School-based Trauma Treatment: Reaching Parents Using a Texting App

Sheryl Kataoka, M.D., M.S.H.S.
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## Disclosures of Potential Conflicts

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<tr>
<th>Source</th>
<th>Research Funding</th>
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<td>SAMHSA TSA Center for Resiliency, Hope, and Wellness in Schools</td>
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<td>NIH Clinical and Translational Science</td>
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<td>Department of Education</td>
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<td>DHHS/Health Resources &amp; Services Administration</td>
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<td>Los Angeles Unified School District</td>
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Collaborators

**LAUSD:**

Kimani Norrington-Sands, PhD
Alejandra Acuna, PhD
Pia Escudero, L.C.S.W.

**UCLA:**

Armen Arevian, MD, PhD
Joe Mango
Antonella Santostefano
Roya Ijadi-Maghsoodi, MD
Sheryl Kataoka, MD, MSHS
PTSD IN CHILDREN

24-34% of youth exposed to urban violence

75% with PTSD have additional mental health problems
POST-TRAUMATIC STRESS DISORDER

First recognized as disorder in DSM III (1980)
Landmark cases described childhood PTSD
  ▪ L. Terr (1979, 1983); Pynoos (1987)

Child manifestations of PTSD described in DSM III-R (1987)
RISK FACTORS FOR PTSD

Three main risk factors in youth

- Severity of the event
- Parental reaction to the trauma
- Proximity to the event
- Past exposure to trauma

Family support and less parental distress result in lower levels of PTSD symptoms
CBITS (COGNITIVE BEHAVIORAL INTERVENTION FOR TRAUMA IN SCHOOLS)

Began in LAUSD 1999-2000 school year as part of immigrant student outreach

Evaluations
- Quasi-experimental design
- Randomized Controlled Trial
- Currently RCT being replicated in SF Unified
- Adaptations:
  - Special Education
  - Child Welfare
  - Disasters (New Orleans)
  - Native Americans (Montana)
  - Teacher implementation (SSET) in English and Japanese

(Jaycox, 2004)
EFFECT OF TRAUMA ON LEARNING

Decreased IQ and reading ability (Delaney-Black et al., 2003)

Lower grade point average (Hurt et al., 2001)

Decreased rates of high school graduation (Grogger, 1997)

More suspensions and expulsions (LAUSD survey, 2006)

More days absent from school (Hurt et al., 2001)

Lower grade point average (Hurt et al., 2001)
COMMON MANIFESTATIONS OF PTSD IN THE CLASSROOM

Nightmares
- Fatigue during the day
- Falling asleep in class

Avoidance
- Absenteeism
- Resistance to doing certain things for no obvious reason

Feeling Shame
- Withdrawal from peers
- Negative self-statements
- Poor eye contact
CBITS: COGNITIVE BEHAVIORAL INTERVENTION FOR TRAUMA IN SCHOOLS

Goals
- Provide early detection and intervention in schools
- Screening in general population
- Symptom reduction
- Academic support
- Peer and parent support
- Build resilience

Skills
- Education about trauma and common effects on students
- Relaxation training
- Cognitive therapy
- Learning to face the trauma (exposure)
- Problem-solving in social situations
CBITS AND IMPLEMENTATION IN SCHOOLS

Trauma Screening + 10 CBITS Group Sessions for Students

* Coordination with teachers/ principals
* Pull-out from class
* 6-8 students/group
* 1-3 individual sessions for trauma narrative work

Trauma Education for Teachers

* During regular teacher in-service
* Hand-out for teacher’s

Trauma Ed for Parents

* Parent Educational Sessions offered in groups
* Hand-out for parents
CBITS REDUCED SYMPTOMS OF TRAUMA

Source: Stein et al., JAMA 2003

PTSD symptoms (average score)

More

Less

Before CBITS 3-month assessment 6-month assessment

Group treated immediately

Group treated later

Solid line = Receiving CBITS Dotted line = Not receiving CBITS
THE IMPROVEMENT IN SYMPTOMS LASTED

PTSD symptoms (average score)

Source: Stein et al., JAMA 2003

Group treated immediately
Group treated later
Solid line = Receiving CBITS  Dotted line = Not receiving CBITS

Before CBITS  3-month assessment  6-month assessment
CBITS IMPROVES GRADES
% of Grade C or above in Spring Term by Treatment Groups

Kataoka et al, 2011
CBITS Parent Sessions

• CBITS is primarily a child group CBT
• Parent sessions optional, not a mandated part of treatment
• 2 CBITS parent sessions
  • Common reactions to trauma
  • Supporting child with use of cognitive and problem-solving skills
  • Helping with real-life exposures
• Phone contact to mobilize parent support and plan for any at home practices of skills or exposures
PAST FINDINGS: CBITS AND PARENTS

When 2 parent psychoeducation sessions offered, more than \( \frac{1}{2} \) don’t attend any sessions

- Did not attend: 59%
- 1 session: 35%
- 2 sessions: 6%
Importance of Parent Engagement in Trauma Treatment

• In treating youth exposed to trauma, one clinical recommendation is parent engagement and involvement in treatment (JAACAP Practice Parameters, PTSD 2010).

