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Disclosure

No financial Interest or Funding

Learning Objectives

- Definition of Social determinants of health (SDOH)
- Review social disparities in women's health
 - > Cervical cancer screening
 - > Inequities in maternal health
 - > Mental health and stress exposures
- Definition of Implicit bias

Social Determinates of Health

- Defined as
 - > Everyday circumstances in which we are
 - Born, live, work, play, age and die
 - Includes our housing, working conditions, schools, social networks, political rights and freedoms

All which shape our opportunities to obtain and maintain good health

- AVOID illness
- While the healthcare system is one obvious social determinant of health, far more important for the population's health are the economic and social conditions that influence the causes of illness in the first place

- Women in the United States have more negative reproductive health outcomes
 - > Higher rates of
 - unintended pregnancy

Abortion

Sexually transmitted infection (STI)

Cervical cancer

- Compared to women in similar developed countries
- Persistent disparities exist within the United States
 - > Greater numbers of racial/ethnic minority and socially disadvantaged women experiencing these reproductive health sequelae

Compared with their counterparts

- Inequities in reproductive health may be due to
 - > Differentials in receipt of women's health care across sociodemographic groups in the US
- Cervical and breast cancer screening has long been recognized as beneficial in reducing cancerrelated mortality

- In response to the Women's Health Amendment to the US Health care reform
 - Affordable Care Act
 - The Institute of Medicine called for more comprehensive preventive services
 - Receipt of services for contraceptive methods and counseling, STI counseling and screening and well-woman examinations
 - Associated with better reproductive health outcomes
- Disproportionate access to preventive women's health services among minority and poor women of all ages
 - May further contribute to gaps in reproductive health promotion and disease prevention Leading to growing women's health inequalities

- An article co- authored by Kelli Hall PhD, MS, Vanessa Dalton MD, MPH and Timothy Johnson MD titled:
 - Social disparities in women's health service use in the United States: a population-based analysis
 - Indicated that from 2006 2010
 - Approximately ¾ of adult women reported women's health service use in the past
 12 months
 - Most commonly Gyn examinations
 - Less than half received contraceptive services and even fewer received STI and pregnancy - related services in the past year
 - US Affordable Care Act

Expanded eligibility for health care coverage to uninsured people between 139% and 399% of the federal poverty level

- Aimed to increase poor and insured women's access to preventive services
 - Including mandated contraceptive coverage

- Cervical Cancer Screening Disparities Gap
 - Black women are more likely to die from the disease than any other racial group
 - Twice as likely to die from cervical cancer compared to white women in the US
 - Despite advances in cervical cancer screening and vaccination against high-risk human papilloma virus (HPV)
 - Long-time racial, ethnic, and socioeconomic disparities are still prevalent
- American Cancer Society (ACS) released new cervical cancer screening guidelines (December 2020)
 - Openly acknowledge Black and Latino women have higher rates of cervical cancer
 - ➤ These guidelines will limit screening options and potentially cause the racial disparity gap to grow even further

- Racial, Ethnic, and Socioeconomic Cervical Cancer Disparities are Prevalent
 - ➤ In 2017, the cervical cancer incidence rate per 100,000 US women were
 - 7.3 for white women
 - 8.3 for Black women (14% higher than white women)
 - 8.9 for Hispanic women (22% higher than white women and 7% higher than Black women)
 - There is also increase mortality among Black and Hispanic women compared to White women
 - These disparities are the result of significant socioeconomic barriers that lead to differences in screening rates.
 - > Studies show both Black and Hispanic women are diagnosed at later stages which lead to higher mortality

- Black women with cervical cancer receive less aggressive treatment
 - > Have less access to health care
- Substantial widening of the racial disparities in incidence and mortality occurs with advancing age, particularly in Black women
- Incidence of cervical cancer is higher in rural vs metropolitan communities in the US
 - ➤ More that 60% of US cases occur in areas of underserved and under screened women
 - Rural settings
 - Screening disparities in rural communities show up at a high rate in the southern region in the US

Many women in this region lack adequate health insurance

- The main factors for explaining racial, ethnic, and socioeconomic disparities include
 - Lack of screening
 - Access to screening services
 - > Follow-up of abnormal test
 - All which can affect the overall cervical cancer incidence and stage at diagnosis
- Along with imbalances in cervical cancer screening rates
 - Disparities in the uptake of HPV vaccine and completion of the vaccine series by geographic region and by race or ethnicity may also contribute to continued health disparities within cervical cancer
- CDC found that less than half of adolescents in the US have completed the HPV vaccine series
 - ➤ Only 53% of Black and 57% of Hipsanic adolescents

