible. However, the raw data showed a decrease in the average risk of cesarean section and a decrease in the average hospital LOS for the patients who chose outpatient FC for cervical ripening, when compared to patients who had inpatient induction of labor alone. Additional research, perhaps in a larger clinic, could be very beneficial in showing that this intervention, when used routinely, can improve patient outcomes.

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Doug Schroer

DNP

Obstructive sleep apnea (OSA) is prevalent in 55% of patients with hypertension; however, the condition is underdiagnosed (Fatureto-Borges et al., 2018). Around 80-90% of people with OSA are undiagnosed, which puts them at an increased risk for cardiovascular disease, hypertension, and all-cause mortality (Chen et al., 2021). The Epworth Sleepiness Scale (ESS) and Stop-Bang questionnaires are sensitive and reliable screening questionnaires for OSA. Evidence-based screening questionnaires were administered at routine follow-up visits for hypertension to increase the diagnosis of OSA. Patients who tested “positive” (a score of eight and above for the ESS or three and above for the Stop-Bang) discussed a sleep study with their provider. A Gantt chart (Appendix A) shows the specific timeline of the project. A strengths, weaknesses, opportunities, and threats (SWOT) analysis helped determine if the project aligned with the clinic's needs. Evidence-based research and the Plan-Do-Study-Act helped develop this project. Over three months, 169 patients with hypertension at a Midwest primary care clinic were screened for OSA; 78% of these patients had a “positive” screening (n=131). Of these 131 patients, 57% (n=75) received a home sleep study order. During the three months, 23 patients completed the sleep study; 83% (n=19) tested positive for OSA (p=0.0039). Screening patients with hypertension for OSA did result in increased rates of OSA. This change in the practice process should remain a standard of care in primary care clinics.

Keywords: Obstructive sleep apnea, hypertension, Epworth Sleepiness Scale, Stop-Bang

Screening for Obstructive Sleep Apnea in Patients with Hypertension

FORT HAYS STATE UNIVERSITY

Doug Schroer
Department of Nursing

Background

Because obstructive sleep apnea (OSA) is underdiagnosed, a Midwest primary care clinic changed a practice process by screening those with hypertension for OSA. Up to 55% of patients with hypertension also have OSA (Fatureto-Borges et al., 2018). Patients presenting for hypertension follow-up appointments were screened for OSA utilizing the Stop-Bang and Epworth Sleepiness Scale (ESS) questionnaires. A score of three or above for the Stop-Bang and/or a score of eight or above for the ESS was considered a "positive" screening. While the long-term effects of untreated sleep apnea have been well documented, the primary concern in those with OSA and hypertension is the worsening of heart disease (Yeghiazarians et al., 2021). For the patients who tested "positive," a sleep study was ordered at the provider's discretion.

Population/Setting

Setting

The project occurred at a primary care clinic in a suburb of a large city in the Midwest. The clinic consists of three physicians and two nurse practitioners.

Project Population

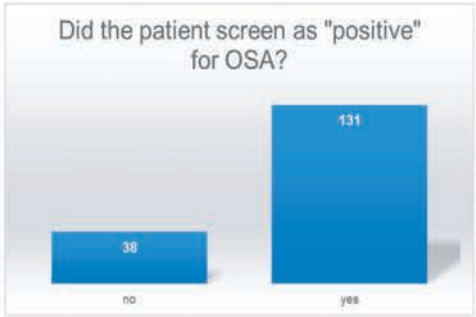
The patient population was predominantly white, but its diversity is comparable to the city's demographics. The project only included adults.

Acknowledgements

Special thanks to the medical assistants, nurses, and other providers who helped implement this practice process change.

Methods

1. Prior to their visit, providers would mark on the schedule which patients needed screened for OSA.
2. The patients were given the Stop-Bang and ESS questionnaire while waiting for the provider. The medical assistant or nurse recorded the results in the electronic health record (EHR).
3. The provider reviewed the results and discussed them with the patient, for those who tested "positive," a sleep study was ordered at the provider's discretion.
4. Once the test was completed, the provider reviewed the results with the patient. If durable medical equipment was needed, the provider prescribed the appropriate therapy.
5. The student recorded data weekly for the OSA questionnaires into a spreadsheet with de-identified data.



