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Trauma-Informed Care PA-S Pilot Program Evaluation

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Background on Trauma & Trauma Informed Care (TIC)

Trauma stimulates the sympathetic nervous system → creates a **fight-or-flight response** through the hypothalamic-pituitary-adrenal axis → release of cortisol¹. **Repeated** stress leads to **dysregulation** of this response, which can lead to altered stress susceptibility and the **inability** to cope with stress.² A **trauma-informed approach** encourages the provision of care to be based on knowledge and understanding of trauma and its widespread implications on patients lives.³

Rather than asking **"what is wrong with you,"** trauma-informed care encourages providers to ask **"what happened to you?"**⁴



Figure 1. The 4 R's of Trauma Informed Care⁴

Benefit of TIC for Patients:

- Develops a **trusting relationship** with providers⁵
- Improves patient **engagement**⁷
- Improves patient **adherence and compliance**⁷
- Improves long-term **health outcomes**⁶

Benefit of TIC for Providers:

- Helps reduce **burnout**, potentially reducing staff turnover⁸
- Decreases unnecessary **utilization of care**⁷
- **Reduce health costs**⁷
- Prevents **loss of follow-up care**⁷

Methods

Overview

- Pre-post evaluation study of a pilot education program intervention for Physician Assistant Students to evaluate their knowledge and utility of TIC

4 Modules

- Primary Care & Pediatrics, Emergency Medicine, Women's Health, Behavioral Health

Recruitment of Participants

- Convenience sampling via in-person and email invitation
- Incentivized with randomized ten-dollar gift cards
- Separated by block randomization into the 4 intervention groups

Pre/post surveys

- 11 questions pre-test and 14-15 questions post-test with 2-3 specialty specific measures composed to categorical scale and open-ended responses

Analysis

- Assess the percent changes between the pre- and post-survey
- Created a **codebook** by categorizing and organizing data into meaningful themes or codes based on the content and context of responses

Trauma Informed Care Training Modules

Self-directed, self-paced online modules launched among 38 volunteer Physician Assistant Students recruited in-person and via email and incentivized through randomized ten dollar gift cards.

Each module includes:

- What is trauma-informed care?
- TIC-directed interview skills
- TIC-directed physical exam skills
- Effective screening tools
- Additional resources and referrals for patients

Emergency Medicine

- Violent injuries
- Acute behavioral health crisis
- Sexual assault
- Social needs screening

11 participants

9 participants

Mental & Behavioral Health

- Anxiety & Depression
- Posttraumatic stress disorder & Suicide
- Psychosis & Schizophrenia
- Alcohol & Substance Abuse

Women's & Reproductive Health

- Intimate partner violence & sexual assault
- Gynecologic Exams
- Traumatic pregnancy & birth experiences

11 participants

7 participants

Family & Pediatrics Medicine

- Behavioral health
- Sexual violence & abuse
- Pediatric populations
- Adverse childhood events
- Examining minors
- Interviewing children & families

Qualitative Results

- Most mentioned themes in pre- and post-survey FITB:
 - Awareness, empathy, personal clinical approach, impact of trauma

Instances of Coded Themes Based on Specialty

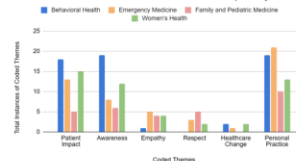


Figure 2. The Instances of Coded Themes by Specialty

Quantitative Results

Overview

- A total of 38 Physician Assistant students completed the TIC modules
- To assess changes in comfort with TIC topics, pre and post survey responses were compiled to 'uncomfortable' and 'comfortable' and excluded neutral responses. This showed the notable changes in attitudes, beliefs and skills based on the module provided.
- All modules saw an increase in the total level of comfort participants had with the statements assessed
 - Few respondents reported feeling either extremely uncomfortable or comfortable

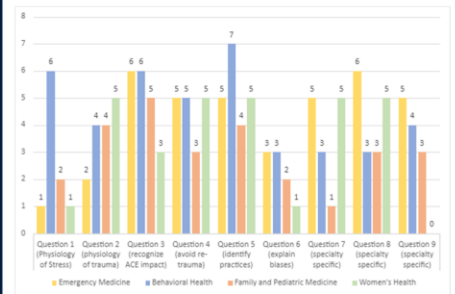


Figure 3. The Change in Responses from 'Uncomfortable' to 'Comfortable'

Discussion & Implications

Overall Outcomes

- Overall, significant improvement in the scored variables indicating the effectiveness of the pilot program intervention

Limitations

- Sample size
- Sample population
- Inability to determine if participants viewed the entire video

Future Considerations

Deploy the modules on a larger scale

- Increase knowledge and utility of TIC through dissemination and **implementation of modules as a requirement** for future PA school curriculums
- Create a **pocket reference guide** surrounding TIC in clinical practice based on the feedback and lessons learned

Trauma-Informed Care PA-S Pilot Program Evaluation

By Karyn Furcolo, Raya Patel, Mihail Petrov, and
Leslie Rowland

Mentor: Rosie Frasso, PhD, MSc, CPH



Who We Are:

MPH/PA Dual-Degree
students at TJU!



