From earthquakes to interpersonal violence: The potential impact of trauma on early childhood development and mental health

What do we know?
What can we do?

Chandra Ghosh Ippen, Ph.D. (chandra.ghosh@ucsf.edu)
Associate Research Director
Child Trauma Research Program
Early Trauma Treatment Network
University of California, San Francisco
National Child Traumatic Stress Network

Mission:
To raise the standard of care and improve access to services for traumatized children, their families and communities throughout the United States.

www.nctsn.org
(NCTSN Learning Center: learn.nctsn.org/)
On-line Resources from the NCTSN Learning Center: http://learn.NCTSN.org

- Continuing Education
  - Special Topics
  - Speaker Series
    - Complex trauma
    - Terrorism and disaster
    - Culture and trauma
    - Master Speaker series
    - Childhood traumatic grief
    - Childhood sexual abuse
    - Early Childhood Consultation
Take Away Messages

• Trauma is an epidemic (even in early childhood)
• Certain groups of children are at higher risk for trauma exposure
• Trauma exposure has negative consequences for young children’s development
• Trauma exposure is associated with later problems in mental and physical health

• THUS, if we want to prevent, manage, or repair mental and physical health problems, we need to address trauma
What Is Trauma?

An exceptional experience in which powerful and dangerous stimuli

- Overwhelm the child’s developmental and regulatory capacity (including the capacity to regulate emotions)
- Insufficient resources to cope with the event
• Do you believe the earthquake affected Trinka and Sam?
• How do their parents help them?
  – Acknowledge what happened
  – Help them feel safe
  – Understand their reactions
  – Help them regulate their emotions

• If you can see how an earthquake can affect a child, think about how interpersonal violence may shake up a child’s world.
TRAUMA IS AN EPIDEMIC
That affects young children

http://nctsn.org/trauma-types/early-childhood-trauma
Community Violence Exposure

• Boston non-referred pediatric sample of 3-5 year old children (Linares et al., 2001).
  - 42% had seen at least one violent event
  - 21% experienced 3+ violent events
  - 12% witnessed 8+ events

• Washington, DC Head Start: 67% of parents and 78% of children reported child had witnessed or been victim to at least one incidence of violence (Shanifar, Fox, & Leavitt, 2000)

• Boston urban pediatric setting: 1 in 10 children had witnessed a knifing or shooting by age 6 (Taylor et al, 1995)

• SF Bay Area study of Chinese middle school students (age=12): 75% reported exposure to community violence within past 6 months (Ozer & McDonald, 2006)
  - 21% knew someone who was shot or stabbed
  - 9% saw a stranger shot, stabbed, or killed
  - 36% knew someone who was beaten up
Domestic Violence Exposure

- 15.5 million children live in families with partner violence (McDonald, Jouriles, Ramisetty-Mikler, Caetano & Green, 2006)
- Police reports of domestic violence show children under age 6 are more likely to be exposed (Fantuzzo & Fusco, 2007)
- Minnesota 25 year study of mothers and children in poverty: 25% reported severe partner violence when children were 18-64 months old (Yates, Dodds, Sroufe, & Egeland, 2003)
Maltreatment Exposure

In the United States each year . . .
• In 2009, Child Protective Services (CPS) received 3.3 million referrals involving the alleged maltreatment of 6 million children
  – 2,042,700 investigations (510,675 substantiated abuse or neglect)
  – 33.4% of maltreatment victims were age 0-3
  – 56.7% of maltreatment victims were age 0-7

http://www.acf.hhs.gov/programs/cb/pubs/cm09/cm09.pdf
Family Violence in the U.S. (Slep & O’Leary, 2005)

- 453 parents of children aged 3-7,
  - recruited through random digit dialing
  - data were kept anonymous
- Mild violence: throw an object that could hurt, push, shove, grabbed, slapped
- Severe violence: beat up, burned, kicked, slammed against the wall, choked, punched, hit with an object that could hurt, used a knife or gun
- In the past year . . .
  - 90% reported some type of aggression (partner, parent, or both)
  - 25% reported severe partner aggression
  - Two thirds of partner aggressive families reported that both partners were aggressive
  - 87% reported any parent to child aggression
  - 13% reported parent violence severe enough to meet many definitions of child physical abuse
  - 92% of families who reported some type of severe aggression, reported both severe partner and severe parent aggression
Many young children experience multiple traumatic events
Prevalence of Trauma Exposure: Help Seeking Sample (Participants)

