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Informed Perceptions of Knowledge, Attitude, and Behavior Concerning Nurse-Led Mobility Among Hospitalized Patients: An Evidence-Based Practice Project

Tasha N. Hudson, Doctoral Candidate, MSN, APRN, AGCNS-BC, CA-SANE, CHPN

INTRODUCTION

Decreased mobility is the primary contributor to severe injuries from falls

– older people are 3x more likely to be readmitted to the hospital within 30 days after discharge.

Declines in a mobility state can affect a patient years after discharge, even leading to death.

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Reduced mobilities both contribute directly and indirectly to poor outcomes, such as:

- ❖ unintentional injuries from falls
- ❖ increased LOS
- ❖ unplanned readmissions

These three outcomes have emerged as quality indicators.

The World Health Organization (WHO)
Burke et al., 2016

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BACKGROUND

2019 Hospital Patient Data

- ❖ Average LOS → 4.35 days.
- • Patients aged >64, → 4.56 days.

- ❖ 2019 30-day unplanned readmission > 64 →10.43%.
- • → all others, 9.64% -11.86.

- ❖ **Inpatient falls 53**
  - ❖ **Unit with most→ PROJECT UNIT**

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INQUIRY QUESTION

The PICOT statement:

- Nursing staff members in an acute care hospital, who participate in an educational intervention that promotes nurse-led mobility strategies will demonstrate improved knowledge, attitude, and behaviors following the intervention.

INQUIRY QUESTION

PICOT Concepts

- **Population:** Volunteer nursing staff members in selected unit of an acute care hospital participate in an EBP project.

- **Intervention:** A poster-style presentation for an evidence-based educational intervention, that included specific knowledge components tailored to strategically reinforce positive attitudes and behaviors associated with promoting nurse-led mobility.

- **Comparison:** Perceived barriers to the promotion of nurse-led mobility interventions among bedside nurses prior to and following participation in intervention.

- **Outcome:** Improved knowledge, attitude, and behaviors, defined as scores from responses to the Johns Hopkins Patient Mobilization Attitudes and Beliefs Survey (Hopkins Medicine, 2020).

- **Time:** Overall one month from distribution of pre-survey, educational styled poster presentation to completion of post-survey

PURPOSE

Determine and then reinforce appropriate patient mobilization knowledge, attitudes, and beliefs among medical-surgical nurses at the project hospital.

AIMS

Specific aims of the project:

(a) to identify the barriers and facilitators associated with mobilizing patients in a medical-surgical acute care hospital;

(b) to introduce an intervention that would transform the knowledge, attitudes and beliefs associated with mobilizing patients; and

(c) to evaluate changes in the knowledge, attitudes and beliefs about mobilizing patients following the intervention

PROBLEMS

- What are the perceived barriers to nurse-led mobility interventions among bedside nurses following a poster style education project of patient mobilization strategies?

- What are the characteristics of nurses who participated in a poster style education project related to nurse-led mobility?

CONCEPTUAL FRAMEWORK
Kurt Lewin's Change Theory

A widely used theory associated with planned change in clinical settings. Unfreezing, movement, and refreezing used for the association of continuing education strategies on improvements to gain an understanding of how the organization benefits from clinicians' growth after practice behavior change.

Lewin (1951) purports that change results from two field or environmental forces, which require organizations to implement planned change activities. Driving forces help to facilitate and move change in a direction that causes the intended change to occur, while restraining forces attempt to impede change and maintain the status quo. Driving forces are necessary to overcome restraining forces. The three-step change model involves unfreezing the status quo, moving towards a new way and refreezing the change for sustainability

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CONCEPTUAL FRAMEWORK
Kurt Lewin's Change Theory

- Unfreezing (need for changes)
- Moving (examination of new or alternative innovations)
- Re-freezing (self-efficacy to encourage sustainability)
  - Driving forces (facilitated positive changes)
  - Restraining forces (acknowledgment of [perceived] barriers)
  - Disequilibrium (using gained insight to inform project objectives)
  - Movement (the "how" of the intervention)

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METHODOLOGICAL
Planning & Implementation Strategies

The Iowa Model Revised: Evidence-Based Practice to Promote Excellence in Health Care (2015)

- EBP process guide
- Clinical decision-making tool
- Applicable at the systems and clinician level
- Can be used by point of care nurses interested in solving clinical problems and improving quality through systematic translation of research into evidence and how to go about using sustainable strategies of change in an organization

The Iowa Model Revised: Evidence-Based Practice to Promote Excellence in Health Care

Iowa Model Collaborative. (2015). Iowa model of evidence-based practice: Revisions and validation. Worldviews on Evidence -Based Nursing, 14(3), 175-182. doi:10.1111/wvn.12223

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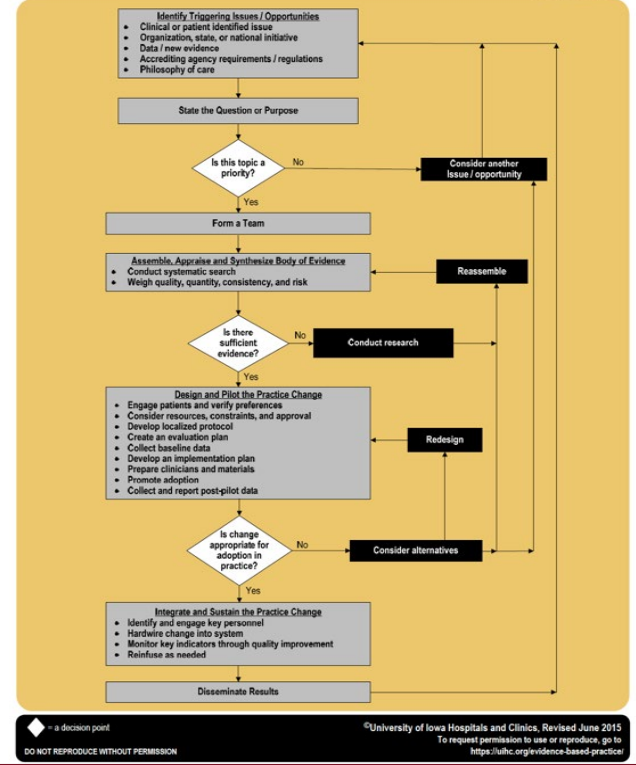
The Knowledge to Action Framework

❖ Knowledge transference builds upon continued professional development and education, in order to influence clinical practice changes.

