Mobile Health Approaches to Breastfeeding

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Maternal-Fetal Medicine
Disclosures

• No financial disclosures
• I made a novel breastfeeding app
• I am not directly affected by the results of this research
Objectives

1. Mobile Health: a Definition

2. Web-based breastfeeding interventions

3. Smartphone application-based breastfeeding interventions

4. Role of virtual breastfeeding support during COVID
Mobile Health Definition

- Mobile health = mHealth = new media

- mHealth: “the practice of medicine and public health supported by mobile devices such as mobile phones, tablets, personal digital assistants and the wireless infrastructure”
mHealth Intervention Options

• Online/web-based
  – Range from static content to interactive/game-based experience

• Short-message system
  – Text messages

• Smartphone App-based
  – Range from automatic chat bots to just-in-time adaptive interventions
Effective Perinatal mHealth Interventions

- SMS: Postpartum hypertension
- Artificial intelligence: Genetics
- App-based: Diabetes
mHealth and breastfeeding
mHealth and Breastfeeding

Mobile Health Approaches to Breastfeeding

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CLINICAL OBSTETRICS AND GYNECOLOGY
Volume 64, Number 2, 384–391
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mHealth and Breastfeeding

Two most-published breastfeeding interventions:

– web-based (online)

– smartphone application (app)-based
Web-based breastfeeding interventions

8 studies published to date, each with different mHealth intervention:

- Web-based asynchronous discussion boards OR synchronous discussion boards (live chat)
- Website providing online and access to in-person support OR educational breastfeeding game
- Certified lactation consultant on-demand via discussion board OR webcam
- Online game-based learning platform
- Breastfeeding diary
Web-based breastfeeding interventions

- Heterogeneity limits result synthesis

- Outcomes range from breastfeeding initiation to exclusive breastfeeding at six months
### Web-based breastfeeding interventions

<table>
<thead>
<tr>
<th>Study Information</th>
<th>Study Setting</th>
<th>Study Design</th>
<th>Number of Participants</th>
<th>Study Duration</th>
<th>Study Intervention</th>
<th>Breastfeeding Outcomes</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| Ahmed et al\(^{12}\) | United States | Randomized trial | 141 | Delivery until 3 mo postpartum | Web-based monitoring program | (1) Breastfeeding support  
(2) Breastfeeding education | (1) Breastfeeding diary  
(2) Survey Web-based survey | Survey |
| Alberdi et al\(^{13}\) | Ireland | Pilot (feasibility) study | 100 | Pregnancy until 3 mo postpartum | Online discussion forum | Breastfeeding duration | Survey  
Web-based survey |
| Geogheanan-Morphet et al\(^{14}\) | Canada | Qualitative | 200 | Delivery until 6 mo postpartum | (1) Online discussion forums  
(2) Personal web-based lactation consultant | (1) Breastfeeding support  
(2) Breastfeeding education  
(3) Breastfeeding outcomes (initiation and duration) | Survey |
| Giglia et al\(^{15}\) | Australia | Prospective cohort | 414 | Pregnancy until 12 mo postpartum | (1) Online discussion forums  
(2) Personal web-based lactation consultant | (1) Breastfeeding outcomes (initiation and duration; exclusive)  
(2) Breastfeeding support | Survey |
| Grassley et al\(^{16}\) | United States | Preimplementation/ postimplementation | 41 | Pregnancy until 1 mo postpartum | Educational game | (1) Breastfeeding intention  
(2) Breastfeeding self-efficacy  
(3) Breastfeeding ducation | Survey |
| Hannula et al\(^{17}\) | Finland | Quasi-experimental | 705 | Pregnancy until 1 wk postpartum | Web-based education and game | (1) Exclusive breastfeeding  
(2) Breastfeeding confidence/ attitude  
(3) Breastfeeding coping | Survey |
| Huang et al\(^{18}\) | Taiwan | Quasi-experimental | 120 | Pregnancy until 6 wk postpartum | Online discussion forums | (1) Breastfeeding knowledge  
(2) Breastfeeding duration  
(3) Breastfeeding attitude | Survey |
| Newby et al\(^{19}\) | Australia | Prospective cohort | 488 | Pregnancy until 12 mo postpartum | Online discussion forums | (1) Breastfeeding support  
(2) Breastfeeding education | Web-based questionnaires |
| Solonen et al\(^{20}\) | Finland | Quasi-experimental | 863 | Pregnancy until hospital discharge | Online discussion forums | Exclusive breastfeeding | In-person survey |
Web-based breastfeeding interventions

