

Creating the conditions in which all people can be healthy and thrive

Edward P. Ehlinger, MD, MSPH Public Health Metaphysician June 9, 2022

Charles Dickens Died on June 9, 1870

"It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of light, it was the season of darkness, it was the spring of hope, it was the winter of despair."



Tale of Two Cities 1859

Charles Dickens February 07, 1812 – June 09, 1870

Georgia Neese Clark On June 9, 1949 she became the 1st woman treasurer of US



Georgia Neese Clark January 27, 1898 – October 26, 1995 Born in Richland, Kansas



Truman pointed out the disadvantages of the job of Treasurer, including low pay, and asked her if she could afford to take the job. She replied, **"Can I afford not to?"**

William Edgar Stafford Born in Hutchinson, Kansas

There's a thread you follow. It goes among things that change. But it doesn't change. People wonder about what you are pursuing. You have to explain about the thread. But it is hard for others to see. While you hold it you can't get lost. Tragedies happen; people get hurt or die; and you suffer and get old. Nothing you do can stop time's unfolding.

You don't ever let go of the thread.

William Stafford, "The Way It Is."



8/24/2022

My thread goes back to early childhood experiences





ROBERT (Bob) MANN No. 87 — End

Sixth season in professional football...Played two seasons with the Detroit Lions catching 66 passes for 1,014 yards in 1949...One of the outstanding receivers in pro football... Teams up with Bill Howton to give the Pack the best pair of receivers in the league...Led the Packers in receiving in 1951 and caught 30 passes for 517 yards and 6 touchdowns in 1952...Former ALL BIG-TEN end and Rose Bowl star...Negro descent...Married and in the Real Estate business with Len Ford of Cleveland Browns in the off season...Residence: Detroit, Michigan.



GO! YOU PACKERS GO! (GREEN BAY PACKERS' SONG)

Composed by ERIC KARLL



PROCESS STADIUM SEEN SAY PUBLISHED BY GREEN BAY PACKER CORPORATION

The strands of the thread include the questions and values of my parents

"Life's most persistent and urgent question

is, 'What are you doing for others?'"

"No one is useless in this world who lightens

the burdens of another."



Dr. Martin Luther King, Jr



Charles Dickens

The thread ran through high school



BULL' FRITSCH



The Other America - 1962

"There is a familiar America. It is celebrated in speeches and advertised on television and in the magazines. It has the highest mass standard of living the world has ever known...(but), there exists another America. In it dwell somewhere between 40,000,000 and 50,000,000 citizens of this land. They are the poor ... maimed in body and spirit, existing at levels beneath those necessary for **human decency.** ... They are hungry. They are without adequate housing and education and medical care."



Michael Harrington Born in St. Louis, MO

That thread ran through college and medical school





Robert Gard born in Iola, Kansas College, U of KS

Wisconsin Idea

- "University should be dedicated to service to the state...an instrument for the advancement of the welfare of the people."
- Legislation should benefit all people of the state - as should educational and cultural opportunities.
- "There never was a higher call to greater service than in this protracted fight for social justice." Robert (Fighting Bob) LaFollette

The thread ran through graduate school

- First Provost, KU Medical Center
- Dean of the University of Kansas Medical School
- Medical Director, KU Medical Center
- Director, Children's Rehabilitation Unit
- Head of MCH at UNC-Chapel Hill



C. Arden Miller, MD

Kansas is more than just the geographic center of the USA



Kansas–Nebraska Act of 1854 Bleeding Kansas – 1854 to 1859





Lebanon, Kansas





State Health Rankings

Kansas - in the center of everything



Mortality rates from mental health conditions 64% higher in distressed areas. People in distressed areas die five years earlier than people in prosperous regions.

Kansas - in the center of everything - except in disparities Women, Infants, and Children

Health outcomes for women #30Health outcomes for children #35

Figure 2. Infant mortality rates for infants of non-Hispanic white women, by state: United States, 2013–2015



[†]Significantly different from the U.S. rate.

