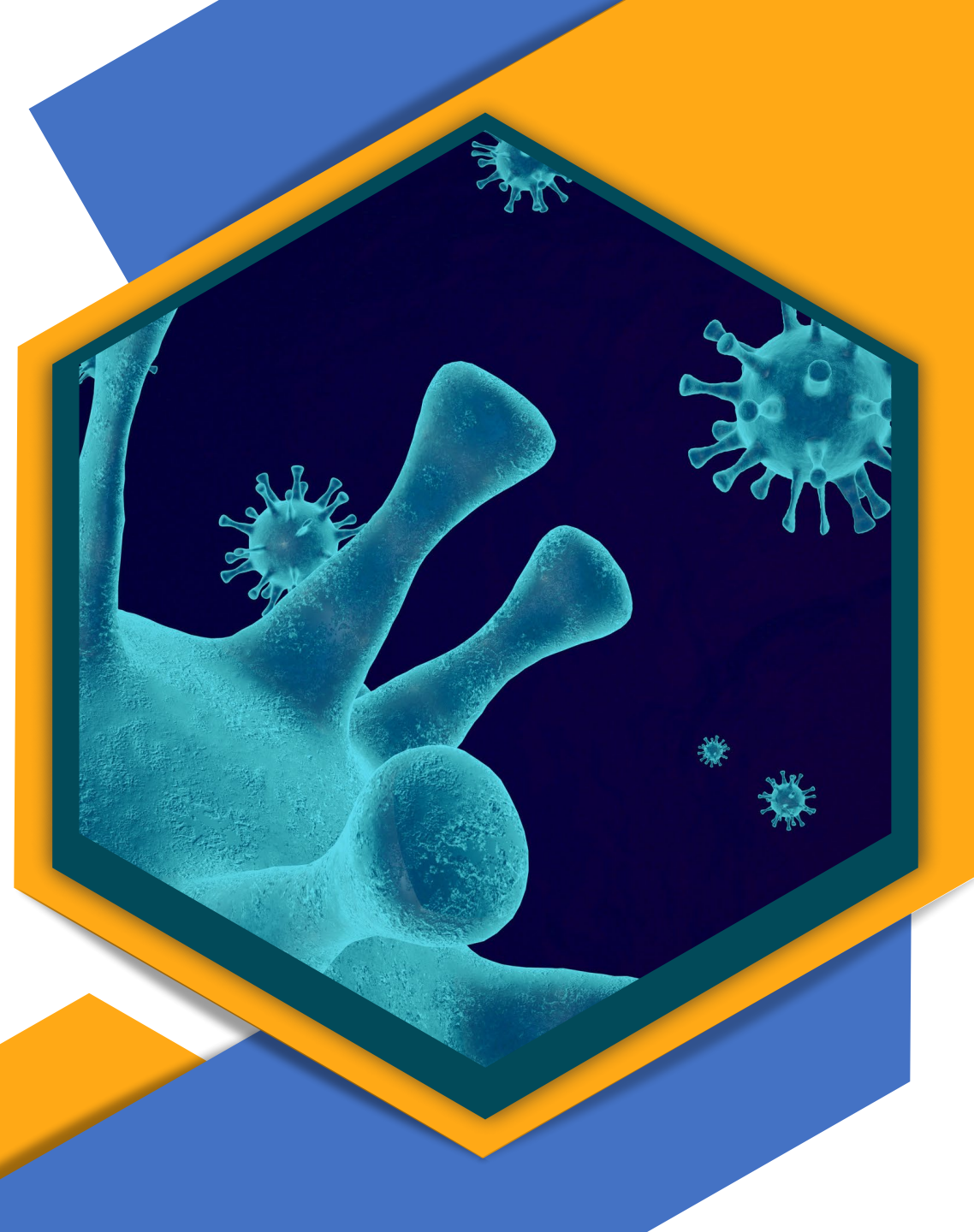


Socio-endemic diseases, Hatred, health and peace

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Objectives



Understanding hatred



1

The Importance of studying Hatred

2

What is the definition of hatred

3

Pathologizing Hatred as a Contagious Disease

4

A Public Health Approach to Hatred

5

Research Findings and Future Recommendations

Questions for Understanding Hatred



- What it is, how it arises, and how to address it?
- What are the underlying causes, and triggers of Hatred?
- “Hatred” lacks essential properties and single definition.

Determinants of Health and Hatred

- Is hatred hereditary or acquired?

Measurement of Hatred

Impact and cost of Hatred

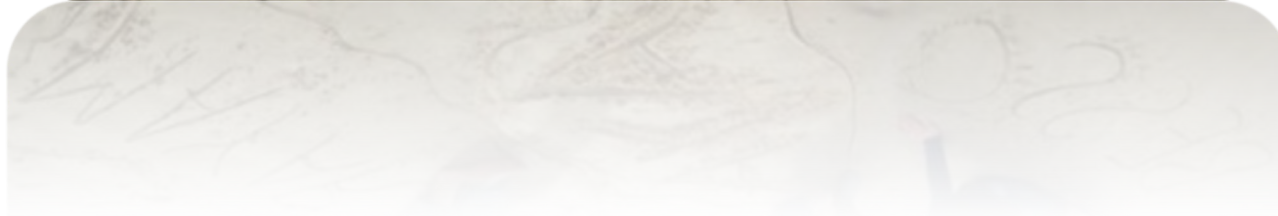
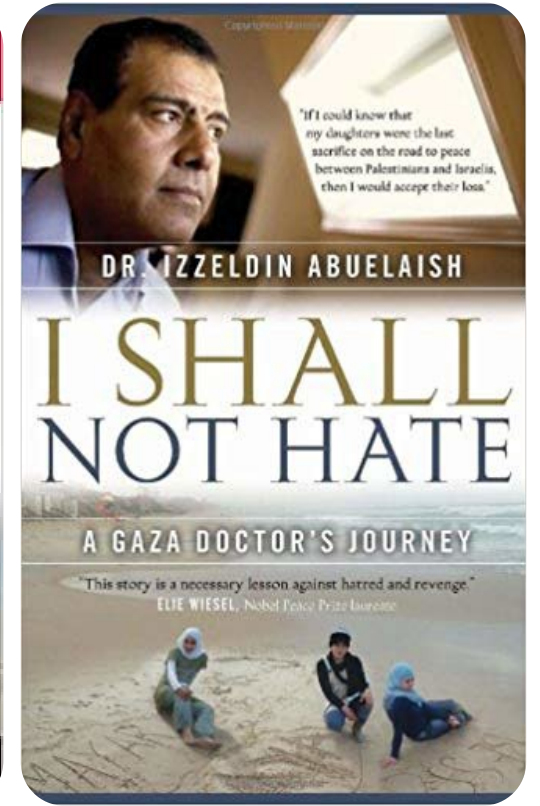
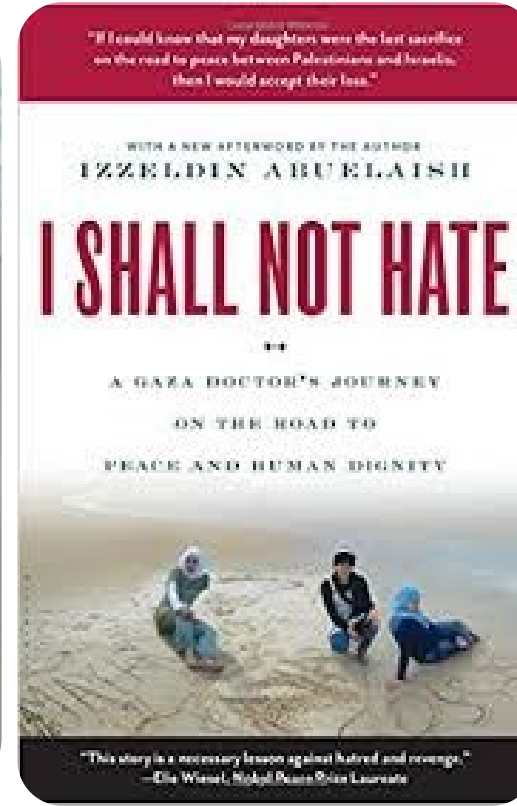
- Health and wellbeing
- Social
- Economic

Is there a treatment or a cure?

- Are there ways to mitigate the health effects of hatred?
- How can we develop a research agenda exploring the health effects of hatred, mitigation or prevention strategies?


Can we prevent Hatred?

Why I became interested in the study of hatred?



