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BACKGROUND

- A Congenital Heart Defect (CHD) is a heart condition that is present at birth (Kovacevic et al., 2020).
- Nearly 40,000 infants are born with a CHD each year in the US (Kovacevic et al., 2020).
- A CHD diagnosis can cause major disturbances in maternal wellbeing (Kolaitis et al., 2017).
- Causes of maternal stress are related to **lack of information, ambiguity of infant care, and disturbances in maternal infant bonding** (Ashby et al., 2016).
- Current literature identifies the benefits of a prenatal orientation on mother's stress levels.

CLINICAL QUESTION

Does the implementation of a prenatal orientation to the cardiac NICU improve the stress levels of a mother with a prenatal CHD diagnosis?

DISCUSSION

Conclusion

- A fetal CHD diagnosis can cause maternal stress levels to be moderately high
- A nurse-led prenatal orientation to the Cardiac NICU can decrease maternal stress levels when it includes the following information:
 - Immediate postnatal period
 - Anticipated daily life in the NICU
 - Unit structure and function
- Specific stressors that a prenatal orientation may relieve include:
 - Anger
 - Feelings of upset
 - Feeling overwhelmed and hopeless
- A larger sample size may be more conclusive

Limitations Related to Sample Size

- Delay in translating documents to Spanish
- Study coordinator on vacation
- Termination of pregnancy

METHODOLOGY

Design

Quality improvement project

Sample

6 mothers, 18 years and older, with a fetal CHD diagnosis

Setting

A large women & children's hospital in Manhattan, NY

Intervention

Prenatal orientation to the cardiac NICU

Outcome

Maternal stress levels measured pre and post intervention with the Perceived Stress Scale (PSS)

Analysis

SPSS for quantitative and descriptive analysis

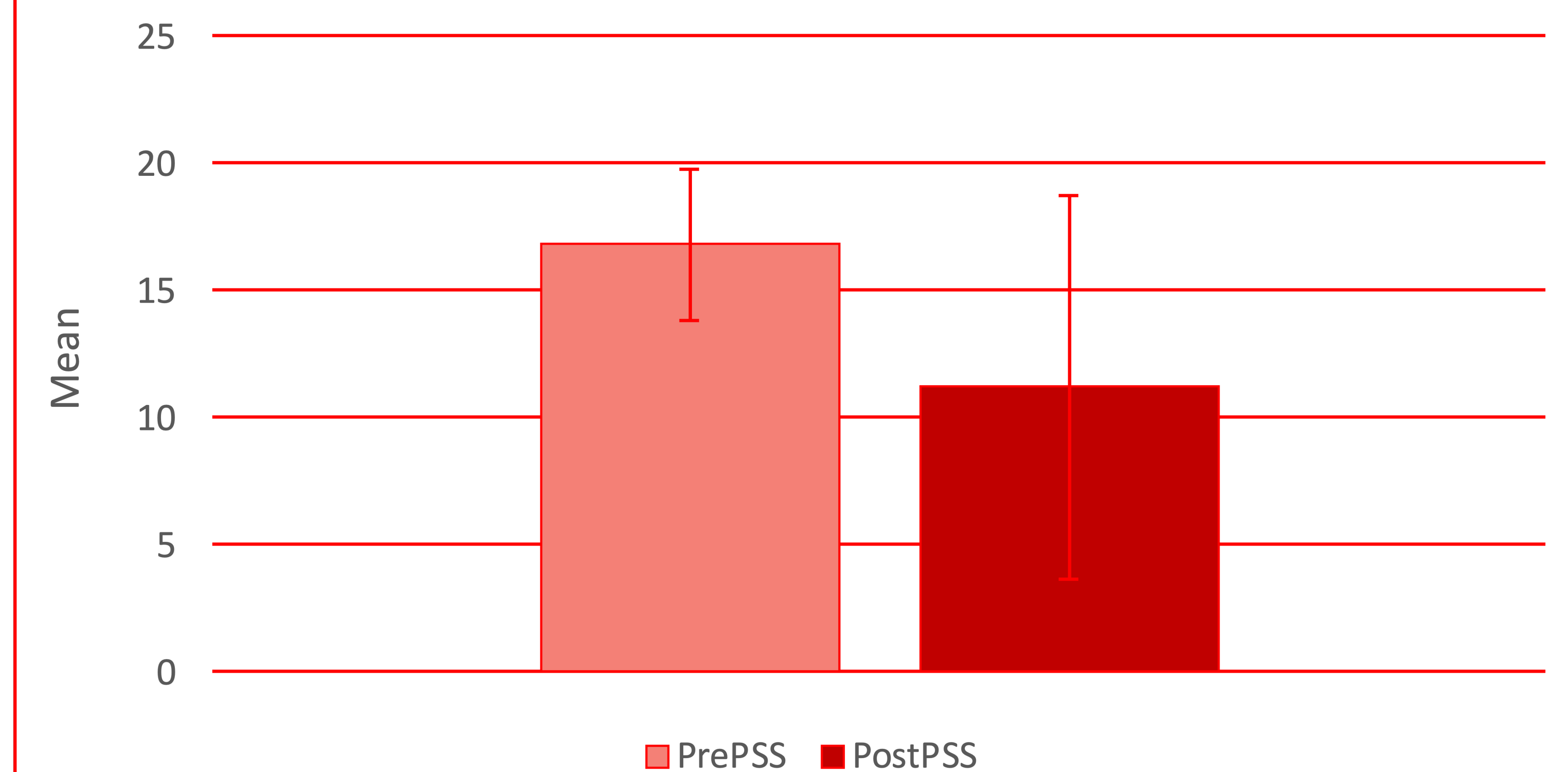
Implications

- Clinical Practice
 - Improve maternal wellbeing
 - Foundation of trust between mother and neonatal team
 - Opportunity for the development of a liaison nurse role
- Healthcare Policy
 - Improve rates of low birthweight and preterm birth
 - Reduce societal costs
- Quality/Safety
 - Safe and effective
 - Patient-centered care
 - Efficient delivery by currently trained staff nurses
- Education
 - Collaborative, ongoing assessment
 - Evidence-based practice

- Late transfers
- Too overwhelmed
- Other language barriers
- Secondary clinic location

RESULTS

Mean & CI PSS Scores Pre and Post Intervention



Wilcoxon Signed Rank Test revealed a **statistically insignificant** change in PSS scores ($z = -1.826, p = 0.068$) most likely due to a Type II Error in sample size.

Pre-Survey

Average total PSS score was within moderate stress levels ($M = 16.8, SD = 2.387$), with a 95% CI [13.84, 19.76]

Post-Survey

Average total PSS score was within low stress levels ($M = 11.2, SD = 6.058$), with a 95% CI [3.68, 18.72]

Conclusion

Stress levels were reduced after implementation of the prenatal orientation.

REFERENCES

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