Background

- Patient handoff is a vulnerable time for patients and nurses.
- The Joint Commission recommends accurate, high-quality handoffs occur for every patient during every transition of care.
- Host Organization uses BSR within units but struggles to ensure accurate handoffs when patients transfer between units.
- The PACU is an active, high turnover, unit that requires nurses to remain in the unit to care for other patients and maintain workflow making interdepartmental hand off impractical.
- The PACU reported 40 events since August 2018; eight (66.66%) were from the PACU to GSU and may have been avoided with the use of virtual handoff.

Purpose

The purpose of this Quality Improvement project was to implement and evaluate the effectiveness of virtual handoff using SBAR format during patient transfer from the Post-Operative Care Unit to the General Surgical Care Unit.

Short-term Goal:
By October 30th, 75% of Nurses in the PACU will complete patient handoff using the SBAR tool virtually, allowing for efficiency and accuracy during report/patient handoff.

Long-term Goal:
By December 31th, 2019, Post-implementation of Virtual SBAR will result in 100% reduction in the number of Patient handoff related events originating from the PACU to GSU.

Methods

- Quality improvement project took place over a 13 weeks
- Setting: Community hospital.
- Population: Adult post op patients transferred from the PACU to GSU.
- PACU, GSU leadership team and the IT team created a safe, HIPAA compliant zoom video call network for patient handoff for PACU and GSU nurses to access.
- Process measures: Percentage of nurses trained to use complete patient handoff virtually.
- Outcome measures: Number of incidents related to patient handoff from GSU to PACU.

Results

- No incidents related to patient handoff from PACU to GSU were reported pre and post implementation.
- The average length of time to complete patient handoff via video call was 7 minutes compared to those done via phone call which average at 5 minutes.
- There were no changes in nurses’ perception of handoff using Handover Evaluation tool.
- 44% of nurses who completed the survey agreed that the video call was a helpful tool in completing patient handoff.

Discussion

- Anecdotal reports from the nurses indicated that Virtual handoff was helpful in completing patient handoff.
- Demonstrated feasibility of process and implementation.
- Nurses appreciated ability to meet and visualize patients prior to transfer.
- Virtual handoff was an optional form of completing patient handoff.
- Consistent availability of technology resources was a barrier.
- Nurses from other units were excluded from completing patient handoff virtually.

Figures

Giving and Receiving patient hand-off via video call is a helpful tool

<table>
<thead>
<tr>
<th>Giving and Receiving patient hand-off via video call is a helpful tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Image of graph showing responses]</td>
</tr>
<tr>
<td>Responses</td>
</tr>
<tr>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>0.0%</td>
</tr>
</tbody>
</table>

Conclusions

- The feedback from the intervention showed that there was no significant change in the rate of incidents related to patient handoff from PACU to GSU during the implementation phase compared to the pre-implementation phase.
- Valuable lessons learned include feasibility and barriers.
- Nurses were able to successfully utilize the new technology.
- Anecdotally shared the ability to visualize patients was helpful.
- Using a standardized SBAR increased the clarity of the communication and the quality of the information shared.
- This pilot of virtual patient handoff was successful in delivering accurate and comprehensive communication of pertinent patient information.

References


Acknowledgements

This project was completed as part of a Doctor of Nursing Practice project. I would like to express my gratitude to Dr. Bridgitte Gourley for her guidance and support throughout this project. I would also like to thank Michelle Lusby, Dr. Cathaleen Ley, IT team and the nursing staff of the host organization for their support and participation in this project.
Implementation of Carbohydrate-Based Liquid Nutrition in Labor

Richard Conley MS, CRNA, Elaine Bundy DNP, CRNP, FNP-C
David Sinopoli MD, MPH, MBA, Natasha Belanger, BSN, RNC-OB, David Ghadisha, MD

Problem Statement

- At a large community hospital in the mid-Atlantic region, with over 2,400 deliveries a year, all women were kept fasting during labor
- This outdated practice can lead to:
  - Increased stress
  - Increased labor pain
  - Disatisfaction with the labor experience
- Current evidence and guidelines support providing clear liquids to laboring women at low risk of an operative delivery and pulmonary aspiration