From Hospital (OB/GYN) to Bio-Psycho-Social (Society)

palestinian healer



A small boy sits by the dim light of an oil lamp and carefully writes out his homework assignment. It is hard for him to concentrate, as there are eight younger siblings tumbling about him and the home is a small one, not more than two rooms. The boy is diligent and intent on producing very neat and careful work, so he tunes out the noise and focuses on his task. His penmanship is clean and careful, for he is eager to impress his teachers. They have assured him that hard work will lead to success for himself and his family. In this way he may someday be able to improve the meager circumstance in which his family lives in Gaza, in the Jabalya refugee camp. He is the first born, the oldest son, and the role model for his younger siblings. Through hard work he may even succeed in improving the lot of his people, the Palestinians. The people feel that if they are one family. All are connected and share the same destiny.

His teachers have noticed that he is unusually intelligent, and try to convince his parents to allow him to spend as much time in school as possible. Aside from the encouraging words of his teachers, there is not a lot to entertain this young boy. Like most other boys who live in the Jabalya refugee camp, he does not have access to summer camp or team sports. He does not have TV or video games to occupy him, in fact, his home does not have electricity. His life is a serious one, one of restricted movement and limited recreation. His life is school, and his hobbies are selling trinkets and working odd

Dr. Izzeldin Abuelaish transcending two worlds

By Brenda Sassoon

27



A border guard, wary of Palestinian terrorists, carefully examines Abuelaish's Fiat.



At the hospital. Abuelaish and Dr. Miriam Katz visit a happy new mom. Ettie Turieman

Why Study Hatred?

Hatred is a Public Health Emergency Threat

- Hatred is a pressing global public health issue and a destructive contagious disease manifested in violence, extremism, and fundamentalism.
- Link between violence and hatred
 - Hate crimes have been designated a public health issue by the largest physician organization in the country.
- Increasing scales of civil conflicts fuelled by hatred worldwide
- Long term consequences or morbidity
- The cost of hatred (Global Burden of Hatred)





Need

Know

<http://www.wisconsinhistory.org/whi>

Leaping the Chasm, image ID 2101

Filling the Gaps in Research

- There is some evidence that hatred spreads like a disease through the community, which is accelerated by collective victim-hood, dehumanization of the out-group, and the internet

- **Lacking evidence that hatred can exist as either chronic or acute**
 - There are many biomedical effects of hatred:
 - Chronic pain, headaches, ulcers, nausea, heart disease, arthritis, stroke, cancer, diabetes, influenza, obesity, respiratory illnesses, PTSD, depression, anxiety
 - What are the socio-biomedical/socio-pathological outcomes of hatred on the individual and society?
 - What is the impact on health and wellbeing?

- **Triggers of hatred may be cumulative, however, causal effects are not yet understood or studied**
 - How does hatred spread as a disease?
 - Contagious/Infectivity/transmission/Dose relationship

- **How can we measure it?**

Hatred has been defined

“

A negative emotion that motivates and may lead to negative behaviors with severe consequences¹

”



The neurobiology of hatred and a cycle of hatred and violence



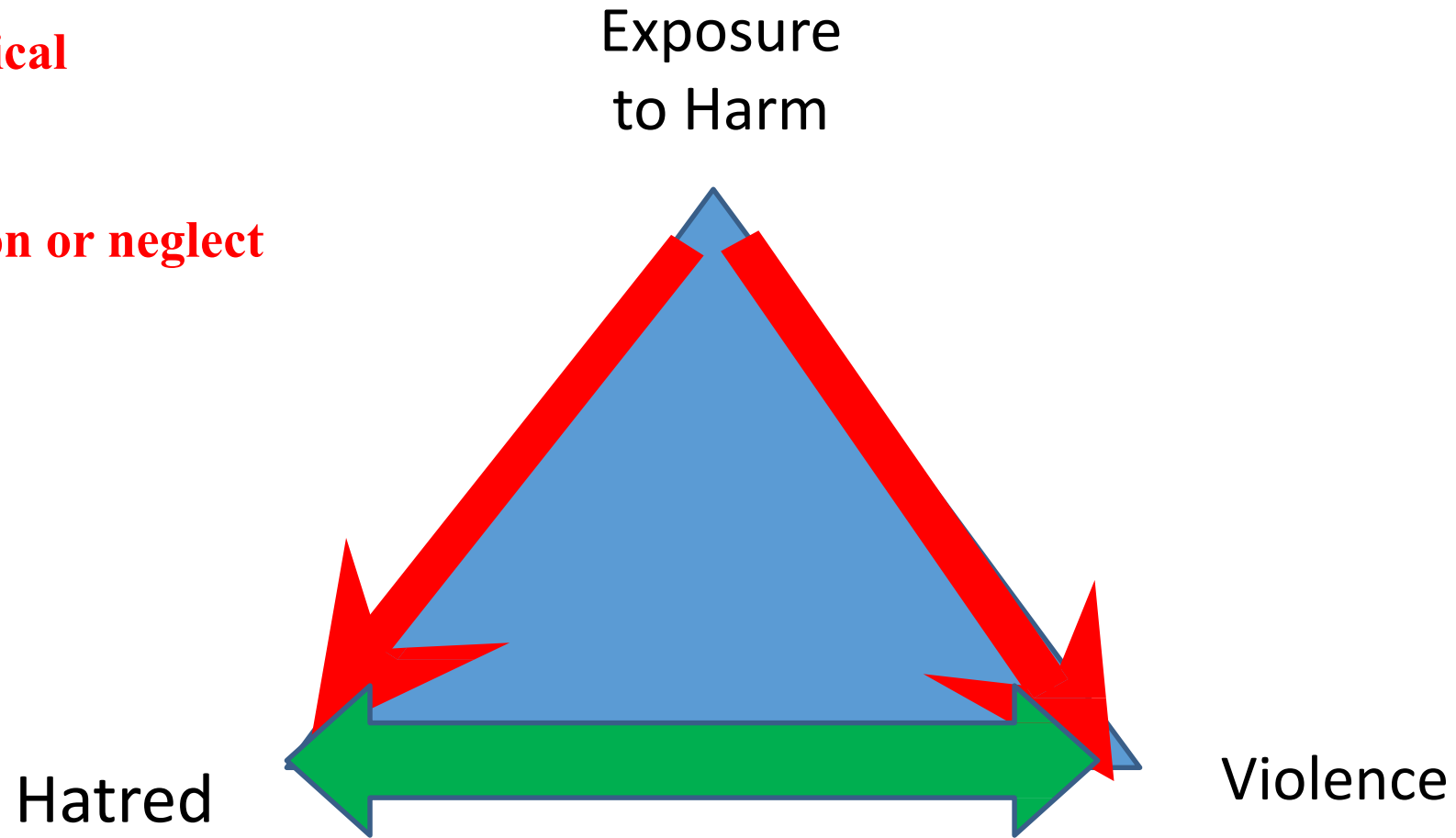
Hatred self-perpetuates, through cycles of hatred, violence, counter-hatred, counter-violence, and so on.

Each cycle brings in its wake increased risk of pathophysiology.

Link between violence and hatred:

- Violence is a public health issue
- Violence is contagious
- Violence is a cause and consequence of hatred

- **Physical**
- **Psychological**
- **Sexual**
- **Social**
- **Deprivation or neglect**



➤ The Media: Promoter of Racism and Intolerance

- The European Commission against Racism and Intolerance (ECRI) report on the United Kingdom noted considerable intolerant political discourse;
- Particularly regarding immigration, of violent racist incidents, a sharp rise in anti-Muslim violence, record levels of anti-Semitic incidents.