Results

From August 26, 2024, until December 10, 2024, 169 patients at a primary clinic with a previous diagnosis of hypertension were screened for OSA using the Stop-Bang and ESS.

- 78% (n=131) screened as "positive."
- Of the 131 "positive" patients, 13% were positive based on the ESS (n=17), and 98% were positive based on the Stop-Bang (n=128); 14 were positive on both questionnaires.
- 57% received an order for a sleep study (n=75).
- 83% of the patients who completed sleep studies tested positive for OSA (n=19).
- Of those testing positive for OSA, 42% had mild OSA, 26% moderate, and 32% severe.
- For those that tested positive for OSA, 100% had a positive Stop-Bang screening, and 26% had a positive ESS.

A one-proportion z test was performed to analyze the rates of OSA in those with hypertension from this study. The p-value of 0.0039 is less than the significance level of 0.05. There is sufficient information to suggest that the sample ratio exceeds the national average. The achieved power of the study is 0.0186, which is considered low in strength.

STOP-Bang questionnaire

Please answer the following questions by checking "yes" or "no" for each one.

	Yes	No
Snoring (Do you snore loudly?)	☐	☐
Tiredness (Do you often feel tired, fatigued, or sleepy during the daytime?)	☐	☐
Observed Apnea (Has anyone observed that you stop breathing, or choke or gasp during your sleep?)	☐	☐
High Blood Pressure (Do you have or are you being treated for high blood pressure?)	☐	☐
BMI (Is your body mass index more than 35 kg per m²?)	☐	☐
Age (Are you older than 50 years?)	☐	☐
Neck Circumference (Is your neck circumference greater than 40 cm [15.75 inches]?)	☐	☐
Gender (Are you male?)	☐	☐

Conclusions

Patients with hypertension are at an increased risk for OSA. The Stop-Bang and ESS are reliable questionnaires for OSA in those with hypertension. Screening for OSA should be done annually for those with hypertension, as age is a known risk factor.

Recommendations

The primary goal was to increase rates diagnosis rate of obstructive sleep apnea (OSA). At the end of the study, 169 patients with hypertension were screened for OSA, and 19 of them were diagnosed and treated for OSA. Therefore, the change in the practice process is a success and should be continued. Screening patients with hypertension for OSA is of no cost and a minimal time commitment but can be of tremendous benefit to the patient and their health.

The total number of patients screened does not capture other significant findings uncovered by the practice process change. Many patients admitted they previously completed a sleep study but were non-compliant with treatment. Treatment options were discussed and then prescribed. Improving compliance for patients with obstructive sleep apnea was an unintended but positive outcome of the study. A significant number of patients (n=21) refused testing because they were unwilling to try any of the potential treatment options.

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This project investigated the prevalence and impact of utilizing specified techniques to reduce compassion fatigue among the staff of an outpatient mental health clinic. Compassion Fatigue (CF) can evolve from long-term exposure to stressful and demanding situations, causing physical, emotional, and mental exhaustion (Cetrano et al., 2017). Due to the consistent involvement of distressing information, healthcare providers (HCPs) can develop a depleted ability to cope with daily surroundings, producing compromised patient care (Singh et al., 2020). Other areas, such as co-worker and employer-employee relationships, can be affected, and such exposure can also lead to mental health conditions such as anxiety, depression, or posttraumatic stress disorder (PTSD; Crocker & Joss,2016). Using a quantitative approach, the Professional Quality of Life Version 5 (ProQOLv5) scale was administered to determine the impact of utilizing evidence-based practice (EBP) techniques to decrease compassion fatigue levels during the workday. The project highlighted the importance of practicing suggested EBP techniques, including meditation, mindfulness, self-care, and breathing techniques, in mitigating compassion fatigue while improving stress levels throughout the workday and personal time outside the work setting. Areas of job satisfaction, happiness, work-life balance struggles, and negative feelings and stressors showed a 13 to 24% improvement in symptoms when pre- and post-survey responses were measured. Recommendations include maintaining a consistent routine and utilizing the suggested techniques to promote healthy habits and combat stress levels within the work setting.

