Sharing Stories: A fully digital parenting programme to promote caregiver mental health, responsive caregiving and child development

Findings from a three-country cluster randomised controlled trial
Parenting in a pandemic.

Parents and caregivers are facing substantial challenges, with potential devastating impacts on the development and wellbeing of young children.

The need for remote support.

New modes of reaching and supporting caregivers are essential for when traditional face-to-face parenting programmes are not available.
Project Aim

Adapt existing in-person evidence-informed interventions to create a **fully digital** parenting programme to promote playful caregiver engagement and positive caregiver mental health.

Deliver the intervention to caregivers of young children via WhatsApp groups.

Test its feasibility and effectiveness in three African countries.
Project Setting

Uganda
- Lwengo, Masaka, Sembabule, Kyotera districts
- COTFONE

Tanzania
- Temeke and Ubungo districts
- Kimara Peer Educators; PASADA

Zambia
- Chibombo, Chilanga, Kafue, Lusaka districts
- ChildFund
The Sharing Stories Intervention

Shared reading to promote playful caregiver engagement with their children. Caregivers receive content on how to use shared reading with digital books to engage with their children in playful and responsive ways.

Support for caregiver mental health. Caregivers receive messages about the importance of taking care of themselves, strategies to cope with stress, and how to access support.

Based on a WHO Parenting for Lifelong Health-endorsed shared reading intervention

Informed by aspects of the widely used WHO’s Thinking Healthy programme
Intervention Delivery

- Delivered over six weeks
- Facilitated WhatsApp groups (30-40 caregivers per group)
- Each group is moderated by two trained facilitators who present content, facilitate discussions and provide support
- New content introduced during weekly “group chat” session (1-2 hours)

Weekly structure:

**Monday:** Orientation messaging
**Tuesday:** Group chat session + digital book (1)
**Wednesday:** Brief recap of caregiver engagement messages
**Thursday:** Brief recap of key caregiver support messages
**Friday:** Brief recap + digital book (2)
<table>
<thead>
<tr>
<th>In-person</th>
<th>Digital</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-8 caregivers in a group</td>
<td>30-40 caregivers in a group</td>
</tr>
<tr>
<td>Facilitators present content to the groups, using videos and practical demonstrations</td>
<td>Facilitators send content via the WhatsApp groups using texts, audios, infographics, animation clips and video demonstrations</td>
</tr>
<tr>
<td>Facilitators offer guidance during caregiver’s one on one practice sessions</td>
<td>Facilitators offer opportunities for questions and feedback, and provide guidance and support within text message group discussions</td>
</tr>
<tr>
<td>Caregivers receive a picture book to take home at the end of each session</td>
<td>Caregivers receive two digital picture books over WhatsApp each week: one at the end of the group chat session and one later in the week</td>
</tr>
<tr>
<td>Caregivers receive a take home card with key messages at the end of each session</td>
<td>Caregivers receive recap messages with key messages throughout the week</td>
</tr>
</tbody>
</table>
**Intervention Content**

- **Text messages** to communicate important information, present questions, and engage caregivers in discussions.

- **Voice notes** to explain or elaborate on key messages, or to demonstrate techniques verbally.

- **Infographics** to visually present key messages alongside helpful, practical tips.

- **Video clips** of caregivers engaging in shared reading with their children were used as demonstrations of key techniques.

**Digital books** sent via WhatsApp groups (2 a week)
Animation clips
**Parent Engagement through Digital Books:** Examples of Key Messages

**Creating positive experiences**

- **Pointing and naming:**
  - Point and name for your child.
  - Ask your child to point.
  - Ask your child to name.
  - "Look, a cow!"
  - "Where is the cow?"
  - "What's that?"

**Voice Note:** You can also use pointing and naming as an opportunity for your child to learn more about animals, objects, and people and what happens in the world. For example, when you point to a cow and say "cow," your child may also tell your child more about cows, such as "cows go moo" or "cows like to eat grass" or "this cow looks like the cows we see on our way to school." This is a great way to help your child develop and learn.

**Mimicking actions and making links**

- **When sharing stories...**
  - Make the pictures come alive for your child!

- **When sharing stories...**
  - Mimic the actions in the story with your child.

- **If the child in the book is waving,** you could say: "Look, he is waving. We wave to мама when she goes to work in the morning."

**Talking about feelings**

- **When sharing stories...**
  - Use the pictures to help your child learn about different feelings.

- **Talking about your child's feelings:**
  - "I can see you are happy because you are smiling your best!"
  - "I can see you are sad because you look very down!"
  - "I can see you are upset because you can't go outside!"