• Six studies outside the United States
  – All effectively increased breastfeeding
  – Geographic variation rural/urban

• 2 studies in US
  – One increased breastfeeding
  – The one RCT did show benefit; intervention limited
Switching gears

App-based breastfeeding interventions

• Only 4 studies (3 with clinical outcomes)

• 2 studies used commercially available app
  – Australian study: app made by certified lactation consultant in US
  – US study: app produced by community-building organization to identify supportive breastfeeding champion

• 2 studies developed their own apps (one in Thailand, one in US)
App-based breastfeeding interventions

• Heterogeneity limits result synthesis

• Outcomes also different: breastfeeding intention vs confidence to breastfeeding at 6m postpartum
App-based breastfeeding interventions

<table>
<thead>
<tr>
<th>Study Information</th>
<th>Study Setting</th>
<th>Study Design</th>
<th>Number of Participants</th>
<th>Study Duration</th>
<th>App Name</th>
<th>Commercial Availability</th>
<th>Breastfeeding Outcomes</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farr et al\textsuperscript{21}</td>
<td>United States</td>
<td>Longitudinal survey</td>
<td>243</td>
<td>Pregnancy until 2 d postpartum</td>
<td>Coeffective</td>
<td>Yes</td>
<td>(1) Intention to exclusively breastfeed (2) Patient satisfaction (3) Exclusive breastfeeding</td>
<td>Survey</td>
</tr>
<tr>
<td>Lewkowitz et al\textsuperscript{22}</td>
<td>United States</td>
<td>Randomized trial</td>
<td>170</td>
<td>Pregnancy until 6 mo postpartum</td>
<td>BreastFeeding Friend</td>
<td>No</td>
<td>(1) Breastfeeding initiation and duration (2) Breastfeeding challenges (3) Ideal breastfeeding support mechanism</td>
<td>Survey</td>
</tr>
<tr>
<td>Wang et al\textsuperscript{23}</td>
<td>Thailand</td>
<td>Mixed methods</td>
<td>21</td>
<td>Delivery until 4 wk postpartum</td>
<td>MoomMae</td>
<td>No</td>
<td>(1) Breastfeeding support (2) Breastfeeding education</td>
<td>(1) Survey (2) Structure interview</td>
</tr>
<tr>
<td>Wheaton et al\textsuperscript{24}</td>
<td>Australia</td>
<td>Prospective cohort</td>
<td>46</td>
<td>Delivery until 6 mo postpartum</td>
<td>Breastfeeding Solutions</td>
<td>Yes</td>
<td>(1) Breastfeeding duration (2) Breastfeeding confidence</td>
<td>Web-based survey</td>
</tr>
</tbody>
</table>
App-based breastfeeding interventions

• Both commercially made apps improved breastfeeding outcomes
  – Pre/post intervention studies

• Thai novel app focused on patient satisfaction (n=21)

• US-based novel app evaluated in RCT: not effective in breastfeeding rates but rated as providing best breastfeeding support after hospital discharge
Next steps

• Intervention development
  – Novel can incorporate patient preferences
    • Increase accessibility & desirability
    • Optimize to target end-users
  – Commercially available is more efficient
Next steps

• Research
  – Less than robust data on mHealth-based breastfeeding support and infant nutrition outcomes

  – Future studies should:
    • Include control group
    • Be conducted among marginalized women
    • Incorporate with embedded trackers to confirm app use
Lactation Support Pivot

Rapid uptake of:

- tele-lactation support and resources
- virtual postpartum groups
- virtual prenatal education
Embrace promise of mHealth for lactation support

View mHealth through precision-medicine perspective


Thank you!