Keywords: compassion fatigue, workplace stress, cost of caring, professional quality of life, interventions for compassion fatigue, relaxation exercises, mindfulness, aromatherapy

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Compassion Fatigue and the Mental Health Professional: Improving Quality of Life in the Workplace

FORT HAYS STATE UNIVERSITY

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Introduction

Problem: Long-term and chronic exposure to distressing information can impede a healthcare provider's ability to cope with daily functions and surroundings, causing physical, emotional, and mental exhaustion resulting in Compassion Fatigue (CF). This "cost of caring" can lead to decreased levels of patient safety, professional productivity, lower staff retention, diminished quality of care, substance use, and increased suicide risk (Lown et al., 2019)

Purpose: To reduce signs and symptoms of CF by utilizing evidence-based practice (EBP) techniques and interventions while assessing efficacy post-project implementation

Objective: To determine if EBP techniques and interventions were effective in reducing signs and symptoms of compassion fatigue for staff of an outpatient mental health clinic

Methods

Setting/Project population: N=fourteen, staff above 18 years of age, employed by an outpatient mental health clinic on a part-time or full-time basis with various educational levels from some college to doctoral degrees. The staff consists of licensed master and clinical social workers, licensed mental health counselors, psychiatrists, psychiatric nurse practitioners, registered nurses, and administrative staff

Recruitment: Utilizing the office email, information was dispersed regarding the project. A PowerPoint presentation was completed during a staff meeting providing project information. Implied consent was obtained with a statement of their willingness to listen to the presentation and submission of completed questionnaires indicate consent for study participation

Human Subject Protection: IRB approval under exempt status

Risk/Harm: The project is of low harm and risk

Project Timeline: August 21,2024 to December 31, 2024

Project Decision: Quantitative quality improvement project using Model for Improvement

Evidence-Based Practice Interventions

- Meditation
- Use of aromatherapy
- Breathing Techniques
- Relaxation Techniques
- Use of mobile applications: Calm and Insight Timer
- Practice mindfulness

ProQOLv5 Survey


Professional Quality of Life Scale (ProQOL)

SMART Objectives

Specific
- Providing staff with specific information and instructions on evidence-based practice recommendations proven to decrease symptoms of compassion fatigue
- Aim for least weekly use of recommended techniques

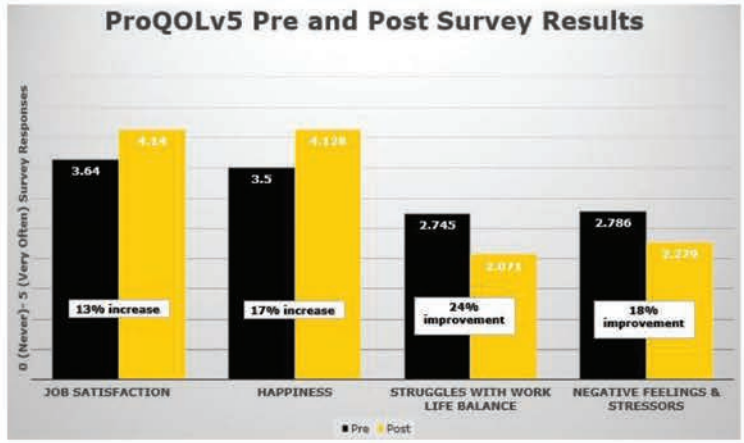
Measurable
- The Professional Quality of Life Version 5 tool is utilized, allowing for the identification of improvements in symptoms before and after project implementation
- Practice of recommended techniques was measured using a Google sign-in sheet indicating the amount of time spent at each session

Achievable
- All goals are achievable

Relevant
- Educational materials provided increased knowledge regarding symptoms of compassion fatigue
- Weekly emails with helpful information had a very favorable response, allowing for additional suggestions and techniques to be distributed to staff
- Positive results of scores related to compassion fatigue symptoms indicate a successful implementation of recommended technique suggestions

Time Bound
- The sustainability of the project was shown to be successful by the positive response from staff regarding the continuation of weekly emails after project completion
- Results could have a higher improvement rate if there was more time allotted

Results



Converting the Likert scale answers of pre- and post-survey responses to the ProQOLv5 screening tool into numerical values allowed for identifying significant changes in four categories: job satisfaction, happiness, struggles with work-life balance, and negative feelings and stressors. Twenty-seven out of thirty question responses were placed into one of those four categories, allowing for a comparison of each. After separating into one of the four categories, the responses were averaged according to the converted numerical value and the number of participants (N=fourteen) to obtain the final pre- and post-survey response results.

