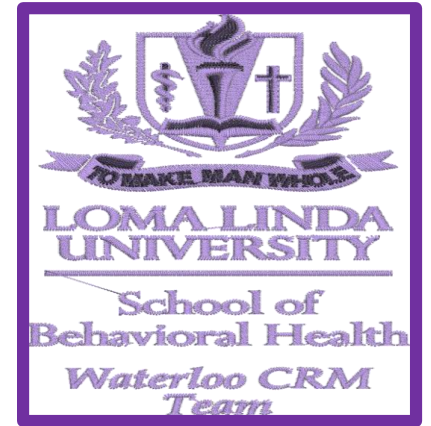




TRAUMA RESOURCE  
INSTITUTE



# The Community Resiliency Model<sup>®</sup> How it could translate to combatting vaccine hesitancy in Sierra Leone + beyond

Susanne Montgomery  
Zephon Lister

Jacinda Abdul-Mutakabbir

Peter Abdulrahman Turay

Loma Linda University, USA and Waterloo Hospital SL  
CRM Teachers and Researchers





# WHO ARE WE?





# Objectives

1. *Describe the impact of stress and trauma on mental and physical health and give an overview of the CRM model.*
2. *Explore how the CRM framework helps explain the socio-environmental reasons for some individual's vaccine hesitancy that often have their roots in stress and trauma. Our focus is on how people process the information.*
3. *Propose how a CRM+ intervention could be developed to help with vaccine hesitancy.*

The presenter has no conflicts of interest to disclose.



TRAUMA RESOURCE  
INSTITUTE

# ***FACTS ABOUT CRM?***

- CRM is an evidence informed model used both in the US and internationally
- CRM skills were initially used during environmental disasters
- CRM skills are appropriate amongst diverse cultural/international groups
- CRM content is appropriate across the lifespan and amongst unique groups

