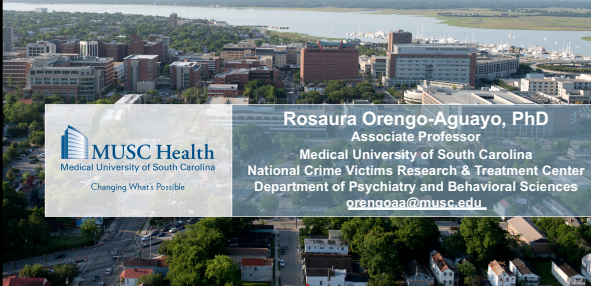



Implementation of Trauma Focused Cognitive Behavioral Therapy in Low Resourced Settings in the US and Latin America: Leveraging Implementation Science & Technology to Reach Underserved Youth






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Medical University of South Carolina
Changing What's Possible

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1

Objectives


1. Describe the implementation of Trauma Focused Cognitive Behavioral Therapy (TF-CBT) in three different low resourced contexts impacted by poverty, natural disasters, and violence in the US and Latin America
2. Describe the cultural and linguistic tailoring of TF-CBT using implementation science principles and technology (i.e., telehealth, apps)
3. Provide program evaluation outcomes, lessons learned, and future directions for global implementation of TF-CBT



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Teamwork Makes the Dream Work!



MUSC Collaborators

- Reagan W. Stewart, PhD
- Meg Wallace, LISW-CP
- Michael A. de Arellano, PhD
- Postdoctoral Fellows

Puerto Rico Department of Education

- Maria Rotón, PhD
- Joy Lynn Suarez-Kindy, PsyD
- Maria Christian, MEd
- Regina Cibes, PhD & Inez Rivera, MSW

University of Puerto Rico, Medical Sciences Campus

- Karen Martinez, MD

Carlos Albizu University



- Tania Rodriguez, PhD & Eileen Santaella
- Gladia Rodriguez, PsyD & Maria Rotón, PhD

Consultants

- Melissa Brymer, PhD (UCLA)
- Annette La Greca, PhD (U Miami)
- Scott Sevin (Meteorologist)
- John Young, PhD (U Mississippi)

NCTSN & SAMHSA Grants

- NCTSN Category III (1U79SM063224; PI: de Arellano)
- NCTSN Supplement (1U79SM063224; PI: de Arellano)
- SAMHSA Mental Health Awareness Training Grant (1H79SM081934-01; PI: Orengo-Aguayo)

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Our Team



Regan W. Stewart, PhD



Rosaura Orengo-Aguayo, PhD



Blanca Villalobos, PhD



Katherine Teeley, MA



Aubrey Dueweke, PhD



Juventino Hernandez PhD



Andel Nicasio, PhD



Rebeca Castellanos, MA



Michael de Arellano, PhD



FUNPRES Team



Creative-El Salvador Team




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Barriers in Access to Trauma Treatment

- Trauma exposed youth from low SES backgrounds, living in rural areas, and belonging to a racial or ethnic minority group are less likely to have access to evidence-based mental health services (Alegria, Vallas, & Pumariega, 2010; Roberts, Gilman, Breslau, Breslau, & Koenen, 2011)
- Barriers in access to mental health services include:
 - Lack of transportation and means to travel (e.g., gas/parking money) to mental health facilities
 - Lack of insurance
 - Employment barriers (e.g., scheduled work hours, leave restrictions)
 - Limited availability of culturally and linguistically competent services
 - Public health emergencies (COVID-19)




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Telehealth Outreach Program for Traumatic Stress (TOP-TS) in South Carolina

- Established 2015 at MUSC
- Provides school-based and home-based telemental health treatment for trauma-exposed children and adolescents
- Goal of increasing access to care for populations that are underserved by office-based mental healthcare programs (low-resourced settings in South Carolina)
 - Especially, rural populations and racial/ethnic minorities



<https://telehealthfortrauma.com>





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TOP Clinic

- Training Clinic
- Multidisciplinary team: psychology interns, postdoctoral fellows, MSW, MD
- **848 visits last school year**
 - 3,500 visits since 2016
- Pre-Pandemic
 - 70% school-based
 - 30% home-based



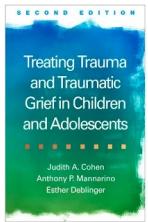


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Trauma Focused Cognitive Behavioral Therapy (TF-CBT)

- Empirically-validated, multi-component psychotherapy model for children ages 3-18 addressing trauma-related symptoms, including PTSD, depression, and moderate behavioral problems.
 - › 20+ randomized controlled trials supporting its efficacy
 - › Highest rating by the California Evidence-Based Clearinghouse for Child Welfare
 - › Successfully implemented in community service agencies worldwide.



(Cohen, Mannarino, & Deblinger, 2017)





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How does it work?

- HIPAA compliant videoconferencing software
- Use of a laptop, desktop, or loaner iPads that are data enabled
- Private location at a school or home
- Weekly therapy visits and psychiatric medication management (as needed)
- Bilingual (Spanish) clinicians and access to interpreter services
- Evidence-based trauma focused therapy (TF-CBT)



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How does it work?