United Nations



UNITED NATIONS HUMAN RIGHTS OFFICE OF THE HIGH COMMISSIONER

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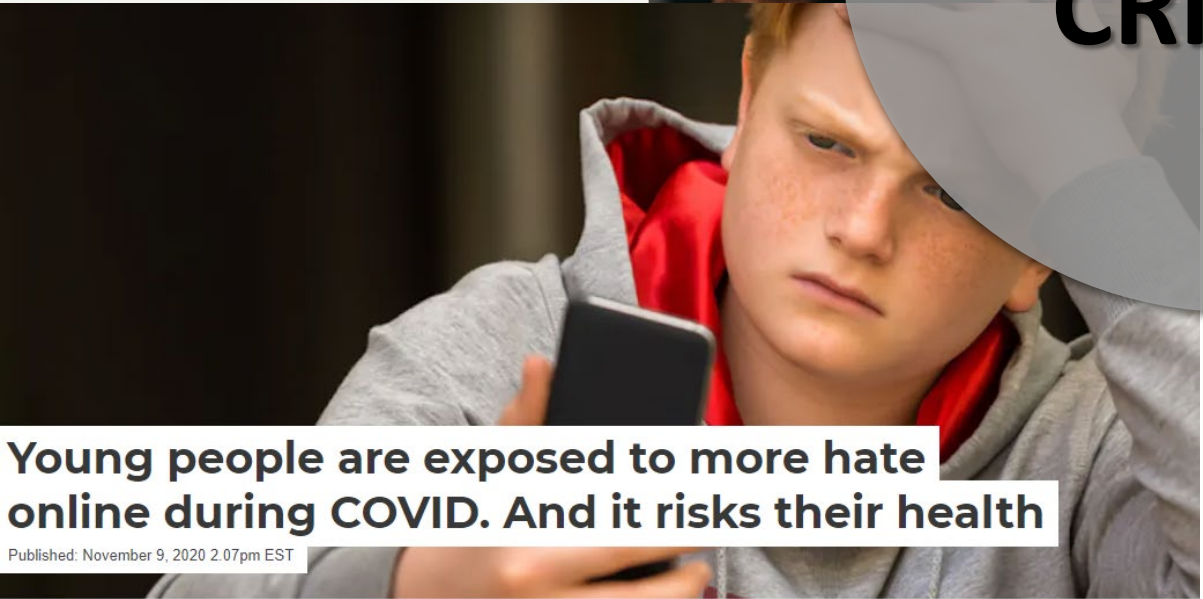
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23 March 2021

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Young people are exposed to more hate online during COVID. And it risks their health

Published: November 9, 2020 2:07pm EST

BY RALPH SCHOELLHAMMER



Wednesday, 4 January 2023

Dispatch 14:15

Migrant violence mars New Year's Eve in Germany

But politicians respond with only silence

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HATE CRIMES

Public Integrity Investigating inequality

DEMOCRACY

Millions are victims of hate crimes, though many never report them



by Catherine Devine, Lillianna Byington and News21 Staff August 16, 2018

Studying the Pathophysiology of Hatred through a novel approach: Bio-Psycho-Social

Studying the Pathophysiology of Hatred through a novel approach: Bio-Psycho-Social

- **Objectives: Study hatred in an interdisciplinary, comprehensive, holistic, collective, multidisciplinary, collaborative and intersectionality approach**

Studying Hatred as a Socio-endemic Disease

Hypothesis



Hatred

is a complex self or community or group destructive chronic/acute contagious disease as a result of exposure (harm/threat/violence) and occurs in clusters.

Key Objectives

To determine whether hatred is a contagious disease, a determinant of health and a public health issue requires the demonstration of a physiological or pathological process leading to disturbed homeostasis.


To determine whether there is a causal relationship that exists between **exposure to the triggers, level of harm, quantity, quality, virulence** and **causality** using a public health approach.

The Seven Domains of Hatred




Why is Hatred a Disease?

Violence affects the structure and function of the brain, has characteristic signs and symptoms, and causes morbidity and mortality.



Hatred meets the definition of disease, based on its level of contagiousness, destructiveness, and chronicity.



Hatred affects the structure and functions of the heart, brain, immune system and causes malfunctioning, morbidity and mortality.

Exposure

1. Fear of “The Other”


- **Survival mechanism: to turn toward our ingroup**
- Wanis explains, “Hatred is driven by two key emotions of love and aggression: One love for the in-group—the group that is favored; and two, aggression for the out-group—the group that has been deemed as being different, dangerous, and a threat to the in-group.”

2. Fear of ourselves: anorexia nervosa:


- This phenomenon is known as projection, our tendency to reject what we don’t like about ourselves.

3. Lack of self compassion: **The antidote to hatred is compassion** — for others as well as ourselves. Self-compassion means that we accept the whole self

To look at hatred in a comprehensive and holistic way: to include physical, mental, spiritual and social factors



Hatred is induced or made as a result of exposure



Then hatred is manifested as a disease

Hatred

Need to redefine hatred



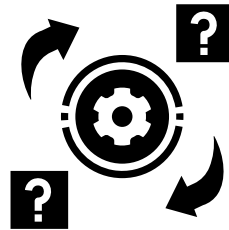
Understanding and changing the behavior of disease



Not enough is known about hatred. There is work and research still to be done to understand the pathophysiology and pathogenesis of hatred as a disease and public health emergency threat

A PUBLIC HEALTH APPROACH TO HATRED

- Epidemiological model
- Bio-psychosocial approach
- Interdisciplinary
- Comprehensive
- Holistic
- Multidisciplinary approach



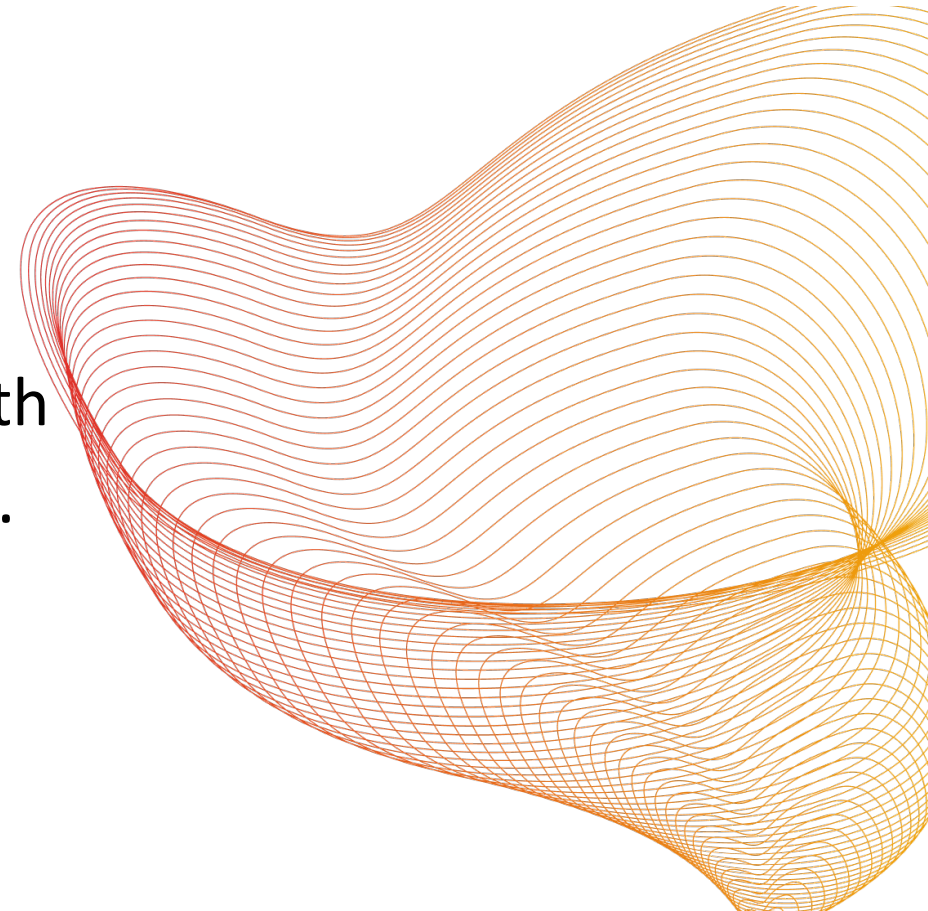
Epigenetics and Complex Behaviors

Can Epigenetics Trigger Hatred?

- Exploring the role of epigenetics in complex behaviors and the importance of integrating knowledge from multiple disciplines.
- An exploration of epigenetic modifications and their potential role in the development of hatred.

Epigenetic Modifications

- Epigenetic modifications can be influenced by various environmental factors.
- Experiences of trauma, stress, and adversity can shape these modifications.
- Certain epigenetic changes may be associated with negative emotions, including anger or aggression.



Determinants of health

Hatred, disease, health, peace,
education, equality, freedom

**Depend on who are you
and where are you**

A man wearing a white tank top and a black balaclava is running through a field of fire. He is holding a rope or wire in his right hand. The background is filled with flames and smoke, creating a dramatic and intense atmosphere.