Objectives

- Create and implement an evidence-based policy for oral carbohydrate-based liquid nutrition in laboring women at low risk of an operative delivery
- Develop an evidence-based tool for use by the obstetrical providers to assess risk of an operative delivery
- Increase the availability of a liquid based nutrition for women in labor at low risk of an operative delivery

Methods

- Population: all women admitted for labor during the implementation period at a large community hospital
- Based upon an evidence search, a tool was developed to assess risk of operative delivery (Figure 1)
- Women at low risk were ordered a carbohydrate-based clear liquid diet
- Women at high risk were kept NPO with Ice Chips
- Education was provided for the staff prior to implementation
- Nursing staff during change of shift huddles over two weeks
- Staff were given verbal and email reminders on use of the assessment tool, policy, and diet orders
- Patient charts were reviewed to record the frequency of high/low risk patients, diet orders and high risk characteristics (Table 1, Figure 2)
- Analyzed using descriptive statistics

Results

- Obstetrical Risk Assessment for Operative Delivery

<table>
<thead>
<tr>
<th>Low Risk</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Term (&lt; 37 weeks Gestation)</td>
<td>Pre-term (&lt; 37 weeks Gestation)</td>
</tr>
<tr>
<td>Singleton Pregnancy</td>
<td>Post-term (&gt; 42 weeks Gestation)</td>
</tr>
<tr>
<td>Vertex Presentation</td>
<td>Multiple (Twins) Pregnancy</td>
</tr>
<tr>
<td>No history of previous cesarean section</td>
<td>Breech presentation (Non-Cephalic Presentation)</td>
</tr>
<tr>
<td>BMI &lt; 40</td>
<td>History of previous Cesarean Section</td>
</tr>
<tr>
<td>Maternal Age &lt; 35 years</td>
<td>BMI &gt; 40</td>
</tr>
<tr>
<td>Use of Labor Epidural for analgesia</td>
<td>Maternal Age &gt; 35 years</td>
</tr>
</tbody>
</table>

- Anesthesia Risk Stratification in case of General Anesthesia

<table>
<thead>
<tr>
<th>Low Risk</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASA Physical Status 1-2</td>
<td>ASA Physical Status 3-5</td>
</tr>
<tr>
<td>Mallamaptopi Score 1-2</td>
<td>Mallamaptopi Score 3-4</td>
</tr>
<tr>
<td>Limited Range of Motion in Neck or Jaw</td>
<td></td>
</tr>
</tbody>
</table>

Discussion

- Due to this practice change 98 women were identified as low risk and allowed to have clear liquids during labor
  - Consistent with the literature, there were no reported complications
- Identified barriers to compliance:
  - Additional step of adding the clear liquid diet order
  - Disagreement with the high risk characteristics in the assessment tool (maternal age, gestational HTN)
- Recommendations for continued success:
  - Add the clear liquid diet order to the admission order set
  - Include the assessment tool in the electronic medical record
  - Adjust the operative delivery assessment tool
  - Remove maternal age, gestational HTN, and Illicit drug/alcohol use from the high risk category

Conclusions

- The project was successful in implementing a policy and assessment tool for carbohydrate-based liquid nutrition in labor
- According to the literature, allowing women carbohydrate-based clear liquids in labor can decrease stress, labor pain and increase satisfaction with the birth experience
  - Next Steps: assessment of these quality indicators
- Recommendations for future QI projects include:
  - Assessment of satisfaction, impact on vaginal versus cesarean delivery rates, and impact on workload for the nursing staff

References


Acknowledgements

- Debbie Kiser, PhD, RN, CNOR, NEA-BC, Chief Nursing Officer, Vice President Patient Care Services
- J. Lynn Petty, MA, RN, NE-BC, Clinical Administrator Women’s and Children’s Service Line
- Jennifer K Stephenson, DNP, RN, PDS-EBP and Research
Integration of TeamSTEPPS Framework and Escape Room to Improve Teamwork and Collaboration

Suzanna Fitzpatrick, MS, CRNP; Dr. Hazel Jones-Parker, DNP, CRNP, AACRN; & Dr. Andrea Smith, MBA, DNP, CRNP
University of Maryland School of Nursing

Problem Statement

Difficulty with communication and teamwork in a large adult emergency department has been identified and senior nursing leadership wanted to enhance collaboration and communication in their workplace. This DNP project leveraged the integration of TeamSTEPPS training and tools in an escape room setting in order to optimize team performance of a group of senior nurse leaders.

