Evidence Based Practice (EBP) Confidence Assessment Survey

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Overview of the Transitions Into Practice (TIP) program for nurse residents:

- TIP program for newly graduated nurses
- Participates in the virtual Clinical Academy Core Fundamentals
- Core Fundamentals was updated to a flipped classroom teaching methodology
- In Core Day 4: Clinical Scholarship, TIPs received two hours of EBP modules and no EBP expert to review and clarify content
- The May 2021 Valley cohort was offered one-hour EBP virtual sessions via Microsoft Team with the regional nurse scientist and librarian
Background

- A goal was set by the Institution of Medicine that 90% of healthcare decisions would derive from EBP by 2020 (Alves, 2021).
- A survey with 6,800 RNs showed that less than half of the nurses were confident in using EBP to make a change in practice (Alves, 2021).
- Organizations continue to struggle to integrate EBP into practice
  - Research suggest that EBP mentors can help bridge this barrier and translate EBP at the bedside
  - Improve patient outcomes
  - Improve confidence in EBP
  - Improve staff engagement and professional development (Alves, 2021).
Nursing professional development (NPD) practitioners’ role is to facilitate and champion scientific inquiry (Nickles et al., 2019).

It is imperative that nurses integrate EBP into their practice (Nickles et al., 2019).

To facilitate that process, nurses need support and education about EBP (Nickles et al., 2019).
Purpose/Aim

Do mandatory Evidence Based Practice (EBP) open office hours with the regional nurse scientist and librarian increase the nurse resident’s confidence and knowledge of the EBP process?
Methods/Approach:

- Quality Improvement project
- Target population all May 2021 Nurse Residents
- One time RedCap survey was sent to all May 2021 cohort TIPS
Methods/Approach

Descriptive statistics for all variables

- Mean
- Standard deviation
- Percentages
- Frequency

Independent t-test completed for confidence questions and knowledge questions as well as Mann-Whitney U
Results

Demographics: All Participants

- LCM Torrance: 12.6%
- LMC San Pedro: 8.4%
- Mission: 4.2%
- St. Mary: 4.2%
- St. John: 8.4%
- St. Joseph-Orange: 12.6%
- St. Jude: 12.6%
- Holy Cross: 7.4%
- St. Joseph-Burbank: 22.1%
- Tarzana: 7.4%

n = 95

Demographics: Intervention Group

- Received Intervention
- Did not receive intervention

- Holy Cross: 20%
- St. Joseph-Burbank: 80%

n = 95
Results

Evidence Based Practice (EBP) Confidence Survey

All Participants Met with Librarian

- No: 87.4%
- Yes: 8.4%
- Not Sure: 4.2%
Results

Intervention Group
Met with Librarian

- No: 73.7
- Yes: 26.3
Results

Evidence Based Practice (EBP) Confidence Survey

All Participants
Met with Nurse Scientist

- No: 75.8%
- Yes: 12.6%
- Not Sure: 11.6%
Results

Intervention Group
Met with Nurse Scientist

- No: 52.6%
- Yes: 31.6%
- Not Sure: 15.8%
Results

EBP Step Identification

- Asking clinical question: 0.99
- Collecting relevant evidence: 0.95
- Critical appraise evidence: 0.75
- Integrate evidence: 0.68
- Evaluating outcomes: 0.73
- Disseminate outcomes: 0.71

Questions Answered Correctly

- 1Q: 2.1%
- 2Qs: 7.4%
- 3Qs: 8.4%
- 4Qs: 26.3%
- 5Qs: 2.1%
- 6Qs: 53.7%
**Results**

**Mean Score of PICOT Identification**

<table>
<thead>
<tr>
<th>Letter</th>
<th>Category</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Patient, Population, or Problem</td>
<td>0.98</td>
</tr>
<tr>
<td>I</td>
<td>Intervention</td>
<td>0.99</td>
</tr>
<tr>
<td>C</td>
<td>Comparison</td>
<td>0.97</td>
</tr>
<tr>
<td>O</td>
<td>Outcome</td>
<td>1.0</td>
</tr>
<tr>
<td>T</td>
<td>Time</td>
<td>0.98</td>
</tr>
</tbody>
</table>

**Percentage of Correctly Answered Questions**

- **1Q**: 1.1%
- **4Qs**: 4.2%
- **5Qs**: 94.7%
## Results

### Hypothesis Test Summary: Knowledge

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Significance</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBP step identification is the same across categories of received intervention</td>
<td>0.634</td>
<td>Retain null hypothesis</td>
</tr>
</tbody>
</table>
## Results