• Participants
  – Children aged 3-6
  – Predominantly ethnic minority (31.8% Black, 43.5% Hispanic/Latino)
  – Lower income, urban community sample
  – Families seeking mental health, developmental screening services
    • Social, emotional, and behavioral problems (42.9%)
    • Parent support and education (23.4%)
    • Developmental issues and concerns (14.3%)
    • Exposure to violence and abuse (13%)

Crusto et al., 2010
Prevalence of Trauma Exposure:  
*Help Seeking Sample (Findings: Trauma Exposure)*

- On average children experienced 4.9 traumatic and stressful life events
- Over 48% experienced 5+ traumatic and stressful life events
- 39% had problematic levels of symptoms of Posttraumatic Stress Disorder

**Witnessing violence**
- Domestic violence - heard or seen family assaulting each other: 42%
- Community violence – physical assault between nonfamily members: 27%

**Separation from important people**
- Been separated from a caregiver: 41%
- Death of someone close: 15%
- Severe injury or illness of someone close: 15%
- Someone close to child attempted suicide: 6%

**Direct abuse and/or neglect**
- Physical aggression - been physically assaulted or beaten: 18%
- Been without food, water, shelter: 11%
- Forced to see or do something sexual: 6%

Crusto et al., 2010
Two Studies (Conducted at the Child Trauma Research Program, UCSF)

- **Study 1: UCSF Preschooler Witnesses of Domestic Violence**
  - Randomized control trial
  - 42 boys and 46 girls aged 36-71 months
  - All exposed to domestic violence
  - Ethnicity: 33% Latino, 25% African American, 20% Mixed ethnicity; 15.6% White; 2% Asian; 4% Other ethnicity; .4% Native American

- **Study 2: Early Trauma Treatment Network**
  - Multi-center effectiveness study
  - 131 boys and 132 girls aged 2-71 months
  - Referred due to any trauma exposure
  - Ethnicity: 37.5% mixed, 28.4% Latino, 13.6% African American, 11.4% Caucasian, 6.8% Asian, 2.3% other ethnicity

- Different measures, remarkable convergence of findings
Results: Child TSLEs simple vs. compound exposure
Results: Child TSLEs simple vs. compound exposure
Results: Child TSLEs simple vs. compound exposure

Study 1 TSLEs: M=3.6 (SD=1.18; Range 1-7)
Study 2 TSLEs: M=5.7 (SD=3.18; Range 1-18)
Study 2: TSLEs and Child PTSD Symptoms

PTSD: OR=1.43 (1.21-1.68)
Who is at higher risk for trauma exposure?

- Young children
- Those living in poverty
- Single parent (likely because of environmental context)
- Ethnic minorities (likely because of environmental context)
- Certain types of trauma (e.g. sexual abuse, domestic violence) place children at risk for other traumatic experiences
Trauma has consequences for later physical and mental health
Trauma Exposure in Childhood and Later Functioning

• Abuse and interparental violence in early before age 6 predicts behavior problems in adolescence (Appleyard, Egeland, van Dulmen, & Sroufe, 2005)
• Child maltreatment was associated with higher rates of adult psychiatric disorder, even after controlling for childhood family adversity (Collishaw et al., 2007)
• Adverse childhood experiences (ACEs) have been linked to adult physical health risks (Dube et al., 2003) and to the leading causes of adult death and disability (Felitti et al., 1998)
Adverse Childhood Experiences

Growing up (prior to age 18) in a household with:

1. Recurrent physical abuse.
2. Recurrent emotional abuse.
3. Sexual abuse.
4. An alcohol or drug abuser.
5. An incarcerated household member.
6. Someone who is chronically depressed, suicidal, institutionalized or mentally ill.
7. Mother being treated violently.
8. One or no parents.
9. Emotional or physical neglect.

(ACE Study, Felitti et al. 1998; www.acestudy.org)
ACE Score and Health Risks

Anda et al., 2006, Dube et al., 2003, Felitti et al., 1998, acesudy.org
ACE Score and Health Risks

- Severe Obesity (BMI 35+)
- Ischemic Heart Disease
- Chronic bronchitis/Emphysema

Anda et al., 2006, Dube et al., 2003, Felitti et al., 1998, acestudy.org
Mechanisms by Which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan

From acestudy.org
Core Tasks of Early Childhood Development: How Does Trauma Affect Development?
What are the Critical Tasks of Early Development?

