Toolkit for Supporting Maternal Mental Health in Public Preschools

CLINICAL SCHOLARS

A Robert Wood Johnson Foundation program

Toolkit for Supporting Maternal Mental Health in Public Preschools

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ABOUT

This toolkit can be used to guide the development and implementation of interventions to promote mental health in community settings and specifically to prevent maternal depression in preschools.

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Executive Summary

Maternal mental health problems can have far-reaching effects on family and child mental health and functioning.

Immigrant Latinas have as much as a threefold increased risk of postpartum depression compared to the general population of perinatal women (Lara-Cinisomo et al 2016). At the same time, Latinas, and particularly immigrant Latinas, have low rates of engagement in mental health treatment. Barriers to treatment include lack of insurance, shortages of culturally and linguistically competent providers, competing demands at work and at home, and stigma. Poverty and its associated stressors (e.g., housing and food insecurity) are potent risk factors for maternal mental health problems (De Oliveira et al 2017) and can limit families' ability to access mental health treatment. Additionally, depression may decrease parents' participation in programs supporting low-income families (e.g., WIC).

Baltimore is an "emerging settlement" for Latino immigrants, a historically non-Latino settlement area that has experienced a dramatic growth in the Latino population in the last 15 years, with a resulting disparity between mental health need and service utilization. Baltimore is home to a diverse immigrant community, primarily from Central America and Mexico. Compared to the general US Latino population, Latinos in Baltimore are more likely to be foreign born, undocumented, have low income and educational attainment and limited English proficiency (Negi et al 2018). To address the wicked problem of maternal depression risk and limited access to mental health care amongst immigrant Latinas, non-traditional service delivery models are critical.

Schools have been described as a more accessible and less stigmatizing environment in which to address mental health needs, particularly for Latino families. Baltimore City Schools recently adopted a "Community School" policy aimed at integrating family and community supports into the school structure. Some schools are home to Judy Centers. Established by the Maryland state legislature in 2000, Judy Centers provide family-centered childcare, school-readiness education and assessment for children 0-5 years. They are located at Title 1 schools across the state, and children are eligible for services based solely on residence within a school's catchment area. There are 60 Judy Centers across the state and 1/4 of participating families self-identified as Hispanic. Community partnerships to address local needs are a cornerstone of Judy Center programming.

Mothers and Babies (MB) is cognitive–behavioral intervention designed to teach mood regulation skills to women at risk for post-partum depression (PPD). Originally developed for Latina women, the United States Preventive Services Task Force recognized MB as one of the two most effective counseling interventions for PPD prevention. MB is built on cognitive-behavioral therapy (CBT) with content specific to the perinatal period. Sessions cover three core domains:

1. Engaging in pleasant activities
2. Identifying/reframing unhelpful thought patterns
3. Building one's social support network

MB builds on attachment theory, with activities integrated throughout the curriculum that promote parent-child interaction. MB was selected based on its previous use with Latinas, strong evidence base, availability in multiple formats (group, one-on-one, and online) and flexibility in who can deliver the intervention: it is designed to be delivered by individuals from a range of educational and professional backgrounds.

To date, our team has directly delivered Mothers and Babies (MB) to 62 mothers from 3 Judy Centers in Baltimore City.

We partnered with Judy Center staff to deliver group format MB to Spanish-speaking mothers attending their centers. We enriched MB with resources to address food insecurity with the aim of reducing stress and potentially allowing women to focus on programming. Following the onset of the COVID-19 Pandemic, we made the following adjustments:

- We converted the MB format to a virtual group and worked with Judy Centers to overcome technology and internet challenges
- We added a brief Q&A session with a pediatrician to each MB session to address a range of concerns and questions around COVID-19, vaccines, health care, and child development
- We partnered with a student organization, Hopkins Community Connection, to assist with Supplemental Nutrition Assistance Program enrollment for interested mothers
- We introduced the use of group text messaging as a platform to share information about local food and COVID-19 resources, Judy Center offerings, and session reminders and intervention content

Also, we have partnered with the MB team at Northwestern University to train staff from 47 different Judy Centers, representing 20 of 24 jurisdictions across the state of Maryland.

"What I liked the most was that I felt important…

I know that babies, kids are important for a mom, but for the whole world babies are the most important and it's as if moms always are left in the background. But what I liked about this program is that I felt like both babies and moms were given priority. And well yes, as a mom, sometimes you put yourself last, but in this program, they reminded us that we're also important, and that since we're the foundation of the family, we need to be doing OK so that our whole family is OK."
– Mothers and Babies participant in Cohort 4

"I think the program went amazing…

We have moms that are happy, implementing the different things that they learned during the class, switching the bad talk for good, practicing mindfulness… sitting down and listening to something is just a relaxing thing to do for her to learn so many different things. And their confidence, for me was so important because I think the group, they were not just, you know, classmates, but they were like, they become these powerful friends, you know, motivating each other and sharing their experiences." – Judy Center staff member and MB facilitator

Planning

Academic Setting and Clinical Context

In 2013, Johns Hopkins established Centro SOL (Center for Salud/Health and Opportunities for Latinos) to address the health and healthcare needs of Baltimore's growing Latino community. Centro SOL operates at the intersection between community engagement, healthcare delivery and research and its faculty and staff have leveraged community and institutional relationships and medical expertise to address disparities in mental health in the immigrant Latino population in Baltimore; having identified mental health as the leading health concern for the local community.

The Johns Hopkins Bayview Medical Center Children's Medical Practice (CMP) is an urban, academic general pediatric practice serving 7,000 patients. 75% of the 13,000 annual visits are for children of limited English proficiency (LEP) Latino parents. The majority of patients at CMP are publicly insured, come from low-income households and have parents with limited health literacy. The CMP clinical team aspires to provide effective patient and family- centered care that promotes the health and well-being of their patients. The practice has a long history of participating in successful patient-centered research projects and in particular have been able to effectively engage LEP Latino families in a variety of projects through its Family Advisory Board and Youth Advisory Board.

Our three core team members have worked jointly and independently with the Latino community and as part of Centro SOL and the Children's Medical Practice: Flor Giusti as a Clinical Social worker with extensive experience working with the Baltimore immigrant community and delivering group interventions in a range of settings, Rheanna Platt as a child/adolescent psychiatrist with expertise in Latino mental health as medical director of Johns Hopkins Bayview Medical Centers Latino Family Clinic and with approaches to addressing maternal mental health in general pediatric settings and Sarah Polk as a pediatrician, co-founder and co-director of Centro SOL and medical director of the Children's Medical Practice.

Project Team

Flor Giusti, LCSW-C: Social Worker*

Rheanna Platt, MD, PhD: Child Psychiatrist*

Sarah Polk, MD, ScM, MHS: Primary Care Pediatrician*

Lindsay Cooper, MA: Research Program Coordinator

**Clinical Scholars Fellows (pictured left to right)*

Focusing on Maternal Mental Health

Through the course of our work, we were familiar with the numerous stressors faced by children in immigrant families as well as their parents. In a needs assessment of 100 Latina mothers of children ages 0-5 attending the Children's Medical Practice, 35% of respondents screened positive for at least mild depressive symptoms. Moreover, almost all survey respondents indicated that they did not have a primary care provider or health insurance. Additionally, through experience in other areas, we recognized the unique benefits of group interventions as an opportunity for parents to receive support from and share their wisdom with other parents.

