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EXAMINING KNOWLEDGE LEVELS AND ATTITUDES OF NURSES CARING FOR PATIENTS WITH SUBSTANCE USE DISORDERS: A PILOT STUDY
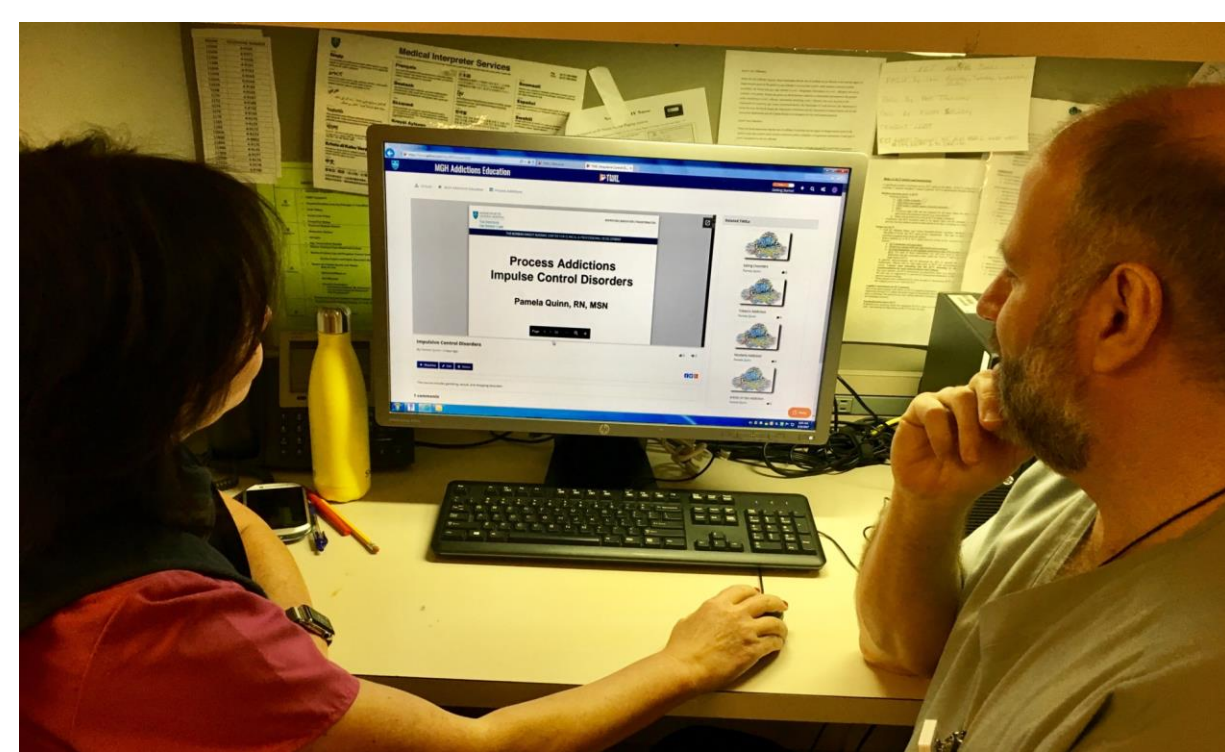
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Joanne Parhiala, BSN, RN-BC, CARN and Pamela Quinn, MSN, RN-BC
Massachusetts General Hospital, Boston, MA, USA

BACKGROUND AND SIGNIFICANCE

- In 2014, more than 21 million Americans aged ≥ 11 years had a Substance Use Disorder (SUD) [SAMSHA, 2015].
- The literature reflects that nurses hold negative attitudes & lack knowledge related to SUD which contributes to suboptimal care & stigmatization.
- Evidence supports that education with role support improves nurse attitudes.
- Certification reduces patient mortality and failure-to-rescue & improves the delivery of clinically competent care to patients with SUD.
- The Massachusetts General Hospital (MGH) 2015 Professional Learning Environment for Nurses (PLEN) survey (N=968) revealed that 63% of respondents reported feeling "not prepared" or only "somewhat prepared" to care for & respond to the needs of their patients & families dealing with substance misuse.