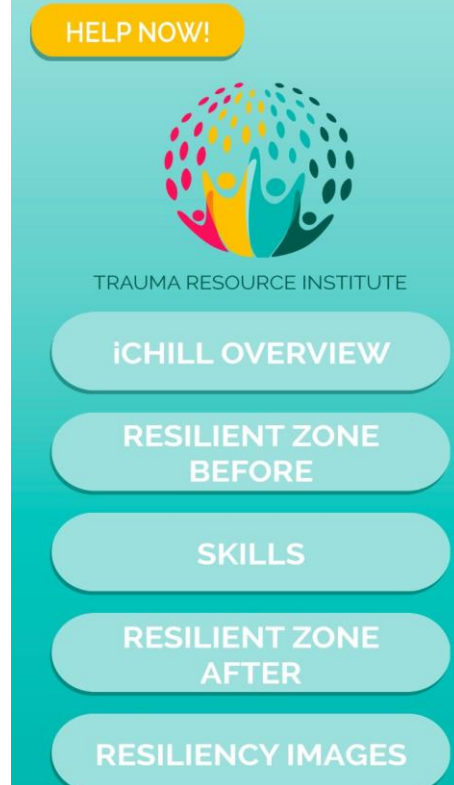


# The Community Resiliency Model (CRM)

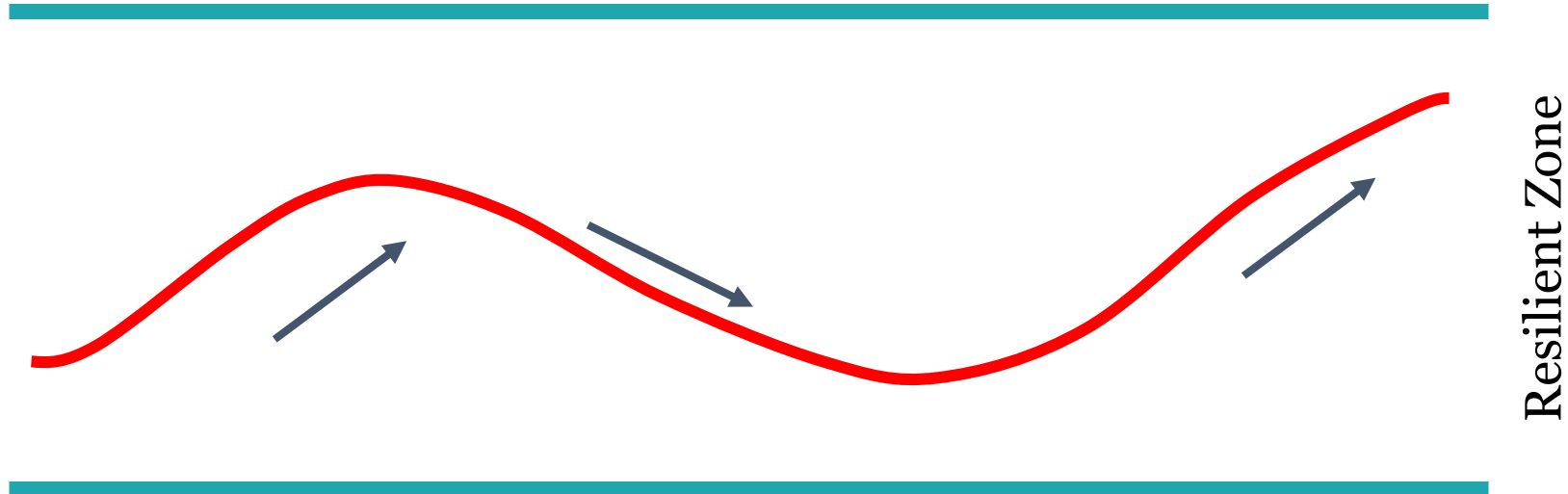
- ❑ A set of six easily learned self-care skills which help us handle life stressors and bring the nervous system back into balance after stressful life events
- ❑ Education on resilience development and the neurobiology of stress and trauma



Free app (English and Spanish) "ichill"