Responding to a Community Request

Our project began after a nearby Baltimore Judy Center reached out for help addressing the mental health of Latina mothers. We conducted a needs assessment with Judy Center staff, Spanish-speaking mothers attending Judy Centers, and local social service providers serving immigrant Latino families. We then selected the Mothers and Babies intervention based on its strong evidence base with Latina mothers, and that it has been delivered with fidelity by non-mental health professionals.

Key Skill Sets

There were a number of key skill sets that enabled our project's development. Most importantly, we built our work on a foundation of *community connectedness*. This was established through:

- Centro SOL's ongoing work in addressing a range of community-identified needs, e.g., youth development, healthy living, food distribution, and mental health initiatives
- Flor Giusti's longstanding partnerships with several community-based organizations
- Johns Hopkins Bayview Community Psychiatry Program's existing mental health work in school-based settings

Given the role of culture in shaping perceptions about motherhood and about mental health, we also felt it was important to partner with individuals who could bring *cultural awareness* to programming. We identified a bilingual and bicultural mental health therapist, Omaira Mejia Castaño, who had an interest in group-based work with parents, to serve as an initial lead for program delivery, supported by a range of individuals including a Community Health Worker, school staff, and our project team.

Finally, it was critical for us to be *humble and flexible* in order to respond to the evolving needs of Judy Center staff and intervention participants, particularly during the pandemic. We recognized the interdependence of everyone involved and that all parties brought expertise to the endeavor that could improve and enrich it. We tried to manifest our humility by listening intently and being responsive to the competing demands faced by Judy Center staff and participants. Judy Center staff and leaders were responsiveness and flexible in return. At the onset of the pandemic, as we worked to address Judy Center needs, the Centers worked with participants to lend electronic devices and hot spots for participants who needed them which facilitated our conversion to virtual delivery of MB. We needed to work with the Judy Centers to deliver the intervention in a manner that *evolved along with centers and local capacity*. In another example, while we trained Judy Center staff in the intervention in the event of staff turnover or unexpected absences, we worked to maintain our team's ability to deliver the intervention.

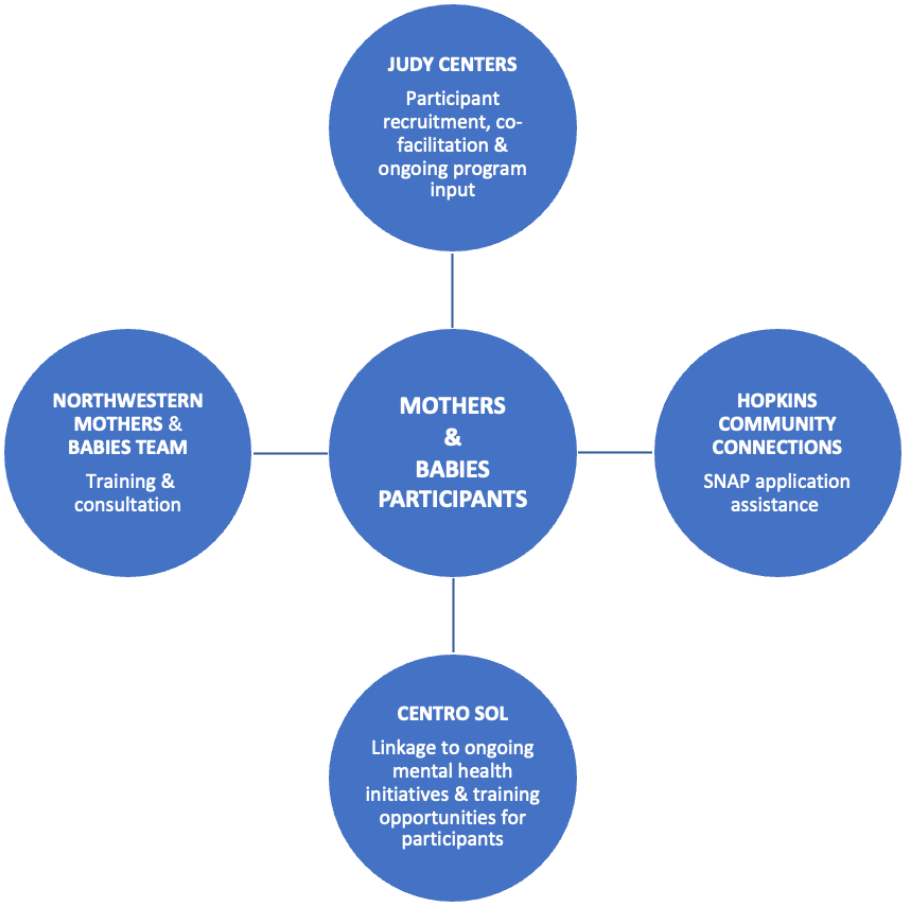
Funding

Our primary funding source was a three-year, $315,000 grant from The Robert Wood Johnson Foundation. This funding was used to cover:

- Personnel, including: Faculty and staff salaries to enable project work, stipends for community mental health providers who facilitated several of the MB cohorts, and to fund time for a student intern to assist participants with navigation of nutrition resources
- Equipment, including provision of headphones to optimize participant privacy during virtual session, printing and mailing of MB participant manuals
- Participant incentives (for completion of research and evaluation measures)
- Partial coverage of costs for trainings in MB

Additional funding for statewide Judy Center staff training and six months of post-training technical assistance and consultation from the MB team came from the Leonard and Helen Stulman Foundation and The Maryland State Department of Education.

Community Partnerships



Our project arose in response to a need identified by a local Judy Center Director. After launching MB at three Judy Centers, we met with their directors and coordinators quarterly. In these meetings, we discussed logistics of MB delivery, ways in which our team might coordinate with and/or highlight other programming offered at the Judy Centers (e.g., parenting classes, food pantries), and evolving needs of families related to COVID-19. Judy Center staff attended most of the intervention sessions and were subsequently trained in MB; post-training we have continued to meet with and support Judy Center staff facilitating MB through in-session assistance with technical issues, session preparation, and coaching/ feedback related to sessions. We met with state leaders of the Judy Centers approximately twice annually staff to identify opportunities to sustain at existing site and to expand it to additional sites as well as to discuss strategies for promoting participation of Spanish-Speaking families in Judy Center programming, through coordination with pediatric practices serving infants (who can provide information to families about their local Judy Centers).

We worked with local and national experts in the Mothers and Babies Course to support training and implementation of MB as well as to guide adaptations in the context of the COVID-19 pandemic (as detailed in Project Work section of this toolkit).

Hopkins Community Connection (HCC) has been at the forefront of Social Determinants of Health (SDH) innovation by addressing families' essential needs during health visits for 15 years. HCC uses trained and supervised undergraduates, referred to as advocates, to connect patients to community resources to address unmet social needs. HCC provided an advocate for each Mothers and Babies cohort to help interested participating mothers apply for SNAP or otherwise address food insecurity. We focused advocates' efforts on food insecurity based on 1) consultation with Judy Center staff, 2) the awareness that Judy Centers provide families with many important services and that individual SNAP application assistance was an unmet need and 3) our experience overcoming system-level obstacles to SNAP enrollment encountered by immigrant Latino parents of SNAP-eligible children.

