

Implementing Prenatal Education and Support to Increase Preterm Labor Risk Knowledge Among Pregnant Women

Marina Reyes Maxwell, BSN; Deborah Busch, DNP, CRNP; Davina Moss-King, PhD

Background

- Preterm birth is leading cause of infant mortality in the U.S. and often plagues babies with long-term health problems¹
- Lack of education and self-confidence adds stress and contributes to under-utilization of prenatal health services by pregnant women.²
- Prenatal education is underutilized in the US, especially by those marginalized and at-risk.
- Community interventions such as prenatal health counseling and women's support groups show 26% decrease in infant mortality.³
- Compliance with medical interventions is more likely when supportive and holistic education is given to patients.⁴

Purpose & Aims

To provide supportive and targeted prenatal education to help pregnant participants reduce modifiable risk factors associated with preterm birth with an evidenced-based educational intervention in a prenatal support group setting.

- Aim 1: Adapt & critique prenatal education modules for presentation in online support group.
- Aim 2: Evaluate knowledge gained and program satisfaction with pre-/post-survey of participants
- Aim 3: Evaluate effectiveness of project by collecting self-reported gestational age at delivery

Intervention

- Best Start Prenatal Education Modules⁵ presented in online support session over 4 weeks via an online meeting
- Socially supportive and interactive session format



Methods

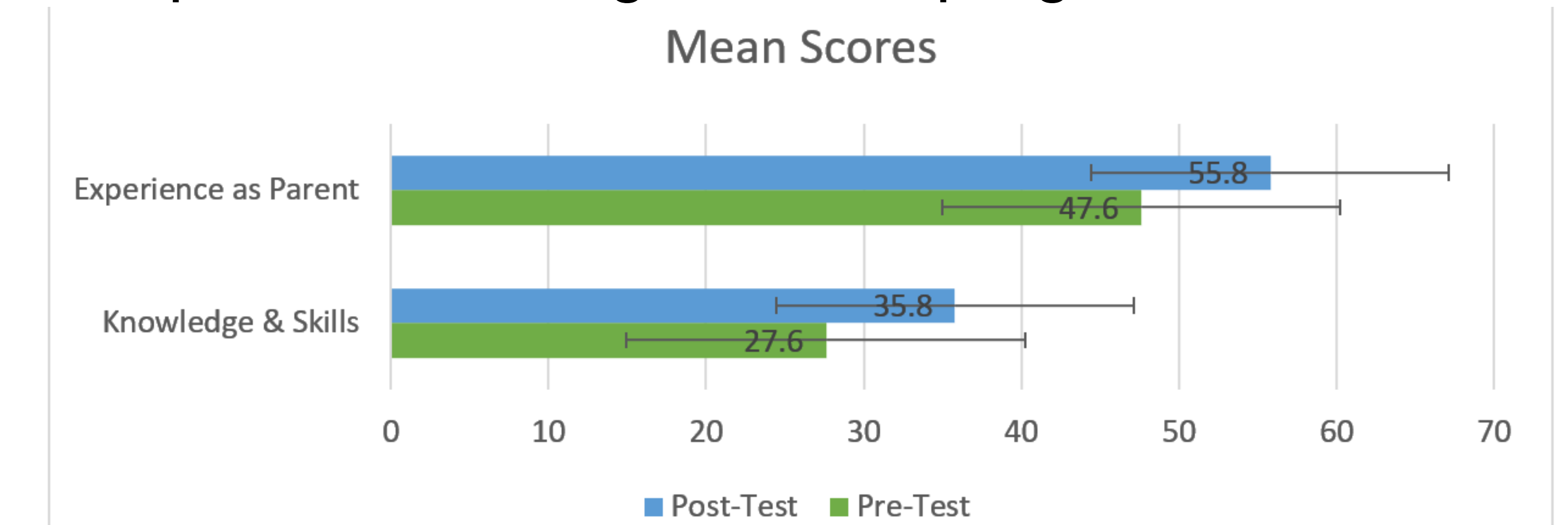
- Project design: QI project using pre-post design
- Setting: online support group run by perinatal counseling center based in urban Western NY
- Sample: Goal was 10-20 voluntary participants 3-8 months pregnant (LDS used for data collection due to inability to recruit participants).
- Measurement Tools
 - Anti-Defamation League Anti-Bias Checklist⁶
 - Upstart Parent post-survey and retrospective pre-survey for knowledge and skills gained and program satisfaction⁷