# *The Resilient Zone- “OK” Zone*



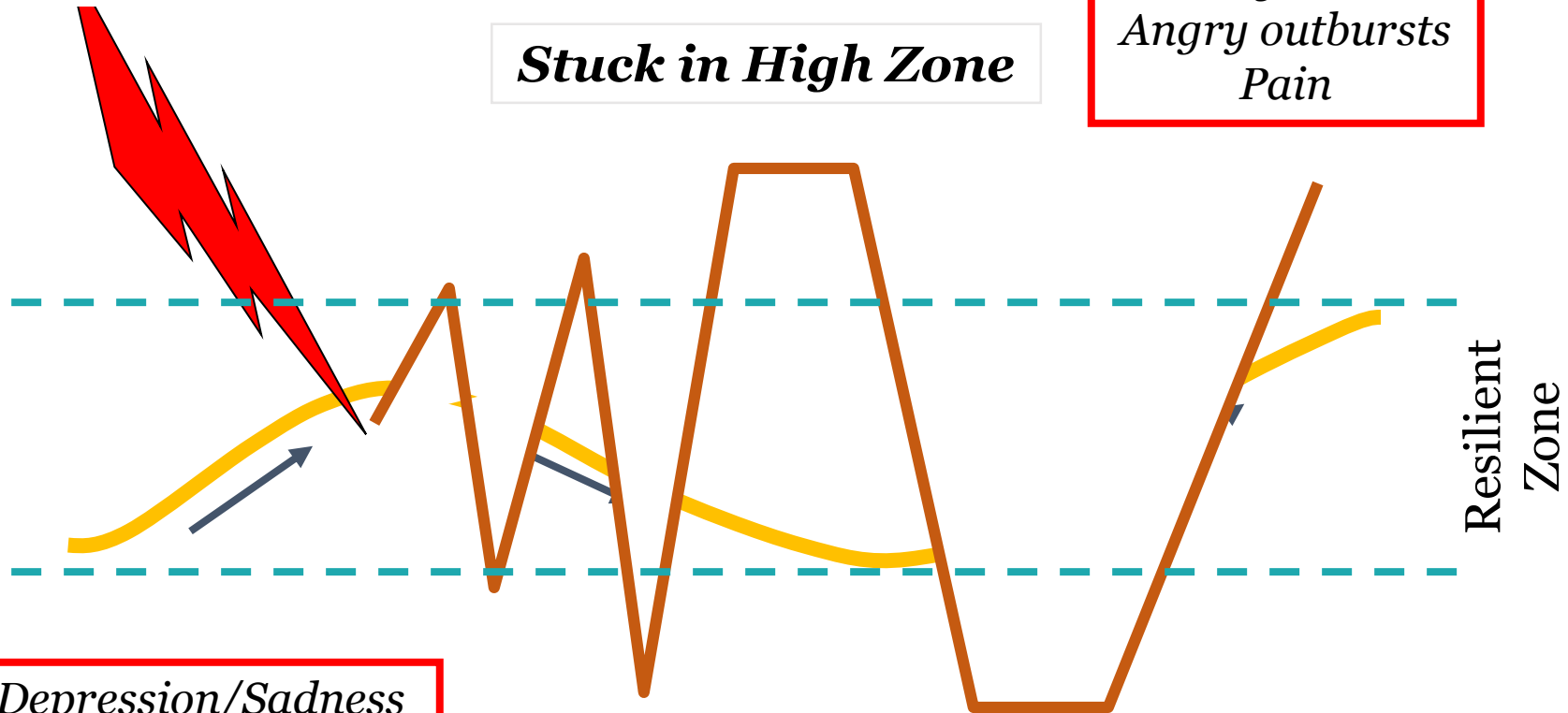
*GOAL: TO WIDEN YOUR RESILIENCY ZONE*



***Traumatic/Stressful Event  
or  
Stressful/Traumatic  
Reminders***

***Stuck in High Zone***

*Edgy  
Irritable  
Mania  
Anxiety & Panic  
Angry outbursts  
Pain*



*Depression/Sadness  
Isolated  
Exhaustion/Fatigue  
Numbness*

***Stuck in Low Zone***

*Stuck in  
High Zone*



# ***Common Reactions to Stress and Trauma***



*Stuck in the  
Low Zone*

## **Thinking**

Paranoid  
Nightmares  
Dissociation  
Forgetfulness  
Poor Decisions  
Distorted Thoughts  
Suicidal/Homicidal

## **Physical**

Numb/Fatigue  
Physical Pain  
Rapid heart rate  
Rapid breathing  
Tight Muscles  
Sleep Problems  
Stomach Upset  
Hypervigilance  
Trembling

## **Spiritual**

Hopelessness  
Loss of Faith  
Increase in Faith  
Deconstruction of Self  
Guilt  
Doubt

## **Emotional**

Rage/Fear  
Nightmares/Night Terrors  
Avoidance  
Depression  
Grief  
Guilt  
Shame  
Anxiety

## **Relationships**

Angry at others  
Isolation  
Missing work  
Overly Dependent  
Irritability  
Clinging  
Regressive