❖ The framework aids in promoting appropriate stakeholder relationships and facilitating applicable exchanges of knowledge transfer, that are informed and guided by the latest research

Caswell et al., 2006
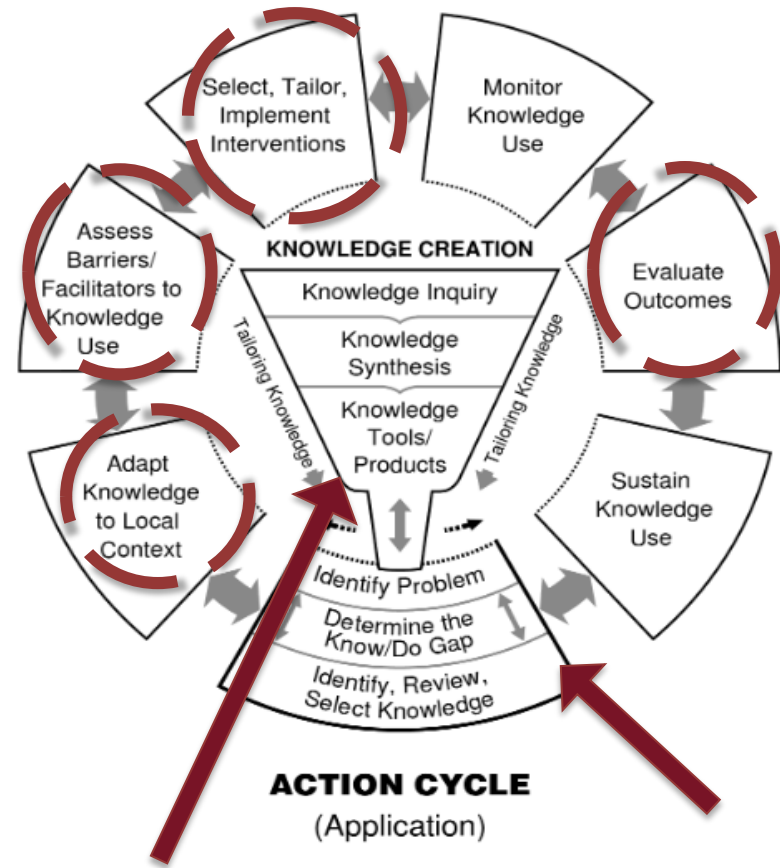
The Knowledge to Action Framework
(used by Permission from Dr. Ian D. Graham, PhD)

"Knowledge Creation" → into 3 stages:

❖ *Knowledge inquiry.*
- First-generation knowledge.

❖ *Knowledge synthesis.*
- Identify, appraise, synthesize.
- This will be the primary element of knowledge that is the key to analyzing pre-survey responses and translating it into data that will inform the educational programming.
- This second stage should also incorporate the research question (Kastner & Straus, 2012, p. 1164).

❖ *Knowledge tools/products.*
- Continue to cultivate and improve the evidence-based knowledge that goes into clinical decision-making
  - ➢ Baylor Mobility Toolkit
  - ➢ Clinical practice guidelines
  - ➢ Guidelines tailored specifically for a telemetry/med-surg unit
  - ➢ Discover robust evidence

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REVIEW OF EVIDENCE

Steps of Literature Review

1. planned the evidence search using the Johns Hopkins Nursing Evidence-Based Practice PET Management Guide Dang and Dearholt (2017)

2. prior to beginning database and internet searches, predetermined limiters, inclusion/exclusion criteria were considered when searching for evidence-based literature to support answering the overall clinical question

3. key terms and phrases

EVIDENCE SYNTHESIS

1. A cross-sectional design tested and refined the use of the self-administered *Johns Hopkins Patient Mobilization Attitudes and Beliefs Survey (previously known as the Overall Provider Barrier Scale*

- N= 120 nurses and physical and occupational therapists (82 nurses; 38 rehabilitation therapists)

- ***knowledge, attitudes, and behaviors for early efforts to improve mobility***

Brotman et al., 2015

2. Descriptive correlation study in two community-based hospitals
- 6 non-ICU units, that used the JH-PMABS. *Surveyed nurses N= 101 who worked at least 20 hours.*
- ***nurse attitudes AND external barriers**, rather than **nurse knowledge alone**, may contribute to insufficient mobility promotion by nurses for hospitalized older adults*

- 5-year increase in nursing experience significantly decreased perceptions of overall barriers to promoting mobility (p = 0.02), **knowledge barriers** (p = 0.009), **and attitude barriers** (p = 0.04).

Dermody & Kovach, 2017

3. Cross-sectional, descriptive, correlational study with convenience sampling (N= 85),
- ***identified nurses' knowledge, attitudes and external barriers*** related to mobilization with ***use of the JH-PMABS*** (formerly the Overall Provider Barrier Scale)
- also used patient Basic Metabolic Index (BMI)
- severity of illness was obtained though data extraction
- Novice nurses, less priority to promote mobility but seemed to promote more mobility.

Dermody, 2016

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EVIDENCE SYNTHESIS

Evidence was divided into the following categories:

- Implementation of Evidence-Based Protocols
- Functional Ability
- Instruments Associated with Patient Physical Function and Mobility
- Effects of Mobility Programs or Applications to Encourage and Supervise Early Mobility
- *Perceived Barriers or Missed Opportunities to Increase Mobilization

*Relate directly to the project

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LITERATURE THEMES

Literature identified:

- Factors associated with mobility of hospitalized patients

- Perceived barriers associated promoting mobilization of hospitalized patients (specifically the non-critical).