Judy Center Pilot Partners

- Commodore John Rodgers: Veronica Jackson and Nikki Venuti
- John Ruhrah: Yenssi Cisneros, Angeles Mendez Jimenez, Audry Motlagh-Harvey, Katie Vaselkiv
- Lakeland: Melissa Cercado and Tessera Slade

Mothers and Babies Training and Technical Assistance

- Original training session:
  - Mimi Le – Professor, The George Washington University
  - Tamar Mendelson – Professor, Johns Hopkins Bloomberg School of Public Health
- Ongoing training and technical assistance: Northwestern University Center for Community Health
  - Darius Tandon – Associate Professor, Medical Social Sciences; Director Northwestern Center for Community Health and Northwestern Mothers and Babies Program
  - Erin Ward (MB Trainer/Consultant)
  - Jessica Ogwumike (MB Evaluation and Implementation Assistant)
  - Jaime Hamil (MB Project Manager)

Johns Hopkins Mothers and Babies Facilitators

- Omaira Mejia – Therapist (Facilitator who transitioned to consulting center staff in delivering MB)
- Whitney Visker and Veronica Torres – Community Health Workers

SNAP Assistance

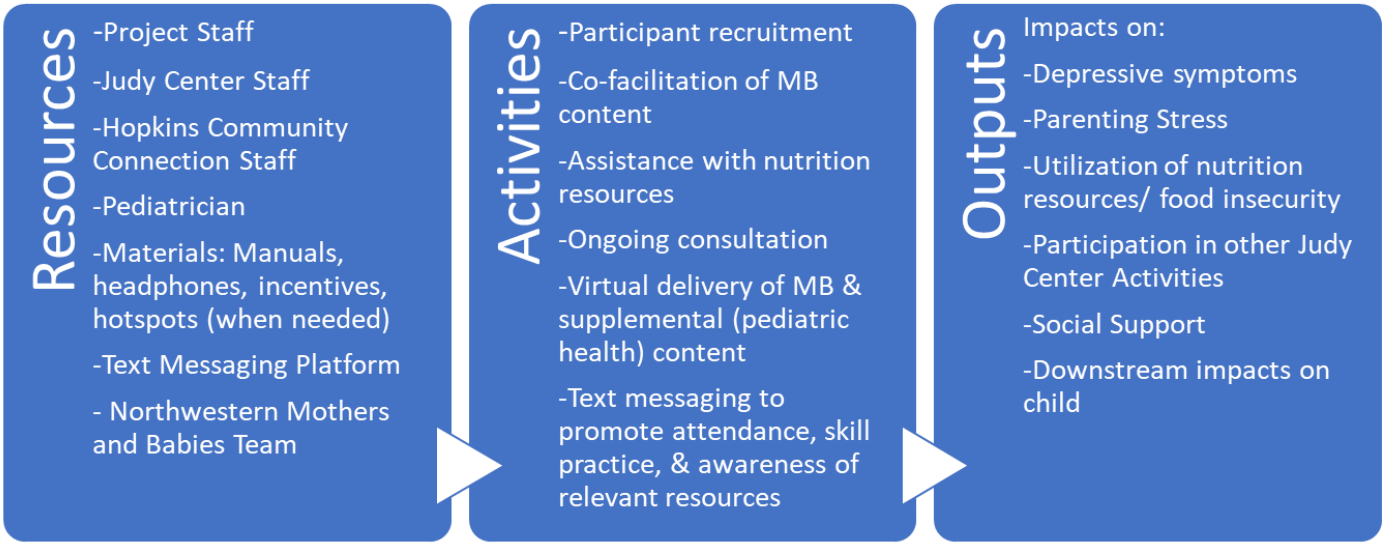
- Hopkins Community Connections (organization training college student volunteers to address unmet social needs): Kristin Topel – Program Director

Expanding and Sustaining Mothers and Babies in Judy Centers throughout Maryland

- Maryland State Dept. of Education (administrative home for Judy Centers): Amy Beal, Nancy Garcia and Amanda Holliday

Johns Hopkins Bloomberg School of Public Health Department of Population, Family and Reproductive Health

- Cynthia Minkovitz – Leading the Pritzker Children's Initiative



Project work

Our project began with a stakeholder assessment related to needs and preferences for an intervention supporting Latina mothers attending Baltimore City Judy Centers, followed by selection of and training in the Mothers and Babies intervention. Subsequent steps included an initial pilot of the intervention at a Judy Center, adaptation of the intervention for virtual delivery in the context of COVID-19 and the expansion of training and supports to Judy Centers across Maryland. Below we detail these steps, along with our project's future directions.

1. Needs Assessment

We conducted community stakeholder interviews with mothers attending the Commodore John Rodgers Judy Center and developed an advisory board with community stakeholders to identify priority areas and needs in order to choose and/or adapt a mental health program that is best tailored to serve these parents. The parents expressed great interest in an intervention that would improve their ability to parent, understand how to raise a child in different stages of development, manage stress and communicate effectively with partners and children. Stakeholders also emphasized topics of stress management, awareness of immigration stressors, and psychoeducation as important components of an intervention.

2. Selection of MB and Initial MB Training

Next, we reviewed existing interventions that might meet stakeholders' expressed needs, with an eye towards interventions that could be delivered in settings with limited resources (e.g., could be delivered by non-mental health professionals, available in a group format), ultimately selecting Mothers and Babies. Once we selected the Mothers and Babies intervention, we identified experts/trainers in the intervention. Drs. Tamar Mendelson and Huynh-Nhu Le, both of whom had been involved in adaptation and/or delivery of the MB program, agreed to provide an initial in-person training in November 2019. This training was delivered to local Judy Center staff as well as local mental health providers serving perinatal women. In addition, the Northwestern Mothers and Babies Team provided ongoing supervision and implementation consultation to training participants.

3. Initial Pilot at Commodore John Rodgers Judy Center

We began our initial cohort of MB participants, recruited from the Commodore John Rogers (CJR) Judy Center, in January of 2020. We worked closely with the Judy Center Family Service Coordinator to develop a recruitment plan and coordinate the timing of the intervention with other offerings at the Judy Center. For the initial cohort, CJR staff selected participants based on prior participation in group interventions offered at the Judy Center (e.g., parenting programs) as well as mothers who staff felt would benefit in a preventive intervention for maternal depression. We coordinated our intervention to be timed with in-person offerings for young children and provided refreshments at each session. Based on staffing limitations at CJR (particularly a paucity of bilingual staff), we provided co-facilitators for the pilot cohort (Omaira Mejia, LCPC, a bilingual and bicultural mental health therapist and Whitney Visker, a bilingual and bicultural community health worker). After each session, mothers filled out a brief, 3-question survey to gauge satisfaction with and understanding of each session. With respect to recruitment, based on Judy Center preference, we allowed mothers to participate in the intervention even if they scored in a clinical range for depressive symptoms. We notified family service coordinators in the event that a potential participant had a significantly elevated score, to coordinate referral for treatment. In most cases, family service coordinators were already familiar with family needs and/or mothers were receiving related support services (e.g., individual counseling).