- Attachment
- Self regulation, including affect modulation
- Cognitive development and capacity to use symbolism
- Safety
- Physiological development
- Relationships
- Affect regulation
- Cognitive development
- Symptomatology
- Developmental trajectory
Posttraumatic Stress Reactions in Early Childhood

Remember: Symptoms = Communication

- Act out or play out the traumatic event
- Triggered by reminders of the event
- Sleep problems
- Developmental regression
- Irritable, temper tantrums
- Aggressive
- Clingy
Trauma is an epidemic
Trauma negatively affects development

What can we do?
Understand Trauma Exposure Results In

- Loss of a sense of safety
- Complicated memories
- Reminders – things that are associated with the traumatic experience that later serve as triggers

- Left to make sense of this experience
Stress Response Reactions, Safety, and Relationships

- Am I safe? (real and perceived safety)
- Can I trust you to keep me safe? (relational safety)

If not . . . (state of dysregulation)
- Flight
- Fight
- Freeze

- Tend and befriend
Safety
Safety: Establishing the Caregiver as a Protective Shield
Your brain and stress
Listen to a Life Nearly Passing By
NPR Interview with David Eagleman, Ph.D.

• Neuropsychologist – fell from a roof as a boy. Felt that time passed slowly as he was falling. Alice in Wonderland effect
• SCAD Diving: Has people fall from 150 foot (15 story) tower
• People report that time passes slowly.

“it’s a trick of memory. Normally our memories are like sieves.: (but when you are in a life or death moment) “our memories go wide open.” “That’s what memory is for. It’s for when everything hits the fan. You want to write it down and remember it.”

“So all of it goes right to your hard drive – the clouds, the feeling of the air. Oh look, there’s a guy in a blue shirt.”

“So when you read that back out, the experience feels like it must have taken a very long time.”

Listen to a Life Nearly Passing By
NPR Interview with David Eagleman, Ph.D.

Normally, the trivial stuff gets dumped but in this situation it gets written.

And then you realize how much trivial stuff there is.

Which makes you wonder. . .how we’d feel if we remembered all that stuff all the time?

You’d be totally consumed by memories. You’d. . .

Buried

You wouldn’t be able to forget it.

Having an experience like this creates a surfeit of memory – too much to remember.
What Might Remind a Small Child of What Happened

• Things in the environment
  – Sights
  – Sounds
  – Smells
  – Tastes
  – Weather
  – Certain places
• Emotions
  – Feeling scared
  – Feeling helpless
  – Feeling frustrated
  – Feeling loss of control
• Other body-based reactions
• Certain activities (e.g. getting in a car, seeing a social worker)
• Certain people
• Things people do (e.g. showing certain emotions)
Child consciously or unconsciously becomes aware of trigger

Child becomes dysregulated

Child is distressed (flight, fight, freeze, clinging)

Child likely shows distress through behavior (flight, fight, freeze, clinging)

What does caregiver do?
Understand the Meaning of Behavior
Understand When Behavior May Be Linked to Traumatic Experience
Four year old Clara recently began living with her dad and step-mother. Before that she resided with her mother. At her mother’s house she witnessed significant domestic violence between her mom and her boyfriend and her mom and her grandmother.

Her father notes that Clara often has problems around mealtimes at home. She says she’s hungry but then she doesn’t eat. He notes that at dinner, she often talks about things she saw. Once she said “grandma took a knife and tried to cut mom.” When they ask her about what happens, she doesn’t answer their questions.
Important Considerations

1. Sometimes what they play represents reality. Often what they play, is a symbolic description of what happened or how they feel about it and not a direct portrayal of reality.