• Poor communication and team work can threaten patient safety
• 14-week Quality Improvement Project

Study Design
department has been identified and senior nursing leadership wanted to
difficulty with communication and teamwork in a large adult emergency
currently, standard leadership courses, conferences and other
group of senior nurse leaders.

Sample
• An evidence-based Quality Improvement project at a large inner city Adult Emergency Room with senior clinical nurses aimed to:
  • Improve communication and teamwork skills
  • Utilize an escape room as a training tactic
  • Assess escape room concept as a training tool

Goals:
• Short Term: 4-6 members of the quality improvement team will have completed TeamSTEPPS training and familiarization with escape room and exercise so they may train others on TeamSTEPPS utilizing the escape room tactic and team dynamics and leadership improvement for project sustainability.
• Long Term: All SCN Emergency Department nurses will change their leadership skills and improve team cohesiveness by completing an escape room and TeamSTEPPS course

Methods

• 14-week Quality Improvement Project
  • Guided by MAP-IT Framework
  • Includes Observation at staff meetings
  • Weekly check-ins with manager and assistant manager
  • Escape room exercise with TeamSTEPPS training completion of perceptions tools
  • Weekly education on teamwork via email following escape room
  • Completion of pre/ post-escape room tools

Study Design

Sample
• 12 senior clinical nurse (n=12)
  • 1- less than 1 year SCN experience
  • 5 – 1-4 years SCN experience
  • 6- greater than 4 years SCN experience
  • Including 1 nurse manager
  • Including 1 assistant nurse manager
  • 11 female: 1 male

Discussion

This group of ED nurses completed 2 escape rooms and a TeamSTEPPS training and all agreed that an escape room can be a fun way to motivate while providing an effective team building activity.

• This group of nurse leaders validated the integration of TeamSTEPPS tools and strategies in an escape room setting
• All participants voiced the experience was enjoyable and an engaging way to learn while providing an effective team building activity.
• This small cohort, in line with the literature, demonstrates that new methods of learning such as an escape room should be explored for engaging participants and improving communication and teamwork skills.

Limitations:
• Small sample size
• Time constraints
• Varying escape room exercises
• Lack of demographics
• Not all survey questions were answered by all participants

Further recommendations:
• Larger sample size
• Dedicated time for TeamSTEPPS training and strategies

Conclusions

Escape rooms can be a dynamic and interactive way to promote team training and education. Integration of TeamSTEPPS tools and strategies within the escape room framework provides for an engaging learning environment where participants can deepen their understanding of concepts through active learning. While this was just a small sample in one intercity hospital, new methods for learning should be reviewed for successful teamwork.

References

Background

- Neonates are a vulnerable population with unique skin care needs and physiological differences compared to adults and children.
- The 2018 Association of Women’s Health, Obstetric and Neonatal Nurses (AWHONN) Neonatal Skin Care Evidence-Based Clinical Practice Guidelines recommends using the Neonatal Skin Condition Score (NSCS) tool for all infants aged 0-28 days, as an objective scale to quantify overall skin condition.

Purpose

- To implement a skin care bundle in neonates 0-28 days that decreases the risk of skin injury by modifying current skin care practices in the Pediatric Intensive Care Unit (PICU) at an urban academic medical center in the Mid-Atlantic region.

Short-term Goals:

- Increased documentation of skin care assessment using the NSCS tool once per shift.
- Neonates would obtain a perfect score of three on NSCS tool, meaning no skin dryness, erythema or breakdown.
- Increased documentation and use of emollient application and diaper care.

