

Evaluation of Registered Nurses' Knowledge and Confidence in Encouraging Cardiac Surgery Patients to Participate in Digital Education

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BACKGROUND

- Surgery remains a viable option for the treatment of patients with cardiac disease. ²
- Literature establishes that preoperative patient anxiety is increasing, and preoperative education can reduce it. ¹
- Nurses have multiple priorities that compete with preoperative education.
- Data specific to this study at the institution reveals an inconsistency with patient preoperative education.

LOCAL PROBLEM

- Cardiac surgery patients are assigned digital education in their Duke MyChart before surgery to standardize the education.
- Patient unpreparedness is a local concern in preoperative education. Evidence has shown that engagement is low.
- Engagement with the digital education platform is low.
- The aims of the project were:
 - To improve nurses' knowledge of the digital education available to patients undergoing cardiac surgery by 25%.
 - To improve nursing and patient engagement of the educational videos by 25%.

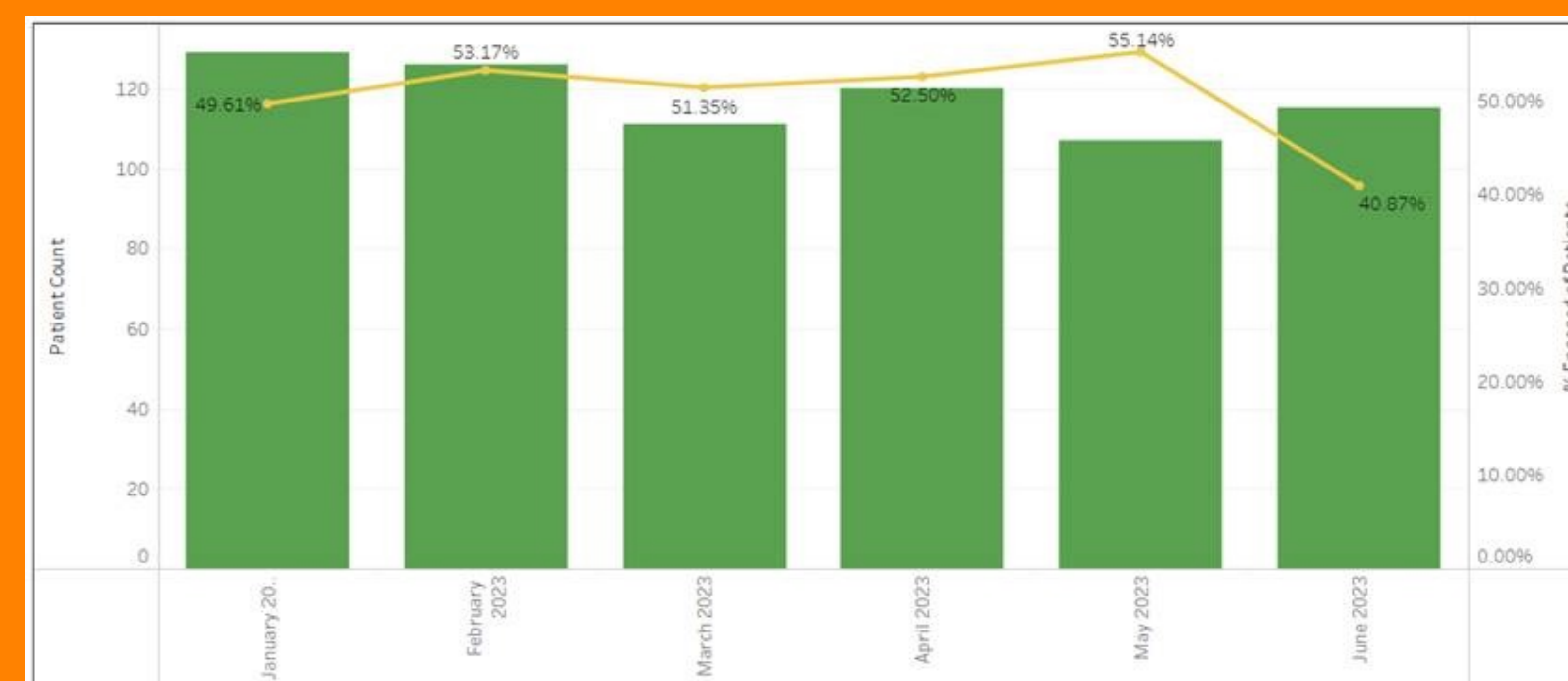
METHODS

- The John Hopkins Evidenced-Based Practice Model guided the project.
- A critical appraisal of the literature demonstrated good and consistent evidence supporting the use of preoperative education using digital education to improve patient outcomes.
- Outcome measures of nursing knowledge and confidence in digital education were measured for a 3 months pre-implementation and post-intervention.

Cardiac surgery nurses *were significantly more confident delivering and utilizing patient digital education* after receiving education about the standardized educational tool.