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TF-CBT Via Telehealth Pilot Study¹ Participants and Context

- 70 children participated in the pilot study
- 19% 81%
- Ages 7 to 18
(M=12.73; SD=3.34)
- 88.6% Racial/Ethnic Minorities
 - 58.6% Hispanic
 - 30% African American
- 34% Received TF-CBT in Spanish
- 7 Underserved Communities In South Carolina
- 63% School-based 34% Home-Based

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TF-CBT Via Telehealth Pilot Study 2020 Results

- 62 of 70 completed all components of TF-CBT (88.6%)
- 8.8 of every 10 children Completed all components of TF-CBT
- 81% of caregivers Participated in TF-CBT with their child
- High caregiver satisfaction
- Tx effects similar to in-person TF-CBT
Kids got better (effect size=2.42)
- Vs. 25-60% Typical completion rate for TF-CBT in studies in the United States

¹ Stewart, R.W., Orrego-Aguayo, R., Young, J., Wallace, M., Cohen, J., Mannarino, T., & de Arellano, M.A. (2020). Feasibility and Effectiveness of a Telehealth Service Delivery Model for Treating Childhood Posttraumatic Stress: A Community-Based, Open Pilot Trial of Trauma-Focused Cognitive Behavioral Therapy. *Journal of Psychotherapy Integration*, 30(2), 274-289. <https://doi.org/10.1037/pspi0000125>

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Lessons Learned and Next Steps

- Understanding the unique needs, concerns, and strengths of agencies and families is an important first step
- Addressing needs/concerns/workflows/communication at organizational, leadership, clinician, and stakeholder levels is crucial
- Ongoing consultation and implementation support is necessary
- Building a repository of tele resources and having an open access philosophy is important

Next Steps:

- National Child Traumatic Stress Network Category II Grant to provide training and technical assistance to agencies in the US and Puerto Rico in telehealth delivery of TF-CBT
- Further development and dissemination of webinars, protocols, resources (<https://telehealthfortrauma.com>)
- Reimbursement, licensing reciprocity across states will be crucial for sustainability- <https://psyvoact.site-ym.com>



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Telehealth Outreach Program (TOP) Recommended Readings:

1. Stewart, R.W., Orengo-Aguayo, R., Young, J., Wallace, M., Cohen, J., Mannarino, T., & de Arellano, M.A. (2020). Feasibility and Effectiveness of a Telehealth Service Delivery Model for Treating Childhood Posttraumatic Stress: A Community-Based, Open Pilot Trial of Trauma-Focused Cognitive Behavioral Therapy. *Journal of Psychotherapy Integration*, 30(2), 274-289. <https://doi.org/10.1037/a0050025>
2. Dueweke, A.R., Wallace, M.M., Nicasio, A.V., Villalobos, B.T., Hernandez Rodriguez, J., & Stewart, R.W. (2020) Resources and Recommendations for Engaging Children and Adolescents in Telemental Health Interventions. *The Behavior Therapist*, 45(5), 171-176.
3. Stewart, R. W., Orengo-Aguayo, R., Wallace, M. M., Metzger, I. W., & Rheingold, A. (2019). Leveraging technology and cultural adaptations to increase access and engagement among trauma-exposed African American youth: Exploratory study of school-based telehealth delivery of trauma-focused cognitive behavioral therapy. *Journal of Interpersonal Violence*. Advance online publication. <https://doi.org/10.1177/088626051983>
4. Stewart, R. W., Orengo-Aguayo, R., Cohen, J. A., Mannarino, A. P., & de Arellano, M. A. (2017). A pilot study of trauma-focused cognitive behavioral therapy delivered via telehealth technology. *Child Maltreatment*, 22(4), 324-333. <https://doi.org/10.1177/1077559517725403>
5. Stewart, R.W., Orengo-Aguayo, R., Gilmore, A.K., & de Arellano, M. (2017). Addressing barriers to care among Hispanic youth: Telehealth delivery of Trauma-Focused Cognitive-Behavioral Therapy (TF-CBT). *The Behavior Therapist*, 40, 112-115. PMID: 28870047.
6. Shealy, K., Davidson, T., Hones, A., Lopez, C., & de Arellano, M.A. (2015). Delivering an evidence-based mental health treatment to underserved populations using telemedicine: The case of a trauma-affected adolescent in a rural setting. *Cognitive and Behavioral Practice*, 22, 331-344. <https://doi.org/10.1016/j.cbpra.2014.04.007>
7. Jones, A.M., Shealy, K., Reid-Quilones, K., Moreland, A.D., Davidson, T., López, C., Barr, S., & de Arellano, M.A. (2014). Guidelines for establishing a telemental health program to provide evidence-based therapy for trauma-exposed children and families. *Psychological Services*, 11(4), 398-409. <https://doi.org/10.1037/a0034963>



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Barriers in Access to Trauma Treatment after Natural Disasters: Puerto Rico

- Natural disasters include all types of severe weather events (e.g., hurricanes, tsunamis, earthquakes, tornadoes, wildfires, and floods), which can pose a significant threat to human safety, security, health, and infrastructure (Fischer, 2003).
- Approximately 175 million children will be affected every year by natural disasters as a result of climate change (Seballos, Tanner, Tarazona, & Gallegos, 2011).
- Children exposed to natural disasters are at increased risk for developing a host of mental health problems that require evidence-based, trauma-focused approaches and interventions (Bonanno et al., 2010)
- Lack of trained providers and/or access to evidence-based services after natural disasters is a significant problem