Questions? Comments

alewkowitz@kentri.org

Adam Lewkowitz@brown.edu
SOCIAL SUPPORT & COVID-19: PERSPECTIVES OF BREASTFEEDING MOTHERS

Kailey Snyder, PhD, MS, CLC
• This research was published in Breastfeeding Medicine

• This research was funded through internal research funds from Creighton University

• This study was approved by the Creighton University Institutional Review Board

• I want to acknowledge that I am a currently breastfeeding mother thus a member of the group whose information I am presenting today
• Based on social support theory
  • Appraisal
  • Informational
  • Emotional
  • Instrumental
• The purpose of this study was to explore perceptions of social support among breastfeeding mothers during the COVID-19 pandemic.
METHODOLOGY

• Cross-sectional phenomenological qualitative study
• Semi-structured telephonic interviews took place April/May 2020
  • n=29
• Mothers were recruited to participate via social media (e.g., Facebook)
• Data analysis
  • Immersion/Crystallization (2 researchers)
  • Deductive thematic analysis
  • Peer debriefing**
    • Reflexivity journal
• 29 participants
  • 79% Caucasian; 10% Hispanic/Latina
  • Average age of participant was 29.9±5.28
  • 31% work in healthcare
  • 24% unemployed
  • 38% identified as WIC participants
<table>
<thead>
<tr>
<th>Support Type</th>
<th>Who Provides Support</th>
<th>How Support is Provided</th>
<th>How Support is Desired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Support</td>
<td>Husband, Family</td>
<td>In-person listening, telephonic/online discussions</td>
<td>In-person listening, peer to peer support</td>
</tr>
<tr>
<td>Informational Support</td>
<td>Family members, Facebook, Pinterest, Lactation Counselors</td>
<td>Facebook Groups, Telephonic</td>
<td>In-person lactation support, reputable online resources</td>
</tr>
<tr>
<td>Instrumental Support</td>
<td>Family, Friends, Workplace</td>
<td>Assistance with errands, time for pumping</td>
<td>Access to Childcare, Ability to run errands with child</td>
</tr>
<tr>
<td>Appraisal Support</td>
<td>Friends, coworkers, family, Lactation counselors</td>
<td>Telephonic Encouragement, workplace support</td>
<td>Greater in-person discussions</td>
</tr>
</tbody>
</table>
EMOTIONAL SUPPORT

- “You can’t really go anywhere, it’s one thing to talk over the phone or on the computer it’s just more difficult that way” (35, Grocery Manager).
• “You don’t always feel comfortable asking someone to come here to help, always just a little worried” (29, Unemployed).

• “If I wanted to go back to work right now one I can’t because of the baby and none of the daycares are taking new babies so that part is really frustrating” (23, Unemployed).
INFORMATIONAL SUPPORT

• “Um honestly I look up a lot on Pinterest just for articles. I know that’s probably not the most reliable” (27, Church Director).

CONVERSELY

• “Everyone has still been available via telehealth options or via phone conferences so I don’t think those resources have lessened at all” (25, Teacher).
“I just feel really isolated so that kind of discourages me from breastfeeding because I’m just so exhausted because like I have formula to make his food I could just pour him some formula and like be done even though I know that’s not what’s best for him” (23, Unemployed).
IMPACT OF THE PANDEMIC
• “It was hard for me to know if it was because of like COVID but I really didn’t get help at all at the hospital. She did latch on pretty easily but no one came in to help or you know anything like that. I never got any support at the hospital” (31, Teacher)
“Mainly it was probably a lot more stressful um I don’t know if that has to do anything with my supply going down and like work all included in there, I’m not sure how that affected it but it’s a lot more stressful I know that. Because for the longest time I was just really like not wanting to leave the house and if I had to like any kind of symptom like if I had a little itch in my throat I’m like oh my goodness do I have something? Am I going to pass it on to her through breastfeeding?”
• “To be very honest the pandemic really started at the end of my maternity leave and so it’s been somewhat of a blessing in disguise because my job allowed me to work from home and so it just feels like it’s been a maternity leave and I feel like it’s given me a lot of time to be home and to be at a slow pace and have a longer period of time to figure out you know my baby and nursing has become so much more easier and I think it helped just having so much time just to practice instead of having to figure it out in the workplace at such a quicker pace and so I’ve honestly enjoyed the time that I’ve had at home these last few months just because of that” (27, Church Director).