- support for the implementation of the JH-PMABS survey instrument in more than one study

  – one study → used scales to assess and define loss of independence in higher-level activities (e.g., climbing several flights of stairs (Alexander et al., 2012)

  – Silver AMI study → a decrease in ability to perform essential ADLs (bathing, dressing, transferring, and walking around home (*Brush, 2020 [23]).

    - this **_"conservative definition"_** used in a study where participants were identified whose independence was **_severely limited by functional loss_**

    - primary outcome was defined as a decline in ability to independently perform ≥1 essential ADLs14 at 6 months posthospital discharge, relative to premorbid ability

SAMPLE OF EVIDENCE TABLE

Evidence-based Nursing Practice Question: When administering the Johns Hopkins Patient Mobilization Attitudes & Beliefs Survey before and after a one-week daily email and poster presentation when compared to administering the survey one-time, to both day and night nursing staff on a 36-bed, med-surg/telemetry unit, how will the intervention impact the top 5 perceived barriers to patient mobilization?

Article # & Category	Author & Date	Study Design & Methods	Sample Size	Study Findings That Help Answer EBP Question	Study Advances Nursing Science?	Study Limitations	Evidence Level & Quality Rating
11 Perceived Barriers or Missed Opportunities to Increase Mobilization	(Dermody, 2016)	Cross-sectional, descriptive, correlational study with convenience sampling to identify nurses' knowledge, attitudes and external barriers related to mobilization with use of the **JH-PMABS (formerly the Overall Provider Barrier Scale)** (Brotman et al., 2015). the and also used Patient Basic Metabolic Index (BMI) and severity of illness was obtained though data extraction.	N = 85 Nurses caring for 98 inpatients, who were aged 65 and older	Measured nurses' knowledge, attitude and external barriers against a validated 5-point Likert Scale survey. Patient condition, the perception that patients could be harmed during mobilization, perceptions of heavy workload, difficulty prioritizing nursing care, and staffing shortages. Novice nurses, less priority to promote mobility but seemed to promote more mobility.	This project has implications for showing how nursing staff education needs should be an organization priority and ongoing to include competencies since the newer nurses in this study showed more promotion for mobilizing.	Limited generalizability due to sampling approach, sample size, methods and measurement. Potential systematic sampling error and sampling bias Causality could not be deduced from descriptive-correlational. No control for other potential variables. Sample was a small convenience sample located in one area	JH II B

Evidence-based Nursing Practice Question: When administering the Johns Hopkins Patient Mobilization Attitudes & Beliefs Survey before and after a one-week daily email and poster presentation when compared to administering the survey one-time, to both day and night nursing staff on a 36-bed, med-surg/telemetry unit, how will the intervention impact the top 5 perceived barriers to patient mobilization?

Article # & Category	Author & Date	Study Design & Methods	Sample Size	Study Findings That Help Answer EBP Question	Study Advances Nursing Science?	Study Limitations	Evidence Level & Quality Rating
					functional status as important and potentially modifiable risk factor and nursing personnel is on the frontline of health promotion and illness prevention efforts. DNPs are the scientist to translate this research into positive outcomes.		scientific evidence.
6 Perceived Barriers or Missed Opportunities to Increase Mobilization	(Brotman et al., 2015)	A cross-sectional, self-administered survey refined through pilot testing. **JH-PMABS (formerly the Overall Provider Barrier Scale)** (Brotman et al., 2015).	N= 120 One system; 2 different hospitals; 120 nurses and physical and occupational therapists (rehabilitation therapists, 38; nurses, 82); 6 general medicine units. Between January and March 2013	Highest perceived barrier: **"Increasing mobilization of my inpatients will be more work for the nurses."**	Yes, because "understanding the barriers to increasing inpatient mobility using a multidisciplinary perspective is important to translate evidence into practice and improve patient outcomes" (p.8).	bias of providers; therapist group was a smaller size than nurses; nurse aids were not considered in this evaluation of barriers. It might be good to include them next time	JH II A
7 Implementation of EBP Protocol Practices	(Carlsen et al., 2019)	A computer-assisted literature search using PubMed, CINAHL, PsycINFO,	**81 studies included** The database search identified 2220 records. One hundred ninety-	EBP education based on the Sicily Statement's five steps, implied an introduction to all of the Sicily Statement's five steps of teaching	Two **key methods for teaching EBP regarding**	Databases prior to 2010 were excluded, limiting the search of literature	JH V B

Evidence-based Nursing Practice Question: When administering the Johns Hopkins Patient Mobilization Attitudes & Beliefs Survey before and after a one-week daily email and poster presentation when compared to administering the survey one-time, to both day and night nursing staff on a 36-bed, med-surg/telemetry unit, how will the intervention impact the top 5 perceived barriers to patient mobilization?

Article # & Category	Author & Date	Study Design & Methods	Sample Size	Study Findings That Help Answer EBP Question	Study Advances Nursing Science?	Study Limitations	Evidence Level & Quality Rating
12 Perceived Barriers or Missed Opportunities to Increase Mobilization	(Dermody & Kovach, 2017)	A descriptive correlation study in two community-based hospitals in the Pacific Northwest. Nurses - worked at least 20H in non-ICU settings (neurology, cardiac, pulmonary, nephrology, oncology, and general medical-surgical) were the target population. based on the research evidence of Brotman et al. (2015). Assess/examine nurse' barriers, to also include attitudes, knowledge, and external barriers to promotion of physical activity in hospitalized older adults through a self-administered survey the **JH-PMABS (formerly the Overall Provider Barrier Scale)**	N = 101	A 5-year increase in nursing experience significantly decreased perceptions of overall barriers to promoting mobility ($p = 0.02$), knowledge barriers ($p = 0.009$), and attitude barriers ($p = 0.04$). This study found differences between nurses with ≤5 years ($n = 35$) and >5 years ($n = 50$) of experience for some scale items, compared to nurses with >5 years' experience, those with less experience had significantly lower perceptions	Yes. Findings in this study suggested nurse attitudes AND external barriers, rather than nurse knowledge alone, may contribute to insufficient mobility promotion by nurses for hospitalized older adults.	Measurement of nurses' perceptions regarding receiving training did not specify the type of training (e.g., transfer techniques, gait walking). Issues other than experience and hospital unit may change perceptions of barriers to promoting mobility and were not examined or controlled for. Causality could not be inferred with this study design. Hawthorne effect or inaccuracies because of time limits. Using a 5-point Likert scale can result in responses being toward the middle (neutral) too often sampling approach, sample size, methods and measurement, may li limit generalizability and or threaten internal validity.	JH II A