NOTES: Rates ranged from 2.52 to 7.04 per 1,000 live births. Access data table for Figure 2 at: https://www.cdc.gov/nchs/data/databriefs/db295_table.pdf. SOURCE: NCHS, National Vital Statistics System.

Figure 3. Infant mortality rates for infants of non-Hispanic black women, by state: United States, 2013–2015



† Significantly different from the U.S. rate.

NOTES: Rates ranged from 8.27 to 14.28 per 1,000 live births. Access data table for Figure 3 at: https://www.cdc.gov/nchs/data/databriefs/db295_table.pdf. SOURCE: NCHS, National Vital Statistics System.

Kansas - in the center of everything - except in disparities Life Expectancy



Why Should People Be Concerned About Equity?





William Foege CDC director 1977-1983



It's a social justice problem...

"The philosophy behind science is to discover truth.

The philosophy behind medicine is to use that truth for the benefit of your patient.

The philosophy behind public health is social justice."

It's a math problem

Diversity is more than just race/ethnicity: Categories of potential inequities

- Race and ethnicity
- Gender
- Sexual preference
- Educational attainment
- Geography
- Community vitality
- Physical environment

- Urban/suburban/rural
- Economic status
- Physical and mental ability
- Language
- Immigration status
- Religion
- And...

Why Should We Care About Equity? We have vested interests in the outcomes.



Michael Harrington Author of "The Other America."

"One cannot raise the bottom of society without benefitting everyone above."



Senator Paul Wellstone

"We all do better when we all do better."



Martin Luther King , Jr.

"We may have all come on different ships, but we're in the same boat now."

Why Should We Care About Equity? We have vested interests in the outcomes.

"Injustice anywhere is a threat to justice everywhere. ... Whatever affects one directly, affects all

indirectly."

MLK, Jr, Letter from Birmingham Jail, April 16, 1963



"Injustice anywhere... ... is a threat to justice everywhere."



Mortality Rates by Race and Black/White Ratio US, 1935 – 2007

National Center for Health Statistics, Health United States, 2009 (updated)

"Injustice anywhere...

... is a threat to justice everywhere."



Life Expectancy, by race: United States,

1970 - 2010 8/24/2022

SOURCE: CDC/NCHS, National Vital Statistics System, Mortality.

Life Expectancy at Birth US and OECD Countries by Gender 1960-2010

U.S. Ranked 49th in Maternal Mortality in 2008

Maternal Mortality Ratio (MMR) by Developed Country

Maternal deaths per 100,000 live births



African-American women were **3.2 times more likely to die** due to pregnancy/childbirth than white women.



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Caucasian 11 DEATHS per 100,000 live births

Source: Institute for Health Metrics and Evaluation Graphic by Tiffany Farrant-Gonzalez, for SCIENTIFIC AMERICAN

U.S. maternal mortality rates continue to climb even as other developed countries improve.

Data from UNICEF, WHO, UN Population Fund, and World Bank with standardized methodology.

Why Should We Care About Equity? Equity and Social Justice are Existential Issues



Frederick Douglass Social reformer, abolitionist, orator, writer, and statesman

"Where justice is denied, where poverty is enforced, where ignorance prevails, and where any one class is made to feel that society is an organized conspiracy to oppress, rob and degrade them, neither persons nor property will be safe."



What we are doing to advance health equity is not working. And may, in fact, be inhibiting progress.

US IMR, 1980-2016: White and Black Race



What we are doing to advance educational equity is not working. And may, in fact, be inhibiting progress.



Figure 2: Percent Reading Scores at or above 250 for 4th, 8th, and 12th grades

Source: Educational Digest, NAEP 2010; Reading scores above 250 reflect ability to search for specific information while reading, interrelate ideas and make generalizations about literature, science, and social studies materials.

How did we get to this point?



Life expectancy vs health expenditures - U.S. and OECD Countries 1970 - 2014





Data source: Health expenditure from the OECD; Life expectancy from the World Bank Licensed under CC-BY-SA by the author Max Roser. The data visualization is available at OurWorldinData.org and there you find more research and visualizations on this topic.