Long-term Goals:

- Automatic population of NSCS tool in EPIC for patients 0 to 28 days of age.
- Dissemination of bundle to units throughout the hospital caring for neonates 0 to 28 days of age.

Methods

Population: Neonates 0 to 28 days old, male or female, admitted to the PICU.

- Exclusion Criteria: Neonates greater than 28 days or neonates 0 to 28 days with a congenital skin condition contraindicated by bathing and emollients.

Pre-implementation: Chart review completed to determine number of neonates admitted per month and documentation procedures for skin assessment.

- Implementation occurred over 11 weeks from September to December.
- Staff education occurred via handout with a case scenario post-test.
- A quick facts sheet, reference guide and laminated NSCS tool were posted throughout the unit.
- Demographic data, daily NSCS scores, and documentation of diaper care, emollient application and referrals were collected weekly through audits.
- Central line associated blood stream infection (CLABSI) data was collected as a balancing measure.

Results

- Post-test completion 16%
- Total neonatal participants n=10
- Total discharged from PICU n=2 (20%)
- Total of neonates who aged out n=8 (80%)
- Referrals made for patient with NSCS greater than or equal to 7 n=0 (0%)
- Rate of CLABSI 0% (n=0)

Discussion

- The results support the use of the NSCS tool to screen for skin injury and make the appropriate referral to prevent skin injury.
- The data does not indicate there is a connection between emollient application and CLABSI rate.
- Limitations of DNP project:
  - Competing QI projects impacted staff buy-in.
  - Staff education was approved to be dispersed via email.
  - NSCS tool did not auto-populate in patient’s chart. RN or project lead had to pull the tool into EPIC.
  - Availability of space to post resources, advertisement and updates limited to a shared bulletin board with competing projects.

Conclusion

- Recommendation: Continue neonatal skin care bundle in the PICU to reduce skin injury.
- Dissemination of bundle to units caring for neonates.
- Future QI project recommendations:
  - In-person education sessions.
  - Auto-population of NSCS tool for neonates 0 to 28 days old with skin and diaper care recommendations to increase adherence.
  - Addition of skin and diaper care emollients to eMAR for increased documentation adherence and auditing.

References

STOP-BANG Screening for Obstructive Sleep Apnea in Adult Pre-operative Patients

Kathleen Kang, BSN, RN
Bridgitte Gourley, DNP, CRNP

**Problem Statement**
- Obstructive sleep apnea (OSA) is a fully or partially obstructed airway during sleep.
- Increases risk of cardiovascular disease, diabetes, and hypertension.
- If unidentified & untreated, OSA can result in escalation of care and prolonged hospital stays.
- Affects 20-30% of Americans and 25% of patients undergoing elective surgical procedures.
- No national required routine screening.

**Purpose**
- Implement STOP-BANG questionnaire for all pre-operative, adult patients with BMI> 35 kg/m², who were admitted for surgery, not previously diagnosed with OSA, and not undergoing bariatric surgery.
- Short-term goal:
  - By October 1st, 2019
  - 75% of pre-op and PACU RNs implement the STOP-BANG questionnaire and additional OSA risk questions to identify patients with suspected OSA and notify the anesthesiologist of high-risk patients to improve outcomes and reduce need for elevation of care.
- Long-term goal:
  - By December 31, 2019
  - Pre-Op and PACU RNs implement STOP-BANG, notify the anesthesiologist as needed, who will determine if patient requires elevation of care, which decreases the risk for negative and adverse outcomes for individuals with undiagnosed OSA.

**Methods**
- Setting: Community hospital.
- Population: Adult, surgical, newly admitted patients with BMI> 35 kg/m², who were admitted for surgery, not previously diagnosed with OSA, and not undergoing bariatric surgery.
- Process measures: % of trained nurses.
- Data outcome measures: % patients requiring escalation in care in related to high-risk STOP-BANG scores.
- Estimation of eligible patients: 15-20 patients per day.
- 13-week implementation period during Fall 2019.