• “It’s impacted me personally for the better just because I haven’t been able to return back to work and I’ve been able to breastfeed on demand which is easier than pumping and trying to come up with milk to feed” (37, Unemployed)
• “If this was my first baby I definitely think it would’ve been a lot harder and just with the whole pandemic in general. I mean it’s been challenging because of the pandemic but it would’ve been a lot more challenging if it would have been our first baby (31, Teacher).

• “With my other one, having that support and weekly consultation with a lactation consultant and everything was really what probably got me through our journey and kept me nursing um if I would have had that problem with my one now and not having that support then I we probably would’ve stopped by now to be honest” (35, Physical Therapist)
• Continue to use diverse channels to communicate benefits of vaccination and breastmilk transmission
• Sharing opportunities between providers to enhance telehealth best practices
• Recognize the additional barriers first time moms may be experiencing
• What do these silver lining findings mean for our future work?
  • Will COVID forever change the work from home model and could this positively effect breastfeeding rates?
  • Could we lengthen maternity leaves by allowing mothers to work part-time from home after the ~12 week leave?
QUESTIONS?
Breastfeeding knowledge, attitudes and practices due to COVID-19 in Kenya

Presentation to the COVID-19 Infant Feeding Research Interest Group Meeting Resources

June 4, 2021

Scott Ickes, PhD
Associate Professor, Department of Applied Health Sciences, Wheaton College
Affiliate Assistant Professor, Depts. of Global Health and Health Services, University of Washington
Acknowledgements

Ruth Nduati (University of Nairobi), Judd Walson (UW), Cary Farquhar (UW)

Benson Singa (KEMRI), Donna Denno (UW), Aunchalee Palmquist (UNC)

Angeline Ithondeka (Naivasha Hospital), Stephanie Martin (UNC), Scott Ickes (Wheaton/UW)

Joyceline Kinyua (KEMRI) – Not pictured
A Supplement to a parent study

NIH Fogarty International Research Scientist Development Award

“Identifying risk factors for sub-optimal breastfeeding and opportunities for breastfeeding promotion among working mothers in Kenya”

Research reported in this publication was supported by the Fogarty International Center of the National Institutes of Health under Award Number K01TW010827. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.
Kenya’s Bill of Health, 2017

• Provision of three months paid maternity leave

• “All employers shall in the **workplace establish lactation stations**, which shall be adequately provided with necessary equipment and facilities...”

• "An employer shall grant all **nursing employees break intervals** in addition to the regular times off for meals to breastfeed or express milk."

Source: http://kenyalaw.org
Naivasha’s leading industries

Floriculture
• $500 Million Industry 35% of all EU sales
  • 65% + of Kenya’s floriculture employees are women
  • Approx. 80,000 female employees
  • Agriculture growers union negotiates implementation of national policies and improved working conditions
• Wages approx. $3/day
## Cross-sectional study: Recruitment by age and employment

- Recruited mothers at 3 health centers: Naivasha District Hospital, Karagita Dispensary, and South Lake Medical Center

<table>
<thead>
<tr>
<th></th>
<th>Birth</th>
<th>6 weeks</th>
<th>14 weeks</th>
<th>24 weeks*</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed - Formal</td>
<td>128</td>
<td>134</td>
<td>144</td>
<td>158</td>
<td>564 (47.6%)</td>
</tr>
<tr>
<td>Self/Informal/Non-</td>
<td>168</td>
<td>164</td>
<td>151</td>
<td>139</td>
<td>622 (52.4%)</td>
</tr>
<tr>
<td>employed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>296</td>
<td>298</td>
<td>295</td>
<td>297</td>
<td>1186</td>
</tr>
</tbody>
</table>

*Exclusive breastfeeding at 24 weeks estimated from retrospective recall from 36-week immunization visit

### 417 mothers employed at commercial flower farms
Breastfeeding by employment status: unadjusted comparisons

<table>
<thead>
<tr>
<th>Time point</th>
<th>Formal Employment</th>
<th>Informal/Non-Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBF at 0 weeks</td>
<td>99.4%</td>
<td>96.8%</td>
</tr>
<tr>
<td>EBF at 6 weeks</td>
<td>92.5%</td>
<td>86.4%</td>
</tr>
<tr>
<td>EBF at 14 weeks</td>
<td>78.9%</td>
<td>52.6%</td>
</tr>
<tr>
<td>EBF at 24 weeks</td>
<td>49.3%</td>
<td>15.9%</td>
</tr>
</tbody>
</table>