Our Project: Trauma-Informed Care PA-S Pilot Program Evaluation

Program Objectives

- Increase the number of PA students who are aware of TIC/support TIC practice/increase utilization of TIC
- Increase the number of PA students who report they are willing to implement TIC in clinical practice
- Increase the number of PA students who receive TIC education prior to entering their clinical experience and engaging with patients

Revise & Record the TIC Specialty Modules Created by the CO2022

- Original Work: Amanda Ciavaglia, Cori Connors, Sara Downie, Hyejin Kim, and Kamryn Sandidge

What is Trauma?

“An event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual’s functioning and mental, physical, social, emotional, or spiritual well-being,” (SAMHSA, 2022).

Lasting Impacts of Trauma

Repeated stress leads to **dysregulation** of this response, which can lead to altered stress susceptibility and the **inability to cope with stress** (Vashistab & Schneiderc, 2014).

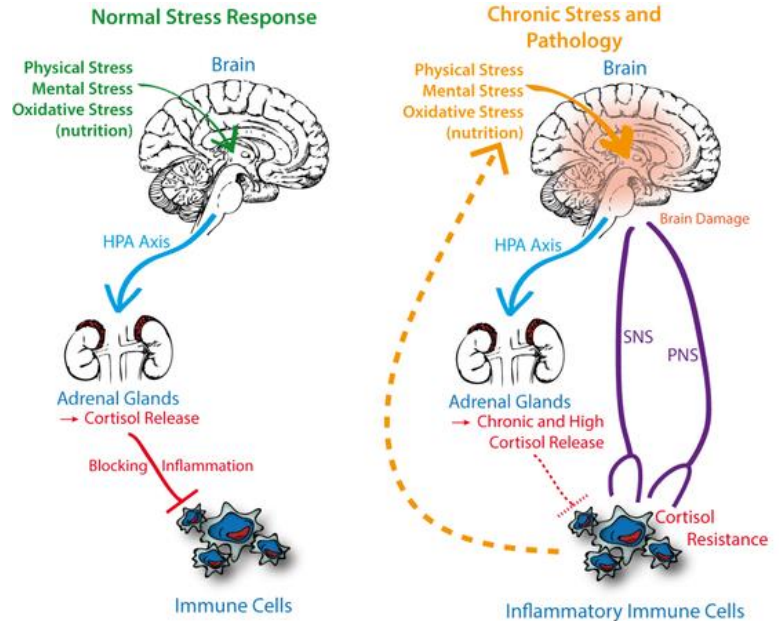


Figure 1. The HPA Axis and Trauma

Why is Trauma Informed Care Important?

The Event

Events can include “the actual or extreme threat of physical or psychological harm or severe, life-threatening neglect for a child that imperils healthy development.”

The Experience

What shapes a person experience of a potentially traumatic event?

The Effect

The lasting impact of the event

The time of onset and duration of these effects can vary

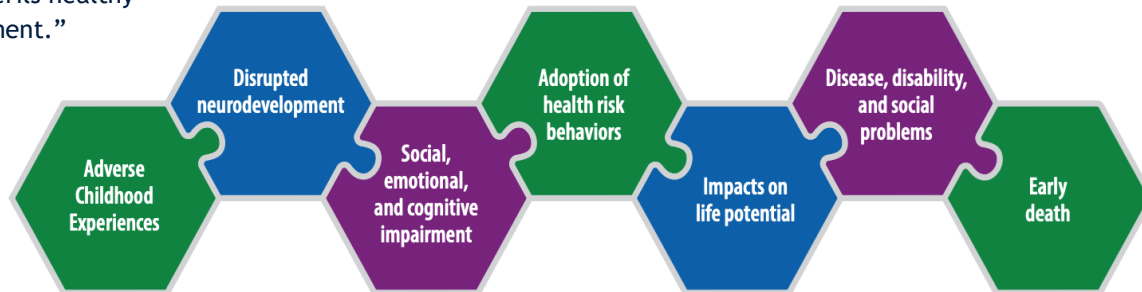


Figure 2. How ACEs Impact Health and Opportunity

Substance Abuse and Mental Health Services Administration [SAMHSA], 2014

Trauma-Informed Care Model ^{24,25}

Rather than asking “*what is wrong with you,*” trauma-informed care encourages providers to ask “*what happened to you?*”