2. They have a short affect dysregulation span (adapted from Wolfenstein, 1996)
   - “Sound bites” – Sharing only as much as they can tolerate
   - Get dysregulated after sharing
     - Get active
     - Fight - aggressive
     - Flight – leave or change the topic
     - Freeze – space out or seem unable to do anything
     - Tend and befriend (connect or get clingy)
Eva and 2 year old Michael are playing with the doll house. Michael takes the dad doll and has it hit the mom doll. He looks at his mom and at the therapist. He then has the dad doll stomp on the mom and jump on three baby dolls he selected. His play becomes increasingly disorganized and he throws the dolls out of the house. Then he throws all the furniture out. His mom sits back from him and seems to be retreating emotionally. Michael moves towards her, and she scoots herself back away from him.

Michael has witnessed severe domestic violence between his parents. More recently it appears he has been physically abused by his father during visits.

Eva has a significant history of personal trauma. Her father, an alcoholic, was violent with both her and her mother.
How do we help caregivers understand what children are saying through their behavior knowing that caregivers have been through so much themselves
Results: Prevalence Maternal TSLEs (before age 18)

<table>
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<th>TSLEs</th>
<th>Lifetime</th>
<th>Before age 18</th>
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<td></td>
<td>M</td>
<td>SD</td>
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<td>12.23</td>
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</tr>
<tr>
<td>Study 2</td>
<td>11.99</td>
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When the Caregiver Has a History of Trauma

• The caregiver’s ability to recognize danger and safety may be affected by past history
• Ghosts in the Nursery (Fraiberg, 1980) – The caregiver’s past may affect the current caregiver-child relationship
• Caregivers may be triggered by the child’s emotions or behaviors (parenting triggered)
• Caregiver may be less likely to trust others and less likely to engage with systems (especially when providers and systems have not been “trustworthy” in the past)
Gustavo has been referred for being hyperactive and aggressive. During treatment as mom is talking about a dv incident with child’s father, child starts climbing all over her lap. His shoes kick her and mom says “How come you gotta be so violent. Get off me now.” He gets off and then begins running around the room.
Marcial Tamay: Presenting Situation

Marcial Tamay is a 30 month old Latino boy. He has been in his current foster care placement for 4 months. Before that he was in an emergency placement for 1 month. His foster mother is very concerned about his behavior problems. Daycare staff tell her that he kicks and hits other children and has also hit staff when they try to discipline him. Most recently, he got into a fight with another boy while they were playing with blocks and cars. When the boy took a car Marcial was playing with, he got a plastic dump truck and threw it directly at his head. Then he went and took the car from the boy. When the staff came and tried to have him sit down and talk, he began screaming, kicking, and scratching at them. This is just one of several violent incidents that Marcial has had at this daycare. The staff note that he has gotten worse in the last 3 months.

His foster mother thinks his behavior is linked to him having visits with his mother. He resumed visits with his mother 3 months ago. His foster mother is worried that something is happening on the visits. She is also unsure as to whether she can keep him because she recently took in a 19 month old girl, and she wonders if Marcial will hurt her.
Marcial Tamay: Worst Incident of Violence
Gathered through interviews with his mother Amalia Tamay

Amalia noted that when Marcial was 2, on his second birthday, his father arrived home drunk. He had been celebrating Marcial’s birthday with his friends at the bar. Marcial was on the floor playing with a little car that his uncle Gustavo (Amalia’s sister’s husband) had given him. Armando did not like Gustavo because he had once stood up for Amalia. Armando had accused them of having an affair.

When he found out that the car was from Gustavo, he took it and threw it against the wall. He then grabbed Amalia by the arm and flung her around saying that his son did not need Gustavo’s gifts. Amalia begged him to calm down, but this angered him more, and he pushed her down some stairs. Marcial was crying. When he moved to go towards his mother, his father pushed him on the ground and began kicking him and calling him names. Amalia wanted to help him but feared for her safety. As Armando kicked Marcial, he yelled in Spanish, “this is all your mother, the whore’s fault (es culpa de esa puta tu mama).” Armando then went down the stairs. He spit at Amalia, and when she tried to get away, he grabbed her and smashed her head against the wall. Amalia passed out, and Armando left. Neighbors apparently called the police. They found Marcial curled up with his mother who was still unconscious. There was blood on her head. She was taken to the emergency room, and Marcial was put in emergency child protective custody.
Marcial Tamay: Foster Parents

Marcial’s foster mother, Carla, and her husband Carlos became foster parents when Child Protective Services contacted them looking for a placement for her nephew Steve. Steve’s mother, Amanda had significant substance abuse problems. She would have wild parties in her house, and it was unclear what Steve had seen. He was removed due to severe neglect.