4. Planning for Local Expansion and Adaptation

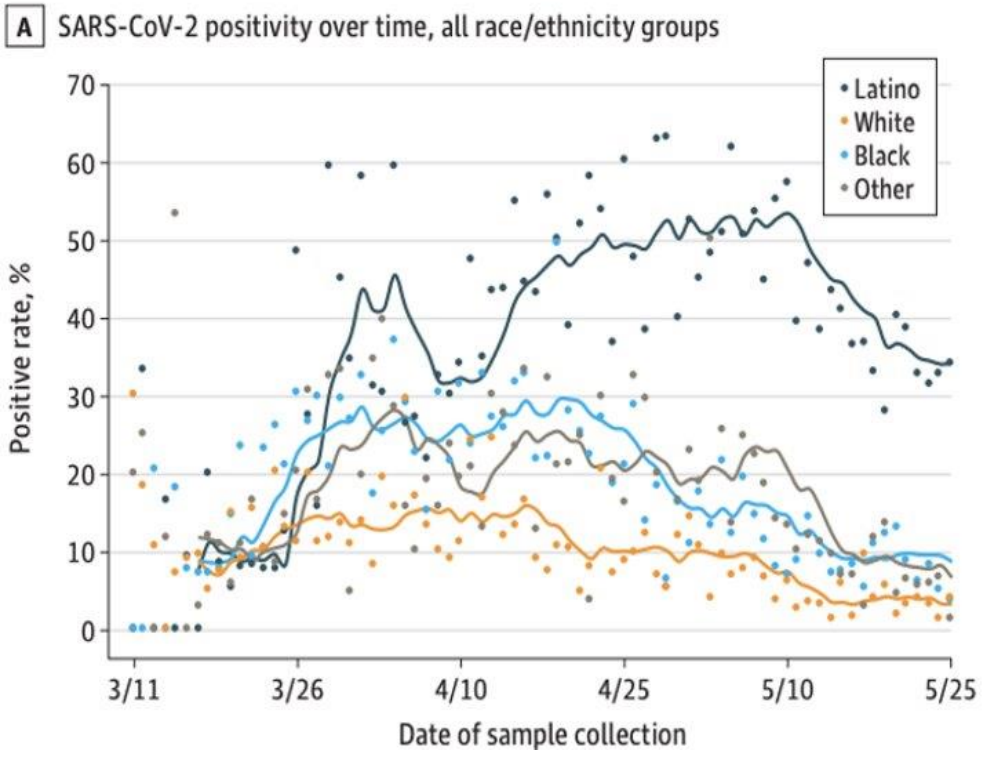
While starting the initial cohort at CJR, we planned for expansion to other centers in Baltimore serving high proportions of Spanish-speaking families (John Rurah and Lakeland Judy Centers). We began quarterly meetings with directors and family service coordinators of all three Judy Centers to discuss:

- Observations from the initial pilot at CJR
- Anticipated needs and logistics for delivery to John Rurah and Lakeland Judy Centers (for example, one center had an embedded mental health professional who was able to serve as an intervention co-facilitator)
- Discussion/prioritization of the most common social needs that might preclude or limit participation in MB

Judy Center staff agreed that food insecurity was the most commonly reported unmet social need by clients and expressed interest in working with our team to address these needs via various approaches, including assistance with food benefit enrollment and reminding families of existing resources (e.g., school food pantries).

5. Onset of COVID and Pivots / Adjustments Made

The onset of the COVID-19 pandemic occurred partway through our first MB pilot. With the onset of the pandemic, Judy Centers suspended in-person programming. Judy Center staff assessed families' technology needs (e.g., for hotspots and/or devices) for school and programming participation, and our team connected with participants to determine their interest in continued meetings via a virtual format. Most participants expressed interest in meeting virtually. Prior to resuming MB sessions virtually, in light of the intersecting needs and concerns faced by families (e.g., remote schooling for older siblings, social, financial, and medical needs), we held several virtual discussion sessions (without MB content) attended by Dr. Polk (a pediatrician) and MB facilitators to answer questions about COVID-19, healthcare access, hospital policies, remote schooling and food distribution.



Source: Martinez DA, Hinson JS, Klein EY, et al. SARS-CoV-2 Positivity Rate for Latinos in the Baltimore–Washington, DC Region. JAMA. 2020;324(4):392–395. doi:10.1001/jama.2020.11374

To adapt the program for virtual delivery, we made the following adjustments:

- Modified the six 90-minute in-person MB sessions for delivery in ten 60-minute virtual group sessions (plus an additional 15 minutes with a pediatric health provider).
- Offered help applying for the Supplemental Nutrition Assistance Program (SNAP) and other nutrition resources via a Hopkins Community Connection resource advocate.
- Coordinated with the Judy Centers to provide participants with hot meal delivery during program.
- Helped eligible moms enroll in the Baltimore City Health Department-Amazon Home Delivery Food Box Program.
- Added between-session text messages to promote session attendance, reinforce skill practice and to remind and/or alert participants about local resources (e.g., vaccines, food pantries).

A benefit of virtual delivery was that Judy Centers could "share" cohorts across sites, meaning that a cohort could be comprised of mothers attending more than one Judy Center and be co-facilitated by staff from more than one Judy Center. Virtual delivery therefore facilitated our planned expansion of the pilot to three local Judy Centers in Baltimore City.

6. Statewide Expansion and Planning for Sustainability

Based on experiences and outcomes with Baltimore City Judy Centers, our team (including local Judy Center partners) met with statewide Judy Center leadership to discuss expansion of MB delivery to Judy Centers across the state of Maryland. Delivery of MB was in keeping with Judy Centers' two-generation focus as well as with recent related developments including (1) anticipated legislation funding a significant expansion in the number of Judy Centers statewide; and (2) the launch of Building Better Beginnings, a statewide Pritzker Children's Initiative-funded program to expand access to high quality programming to support families of children ages 0-3. Our team partnered with the Maryland State Department of Education to provide funding to conduct a statewide Judy Center training and technical assistance in the Mothers and Babies Course alongside the Northwestern Mothers and Babies team. To date, we have trained 90 staff from 47 different Judy Centers and have worked with centers to identify staff who will engage in additional "train-the-trainer" programming. Along with the Northwestern consultation team, our team has continued to work with Baltimore City Judy Centers to support transition of group facilitation to delivery by Judy Center staff.

7. Next Step: Establishment of Judy Center Latino Family Advisory Board

To guide recommendations for future programming to support Latino families attending Judy Centers, our team's next step is to establish a Judy Center Latino Family Advisory Board. This advisory board will be modeled after Johns Hopkins Bayview's Latino Family Advisory Board, which was established in 2011 by team member Sarah Polk and pediatric colleague Lisa DeCamp, to engage Spanish-speaking Latino families in healthcare improvement at the Johns Hopkins Bayview Children's Medical Practice (CMP). The LFAB members are Latina immigrant mothers who come from countries throughout Central and South America and whose children are patients at the CMP. The board meets monthly, and all meetings are conducted in Spanish and lead by bilingual facilitators, including Flor Giusti. Childcare, dinner, and a small stipend are provided to members. Our next step of this project is to establish a Spanish-language parent advisory board, similar to the LFAB, for local Judy Centers.

Evaluation and dissemination

We used surveys, interviews, ongoing communication with families and Judy Center staff, and process data (e.g., session attendance, brief questionnaire after each session) to guide evaluation of our program. Most of the surveys were staff-administered by phone or zoom to facilitate participation of parents with limited literacy.

Mothers completed baseline surveys of demographic information (including food insecurity), depressive symptoms, parenting stress, perceived social support, and self-efficacy to manage negative emotions. At the conclusion of the intervention, mothers completed post-program surveys re-assessing depressive symptoms, parenting stress, and self-efficacy to manage negative emotions and assessing satisfaction with the intervention, use of core MB skills, and perceived group cohesion and functioning. Mothers also completed post-intervention interviews regarding their perceptions of the program and to solicit feedback for ongoing improvements. School staff and facilitators also completed periodic interviews to ascertain ongoing feedback.

We note that the Northwestern Mothers and Babies Program lists a range of potential evaluation tools on its website. A summary of our evaluation plan is detailed in the table below.