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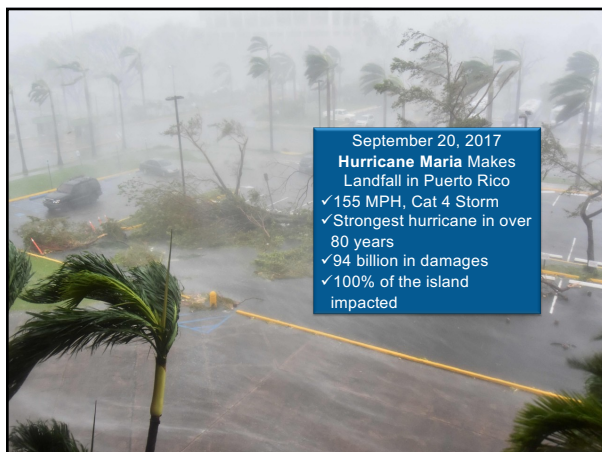
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Item Description	Youths, No. (%)		
	Overall (N = 96 108)		
Injured during hurricane	3895 (4.1)	Theft in neighborhood	16 998 (17.7)
Family, friend, or neighbor injured during hurricane	15 367 (16.0)	Violence in neighborhood	11 990 (12.5)
Family, friend, or neighbor died	6376 (6.6)	Moved schools	5474 (5.7)
Thought own life was at risk	28 729 (29.9)	Helped rescue people	23 124 (24.1)
Own house damaged	43 901 (45.7)	Parent(s) lost job	10 964 (11.4)
Belongings damaged	29 818 (31.0)	Electricity unrestored	80 020 (16.7)
Forced to evacuate	24 537 (25.5)	Water unrestored	6995 (7.3)
Still relocated	5284 (5.5)	Friends or family left island	55 550 (57.8)
Saw houses damaged	80 608 (83.9)		
Lost a pet	7212 (7.5)		
Shortage of food or water	31 086 (32.3)		

- 30% thought they could die during Maria
- 32% still did not have adequate food or water 5-9 months post Maria
- 58% experienced loss of social support networks

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Mental Health Results

- Prevalence of probable PTSD = 7.2% (N=6,900)
- Significant differences in PTSD by gender ($t = 27.69$, $P < .001$) with girls reporting more clinically significant PTSD symptoms than boys (8.2% vs. 6.1%)
- Being female, experiencing greater material loss, and fear of dying during the hurricane accounted for 20% of the variance in PTSD symptoms ($r^2 = 0.195$; 95% CI, 0.190-0.200).
- Socioeconomic status, geographic location, and distance from landfall did not predict PTSD symptoms.

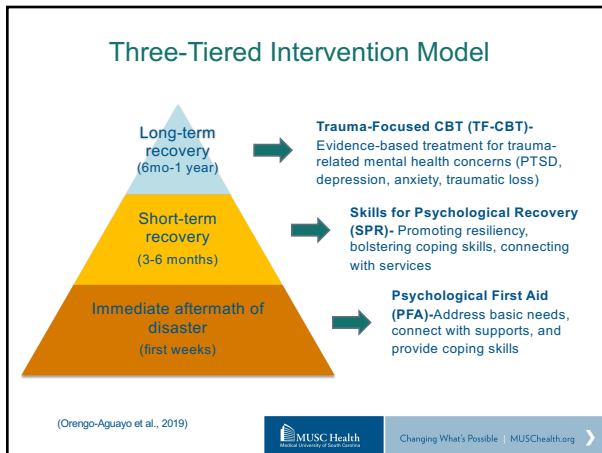
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Conclusions

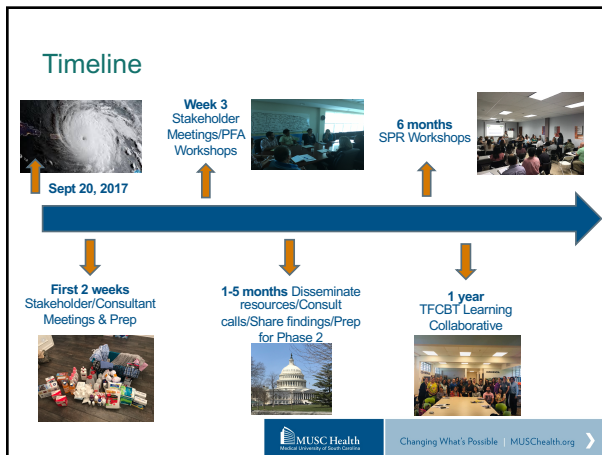
- 100% of Puerto Rican youth surveyed experienced some type of disaster related stressful event regardless of socioeconomic status or geographic location on the island.
- Puerto Rican youth are also resilient (7.2% vs. 30% prevalence rates compared to other post-disaster studies)
- **There is a need for trauma-focused interventions for Puerto Rican youth after hurricane Maria.**



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PRACTICE

- Psychoeducation and Parenting**
Psychoeducation about childhood trauma and PTSD
Parenting component, including parent management skills
- Relaxation**
Relaxation skills individualized to the child and parent
- Affect Modulation**
Affective modulation skills adapted to the child, family, and culture
- Cognitive Coping**
Connecting thoughts, feelings, and behaviors related to the trauma
- Trauma Narrative**
Assisting the child in sharing a verbal, written or artistic narrative about the traumatic and related experiences
Including cognitive and affective processing of the trauma experiences
- Memory Strategies**
Mastery of trauma reminders
- Coherent Parent-Child Sessions**
Practice skills and enhance trauma-related discussions
- Enhancing Safety and Development**
Enhancing future personal safety and optimal developmental trajectory by providing safety planning and social skills training