LIKERT Survey Questions	Mean Pre/ Post Survey	p
I feel comfortable delivering patient education about what to expect before, during, and after surgery?	3.66 / 4.17	.011
I know how to access and utilize the CT surgery digital patient education through MyChart?	2.79 / 4.02	<.001
I know how to use the unit's iPad for reviewing the patient's educational videos?	2.64 / 4.04	<.001
I feel comfortable delivering patient education through technology?	3.39/4.30	<.001

- A list of the questions sent to the nurses pre- and post- intervention. All questions showed a response in the mean of the question answered as well as the p value.



-The number of patients watching the videos peaked during education on the unit and dropped again when there was not active education.



Scan for executive summary, Qualtrics survey, and reference list.

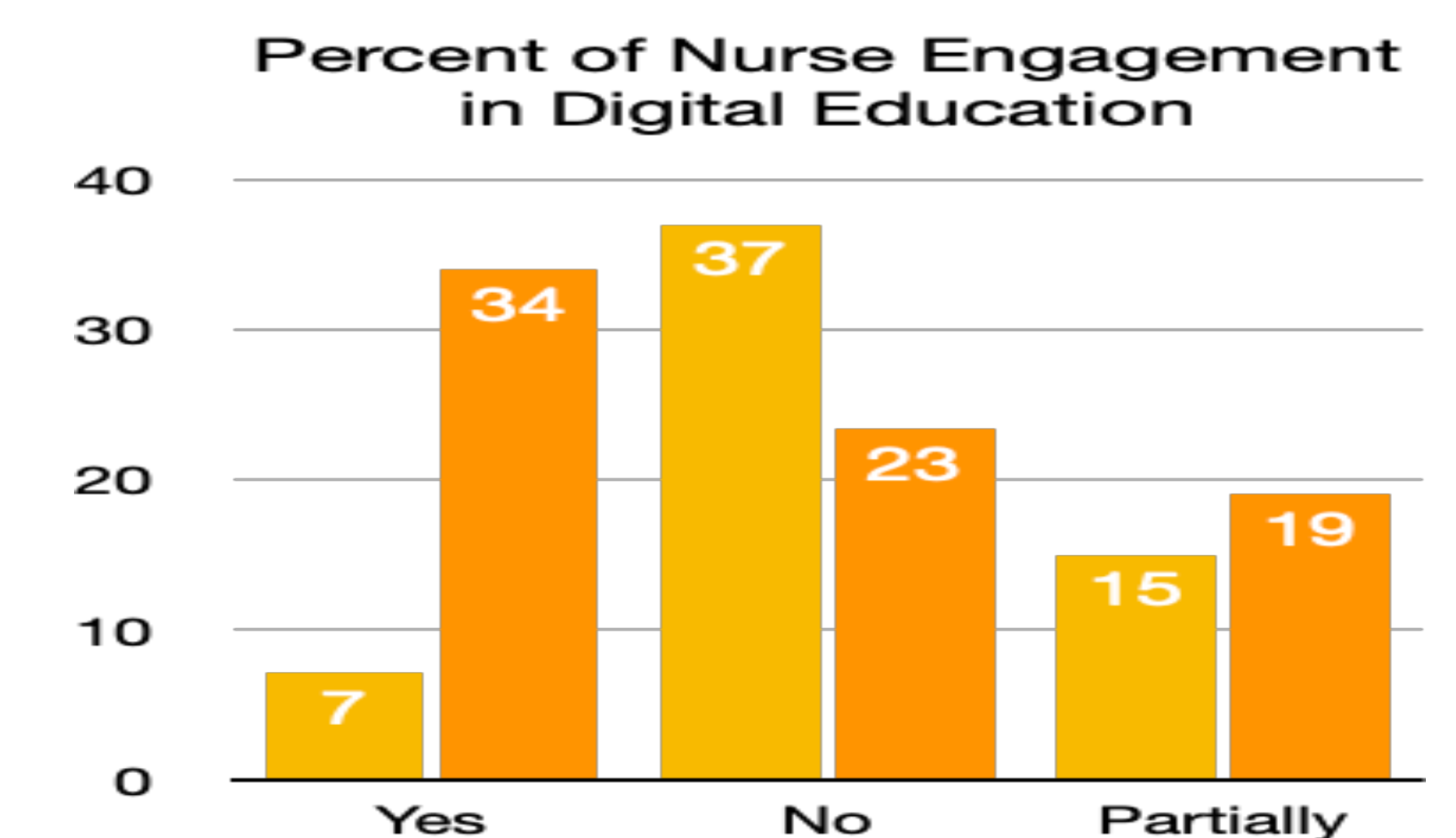


INTERVENTIONS

- The DNP student attended staff huddles to introduce the project.
- An anonymous Likert survey was shared with nurses to test baseline knowledge and confidence in using digital education.
- The DNP student taught nurses how to access and utilize digital education materials to improve post-cardiac surgery outcomes.
- The nurses again took the anonymous survey to evaluate the impact of using digital education after the intervention.

RESULTS

- Statistical significance in every category of the Likert Survey reflected that nurses felt more confident disseminating digital education materials.



- The nurse engagement rates with digital education increased by 79%.

CONCLUSIONS

- Patient and nurse engagement in digital education increases with education about the process and tools.
- The unit leadership should incorporate education about digital education into nursing orientation and a mandated learning module.
- The hospital can add an admission question asking the patients about engagement with digital education to remind nurses and patients about the education.

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