Total Investment in Health and Human Services



Expenditures as a % of GDP

In OECD countries, for every \$1 spent on health care, about \$2 is spent on public health and social services.

In the U.S., for every \$1 spent on health care, about 55 cents is spent on public health and social services.

... 📃 Medical Care Expenditures

We need to change how we do our work

"Public health is what we, as a society, do collectively to assure the conditions in which (all) people can be healthy."

The Future of Public Health Institute of Medicine, 1988

CHWs can help change the conditions in which people can be healthy.

Living Conditions Impact Health

Communities of Opportunity Low-Opportunity Communities •Social/economic inclusion Good Social/economic exclusion Health •Thriving small businesses and entrepreneurs •Few small businesses Status •Grocery stores •Fast food restaurants •Unsafe/limited parks •Parks & trails •Rental housing/foreclosure Poor •Sufficient healthy housing Health •Poor and limited housing stock •Good transportation options and infrastructure Status •Few transportation options •Financial institutions •Payday lenders Contributes •Home ownership to health Poor performing schools disparities: •Better performing schools •Pollution/contaminated drinking water Obesity • Diabetes •IT connectivity •Limited IT connections Asthma Weak local governance Strong local governance Cancer Injury

Adverse Childhood Experiences (ACEs) Impact Long-term Health



Diseases of Disconnection and Despair



Changing the Conditions that Affect Health Requires the Capacity to Act



How do we change the conditions that impact health? Create/Strengthen our "Capacity to Act"

Organize:

Resources: Identify/shift the way resources, systems and processes are structured.



To Advance Health Equity and Optimal Health for All we need to influence policies and change living conditions



Expand the Understanding of What Creates Health

Determinants of Health Genes and Biology Social and Economic .0% Factors Physical Environment 40% Clinical Care 10% 30% Health **Behaviors**

Determinants of Health Model based on frameworks developed by: Tarlov AR. Ann N Y Acad Sci 1999; 896: 281-93; and Kindig D, Asada Y, Booske B. JAMA 2008; 299(17): 2081-2083.

World Health Organization. Ottawa charter for health promotion. International Conference on Health Promotion: The Move Towards a New Public Health, November 17-21, 1986 Ottawa, Ontario, Canada, 1986. Accessed July 12, 2002 at http://www.who.int/hpr/archive/docs/ottawa.html.

Vital conditions for health (WHO)

- Peace
- Shelter
- Education
- Food
- Income
- Stable eco-system
- Sustainable resources
- Social justice and equity
- IT connectivity
- Mobility

Conditions and circumstances in which people are born, live, work, and age
Top Ten Causes of Death: 1850 – 1900 – 2000 Death Certificate Causes

1850	1900	2000
Tuberculosis	Pneumonia	Heart disease
Dysentery/diarrhea	Tuberculosis	Cancer
Cholera	Diarrhea	Stroke
Malaria	Heart Disease	Lung disease
Typhoid Fever	Stroke	Accidents
Pneumonia	Liver Disease	Diabetes
Diphtheria	Accidents	Pneumonia/Influenza
Scarlet Fever	Cancer	Alzheimer's disease
Meningitis	Diseases of Old Age	Kidney disease
Pertussis	Diphtheria	Blood poisoning

https://www.census.gov/history/www/through_the_decades/overview/1850.html

Actual Causes of Death The new social/environmental issues

Cause of Death	#	%
		of total deaths
		ucatils
Tobacco	435,000	18%
Diet/activity	400,000	16%
Alcohol	85,000	4%
Microbial agents	75,000	3%
Toxic agents	55,000	2%
Firearms	29,000	1%
Sexual behavior	20,000	<1%
Motor vehicles	43,000	<1%
Illicit use of drugs	17,000	<1%



Cause of Death	Number of Deaths
Tobacco	435,000
Diet/Activity	365,000
Less than High School Graduation	245,000
Racial Segregation	176,000
Low Social Support	162,000
Individual Poverty	133,000
Income Inequality	119,000
Alcohol	85,000 (Other Drugs add 75,000)
Microbial Agents	75,000
Toxic Agents	55,000
Community Level Poverty	36,000
Firearms	29,000 ₃₉

Is the healthy choice a possible choice?