EBP Measures
Survey Instrument

Page 1

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Survey Instrument & EBP Measures

Purpose: Determine and then reinforce appropriate patient mobilization knowledge, attitudes, and beliefs among medical-surgical nurses at the project hospital.

Aims:

(a) to identify the barriers and facilitators associated with mobilizing patients in a medical-surgical acute care hospital;

(b) to introduce an intervention that would transform the knowledge, attitudes and beliefs associated with mobilizing patients; and

(c) to evaluate changes in the knowledge, attitudes and beliefs about mobilizing patients following the intervention

Problems:

1. What are the perceived barriers to nurse-led mobility interventions among bedside nurses following a poster style education project of patient mobilization strategies?

2. What are the characteristics of nurses who participated in a poster style education project related to nurse-led mobility?

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EBP Intervention

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CARROLLTON REGIONAL MEDICAL CENTER
Managed by Sana Healthcare.

"Make a Moment for Mobility"

Tasha N. Hudson, Doctoral Candidate, MSN, APRN, AGCNS-BC, CA-SANE, CHPN

Risks of Bed Rest

- ✓ **Skin** Conditions (breakdown, pressure ulcers)
- ✓ **Musculoskeletal** Conditions (contractures, muscle weakness, muscle atrophy, disuse osteoporosis)
- ✓ **Urinary Conditions** (infection, renal calculi, urinary, stasis, incontinence, retention)
- ✓ **Lung** Conditions (pneumonia, atelectasis, altered respiratory vital capacity)
- ✓ **Vascular** Conditions (venous stasis, venous insufficiency, orthostatic hypotension, altered cardiac reserve, edema, embolus, thrombophlebitis)
- ✓ **Nutritional** Deficits (loss of calcium from the bones, constipation)

- • There is an average **LOSS of 15%** muscle strength with prolonged bed rest.
- • Each day spent on bed rest lowers a patient's muscle strength **by 3-11%** over the next months and years following discharge.
- • Older adults with poor physical function when discharged, are **3 TIMES** more likely to be readmitted within 30 days after discharge.

Goals of Early Mobility

- ➢ **Early mobility**
  - • **Get patient out of bed or ambulating within first 24 hours of admission**
- ➢ **Nursing Diagnosis: Impaired Physical Mobility**
  - • is "the limitation in independent, purposeful physical movement of the body or of one or more extremities."

Goals of Early Mobility
Minimize complications of bed rest
Improve overall patient functions
Improve overall strength and endurance
Decrease length of stay
Promote positive psychological benefits
Increase likelihood of d/c home

Team
Nurse Driven
Physician orders
PT consult prn
RT assist prn

Getting patients back to living

Progressive Mobility
Order for mobility (unless contraindicated)
Use JH-HLM Scale
Mobilize patient 3 times a day as able
Long term goal is pre-hospitalization level
Short term goal to increase at least one level daily
ROM | Dangle | Sit to Stand | Standing Marches | Up in Chair | Ambulate

Interdisciplinary

Nurse Driven
Physician Orders
PT Consult prn
RT Assist prn

Move to Improve
Minimize complications of bedrest
Improve overall patient functions
Decrease length of stay
Promote positive psychological benefits
Increase likelihood of D/C home

Every Patient, Every Day
Order for mobility (unless contraindicated)
Mobilize patient 3x a day as able
Use JH-HLM Scale
Long term goal is prehospitalization level
Short term goal is to □ at least 1 level daily
Dangle | Sit to Stand | Standing Marches | Chair | Ambulate

Why Nurse-led Mobility Matters

- ➢ Increasing mobility during an acute care stay is essential for promoting health and wellbeing **AFTER** discharge.
- ➢ Patients who mobilize at least **3 TIMES daily** during hospital stay, can potentially decrease their LOS by 0.4 to 1.11 days

Innovate with Technology

Alarm
09:00
14:30
17:00
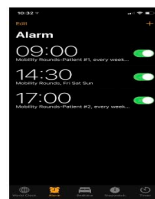
Acknowledgements

Thank you CRMC leadership and management. Thank you to all the nurses and techs on this unit for your hard work and involvement with this project. Without your participation, it would not be possible. Thank you, Baylor Scott & White Health System for permission to use their Mobility Toolkit resources. Thank you, to the TWU Library system for support of this research.

References

Available on request

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DATA EVALUATION

Evaluation of the Project

Project Question:

When administering the Johns Hopkins Patient Mobilization Attitudes & Beliefs Survey before and after a one-week daily email and poster presentation when compared to administering the survey one-time, to both day and night nursing staff on a 36-bed, Med-Surg/Telemetry unit, how will the intervention impact the top 5 perceived barriers to patient mobilization?

Project Objectives to Answer the Research Question:

The project questions originated from developing a PICOT statement as follows:

- What are the perceived barriers of nursing-led mobility promotion, when examined by the three domains of knowledge, attitudes, and behaviors, among nursing staff members in an acute care hospital setting?
- What is the effect on the participant pre-survey responses for perceived barriers after receiving a poster-style education intervention with reinforced evidence-based nurse-led mobilization strategies?
- Among nursing staff members, is there a relationship between educational level, years of nursing experience, age, shift worked, unit location, or type of training that affect their perceived barriers to nurse-led mobilization of inpatients?