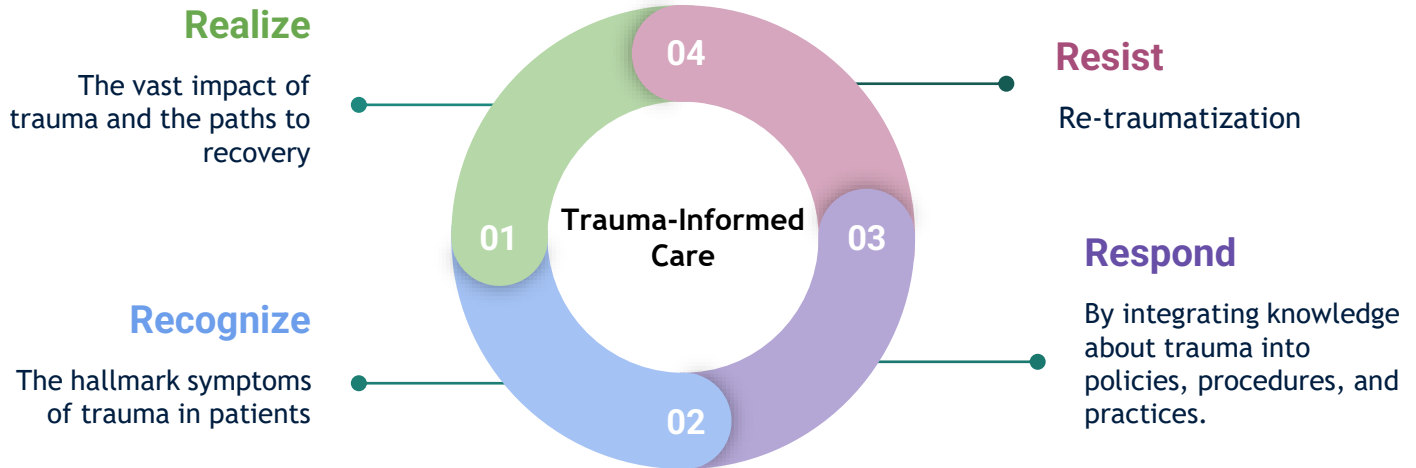


Figure 3. The 4 R's of Trauma Informed Care

Methods Overview

Overview

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- Assess the percent changes between the pre- and post-survey
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Four Specialty-Specific Modules

Emergency Medicine

- Violent injuries
- Acute behavioral health crisis
- Sexual assault
- Social needs screening

Mental & Behavioral Health

- Anxiety & Depression
- Posttraumatic stress disorder & Suicide
- Psychosis & Schizophrenia
- Alcohol & Substance Abuse

Women's & Reproductive Health

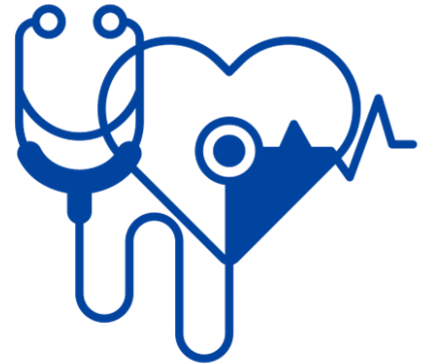
- Intimate partner violence & sexual assault
- Gynecologic exams
- Traumatic pregnancy & birth experiences

Primary Care & Pediatrics

- Behavioral health
- Sexual violence & abuse
- Pediatric populations
- Adverse childhood events
- Examining minors
- Interviewing children & families

Family and Pediatrics Medicine Module

- Mental & Behavioral Health
- Sexual Violence & Abuse
 - Child Abuse
 - Adult Abuse
 - Intimate Partner Violence (IPV)
- Pediatric Population
- Resources for Patients & Providers



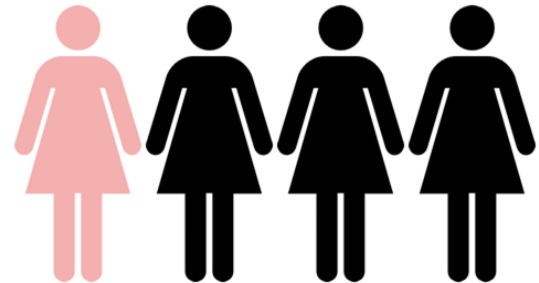
Emergency Medicine Module

- Violence Related Injuries
- Sexual Assault
- Acute Behavioral Health Crisis
- Social Needs Screening & Resources