† P<0.05

n=622

n=564
Adjusted ORs of breastfeeding indicators by employment status

Models compare formal employment with informal/self/and non-employment (referent group), and control for maternal age, maternal education, HIV status, delivery type, child morbidity, parity, delivery setting.
Reasons for introducing mixed feeding among mothers who discontinued EBF (n=440)

- Going to work: 46.5%
- It was time to introduce other foods based on the child's age: 33.5%
- Perceived milk insufficiency: 13.7%
- Constipation/Child digestion problems: 5.4%
- Baby cries after being breastfed: 4.6%
- Uncomfortable/Did not want to continue/Family pressure: 2.7%
- Child refused: 1.2%

Proposed study

**COVID-19, Employment, Food Security, and Breastfeeding**

Disruptions to the health system, food shortages, and economic downturn are expected to exacerbate all forms of malnutrition, with an increase of 6.7 million children experiencing wasting, 22% of whom live in sub-Saharan Africa.

Headey et al., 2020
Beliefs about the novel coronavirus have influenced multiple aspects of obstetric and neonatal health, including reducing medical counseling and social support due to lockdowns and healthcare alterations. The pandemic has also affected the healthcare context for breastfeeding in multiple ways.

**Aim 1:** To examine how COVID-19 has affected employment, food security, and infant feeding practices among mothers employed in commercial agriculture.

We hypothesize that the COVID-19 pandemic will have created an additional challenge to EBF among mothers, including reducing social support and exposure to breastfeeding counseling.
## Recruitment

<table>
<thead>
<tr>
<th>Participant group</th>
<th>Sample size</th>
<th>Purpose/ information sought from in-depth interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers &amp; Supervisors at commercial flower farms and hotels</td>
<td>n = 15</td>
<td>• Impact of COVID-19 pandemic on implementation of the 2017 Kenya Health Act, specifically the policies related to workplace breastfeeding supports. Effect of the pandemic on employment, employee welfare.</td>
</tr>
<tr>
<td>Health care providers (delivery ward, MCH)</td>
<td>n = 15</td>
<td>• Health communication regarding infant feeding in the context of COVID-19, perception of mother’s feeding attitudes and practices</td>
</tr>
</tbody>
</table>
## Recruitment

<table>
<thead>
<tr>
<th>Participant group</th>
<th>Sample size</th>
<th>Purpose/ information sought from in-depth interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day care center directors</td>
<td>n = 22</td>
<td>Feasibility of storing expressed milk; challenges to support nursing mothers; identify role of childcare center directors in supporting BF, and opportunities for additional support.</td>
</tr>
<tr>
<td>Mothers employed at commercial flower farms</td>
<td>n = 30</td>
<td>Impact of COVID-19 on infant feeding practices, food security, employment Perceptions of breastfeeding in the context of COVID19, including risk of MTCT. Interactions with healthcare workers regarding breastfeeding counseling and support.</td>
</tr>
</tbody>
</table>
Aim 2

To assess how the economic and health impacts of COVID-19 have influenced the implementation of national breastfeeding policies and legislation in the commercial agriculture industry.

*We hypothesize that the pandemic will have impeded the implementation of breastfeeding support at workplaces.*
Aim 3

To determine how mothers' and healthcare workers' breastfeeding attitudes, perceptions, and practices have been affected by COVID-19 information and media.

We hypothesize that healthcare workers have experienced challenges to clear, evidence-based communication about breastfeeding in the context of COVID-19 and that mothers feeding practices have faltered as a result.

Secondly, caregiver capabilities will modify the negative impact of COVID-19 pandemic.
Aim 3 Methods

• **Recruitment and sampling.** Consistent with the approach of the parent study, we will recruit mothers at three different health facilities that serve most mothers in Naivasha, Kenya, including most mothers employed in commercial agriculture. Mothers will be recruited post-partum after stabilizing and before discharge for the 0-week assessment and at routine immunizations at 6, 14, and 24 weeks.

• **Data analysis.** We hypothesize that there will be a lower prevalence of early initiation and EBF at each timepoint in the total sample of mothers.

