Collaborative Creation of MommaConnect: mHealth Therapy App for Enhancing Mother-Infant Interaction and Alleviating Postpartum Depression

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Objectives
Without treatment, postpartum depression (PPD) increases the risk for poor mother-infant interaction, reduced infant safety measures, decreased breastfeeding, maternal functional impairment, suicide and long-term risks to infant neurobehavioral development. Based on our Mother Baby Connections intensive outpatient program, MommaConnect is a mobile health application used by mothers and clinicians and designed to provide accessible and effective delivery of tailored treatment. MommaConnect integrates Interpersonal Psychotherapy and Mother Baby Interaction Therapy to address PPD and mother-infant interaction. MommaConnect is being co-created with mothers and PPD providers to ensure that the design reflects their shared experiences and challenges. This presentation will share the evolution of MommaConnect, co-creation process, focus group/feasibility test results, and key features of MommaConnect.

Methods
We employed the PRECEDE-PROCEDE Model (Green et al., 1980; Green & Kreuter, 2005) and a user-centered approach to inform the development and content of MommaConnect. We collected formative qualitative data through online focus groups of diverse mothers and clinicians. Participants were shown mock-ups of the app to elicit feedback and test features. We employed content analysis following verbatim transcription. Feasibility testing was assessed with the System Usability Scale.

Results
The user-centered design, format and content of MommaConnect reflects systematic, iterative development utilizing feedback from mothers with PPD experience and clinicians who serve this population. Results of focus groups revealed specific needs, barriers, motivators, and impressions about MommaConnect. Overall, participants endorsed the initial design and functionality, and recommendations were integrated into the revised design for feasibility testing. System Usability Scale scores (.91) were in the high range.

Conclusions
To be used in collaboration with mental health providers, MommaConnect holds promise as an efficient and relevant therapy approach to expand access to specialized treatment, increase engagement, improve health outcomes, and ultimately decrease healthcare disparities for diverse women experiencing PPD and their infants. Next steps include larger feasibility and usability trials, and continuing to develop MommaConnect with a focus on Black/African American birthing parents with recently awarded national grant funding.

Acknowledgements
Recently awarded funding for MommaConnect:
- Challenge.gov: Racial Equity in Postpartum Care Challenge grant awarded by the Health and Human Services’ Office on Women’s Health in partnership with the Centers for Medicare and Medicaid Services;
- SBIR Phase 1 grant funded by National Institute on Minority Health and Health Disparities. (Grant 1 R43 MD018236-01)

Disclosures
None