**STOP BANG Tool**
- S→ Snoring
- B→ BMI≥35 kg/m²
- T→ Tiredness (daytime)
- A→ Age>50
- O→ Observed Apnea
- N→ Neck Circumference
- P→ Pressure, Hypertension
- G→ Gender (Male)

**Results**
- Weekly average:
  - 6 patients screened.
  - 7 patients eligible.
  - 31% of patients screened were high-risk
  - No escalation of care required.
  - 41% of eligible males, 88% of eligible females screened.
  - 76% of PACU RNs and 85% of pre-op RNs were trained.

**Discussion**
- 31% of patients screened were high risk; none required escalation of care.
- Unknown if patients may have required escalation of care but were discharged prematurely.
- More patients could have screened higher risk for OSA in early weeks due to more frequent administration of STOP-BANG questionnaire earlier in QI project.

**Conclusions**
- Tool does identify people with or at risk for OSA.
- Feasible to use pre-operatively
- Continued education encouraged for refreshing importance of OSA screening.
- Further evaluation of inclusion criteria, which was purposefully strict, may identify opportunity to include more patients for screening.

**References**

**Acknowledgements**
This project was completed as part of a Doctor of Nursing Practice project. I would like to express my gratitude to Dr. Bridgitte Gourley for her guidance and support. I would also like to thank Jennifer King, Sue Lee, Dr. Cathleen Ley, and Dr. Maxim Orlov, for their support and participation in this project.
Background & Significance
A deficit in nurse communication was identified, causing approximately 3% of patients bounced-back (i.e., readmitted) to the emergency department (ED) from the psychiatric emergency services (PES) from April – August 2019. Approximately 3% of patients bounced-back (i.e., readmitted) to the emergency department (ED) from the psychiatric emergency services (PES) from April – August 2019. This suboptimal communication contributes to a lack of rapport, poor workflow, and reduced patient safety, making implementation of a communication tool for the receiving nurse in PES essential.

Project Purpose & Goals
To implement and evaluate a psychiatric SBAR tool (PSYCH) from October 1st through November 30th, 2019 utilized by all PES nurses (n = 21) when receiving report on patients from the ED in order to reduce patient bounce-back in PES to 0% through improvements in nurse-nurse communication.

Methods
• Kurt Lewin’s Change Theory utilized nurses’ current dissatisfaction of communication (driving forces) to influence implementation of the PSYCH tool, furthering motivation from nurses for a change in the report process.
• T-TAQ communication scale was identified to collect data on nurse-nurse communication between PES and the ED.

Results
• Through random observation compliance to PSYCH tool use reached 100% by end of project.
• Patient bounce-back reduced to 0.8% throughout the project.
• T-TAQ communication scale showed pre-implementation ED perceptions of communication (M = 24.25, SD = 2.22, n = 12) to be lower than PES perceptions (M = 25.75, SD = 2.22, n = 20).
  - PES nurse perceptions decreased from pre- to post- T-TAQ, while ED nurse perceptions improved.
• Post-implementation perceptions between PES (M = 24.33, SD = 1.68, n = 15) and the ED (M = 24.62, SD = 1.80, n = 13) were not significant (t/26) = 0.43, p = 0.34.
• Overall pre- to post- T-TAQ scores were shown to not be significant, t(58) = 1.36, p = 0.09.
  - 3 of the 6 T-TAQ items showed a positive post survey mean score improvement.

![Individualized Questionnaire Item Mean Scores for T-TAQ Pre-survey and Post-survey](image)

![Nurse Perception of Communication Pre-and Post-T-TAQ Communication Scale Scores](image)

Discussion
Despite showing an improvement in patient bounce-back, nurse perception of communication decreased within PES, while improving within the ED.
• The results of an independent t-test showed the differences in perceptions of communication between the ED and PES to be statistically significant pre-implementation, but not post-implementation.
• Need further buy-in from ED.
• Not all the same nurses filled out T-TAQ from pre- to post-implementation.