DATA EVALUATION

Evaluation of the Project

Problem 1: What are the perceived barriers of nursing-led mobility promotion, when examined by the three domains (knowledge, attitudes, and behaviors) among nursing staff members in an acute care hospital setting?

Dependent Variables

– Perceived barriers to mobility promotion (JH-PMABS)

Chosen statistics for analysis:

– Descriptive → Frequencies

Rationale: This test is useful to examine the same variable as it may change at two different points in time, such as the perceived barriers pre-intervention survey and post-intervention survey.

DATA EVALUATION

Evaluation of the Project (continued)

Problem 2: Among nursing staff members, is there a relationship between educational level, years of nursing experience, age, shift worked, unit location, or type of training that affect their perceived barriers to nurse-led mobilization of inpatients?

Independent Variables

– Age, Role, Work Shift, Overall Experience (Years), Highest Level of Education, Unit

Dependent Variables

• Knowledge subscale, Belief subscale, Behavior subscale

Chosen statistic: Kruskal-Wallis

DATA EVALUATION

Evaluation of the Project (continued)

Problem 3: What is the effect on the participant pre-survey responses for perceived barriers after receiving a poster-style education intervention with reinforced evidence-based nurse-led mobilization strategies?

Independent Variable

✳ Week-long intervention (daily email accompanied by a one-time poster-style presentation)

Dependent Variable

• Perceived Barriers (overall barrier score on pre and post-survey and subscale pre and post-survey scores of the same participants)

Chosen statistic: Wilcoxon signed ranks test to compare the sums of overall barrier scores of the pre and post-survey scores and compare the subscale pre and post-survey scores of the same participants

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FINDINGS

Participant Characteristics
Descriptive Frequency Statistics

Participant Age
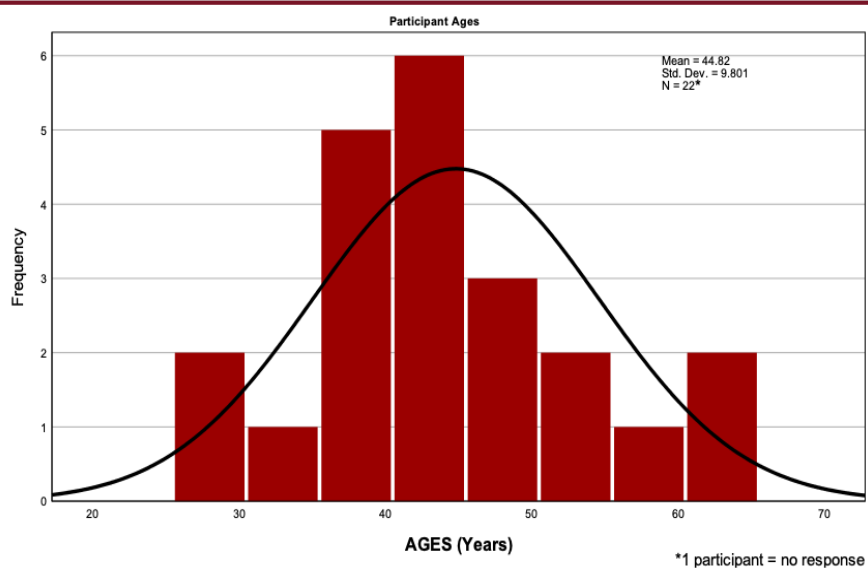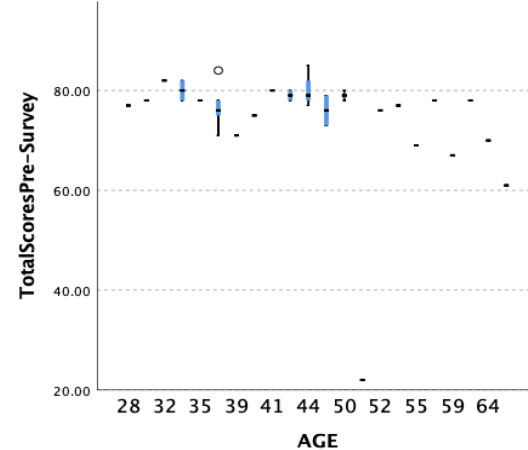
FINDINGS