**Let's practice! What could you tell your child about this picture below? What do you think the caregiver is feeling, and why is she feeling that way?**
Support for Caregiver Mental Health: Examples of Key Messages

**Take control of your thoughts**
When we feel stressed, we often forget to think about the things we are good at, or the things we have done well.

- **How are you feeling today?**
  - Notice how we feel and understand how this affects the way we think. It is an important part of dealing with stress and unhelpful thoughts.

- **VOICE NOTE:** The truth is – our thoughts are very powerful. We don’t always have control over many things in our lives, but our thoughts are one of the things we can control. With practice, we can learn to change the way we think about things. And the more we practice controlling our thoughts the better we get at it.

- **You are in control of your thoughts!**
  - When you are feeling stressed, focus on identifying helpful thoughts to help lift the cloud from your mind.

**Asking for help and support**
Just as children need help and support, so do we as adults and caregivers.

- **It’s okay to ask for help!**
  - It is not always easy to manage stress, worry, or sadness by yourself. If you feel stuck, know that it is okay to ask for help.

- **If you feel comfortable, share with us something that you have been struggling with, or that you would like to ask for help with?**
  - Allow participants to respond

- **Talk to someone you trust**
  - Talk to a friend, a family member or someone you trust about how you are feeling, and they may be able to help you.

**Coping with stress**
We know that taking care of young children can be really hard work at times, and all caregivers have moments when things feel difficult, frustrating or overwhelming.

- **We all need a break sometimes!**
  - **Breathing can help calm you down**
    - Breathing is one of the quickest ways of calming down the body when we experience feelings such as feel worried or angry.
    - When you start feeling angry, go somewhere safe and quiet for ten minutes to regulate your reaction to your emotions. If you have safe outdoor space, go outside.

- **Please share with us: What are some of the things that work to calm you down when you are feeling upset or frustrated?**
  - Allow participants to respond
Group Facilitation

1. Be Kind
   We are all in this together! Let’s treat everyone with respect and understanding.

2. Respect everyone’s privacy
   When members share personal information, do not re-share it outside the group.

3. Keep posts relevant
   Please share and ask questions that relate to the topics being discussed.

It will be easier to see the images in the digital book in full view on your screen if you rotate your phone.

+260 96 4721491 changed this group’s settings to allow only admins to send messages to this group.

+260 96 4721491
16:32
~Inonge

We are going to close the group and will reopen it for tomorrow’s group chat session. See you all tomorrow.
Research Design

Study Design
RCT, with outcome data collected at baseline and directly post-intervention.

Primary Outcomes
1. Less negative and more positive, responsive caregiving
2. Better child language outcomes
3. Better child social and emotional development outcomes

Secondary Outcomes
4. Better mental health
5. Less parenting stress
Research Design

Participants

<table>
<thead>
<tr>
<th>Child Age</th>
<th>Primary caregivers of children between 9 and 32 months of age at recruitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caregiver Age</td>
<td>Caregiver had to be 18 years or older</td>
</tr>
<tr>
<td>Smartphone</td>
<td>Had access to a working smartphone in their house</td>
</tr>
<tr>
<td>Consent</td>
<td>Consented to participate</td>
</tr>
</tbody>
</table>

Recruitment

- Local community-based organisations
- Social networks of recruited participants

Randomisation

Participating caregivers were stratified based on child age (9-20 months and 21-32 months) and randomly assigned to either the intervention or waitlist control arm.
## Outcomes

### Socio-demographic characteristics

<table>
<thead>
<tr>
<th></th>
<th>Zambia (n = 247)</th>
<th>Tanzania (n = 247)</th>
<th>Uganda (n = 240)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Caregiver Age (years)</strong></td>
<td>31.9 (6.8)</td>
<td>31.1 (9.2)</td>
<td>31.8 (7.7)</td>
</tr>
<tr>
<td><strong>Child Age (months)</strong></td>
<td>20 (7.1)</td>
<td>21 (7.3)</td>
<td>23.1 (6.8)</td>
</tr>
<tr>
<td><strong>Child Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>49%</td>
<td>42%</td>
<td>51%</td>
</tr>
<tr>
<td>Female</td>
<td>78%</td>
<td>75%</td>
<td>70%</td>
</tr>
<tr>
<td><strong>Caregiver Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No schooling / some primary schooling</td>
<td>10%</td>
<td>29%</td>
<td>20%</td>
</tr>
<tr>
<td>Some secondary schooling</td>
<td>65%</td>
<td>36%</td>
<td>33%</td>
</tr>
<tr>
<td>Tertiary qualification</td>
<td>25%</td>
<td>35%</td>
<td>47%</td>
</tr>
<tr>
<td><strong>Caregiver Employment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>55%</td>
<td>26%</td>
<td>33%</td>
</tr>
<tr>
<td><strong>Impact of COVID-19</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lost income due to COVID</td>
<td>59%</td>
<td>50%</td>
<td>77%</td>
</tr>
</tbody>
</table>