Conclusions
Showed feasibility of a psychiatric SBAR tool (PSYCH) used during report between two emergency units to improve communication:
• Results reinforced the importance of gathering all pertinent data using a standardized tool.
• Improved nurse adoption of efficient communication, reducing redundancy and improving patient safety.
• Further inquiry into security & safety risks identified.
  - Patient possession of hidden weapons
  - Medical problems (broken arm).
• More in depth patient searches needed prior to transfer.

References

Acknowledgements
There are no disclosures or conflicts of interest for this project. This student is being completed as a DNP Project. Natalie A. Marchione may be reached via e-mail: mariani@umaryland.edu

For further information, please refer to Bridgitte Gourley, DNP, FNP-BC, Faculty Advisor, University of Maryland School of Nursing.
Decreasing Fetal Mortality: Promoting Fetal Movement Awareness and Decreased Fetal Movement Management
Evgenia Ogorodova, MS, RN; Claire Bode, DNP, MS, CRNP; Usha Varghese, MS, CRNP
University of Maryland School of Nursing

Problem Statement
Perinatal fetal death (PFD) - the death of a fetus of 28 or more weeks gestation or of an infant less than 7 days old. PFD is a significant problem:
- 25000 annual PFDs in US
- 478 PFDs in MD in 2017
- 60 PFDs in MC in 2017

The MD Department of Health and Fetal and Infant Mortality Review (FIMR) board has identified PFD as a top priority issue. Maternal perception of decreased fetal movement has been identified as the most sensitive predictor of adverse outcomes and PFD. However, up to 60% of women report lack of formal fetal movement education, lack of knowledge and ability to recognize clinically significant changes in fetal movement (FM).

Results of several large trials indicate that standardized fetal movement patient education leads to:
- increased maternal awareness of decreased fetal movement,
- decreased delay in decreased fetal movement reporting,
- increased prompt management of decreased fetal movement, and
- decreased PFD rate by as much as 30%.

Project Purpose and Goals
Purpose:
The purpose of this quality improvement project is to implement routine evidence-based fetal movement patient education and a fetal movement education handout provided to all women at 28 or more weeks gestation at all routine prenatal care visits to decrease PFD rate.

Short term goals:
By December 31, 2019:
- 100% of staff registered nurses (RNs) will demonstrate competency in providing and documenting comprehensive fetal movement education by achieving a minimum score of 90% on the knowledge assessment.
- 80% of all eligible pregnant women with at least one prenatal care appointment will receive standardized fetal movement education.
- 80% of all eligible pregnant women with more than one prenatal care appointment will receive standardized fetal movement education at all appointments.

Long term goal:
By December 31, 2022 - PFD rate for women receiving care at the project site will decrease by 30% (not measured during this project implementation).

Countries and organizations with developed recommendations or guidelines for DFM management:

Methods
Setting - OB/GYN clinic at a large urban Mid-Atlantic hospital providing maternity care and services to as many as 1,000 low income and uninsured women each year regardless of their ability to pay.
Population - Pregnant women 28 or weeks’ gestation receiving routine prenatal care at the OB/GYN clinic.

Implementation procedures
Implementation period – 10 weeks.

Evidence-based Fetal Movement Education:
All routine appointments at 28+ weeks gestation
- Education components:
  • Expected Fetal Movements
  • Maternal factors affecting fetal movements
  • Kick chart/fetal movement counting methods
  • Contacting provider if experiencing DFM
  • Fetal movement written handout
  • Developed handout in English and Spanish
  • Developed RN documentation tool

Initial 2 weeks
- RN training conducted
- Pre and post training knowledge assessment completed using adapted validated assessment tool
- Documentation form, handouts, posters, and reminders for use in clinic

Following 8 weeks
- RNs provided fetal movement education to pregnant women 28+ weeks gestation at routine prenatal care appointments
- RNs documented components of fetal movement education provided
- Reminders and informal interviews conducted to identify barriers and solutions

Results
Total number of RNs educated = 5 (100%)
For RN knowledge, increased from average of 42% before training to average 76% after training (p<0.001).
Total eligible patient encounters = 223
162 (73.5%) eligible patient encounters with documented at least one component of fetal movement education documented.
Number of patients with more than one appointment = 60.
Number of patients with 1+ appointment with at least one fetal movement education component documented at all their appointments = 44 (73%).