Results

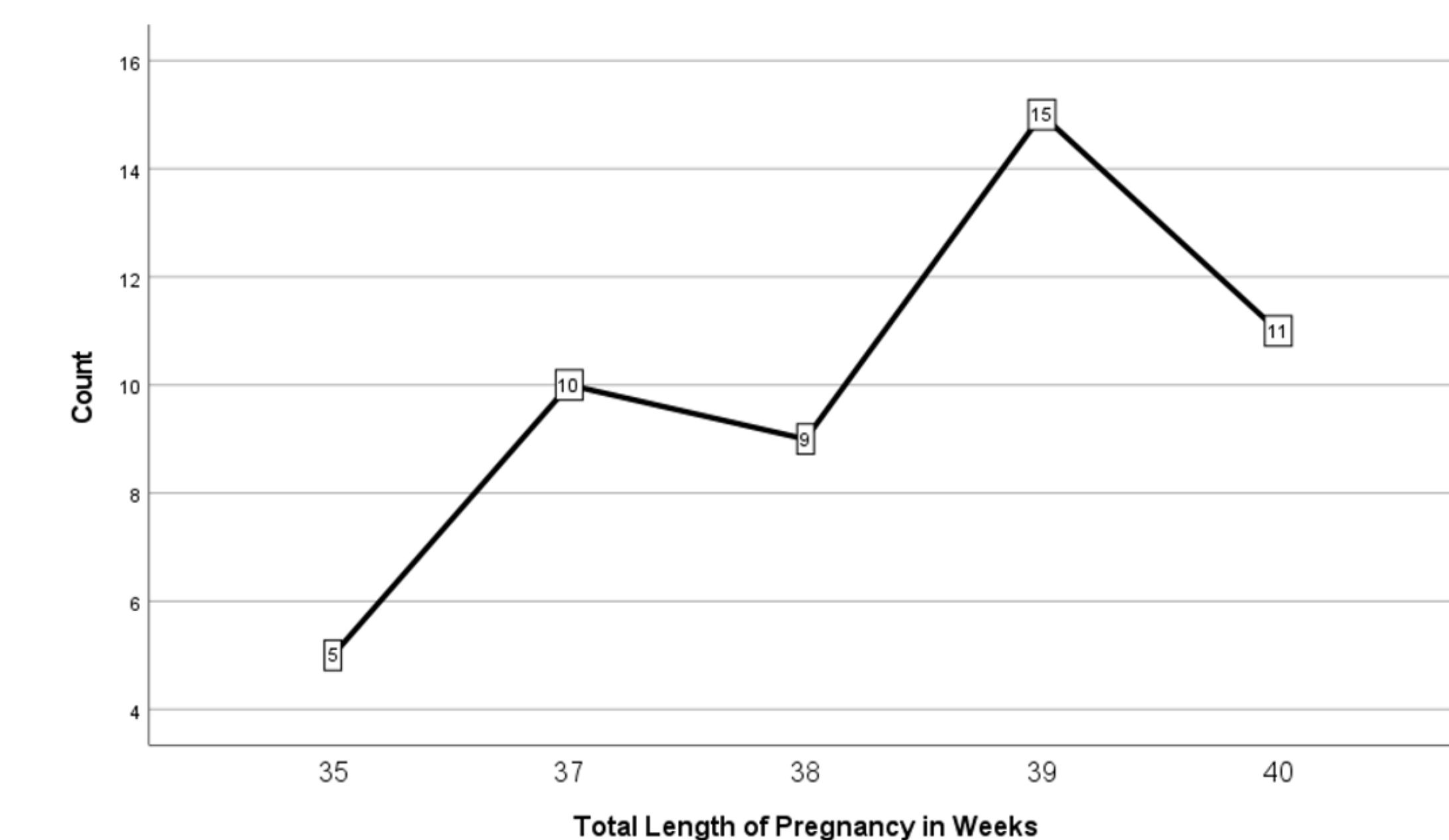
Aim 1: Education content scored well on Anti-bias Checklist: images & content inclusive of diverse ethnicities, modules accommodate different learning styles, images & content could be more inclusive of LGBT+ community

Results

Aim 2: Pregnancy knowledge & skills improved 15 points in post-test compared to pre-test with high level of program satisfaction



Aim 3: Preterm birth rate among participants was 9.8% compared to regional average of 9.2% but median pregnancy length was 39 weeks.



Results based on hypothetical LDS data, not actual participants

Conclusion & Sustainability

- Prenatal education should be combined with behavior modification interventions to have greatest impact on healthy pregnancy outcomes.
- Further research is needed on the impact of prenatal education and interventions on objective measures of pregnancy health.
- Education modules recorded for future use by organizational mentor

References

1. March of Dimes. (2022, March 7). 2021 March of Dimes Report Card. March of Dimes. <https://www.marchofdimes.org/peristats/tools/reportcard.aspx>
2. Chedid, R. A. & Phillips, K. P. (2018). Best practices for the design, implementation and evaluation of prenatal health programs. *Maternal and Child Health Journal*, 23(1), 109-119.
3. Straub, H., Qadir, S., Miller, G., & Borders, A. (2014). Stress and Stress Reduction. *Clinical Obstetrics & Gynecology*, 57(3), 579-606.
4. Noronha, J. A., Bhaduri, A., Bhat, H. V., & Kamath, A. (2013). Interventional study to strengthen the health promoting behaviours of pregnant women to prevent

anaemia in southern India. *Midwifery*, 29(7), 35.

5. Best Start Resource Centre (2018). Program Overview. Prenatal Education Program.

https://en.beststart.org/sites/en.beststart.org/files/u7/Program_Overview_2018_EN_Final.pdf

6. Anti-Defamation League (2021, April 16). Creating an Anti-Bias Learning Environment. <https://www.adl.org/media/2203/download>

7. Benzies, K., Clarke, D., Barker, L. (2013). UpStart Parent Survey: A new psychometrically valid tool for the evaluation of prevention-focused parenting programs.

Maternal and Child Health Journal, 17(8), 1452-1458.