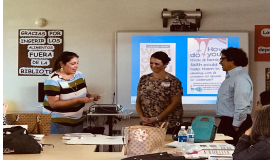




TF-CBT Web 2.0 Español Disponible Ya!
<http://tfcbt-es.musc.edu>

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Phase 3: Trauma-Focused Cognitive Behavioral Therapy (1 year)


- Increasing local capacity for evidence-based trauma-focused treatment
- 18 Department of Education school psychologists
- Learning Collaborative Model (~8 months)

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Tailoring TF-CBT to the Puerto Rican Context

- Fidelity to the model and TF-CBT training requirements were maintained- Very important!
- Tailoring occurred at the **implementation level**:
 - Identifying Needs and Strengths**: Informal focus groups to understand the needs and strengths
 - Translation and tailoring of all materials** (reviewed iteratively by native speakers)
 - TF-CBT Web 2.0
 - CPSS-5 (Foa et al., 2017) and RCADS (Chorpita et al., 2005)
 - Creation of a TF-CBT resource and implementation workbook
 - Learning Collaborative Model** (Bunger et al., 2016)

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Identifying the Needs

- Significant mental health professional shortage in PR
 - Financial crisis
 - Immigration to the mainland US ("brain drain")
- Limited psychologists to address mental health concerns in schools (~35 for 300,000+ students across 865 schools!)
- Barriers to accessing mental health treatment (distance to clinics, caregiver schedules, time missed at school)
- Lack of specialized trauma-focused training
- Limited, to non-existent availability of resources in Spanish



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Identifying the Strengths

- Committed leadership and staff
- Resourceful- Have been doing a lot with little for many decades
- PR-DE open to the idea that a trauma-informed school is important (mainly as a result of Hurricane Maria)
- Willingness to participate in specialized training
- Willingness to allow psychologists to see children and caregivers at school to minimize barriers in access to care



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Translation and Tailoring of Materials

TFCBT Web 2.0 Español Disponible Ya!
<http://tfcbt-es.musc.edu>



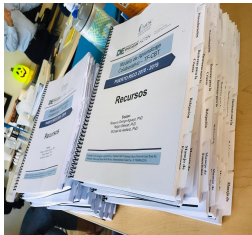
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Tailoring and Translation of Materials

[illegible]

Translation and Tailoring of Materials

[illegible]

Tailoring and Translation of Materials

[illegible]

Learning Collaborative Model

1. Orientation and contract
 1. Read intro packet and expectations and "opt in"
2. Pre-training work
 1. Complete TF-CBT Web2.0 and read a TF-CBT chapter written in Spanish (Moreland, de Arellano, Hanson, & Deblinger, 2016)
3. Learning Session #1
 1. 2 day, in person training. All materials and training in Spanish
 2. In-vivo adaptation based on needs
4. Action Period (bi-weekly consultation calls)
 1. Bilingual consultants
5. Learning Session #2
 1. 2, in person booster (4 months into collaborative). Reinforce Trauma Narrative and Conjoint Session components

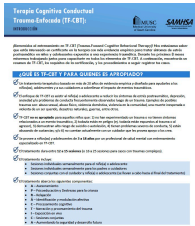


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Learning Collaborative Model

1. Orientation and contract



54% (n=19 out of 35) psychologists
"opted in" after reviewing

- REQUISITOS PARA CERTIFICARSE EN TF-CBT**
- ✓ Para poder certificarse en TF-CBT es necesario que complete TODOS los requisitos a continuación. Este formulario es de 8 páginas. No se trata de un examen.
 - ✓ **Completar la historia y un caso en inglés.** Antes de la primera capacitación (puede que envíenlos completos por correo electrónico o traerlos en papel).
 - ✓ **Asistir a 2 capacitaciones (12 días cada una): #1 (sept. 19-20, 2019) y #2 (por anunciar los fechas).**
 - ✓ **Completar por lo menos 1 caso de TF-CBT.** Entregarlo mediante una red, postal o mediante comunicación de medios para enviarlo al equipo de TF-CBT por sus pautas en la tarjeta.
 - ✓ **Asistir a la Jornada de consulta.** 2 veces al mes, por 1 hora, vía telefónica de conferencia o por persona. Debe participar activamente y estar por lo menos 15 minutos de cada hora de la jornada.
 - ✓ **Completar un cuestionario de satisfacción.** En línea para documentar su progreso en el TF-CBT con cada sesión.
 - ✓ **Usar WhatsApp.** Para recibir información y comunicarse con el equipo de MUSC (los entrenadores).
 - ✓ **Usar el correo.** Para obtener acceso gratuito a todos los recursos necesarios para implementar TF-CBT.
 - ✓ **Si cumplir todos los requisitos mencionados arriba, recibirá una certificación en TF-CBT.** Esta le permitirá aplicar TF-CBT en su práctica clínica. De gane, aparecerá en el registro nacional de proveedores de TF-CBT. Debe completar una prueba adicional, en línea (solo disponible en inglés), que confirme un nivel adicional de sus conocimientos (<https://tfcbt.musc.edu/evaluation/evaluation>).
 - ✓ **Si tiene una duda sobre los requisitos, contacte a la Dra. Rosaura Orange Aguayo.** rosaura@musch.edu



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Learning Collaborative Model

2. Pre-training work

1. Complete TF-CBT Web2.0 and read a TF-CBT chapter written in Spanish (Moreland, de Arellano, Hanson, & Deblinger, 2016)



- Found it difficult to complete the English version (particularly the quizzes)- wanted it in Spanish
- Quizzes "made us nervous"
- "Too long"
- Most helpful component were the videos
- Greatly valued the CEU credits
- Preferred the book chapter (Moreland et al., 2016)