Participant Characteristics

Descriptive Frequency Statistics

Role
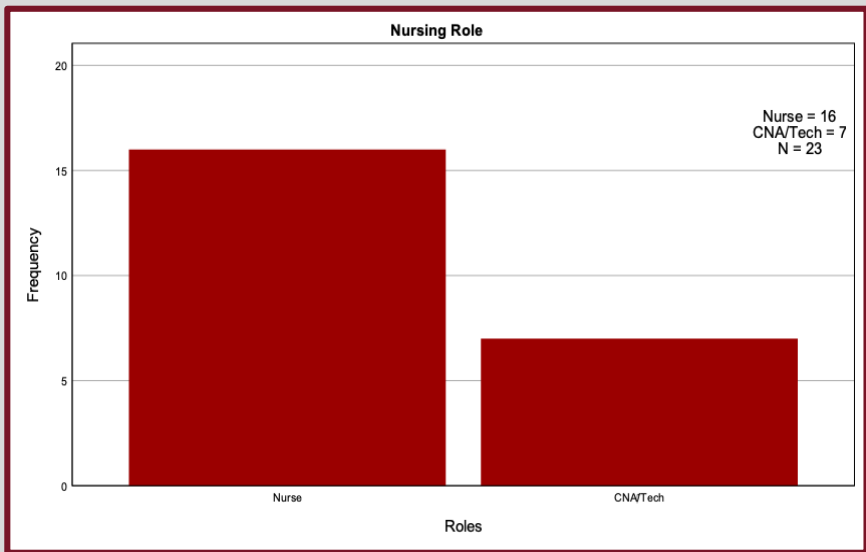
Shift
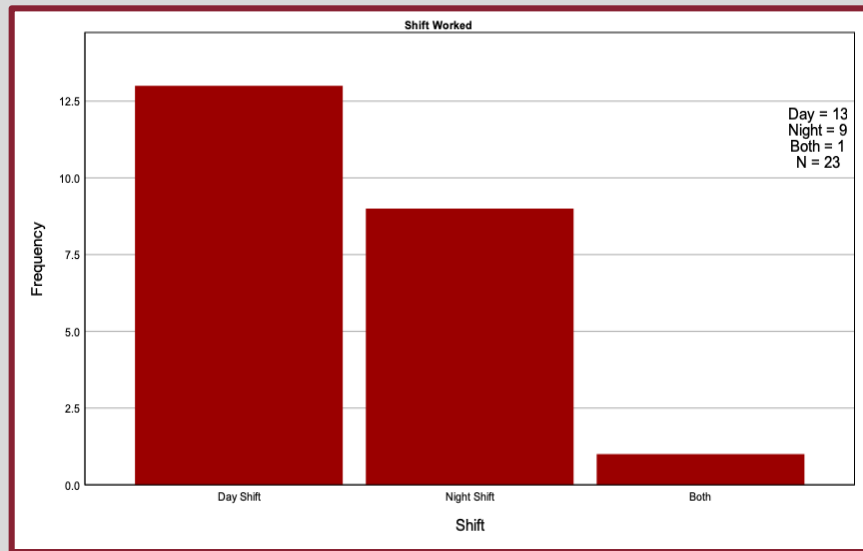
FINDINGS
Participant Characteristics
Descriptive Frequency Statistics

Total Years of Experience
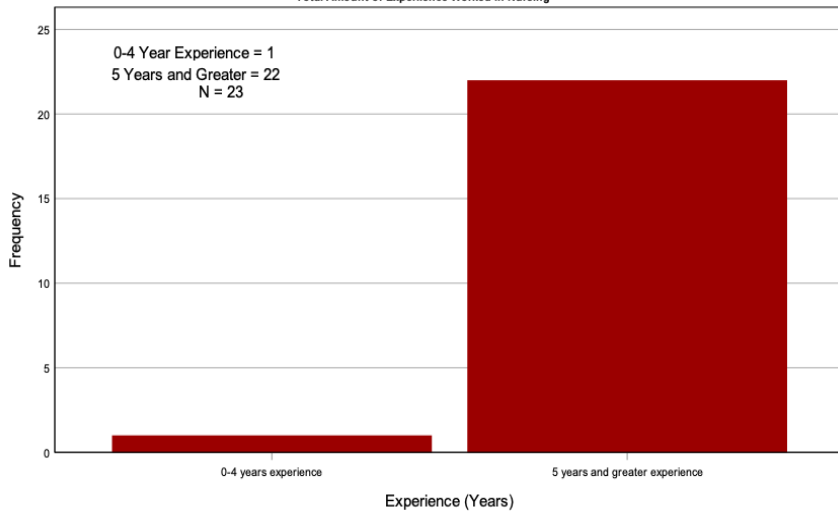
Highest Level of Education

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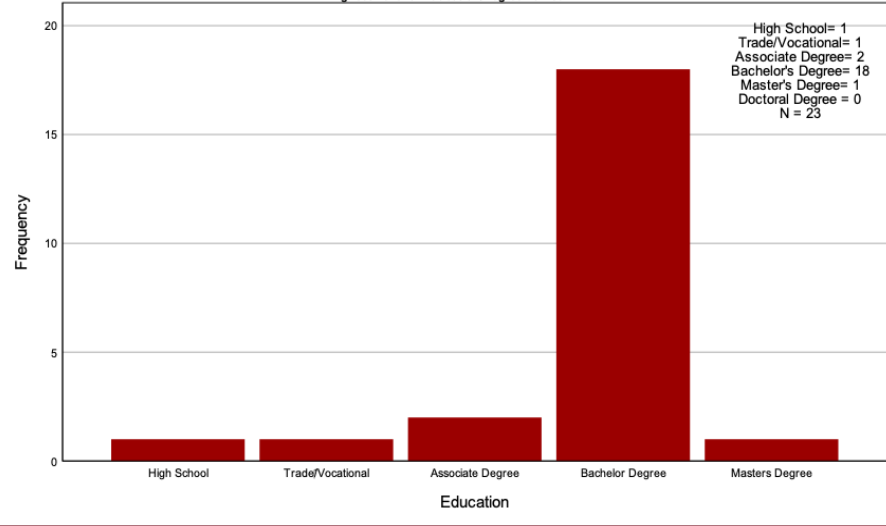
FINDINGS

