# The STEM IL Nobel Project: Community Health Workers Program

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#### INTRODUCTION

Not only did COVID-19 pandemic impact the people's mental health, but it was also accompanied with racial trauma and high rates of death. Usually, communities of color are the ones that experience secondary trauma during times of national distress. [1] Symptoms of anxiety and depressive disorders increased significantly during the period of April-June of 2020 compared to the same period in 2019. [2]



Figure 1. BLM protests

#### Overview

My project is focused on creating a solution to decrease the overall mental distress caused by COVID-19 and racial trauma in communities of color.

#### Goals

- Improve the overall mental health in communities of color by creating a Community Health Workers (CHWs) program with high school students in Champaign-Urbana, Chicago, and Pembroke.
- Provide underserved students and students of color unprecedented access to health and well-being resources at the University of Illinois at Urbana-Champaign.
- Long-term goal is to train 100,000 CHWs

# **METHODS**

- Created a randomly sampled database consisting of 50 tweets representing more than a million tweets to get a sense of what people are discussing on social media platforms during the pandemic and police shootings along with racial trauma
- Generated categories for each of the tweets and choose random samples that represented each category
  - Example of categories: Mental Health, Racial Trauma, Shootings, etc...
- Decode the topics and compare similarities and differences between them around themes.

## Sample Examples

@BlkMentalHealth Using cinema to raise awareness for #mentalhealth.pic.twitter.com/2lfA sjQ6sS

Figure 2. Sample Tweet pt.1

Black youth under 13 years are
twice as likely to die by suicide
and when comparing by sex, Black
males, 5 to 11 years, are more
likely to die by suicide compared
to their White peers.
Photo:@BLKMentalHealth
#blackmindsmatter
#youngblackmindsmatter
#mentalhealth
#suicideawarenesspic.twitter.com/
kaMK1hZwo6

Figure 3. Sample Tweet pt.2

# Results

- Create a Community Health Workers (CHWs) program that helps the community by improving their overall mental health and changing their behavior.
- Train five community health leads.
- CHWs leads will help in training 30-45 middle to high school students to become CHWs
- Create infographics about the CHWs program (behavior change infographics, health and wellness kit, CHWs toolkit & budget)

## Example

# COMMUNITY HEALTH **WORKERS'** WELLNESS TOOLKITS TOUCHLESS THERMOMETER especially beneficial during the 2 DARK CHOCOLATE Improves blood flow, lowers blood pressure, raises HDL & protects LDL from oxidation, Helps in reducing heart disease risk. etc... 3 WATER Regulates body temperature. excrete waste, maximizes physical performance, prevents dehydration, etc... 4 INSPIRATIONAL QUOTES Help improve overall mental 5 WHITE COATS Keeps clothes clean, carrying innumerable items, and most of all identifying a community health worker

Figure 4. Behavior change

#### **Discussion**

- Racial trauma findings along with mental distress in the community due to COVID-19 shows that training community health workers is a great solution to engage in stress prevention as well as work on chronic disease and reduce overall mental health issues.
- This program will also allow students of color a chance to experience what it is like to be a CHWs and allow them to explore their interests as future healthcare professionals.

## **Future Recommendations**

- Plan to collaborate with Morehouse college of Medicine and the Illinois Community health Workers Association to train 100,000 CHWs.
- Plan to reach out to CUPHD to discuss possible collaborations.

#### Reference

[1]https://psycnet.apa.org/fulltext/2020-41729-001.pdf [2]https://www.cdc.gov/mmwr/volumes/69/wr/mm693 2a1.htm#:~:text=Younger%20adults%2C%20racial%2 F,and%20elevated%20suicidal%20ideation.

Figure 1: <a href="https://news.uchicago.edu/black-lives-matter-protests-hope-future">https://news.uchicago.edu/black-lives-matter-protests-hope-future</a>

Figure 2,3: Mendenhall, Ruby Twitter Samples Dataset Figure 4: Kishta, sarah

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