Why hatred should be considered a contagious disease

Published: May 26, 2021 2.11pm EDT

should be considered a contagious disease,”
Abuelaish writes:

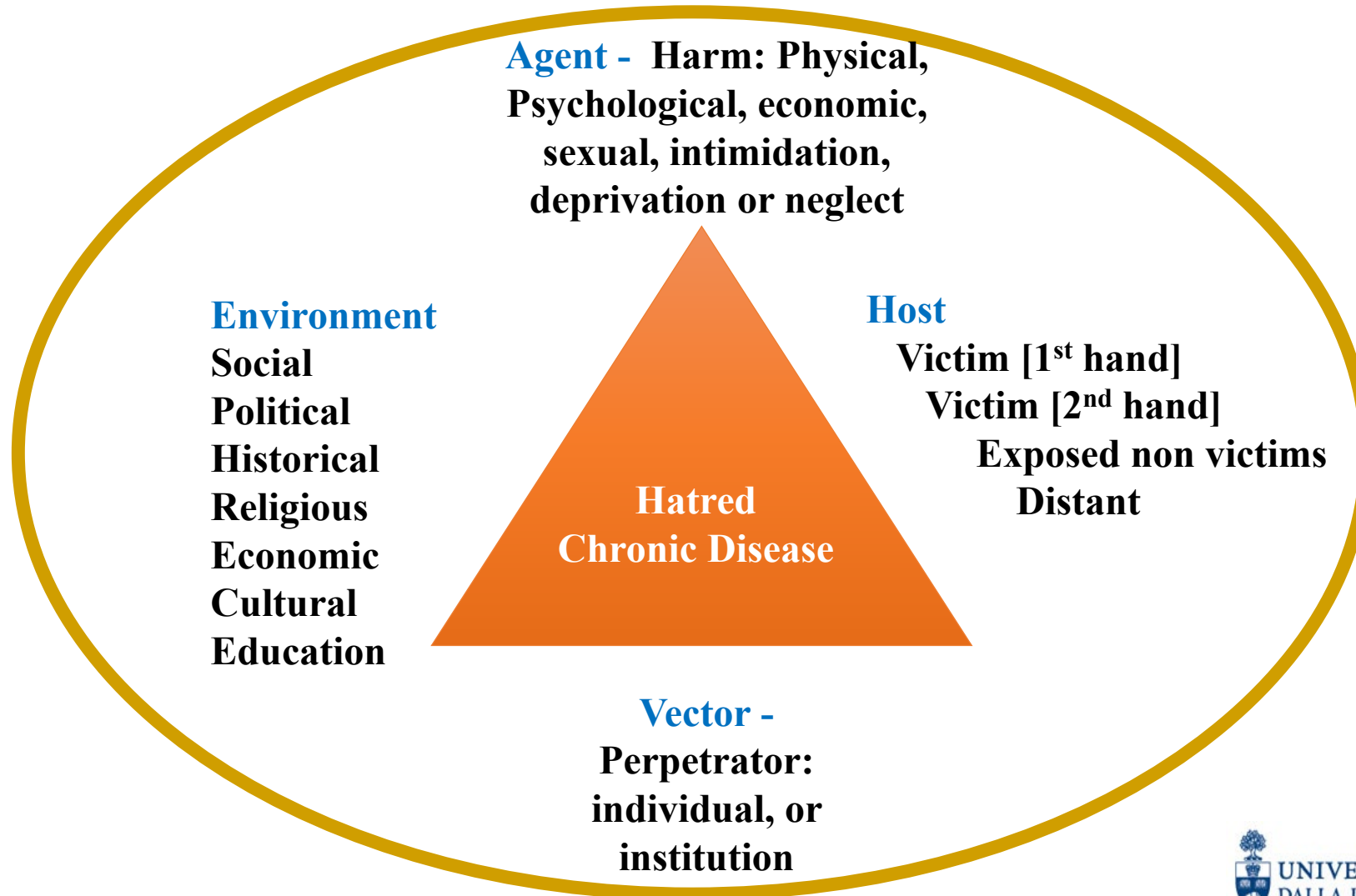
- “Hatred can be conceptualized as contagious disease, a determinant of health and a public health issue spreading violence, fear and ignorance. Hatred is contagious and crosses barriers and borders, and no one is immune to its risks....

- **Epidemiology:** is the study of disease dynamics in populations. It seeks to understand patterns of disease as a means of identifying potential prevention and control measures
- The basic principle of epidemiology is that disease is not a random Event.



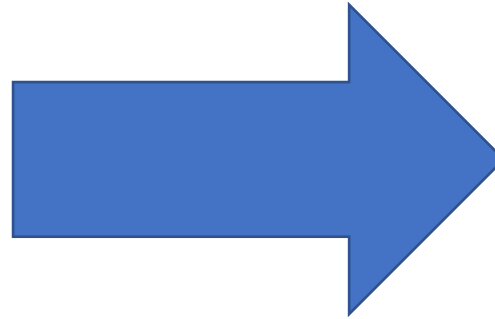
A Palestinian protester uses a slingshot during clashes with Israeli soldiers at the northern entrance of the West Bank city of Ramallah on May 21, the day a cease-fire took effect after 11 days of heavy fighting between Israel and Gaza's Hamas rulers. (AP Photo/Nasser Nasser)

Socio-epidemiological Approach to Hatred: Causal relationship



Triggers, Causes and Determinants of Hatred:

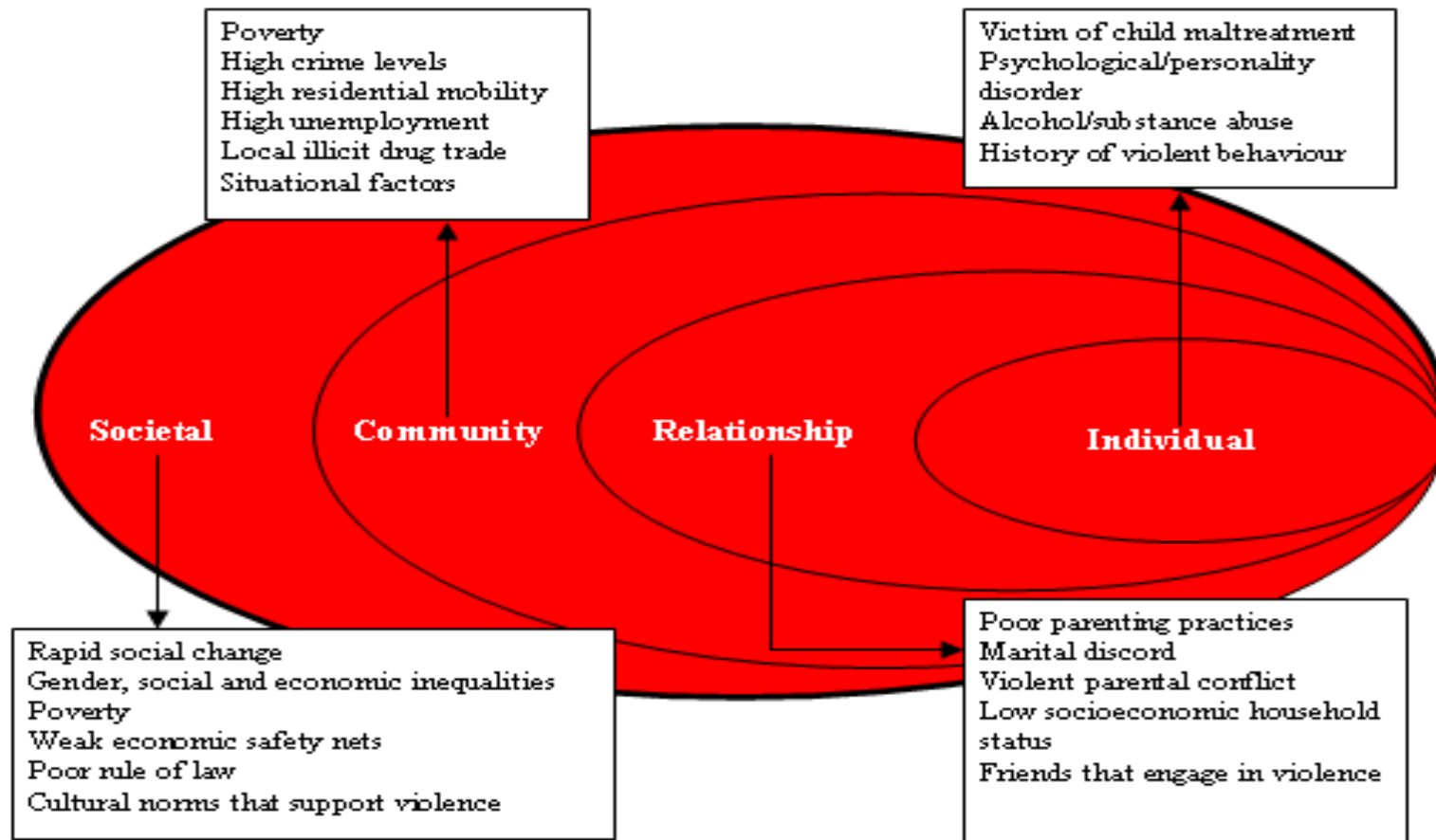
- There are non-biological agents: Environmental
 - If unknown: idiopathic, unknown, autoimmune disease
 - In hatred the agent or pathogen is environmental: is hate speech, hate crime, colonization, violence,
 - Exposure to environmental social agent
- Ingroup and outgroup, colonialism, incitement
 - White supremacy, Islamophobia, Antisemitism, discrimination, racism, poverty
 - **Nationalist and anti-globalist.**
 - Fear, incitement, fear mongering psychosocial terror.
 - Hatred messages.
- Hostile relationships between communities, which involves “the objectification, dehumanization, and demonization of a particular person based on his/her race, nationality, religion, sexual orientation, gender, and so forth”