Outcome	Measure(s)	Data source(s)
Process Outcomes		
Feasibility	Attendance at sessions	• Attendance sign-in (in person) • Zoom participation (virtual) • Post-intervention participant and staff interviews (staff, mother)
Acceptability	Participant Post-Session Feedback Survey *Modified during COVID-19* could not capture participant-level feedback information via Zoom poll but were able to get an overall sense of satisfaction and understanding	• Post-Session Survey (in-person) • Post-intervention participant and staff interviews *(Appendix E and F)*
Fidelity	MB Implementation Fidelity checklist	Observation
Maternal Outcomes		
Parenting Stress	Parenting Stress Index (PSI-4-SF)** (Proprietary)	Survey (baseline, post-intervention)
Depressive Symptoms	Patient Health Questionnaire (PHQ-9)	Survey (baseline, post-intervention)
Group Connectedness	Social Connectedness in Group Environments Scale	Survey (post-intervention)
Self-efficacy to manage emotions	PROMIS Self-Efficacy for Managing Emotions – Short Form 4a	Survey (baseline, post-intervention)
Unmet Social Needs, use of entitlements (e.g., WIC, SNAP)	Demographic Survey	Survey (baseline)
MB Skill Utilization	Mothers & Babies Skill Utilization	MB evaluation materials
Child Outcomes* (Planned)		
Development **School Readiness** **School Attendance**		Judy Center Administrative/Service Data

Pilot Study Feasibility, Acceptability and Participant Outcomes

Obtained from 49 participants in the 5 fully virtual cohorts conducted to-date

Process Outcomes: Participants attended approximately 70% of scheduled sessions. Satisfaction polls completed after each session indicated excellent session understanding, usefulness, and enjoyment.

Program Outcomes: At baseline, approximately 70% of participants reported concerns about food insecurity. From pre- to post-assessment, MB-VG reduced depressive symptoms (effect size -0.27) and parenting stress (effect size -0.22) and improved self-efficacy to manage emotions (effect sizes 0.48). Additionally, at post-test, participants reported high perceptions of social connectedness within the group and high usage of core MB skills.

Semi-structured interviews with participants suggested privacy and confidentiality issues were handled appropriately, facilitated by headphone provision and explicit discussions about group rules. Regarding the virtual format, only a few participants reported difficulties with the virtual modality (e.g., connectivity issues) and many participants noted significant practical benefits (e.g., reduction of transportation barriers). Some participants reported feeling less personal connection via a virtual group modality as compared to in in-person modality, but commented that the virtual modality facilitated social connections in the context of the COVID-19 pandemic and in particular facilitated session attendance for mothers with competing demands or work obligations. Participants universally valued the inclusion of the Resource Advocate and Pediatrician given their otherwise limited access to nutrition, parenting, or child development resources

The table below summarizes several themes from interviews conducted with program participants (mothers), school staff, and facilitators.

Themes from Evaluation Interviews with Participants and Stakeholders	
Benefits of Virtual MB Participation	*"If it had been in person, it might have been harder for me to go and have to miss work every Friday or not be able to go to the classes. Whereas via Zoom, I was listening and paying attention. It was an advantage for me.*" – Cohort 3 participant *"I could do my work and do the class and take care of the babies. I saw the experience as very important, very interesting. If I go in person, I can't acquire all I would like to learn because I'm going to be troubled thinking about not being able to work and earn money."* – Cohort 4 participant
Challenges/ Drawbacks of Virtual MB Participation	*"It's never going to be the same... I feel like you can't connect with another person through a screen. The little bit you can share, the truth is, you're talking about a specific topic. And when someone makes a connection with a person, they talk, more than anything else, about a lot of more personal topics, I believe."* – Cohort 2 participant
Lessons Learned from MB Content	*"I learned it during the program, because sometimes they were things that were in me, but they weren't like awaken. So before if I felt tired and had to play with the kids, I came and tried to play with them. Whether I was tired or angry, I did it. Now, with the program, I said to myself 'No, that mindset has to change.' If I'm tired, I lie down for 10-15 minutes so my mind relaxes and then I can go be in a better mood to play with my kids. I learned that during the program."* – Cohort 4 participant

Themes from Evaluation Interviews with Participants and Stakeholders	
Lessons Learned from MB Content (Continued)	*"What happens is that sometimes you don't focus on some things. I wasn't focused on saying 'I'm going to do something productive with my kids'... But with the group I learned that everything has a balance. I have to have my own space. I can do pleasant activities with the kids. Even if it's just a little bit in the evening. I know I needed to do that before the group, but I hadn't focused on doing it. So, when I'm in the classes, it's like you look at things from a different point of view. Even if it's just half an hour of a pleasant activity with our girls, it's a win. Even if it's going outside with them to play in the yard or run a little, I feel like it helps them. Before I didn't focus on that. So you reach a point and say 'Ok, half an hour, 40 minutes, I'm going to go outside with them. So I got focused. The group helped me because I feel like I hadn't looked at it in a clear way to do it. Afterwards, I went over and thought about everything you all said. So that's what helped me a lot."* – Cohort 3 participant
Combining Groups Across Judy Centers	"*I think it was beneficial. 'cause here you are learning from other families from a different community. So I think actually that was a good thing for them. Just to expand their support system, to connect with people that they don't necessarily see every day."* – Judy Center director
Benefits to participants and centers	*"I think it went really well. … They've been more participatory in our programming. They seem to have built a strong relationship with our family service coordinator and our zero to three specialist. So I think it's been a good support for them and I know that [facilitator's name] has gotten a lot of positive feedback. … They're coming to playgroups and then engagement events. And then I think a couple of them have older kids that they're now registering for pre-K and kindergarten."* – Judy Center director
Program effects on mothers as observed by facilitators	*"I think the program went amazing. […] We have moms that are happy, implementing the different things that they learned during the class, switching the bad talk for good, practicing mindfulness, things to do, discovering, you know, sitting down and listening to something is just a relaxing thing to do for her to learn so many different things. And their confidence, you know, for me was so important because I think the group, they were not just, you know, classmates, but they were like, they become these powerful friends, you know, motivating each other and sharing their experiences. I think the program went really excellent*." – Judy Center staff member & MB facilitator

Dissemination

Community Partners

- Centro SOL's 2022 Latino Health Conference: Addressing Mental Health Challenges through Community Engagement: A Multilevel Approach to Depression among Latino Immigrants in Baltimore – This conference was attended by a wide range of stakeholders including city and state government officials, local service providers and community members, citywide mental health service providers, and representatives from local and state chapters of the National Alliance on Mental Illness
- Trauma Summit June 2022: Healthier Brains for a Healthier Baltimore – Hosted by the University of Maryland School of Medicine's Center for Epigenetic Research in Child Health and Brain Development, "The Baltimore Trauma Summit is uniting leaders in the field of trauma research with community activists, policymakers and healthcare providers to discuss the presentation of adversity in Baltimore and the science behind trauma and the brain. Approaching from the point of child health and brain development, the two-day summit aims to address the way stress impacts our community and imparts lasting biological changes that lead to a lifetime of elevated risk for poor health outcomes."
- Presentation to statewide Judy Center leadership and staff January 2021 – Our team presented on the motivation for our project, Baltimore's Latino community, the needs assessment interviews that guided our next steps and "plus" components we incorporated into the program. We also presented on program implementation logistics specific to virtual delivery, our progress up-to-date and preliminary data on participant characteristics, depressive symptoms and participant feedback from post-program interviews. A member of the Northwestern Mothers and Babies program joined us to present on the intervention's conceptual background, evidence of effectiveness, the various intervention modalities and content, as well as training and implementation support they offer.
- Presentations during Judy Center Staff MB Trainings May 2021 and February 2022 – Organized by the Northwestern Mothers and Babies Program and funded by the Maryland State Department of Education, our team presented on our experience implementing Mothers and Babies at the 3 pilot Judy Centers, with specific focus on the "plus" components offered and discussion around future sustainability across Judy Centers. Members of our team (social worker and program coordinator) and previous facilitators (mental health provider and Judy Center school staff), shared lessons learned and recommendations during a panel Q&A discussion.