Steve was 3 ½ when he came to them. He had very little speech and language and would pee in the corners of the house. When they tried to potty train him, he would bang his head against the floor and scratch at himself. Carla and Carlos took him to speech and language therapy, to individual therapy, and they attended parenting classes, but many of his symptoms continued. He had nightmares. He would get into the trash and eat things even when they tried to lock it up. Carla and Carlos had two other children at the time. They felt that they could not help Steve and did not know what to do. They asked that Steve be removed from their house. He was sent to live with his paternal aunt in another state.

Years after their children were grown and had left the house, Carla and Carlos decided to open their home and become foster parents so that they could help other children like Steve.
What can we do?

Understand Trauma

• Understand how trauma affects . . .
  – The child
  – The caregiver
  – The family
  – The provider
  – The system

• Young children communicate through behavior; symptoms=communication

• Try to understand what they are trying to say
What can we do?

Safety

- Focus on safety (real and perceived) for all of us
- Support the caregiver-child relationship and restore the protective shield
  - Children need to see caregivers as protective
  - Trauma often shatters this view (even when it is not the caregiver’s fault)
  - When a caregiver has not been protective and is not making changes to become protective
    - Help the child make meaning of this in a way that holds both the caregiver and child’s perspective
    - Young children see themselves as 50% mom and 50% dad. They need to see their parents strengths and at their own pace, understand why they may have had problems
    - Help the child to see that, in general, other grown-ups are protective (big people take care of little people)
What can we do?

*Recognize the importance of relationships*

- Young children’s sense of safety comes from relationships with caregivers
- Young children regulate affect in relationships
- The best predictor of child functioning is caregiver functioning

In thinking about caregivers...

- What is it like having someone try to get you to change if you don’t like them?
- Caregivers with problems often developed problems because they experienced abusive, coercive relationships. Ideally our systems would change that pattern of relationships.
What can we do?

Help children regulate in the presence of reminders

• Identify trauma reminders
• Communicate about trauma reminders to child and to people who care for child
• When possible (without inviting avoidance), reduce exposure to reminders
• Help child regulate (thinking about safety and relationships)
  – Acknowledge that child is triggered – label feelings
  – Be present
  – If things are different and child is now safe, let child know this
  – Soothe child (if possible)
  – Help child learn ways to soothe self (if possible)
What can we do?

*Pay attention to our own reactions*

“It is not possible to work on behalf of human beings to try to help them without having powerful feelings aroused in yourself . . . In working with families who are in great difficulty, rage can become the most familiar affect, - at the system, at a world with too much violence that creates too much helplessness and also at a family who will not be better or even seem to try.”

(Pawl, 1995, p. 24)
Reflective Practice Resources

• Key video – Early Headstart National Resource Center: Reflective Supervision Putting it into Practice
  http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/ehsnrc

• List of readings – California Center for Infant-Family and Early Childhood Mental Health
  http://www.ecmhtraining-ca.org/readings.html

Encourage Normal Development/Continuity of Daily Living
Trinka and Sam
The Day the Earth Shook

Story by Chandra Michiko Ghosh Ippen
Melissa Brymer and Jennifer Grady

Illustrated by Erich Ippen, Jr.

Parents' Guide by
Chandra Ghosh Ippen
Mindy Kronenberg
Melissa Brymer

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This story was developed in collaboration with the Early Trauma Treatment Network, a partner of the National Child Traumatic Stress Network.

The story was developed to help young children and their families begin to talk about feelings and worries they may have after they have experienced an earthquake.

More information about how to help children who have experienced disasters or other traumatic events can be found at nctsn.org.

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A PARTNER IN
NCTSN
The National Child Traumatic Stress Network
For children and families who have experienced earthquakes.

Adults: This story was designed for children who have experienced serious earthquakes. Please read it by yourself first and decide whether this is a good story to read with your child. If your child has been through a mild earthquake, you may decide that this story presents details that may not be helpful for your child to hear. Even if you choose not to read the story to your child, the story and the parent guide, which is at the end, may help you better understand your child's reactions to the earthquake.
This is Trinka.

And this is Sam.
They are neighbors, and they like to play together.

In the summer, they play at the park.
In the winter, they go puddle stomping.