- The American Cancer Society cervical cancer guidelines: December 2020
 - ➤ Begin screening at 25 years of age rather than 21 years
 - Remove Pap test from frontline screening
 - Change to HPV alone screening
- American College of Obstetrics and Gynecologists (ACOG)
 - Released statement and reinforced their position on cotesting
 - American Society of Cytopathology (ASC)
 College of American Pathologist (CAP)
 American society for Clinical Pathology (ASCP)
- ❖ ASCP and ASC
 - ➤ Warn if pap testing is no longer covered by insurance companies, existing screening disparities will increase further

- Additionally, cases will be missed if only high-risk HPV test are used for screening
 - Up to 10% of invasive cervical cancers test negative for HPV
 - ➤ Up to 14% may be negative for high-risk HPV types covered by tests
 - 8.3% 14% of high grade squamous intraepithelial lesion (HSIL) may also be negative for highrisk HPV
- College of American Pathologists (CAP)
 - Recommend cytology and cotesting be retained given that there is no longitudinal data applicable to US screening populations supporting the change.
- The Black Women's Health Imperative stated
 - The new ACS guidelines "fail to preserve access to the most accurate and effective cervical cancer screening options and threatens to put lives at risk."

Black Women's Health Imperative

- Emphasize that Black women are already more likely to be diagnosed with advanced cervical cancer
- More likely to die from the disease
- ➤ There are concerns that adjusting the screening interval will make women visit their healthcare provider less frequently
 - Missing opportunities to counsel patients on a variety of health issues Limiting screening options and testing fewer women at decreased frequency will widen the disparity gaps even further

- Maternal mortality is marker of national health and well-being
- Black women experience maternal morbidity and mortality ratios several times higher than other groups
- Black and American Indian/Alaska Native women are 2-3 times more likely to die from pregnancy related causes than white women
- non-Hispanic black women who experiences postpartum hemorrhage have a higher risk of severe morbidity and death compared with non-Hispanic white women

- More than a decade ago, the World Health Organization
 - ➤ Launched its commission on the social determinants of health (SDOH)
 - To foster a global movement to address the conditions in which people are born, grow, live, work, and age.
- ❖ Taking social factors into account is essential to improving both primary and secondary prevention and the treatment of acute and chronic illness
 - Social context affect the delivery and outcomes of healthcare

- ❖ National Academies of Science, Engineering, and Medicine (NASEM)
 - > Identified five essential activities for the integration of social needs into health care
 - 1. Awareness
 - Indicated the need for screening for SDOH
 - 2. Adjustment
 - Indicates the need to tailor services to resolve the negative determinants and support the positive
 - 3. Assistance
 - 4. Alignment
 - 3 and 4 both mean strengthening social supports and redesigning health services to meet the needs of the public
 - 5. Advocacy
 - Making use of local, state and federal governments to support public health efforts in addressing SDOH consistent with clinical care within the context of the communities where the care is provided

- When considering maternal health
 - Application of the reproductive justice framework provides us with some guidance for acknowledging and addressing structural determinants of health inequities
 - Framework created by women of color
- Reproductive justice refers to the human right to personal bodily autonomy not to have a child, to have a child, and to raise a child in a safe and sustainable community
 - Framework calls for program and policy recommendations that dismantle a belief in hierarchy of human value.
 - It shifts accountability from individuals to systems by acknowledging that the context of people's lives determines their health Blaming individuals for having poor health or crediting them for good health is therefore inappropriate

- Individuals are unlikely to be able to control directly many of the upstream determinants of health:
 - Governance, policy, and cultural or societal norms and values that shape who has access to health-promoting resources and opportunities and who does not
- Beginning from this vantage point allows an understanding of why social determinants are born from structural determinants and cannot be addressed separately
- No matter how empowered, knowledgeable, or willing someone is to change their behavior
 - > They may not be able to do so because of structural determinants of health inequities

- Developed by Roach in 2016
 - Restoring Our Own Through Transformation (ROOTT)
 - Theoretical framework elucidates the web of causation between structural and SDOH and wellness
 - This framework identifies the social determinants of Black maternal health Education, income, neighborhood characteristics, housing, access to care, safety and food stability
 - How their availability to Black families has been dictated by the very structure of American Society from the time of slavery
- Structural racism and institutional policies and practices
 - ➢ Jim Crow, the GI Bill, "redlining" (home mortgage denial on the basis of race and government- backed disinvestment in non- White neighborhoods), mass incarceration Historically based features of an overtly oppressive U.S. society that have endured and adapted over time and continue to shape contemporary access to health-promoting resources and opportunities necessary for optimal Black maternal and infant health outcomes