➤ Down Stream Effects of Hatred as a Contagious Disease:

- Racism
- Discrimination
- Supremacy
- Violence
- Fear/fear mongering
- Ignorance
- Intolerance
- White supremacy
- Ableism
- Inequity
- Homophobia
- Sexism
- Xenophobia
- Classism
- Hate crime
- Hate speech
- Intimidation
- Bigotry
- Etc.

Ecological Model for Understanding Hatred

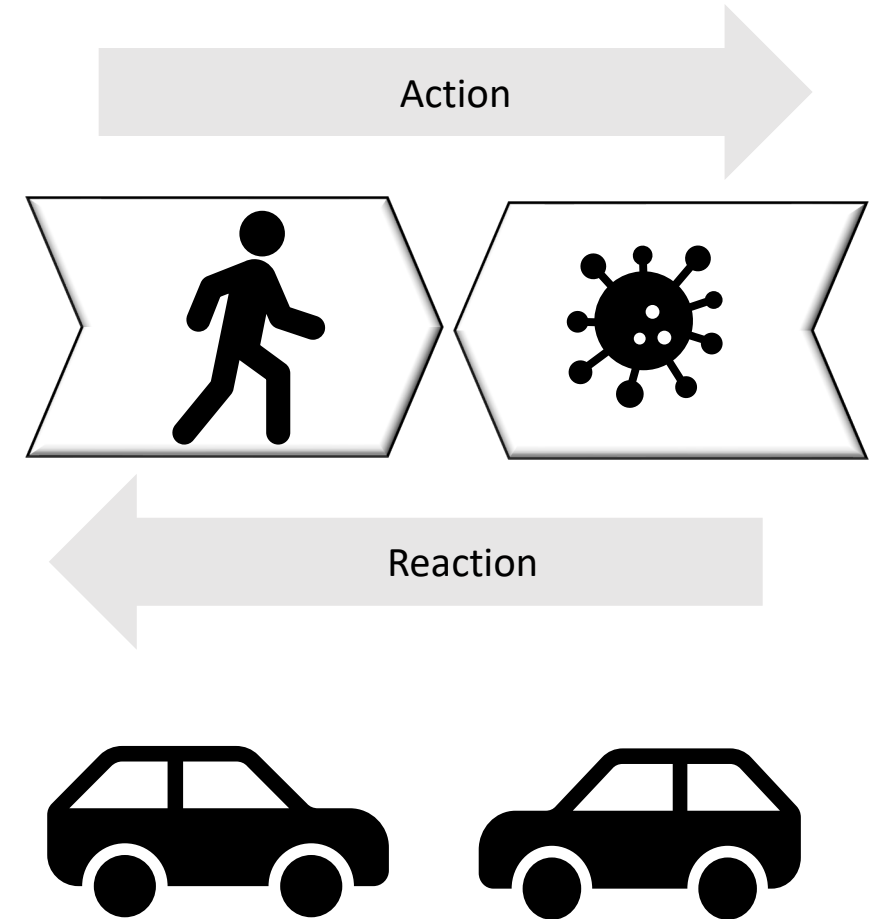


Reaction to Hatred

Newton's third law states:

*"for every action there is an **equal and opposite reaction**".*

- When we face atrocities and are exposed to challenges, our reaction to these challenges varies according to the **type, magnitude, duration of the challenges, individual variations, and environmental conditions.**
- Hatred may follow a **traumatic event or severe disappointment.**
- E.g., viral microbial will be faced with resistance or disease.



WORDS TO REFLECT ON

“

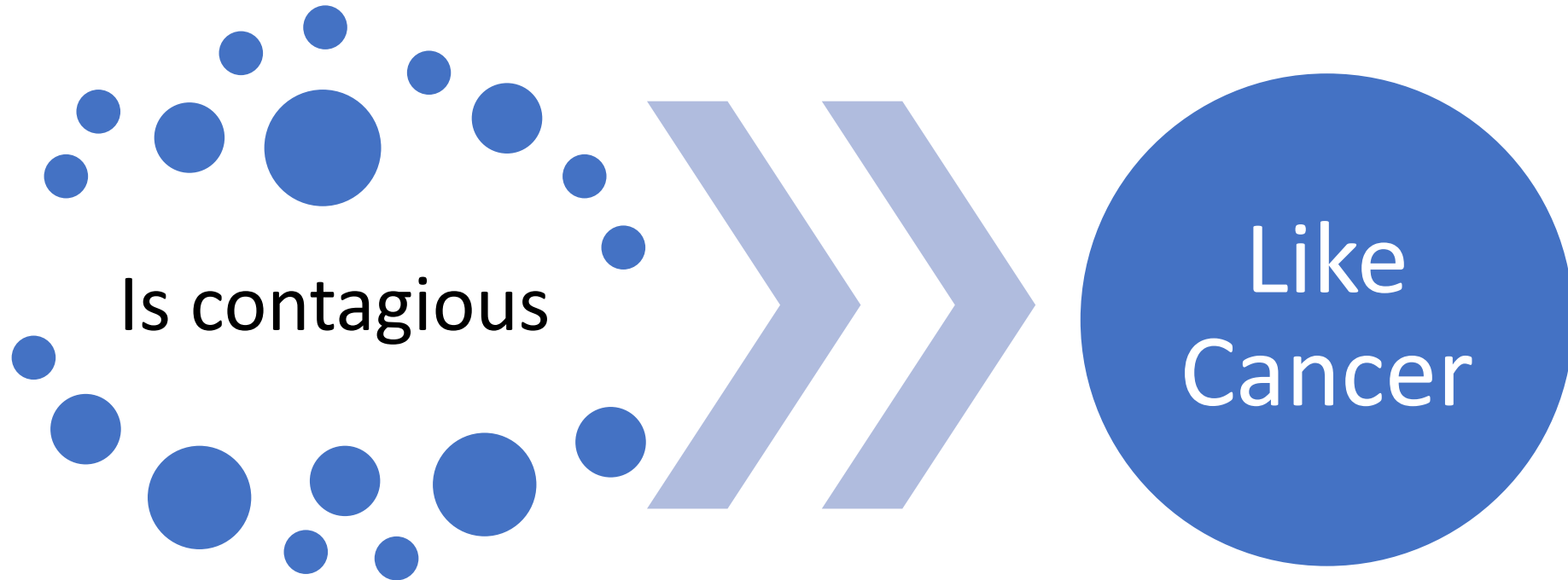
OR

“Hatred begets Hatred”.

“Violence begets violence” (1958).