Living Conditions Impact F **Communities of** Opportunity Social/economic inclusion Good Health Thriving small businesses and entrepreneurs Status Grocery stores Parks & trails Poor Sufficient healthy housing Health Good transportation options Status and infrastructure Financial institutions Contributes to health Home ownership disparities: Better performing schools Obesity Diabetes IT connectivity Asthma Strong local governance Cancer Injury



The real reason dinosaurs became extinct

 MOTOR VEHICLE CRASHES • OBESITY • HOMICIDES PTSD • ANXIETY • DEPRESSION • DEMENTIA STDS • SUICIDES • MENTAL HEALTH CRISES INJURIES • HIV • HEPATITIS C • CIRRHOSIS UNWANTED PREGNANCIES • DIABETES SUBSTANCE ABUSE (ATOD) • ADDICTIONS (ALCOHOL, DRUGS, FOOD, SEX, GAMBLING, SCREENS)

 DIVORCE/SEPARATION • ALCOHOL ABUSE DRUG USE • INCARCERATION MENTAL ILLNESS • DOMESTIC VIOLENCE ABUSE (PHYSICAL, SEXUAL, VERBAL, EMOTIONAL)

INEFFECTIVE SCHOOLS • INCOME INEQUALITY
 CRIME • POVERTY • SOCIAL EXCLUSION • RACISM
 SEXISM • UNEMPLOYMENT • SCHOOL SUSPENSIONS
 HOMOPHOBIA • FOOD INSECURITY • LACK OF HOPE
 ENVIRONMENTAL CONTAMINATION • DISRUPTED FAMILIES
ORICAL TRAUMA • CLIMATE VULNERABILITY • VIOLENT NEIGHBORHOODS
SECURITY • POOR ACCESS TO HEALTH AND HUMAN SERVICES • REDLINING

States: marketing tobacco arketing alcohol marketing soda (by

Expand the Understanding of What Creates Health



Social Determinants of Health (Vital Conditions for Community Well-being)

Shaped by the distribution of money, power, social policies, & politics that are beyond the control of the individual.
Disproportionately affect individuals from Black, brown, and Indigenous communities.
Structural racism

Ehlinger's beliefs about the contributions to health determinants

Expand our understanding about what creates health: Importance of Narrative

"Public sentiment is everything. With public sentiment, nothing can fail; without it nothing can succeed."

-Abraham Lincoln



Expand the understanding about what creates health. Contrasting/Alternative Worldviews



Alternative Health Narrative



Change the Narrative about what is health?

"Health is

the absence of disease or infirmity)."

Implement a Health in All Policies and Sectors Approach with **Health Equity as the Goal**

- Minimum Wage
- Paid Leave
- Criminal justice
- Energy
- Transportation
- Broadband connectivity
- E-Health
- Housing/Homelessness



- Air/Water quality
- Ag Buffer strips
- Food Charter
- Marriage Equity
- Payday Lending
- Freedom to Breathe
- Health Care Reform
- Climate Change

This should be the Portfolio of CHWs

War on Poverty Components 1965-1967 - 89th Congress

- Title V C & Y, MIC, FP Projects
- Head Start
- Medicare and Medicaid
- School lunch program
- Neighborhood health centers
- Food stamps
- Elementary & Higher Education Act
- Education of the Handicapped Act
- Housing & Urban Development Act
- Voting Rights Act
- Vocational Rehabilitation ²⁴
- Job Corps
- VISTA
- Peace Corps



- Older Americans Act
- Freedom of Information Act
- Cigarette labeling and advertising act
- Public Works & Economic Development Act
- National Foundation on the Arts and Humanities Act
- Immigration and Nationality Act
- Motor Vehicle Air Pollution Control Act,
- Highway Beautification Act,
- National Traffic and Motor Vehicle Safety Act
- National Historic Preservation Act,
- National Wildlife Refuge System Act,
- Department of Transportation Act,
- Etc.