Women's Health Module

- Intimate Partner Violence
 - Screening Tools
 - Interview Skills
 - Physical Exam Skills (Breast & Pelvic)
 - Intervention & Support Services
- Trauma in Prenatal Period
 - Birth trauma
 - Previous prenatal loss
- Resources for Patients and Providers



Behavioral Health Module

- Role of PAs in Mental Health Care Settings
- De-Escalation Techniques
- Interviewing and Physical Exams Techniques
- Common Conditions & Their Specific TIC Aids
 - Anxiety
 - Depression
 - Suicide
 - Post-Traumatic Stress Disorder (PTSD)
 - Alcohol & Substance Use Disorder
 - Psychosis and Schizophrenia
- Resources & Support



Results Overview

A total of 38 Physician Assistant students completed the TIC modules.

All modules saw an increase in the total level of comfort participants had with the statements assessed.

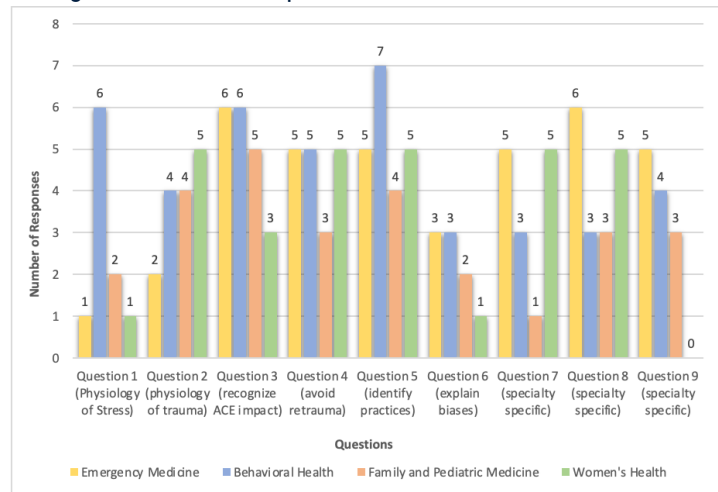
Most mentioned themes in pre- and post-survey FITB:

- Recognition and awareness
- Personal clinical approach
- Impact of trauma

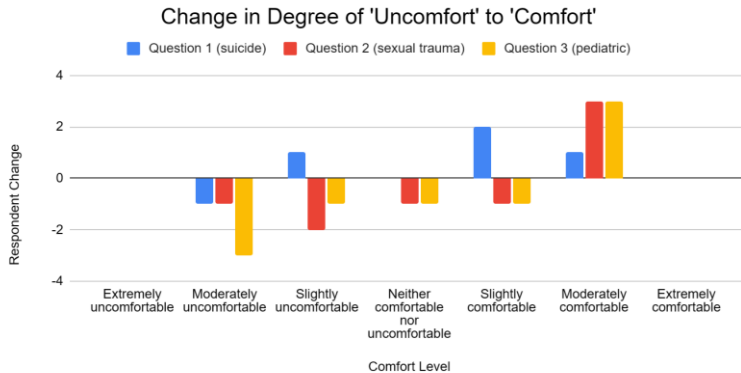
FITB themes from pre- to post- survey

- Patient Impact
- Awareness
- Empathy
- Respect
- Healthcare Change
- Personal Practice

Change in the Number of Responses from 'Uncomfortable' to 'Comfortable'



Family and Pediatric Medicine Results



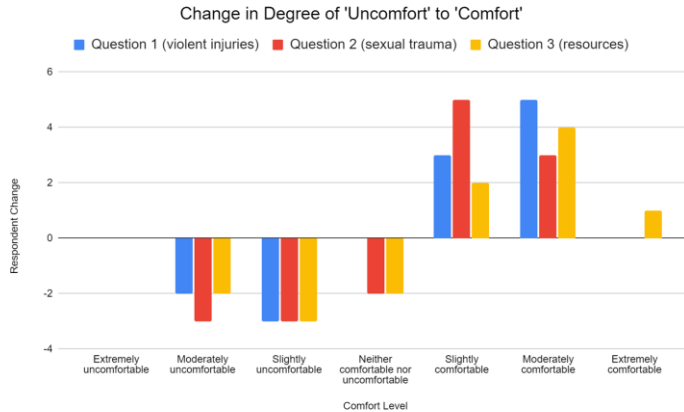
Question 1: "I feel comfortable assessing a patient's risk for suicide?"