- Health Systems Considerations as Structural Determinants of maternal Health
 - Health policy researchers have identified four key features of the US healthcare system that result in a health disadvantage for individuals
 - 1. US health system suffers from financial barriers to care, a shortage of primary care providers and important gaps in quality of care
 - 2. Many Americans live in structured environments that produce a higher prevalence of certain unhealthy behaviors than in other developed countries
 - Consumption of more calories per capita
 - Higher rates of prescription and illicit drug misuse
 - More traffic accidents involving alcohol

- Health Systems Considerations as Structural Determinants of maternal Health
 - Health policy researchers have identified four key features of the US healthcare system that result in a health disadvantage for individuals
 - 3. Relative to other developed countries
 - The US lags in educational attainment
 - Vast income inequality has resulted in a concentration of resources among a small segment of the population
 - With adverse implications for population health and health inequities, including maternal and infant mortality
 - 4. Americans live in a built environment that does not encourage physical activity and live in more racially segregated communities
 - Largely a result of redlining

WEB OF CAUSATION

STRUCTURAL and SOCIAL DETERMINANTS: IMPACT ON HEALTH

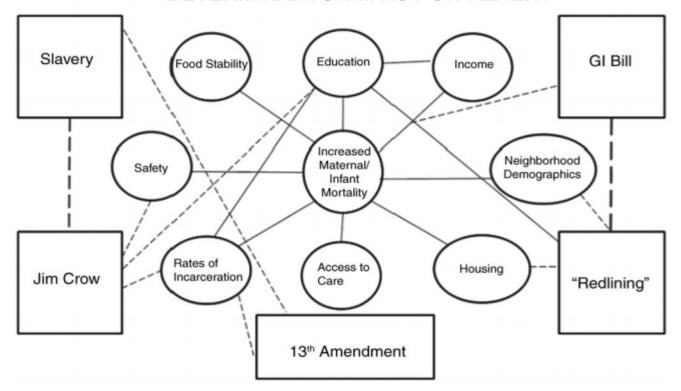


FIG. 1. ROOTT Theoretical Framework.¹⁵ This figure depicts the theoretical framework developed by ROOTT¹⁵ used to identify structural and social determinants of maternal and infant mortality in the United States. Structural determinants are those depicted in boxes connected by dashed lines, which in turn shape the distribution of social determinants (those depicted in circles and connected by solid lines). The multiple and interconnected pathways between structural and social

- The shortage of primary care providers
 - > Nurse midwives, obstetricians, nurses
 - puts diverse women at risk for delay or omission of two essential activities during perinatal period
 - Seeking care at early stage in pregnancy Building trust with providers
 - This risk is amplified for women who have preexisting conditions when they become pregnant or who develop comorbidities during the perinatal period

- Overview of Existing Policies and Practices to Address Structural and Social Determinants of Maternal Health
 - Paid Family Leave
 - Lack of paid family leave is considered a public health crisis in the US

 The US is one of only two countries in the world that does not have a national policy guaranteeing paid leave to new parents
 - Papua New Guinea

1993 Family Medical and Leave Act provides for unpaid leave

- Almost half of US workers are not eligible
- Many cannot afford time off without pay

Around the globe paid maternity leave is standard practice

Averaging 18 weeks and extending beyond 6 months in many developed countries

- Overview of Existing Policies and Practices to Address Structural and Social Determinants of Maternal Health
 - Paid Family Leave
 - Reforms that have increased the duration of job-protected paid parental leave have improved women's economic outcomes Access to paid parental leave around the period of childbirth appears to reduce rates of infant mortality
 - Breastfeeding representing one possible mechanism

More generous paid leave entitlement in countries that offer unpaid or short duration of paid leave could help families strike a balance between the competing demands of earning income and focusing on personal and family well-being

- Overview of Existing Policies and Practices to Address Structural and Social Determinants of Maternal Health
 - Health Insurance coverage and scope
 - A review of emergent research found that states that expanded Medicaid eligibility improved the health of women of childbearing age by
 - increasing access to preventive care
 - Reducing adverse health outcomes before, during and after pregnancies
 - Reducing incidence of maternal mortality

Expansion states experienced significant reductions in Black-White disparities in adverse birth outcomes shortly after the policy went into effect

- 50% reduction in infant mortality
 - Greatest declines among Black/African American infants