-Dr. Martin Luther King, JR

Hatred

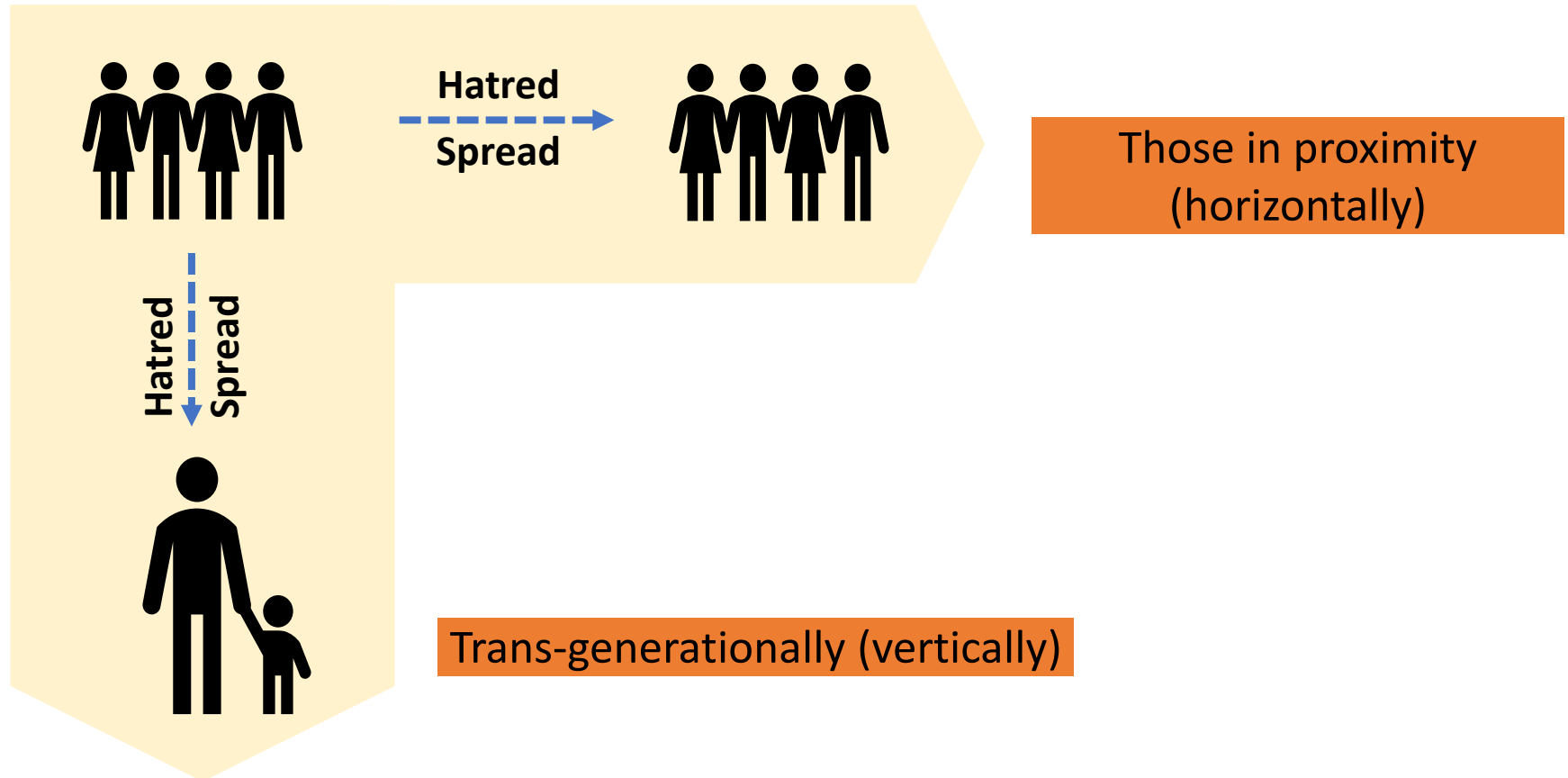


Is contagious

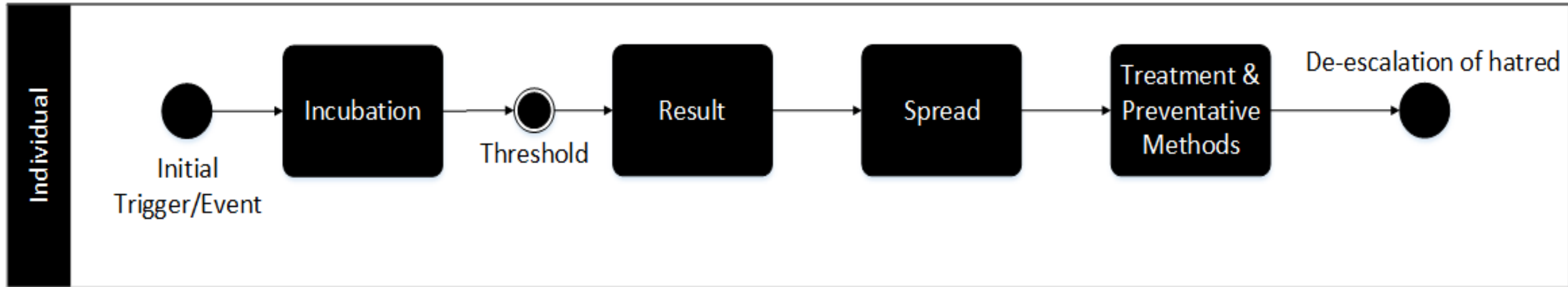
Can spread

- Direct or local spread
- Distant or metastatic spread

Transmission of Hatred



Hatred Mode of Transmission



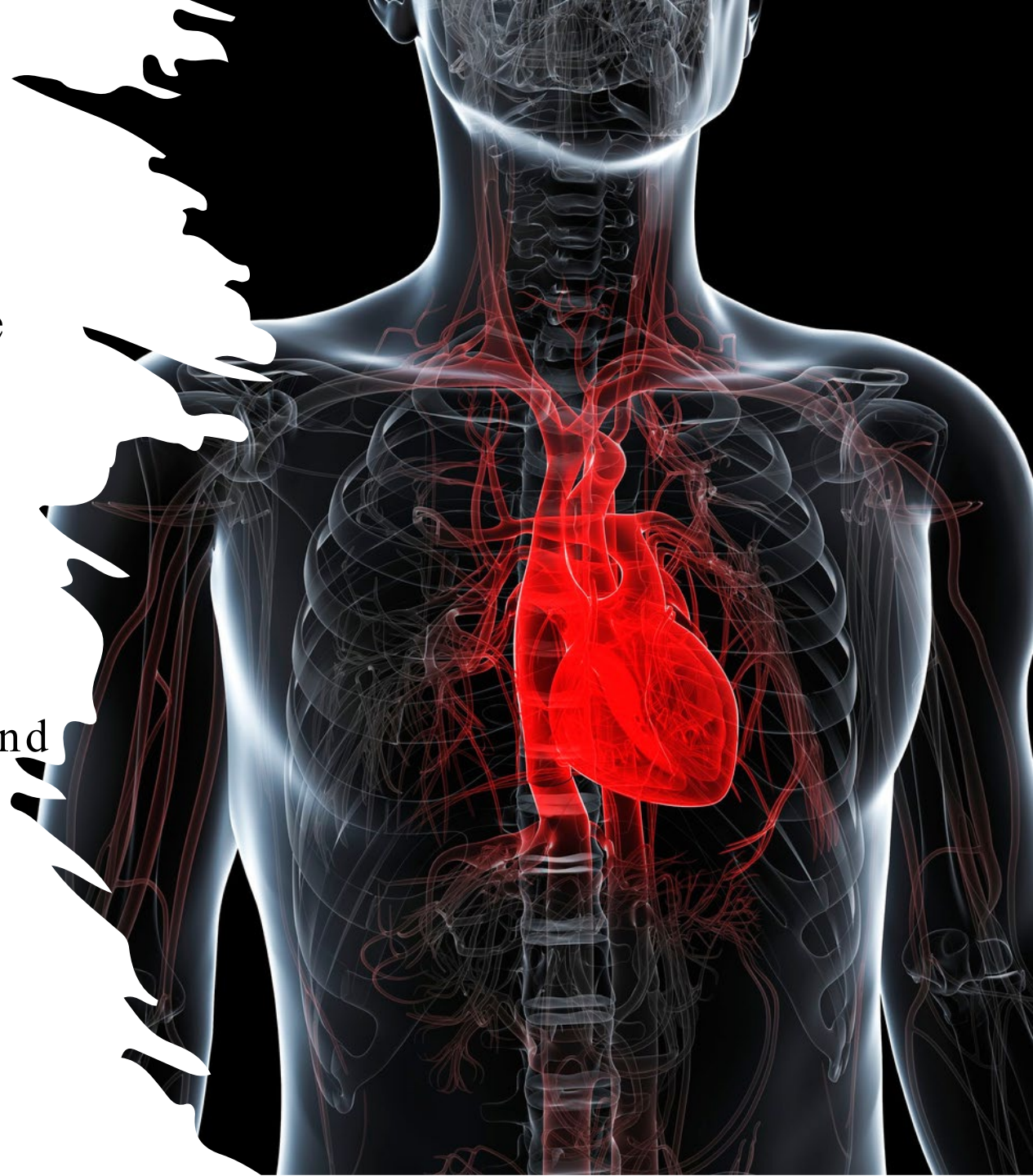
Treating people not diseases



- Medicine is a social science, as the science of human beings, has the obligation to point out problems and to attempt their theoretical and practical solutions.
- Health is not created or made in hospitals, clinics, medical schools or medical journals. It's created and made in schools, among families, houses, communities and within neighborhood.
- Leonardo Da Vinci: Medicine is the restoration of discordant elements; sickness is the discord of the elements infused into the living body.
- Medicine is a science focused on the diagnosis, treatment and prevention of diseases. Medicine is meant to restore and maintain health through curing and preventing illnesses.
- Maimonides said: the physician should not treat the disease but the patient who is suffering from it.
 - Treat the patient rather than the illness