And they always listen when it's time to stop... well... almost always.
They were growing up and learning lots of things. Sam just started school.

Trinka was too little for school, but her mom taught her the alphabet, and she played school with her dolls.
But one day, something scary happened. The ground started to shake.
Sam hid under the table with his teacher and his friends.

Trinka was in the yard playing. She didn't know what to do.
The Earth growled, grrr like it was angry.
It shook and shook and shook.
It seemed like it would never stop.
Sam worried that the school would fall down.

Trinka wanted her mommy.
- Mommy, mommy, mommmy!

Then crack boom, a tree fell down. Trinka yelled “mommy, mommy, mommmy.”

Crash

Trinka, Trinka!

Trinka’s mom heard her, but the door was blocked. She couldn’t get to Trinka.
It's ok. You're ok. I'm here. It was an earthquake. It's over.

Let's sit over in the grass where it's safe.

She hugged Trinka. Trinka started to cry. Her mom started to cry too. They were scared.

"It was an earthquake" her mom said. "It's over."

Mommy, mommy! Where were you mommy?

I was stuck in the house. I was trying to get to you.

She tried and tried until finally she got the door open and ran out to find Trinka.

I was so scared?
Sam was with his class. Their teacher said it was safe to come out, but there were no lights.

Their cubbies had fallen down. Their stuff was broken. Sam wanted his mom and dad. Some kids were crying.
The teachers said that they were safe, but now they had to go outside like they practiced in the drill. They all lined up and followed their teachers.

After a while their teachers said it was ok to go back in. There had been an earthquake, and they had listened and done really well.
Now they would wait for their parents to pick them up. Their parents knew where they were. They sat in a circle and read a story. Sam tried hard to listen. He wanted his mom and dad to come soon. It was hard to wait.
It was hard to get to your school.
I had to get your little brother.

Why didn't you come sooner?

Mom will meet us at home.

Where's mom?

After a long time, Sam's dad came. Sam was mad.

Sam was worried about mom. Why wasn't she there?
They went home. All along the road, Sam saw what the earthquake had done.
Trinka stared out the window. The playground was broken.

The house next door fell down. Piplo and his family had to stay somewhere else.
Trinka saw Sam come home.

She was glad he was ok. He was happy to see her too.
The earthquake was over, and it was time to sleep. Sam went to bed.

Mommy, will you sleep with me?
I will stay with you tonight.

Trinka went to bed, but she needed her mommy and her mommy slept with her.
But while they were in bed, the earthquake came back. The ground growled grrrr again. It wasn’t over. The beds shook. Trinka and Sam woke up and jumped out of bed.
Aftershocks are scary. They remind us of the earthquake. When one happens, we will stay in bed, curl up, hold on, and protect our heads with our pillows.

It's ok to be scared. I got scared too. I am sorry I didn't tell you about aftershocks. The big earthquake ended, but after a big earthquake there are often lots of little quakes called aftershocks.

Trinka's mom explained, and Sam's dad explained, "That was an aftershock. After an earthquake there can be lots of aftershocks. They can be just as scary and make us jump inside." Trinka's mom and Sam's dad talked about what to do when one happens.
The aftershocks kept happening. They happened when Trinka and Sam played.

They happened at school. They happened at dinner.
When it rumbled, Trinka got scared.

When she got scared, she needed her mommy. Her mommy helped her find a safe place where they could sit, and her mommy helped her feel safe inside.
When it rumbled, Sam's tummy hurt. He didn't want to go to school.

- He took his brother's toy.

- He slammed the door.

- He didn't listen to his daddy.

He felt cranky.
Trinka’s mom understood. Sam’s dad understood. Even though the earthquake was over, Trinka and Sam were still shook up.
It would take some time. Slowly the earth would stop shaking; the aftershocks would stop. Slowly Trinka and Sam would feel safe again.
And while they waited, their parents would be there to help them.
It might take a while. The school and house would be put back together. They would work together to fix the playground.
And eventually they would all go out to play.
Parents' Guide
The purpose of the story is to help children who have experienced an earthquake learn to deal with their fears and worries. As the story shows, you can help your child by letting your child know s/he is safe and loved.