Professional Organizations and Academic Forums

- The American Academy of Child and Adolescent Psychiatry's Annual Meeting (2021)
- The National Center for School Mental Health's annual meeting
- The University of North Carolina's Maternal Mental Health Diversity, Equity and Inclusion series
- Our team is also currently preparing manuscripts related to the needs assessment interviews that informed our intervention selection and project work, as well as a manuscript focused on the initial evaluation (from perspectives of participants and Judy Center staff) of virtual MB groups.

Key Messages

Go for it! In partnership with the community, with cultural awareness, with humility and flexibility, and with a plan for ongoing evaluation, adaptation, and dissemination. Get to work. Do not let the lack of an intervention perfectly tailored to your problem and the community you serve with an impeccable record of evidence be an excuse for inaction. Consult your community and choose an intervention carefully. As you implement an intervention, make adjustments as required to serve your community, document extensively and share your findings back to the community and with your colleagues.

Lessons learned

Challenges

The COVID-19 Pandemic posed challenges to our planned project and fostered innovation. While the transition to virtual delivery facilitated participation for some, there were unique challenges associated with virtual delivery of MB, particularly as a group intervention. First, many participants had limited private space in their homes and/or had competing responsibilities during MB sessions (e.g., child care, house work, and employment). To facilitate a greater sense of privacy amongst participants, our team mailed headphones to participants along with MB manuals and provided frequent reminders about the importance of confidentiality and the option to use headphones. Some participants used cell phones to participate in the intervention, limiting the number of other participants they could see on the screen at the same time; Judy Centers did attempt to loan devices to parents to facilitate participation. While participants seemed to be more comfortable with participation via technology as time went on, we offered group and individual technical support sessions with participants.

As we expanded our work to different Judy Centers, it became clear that programming, center staffing and resources available at the different centers varied, and centers faced frequent staff turnover. For example, not all centers contracted with local mental health professionals, and availability of bilingual staff at centers was variable. While this required individualized plans for centers, it also facilitated center-to-center sharing of staff facilitators and cross-center participation in virtual programming.

A primary motivation for our project was the limited availability of local mental health resources for immigrant Latina women. While our program was able to fill a gap in services, challenges remain for those with mental health needs beyond the scope of a preventive intervention. We worked with Judy Center staff to plan for such scenarios

Successes

As noted above, there were distinct benefits associated with transition to virtual delivery of MB. The virtual format facilitated program participation for some mothers with competing demands such as work, household duties, transportation and/or child care barriers. In addition to facilitating sharing bilingual staff across Judy Centers, the virtual format also enabled the addition of question and answer sessions with the pediatrician, which was well-received by participants.

Participation in the MB program also appeared to be a springboard for mothers' participation in other activities, including programming offered by Judy Centers, as well as other mental health-related community programs. Five MB participants have gone on to participate in Centro SOL's Mental Health Ambassadors program, introductory mental health training for community members to equip them to perform community outreach aimed at reducing mental health stigma. Additionally, Five MB participants have gone on to participate in other wellness programming (e.g., mindfulness programming Radiante) offered by Centro SOL. Finally, a number of participants have agreed to serve as ongoing project advisors as our team moves towards development of a Spanish-language advisory board for Judy Centers.

Shifts in Thinking

While we initially aimed to implement an existing, established program (Mothers and Babies) to reach a population with limited access to formal mental health services, the COVID-19 pandemic prompted us to reconfigure the intervention as a "package" (including time with a health professional, access to a resource advocate, use of text messaging) and remain responsive to the inter-related and evolving needs of participants. As a team, we continue to work to ensure that programming remains responsive to participant feedback, beyond formal interviews and evaluations.

Recommendations

We share our experience through this toolkit as one example of mental health promotion in a setting easily accessed by children and families. We hope this toolkit can be of use to a wide audience whose aim is family wellbeing-including, but not limited to early childhood education centers, primary care for children and adults, mental health care settings, home visiting programs, Women, Infants & Children offices, schools, churches, etc. We claim relevance to a broad audience because we intend this toolkit to serve as an encouraging example rather than a proscriptive template.

Getting Started

Community engagement is essential to our model. To get started tackling a wicked problem, consider the needs and resources of the people to be served and those providing the service or delivering the intervention. Conversations with all constituents regarding expectations and features of a feasible and acceptable intervention are essential although a formal needs assessment may not be.

Subject Matter Experts
■ What evidence-based interventions exist that tackle the problem we wish to address? ■ In what target populations has the intervention been tested? ■ What are the costs or required resources of the available interventions? ■ Are intervention materials available in a language/format/literacy level relevant to your target population?
Target Population
Part 1: Mental health overview and openness to intervention model ■ Where have you gone for support? What helps you feel supported? ■ What are some barriers that keep you from receiving support? **Part 2: Specific qualities of potential intervention** ■ What benefits do you see from a mental health support group? What benefits do you see from individual help? ■ If there was a group that was designed to support Latina mothers' dealing with stress and/or low mood, what topics do you think would be important to discuss? ■ How would you define a good leader for a group? ■ What do you think would make someone want to attend a group? What would make them stay for the whole program? ■ Any follow up questions? Lingering thoughts or concerns? Name ideas for this project?
Community Partners
■ What is your role and how do you work with the target population (Latina mothers, with children at Judy Center)? ■ What do you think parents need regarding mental health services? ■ What mental health topics should be covered in a support group? ■ What components are important in the group format? ■ What qualities are important in a group leader? ■ What would help build trust and community within the group (both between members and with the leader)? ■ What incentives or resources would be key to making the program successful? ■ How does this program align with your mission and goals?

Regarding resources, who might be a partner who has something to contribute as well as an interest in contributing? Who would benefit from having the wicked problem addressed? Keeping sustainability in mind from the beginning may inspire creative thinking regarding resources although acceptability and feasibility need to be demonstrated first.

- **Who else is serving the target audience?**
    - Do they share our concern for our wicked problem?
        - Do they want to partner to address it?
            - What resources can they bring to bear?
                - Connections with the target audience? Money? Expertise? Personnel? Space? Equipment?
                    - What are their expectations of the partnership?

Before starting, please consider any unintended consequences of the planned intervention and have a contingency plan for those consequences. An example from our work is that conversations about depression may identify persons suffering from more severe symptoms than our intervention is designed to address. A response plan, should such a situation arise, had to accommodate the fact our participants were uninsured. Having a response plan was ethically responsible and also important to our partnership with community organizations.

Best Practices

Our suggestions reflect our professional experience as well as our role in this project.