Health Impact of Hatred

- Hostility increases the risk of developing heart disease, and worsens heart disease in those who already have it;
- Research shows that heart failure patients with high anger and hostility scores also have far more hospitalizations.
- Studies have also demonstrated that anger and temper flares are significantly associated with accelerated genetic aging;
- Even with an increased risk of death from all causes.



The Patho-physiology of Hatred

Impact on health and wellbeing

- Pathology → disturbance of homeostasis, balance, equilibrium
 - **The balance, equilibrium, functionality**
 - **Multisystem**
 - **Physical, mental, psychological, spiritual Health**
- **Hatred** → Stress, CVS, Endocrinology, Immunology, Metabolism, Functionality, Mental, Physical, Social, Economic

Impact: Neurological and Physical changes

- Stress → immunity
 - Stress → endocrinology
 - Stress → CVS
 - Mental
 - Social pain
 - Physical pain
 - Spiritual pain
 - Emotional pain: injury to the soul
-
- Heart (break the heart)
- Glaser et al 2002: Negative emotions such as depression, anxiety, anger and hostility have a tendency to contribute to mortality and morbidity including CVD, osteoporosis, arthritis, and certain cancers



Indicators and Measures

➤ **Hermes Garban**

- Established a method for using cortisol and other biological markers as indicators of the physiological and psychological effects of hate speech.
- Exposure to hate speech = statistically significant increase in clinical anxiety and salivary cortisol, also known as stress hormone, levels (Garban et al., 2012).

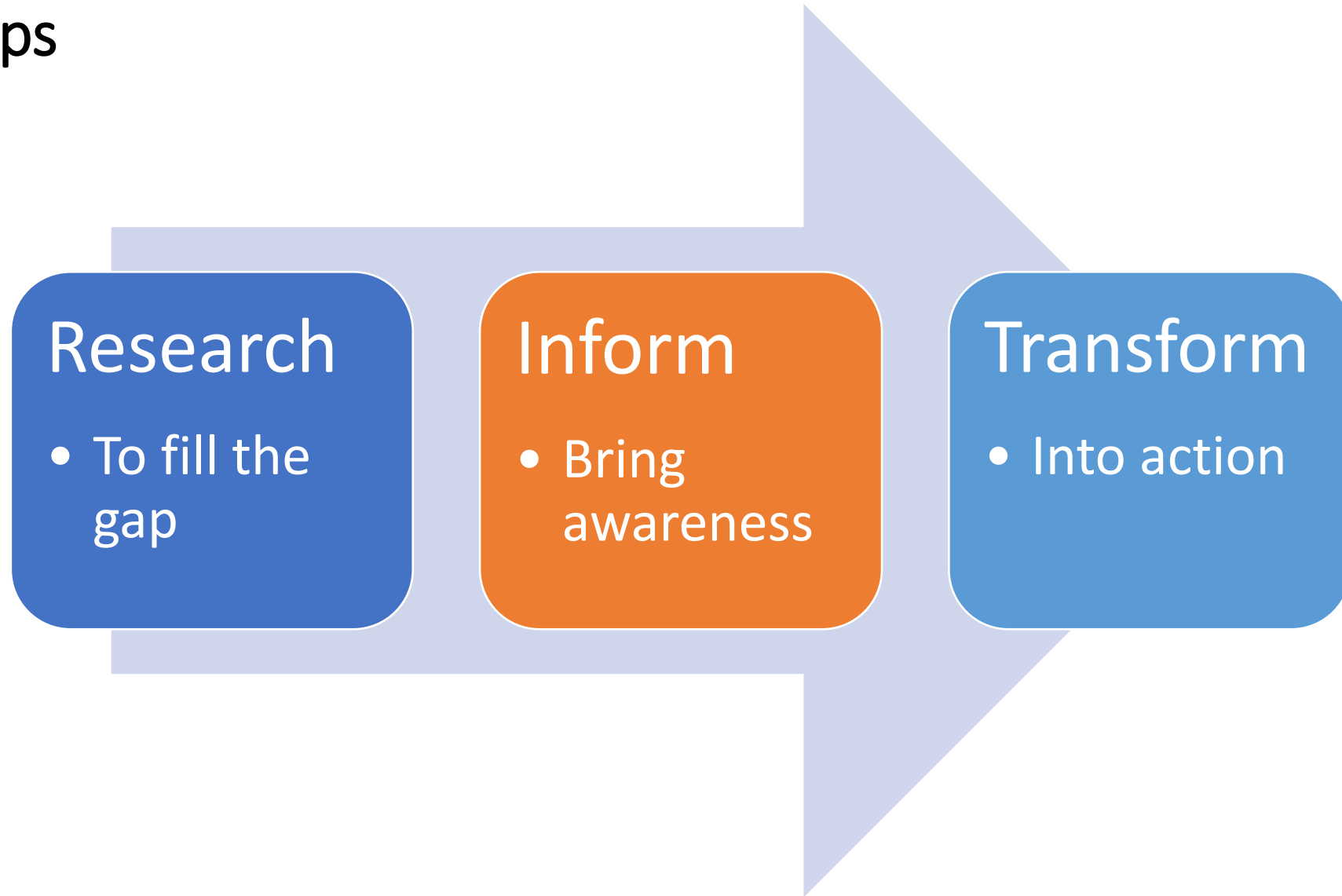


NEURAL
CORRELATES
OF HATE
ZEKI S¹,
ROMAYA JP.



- **An example set of four processed face images (faces not from this study).** The images are converted to greyscale and normalized with respect to visual area and average brightness. They are roughly matched in terms of spatial frequency and intensity contrast. The faces are all of the same sex, the expressions are similar and a vertically aligned full face image has been selected in each case. An individual set of four such faces was presented to each subject. One of the faces was of a person hated by that particular subject, the other three faces were known to the subject, but were of a neutral relationship, neither loved nor hated.
- 17 healthy subjects (10 male, 12 right-handed, mean age 34.8 years) were recruited through advertisements.
- Viewing a hated face resulted in increased activity in the medial frontal gyrus, right putamen, bilaterally in premotor cortex, in the frontal pole and bilaterally in the medial insula. We also found three areas where activation correlated linearly with the declared level of hatred, the right insula, right premotor cortex and the right frontal-medial gyrus. One area of deactivation was found in the right superior frontal gyrus. The study thus shows that there is a unique pattern of activity in the brain in the context of hate.

Next Steps



The Global Institute for the Study of Socio-Endemic Diseases: Vision & Mission



Vision

A **world** where ...

- ✓ ... **freedom, health, wellbeing, justice, equality, and peace** are the destiny of **all people**.
- ✓ ... the antidote to hatred develops through **collective awareness, knowledge, and education** that fortify **resilience, tolerance, kindness, and forgiveness**.

Mission

1. Create, preserve, and communicate **knowledge on socio-endemic diseases** to understand their **impact on health**, thereby contributing to the cultural, social, and economic **well-being** of all humanity.
2. Bridge the gap in **research, knowledge, and awareness** of socio-endemic diseases in a **comprehensive, interdisciplinary, multidisciplinary, holistic, collaborative, and convergent** approach.
3. Create and promote **evidence-based research and interventions** for the socio-endemic challenges affecting our world to improve universal health and peace.

The Global Institute for the Study of Socio-Endemic Diseases: Values



Build an **inclusive** and **supportive community** that promotes **equity** and **equality**.



Promote **innovation** and **integrity** within health and peace studies.