Participant Characteristics

Descriptive Frequency Statistics

Unit Worked
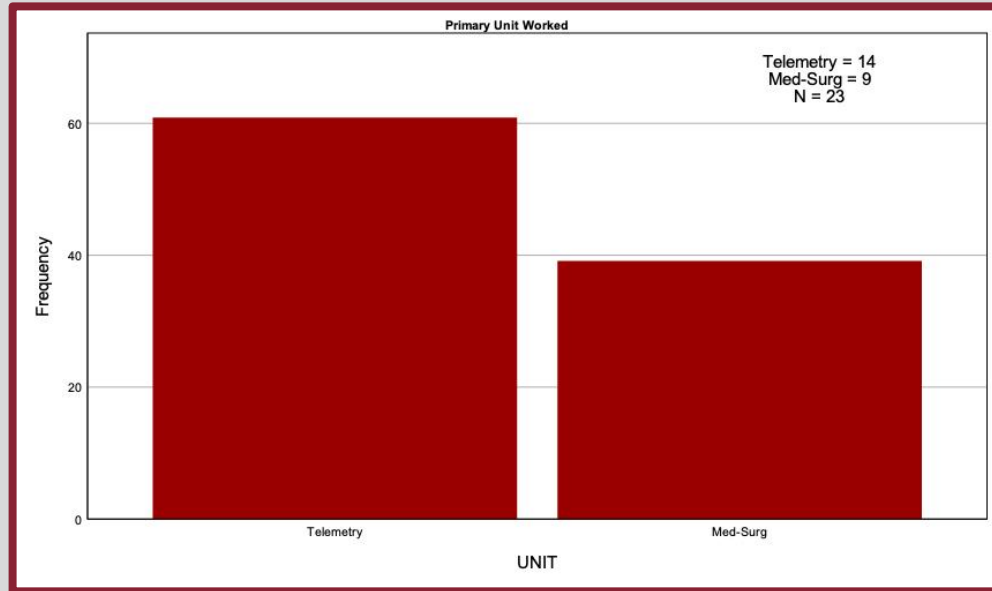
FINDINGS

Top 5 Perceived Barriers to Inpatient Mobility Promotion

Descriptive Frequency Statistics

Item 4*: A physical therapist or occupational therapist should be the primary care provider to mobilize my inpatients *(attitude subscale).*

Survey Item 4		
	Frequency	Percent
0 No Response	9	20.5
1 Strongly Agree	**11**	**25.0**
2 Agree	**7**	**15.9**
3 Neutral	5	11.4
4 Disagree	11	25.0
5 Strongly Disagree	1	2.3
Total	44	100.0

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*Negative worded items on the survey.

FINDINGS

Top 5 Perceived Barriers to Inpatient Mobility Promotion
Descriptive Frequency Statistics

Item 15*: Increasing the frequency of mobilizing my inpatients increases my risk for injury*(behavior subscale)*.

Survey Item 15		
	Frequency	Percent
0 No Response	10	22.7
1 Strongly Agree	**4**	**9.1**
2 Agree	**20**	**45.5**
3 Neutral	7	15.9
4 Disagree	3	6.8
Total	44	100.0

Item 17*: My inpatients are resistant to being mobilized
(behavior subscale).

Survey Item 17		
	Frequency	Percent
0 No Response	10	22.7
1 Strongly Agree	**13**	**29.5**
2 Agree	**18**	**40.9**
3 Neutral	3	6.8
Total	44	100.0

*Negative worded items on the survey.

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FINDINGS

Top 5 Perceived Barriers to Inpatient Mobility Promotion

Descriptive Frequency Statistics

Item 19*: I am not sure when it is safe to mobilize my inpatients

Survey Item 19		
	Frequency	Valid Percent
0 No Response	10	22.7
1 Strongly Agree	**13**	**29.5**
2 Agree	**18**	**40.9**
3 Neutral	3	6.8
Total	44	100.0

Item 23*: I do not have time to mobilize my inpatients during my shift/workday.

Survey Item 23		
	Frequency	Valid Percent
0 No Response	10	22.7
1 Strongly Agree	**9**	**20.5**
2 Agree	**17**	**38.6**
3 Neutral	7	15.9
4 Disagree	1	2.3
Total	44	100.0

*Negative worded items on the survey.

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FINDINGS

Related–Samples Wilcoxon Signed Rank Test

Positive Differences (3)
Negative Differences (18)

Number of Ties = 2

Pre-Survey Overall Barrier Scores (Sum)

N = 23
Min = 67.00
Max = 85.00
Mean = 76.739
Std. Dev. = 4.3820

Post-Survey Overall Barrier Scores (Sum)

N = 23
Min = 42.00
Max = 79.00
Mean = 61.957
Std. Dev. = 11.1456

Related-Samples Wilcoxon Signed Rank Test Summary

Total N	23
Test Statistic	10.000
Standard Error	28.755
Standardized Test Statistic	-3.669
Asymptotic Sig. (2-sided test)	.000

For Overall Barrier Scale Score 0-100 → The higher the score, the more the nursing staff perceived a barrier to promoting inpatient mobility

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FINDINGS

Ranks

	PARTICIPANT ROLE	N	Mean Rank
PreKnowledge Role	1 Nurse	16	12.75
	2CNA/Tech	7	10.29
	Total	23	
PreAttitude Role	1 Nurse	16	10.44
	2CNA/Tech	7	15.57
	Total	23	
PreBehavior Role	1 Nurse	16	13.69
	2CNA/Tech	7	8.14
	Total	23	
PostKnowlede Role	1 Nurse	16	9.56
	2CNA/Tech	7	17.57
	Total	23	
PostAttitude Role	1 Nurse	16	10.00
	2CNA/Tech	7	16.57
	Total	23	
Post Behavior Subscale & Role	1 Nurse	16	9.31
	2 CNA/Tech	7	18.14
	Total	23	

Non-Parametric Testing: Kruskal-Wallis Ranks Test

Post-Survey Subscale Scores
Test Statistics

	Pre-Know	Pre-Att	Pre-Behav	Post-Know	Post-Att	Post-Behav
Kruskal-Wallis H	.668	2.829	3.339	7.214	4.636	8.333
df	1	1	1	1	1	1
Asymp. Sig.	.414	.093	.068	**.007**	**.031**	**.004**

a. Kruskal Wallis Test
b. Grouping Variable: PARTICIPANT ROLE

🟡 statistically significant with a p < .05

🟨 statistically significant for greatest mean ranks difference

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FINDINGS

Non-Parametric Statistics: Kruskal-Wallis H Test

Continued Testing Revealed:

- There was also a significant effect on **attitude subscale** scores based on **the unit** staff participants worked, with a p-value of $p < .05$.

- Significant effect on **knowledge subscale** scores based on **the shift** staff participants worked, with a p-value of $p < .05$.