A Brief History of Community Health Worker Programs Henry Perry, September 18, 2013

"...the (early CHW) movement incorporated two agendas: the first was a **service-oriented agenda** of extension of preventive and curative services within the existing health system, while the second was a t**ransformative agenda** concerned with engagement of communities in the process of taking responsibility for their health, and addressing the environmental, social, and cultural factors that produce ill health, including inequity and deep poverty."

https://www.mchip.net/sites/default/files/mchipfiles/02_CHW_History.pdf#:~:text=The%20first%20Community%20Health%20Workers% 20%28CHWs%29%20were%20%E2%80%98%E2%80%99Farmer,emerge%20in%20various%20countries%2C%20particularly%20in%20Lati n%20America.

Strengthen the Capacity of Communities to Create Their Own Healthy Future



Strengthen the Capacity of Communities to Create Their Own Healthy Future



Strengthen the Capacity of Communities to Create Their Own Healthy Future



"...the community in the fullest sense is the smallest unit of health...to speak of the health of an isolated individual is a contradiction in terms."

Wendell Berry

By Strengthening...

- Food and Water Sovereignty
- Mutual accountability
- Environmental decay
 Leaders and institutions

This is where CHWs can be most influential!

Prevention Network, Centers for Disease Control and Prevention; April 15, 2008. Available at: http://www.cdc.gov/syndemics/monograph/index.htt

Social Cohesion/Belonging

"The greatest epidemic today is not TB, HIV or leprosy, it is being unwanted. Being unwanted, unloved, uncared for, forgotten by everybody is a much greater hunger, a much greater poverty, than the person who has nothing to eat.



Mother Teresa Saint Teresa of Calcutta

Social Cohesion Social Justice

- A community ethic that works toward the well-being of and embraces a responsibility for all community members, fights exclusion and marginalization, promotes trust, and creates a sense of belonging.
- Elements of **social cohesion** are:
 - social capital the resources that result from people working together toward a common goal,



- social mobility the ability to move up in social or economic status,
- social inclusion having connection to, ownership of, and responsibility for community goals; having a sense of belonging – being wanted & needed.
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Health is in relationships – Health is in community

"A proper community is a commonwealth: It

answers the needs, practical as well as social and

spiritual, of its members - among them the need

to need one another. The Art of the Commonplace



Wendell Berry

Health is in belonging

What would it look like if equity was the starting point for decision-making? Our work would be different.



Our work would be based on the principles on which public health and CHWs are built



- broad definition of health and well-being,
- focus on overall health and education of the entire population, (emphasis on making populations less vulnerable)
- balance of intervention and prevention,

- good science,
- long-term responsibility,
- collaboration and inclusion,
- social justice, social responsibility, and equity.

How is that thread colored?

It is difficult to get the news from poems yet men die every day for lack of what is found there.



William Carlos Williams, MD "Asphodel, That Greeny Flower"

Dream Deferred – (inspired MLK, Jr)

What happens to a dream deferred? Does it dry up Like a raisin in the sun? Or fester like a sore--And then run? Does it stink like rotten meat? Or crust and sugar over-like a syrupy sweet? Maybe it just sags like a heavy load. Or does it explode?



Dream Deferred by Langston Hughes

Written in 1951

Don't Defer Your Dreams Keep Your Eyes on the Prize

...history has its eyes on us.. And so **we lift our gazes** not **to** what stands between us but **what stands before us**....

Amanda Gorman, Inauguration poem, The Hill We Climb



We can't defer our dreams, or be deterred by other schemes Keep your eyes on the prize, hold on.

We must embrace our dream with health equity as the theme Keep your eyes on the prize hold on.

Hold on, hold on, Keep your eyes on the prize, hold on .

Keep Your Eyes on the Prize

We all must take a stand, when there's inequity in our land Keep your eyes on the prize, hold on.

Social justice is our goal for the community as a whole Keep your eyes on the prize, hold on.

Hold on, hold on. Keep your eyes on the prize, hold on. From history we all know we can't accept the status quo Keep your eyes on the prize, hold on

That's why we're here today to help find a better way Keep your eyes on the prize, hold on.

Hold on, hold on. Keep your eyes on the prize, hold on.