AIMS

1. Determine whether nurses' attitudes and knowledge levels improved after a five month educational intervention related to SUD.
2. Prepare nurses to sit for the Certified Addictions Registered Nurse (CARN) exam.

This Week I Learned (TWIL) :
Web-Based Self-directed Learning Method

METHODS

Design: Quasi-experimental study using repeated measures (pre-test/post-test) at baseline in April/May, 2016), completion of the program in October, 2016, and follow-up time points in December, 2016 and February, 2017.
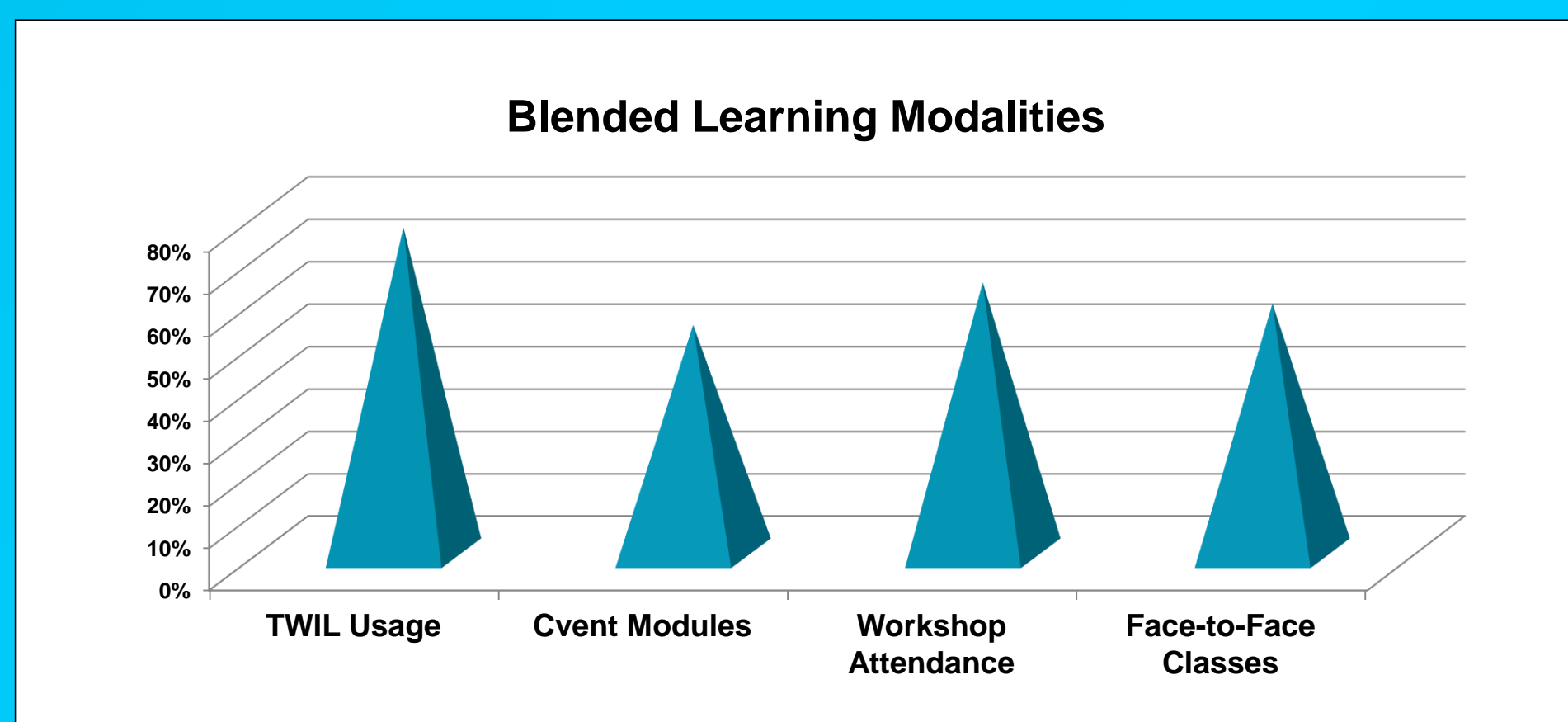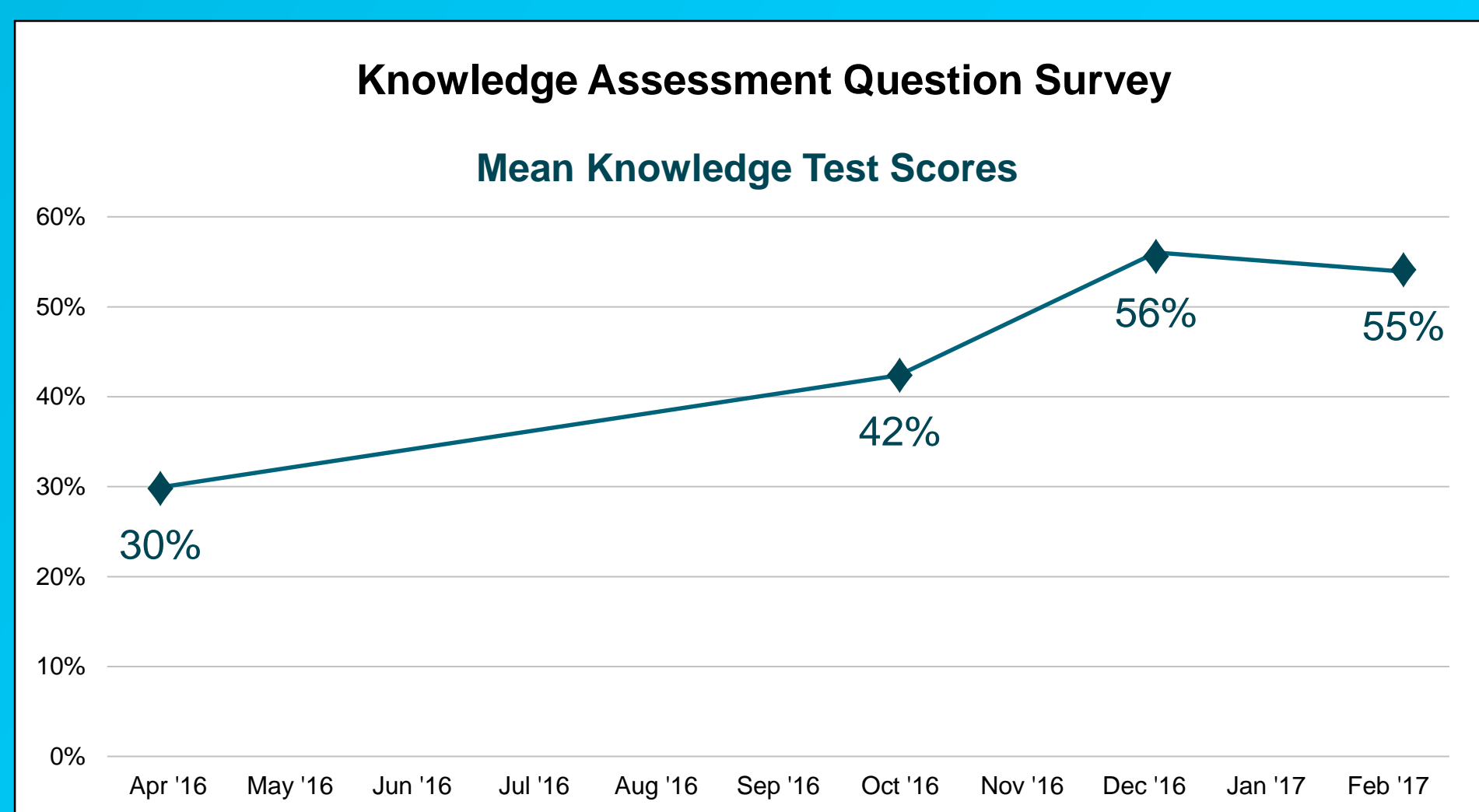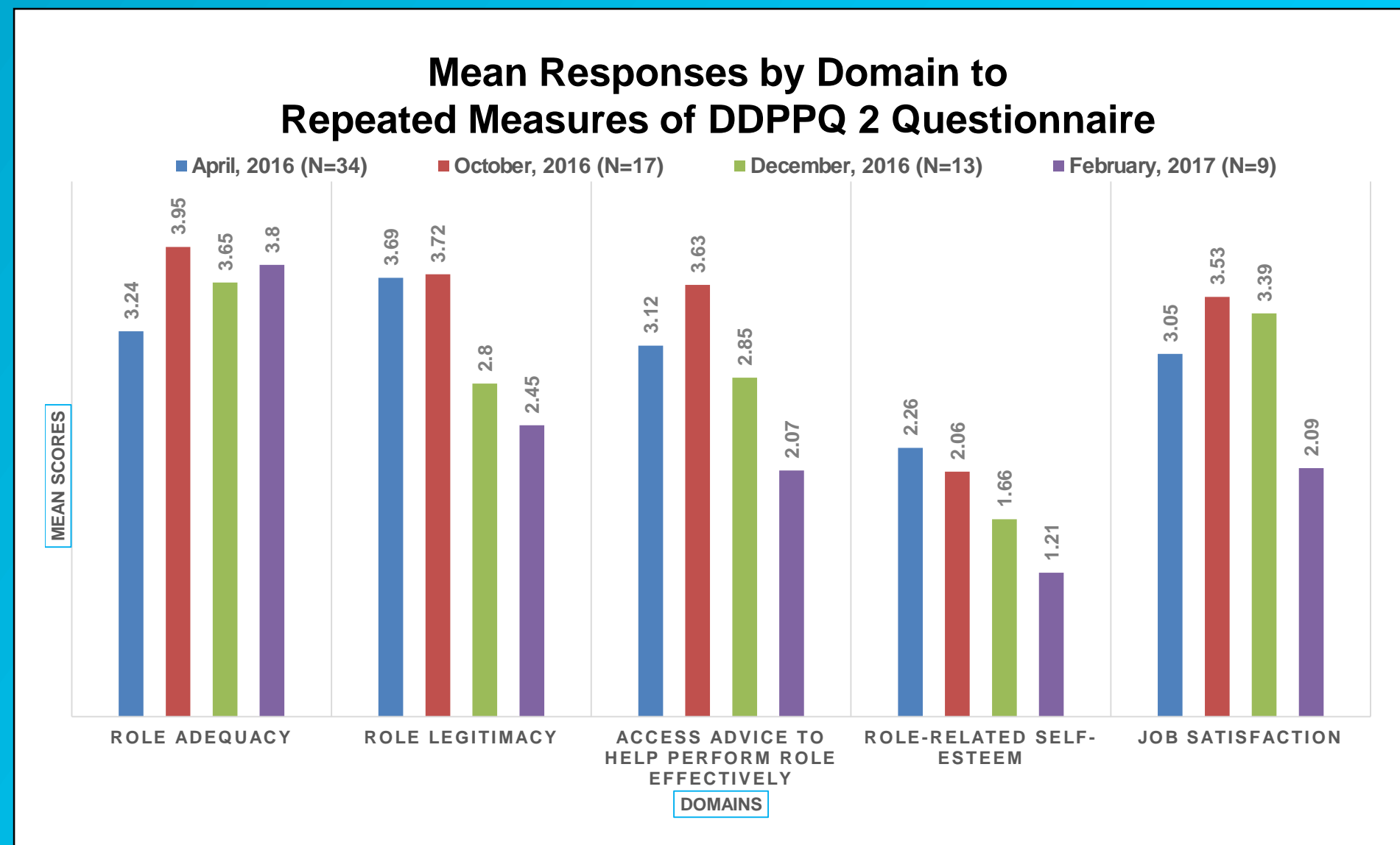
Sample: 30 nurses from a variety of inpatient care areas.