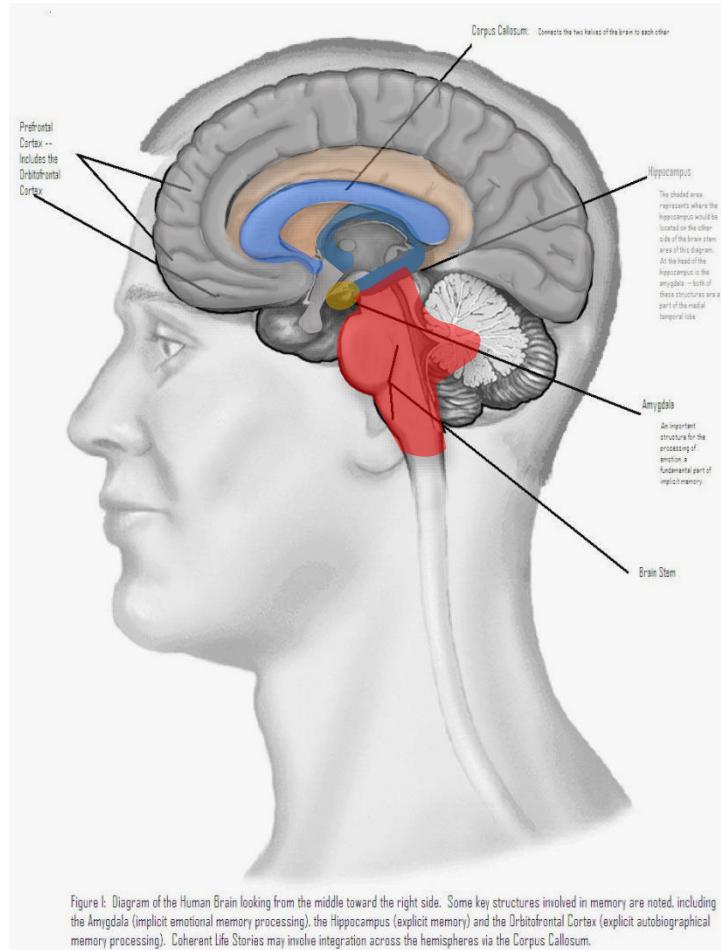
## **Behavior**

Isolation  
Tantrums  
Self-Injury  
Violent behaviors  
Addictions  
Eating Disorders  
Abusive Behaviors





# Organizing Principle: Three Parts of The Brain



## Cortex: Thinking

Integrates input from all 3 parts.  
Cognition, beliefs, language,  
thought, speech.

## Limbic Area: Emotional

Assesses risk.

Expression and mediation of  
emotions and feelings, including  
emotions linked to attachment.

## Survival Brain: Instinctual

Carries out “fight, flight, & freeze.”  
Unconscious.

Digestion, reproduction, circulation,  
breathing - responds to sensation.

# Past CRM + Capacity building resiliency interventions (lifestyle, communication, health care professionals – sickle cell care) outcomes



Individuals



Communities



With resiliency-informed care.

# Program History In Sierra Leone

## Phase 1

- **Intervention (August 2015)**
- Trained professionals teach the Community Resilience Model (CRM) to community members

## Phase 2

- **Training (January 2016)**
- Professionals train sub-group of initial cohort to be non-specialist facilitators in the CRM model

## Phase 3

- **Practice (May 2016)**
- Non-specialist facilitators teach the Community Resilience Model to others in their community

## Phase 4

- **Capacity Building (June 2016)**
- Non-specialist facilitators train community members to teach the Community Resilience Model

## Phase 5

- **Capacity Building (February 2020)**
- Non-specialist facilitators train hospital staff in CRM model to use in patient care
- Non-specialist facilitators train teachers, students and parents in CRM/FASCET model