• Given the 32% prevalence of EBF through 6 months postpartum in a sample taken before the COVID-19 pandemic, 400 mothers (n=100 at each point) will be enrolled to detect a 14% difference in each BF indicator at each time point with 90% power and alpha <0.05.
Impact

By leveraging comparison with recent pre-pandemic breastfeeding studies, we expect to identify pandemic-related declines in EBF and food security, document misinformed perceptions about breastfeeding in the context of COVID-19, and discover how the pandemic has influenced the implementation of breastfeeding policies at workplaces.

Collectively, these aims will inform breastfeeding policy and programming and guide employer support for breastfeeding in LMIC contexts during the ongoing COVID-19 pandemic in Kenya, a global leader in LMIC for breastfeeding support.
Please email me with questions: scott.ickes@wheaton.edu
BREASTFEEDING DURING A PANDEMIC:  
THE IMPACT OF COVID-19 ON LACTATION SERVICES

Jennifer Schindler-Ruwisch, DrPH  
Kathryn Phillips, PhD, MA, MSN, CHSE, APRN

Fairfield University Egan School of Nursing and Health Studies
DISCLOSURES

Supported by internal research grant from Fairfield University.

I am a breastfeeding researcher and advocate, but am not a lactation professional. I have prior personal breastfeeding experience, but cannot speak directly to receiving these services during a pandemic or the lived experiences described herein. I hope through this research to highlight the experience of lactation providers and patients during this challenging year according to the reported experiences of the survey respondents.

I want to acknowledge that I am not a member of the specific population whose information I am presenting today.
PURPOSE

To better understand the changes to breastfeeding support services during the COVID-19 pandemic according to the perspectives of trained lactation providers and the strengths and limitations of telehealth lactation/related breastfeeding services on promoting breastfeeding during this challenging time.
METHODS

• E-mail recruitment letter sent to key gatekeepers at WIC agencies and local breastfeeding networks (Coalition listservs, LLL, Hospitals)

• Survey open for entire month of June 2020

• Brief online survey hosted by Qualtrics (33 questions, 10 minutes, mixed methods)

• To be eligible providers needed to respond “yes” to the following questions:
  • Do you currently provide breastfeeding services/support as part of your job (outside of support to friends, family and peers)?
  • Have you had formal training to provide breastfeeding services/support to pregnant/postpartum women?
  • Are you over 18 years of age?

• All participants received $10 e-gift card

• Study approved by the Fairfield University IRB; electronic consent collected from all participants
SAMPLE

- N=40 lactation providers (1 ineligible)
- 94.7% serving WIC recipients
  Mostly CT-based providers (3 outside CT)
  - 23 CLCs
  - 13 IBCLCs
  - 1 CLS/CLE/CBC/LEC
  - 4 peer counselors
  - 5 RNs/LPNs
  - 3 PA/NPs
  - 2 nutritionists
  - 3 other*
  *not mutually exclusive

Do you currently provide breastfeeding services to WIC recipients?

- Yes, only WIC recipients
- Yes, some WIC recipients
- Yes, some non-WIC recipients
- No, not typically to WIC recipients
TYPES OF SERVICES PROVIDED DURING COVID-19

Of the lactation providers surveyed they reported:

- 69.23% used all online/telehealth for services
- 15.38% conducted all in-person visits
- 15.38% utilized a combination of in-person and telehealth support
- 83.33% of mothers preferred telehealth visits compared to in-person visits during the height of the COVID-19 pandemic, according to lactation providers
VIRTUAL PLATFORMS UTILIZED

N=14 providers only using phone as primary method of service provision

N=7 providers using a combination of phone and virtual support (Facetime, Duo, Zoom, e-mail)

N=5 providers using mostly Zoom or Facetime consultations

N=2 providers using MyChart telehealth platform

Other apps/platforms used: HouseParty, What’sApp, texting
VIRTUAL LACTATION SUPPORT EFFECTIVENESS

On a scale from 1–5, where 1 is not at all effective and 5 is comparably effective, how effective is virtual lactation support compared to in-person lactation support (prior to COVID-19 restrictions)?

![Bar chart showing effectiveness of virtual lactation support compared to in-person support.]