^ Mean and standard deviation are reported
Outcomes

Impact of the intervention:

Meaningful impacts on responsive caregiving behaviours and caregiver mental health

- Higher rates of responsive caregiving
- Spending more time reading or looking at picture books
- Spending more time telling their child stories
- Significantly lower rates of depression and anxiety

No significant impact on child development outcomes

A longer follow-up period may be required to allow for the improvements in caregiving capacity and responsive parenting to translate into observed improvements for child development outcomes.
Process Data

Feedback interviews with participating caregivers

• Interviewed 12 caregivers in each country (6 male and 6 female caregivers) on the programme’s acceptability, perceived benefits and barriers to participation
• Caregivers with both high and low levels of engagement were interviewed

Caregiver engagement via WhatsApp metric data

• The percentage of caregivers who posted a message within 24 hours of the weekly group chat session
• The percentage of caregivers who read certain messages or content within 24 hours
• The percentage of caregivers who opened the message with the second digital book that was sent to the groups each Friday.

Facilitators also monitored if caregivers exited the group, and conducted follow up to establish why they had decided to leave.
Feedback interview findings

Perceived benefits:

Benefits for caregiving:
• A better understanding of child development
• More time spent together, sharing books
• A gentler approach to caregiving
• Improvements in the caregiver-child relationship
• Benefits for male caregivers’ engagement

Benefits for caregiver’s mental health:
• Improved management of stress
• Improved access to support
• Prioritising self-care
• Socially supportive environments

“My child is now free and happy to be with me, she doesn’t fear me anymore...she is no longer afraid of me, she feels happy when she sees me and prefer to ask me to show her digital books and asks me questions from that. Yes. I’m now better, I’m kind to my child, treating them well, politely and with love.”
(Male caregiver with high engagement, Tanzania)

“The programme has really helped me, especially with stress for example sometimes I would be upset for no reason and be moody but every time I would join the group chat and hear the stories of other parents how to be with children, how to cope with other people in the surrounding. Even if I was upset, I would cheer up.”
(Female caregiver with high engagement, Zambia)
Feedback interview findings

Perceived challenges:

- Work schedules and responsibilities (not able to participate in the group chat sessions in “real-time”)
- Mobile phone storage space and data
- Groups closed for participation

Benefits of digital delivery:

- Ease of attendance
- Easy access to programme content
- Feeling free to share
- Reinforcement of programme messages through multi-media content

“The challenges are there because there are times when I found myself without data so I failed to contribute and by the time when you want to share your thoughts, the group is already closed... I think the WhatsApp groups should not be closed because sometimes all we want to do is to contribute but we are not able to do.”
(Male caregiver with low participation, Tanzania)

“I think it is because of the convenience even when you are far, you just join in the group and proceed to learn...this method is useful because it gives me the flexibility on time, I don’t need to be there, but still not able to miss because I will eventually catch up later, when I go online.”
(Female caregiver with high engagement, Tanzania)
WhatsApp metric data (posted a message within 24hrs)

Tanzania
Posted a message within 24hrs of group chat

<table>
<thead>
<tr>
<th>Group</th>
<th>W1</th>
<th>W6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>31%</td>
<td>14%</td>
</tr>
<tr>
<td>Group 2</td>
<td>57%</td>
<td>30%</td>
</tr>
<tr>
<td>Group 3</td>
<td>45%</td>
<td>23%</td>
</tr>
</tbody>
</table>

Zambia
Posted a message within 24hrs of group chat

<table>
<thead>
<tr>
<th>Group</th>
<th>W1</th>
<th>W6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>48%</td>
<td>45%</td>
</tr>
<tr>
<td>Group 2</td>
<td>41%</td>
<td>15%</td>
</tr>
<tr>
<td>Group 3</td>
<td>50%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Uganda
Posted a message within 24hrs of group chat

<table>
<thead>
<tr>
<th>Group</th>
<th>W1</th>
<th>W6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>12%</td>
<td>8%</td>
</tr>
<tr>
<td>Group 2</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>Group 3</td>
<td>9%</td>
<td>2%</td>
</tr>
</tbody>
</table>
WhatsApp metric data (read messages within 24hrs)

