

Culture and Health: An Interpersonal Lens on Healthcare



Ahmed Elwasila, Wharton's Dean SUMR Scholar

Introduction

Ahmed Elwasila

Rising Junior at the University of Pennsylvania,
Health and Societies Major on Pre-Med Track





Project Overviews

KeepCalm App: Supporting Emotion Regulation in Children with Autism

Heather J. Nuske, PhD

The KeepCalm App is designed to address significant barriers in the management of challenging behaviors in children with autism– it does this by communicating the stress levels of children to their teachers through heart rate signaling.

How might the implementation of this mechanism differ across races and cultures?


The Orthopaedic Center of Excellence in Moshi, Tanzania

Neil P. Sheth, MD, FACS

The Orthopaedic Center of Excellence executes a model that provides a way to interact with and train the next generation of Orthopaedic surgeons in Central and East Africa.

What barriers exist in the process of research implementation in Tanzania?

How can the characteristics of the Tanzanian healthcare system be considered in management and policy?



“People who suffer the most from a given state of affairs are paradoxically the least likely to question, challenge, reject or change it.”

- Adam Grant, “Originals”



Significance

- Culture and personal perspective play a significant role in implementation, especially across race and nationality
- Studies seek to collect data on implementation through objective, asset-based approach



The Impact of COVID-19 on Behaviors and Schooling of Children with ASD from Families of Color

Mentor: Heather J. Nuske, PhD



KeepCalm App

> [Stress](#). 2019 May;22(3):303-311. doi: 10.1080/10253890.2019.1572744. Epub 2019 Mar 1.

Heart rate increase predicts challenging behavior episodes in preschoolers with autism

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Affiliations + expand

PMID: 30822219 DOI: [10.1080/10253890.2019.1572744](https://doi.org/10.1080/10253890.2019.1572744)

Abstract

Identifying triggers for challenging behavior is difficult in some children with autism because of their limited communication abilities. Physiological indicators of stress may provide important insights. This study examined whether heart rate (HR) predicts challenging behavior in children with autism. While wearing an electrocardiograph monitor, 41 children with autism aged 2- to 4-years participated in tasks designed to induce low-level stress (e.g. waiting for a snack). Coders identified 106 time periods during which challenging behaviors occurred and also coded 106 randomly selected time samples that did not include challenging behaviors. Thirteen (32%)

- Increased heart rate indicative of challenging behavior episodes
- KeepCalm app serves as a tool for the implementation of evidence-based strategies that decrease challenging behaviors
- Enables teachers to better accommodate child's needs
- Data about COVID-19 impact from interviews



Background

Coronavirus has a particular psychological impact on children on the autism spectrum and their caregivers. (Amorim et al, 2020)

Lack of literature on the intersection

The effects of the pandemic on households have varied across different races and cultural sub-groups. (Wright and Merritt, 2020)



Aims

- Identify if the effects of the COVID-19 pandemic on behavior and schooling of children with ASD differed by race of household
- Establish intention of being culturally conscious within community-academic partnerships
- Increase width of awareness across races and cultures



Methods

Participants

- 10 parents (5 white, 4 black, and 1 hispanic) were recruited for an hour-long interview.

Design

- Parent needs in helping their child manage emotions were assessed. Questions regarding COVID were isolated for mini-study.

Data Analysis

- Qualitative data collected in interviews was analyzed by two coders through consensus coding.



Findings

Impact on
externalizing behaviors
(4/10)

50% White
25% Black
25% Hispanic

Impact on internalizing
behaviors
(2/10)

50% White
50% Black

Schooling format
difficulties
(3/10)

66% White
33% Black

"Like all of a sudden, we got the face and he's crying and you're like what's wrong and he can't tell you and then he's biting you and or scratching and stuff and he is not, historically prior to COVID, an assaultive kid.."

"And just more of like the refusal or retreating into himself um. We're seeing like a lot of his social skills that he has acquired have been kind of regressing."

"They're not going to school or they're in for a week and then they're home for a week. So like his routine being in office been very stressful to him."



Limitations & Next Steps

Limitations:

- Sample size
- Interview guide designed with themes particular to different questions

Next Steps:

- Conduct study with larger sample size and suitable probes
- Establish level of awareness of race and culture in future publications



Penn Medicine

Manifestations of Culture Amongst Medical Professionals in Tanzania

Mentor: Neil P. Sheth, MD, FACS

In Tanzania, there is approximately 1 orthopaedic surgeon for every

1,900,000

individuals. (Premkumar et al, 2018)



Background

A shortage of orthopaedic surgical care in LMICs is further complicated by increased demand for these services due to high and growing rates of injury, which often require operative intervention [4, 5]. Road traffic accidents (RTA) in particular take a much larger toll on people living in LMICs; 90% of all road injury-related deaths, 95% of all child deaths, and the majority of disability from road injuries worldwide occur in LMICs [6, 7]. The burden of RTAs is also increasing in LMICs and this acceleration is projected to continue over the next 20 years [7,8,9].

- Burden of RTA accelerates the levels of disability and mortality associated with lack of care
- The Orthopaedic Center of Excellence in Moshi, Tanzania aims to cross-pollinate with and train the next generation of East and Central African medical professionals



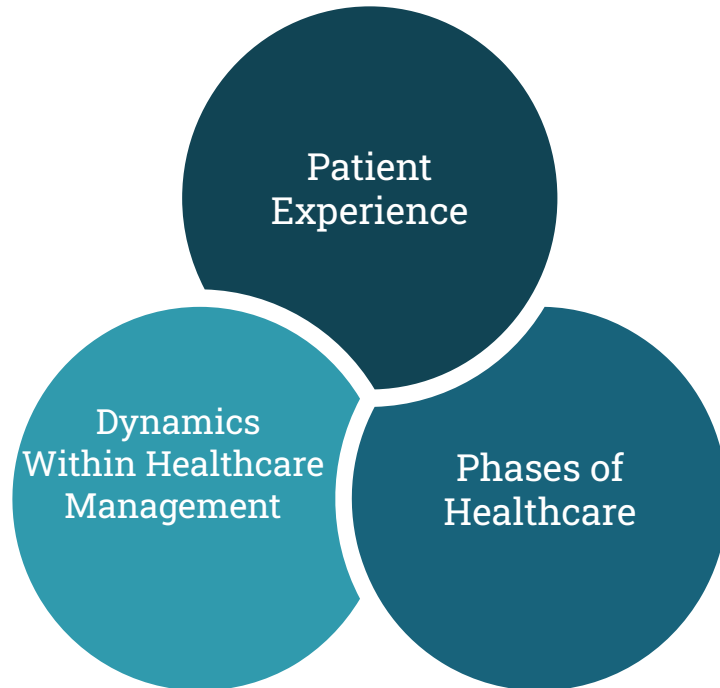
Aims

- Assess MD perceived barriers in the implementation of research into practice or education





Aims



- Compare MD perceptions of Tanzanian healthcare system and healthcare systems of other countries



Methods

Participants

- 5 Tanzanian medical doctors who have had experience practicing abroad were recruited for an hour-long interview.

Design

- Interview guide designed with two distinct aims and preliminary themes to guide questioning.

Data Analysis

- Data yet to be collected
- Consensus coding amongst a team of 2-4 analysts.



Next Steps

- Conduct interviews and probe to guide conversation within preliminary themes
- Reassess themes and code data
- Analyze data through scopes of new themes and draw conclusions
- Consider conclusions in implementation and practice

Lessons Learned





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THANKS FOR YOUR TIME!

Any questions?