- Flor Giusti, Clinical Scholars Fellow and Social Worker: An essential sustainability practice is to train program facilitators to be able to train their colleagues, train the trainer training. People change jobs and it is very helpful to have new staff be able to be promptly trained by a colleague within their organization. A potential additional benefit is the departing staff member could take the intervention to their new job and have the skills to implement it if the opportunity arises.
- Lindsay Cooper, Program Coordinator: Ask your community partners about constraints they or their clients face. The following are two specific examples from our work with school-based early learning programs:
    - Timing of groups, both time of year and time of day, mattered. Program attendance was less consistent in our groups that started late in the spring and thereby extended into summer or that coincided with lunch time or school pickup time for participants with older, school-aged children.
    - Even if they are willing and able, do your community partners' contracts allow them to work with you? Our school-based therapists, regardless of their skills and permission from their supervisors, had contract limitations regarding what type of work they could do as well as contracts asynchronous with the school calendar.
- Sarah Polk, Clinical Scholars Fellow and Pediatrician: Honor the expertise of the target audience through the use of facilitative leadership. One of my roles in the project was a 15 minute 'Ask the Pediatrician' session appended to Mothers and Babies group session at the onset of the pandemic. When a mother asked a question, I almost always asked a fellow participant to volunteer an answer to her question. I then affirmed or amended the answer as appropriate. I am a white, non-Latina, female physician and group participants were Latina mothers. Answers from peers have cultural relevance and value and may build community. Additionally, I hope that calling attention to participants' knowledge and expertise in parenting might boost participants' self-confidence. Finally, facilitative leadership is fun and inclusive and celebratory of the many ways of contributing to solving problems. Facilitative leadership is an approach that is valuable in a wide range of settings and requires very little training.

- Rheanna Platt, Clinical Scholars Fellow and Child and Adolescent Psychiatrist: The virtual format can speed innovations that would be difficult to achieve in-person. For example, asking a health professional (e.g., a pediatrician) to travel to centers for a brief question and answer session after MB programming would not have been feasible- virtual participation may be a much lighter lift. Our program benefitted greatly from the multi-sector/disciplinary involvement facilitated by the transition to a virtual setting. That said, there are other details that you need to pay concerted attention to when delivering services virtually, including understanding who else may be "in the room".

Best Advice

- Flor Giusti, Clinical Scholars Fellow and Social Worker: One size doesn't fit all. Not even when using an evidence-based curriculum. Check who is going to receive the intervention and make sure that you are flexible to adjust the delivery of the curriculum to their specific characteristics: language, reading/writing level, cultural norms and values, etc.
- Lindsay Cooper, Program Coordinator:
    - Dedicating time before the program starts to a technical orientation session or individually setting participants up with the class virtual platform
    - Establishing the expectation around camera use from the start and sticking firm to it, which can make a big difference in engagement and establishing connections
    - Weekly planning meetings to ensure smooth sessions and divide up the content and technology aspects
    - Participants particularly valued the confidentiality rule that was established as a group at the beginning and reiterated at the start of every session: "What is said in the group, stays in the group"
- Sarah Polk, Clinical Scholars Fellow and Pediatrician: Do something! Proceed with respect – for those you're serving, your community partners and the gravity of the problem you're tackling – but don't wait until there is a preponderance of evidence highly specific to your specific problem and constituency to do something. If you proceed with respect and humility, you can learn and modify along the way and thereby tackle a problem and contribute to science simultaneously.
- Rheanna Platt, Clinical Scholars Fellow and Child and Adolescent Psychiatrist: Allow space and time for reflection. Dedicating periodic time and "space" (zoom or in-person) to convening with our Judy Center partners helped us understand their ongoing programming, operations, and challenges (and how our efforts might complement theirs) and facilitated cross-center collaboration. Additionally, allow space and time for group participants to teach each other- there is a lot of wisdom in the room!

"I could do my work and do the class and take care of my babies…

I saw the experience as very important, very interesting. If I go in person, I can't acquire all I would like to learn because I'm going to be troubled thinking about not being able to work and earn money."

– Mothers and Babies participant in Cohort 4

Appendix

Appendix A: Mothers and Babies Program Information

The George Washington University
The Mothers and Babies: Mood and Health Research Program
Department of Psychology
Columbian College of Arts & Sciences
https://mbp.columbian.gwu.edu/

Northwestern University
Mothers and Babies Program
Center for Community Health
Institute for Public Health and Medicine
https://www.mothersandbabiesprogram.org/

Appendix B: FortaleceBaltimore.org

Related website associated with a local, Spanish-language mental health stigma campaign (including a testimonial from a woman with a history of perinatal depression):
https://www.fortalecebaltimore.org/

Appendix C: Needs Assessment Interview Guide for Stakeholders – Parents

Goal: The goal of this interview is to gather Latina mothers' preferences regarding a deliverable peer-led group-based mental health intervention.

Will be translated into Spanish and adapted to accommodate literacy level

Themes: Leadership, structure, format, time, incentives

Opening: Name, where you are from, how long you have been in Baltimore.

Part 1: Mental health overview and openness to intervention model

1. What are the best parts of being a parent? What are the most challenging parts of being a parent?
    a. *Follow up: What else may cause you stress or worries in a mother's life?*
2. Where have you gone for support? What helps you feel supported?
3. What are some barriers that keep you from receiving support?

Part 2: Specific qualities of potential intervention

4. What benefits do you see from a mental health support group? What benefits do you see from individual help?
    a. *Follow up: Would you be interested in attending a group with or without individual support?*
5. If there was a group that was designed to support Latina mothers' dealing with stress and/or low mood, what topics do you think would be important to discuss? Are there other topics you think would be helpful to include?
6. Do you think people would be interested in the group if it followed a curriculum
    a. Follow up: What are the benefits of a curriculum vs drop-in class?
7. How would you define a good leader for a group?
    a. *Follow up: Who could lead a group besides a mental health professional? What kind of training would you like to see them have?*
8. How often do you think someone would want to meet for this group? How long should each session last?
9. What do you think would make someone want to attend a group? What would make them stay for the whole program?

Closing: Any follow up questions? Lingering thoughts or concerns? Name ideas for this project?

Note: This interview guide can be used for initial interviews or focus group depending on preference of participation

Appendix D: Needs Assessment Interview Guide for School Staff & Community Service Providers

Goal: The goal of this study is to gather information on the attitudes/preferences regarding a deliverable peer-led group-based mental health intervention for the population they serve.

Themes: Leadership, structure, format, location, time, incentives

1. What is your role and how do you work with the target population (Latina mothers, with children at Judy Center)?

    a. ***Probes:*** *professional title, population you serve*

    b. ***What we want to learn from this question:*** *What are the relationships between stakeholders and target population*

2. What do you think parents need regarding mental health services?

    a. ***Probes****: professional support, a safe space to go to get a break, more time to be with friends or community members, a support group*
    b. ***What we want to learn from this question:*** *Perceived needs and preferences for target population*

3. What mental health topics should be covered in a support group?

    a. ***Probes:*** *anxiety, domestic violence, depression, how to help a friend experiencing a mental illness, traumatic stress, adjustment into the neighborhood*
    b. ***What we want to learn from this question:*** *Perceived needs and preferences regarding content of intervention for target population*

4. What components are important in the group format?

    a. ***Probes****: flexible vs. structured, instruction or time to share ideas with peers, take home materials, written vs. visual vs. audio format, size of group, groups specific to certain groups (language, age of child, aspect of mental health you want to explore)*
    b. ***What we want to learn from this question:*** *Perceived needs and preferences regarding format of intervention for target population*

5. What qualities are important in a group leader?

    a. ***Probes:*** *male vs. female, community member, someone with a mental health background, personality*
    b. ***What we want to learn from this question:***

6. How do you feel about a trained peer from the community leading a group?

    a. ***Probes****: length and type of training, supervision*
    b. ***What we want to learn from this question****: Perception about acceptability and feasibility of using a trained lay leader*

7. What would help build trust and community within the group (both between members and with the leader)?

a. ***Probes:*** *time before each session to talk, structured icebreakers, group created expectations, a confidentiality agreement, options to have an informal social outing together, easily accessible leader*
b. ***What we want to learn from this question:*** *Perceived needs and preferences regarding social norms and expectations*