Improving job satisfaction and happiness proved successful, with a 13% and 17% increase, respectively. The most significant improvement surrounded decreasing work-life balance struggles, with a 24% improvement in the staff's responses. Negative feelings and stressors had an 18% decline, indicating positive responses to the utilization of recommended techniques to improve their symptoms related to CF.

Recommendations

Improving self-care and awareness can positively benefit individuals in and out of the work environment. Utilizing EBP techniques for as little as 5 minutes a few times a week can decrease CF symptoms and improve quality of life. Getting involved in mindful activities such as walking, practicing deep breathing techniques throughout the day, or meditation can bring stress levels down to manageable levels. With the convenience of the internet, these tools are available with many options to fit within one's lifestyle. Local libraries are an excellent resource for activities that are usually very cost-friendly, if not free. Offering partnerships for walks during lunchtime can provide an effective intervention that decreases stress levels while improving work relationships.

Conclusions

The effects of CF can negatively impact patients and co-workers alike. Stress levels that affect personal achievement and satisfaction, emotional exhaustion, and depersonalization have been improved by implementing mindfulness meditation, using mobile applications, and providing educational opportunities within organizations (Green & Kinchen, 2021).

This project has proven successful in improving staff's overall stress levels, positively impacting the work they provide to their patients. The role of the Doctor of Nursing Practice in this project is to provide additional knowledge through experience and education, demonstrate improvement in patient outcomes, and be a role model for co-workers (Beeber et al., 2019).

By providing the information distributed and encouraging EBP techniques to improve CF symptoms, stress within the work environment has improved, which was the project's intent. CF symptoms can continue to improve through the ongoing distribution of information through weekly emails and encouragement to utilize suggested techniques routinely.

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Winner

DNP CHBS Graduate Student of the Year

2025 MSN-DNP
Stroup Award
Winner


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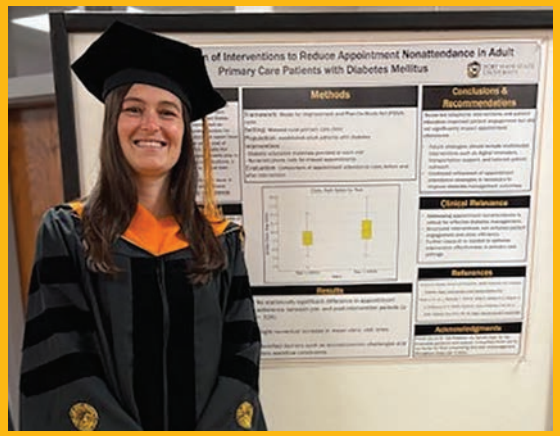
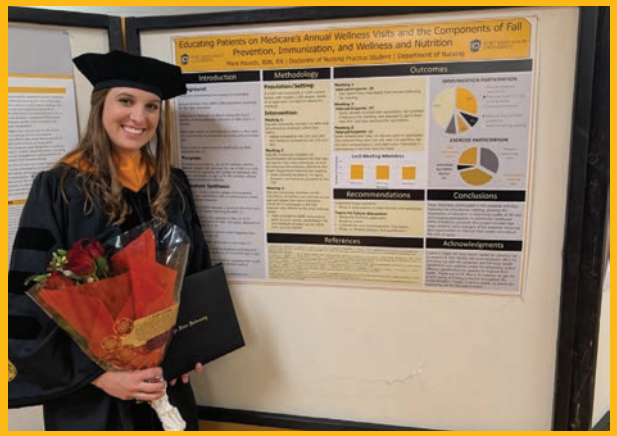
Implementation of an Asthma Action Plan to Improve Care for Elementary Students


Catch-Up HPV Vaccination
Claire Kringen, RN, BSN, DNP student


Implementing an Older Adult Fall Risk Screening and Education Protocol in an Urban Family Medicine Clinic


Food Insecurity on the College Campus


Primary Care Patients with Diabetes Mellitus


Educating Patients on Medicare's Annual Wellness Visits and the Components of Fall Prevention, Immunization, and Wellness and Nutrition


Defining Sexual Assault, Consent, and Resources to Empower Students: A DNP Project