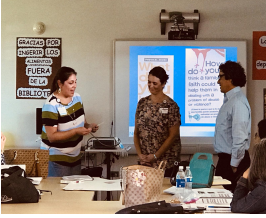
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Learning Collaborative Model

3. Learning Session #1

1. 2 day, in person training. All materials and training in Spanish
2. In-vivo adaptation based on needs



- Space to process Hurricane Maria experiences
- Time to train on metrics and scoring
- Dynamic and experiential approach was beneficial
- Reinforce with opportunity to earn therapy materials as prizes & coffee/food breaks
- Time for group activities and sharing
- Repetition of PRACTICE acronym throughout


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Learning Collaborative Model

4. Action Period (bi-weekly consultation calls and implementation support)



- Metrics Coordinator
- Clear instructions for scoring and sending measures to metrics coordinator
- Resources on dropbox
- WhatsApp group chat
- Virtual Vouchers
- Group consultation
- Individual consultation ("on demand")
- Self-care processing groups

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Learning Collaborative Model

1. Learning Session #2

1. 2, in person booster (4 months into collaborative). Reinforce Trauma Narrative and Conjoint Session components



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Adapting to Earthquakes & COVID-19: TF-CBT via Telehealth in Puerto Rico




TF-CBT Learning Collaborative with APS Healthcare Clinics

- Began in August 2019
 - Still recovering from Hurricane Maria
 - Series of earthquakes ravage the island in January 2020
 - COVID-19 pandemic March 2020-Present

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Timeline



Sept 2017
Hurricanes Irma & Maria


Jan-Feb 2020
Earthquakes & Aftershocks

March 2020
COVID-19 Pandemic

- Island wide impact
- Loss of communications and power (6-12 months)
- Loss of property and jobs
- School closures (3-12 months)

- Homes structurally or permanently damaged
- School closures
- Fear and uncertainty
- New type of natural disaster


- Island wide lockdown
- Impact on economy
- Extended school closures- Limited access to tech and internet= disparities
- Earthquakes + COVID

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Transition from in-person to telehealth

- Needs assessment with APS clinics leadership
- 3-hour webinar on delivering TF-CBT via telehealth with psychologists and leadership
- Development of tip-sheets specific to platform utilized (zoom)
- Practice tele-sessions
- Ongoing implementation support via phone and WhatsApp
- Teleconsultation calls
- Coordinated effort between leadership, administration, and providers with MUSC team
- Transition for 70% of enrolled patients occurred within 2-3 weeks

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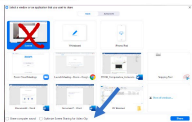
¿Se puede usar ZOOM?

Compatibilidad de dispositivos

- No use la primera opción **Screen**, porque le estará dando acceso al paciente o cuidador de un todo lo que usted está viendo en su computadora y cualquier actividad que usted haga.
- Use el **Whiteboard** a su discreción. Tenga en cuenta que le estará dando el control al paciente y esto no es recomendable con niños/as pequeños/as.
- **iPhone/iPad**... No lo utilizará en las sesiones de Tele salud por ahora.
- Tenga los documentos que va a utilizar abiertos y minimizados antes de la sesión para mayor rapidez y fluidez para usted. La imagen deberá poder ver que hay 2 diferentes opciones para compartir a la última abra una opción que está abierta también.
- Prueba funcionar y abra otros documentos mientras está en video o está mostrando un documento específico. Recuerde que el paciente y el cuidador solo ven lo que le está mostrando.

Compatibilidad de Video

- Debe de activar la opción **Optimize Screen Sharing for Video Clip** que aparecen debajo en la ventana de Share Screen. Antes de activar... **Share Computer screen** a **Optimize Screen Sharing for Video Clip**. Después elija el video que ya tiene preinstalado planea y está instalado en su computadora.

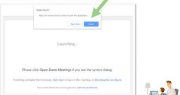


Instrucciones para usar ZOOM


Computadora


Paso 1:
Se le guiará a cómo a enviar un correo electrónico con una invitación para conectarse por Zoom. Cuando abra el correo electrónico haga clic en el enlace.

Paso 2:
Le abrirá la página de abajo. Haga clic donde dice **Open Zoom**.




Paso 3:
Después le aparecerá una ventana como la de abajo. Haga clic donde dice **Join with Video**.



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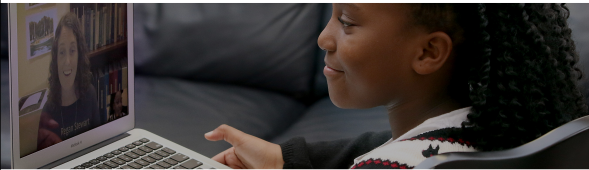
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telehealthfortrauma.com




Telehealth Outreach Program

HOME ABOUT US RESEARCH RESOURCES TELEHEALTH WEBSITES RESOURCES EN ESPAÑOL WEBSITES DE TELESAUD EN ESPAÑOL





Reducing Barriers and Expanding Access

Welcome to the Telehealth Outreach Program (TOP). TOP is a collaborative effort to increase access to evidence-based trauma-focused mental health treatments for children and adolescents through telehealth technology. The program is dedicated to...