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- Overview of Existing Policies and Practices to Address Structural and Social Determinants of Maternal Health
 - Invest in communities
 - Stepping outside of the acute care setting
 - It's essential to increase investment in comprehensive community-oriented primary care for diverse women of reproductive age in a variety of settings

At state level

- income/wealth inequality may be reduced by supporting higher living wages and asset-generating opportunities to help low-income families
- Passing progressive tax systems to fund
 - public education
 - ◆ Sick leave
 - Family leave
 - Child care systems

- Over forty years of epidemiologic research reveals consistent gender differences in mental and physical health
- Women's mental health can only be understood by considering the biological, social, cultural, economic, and personal context of their lives
- Studies have established the toxic effects of some environments on mental health
 - Childhood physical and sexual abuse
 - Boys more likely to experience physical abuse
 Girls more likely to experience sexual abuse
 - Some may develop depression, anxiety, posttraumatic stress disorder, antisocial personality disorders, substance abuse/dependence and somatization disorders

- Studies have established the toxic effects of some environments on mental health
 - Poverty is another environmental toxin
 - 70% of the world's 1.2 billion who live in poverty are women often with dependent children
- Many women must combine paid work with agricultural work and family responsibilities
 - Leading to chronic exhaustion and poor health
- Work inequities are detrimental to women's mental health
 - ➤ Lower salaries for equal work
 - Working informally or on contract
 - ➤ Minimum wage
 - > Job security
 - ➤ Sick benefits
 - Discrimination, harassment, bias

- Thousands of women in poorer countries who survive childbirth may be left chronically incontinent with vaginal fistulas
 - > Worse with women whom undergo female genital mutilation
- Education is the key to better health, nutrition, fertility control, social status, economic well-being and quality of life
 - ➤ Women make up the majority of the world's 900 million illiterates
- Violence, whether in war, in society, or at home is an enormous risk to women's mental health
- Women are more likely to be seriously injured or killed by their spouse than be a stranger
 - Interpersonal violence is the leading cause of death of women aged 10-44 in North America

- Prolonged physical violence or mental abuse has been shown to be linked to
 - Physical and mental disorders
 - Psychosomatic disorders
 - Chronic pelvic pain
 Low back pain
 Irritable bowel syndrome
 Chronic headaches
- Stress is not equally distributed across all women
 - Certain groups are more disadvantaged than others due to occupying multiple disadvantaged positions
- Women in minority groups experience more chronic stressors across their life course than other women

- This difference in exposure to chronic stressors is a key explanation for the poorer mental and physical health of minority women
- A study measuring telomere length, a biomarker of aging, found
 - ➤ Black women were 7.5 years biologically 'older' than white women
 - Ages 49-55
 - > This finding highlights the accumulation of stress over the life course and its wear- and- tear on the body

- Sexual and racial/ethnic minority women experience unique stressors not experienced by white or heterosexual women
 - Discrimination
 - Damages physical and mental health Multiple studies indicate that racial/ethnic and sexual minorities report more discrimiation events than other women Discrimination, stigma and predudice
 - Indirectly increase stress by preventing women from obtaining housing, employment, healthcare, and access to other institutional resources
 - Increase women's vulnerability to other stressors by reducing their sense of control

- According to psychological stress model
 - Stress affects health by inducing a negative emotional state
 - Ex: depression or anxiety
 - > Stress causes hormonal changes and increases inflammatory production

 Leads to increased risk of cardiovascular, immune, and metabolic dysfunction
- Exposure to stress may lead individuals to practice fewer health protective behaviors and more health compromising behaviors

Health & Healthcare Disparities

- Performance of the US healthcare system reveals significant inequities actress population with missed opportunities
 - Preventing disease
 - Disability
 - Morbidity and mortality
- Disparities in health and healthcare are due to complex interaction between many factors
 - Those that increase exposure to disease
 - Those that decrease access to healthcare
- > Trends reveal individuals form communities of color
 - Experience poorer health
 - Face greater challenges in accessing care
 - Experience significant navigation problems within the system
 - Receive a quality of care that is inferior to that of their nonminority peers

Social Determinants of Health

- > The varied economic and social factors play different roles in health, well-being, and overall risk of premature death
 - One's risk of premature death is broken down into
 - 40% associated with individual behavior
 - 30% with genetics
 - 20% with social and environmental factors
 - 10% with healthcare

Box 64-3: Social determinants of health.

