STROKE SURVIVOR: A Tabletop Escape Room Game to Educate Novice and Experienced Nurses and Improve Stroke Care

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PROBLEM

The Legacy Emanuel Stroke Program noted several missed Get With the Guidelines (GWTG) quality measures on the acute care stroke unit. The unit leadership team decided to address these missed measures through education.

Due to staff turnover during the Coronavirus-19 pandemic, the nurses had a wide variety of stroke care experience.

BACKGROUND

- GWTG is a program managed by the American Heart Association to improve stroke patient care
- With limited time and combined classes, nurse educators are challenged to educate both novice and experienced nurses effectively
- An escape room is a game in which individuals in a locked room solve puzzles to escape
- Escape room type games are widely used in healthcare education
- Escape rooms often only accommodate one small group at a time which can stress educator resources



An escape room tabletop game was an *innovative* education intervention that increased both novice and experienced nurse knowledge and improved care for stroke patients



METHODS

- care
- Multiple teams of five-six nurses in one room competed to solve ten puzzles
- This format allowed two educators to facilitate 30 class participants in game play simultaneously
- Puzzles were created from easily sourced and inexpensive items
- Class participants completed a pre-test and post-test to evaluate knowledge of stroke care
- Two GWTG quality measures, swallow screen before oral intake and stroke patient education before discharge, were compared 12 months pre- and 12 months post-intervention

| Nurse Stroke Care Experience | | |
|------------------------------|--------------------------|--|
| Years of Experience | Number of Nurses (N=105) | |
| <1 | 17 (17.5%) | |
| 1 to 2 | 22 (22.7%) | |
| 3-5 | 10 (10.3%) | |
| > 5 | 48 (49.5%) | |
| Unknown | 8 | |

Digital Poster



Puzzle Examples



References

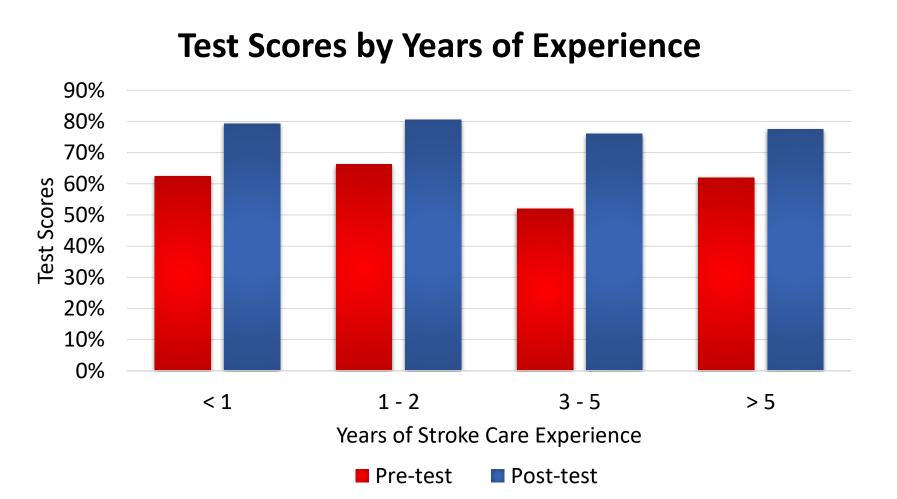
• A tabletop escape room style game was developed to educate 105 novice and experienced nurses about stroke



RESULTS

Stroke Care Knowledge

- Stroke care knowledge test scores increased significantly (p<.001) from 62.1% to 78.4%
- No significant difference in improvement of test scores was found between experience levels (p=.621)



 90% of nurses found the activity moderately to extremely helpful

Quality Measures

While patient demographics were similar pre- and post-intervention, swallow screen and stroke patient education rates improved significantly (p<.001)

| Stroke Patient Demographics | | |
|-----------------------------|------------------------------|------------------------------|
| Demographic | Pre-Intervention | Post-Intervention |
| Sex | Female = 48% | Female = 42% |
| | Male = 52% | Male = 58% |
| Race | White/Caucasian = 68% | White/Caucasian = 66% |
| | Black/African American = 13% | Black/African American = 13% |
| | Hispanic/Latino = 8% | Hispanic/Latino = 9% |
| | Other = 12% | Other = 12% |
| Age (mean) | 65 years | 65 years |
| Length of Stay | 6 days | 5.5 days |
| (median) | | |