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TF-CBT Outcomes in Puerto Rico

- N=106 youth
 - APS Health
 - Dept of Ed
- Mean Age=10.4 yrs (Range: 4-18)
- 55% Female
- Referred by school social workers, counselors or teachers, caregivers

Index Trauma	N=106	%
Traumatic Loss/Grief	22	20.8
Domestic Violence	17	16.0
Sexual Abuse	12	11.3
Bullying in Schools	12	11.3
Hurricane Maria	11	10.4
Physical abuse	9	8.5
Poivictimization	7	6.6
Earthquakes	3	2.8
Community Violence	2	1.9
Neglect	1	0.9
Other	10	9.4



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Pre-Post Treatment Measures (N=77)

Measure	Pre-M (SD)		Post-M (SD)	
	Child	Caregiver	Child	Caregiver
CPSS DSM 5 (≥31 probable PTSD)	33.08 (14.30)	33.28 (14.84)	12.50 (9.48)	11.72 (8.67)
	56% mod-severe	59% mod-severe	6% mod-severe	3% mod-severe
RCADS-R (T-Score >70, clinically elevated)				
Depression	55.71	67.64	42.84	52.85
Anxiety	55.36	64.86	42.66	50.12
Combined	56.19	67.95	41.90	51.01

Cohen's d for PTSD=1.43 (child) and 1.59 (caregiver)



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Lessons Learned for Building Collaborative Partnerships

- Listen first- Special attention to basic needs, safety, and trust
- Provide a menu of options, based on your expertise, in a respectful, simple, and flexible manner
- Be ready to adapt as needs and priorities shift
- Acknowledge local expertise and leverage it
- Help build a network of collaborators who capitalize on each other's strengths
- Careful not to become a burden (e.g., coordination, interpretation)
- Long-term commitment is desirable in post-disaster contexts
- Build partnerships pre-disaster

Orrego-Aguayo, R., Stewart, R.W., Martínez González, K.G., Suárez Kindy, J.L., Christian Herrero, M.C., & Rivera Colón, I. (2019). Building collaborative partnerships across professions to implement trauma-focused cognitive behavioral interventions after hurricane Maria in Puerto Rico. *The Behavior Therapist*, 42, 123-126. <http://www.abct.org/docs/PastIssue42n4.pdf>.



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Cultural Humility and Sensitivity

- My own experience as a Puerto Rican living in the mainland United States (not in the island of Puerto Rico)
- Listen first, listen often,
- Context matters- One successful implementation strategy in one context under a set of conditions may flop in another context
- Perspective taking- What would I have wanted when I was learning TF-CBT?
- Involve local providers in the process and as part of the team
- Be there when things get tough and offer support (e.g., earthquakes, recent tropical storm Isaias)
- Build up, encourage, model humility and team-work
- Have fun!



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Future Directions

- Training additional community mental health and school-based providers in culturally-tailored TF-CBT
- Training community and child-serving agencies (e.g., schools) to become more trauma-informed
- **Enhancing access to trauma-focused treatment via telehealth**



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Expanding Access: Teleconsultation Program in Schools




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PR Recommended Readings:


1. Orengo-Aguayo, R., Stewart, R.W., Villalobos, B. T., Hernandez Rodriguez, J., Dueweke, A. R., de Arellano, M. A., & Young, J. (2020). Listen, don't tell: Partnership and adaptation to implement trauma-focused cognitive behavioral therapy in low-resourced settings. *American Psychologist*, 75(6), 1158–1174. <https://doi.org/10.1037/amp0000691>.
2. Orengo-Aguayo, R., Stewart, R.W., de Arellano, M.A., Pastrana, F.A., Villalobos, B.T., Martínez-González, K.G., Suárez-Kindy, J.L., & Brymer, M. (2019). Implementation of a multi-phase, trauma-focused intervention model post-hurricane Maria in Puerto Rico: Lessons learned from the field using a community based participatory approach. *Journal of Family Strengths*, 19 (1). <https://digitalcommons.library.tmc.edu/jfs/vol19/iss1/7>.
4. Orengo-Aguayo, R., Stewart, R., de Arellano, M., Suárez-Kindy, J., & Young, J. (2019). Disaster exposure and mental health among Puerto Rican youth after hurricane Maria. *JAMA Network Open*, 2(4): e192619. <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2731679>.
5. Orengo-Aguayo, R., Stewart, R.W., Martínez González, K.G., Suárez Kindy, J.L., Christian Herero, M.C., & Rivera Colón, I. (2019). Building collaborative partnerships across professions to implement trauma-focused cognitive behavioral interventions after hurricane Maria in Puerto Rico. *The Behavior Therapist*, 42, 123-126. <http://www.abct.org/docs/Pastissue/42nd.pdf>.

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Barriers in Access to Trauma Treatment in Latin America: El Salvador


- 30-60% of children in Latin America have experienced a potentially traumatic event during their lifetime (Speizer et al., 2008)
- Many Latin American countries have a long-standing history of political instability, gang-related violence, poverty, and forced migration that has further exposed youth to potentially traumatic events (Wirtz et al., 2016)
- A universal mental health screening study found that ~35% (1/3) of students endorsed elevated symptoms of posttraumatic stress in El Salvador (Stewart et al., 2021)
- However, an estimated 70% of Latin American youth with mental health disorders **do not** receive treatment and of those that do receive services, most are not evidence-based (Kohn, 2013)

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TF-CBT Training and Implementation in El Salvador

MUSC: Trauma Experts
Linguistic and cultural adaptation of TF-CBT to the El Salvador context



December 2018-January 2019

Training of 15 Psychologists
In TF-CBT (3 days in January, 2019; 2 days in May, 2019)