Survey Instruments:
- ***Drug and Drug Problems Perception Questionnaire 2.0 (DDPPQ 2.0)*** [Watson, Maclaren,& Kerr 2006] consists of 20-items on a 7-point Likert Scale (1=strongly disagree; 7=strongly agree) that load on five factors: role adequacy, role legitimacy, accessibility of advice to perform role effectively, role-related self-esteem, and job satisfaction.
- ***Knowledge Assessment Questionnaire (KAQ)*** A new, 10-item investigator-developed instrument related to the definition of addiction, knowledge of various types of addictions and associated consequences.

Blended Learning Modalities
- ***Cvent*** – Online event management tool that provided 14 independent learning modules, program evaluation, and mechanism to award contact hours.
- ***TWIL (This Week I Learned)*** – Mobile application that is a web-based, self-directed learning tool that promotes learning via videos and interactive collaboration with all team members.
- ***Face-to-Face Learning*** – Series of workshops and lectures were offered.

Mean Responses by Domain to Repeated Measures of DDPPQ 2 Questionnaire

Legend: April, 2016 (N=34), October, 2016 (N=17), December, 2016 (N=13), February, 2017 (N=9)

Knowledge Assessment Question Survey
Mean Knowledge Test Scores

Blended Learning Modalities

Workshop Content Experts, Faculty & Research Team

RESULTS

Drug and Drug Problems Perception Questionnaire 2.0 (DDPPQ 2.0):
- Nurse attitudes became more positive on all domains except "Role-Related Self-Esteem"; however, that domain was negatively worded so the result is positive
- More positive attitudes were sustained at data points 2 to 4 for the domain of " Role Adequacy"
- At data points 3 and 4, attitudes trended down / more negatively for all four of the other domains

Knowledge Assessment Questionnaire (KAQ):
- Average scores on the KAQ trended upward 10% from baseline to data point 2 and, subsequently, data point 3.
- Average scores plateaued at data point 4

CARN examination:
- 17 of 30 nurses who completed the pilot study took the exam
- 82% of nurses who took the exam reported passing the exam

Blended Learning Modalities
- Average of 77% cohort participation on TWIL
- Average of 54% completed Cvent online modules
- Average of 64% of cohort attended in person workshops
- Average of 59% attended face-to-face classes

LIMITATIONS

- Small sample size
- No demographic data to describe the sample
- Method of coding subject data prevented analysis of matched data sets
- Limited to a single site

CONCLUSION

- Increased the percentage of CARN-certified nurses by 500% in the institution.
- The survey at completion of the educational intervention revealed a positive trend in all domains of the DDPPQ 2 as compared to the initial survey administered prior to initiating the educational intervention.
- The results showed a trend of successive increase and retention in knowledge.
- Nurses that participated in this educational intervention passed the CARN exam at a rate of 82% vs. the average national pass rate of 74%.

IMPLICATIONS FOR PRACTICE AND FUTURE RESEARCH

- CARN nurse champions are serving as resources, role models, & educators in their practice areas.
- A new cohort of 30+ nurses enrolled in a second SUD Educational Program including nurses from the emergency department, outpatient clinics, & community health centers.
- After this pilot study, two additional inter-professional SUD conferences were offered with more than 120 participants at this institution.
- Future studies are needed to assess the impact on patient outcomes.
- Future plans for integrating this educational model into interprofessional programs within MGH & Partners Healthcare
- Consider developing this educational intervention as a national model.

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