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Healthcare System
Employment Income Expenses Debt Medical bills Support	Housing Transportation Safety Parks Playgrounds Walkability	Literacy (including health literacy) Language Early childhood education Vocational training Higher education	Hunger Access to healthy options	Social integration Support systems Community engagement Discrimination	Health coverage Provider availability Provider linguistic and cultural competency Quality of care

Health Outcomes: mortality, morbidity, life expectancy, healthcare expenditures, health status, functional limitations

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- The ecologic determinants shown in previous slide influence health and disease prevalence but are rarely included in patient histories
- Asking the necessary questions that reflect the patient's broader living situation is a more effective approach in hiding healthcare decisions and health interventions

- Theorizing Health & Illness Causation & Establishing the Therapeutic Relationship
 - ➤ Illness is a socially influenced condition and must be viewed within the socially recognized reality defined by the patient
 - > Family medicine offers helpful strategies through supportive and intentional counseling
 - Ex: motivational interviewing
 - Encourages affirmation and self-reflection that are patient directed
 - Other skills that empower patients
 - Expressing empathy during the encounter
 - Exhibiting a practice style that encompasses and appreciates diversity
 - Physician attributes such as eliciting the patient's goals and projecting a willingness to negotiate care options and patient preferences have been shown to increase visit satisfaction and adherence to treatment

Implicit Bias

- Is the unconscious assignment of specific attributes ascribed to members of an identified socially racialized group
- > These perceptions are developed by learned associations assigned to certain groups
- ➤ These perceptions are usually influenced by stereotypes
 - These can be explicit (or conscious) implicit (or unconscious)
 - This can be unrecognized during the clinical encounter but can influence the doctor-patient relationship, therapeutic decisions and clinical outcomes
- > Self-awareness and strong communication skills are key to establishing a strong therapeutic relationship and equality
- Physicians must be aware of any implicit biases they may hold

Implicit Bias

- As a society we are conditioned to associate certain things with various demographic characteristics including gender, sex, age, race, and ethnicity
- Resources such as Harvard's Project Implicit can assist individuals to identify biases they may not know they possess

Mental & Behavioral Health

- Can be seen as the result of the complex interactions between biological, psychological, social, and cultural factors
- > The US Surgeon General's report on mental health found the following
 - Minorities have less access to have less availability of and receive fewer mental health services
 - Minorities in treatment often receive a poorer quality of mental health care Minorities are underrepresented in mental health research Racial and ethnic minorities collectively experience a greater disability burden from mental illness than do whites
 - Stems from minorities receiving less care and poorer quality of care

- Application of Cultural Information & Skills in Clinical Interactions
 - > Several tools available to physicians can provide guidance in interacting with patients and incorporating cultural elements as part of the clinical assessment
 - Berlin and Fowkes' LEARN
 - Provides the patient an opportunity to engage in and elaborate on signs and symptoms from their culture perspective

Box 64-4: LEARN model.

Listen to patients' perspectives.

Explain medical views.

Acknowledge similarities and differences.

Recommend a course of action.

Negotiate plans.

- Fundamental to every clinical encounter is establishing a therapeutic relationship with a patient that is affirming, inclusive and collaborative
- This lifelong process begins with recognizing the inherent strengths and value of human diversity
- The continuum includes the confrontation of personal and societal bias, fosters the growth of cultural awareness and sensitivity, and develops the cross-cultural knowledge and skills that will improve clinical practice
- Effective communication is fundamental to providing health care to diverse patients

References

1. Do Social Policies Influence the Health of Women and their children? Implications for Designing Future Policies using a 'Social Determinants of Health' Lens Therea L Osypuk, Pamela Joshi, Kimberly Geronimo and Dodores Acevedo-Garcia

 Social disparities in women's health service use in the United States: a population-based analysis

Kelli Sticham Hall PhD, MS, Vanessa Dalton MD, MPH, Timothy R.B. Johnson MD

References

- 3. Addressing the Cervical Cancer Screening Disparities gap
 Rdand matthews, MD
- 4. Social and Structural Determinants of Health Inequities in Maternal Health Jia Crear-Perry, MD, Rosaly Correa-de-Araujo, MD, MSc, PhD, Tamara Levis Johnson, MPH, MBA Monica R. MoLemore, PhD, MPH, RN, FAAN, Elizabeth Neilson, PhD, MPH, MSN and Maeve Wallace, PhD, MPH
 - 5. Social determinants of women's mental health Journal of Psychosomatic Research 63 (2007) 223-224

References

6. Women, Stress, and Health
Micke Beth Thomer, Debra Umberson and Kristi Williams

7. Current Diagnosis & Treatment: Family Medicine, 5e
Chapter 64: Cultural & Linguistic Competence
KimA Bullock Dard L Graves