January 2019/May 2019

Technical Assistance and Consultation
With implementation, fidelity to the model, metrics, consultation calls, adaptation of protocols



February-October 2019

11 months

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Participants and Context

• **121** children participated in the pilot study

53%

47%

Ages 3 to 18
(M=11.96; SD=3.65)

5 Schools

1. José Simedón Cañas (Santa Tecla)
2. Concha Yisús de Escalón (Santa Tecla)
3. José Martí (Santa Tecla)
4. La Sabana (San Salvador)
5. República de Canadá (San Salvador)

1 Community Clinic

1. Centro de Evaluación y Atención Psicológica (CEAP)-Funpres

70%
Received TF-CBT in Schools

Municipalities of San Salvador and Santa Tecla

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Types of Traumas

Trauma	#	%
# of students receiving treatment = 121		
Traumatic loss/grief	29	24.0
Witnessing domestic violence	20	16.5
Physical abuse	18	14.9
Sexual abuse	16	13.2
Serious accident	12	9.9
Witnessing community violence	9	7.4
Threat of death	3	2.5
Assault	3	2.5
Traumatic medical procedure	2	1.7
School Assault/Bullying	2	1.7
Separation from caregiver	2	1.7
Abandonment	2	1.7
Verbal abuse	1	0.9
Robbery	1	0.9
Animal attack	1	0.9

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Results

• **104** of 121 completed all components of TF-CBT (**86%**)

14% (N=17)
Did not complete TF-CBT

- 7 dropped out (reason unknown)
- 7 left treatment (moved/ dropped out of school)
- 2 left treatment (medical reasons)
- 1 remained in PRAC-coping skills components (for safety reasons- Suicidal Ideation/ Revictimization)

Vs. 40-60%
Typical completion rate for TF-CBT in studies in the United States

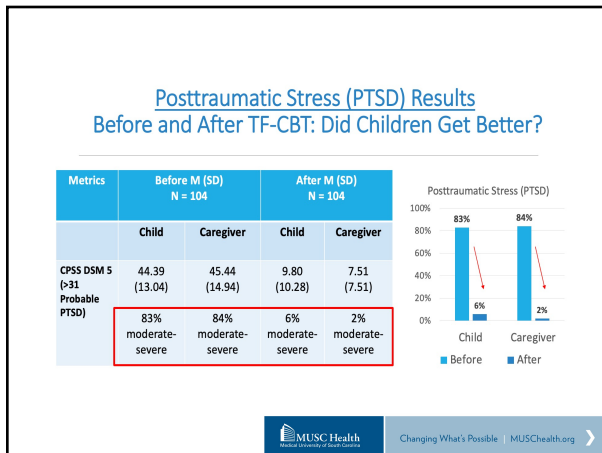
8.5 of every 10 children
Completed all components of TF-CBT

95% of caregivers
Participated in TF-CBT with their child

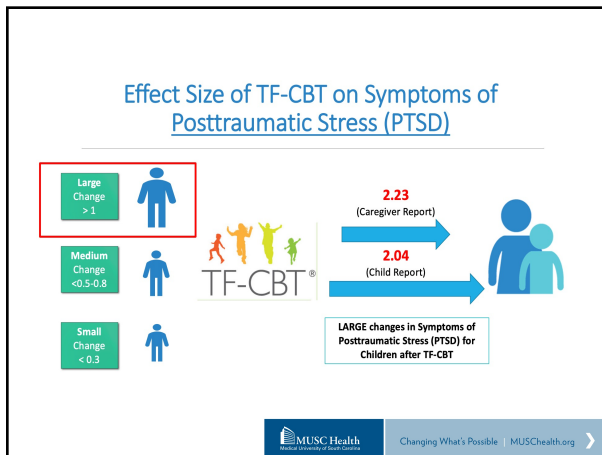
14 Sessions (average)
4-6 months to complete TF-CBT

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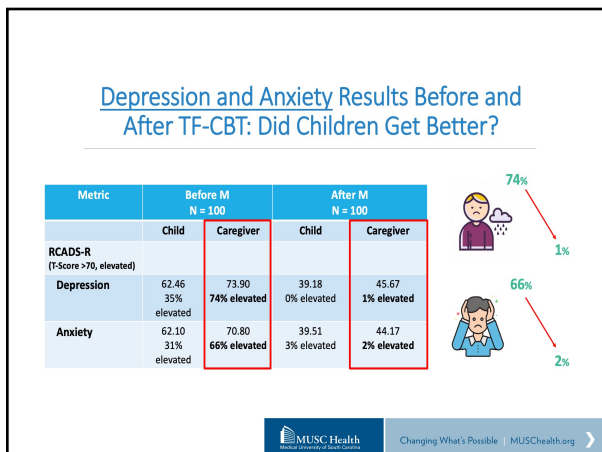
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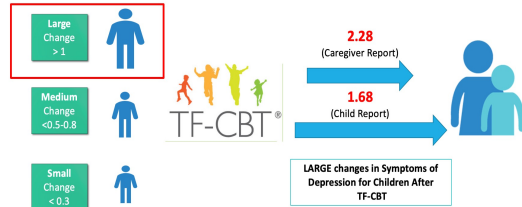


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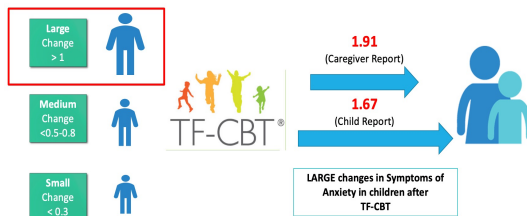
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Effect Size of TF-CBT on Symptoms of Depression



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Effect Size of TF-CBT on Symptoms of Anxiety



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TF-CBT Pilot Trial Conclusion

- 9 of every 10 children (92.8%) got better (no longer had Posttraumatic Stress (PTSD) after TF-CBT)
- 10 of every children with symptoms of Depression (100%) no longer had symptoms of depression after TF-CBT
- 9.5 of every 10 children with symptoms of Anxiety (97%) no longer had symptoms of Anxiety after TF-CBT
- Its important to provide ALL TF-CBT components (A-PRACTICE) to obtain these results

TF-CBT was adapted and implemented successfully in the local context of El Salvador and produced successful results.
TF-CBT is feasible, acceptable and effective in El Salvador.