### Evidence Based Practice (EBP) Confidence Survey

<table>
<thead>
<tr>
<th>Components</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describing the EBP process from start to finish</td>
<td>3.16</td>
</tr>
<tr>
<td>Performing a literature search in an electronic database</td>
<td>3.52</td>
</tr>
<tr>
<td>Identifying your ministry’s preferred EBP model</td>
<td>2.92</td>
</tr>
<tr>
<td>Asking an EBP question about your clinical practice</td>
<td>3.43</td>
</tr>
<tr>
<td>Identifying an appropriate venue for disseminating results</td>
<td>2.86</td>
</tr>
<tr>
<td>Distinguishing between different types of clinical inquiry</td>
<td>3.09</td>
</tr>
<tr>
<td>Critiquing and synthesizing the evidence</td>
<td>3.17</td>
</tr>
<tr>
<td>Formulating a PICO(T) question</td>
<td>3.38</td>
</tr>
<tr>
<td>Accessing library resources</td>
<td>3.56</td>
</tr>
<tr>
<td>Interpreting statistical results from a research study</td>
<td>3.2</td>
</tr>
<tr>
<td>Identifying the level of evidence of an article</td>
<td>3.14</td>
</tr>
<tr>
<td>Creating a table of evidence</td>
<td>3.04</td>
</tr>
<tr>
<td>Understanding the role of IRB in EBP</td>
<td>2.85</td>
</tr>
</tbody>
</table>
# Results

## Hypothesis Test Summary: Confidence

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Significance</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describing the EBP process from start to finish is the same across categories of received intervention</td>
<td>0.249</td>
<td>Retain null hypothesis</td>
</tr>
<tr>
<td>Performing a literature search in an electronic database is the same across categories of received intervention</td>
<td>0.008</td>
<td>Reject null hypothesis</td>
</tr>
<tr>
<td>Identifying your ministry’s preferred EBP model is the same across categories of received intervention</td>
<td>0.451</td>
<td>Retain null hypothesis</td>
</tr>
<tr>
<td>Asking an EBP question about your clinical practice is the same across categories of received intervention</td>
<td>0.034</td>
<td>Reject null hypothesis</td>
</tr>
<tr>
<td>Distinguishing between different types of clinical inquiry is the same across categories of received intervention</td>
<td>0.029</td>
<td>Reject null hypothesis</td>
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<tr>
<td>Critiquing and synthesizing the evidence is the same across categories of received intervention</td>
<td>0.147</td>
<td>Retain null hypothesis</td>
</tr>
<tr>
<td>Formulating a PICO(T) question is the same across categories of received intervention</td>
<td>0.082</td>
<td>Retain null hypothesis</td>
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<tr>
<td>Accessing library resources is the same across categories of received intervention</td>
<td>0.120</td>
<td>Retain null hypothesis</td>
</tr>
<tr>
<td>Interpreting statistical results from a research study is the same across categories of received intervention</td>
<td>0.192</td>
<td>Retain null hypothesis</td>
</tr>
<tr>
<td>Identifying the level of evidence of an article is the same across categories of received intervention</td>
<td>0.090</td>
<td>Retain null hypothesis</td>
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<tr>
<td>Creating a table of evidence is the same across categories of received intervention</td>
<td>0.310</td>
<td>Retain null hypothesis</td>
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<tr>
<td>Understanding the role of IRB in EBP is the same across categories of received intervention</td>
<td>0.511</td>
<td>Retain null hypothesis</td>
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</table>
Conclusion

• General findings: KNOWLEDGE
  - 54% of all participants knew the six steps of the EBP process
  - 95% of all participants answered all PICO questions correctly
  - No statistical significance in knowledge of EBP steps or knowledge of PICO between the two groups

• General findings: CONFIDENCE
  - Intervention group showed a statistical significance in EBP CONFIDENCE.
    - Performing a literature search
    - Asking an EBP question
    - Distinguishing between different types of clinical inquiry (EBP/QI/Research)
Implication for practice

• Increased knowledge and confidence in the EBP process will lead to improved outcomes for the nurse, organization and our patients.

• KNOWLEDGE in the EBP process assists with identifying practice gaps

• CONFIDENCE in the EBP process allows nurses to speak up for safety, present or lead unit-based councils

• CONFIDENCE ignites the spirit of inquiry

Future implications:

• Continue formal training developed by the Clinical Academy in Core Fundamental Day #4

• Expand EBP Open Office Hours with regional nurse scientist and librarian to other ministries

• Organizations that invest in EBP training are likely to see gains in quality, patient safety and nurse satisfaction (Alves, 2021).
References


Acknowledgements

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