RN Fetal Movement Education Knowledge

Eligible Patient Encounters with Documented Education Components

RNs identified the written handout as the most successful component.

Discussion
Although supported by the literature and the priority goals of the MD Department of Health, implementing standardized fetal movement patient education bundle in an OB/GYN clinic was less successful than initially hypothesized.

Short term goals:
All RNs participated in the initial fetal movement education training and completed the knowledge assessment.
Initial RN knowledge was lower than expected at the average of 42% with the highest score of 50%, indicating low fetal movement knowledge.
Although RN knowledge increased on average by 34%, the average post-training score was 76%, falling short of the 90% average goal.
None of the eligible patient encounters had all education components documented as provided.
And only 73.5% of all eligible patient encounters, and 73% of patients with multiple appointments had documented at least one component of patient education provided, falling short of the 80% goals.

References

University of Maryland School of Nursing
Background/Significance

- Aggressive behaviors in inpatient psychiatric units are a challenging safety problem.
- Early identification of aggressive behavior is vital.
- Structured violence risk assessments identify the level of risk and allow for early interventions.
- Despite this evidence, a violence risk assessment tool was not utilized on an inpatient psychiatric unit and the rate of coercive measure as seclusion and restraints was higher than desired.

Project Purpose/Goals

Implement Dynamic Appraisal of Situational Aggression-Inpatient Version (DASA-IV) and evaluate effectiveness of tool to identify and manage patients with risk for aggression
- 100% of nurses will utilize new report sheet with additional DASA-IV items while receiving handoff report from the ED.
- 100% of the patients admitted to the unit will be screened by nurses utilizing the DASA-IV tool.
- 100% of patients who are screened moderate or high risk for aggression will have a crisis safety plan or risk management plan.
- Incidents of seclusion, restraints and staff injuries will be reduced by 50%.

Methods

DASA-IV is a violence screening tool that assesses for seven items: irritability, impulsivity, unwillingness to follow direction, sensitive to perceived provocation, easily angered when request are denied, negative attitudes and verbal threats. Each item is scored 0 if absent and 1 if present
- Score of 0 or 0 = low risk for aggression
- Score of 2-3 = moderate risk for aggression
- Score of >3 = high risk for aggression
- The project occurred within a 18 bed inpatient unit from October 1st through November 30th, 2019.
- Subjects included were all the unit nurses employed at the hospital (n = 17).
- The Theory of Interpersonal Relations by Hildegard Peplau (1997) guided by MAP-IT was the framework used in the project.

Implementation Procedures

- Pre-education classes were held and one-on-one sessions were given to nurses unable to attend.
- All the nurses were provided with the tool and scoring guide.
- Bright color reminders were posted in work stations and computers.
- Nurses utilized the report sheet updated with DASA-IV items to receive report from ED and on all newly admitted patients.
- Nurses initiated a crisis safety plan or risk management plan based on the DASA-IV score.
- Nurses filled out Post DASA Implementation Questionnaire (PDIQ) after the completion of the project.

Results

- 100% of staff nurses on the unit received training, either in class or one to one.
- The compliance of using the tool during the implementation period was 63% to 89%, with the average compliance of 74.5%.
- Out of 83 patients who were screened using DASA-IV tool, 10.8% (n = 9) screened moderate risk for aggression and 12.05% (n= 10) screened high risk for aggression.
- The compliance rate of nurses initiating a crisis safety plan and risk management plan individualized to patient was 100%.
- A Mann-Whitney U test showed there was not a significant difference in seclusion and restraints [U-stat = 873, U-critical = 682 (U-stat > U-critical)] and staff injuries [U-stat = 870, U-critical = 682 (U-stat > U-critical)] pre and post implementation of the tool.
- The five point Likert scale, PDIQ survey showed nurses positive perception towards the tool in managing patients aggression (M = 25.71, SD = 1.76, n = 17).