8. What incentives or resources would be key to making the program successful?

    a. ***Probes:*** *food, transportation, childcare, monetary incentives/gift cards, recruitment strategies*
    b. ***What we want to learn from this question:*** *Perceived barriers to participation and possible solutions to these barriers*

9. What additional supports and services should be integrated into the intervention?

    a. ***Probes:*** *referrals to individual therapy or social work, gaining skills, option to lead a group, space to process the questions that have been on your mind, help with a specific concern*
    b. ***What we want to learn from this question:*** *How this intervention could compliment and feed into the existing landscape of services and what value it would be adding*

10. How does this program align with your mission and goals?

    a. ***Probes:*** *future collaborations, increased access, expanded services*
    b. ***What we want to learn from this question:*** *Gage interest and buy-in from the stakeholder*

11. How do you think a program like this can be sustained? What challenges or opportunities do you see in this process?

    a. ***Probes:*** *Continued contact with JHU, ongoing training for school staff (payment?), provide program materials, advisory group (at least 2-3 constants that are trained and familiar with program)*
    b. ***What we want to learn from this question:*** *How to make this sustainable (look at CHIPP for examples?)*

12. Would you be interested in sharing your expertise in a focus group and/or advisory group?

    a. ***Probes****: Monthly meeting to discuss project and gather constant feedback from stakeholders for the duration of the project (adaptation, piloting, process evaluation)*

    b. ***What we want to learn from this question:*** *who is interested in working on this project as advisory board*

Appendix E: Post Intervention Interview Guide for Participants

Overall Experience

1. Have you liked your experience participating in Mothers and Babies? (Why or why not)?

Experiences with Virtual Format

2. How was it using Zoom/video calls for our sessions?
    a. (Probe about whether had any technical difficulties, wifi or bandwidth issues, device issues, cost)

3. How would you compare the experience of attending a group in person at school with via Zoom?

4. What were the benefits of using Zoom for participating in the group?

5. In what ways is it preferable to in person (cost/childcare etc.)

6. What were the disadvantages of using zoom for participating in group?

7. In what ways is it less preferable to attending in person?

8. If you had the choice, would you prefer to attend Mothers and Babies via Zoom or in person? Why?

9. In general, did you feel like you had sufficient privacy during the classes?

10. Did you feel that you were able to make personal connections with the other mothers in the group via Zoom?

    a. If so, what helped you do this? If not, why not?

11. Have you connected with women in the group outside of the sessions?

12. Do you have suggestions about how we could improve future zoom sessions?

Barriers and facilitators to personal project

Part of the course was to do personal projects between sessions (for example, the quick mood scale, or doing pleasant activities).

13. Did you have the opportunity to do the personal projects?

    a. If yes, was it helpful/useful to practice? What helped you to be able to practice between sessions?

    b. If not, what were barriers to doing personal projects?

    c. Would it have been helpful to get text reminders about personal projects?

Questions about ‘add ons’

For many of the classes, there was a pediatrician who came during the last 15 minutes to share information with the group and respond to their questions.

14. How did you like this part of the class? Was it useful? Why or why not?

Another part of the program was including Ria who was available to help with enrolling in the food stamp program.

15. Did you get help with SNAP (estampillas de comida) from Ria?

    a. If not, why not? (Lack of need, lack of time, etc.)

Wrap up section

16. Do you have suggestions about how we could improve the Mothers and Babies program?

17. Is there something else you would like to talk about that I did not ask you or something you would like to add to what you have said?

Content - Additional questions if they come up

18. What do you think about the topics discussed during the Mothers and Babies sessions?

19. Have there been topics that have been particularly helpful to talk about in group?

20. Have there been topics that have been difficult to talk about in group?

Appendix F: Post Intervention Interview Guide for Judy Center Staff

1. How do you feel the program went, logistically speaking?
    a. *Probes: Recruiting parents*
    b. *Use of zoom and other technologies*
    c. *What, if any, challenges were encountered in implementing this program with the mothers that you work with?*
2. From your knowledge, how do you feel the program has been going for the participants/parents?
3. What participant needs do you think were not met with this program?
4. Are there other programs or services that you think would be more helpful? (if so, which?)
5. What suggestions do you have to improve the program?
6. (For directors): What do you feel your Judy Center's capacity is to deliver the Mothers and Babies intervention in the future?
    a. *Probes: competing demands*
    b. *Resources*
    c. *Time required*
    d. *Possible staff to deliver*
    e. *Supervision needed*
7. (For staff who may deliver): Having started to co-facilitate or observe mothers and babies, how would you feel about leading groups in the future?
    a. What additional support would you want or need?
    b. What areas do you feel prepared to lead?
    c. What areas do you feel less prepared to lead
    d. What do you think would limit your ability to be able to deliver mothers and babies?
8. Do you think that this program should be continued?

Appendix G: Articles or Literature to Tackle This Issue

- **Mothers and Babies Implementation**

  - Muñoz RF, Le HN, Barrera AZ, Pineda BS. Leading the charge toward a world without depression: perinatal depression can be prevented. Arch Womens Ment Health. 2021 Oct;24(5):807-815. doi: 10.1007/s00737-021-01160-1. Epub 2021 Sep 7. PMID: 34491429.

  - Le HN, Perry DF, Mendelson T, Tandon SD, Muñoz RF. Preventing Perinatal Depression in High Risk Women: Moving the Mothers and Babies Course from Clinical Trials to Community Implementation. Matern Child Health J. 2015 Oct;19(10):2102-10. doi: 10.1007/s10995-015-1729-7. PMID: 25673369.

- **Risks for Depression among Latina Women**

  - Lara-Cinisomo S, Girdler SS, Grewen K, Meltzer-Brody S. A Biopsychosocial Conceptual Framework of Postpartum Depression Risk in Immigrant and U.S.-born Latina Mothers in the United States. *Women's health issues : official publication of the Jacobs Institute of Women's Health*. May-Jun 2016;26(3):336-43. doi:10.1016/j.whi.2016.02.006

  - De Oliveira G, Cianelli R, Gattamorta K, Kowalski N, Peragallo N. Social Determinants of Depression Among Hispanic Women. *J Am Psychiatr Nurses Assoc*. Jan/Feb 2017;23(1):28-36. doi:10.1177/1078390316669230

- **Establishment of Family Advisory Board**

  - DeCamp LR, Gregory E, Polk S, Chrismer MC, Giusti F, Thompson DA, Sibinga E. A Voice and a Vote: The Advisory Board Experiences of Spanish-Speaking Latina Mothers. Hisp Health Care Int. 2015;13(4):217-26. doi: 10.1891/1540-4153.13.4.217. PMID: 26671562; PMCID: PMC4751862.

Appendix H: Budget Overview

Personnel Salary Support
Program Director
Program Coordinator
Intervention Co-Facilitators (2 per cohort)

Other Direct Costs
Intervention Training – Northwestern MB Program Team
Intervention Supplies: Manual -Intervention Manuals -Intervention Certificate of Completion -Shipping Costs
Virtual Intervention Implementation -Zoom Pro Account (2 per cohort) -Incentives (meal delivery, stipends)

Other Potential Costs/Purchased Services
Intervention Supplies: -Earbuds -Shipping Costs
Virtual Intervention Implementation -Incentives (meal delivery, stipends) -Hotspots
Consultants – Mothers & Babies Intervention
Consultants – Food Insecurity Resources (e.g., SNAP Advisor)
Consultants (any MB plus components) – (e.g., pediatrician, social worker, other guests
Text Messaging Platform (more information on MB website)