One Foot in Front of the Other and Lead with Love Melanie DeMore



"The field is very important, but the work is incessant." Mary Ann Shadd, anti-slavery activist, teacher, and first black woman publisher in the U.S. and first woman publisher in Canada.

Put one foot in front of the other And lead with love. Put one foot in front of the other And lead with love. Don't give up hope (call & response) You're not alone Don't you give up Keep movin on

To give us hope For humanity Let's build a world Of equity.

BAMBELELA – NEVER GIVE UP Nurture your dreams

June, 1868 Thomas Edison is issued his first patent application for an electrical vote recorder. *"Our greatest weakness lies in giving up. The most certain way to succeed is always to try just one more time."*

Bambelela, bambelela, O bambelela, bambelela Bamba, bamba, bamba, bamba, bamba, bamba, bamba, bambelela

Never give up, never give up, O never give up, never give up, Never, never, never, never, never, never, never, never give up.

Nurture your dreams, nurture your dreams. O nurture your dreams, nurture your dreams, Always, always, always, always, always, always, always, always nurture your dreams.



Gwendolyn Brooks Born June 7, 1917 in Topeka, KS

"Live not for Battles Won. Live not for The-End-of-the-Song. Live in the along."

Speech to the Young, Speech to the Progress-Toward



First African American to receive the Pulitzer Prize First African-American woman inducted into the American Academy of Arts and Letters. Honorary Doctorate of Literature, U of Wisconsin, June 3, 1972



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BAMBELELA – NEVER GIVE UP

Definitions: Disparities – Inequities

- Health disparity: A population-based difference in health outcomes.
- Health inequity: A health disparity due to inequitable, socially-determined circumstances. Because health inequities are socially-determined, change is possible.
 - This is what most people mean when talking about health disparities.
- Health equity: When every person has the opportunity to realize his/her/their health potential the highest level of health possible for that person without limits imposed by structural inequities. Health equity means achieving the state in which all people have the opportunity to attain their highest possible level of health.

Definitions: Disparities – Inequities

- Structural inequities: Structures or systems of society such as finance, housing, transportation, education, social opportunities, etc. — that are structured in such a way that they benefit one population unfairly (whether intended or not).
- Structural isms: The normalization of an array of dynamics historical, cultural, institutional, political, and interpersonal — that routinely advantage one group of people while producing cumulative and chronic adverse outcomes for non-members of that group.
 - E.g. Structural racism: The normalization of an array of dynamics historical, cultural, institutional, political, and interpersonal — that routinely advantage white people while producing cumulative and chronic adverse outcomes for Black, brown, Indigenous, and People of Color.
 - Structural ableism, sexism, agism, elitism, etc.

- Any subject (like being a physician) can have a metatheory, a theoretical and often abstract consideration of its properties.
 Basically, X about X : e.g., data about data – meta data; literature about literature – meta literature.
 - The term "meta" comes from the Greek preposition and prefix meta- (μετά-) which means "after", "beside", "with", "among", "from," "about."
- A Public Health Metaphysician provides the perspective of being a physician from the viewpoint of a medical and public health practitioner.

- Metaphysics is a traditional branch of philosophy concerned with explaining the fundamental nature of being and the world that encompasses it.
- A Public Health Metaphysician is concerned with explaining the nature of being healthy as individuals, a community, and society and the conditions that create health; all viewed from the perspective of equity and social justice.

Public Health Metaphysician

- Integrates medicine, public health, & other disciplines
- Considers the objective and subjective factors of biological and social sciences
- Embraces the creativity and imagination of the arts
- Seeks to understand the lessons of history
- Uses a mosaic of information from all disciplines, sectors, and cultures in addressing complex issues.
- Addresses philosophical and abstract issues about the nature of health and the conditions that create health
- Asks epistemological (theory of knowledge) questions
- Practices humility
- Deals with the interconnection of multiple sectors and cultures
- Uses the lens of equity and social justice.



Public Health Metaphysician

"You think that if you understand one, you understand two-because one and one are two. But you must also understand 'and'."

Sufi saying

