

An Evaluation of a Maternal and Child Health Passport for Baltimore City Mothers



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Background

- The U.S. has the highest global rates of maternal mortality & morbidity
 - 16.9 deaths per 100,000 live births³
 - **increased by 20%** since 2000³
 - Influenced by inadequate prenatal care utilization^{3,7}
- Prenatal Care = education, screenings, check-ups, etc.⁵
- Sufficient maternal health literacy (MHL) + feelings of empowerment → **better health outcomes for mothers & children**^{1,5, 6, 7}
- Health passports are booklets used for managing health & learning about relevant topics
 - Improves: **health literacy**, care management, quality of care, patient-provider communication²
 - Limited research on their use in clinical practice

Purpose

The purpose of this research project is to adapt and implement a maternal and child health (MCH) passport to increase MCH literacy and self-confidence among pregnant women in Baltimore City who are receiving doula care.

Aims

- 1) Adapt a valid Maternal and Child Health (MCH) passport.
- 2) Hold a virtual in-service for participating doulas to learn the content in the MCH passport and proper use of the tool with clients.
- 3) Determine if the mothers' MCH literacy scores change from baseline measurements after using the MCH passport for 4 weeks.
- 4) Determine if the mothers' self-confidence scores change from baseline measurements after using the MCH passport for 4 weeks.

Methods & Intervention

Design: pre-post study design taking place at a nationally renowned medical institution in Baltimore, Maryland.

Sample: 50 pregnant women enrolled in the selected doula program, 10 doulas

Measurement Tools and Data Analysis

- Evaluation of MCH Passport by Expert – descriptive statistics
- Doula Knowledge Checklist – descriptive statistics
- Maternal Health Literacy (MaHeLi) Composite Scale – paired t-test
- Parenting Sense of Competence (PSOC) Scale – paired t-test

Intervention

- Adapt MCH passport for project and receive feedback from 5 field experts
- Provide virtual training for doulas to ensure competency
- Doulas meet with mothers for at least 30 minutes once weekly for 4 weeks to review the MCH passport. Must complete the entire passport within the 4-week period.

*A learning data set was created for doula & mother data. Evaluations from experts are real.

Conclusions

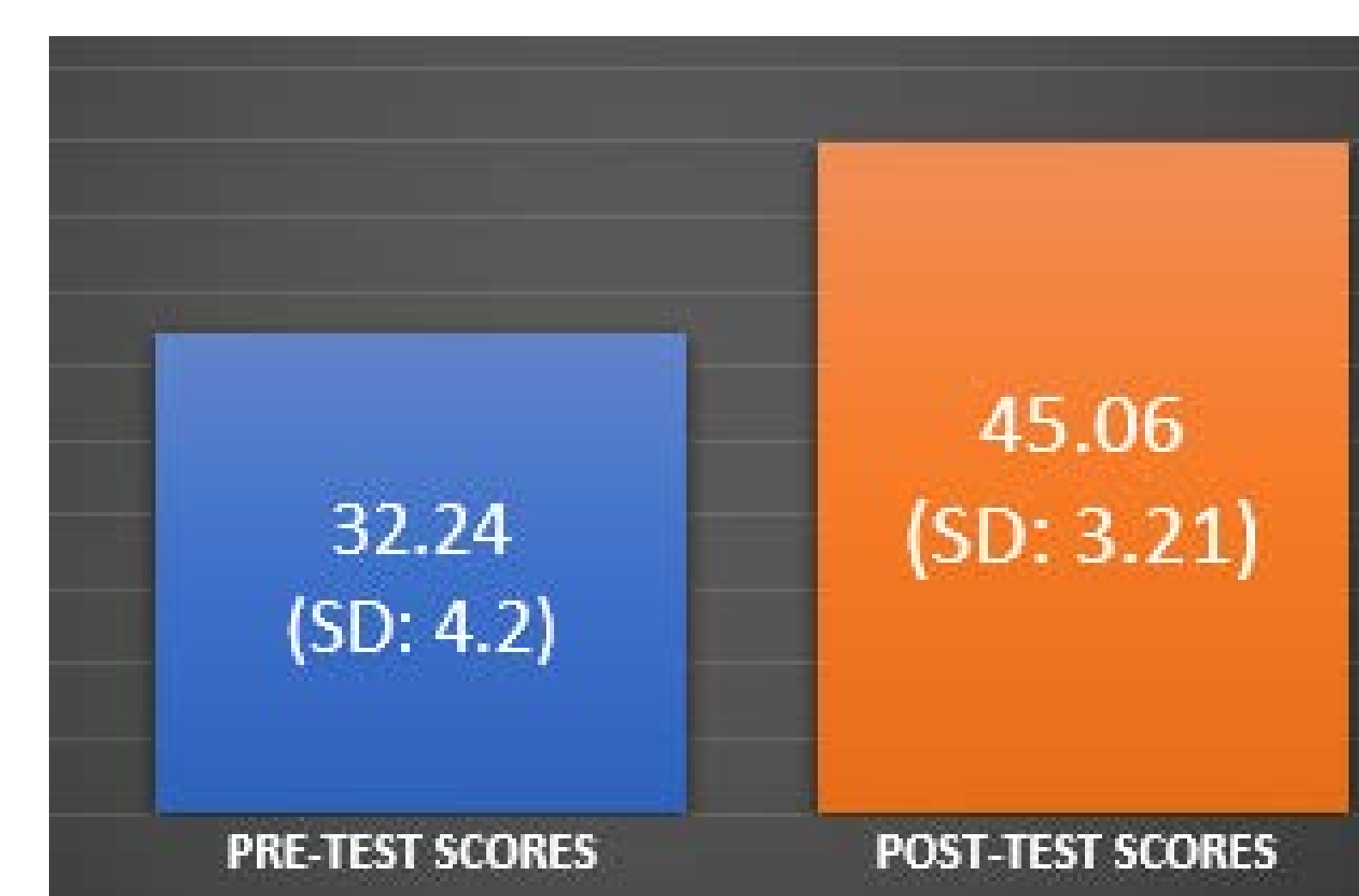
- Field experts rate the MCH Passport as a suitable tool for target population
 - Simple language, graphics, readability, & accurate information
- The MCH passport is an effective tool for improving MHL and self-confidence in Baltimore City mothers
 - MHL scores improved by 12.82 points & self-confidence by 1.38 points → **statistically significant**
 - Tool can potentially help combat U.S. maternal mortality & morbidity rates
 - Further supports benefits of health passports
 - More research needed on this tool