Ways to Use This Story
1. Read and talk about this book with your child.
   - Follow your child’s lead.
   - Some children may want to stop and talk about what’s on the page. Let them. This is how they will begin to express how they feel and what they remember.
   - Some children may get worried while reading the book and need to take a break. That’s ok. You can say something like “It's hard for me to talk about the earthquake too. It is good to take a break.”
2. Use it as a coloring book.
   - Coloring is fun and relaxing.
   - Children can use different colors for different feelings. For example, when Sam gets angry, they might color that picture red. When Sam and Trinka are scared, they might choose a color for fear and color “scary” pages with that color. Doing this will help your child begin to think about different feelings.
   - As children are coloring, they will often begin to talk about what they are thinking.
   - Some children may want to scribble on the earthquake pictures to show how angry they are with the earthquake or how much they didn’t want the earthquake to happen. This is a good way to share feelings.
3. Use it to begin talking about what happened to your family during the earthquake and its aftermath.
   - Stories are important to young children. They help them understand what is happening.
   - When you read the story to your children, they will know it is ok to talk about what is happening and ask questions.
   - Each family will be impacted differently. Use this time to talk with your children about your family’s experience. Give the facts in simple words.
   - If your child saw you get upset, talk about it. It is ok to admit that you were scared or upset. Help your child to see that you are doing better now, that you are strong, and that you will do all you can to keep your family safe.
   - By talking to you, they may be able to share difficult feelings. When children can talk and don’t have to act out their feelings through their behavior, often their behavior improves.
   - To help your children begin to talk, ask them what they remember and whether they ever feel the way that Trinka and Sam felt. Offer that you have felt scared too and be open to answering their questions.
   - Sometimes when children are not comfortable or ready to talk about their own feelings, they can express themselves by talking about how the characters in the story felt or behaved. If you have noticed similarities between Trinka and Sam’s feelings and behaviors and those of your own children, you can direct the conversation to those parts of the story. For example, after the earthquake, Sam is mad at his dad because Sam thinks his dad took too long to come and get him. Young children often get upset with their parents and blame them for what happened even when it’s not the parents’ fault. This is because they believe that parents are so strong and powerful that if they don’t do something, it is because they chose not to do it. For Sam, it is important that his dad not react to his anger but recognize that Sam was very scared and needed him. It may help if he talks to Sam about how much he wished he could have been there to hold Sam and keep him safe and how he came as fast as he could. After the earthquake, Trinka is also upset with her mom because she thinks her mom lied when she said the earthquake was over. Her mom was just trying to make Trinka feel safe but Trinka doesn’t understand that. It is important that Trinka’s mom support her and help her understand what is happening. If your children seem angry with you, talking about how Sam and Trinka are upset with their parents may help your children begin to talk about their feelings.
4. Use it to begin talking to your children about earthquakes.
   - Young children may have a lot of questions about earthquakes, but because they are little, they may not know how to ask them. Here are some questions they
may have.
- What is an earthquake?
- Why do they happen?
- Will it happen again?
- When will it happen?
- What will we do if it happens?

- When children have their questions answered, they feel less scared. Even if they are still scared, they know they are not alone. They know that they can talk to you.
- Here is some information you might share with children to help them understand earthquakes. To start the topic you can say, "It is helpful to know about earthquakes. Here is what I know about them."
  - The earth has pieces like a puzzle. We call the pieces tectonic plates. They are always moving. Usually they move slowly. Earthquakes happen when the plates (puzzle pieces) bump into each other.
  - Earthquakes happen all the time. Most are so small we don't even feel them.
  - The shaking may be sideways, up and down, or wave-like.
  - Earthquakes typically last less than one minute. They usually start with a rumbling noise that can be low or as loud as a freight train.
  - Earthquakes occur suddenly and without warning.
  - During an earthquake, we want to make sure that things do not fall on us. This is why your teachers and I tell you to drop, find cover, and hold on.
  - A big earthquake is often followed by more earthquakes. These are called aftershocks. They are usually smaller than the first earthquake, but they can still be scary. Aftershocks happen because the earth is adjusting itself (the puzzle pieces are settling down) after the first quake. Typically, the larger the first quake, the larger and more numerous the aftershocks. Remember to drop, find cover, and hold on even in an aftershock, as objects can still fall or break.
  - When an earthquake or aftershock happens at night, stay in bed, curl up, and hold on. Protect your head with a pillow.
  - For families that live near the ocean, big earthquakes can cause large ocean waves, called tsunamis. Listen for the tsunami warning. If the warnings say to evacuate, do so immediately. Evacuate means you leave an area that might not be safe and you go to a place that will be safe (typically inland and to higher ground).