**Tanzania**
Read Tuesday group chat messages within 24hrs

- **Group 1:** 72% - 56%
- **Group 2:** 81% - 76%
- **Group 3:** 78% - 73%

**Zambia**
Read Tuesday group chat messages within 24hrs

- **Group 1:** 74% - 71%
- **Group 2:** 70% - 56%
- **Group 3:** 70% - 53%

**Uganda**
Read Tuesday group chat messages within 24hrs

- **Group 1:** 71% - 36%
- **Group 2:** 60% - 30%
- **Group 3:** 76% - 35%
Caregivers exiting groups (n = 13)

Zambia: n = 3
- Group 1: n = 1 (left in Week 3)
- Group 2: n = 1 (left in Week 1)
- Group 3: n = 1 (left in Week 1)

Tanzania: n = 2
- Group 2: n = 2 (left in Week 2)

Uganda: n = 8
- Group 1: n = 3 (left in Week 2 and 3)
- Group 2: n = 4 (left in Week 1)
- Group 3: n = 1 (left in Week 1)

Reasons for leaving: confusion about the groups opening and closing at different times, and caregivers changing the contact number they wanted to participate with. Caregivers who provided these reasons requested to be added back into the groups.

Was not possible to follow up with some of the caregivers in Uganda. Possible that caregivers who facilitators were not able to reach were only on the groups to receive the data bundles before exiting.
Sharing Stories: selling points

- Delivered completely remotely
- Brief intervention – six weeks
- Combines parenting engagement with caregiver mental health (addresses mental health directly)
- Training, monitoring and supervision all done remotely
- This intervention had meaningful impacts on both parenting and mental health

The results contribute to our understanding of how to effectively deliver supportive parenting interventions through digital platforms in a pandemic, under varying degrees of lockdown in different countries, and against the context of a range of social, political and economic challenges
Key Learnings

Intervention Delivery:

The digital delivery format is hugely beneficial for ensuring fidelity to the program
- Delivering content with step-by-step instructions frees up facilitators to enact soft skills and create a warm, supportive social environment

The digital delivery format offers caregivers more flexibility in terms of when they engage with the programme and its content
Overcomes logistical barriers frequently associated with attendance of in-person parenting groups (time to attend the session, child care and travel).

The digital delivery format is more cost-effective than in-person delivery.
Main costs: salaries, devices and airtime/data
Potentially no limit to the amount of digital books you can send
Key Learnings

Intervention Delivery:

**WhatsApp is an appropriate delivery platform, but access was limited to households with smartphones**

- WhatsApp is widely used, supports different types of messages
- Usable on relatively basic and commonly owned mobile phones
- Considerations for larger scale interventions
  - Memory space on devices
  - Data to access intervention content

**Digital delivery of the intervention means that monitoring and evaluation can take place in real time**

Alternative solutions to monitoring engagement will need to be explored if implementation takes place on a larger scale.
Key Learnings

Considerations for in-person vs. digital:

**Digital delivery:**
- Can reach larger numbers of caregivers
- Easier to ensure fidelity to the programme
- Caregivers can easily share the content with family and household members
- Overcomes many logistical challenges associated with in-person delivery, therefore saving on costs.

**In-person delivery:**
- Potentially reaches more vulnerable families (areas without network coverage, those without smartphones)
- Not dependent on technology, electricity or network
- More opportunities to practice in the presence of a facilitator and receive individualised feedback and support.
Key Learnings

Modifications to intervention design:

• Add more specific content (and demonstration videos) on **how to share digital books** specifically (as opposed to actual books)

• Add content that encourages **learning through play beyond shared reading**

• Include messages and activities that **encourage caregivers to share the content with others** in their family or community, including activities that they might do in pairs or groups.

• Modify the programme to include a similar “**practice**” **component** as the in-person version (e.g. inviting caregivers to send brief videos of themselves engaging in shared reading with their child, and for the facilitators to comment and provide feedback)

• **Allow the groups to stay open**, which may help to improve engagement and strengthen the sense of community and group support that caregivers are able to provide to one another beyond the group chat session

• Allow groups more flexibility in terms of **group chat session times**
Future research questions

1. Testing the modified digital version, using more direct outcome assessments (either video or in-person) of child development and caregiver-child interactions, with a longer-term follow up.

2. Testing different combinations of digital and in-person approaches to establish which options optimise impact and minimize costs.

3. Comparing different models of training and supervision – for example one with light touch training/supervision and another with more intense training/supervision.

4. Testing the intervention’s potential to improve outcomes for different target groups, such as adolescent or young mothers or other vulnerable groups, or to what extent the intervention is able to improve caregiving at a household rather than individual level.
Thanks for listening!