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Presentation of Results to Community Partners and Government officials





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DEVELOPMENT OF A TRAUMA-INFORMED SYSTEMS APPROACH IN EL SALVADOR: OPEN PILOT TRIAL OF TRAUMA-FOCUSED COGNITIVE BEHAVIORAL THERAPY

TRAUMA-FOCUSED COGNITIVE BEHAVIORAL THERAPY (TF-CBT)

The results of TF-CBT delivered in a community mental health clinic and 5 schools demonstrated positive and strong outcomes in reducing symptoms of PTSD, anxiety, and depression among youth in El Salvador (N = 1,205).

YOUTH who received TF-CBT were 3x more likely to report a reduction in PTSD symptoms (OR = 3.15, 95% CI = 1.45-6.85).

FOCUS: 85% of youth reported a reduction in PTSD symptoms.

85% of youth reported a reduction in PTSD symptoms.

85% of youth reported a reduction in PTSD symptoms.

COMMUNITY MENTAL HEALTH (CMH)

The results of this school screening revealed high rates of trauma exposure and post-traumatic stress symptoms among youth in El Salvador (N = 1,205).

YOUTH who participated in the screening were 3x more likely to report a reduction in PTSD symptoms (OR = 3.15, 95% CI = 1.45-6.85).

FOCUS: 85% of youth reported a reduction in PTSD symptoms.

85% of youth reported a reduction in PTSD symptoms.

85% of youth reported a reduction in PTSD symptoms.

SELF-HELP/TELEHEALTH SERVICES (SHEALTH)

Psychologists successfully trained school teachers and staff on how to better identify trauma symptoms, refer for trauma services, and provide self-care.

TEACHERS who received training were 3x more likely to report a reduction in PTSD symptoms (OR = 3.15, 95% CI = 1.45-6.85).

FOCUS: 85% of youth reported a reduction in PTSD symptoms.

85% of youth reported a reduction in PTSD symptoms.

85% of youth reported a reduction in PTSD symptoms.

DESARROLLO DE UN ENFOQUE DE SISTEMAS INFORMADO POR TRAUMA EN EL SALVADOR: PRUEBA PILOTO ABIERTA DE UN TRATAMIENTO COGNITIVO CONDUCTUAL ENFOCADO EN TRAUMA

TRATAMIENTO COGNITIVO CONDUCTUAL ENFOCADO EN TRAUMA (TF-CBT)

Los resultados de TF-CBT proveen una evidencia de la salud mental positiva y resultados fuertes en la reducción de síntomas de PTSD, ansiedad y depresión entre los jóvenes en El Salvador (N = 1,205).

Los jóvenes que recibieron TF-CBT fueron 3 veces más propensos a reportar una reducción en los síntomas de PTSD (OR = 3.15, IC 95% = 1.45-6.85).

FOCUS: 85% de los jóvenes reportaron una reducción en los síntomas de PTSD.

85% de los jóvenes reportaron una reducción en los síntomas de PTSD.

85% de los jóvenes reportaron una reducción en los síntomas de PTSD.

SALUD MENTAL EN LA ESCUELA (CMH)

Los resultados de esta encuesta revelaron altas tasas de exposición a eventos traumáticos y síntomas de estrés post-traumático entre los jóvenes en El Salvador (N = 1,205).

Los jóvenes que participaron en la encuesta fueron 3 veces más propensos a reportar una reducción en los síntomas de PTSD (OR = 3.15, IC 95% = 1.45-6.85).

FOCUS: 85% de los jóvenes reportaron una reducción en los síntomas de PTSD.

85% de los jóvenes reportaron una reducción en los síntomas de PTSD.

85% de los jóvenes reportaron una reducción en los síntomas de PTSD.

SERVICIOS DE SALUD TELESAUD (SHEALTH)

Los psicólogos capacitados exitosamente a los maestros y al personal de la escuela sobre cómo identificar mejor los síntomas de trauma, derivar los servicios de salud mental apropiados y brindar apoyo y autocuidado.

Los maestros que recibieron capacitación fueron 3 veces más propensos a reportar una reducción en los síntomas de PTSD (OR = 3.15, IC 95% = 1.45-6.85).

FOCUS: 85% de los jóvenes reportaron una reducción en los síntomas de PTSD.

85% de los jóvenes reportaron una reducción en los síntomas de PTSD.

85% de los jóvenes reportaron una reducción en los síntomas de PTSD.


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Lessons Learned and Next Steps

- Draw on local expertise
- Adapt to the local context
- Build long-term relationships based on collaboration, sharing, and service
- Remember the BIG picture

NEXT STEPS:

- “Diplomado” in Trauma
- RCT of TF-CBT in El Salvador
- Telehealth pilot



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