Resiliency Building Techniques for Nurses to Improve the Workplace Environment

Ronda Mintz-Binder, DNP, RN, CNE,
Susan Andersen, PhD, RN, FNP-BC
Texas Tech University Health Sciences Center
School of Nursing
Learning Objectives

1. Describe the relationship between resilience and burnout;

2. Delineate two major findings from this study;

3. State at least one unexpected limitation of this study.

Funding: Methodist Health Systems, Dallas, Texas
IRB approved from the hospital system and TTUHSC
No conflicts of interest
Introduction

• Nursing is emotionally stressful work which can lead to burnout and high turnover of nursing staff (Adriaenssens, De Gucht, & Maes, 2015).

• Emotional dissonance of nurses’ work may lead to stress and burnout (Delgado, et. Al, 2017).

• Resilience building may positively impact the stress-cycle.
  • Prevents development of burnout by relieving work stress
  • Resilience is a moderating factor in relationship between stress/burnout

• Resiliency: an individual's ability to successfully adapt to life tasks in the face of social disadvantage or highly adverse conditions. Included in this is the workplace (Gillespie, Chaboyer & Wallis, 2007).

• Stress management: being able to cope with an acutely stressful situation
Theoretical Framework

We proposed to impact nurse resiliency using a multi-modal approach.
Nurse Scholar program

This study was the result of an evidence based nursing study designed by bedside nurses who were selected to be part of a Nurse Scholar Program at one Methodist Hospital in Texas.

* 4 sister hospitals

* 2-3 nurses/hospital

* Designed brochures and posted flyers/recruited nurses/consented and gave tool kit of resiliency items agreed upon as a group
Engagement of nurses in resilience building activities *during working hours* has not been previously studied.

Stress reducing activities in the literature:

- Guided relaxation
- Deep breathing
- Tetris/game apps
- Lavender
- Sudoku-mind activities
- Adult coloring books
Study

Design:
A quasi-experimental pre- and post- test interventional study using within subjects design

Aims:
1. Would a provided toolkit of resiliency building activities increase resiliency?

2. Which activities were most often utilized by nurses?

3. Would nurses continue using the activities once the study ended?
Participants

Inclusion criteria

• Registered nurses across 4 hospitals in the Methodist Hospital system in the Dallas Fort Worth areas of Texas
• Full or part time employment for a minimum of 1 year
• Working on a medical-surgical unit with a patient : nurse ratio of 5:1
Data Collection

**Instruments**

1. Connor-Davidson Resiliency Scale (Connor & Davidson, 2003) pre- and post-test
2. Demographics: researcher created
3. Shift checklist: 10 times per participant; rated stress pre- and post-tool use.
4. Post-study questionnaire
Demographic Results

N=77 participants completed all phases of study

142 nurses consented and submitted pre-test data

**Age**
- 18-24: 35%
- 25-34: 35%
- 35-44: 20%
- 45-54: 6%
- 55-64: 4%

**Shift Worked**
- Days: 63%
- Nights: 37%

**Nursing Degree**
- ADN: 55%
- BSN: 39%
- MSN: 6%
Results

**Attrition Rate**
- 46% for post-test
- 37% for all shift entries

**Top three interventions used:**
- 1. Deep breathing (83%)
- 2. Lavender inhaler (58%)
- 3. Meditation (30%)

NOTE:

<table>
<thead>
<tr>
<th>DF</th>
<th>t value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>77</td>
<td>-2.141</td>
<td>p&lt;.02</td>
</tr>
</tbody>
</table>
Top 5 Work stressors reported:

1. Patient interactions
2. Patient’s family interactions
3. High admission/discharge turnover
4. Patient death
5. Staff concerns
Identified outside stressors

1. Family: 70%
2. Finances: 46%
3. Spouse/Partner: 26.7%
4. Health: 21.3%
5. Other: 11.3%
6. Friends: 10%
Limitations

1. Technological delays—compatibility of Qualtrics survey and work emails; managing participants who started in multiple waves

2. Holidays—attempted to avoid

3. Nurses did not log into work email consistently; survey concluded if no log in after 10 days

4. Recruitment at one hospital much lower

5. Nurse Scholars were the conduit for communication

6. Statistically analyzing data was cumbersome due to multiple waves
Lessons Learned & Next Steps

Lessons Learned:

- Multiple delays affected retention; nurse respondents had to wait to start study
- Qualtrics delivered to work email-had to be Whitelisted
- Nurse Scholars not engaged if not part of the unit under study

Next steps:

Serenity room on medical surgical units at one Methodist Hospital (to do interventions); relaxation areas at others

Re-do study with paper/pencil; revise questions/data to be collected. Consider measuring retention long term.
Conclusion

The top 2 activities were easily accessible and expedient.

Tool kit activities used during shift increased resiliency at 6 weeks.

Increasing resiliency, while moderating stress, may improve the nurse work experience with the goal of decreasing burnout, thereby increasing retention rates.

HOW RESILIENT ARE YOU?
Thank you!

Thank you to:

1. Methodist Hospital Systems, Dallas
2. Dr. Huaxin Song, TTUHSC for statistical advice and analysis
3. Adam Wood, TTUHSC SON IT for assistance with Qualtrics
4. Nurse scholars
4. Nurse study respondents