# Training Community Persons in Basic CRM: Mental Health, Wellbeing and CRM skills– original cohort and Trainee results

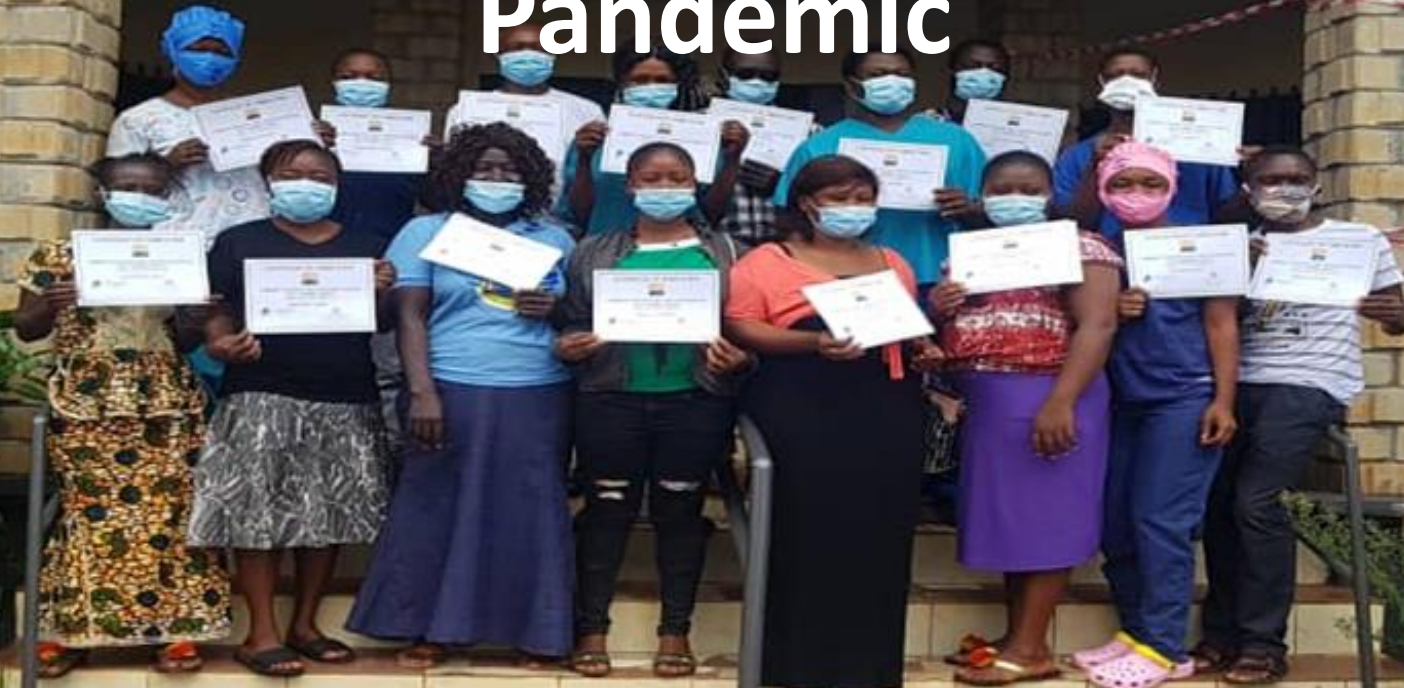
---

|                              | Original Cohort at 1 year post (N=22)* significance at p=<.05 Repeat measures ANOVA | Training the trainer (N=59) Pre/post significance p=< .05 Repeat measures t-test |
|------------------------------|---|--|
| Understanding of trauma      | ✓ increased sign.   | ✓ Increased sign.  |
| Management of stress/anxiety | ✓ Increased sign.   | ✓ Increased sign.  |
| Clinical Measures:           |   |  |
| PTSD                         | ✓ Decreased sign.   | ✓ Decreased sign.  |
| Depression                   | ✓ Decreased sign.   | ✓ Decreased sign.  |
| Anxiety                      | ✓ Decreased sign.   | ✓ Decreased sign.  |
| Secondary Traumatic Stress   | ✓ Decreased sign.   | ✓ Decreased sign.,   |
| Resilience                   | ✓ Increased sign.   | ✓ Increased sign.  |

Core group of 3 continue to do projects; group of 12/22 continues to be involved in CRM programing and research