**Key Points to Remember**
- Even after a natural disaster is over, it can continue to affect us.
- Many things may remind you or your child of the earthquake.
  - Aftershocks
  - Large trucks passing by that shake the ground or house
  - Separations
  - Seeing people upset or crying
- Young children often cannot tell us that they are remembering. They show their fear through their behavior. Trinka wants to be picked up. Sam takes his brother's toy and runs around the house. Some children get stomachaches.
- Different children react in different ways. Trinka is scared, and she becomes clingy. Sam is scared, and he acts out.
- In the story, the parents are upset and frustrated by their children's behavior, but they try to understand why their children are behaving the way they are and they try to help the children understand why too.
- Even when children are scared, angry, or sad, it is not ok for them to behave aggressively – setting limits for your children will help them feel safe.
- Young children ask the same questions over and over. This is not because they forget what you told them but because this is their way of learning about what happened and making sense of it. They need you to answer the same
questions over and over, as patiently and lovingly as possible.

- Let your children know that even though scary things may have happened in the past, they are safe now. Remind them of the family plan to keep safe.

**Thinking About Your Child**

- Has your child acted differently since the earthquake?
- What makes your child scared?
- How do you know when your child is scared?
- How does your child tend to behave when stressed or scared?
- What can you and your child do together that will help your child feel better?

**Ways You Can Help Your Children**

- Help your children talk with you about what happened.
- Help your children identify feelings they may be having, and let them know it’s ok to feel that way.
- Help your children feel safe. Focus on psychological safety (how your children feel) and actual physical safety (what to do if there is another earthquake, where they can go that will be safe).
- Young children feel safe when you hold them.
- Children feel safe when they have predictable routines (regular meals and schedules and consistent rules) and know what is going to happen next.
- Develop a family disaster plan, so that your children know what will happen if there is another earthquake. To prepare, practice the Drop, Cover, and Hold On as a family. Secure furniture or other objects that can fall or break. Put together an emergency supplies kit that is easily accessible. Keep flashlights and shoes by everyone’s bedside at night. Make sure that everyone knows the safest places at home and school to take cover during an earthquake or tsunami, and where to go if you have to evacuate.

**Ways You Can Help Yourself**

- Adults can also be affected by natural disasters. You may be scared, and you may feel sad, angry, or guilty about all that has happened.
- In order to best help your children, you need to take care of yourself. Children, even very little children, notice when the grown-ups around them are not doing well.
- The first step to taking care of yourself is taking time for yourself. Ask yourself...
  - Does thinking about the disaster keep me from being able to do what I want or need to do?
  - Am I trying to completely avoid thinking about the disaster?
  - Do I feel anxious, distracted, or irritable?
  - Do I feel very sad or depressed?
  - Could my attempts to cope cause me problems later? Am I ignoring things I need to do or doing things that are not good for me?
  - What good things am I doing?
- If you notice that you are having strong reactions to the disaster
  - Talk to friends or family members.
  - Take time for yourself and do things that you enjoy.
  - Stay healthy. Eat well, exercise, and get enough sleep.
  - Allow yourself to feel sadness and grief.
  - Try to return to a normal routine.
  - If you feel very overwhelmed, try to take small steps to deal with large problems.
- Many adults feel guilty about focusing on or taking care of themselves, but remember your children feel happiest when they know that you are ok.

**Additional Resources**

- NCTSN.org – information about children, natural disasters, and trauma
- Futureunlimited.org – information about young children and mental health
- FEMA – Earthquake information for children:
  [http://www.fema.gov/kids/quake.htm](http://www.fema.gov/kids/quake.htm)
• Sesame Street – *Let’s Get Ready! Planning Together for Emergencies* with tips, activities, and other tools to help the whole family prepare for emergencies (both in English and Spanish):
  [http://www.sesamestreet.org/ready](http://www.sesamestreet.org/ready)
• Redcross.org
  • Earthquake-related activities for families with children ages 5-14
  • Zerotothree.org – information about young children and early childhood development