Discussion

- The utilization of the tool was helpful in improving safety even though results were not significantly different.
- Fluctuation in acuity of the unit, staffing ratio, short implementation period and the severity of patients illness play an important role.
- Incorporating the DASA-IV tool into admission nursing assessment in EHR would increase nurses adherence.
- Establishing a standard crisis safety plan and risk management protocol would maintain consistency on the interventions provided to manage the aggressive behavior.
- Incorporating the DASA-IV score in nursing shift handoff will improve communication and also determine the acuity of the unit for the following shift.

Conclusion

- The utilization of the DASA-IV tool increased staff overall awareness of patient at risk of aggression.
- Encouraged patient centered intervention to reduce the number of events such as seclusion, restraints and injuries.
- The addition of a structured tool to nurses clinical judgement for appraising risk for imminent aggression in psychiatric unit can assist nurses in the initiation or prevention intervention and improve safety.

References


Acknowledgements: Thank you to my project advisor, second reader and a special thank you to Thera Biehar, MSN, RN, Unit Manager.
Mindfulness-Based Meditation and Stress Reduction in Healthy Adults

Nomy Thomas Jacob, RN, BSN, SCRN, CNRN, Dr. Karen Elizabeth Scheu, DNP, FNP-BC.

Background

- Stress is a public health concern as it affects the health of communities.
- 2019 county health rankings reveal higher stress levels in Northwest Maryland, e.g. driving alone 85% compared to 74% in Maryland (MD).
- Community members in Northwest (NW) county, MD were actively seeking solutions to their stress at the Community Outreach and Health Improvement (COHI) HealthLink.
- No stress reducing resources existed.
- Mindful Meditation (MM) is an integral part of an evidence-based Mindfulness Based Stress Reduction (MBSR) course that reduces stress.

Methods

Process: Twelve-week MM program

Pre-intervention Phase: Train the trainer program (2 hr. class)
- Didactic and Demonstrated sessions
- Prepared the PC to facilitate MM programs in various community settings
- Used Pre-post questionnaires

Intervention Phase: Six-week pilot program
- Didactic and Demonstration sessions
- Prepared the PP to self manage their stress level
- Used an audit tool.

Post-intervention Phase: Five-weeks
- PP practiced 5 minutes MM daily until the end of the DNP project.
- Used a daily log to track MM practice
- PP self monitored their stress using Perceived Stress Scale.

Results

- The post-survey showed an increase in knowledge and skill level of PC and their perception of using the resource tool kit (Figure 1a, 1b, 1c, 1d).
- More than 70% of PP attended each week’s pilot class (Figure 2).
- More than 50% PP stated MM program was useful to reduce stress (Fairly useful: 85.71%, Extremely useful: 14.29%) (Figure 3).

Discussion & Conclusion

- First evidence-based stress reduction program for healthy adults in the NW community.
- Literature supports MM and stress reduction.

Despite smaller sample, less diversity and self reported measures, this project demonstrated:
- MM is a brief and cost-effective program,
- Easily to implement in various community settings
- Stress is reduced by practicing MM daily for 5 minutes
- The tool kit provided resources that can be used by PC and PP

Future QI projects should replicate MM project in
- Diverse sample
- Integrate physiological markers of stress for more reliable finding

Bibliography


Purpose & Goal

To evaluate the feasibility of a mindfulness-based meditation program among healthy, stressed adults in the community.

Goals

- Project champions (PC) knowledge and skill related to stress and MM may increase after the train the trainer class.
- The resource tool kit may be used as a guide.
- 70% of the project participants (PP) may attend the entire 6-week pilot program.
- 50% of the PP may state that MM is useful to reduce stress.

Quality Improvement Project

Setting: COHI department.

Sample

- Train the program: 4 participants
- Included staffs of COHI department (PC)
- Pilot Program: 8 participants
- Recruited through word of mouth and email
- Included healthy stressed adults ≥18 years old with no chronic diseases.