Results

Aim 1: Passport Suitability Rated by Field Experts - **14.8** (SD: 2.39) out of a max score of 18

Aim 2: Doula Competency After Training - **10.9** (SD: 0.57) out of a max score of 13

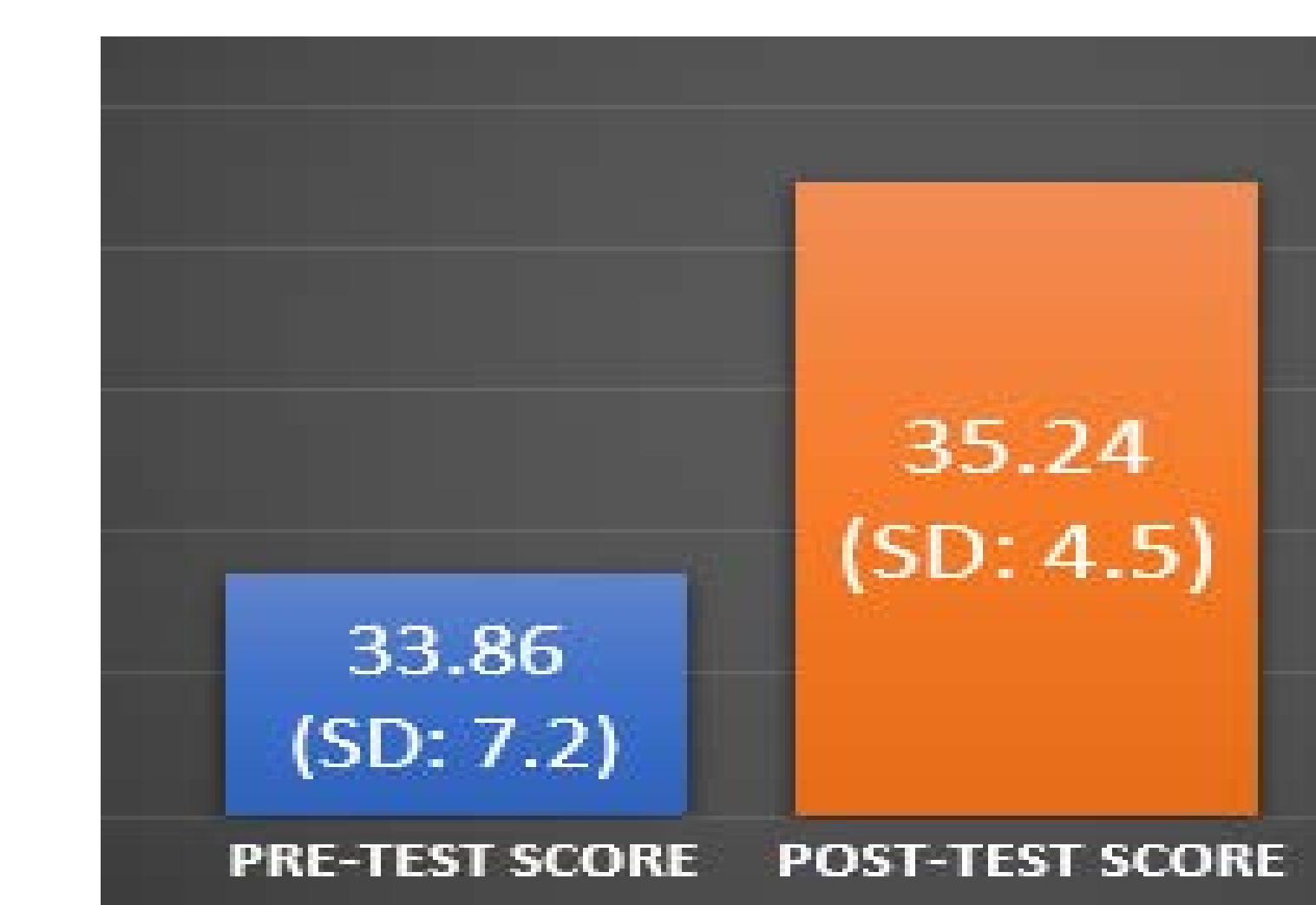
Aim 3: Mothers' Average Pre-Post MaHeLi Scores



On a 60-point scale; higher score → greater MHL

Scores increased by 12.82 points (SD: 3.26), (p<0.001)

Aim 4: Mothers' Average Pre-Post PSOC Scores



On a 42-point scale; higher score → greater self-confidence

Scores increased by 1.38 points (SD: 34.49), (p<0.05)

Dissemination

- The President of the institution's Community Health Innovations Dept has agreed to print hard copies of the MCH passport and make the tool available at health centers within the network.
- The tool is now part of the dept's collection of health passports (e.g. men, women, children, general adult).

References



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