- Moderately less effective than in-person support: 10%
- Neither effective nor ineffective: 20%
- Moderately effective compared to in-person support: 50%
- Very effective/comparably effective to in-person support: 20%
WEAKNESSES OF VIRTUAL LACTATION SUPPORT

Themes
• Difficulty assisting with latch and positioning
• Technical difficulties
• Logistical challenges- holding phone, distractions etc.
• Rapport and body language limitations (especially with phone only support)
• Unable to get accurate weights/growths and assist with diagnostic issues
BENEFITS OF VIRTUAL LACTATION SUPPORT

Themes
• Safety (no COVID exposure/risk)
• Reduces travel time, can be more convenient for moms and providers
• Flexible, immediate, continuous support available
• Increased comfort in patients own home
• New communication strategies
ACCESS TO A DEVICE FOR VIRTUAL SUPPORT

• Almost a quarter of providers indicate that not all women they serve have access to a device for virtual support

• Access issues providers report include:
  • Patient not having a smart phone
  • Patient unable to use/download apps
  • Patient unable to utilize videoconferencing
DIFFERENCES IN VISIT FREQUENCY BEFORE AND DURING COVID-19

Statistically fewer visits during COVID than prior to COVID $x^2(4, N=37)=21.25$, $p<.001$
SUPPORT GROUPS DURING COVID

- 27% of providers currently conducting breastfeeding support groups
- Often less frequent group offerings (although a few have reported moving from monthly to weekly groups, but with lower attendance)
- Virtual format limiting for discussion
- Many converted groups to 1-1 support
- Pre-recorded videos shared
EFFECTIVENESS OF ONLINE SUPPORT GROUPS

Do you feel that the dynamic and level of support in these groups have changed during the COVID-19 pandemic? — Selected Choice

Pros= moms may be more interested in even virtual engagement with peers due to COVID isolation
Cons=Less personal, harder to build relationships
LEVELS OF HOSPITAL AND PEDIATRICIAN SUPPORT

• Half of providers surveyed (50%) feel women are receiving sufficient in-hospital lactation support during COVID
  • Shorter duration in hospital, less time to see LC, limited contact with LC
  • No in-person hospital groups
  • Awaiting COVID testing first

• 64% of providers feel women are receiving insufficient pediatrician support
  • Follow-up less frequent, and via often telehealth
  • Lactation providers less available via telehealth or taking on different roles
  • Routine baby weights not being taken in office consistently for safety measures, hard to ascertain weight gain
  • More referrals to formula perceived
PERCEIVED BREASTFEEDING INITIATION AND DURATION CHANGES

• Almost 70% of providers report seeing changes in breastfeeding initiation and duration during COVID-19

Promoting bf initiation = moms at home more to establish breastfeeding, formula availability limited, want to protect babies from COVID with immunity

Reducing bf initiation = separation due to potential infection, fears/uncertainty, limited hospital support, less support when difficulties arise

Promoting bf duration = longer time at home with baby in many cases, want to protect baby until pandemic over, supply improvements with more time at home

Reducing breastfeeding duration = less peer/family support, isolation, lack of in-person provider support
INEQUITIES IN BREASTFEEDING SUPPORT

• 36.1% of providers feel that some groups are disproportionately affected by the COVID-19 pandemic in terms of available breastfeeding support and 55.6% of providers are unsure.

• Women potentially disproportionately affected by COVID-19 lactation support changes:
  • Minority groups
  • Underinsured/Uninsured
  • Multi-lingual
  • Groups with higher rates of COVID-19
  • COVID-19 positive women
LIMITATIONS & CONCLUSIONS

• Small, preliminary findings for a specific regional location

• Lactation providers (not mothers) were the only source of data

• Online only survey; newly created instrument

• Ongoing research will be critical for understanding the actual (versus perceived) impact of COVID-19 on breastfeeding rates in the short and long-term
  • Breastfeeding disparities may be further exacerbated among those without equitable access to lactation support
  • Innovations in virtual support may impact communication and adaptive options in the field in the future
“COVID-19 is an opportunity to raise public awareness of the importance of breastfeeding for protecting the health of infants.”
THANK YOU!

• Thank you to the hard working lactation providers, breastfeeding/chestfeeding parents, and supporters!

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