Waterloo  
ADVENTIST HOSPITAL

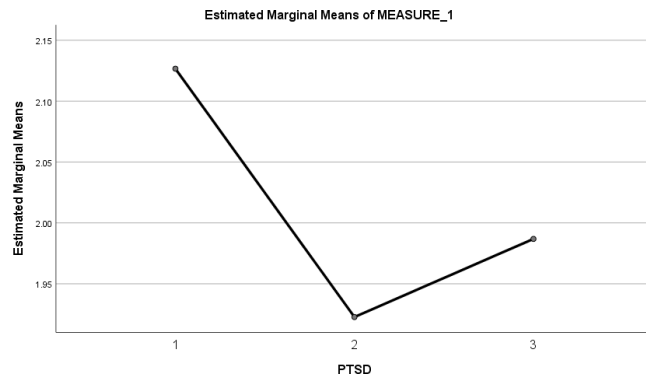
# Training Health Care Workers During Covid-19 Pandemic



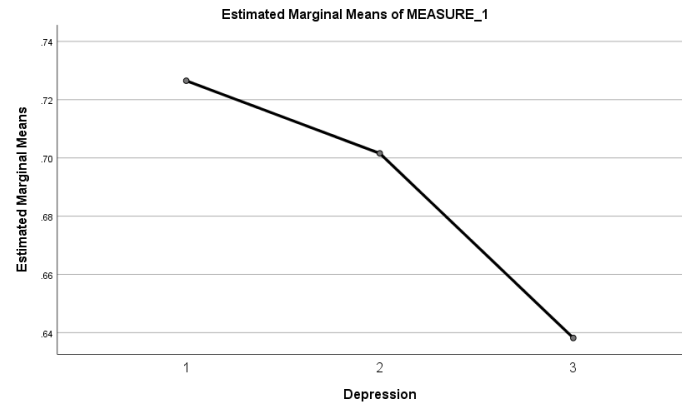
# Training Health Care Workers in CRM in the Wake of COVID-19 (by local CRM trainers)