• Studies have shown that parents involved in their child’s trauma treatment have improved:
  • Parental depression
  • Greater support for the child
  • More effective parenting (Cohen 2004).
Barriers to Parent Engagement

- Although schools can be an ideal place to provide trauma treatment for students, it can be challenging to engage parents in school interventions.
- Barriers to engagement as reported by parents
  - Scheduling conflicts, high cost, lack of transportation and child care
  - Perceptions that provider is judgmental, lacks empathy
- Risk factors for lower rates of engagement:
  - Single-parent status
  - Low SES, poverty
  - Parent psychopathology
  - Ethnic minority status
What is Known about Overcoming Barriers to Parent Engagement

• Training staff in specific parent engagement strategies leads to improved parent participation (McKay 1996)

• Strategies to improve engagement (Alameda-Lawson 2010):
  • Outreach
  • Persistence
  • Responsiveness
  • Resource linkages
History of CBITS Parent Engagement

Experience from 3 Different States, 11 Schools (Santiago 2013)

• Not all schools offer parent sessions due to:
  • Limited school-based clinician time
  • Limited resources
  • Challenges with outreach to parents generally
• Parents who attended, welcomed CBITS sessions
  • Requested additional sessions (managing family stressors, parent-child communication)
  • Parent barriers: long work hours, transportation, childcare
Purpose of a Trauma-Informed Mobile Texting App for Parents

- To improve engagement of parents in school-based trauma treatment
- To provide trauma education to parents who can’t attend in-person sessions
- To reinforce knowledge and skills learned during in-person sessions
Community-Partnered Participatory Research

- Mutual transfer of expertise and insights, sharing in decision-making, and mutual ownership
- More rapid and effective improvement in community health outcomes
- Interventions have the potential to become more permanent fixtures in the community (Wells et al., 2006)
UCLA Development, Incorporate evidence-based components

LAUSD Development & Implementation

Parents Address barriers, acceptability
Chorus is a website that allows anyone (researchers, community members, clinicians) to create their own automated mobile interventions

- Text messages (SMS)
- Interactive Voice Response (IVR)
ENABLING PARTICIPATORY MOBILE INTERVENTION DEVELOPMENT

Non-techie people can create their own mobile interventions
Everyone’s voice can be heard. Because no programmers or servers are required, people can create their own mobile health interventions directly

Fast and easy development allows for real-time and iterative co-design
Stakeholders can create their apps in real-time together (during a workshop for example) and then mobilize those apps to test and improve the same day. Real-time development also enables creating apps for evolving needs (i.e. disasters, health emergencies)

This allows direct and participatory engagement of broad stakeholders
community partners academic partners
broader stakeholders patient advocates
providers patients
traditional application development

creation
“expert”
+ “IT”

→

output
“beta app”

↔

feedback
“users”

output
“final app”
participatory mobile intervention development

Stakeholder Engagement + Participatory Design

Clients
Parents
Teachers
Clinicians
Partners

Feedback

Outcomes

Iterative Development

Person-Centered Customization

Clients

Parents

Clinicians
Brief Texts Pushed Out Weekly to Parents

• 160 character texts that can be pushed out following child sessions
  • Messages can tell parents what was covered that day and how they can support their child at home
  • Content can be expanded through video links
  • Parents can decide when they receive texts
Welcome to the Parents CBITS App! (Bienvenidos a CBITS app) Text/Envie: 1 - for English 2 - for Spanish

We're here to help you learn along with your child. This is an automated texting app. For non-emergencies please contact your child's PSW.

For emergencies, dial 911. If at any point you choose to stop receiving these texts please text STOP. You can restart or resume by texting START.
(1/3) In dealing with problems we have with others, sometimes it seems impossible to fix the situation.

(2/3) The first step is focusing on parts of the problem we have control over. Changing our thoughts gives us the chance to act differently to the problem.

(3/3) Text NEXT to see an example. Text MENU to see more about Social Problem Solving.

(1/2) There were two home activities for this week. Ask your child to share their "Problem-Solving" worksheets with you.

(2/2) How did it go? Text 1 for 'Great!' and Text 2 for 'Not so good'.

(1/2) Great Job! Keep practicing solving problems with others in conversations with your child. Tell them how proud you are of them for their hard work.

(2/2) Text MENU to go
CBITS Parent App:

- Parents receive brief text messages to let them know what their child learned in CBITS that week (10 sessions)
- Content:
  - What is stress and trauma and common reactions
  - Relaxation exercises
  - Coping with thoughts and feelings about trauma
- Parents receive 2-3 texts per week or can view text on website
CBITS Parent App: Results

• 61 parents pilot tested the CBITS Parent Texting App

• Feedback:
  • Learned something new
  • Texts were helpful
  • Would recommend texting app to a friend

• Dissemination:
  • Parent texting app part of routine school consent for CBITS
  • Can be easily modified to adapt for specific community needs
THANK YOU!

SHERYL KATAOKA, M.D.

CONTACT ME AT:
SKATAOKA@MEDNET.UCLA.EDU