Question 2: "I feel comfortable performing a history and physical on a patient who is a survivor of sexual trauma?"

Question 3: "I feel comfortable assessing a pediatric patient's risk for trauma?"

CODE	PRE - FITB: in your own words describe TIC	POST - FITB: in your own words describe TIC	POST - FITB: what was your biggest takeaway
Patient Impact	2	2	1
Awareness	1	4	1
Empathy	1	2	1
Respect	2	2	1
Healthcare Change	0	0	0
Personal Practice ★	2	4	4

Emergency Medicine Results



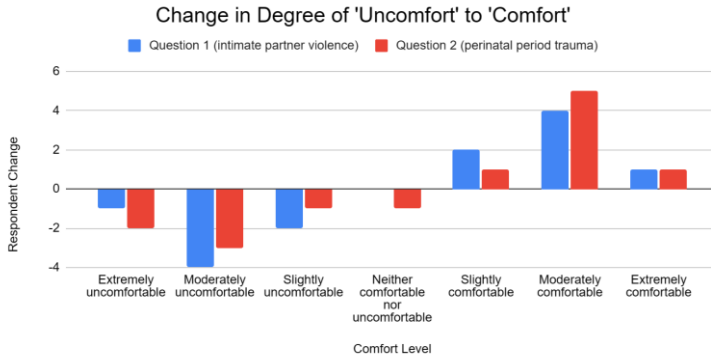
Question 1: “I feel comfortable interviewing patients who are survivors or violent injuries?”

Question 2: “I feel comfortable performing a history and physical on a patient who is a survivor of sexual trauma?”

Question 3: “I feel comfortable locating and utilizing intervention programs and support resources to provide individualized care to each of my patients?”

CODE	PRE - FITB: in your own words describe TIC	POST - FITB: in your own words describe TIC	POST - FITB: what was your biggest takeaway
Patient Impact	3	6	4
Awareness	4	5	2
Empathy	1	3	1
Respect	0	3	0
Healthcare Change	0	1	0
Personal Practice ★	2	11	8

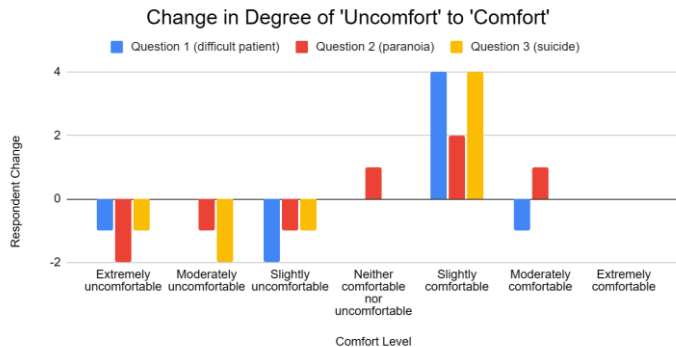
Women's Health Results



Question 1: "I feel comfortable performing a history and physical on a patient who has experienced intimate partner violence?"
 Question 2: "I feel comfortable caring for a patient who has previously experienced trauma in the perinatal period?"

CODE	PRE - FITB: in your own words describe TIC	POST - FITB: in your own words describe TIC	POST - FITB: what was your biggest takeaway
Patient Impact ★	5	6	4
Awareness	7	4	1
Empathy	2	1	1
Respect	2	0	0
Healthcare Change	0	0	2
Personal Practice	5	3	5

Behavioral Health Results



Question 1: “I feel comfortable de-escalating a difficult patient?”

Question 2: “I feel comfortable assessing a patient who is experiencing paranoia?”

Question 3: “I feel comfortable assessing a patient’s risk for suicide?”

CODE	PRE - FITB: in your own words describe TIC	POST - FITB: in your own words describe TIC	POST - FITB: what was your biggest takeaway
Patient Impact	5	9	4
Awareness ★	7	7	5
Empathy	0	1	0
Respect	0	0	0
Healthcare Change	0	2	0
Personal Practice ★	6	8	5

Discussion

Overall Outcomes

- Significant improvement in the scored variables indicating the effectiveness of the pilot program intervention

Limitations

- Sample size
- Sample population
- Inability to determine if participants viewed the entire video

Future Considerations

Deploy the modules on a larger scale

- Create a future pilot study with increased participation to analyze for statistical significance
- Increase knowledge and utility of TIC through dissemination and implementation of modules as a requirement for future PA school curriculums
- Create a pocket reference guide surrounding TIC in clinical practice based on the feedback and lessons learned

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Thomas Jefferson Center City Physician Assistant Program

2022 MPH/PA Dual Degree Cohort

Thank you for your time!

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