## Mental Health and Wellbeing

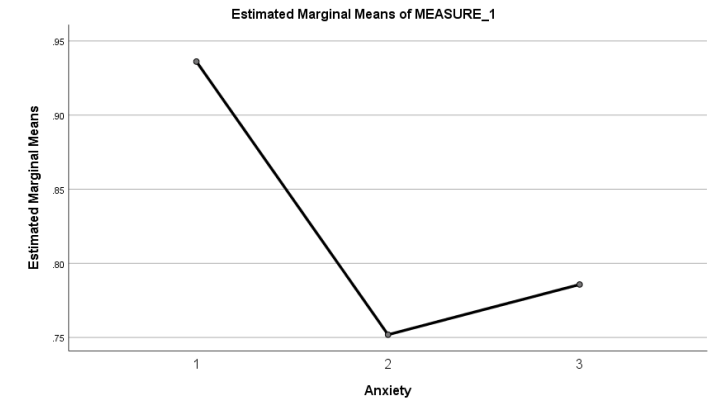
### PTSD



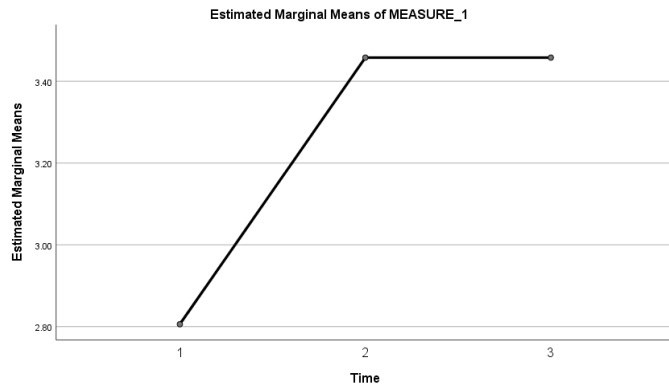
### Depression



### Anxiety



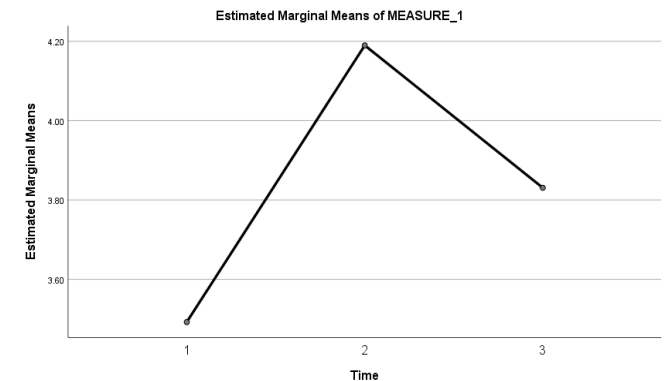
### Understanding



## Supporting MH Patient care



### Confidence





# What is our Sierra Leone Sabin project doing?

## What we collect from health care workers:

- Survey data
  - → Report of findings
- Qualitative interviews
  - → Report of findings
- We expect:
  - Reasons for hesitancy- barriers and benefits, level of knowledge
  - Insights in how our health professionals are engaging with their patient about the vaccine

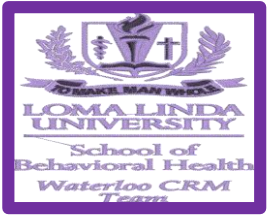
## What do we do with it- an intervention with health care workers– training-the-trainer?

Analyze data to inform CRM + Intervention

- A curriculum that uses CRM to help people not react emotionally but be more present in vaccine hesitancy discussion
  - 1. Pilot intervention; 2. if effective do a larger study; 3. goal: use in SL health care
- To achieve larger scale implementation, co-develop a health professional community engagement plan



TRAUMA RESOURCE  
INSTITUTE



## A TWO STEP PROCESS: "CRM +"

Step 1-A: CRM and A CRM-SELF-CARE  
PLAN

Step 1-B Teach about pros and cons  
of vaccination (science made easy)

1. What are you doing to widen your Resilient Zone?
2. If you found the CRM skills beneficial, how could you weave this skill into your daily routine/in reaching out to others when discussing vaccination? Which technique might be the most helpful?
3. What specifically do you need to do differently in engaging in a discussion about vaccine uptake?



TRAUMA RESOURCE  
INSTITUTE



## Step 2: Engaging Others in a COVID vaccination discussion-

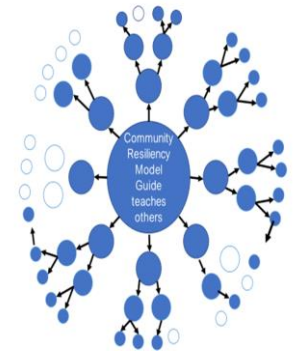
1. What have we learned are barriers or reasons to vaccinate?
2. How could you use CRM Skills in your community to promote Vaccine uptake?
3. What strengths does your community have that would support bringing CRM Skills to more people on this issue?
4. What challenges would you expect and how would you handle them from a resiliency lense?



# How can we use CRM in the context of vaccination hesitancy in Sierra Leonean health care workers? CRM +



- Use body awareness skills for self-care but also use it when reaching out to others when encouraging them to consider vaccinations
- When we move in **survival state** (defensive, worried, stressed) we are less open/able to critical thinking/processing; we retreat- are not open to dialogue. CRM helps to our pre-frontal cortex to come back on line (away from a natural freeze response)
- CRM helps **manage anxiety** about something that is often stressful to us— virus and vaccine; idea is to help move us back into resilience zone— so we can critically evaluate beliefs and assumptions
- Share info, ones struggles/dysregulation are acknowledged as “real”
- Communicate often and with compassion about the decision making process, normalize struggle around vaccine uptake
- Share CRM concepts & use CRM language while doing so



[PS. Share the app- its free!]

***CRM can be a model for our communities!***



TRAUMA RESOURCE  
INSTITUTE



[iChillapp.com](https://iChillapp.com)

# iChill

*“Resiliency is an individual’s and community’s ability to identify and use individual and collective strengths in living fully with compassion in the present moment, and to thrive while managing the activities of daily living.” ~Miller-Karas (2020)*