Inspire **excellence** in **academic research** in **health and peace**.



Embody **human dignity, respect, diversity** and **compassion** in all aspects of the institute.

The Role of Public Health Sector in Disease Prevention

The core, cornerstone and the basis of prevention is based on changes in relation to environmental, behavioral, contextual and social norms.

Identifying the highest risk groups and preventive measure to prevent spread.

New protective behaviors.

Individual and community tolerance and resilience.

Primary Prevention: preventing from happening

Early age, children at schools

Secondary prevention: screening people at risk: like cancer screening

Marginalized, ethnic minorities, socially oppressed and depressed, segregated and disconnected

Poor, discrimination, hatred speech, incitement, hatred crime, gun shooting

Conclusions and Recommendations

- Hatred is infectious and spreads or crosses barriers
- **Hatred is a result**
- Hatred is a disease not emotion
- Hatred is a public health issue
- Hatred is a determinant of health
- Hatred is not our destiny and should never be eternal but contained and prevented or eradicated. Freedom, health, wellbeing, justice, equality and peace are our destiny.
- It is a threat to world's stability and peace. Connection and relation between health, peace, hatred and wellbeing.
- Hatred, fear and fear mongering and incitement are universal and global threats that need collective and collaborative action.
- Supremacy and islamophobia are the major threats facing our world to advance a political agenda.

- Depends on who you are and where you are

➤ **Understanding and addressing hatred requires a multidimensional approach.**



Published articles



Medicine, Conflict and Survival



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Hatred-a public health issue

Izzeldin Abuelaish & Neil Arya

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COMMENTARY

Hatred-a public health issue

Izzeldin Abuelaish^a and Neil Arya^b

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ARTICLE HISTORY Accepted 1 May 2017

Hatred may be defined as a 'negative emotion that motivates and may lead to negative behaviours with severe consequences' (Halperin 2008). Though these sentiments might accompany it, hatred is not synonymous with extreme dislike, aversion, resentment, anger, or rage. Hatred includes an intense and chronic feeling, a judgment (of its object as 'bad, immoral, dangerous' (Navarro, Marchena, and Inmaculada 2013)), and a tendency, desire, or intention to be violent, often to the extreme of destroying its object. Most alarmingly, hatred involves the *dehumanisation* of the other (Halperin 2008; Harris and Fiske 2009; Sternberg 2005), which serves as a gateway through which moral barriers can be removed and violence can be perpetrated. From a peace studies point of view, hatred might be seen as a prime and extreme, enabler of direct, structural and cultural violence. As such, when contextualised within conflict, hatred may manifest as massive violence, mass murder, and genocide. Whether it engenders widespread physical, psychological, or political violence, each will result inevitably, in equally widespread health consequences. Many of the current violent civil or civil-military conflicts across the globe are either based on, or fuelled by, hatred. Hatred self-perpetuates, usually through cycles of hatred and counter-hatred, violence and counter-violence (sometimes as revenge) (Figure 1).

Debate

Interdependence between health and peace: a call for a new paradigm

Izzeldin Abuelaish, Michael S. Goodstadt*, and Rim Mouhaffel

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Summary

Health and peace, and their relationships to disease/conflict/violence, are complex and multifaceted interrelated terms. Scholars have proposed a variety of definitions for health and peace. The conceptualizations of health and peace share many fundamental elements, including in their social, psychological (emotional and mental) and spiritual dimensions. We argue that health and peace are inter-dependent in a fundamental *causal* fashion. Health is always positively or negatively affected by conflict; peace can be directly or indirectly fostered through public health program and policy initiatives. Evidence shows that public health professionals and academics have frequently failed to recognize the inter-dependence of health and peace when conceptualizing, and addressing, issues related to health and peace. In contrast, the present article argues in support of a new paradigm for addressing public health issues related to health and peace; such a paradigm is based on the premise that health and peace are inextricably linked, requiring that they be addressed in an integrated, inter-dependent, fashion. Finally, we emphasize that fostering health and peace requires identifying and promoting positive socio-ecological influences on health, rather than limiting our focus to health deficits and obstacles at the individual or community levels.

Key words: peace, health promotion, violence, public health, socio-ecological model

HATRED IS A CONTAGIOUS DISEASE AND PUBLIC HEALTH ISSUE IN ETHNOPOLITICAL CONFLICTS

Izzeldin Abuelaish

The prevalence of violent ethno-political conflicts across the globe that are fueled by mutual or one-sided hatred, interpersonal and especially intergroup hatred is a serious public health issue requiring public health perspective intervention. Intergroup hatred often causes widespread physical and psychological violence or sociopolitical harm, affecting entire populations and generations of populations, including children. The harm molded by hatred includes long-term distress-related health effects caused by immune system dysregulation. Such health effects of hatred are found in the targets of hatred, and the haters. Hatred self-perpetuates through cycles of hatred, violence, counter-hatred, and counterviolence. Each cycle brings in its wake increased risk of pathophysiology.

Violence is recognized as a public health issue, preventing or managing interpersonal and intergroup hatred also makes a positive contribution to public health by addressing a significant category of violence. Hatred is a wide-spread health issue that is linked to violence as only one of its consequences. Health practitioners, researchers, educators, cultural figures, faith representatives, policymakers, governments, and members of the public must create a radical immunization program to inoculate all (first and foremost children and youth) against individual and group-based hatred to begin to heal wounds created by hatred.

The effect of war, violence, and hatred on children's development

Izzeldin Abuelaish

Dalla Lana School of Public Health, University of Toronto, Toronto, ON, Canada.

doi: 10.1111/dmcn.15012

EDITOR—Delchambre recently highlighted the complex interplay of resources, politics, and conflict within the current COVID-19 pandemic, and its long-term impact on disabled children.¹ It is urgent to mitigate both the immediate and the long-term consequences of these factors on the world's most vulnerable individuals.² Health, development, and well-being depend on who you are and where you are in the world; they are shaped by the environment and context in which children live. War, violence, and hatred directly affect children and have considerable costs in terms of their health and mortality. They hinder the development and life of children in all aspects: from education, basic needs, safety, security, and access to health care – to the toxic stress and trauma they engender.

Armed conflict is a significant social determinant of children's health.³ It is a public health issue, and it may therefore be useful to understand conflict as a virulent socio-endemic disease causing injustice and inequality. Children not only die or suffer long-lasting physical impairments from bombs or bullets, but also from the long-term legacies of war, including otherwise avoidable diseases and impaired development.

Children in war zones can be affected directly and indirectly; for example, through their basic health needs not being met, the loss of family members, disruption of social networks, displacement, and the effect of conflict upon their parents. The serious deprivation of resources and related stress during warfare are extremely detrimental to the cognitive and emotional development of children. Children in armed conflict areas may be more susceptible to mental and physical health problems. These include hatred, anxiety, and depression, as well as physiological problems in the immune system and central nervous sys-

tem. Hate stifles children's ability to live a life fully with love and security. In addition to permanently skewing their cognitive ability and emotional health, hatred causes personal distress leaving a stain on one's ideological viewpoints of the world.

Exposure to such harm across individual and structural levels often results from and is enabled by hatred. Recently described as a public health issue, hatred has been characterized as a demeaning, divisive, and destructive disease that manifests through violence and cruelty. Violence has been established as a public health problem and disease; when fueled by hatred, it can generate vicious cycles of ill-health and well-being.⁴

Hatred is a contagious disease and is the result of exposure to/is triggered by racism, bigotry, and discrimination, etc. It crosses all barriers and borders, and no one is immune to its risks. Like most diseases, hatred is initially triggered by a causal agent or from harmful exposure. Once the exposure is manifested and incubated within the host, it can grow slowly over a period by continuous chronic exposure – or instantly by acute exposure. Given that hatred results from exposure(s) that may lead to violence and vice versa,⁴ it can extend to systems and hierarchies until finally emerging as structural hatred. This fuels structural violence, defined in public health discourse as social systemic hatred and institutions causing harm and preventing people from meeting their basic needs. Structural hatred perpetuates systemic discrimination (e.g. structural racism, the legacy of colonialism) and violence, creating inequities and inequalities that may also foster susceptibility to hateful and even extremist events compromising health and peace.⁵

We need a public health and ecological model for the study of the pathophysiology of violence and hatred, with a comprehensive, interdisciplinary, multidisciplinary, and holistic approach. This will enable us to set up effective and efficient preventive measures, for a free, safe, and peaceful environment.