- *No statistically significant relationship was found in comparing age and subscale scores.*

- *No statistically significant relationship was found in comparing education and subscale scores.*

DISCUSSION

❖ The survey as a knowledge building tool

❖ interdisciplinary empowerment

❖ bridge the clinical practice gap that exists where EBP falls short

❖ Veteran staff →useful for informing of ongoing competencies and in-service needs.

❖ This project shed light on how versatile the survey can be and how useful the Mobility Toolkit (BSWH, 2017) components were in filling in knowledge gaps.

LIMITATIONS

❖ Small sample size

❖ Causality is difficult to infer with type of project

❖ COVID-19 pandemic
  ❖ low participation rates
  ❖ paperwork delays
  ❖ project on COVID unit
  ❖ staff burn-out
  ❖ turnover
  ❖ leadership changes

❖ project limited to one unit→ limits ability to generalize

❖ hospital ownership and EHR transitioned during project

RECOMMENDATIONS & IMPLICATIONS

Implications for DNP Essentials

Project based on various theoretical frameworks that sought to answer a research question, and in the process, affect change through a translational scientific approach. The Doctor of Nursing Practice Essentials were integrated and applied throughout the preparation for planning and implementing the project.

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Ethical IMPLICATIONS

- EBP Determination Process

- Fidelity

- Confidentiality

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RECOMMENDATIONS & IMPLICATIONS

Knowledge, Attitude, and Behavior Implications for Nursing Practice

❖ Registered nurses did not perceive knowledge as a contributing barrier to promoting. mobility for inpatients
  - ❖ They perceived external barriers and attitudes were the perceived barriers.
  - ❖ There was a lack of mobility culture in this unit.
  - ❖ It is recommended that a change agent is necessary to engage in ongoing mobility in-service activities that engage the nurses in a manner they don't perceive as another competing task.
    - ❖ An important aspect of the KTA framework is the idea that knowledge transference considers and builds upon continued professional development and continuing education, in order to influence clinical practice changes. The framework also aids in promoting appropriate stakeholder relationships and facilitating applicable exchanges of knowledge transfer, that are only informed and guided by the latest research (Caswell et al., 2006)

  - ❖ Transforming the clinical environment to reflect one of an evidence-based nature. A culture shift follows the change agent where nursing leadership combines with interdisciplinary approaches in order to sustain that culture.

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RECOMMENDATIONS & IMPLICATIONS

Financial Implications for Nursing Practice
A large budget was not necessary for this project, but the intervention successfully produced a positive outcome with potential for a large financial gain from unit to hospital level.
❖ Balance with need and planning of needs for future PPE

Organizational Implications for Nursing Practice
❖ COVID-19 Pandemic showed how complex the care sphere can be.
❖ Importance of mobility; seen more when patients were not only admitted Not only COVID-19 positive, but being diagnosed with COVID pneumonia, several of whom had recently been discharged. Protocols for mobility must be made a priority even in the time of a Pandemic.
❖ Plan for mobility protocols for **<u>isolated patients</u>** in general

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RECOMMENDATIONS & IMPLICATIONS

Implications for Improving Patient Mobilities

Project was not directly involved with patients, but indirect implications for the improvement of patient outcomes. Knowing perceptions of barriers to nurse-led mobility promotion provided insight into possible staff knowledge deficits, informing educational programming for the intervention. This gained knowledge promoted empowerment to indirectly improve patient health outcomes as there is an increased level of knowledge and awareness. For patients, this means avoiding functional decline that add up to a positive change in the following: ↓ **LOS** ↓ **falls** ↓ **injuries from falls**

↓ **decreased need for transfer to rehabilitation facilities at discharge**

↓ **decreased unplanned readmissions**

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OVERALL PROJECT SUMMARY

Completed an evidence-based nursing practice project focused on positively impacting nurses' perceptions of the promotion of nurse-led mobility from the domains of knowledge, attitude, and behaviors.

NEXT STEPS

- Project →Change Agent
- CRMC→ Sustainability
  – new-hire training
  – competencies (is re-training needed)
  – indicator for new staff (is training needed?)
  – system
- Stakeholder Involvement for future sustainability
- Clinical Setting Recommendations
  – JH-Patient Mobilization Attitudes & Beliefs Survey as an Indicator for Baseline Training Needs
  – Nursing-led Mobility Competencies
  – New-Hire Orientation on Mobility
- Next Steps and Sustainability Outlook
  – Can this EBP project work in other unit settings?

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PLANS FOR DISSEMINATION

1. Hospital Poster Presentation
    a. stakeholders
        i. education department
        ii. participants

2. Nursing Organizations
    a. American Colleges of Nursing (AACN) and the Graduate Nursing Student Academy (GNSA)

i. Presented a Virtual Poster Presentation to the GNSA Leadership and other graduate nursing students in September 2020.

3. Interdisciplinary Conferences
    a. National Mobility Conferences
        i. (Abstract submitted) 2020 Johns Hopkins Mobility Conference (April 2020-canceled due to COVID-19).

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4. Evidence-Based Practice Conferences
    i. Ongoing project presented to University of Iowa Advanced Practice Institute: Promoting Adoption of Evidence-Based Practice in February 2020.

    ii. Submitted completed project Evidence-Based Practice Blinded Abstract to the University of Iowa Health Care and Nursing Research and EBP 28th (2021) National Evidence-Based Practice Conference, Team Science: Achieving More Together for a virtual pre-recorded oral presentation or electronic poster display.

5. Discipline-specific Conferences

   a. National Clinical Nurse Specialist (NACNS)
      i. Poster presentation of ongoing progress at the 2020 Annual Conference, 25th Anniversary "Transforming Health Care: Our Past, Our Present & Our Future! While it was ongoing (March 2020).

      ii. Submitted abstract of completed project for the NACNS Annual 2021 Conference: Resurgence of the CNS Virtual Poster Presentation "CNS Improving Outcomes" in topics of Clinical Practice Application, Health Care System, Health Promotion, Education, Gaps in Knowledge, Skills, and Practice scheduled March 2021.