



Social Determinants of Health

Veda Johnson, MD
Associate Professor
Emory University School of Medicine
E-mail: vjohn01@emory.edu
April 22, 2014

Health

- **The World Health Organization defines health as a “state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity.”**



Health

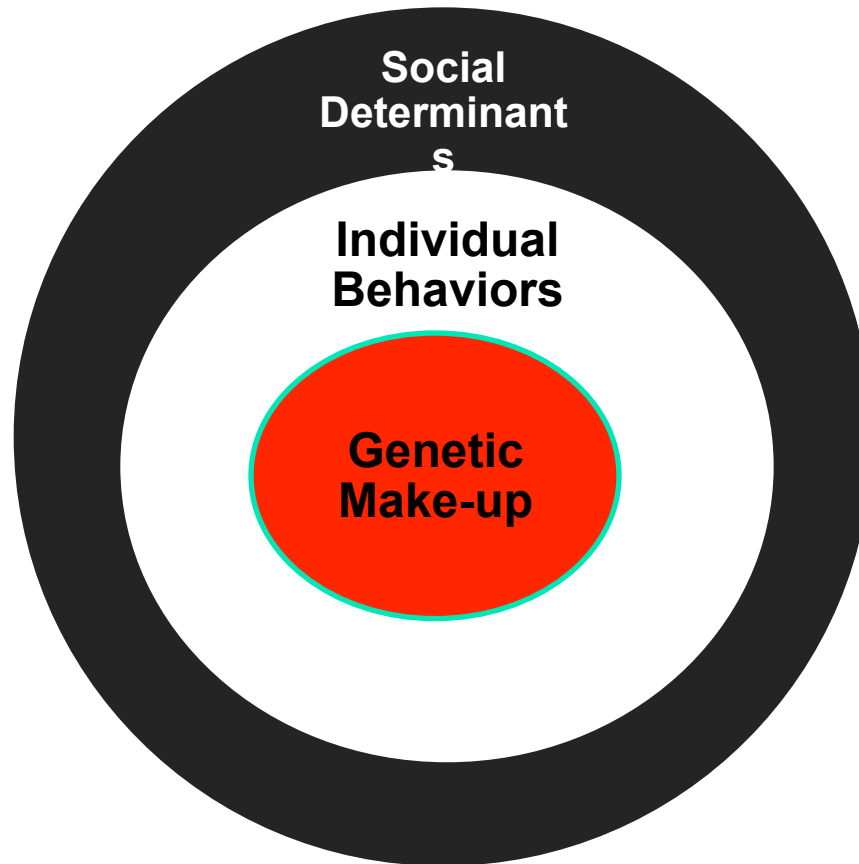
- **‘The extent of an individual’s continuing physical, emotional, mental and social ability to cope with his/her environment’-
Encyclopedia
Britannica**





Determinants of Health

Determinants of health and illness that are outside of the individual
Beyond genetic predispositions



Beyond individual behaviors



Determinants of Health...

- Factors for Good Health
 - Genetic make-up
 - Lifestyle choices
 - Access to quality, affordable health care
 - Social environment
 - Physical environment

Social Determinants of Health

- Definition of social determinants of health:

The economic & social conditions that influence health ...

‘The conditions in which people are born, grow, live, work and age.’





Social Determinants of Health...

- Factors in the social environment that contribute to or detract from the health of individuals and communities:
 - Income
 - Housing
 - Education
 - Transportation
 - Access to services
 - Physical Environment
 - Socioeconomic status/position
 - Discrimination by social grouping
 - Social or environmental stressors
 - Source: www.cdc.gov/sdoh accessed on 11-9-07

Social Determinants of Health...

- Major social determinants of health
 - Social Position
 - Where you live
 - Race
 - Stress





Social Determinants of Health...

■ **Social Position...**

- **Income and education are markers of socioeconomic position**



Social Determinants of Health...

■ **Income...**

- People living in poverty or with lower socioeconomic position are more likely to have worse access to healthcare
- Social position influences whether a person is
 - exposed to health risks
 - has resources to buffer health risks



Social Determinants of Health...

- **Education...**

- **Education is a direct predictor of health**

- Academic success is a predictor for adult health outcomes
- Adults with higher educational achievement are more likely to be more knowledgeable, have better jobs and better opportunities to achieve and maintain healthy lifestyles.

Childhood Poverty

- **‘POVERTY IS THE SINGLE GREATEST THREAT TO A CHILD’S WELL-BEING’**



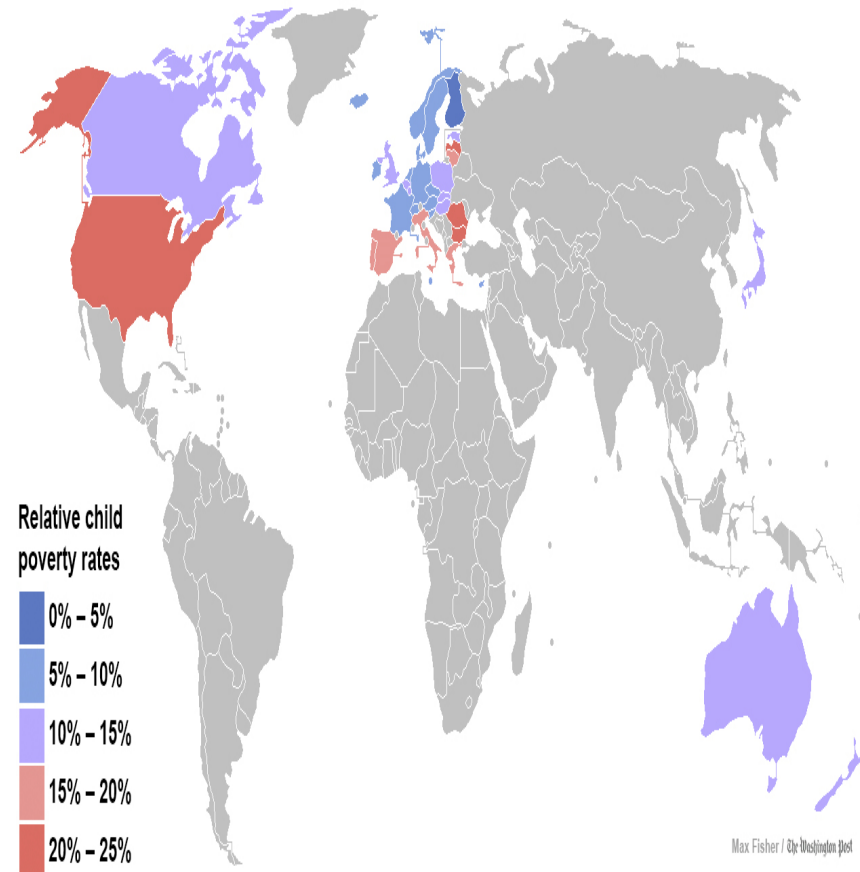


Childhood Poverty...

- **Childhood Poverty associated with:**
 - Lack of Access to Healthcare
 - Substandard housing or homelessness
 - Inadequate nutrition
 - Poor Physical Health
 - Behavioral and Socio-emotional Problems
 - Poor Academic Achievement & School dropout

Childhood Poverty...

- United States
 - 1 in 5 children
 - US ranks 34 out of 35 developed countries surveyed
 - Romania only country below US
- Georgia
 - 1 in 4 children (26%)



Education...

- **EDUCATION IS
A PATHWAY
OUT OF
POVERTY**



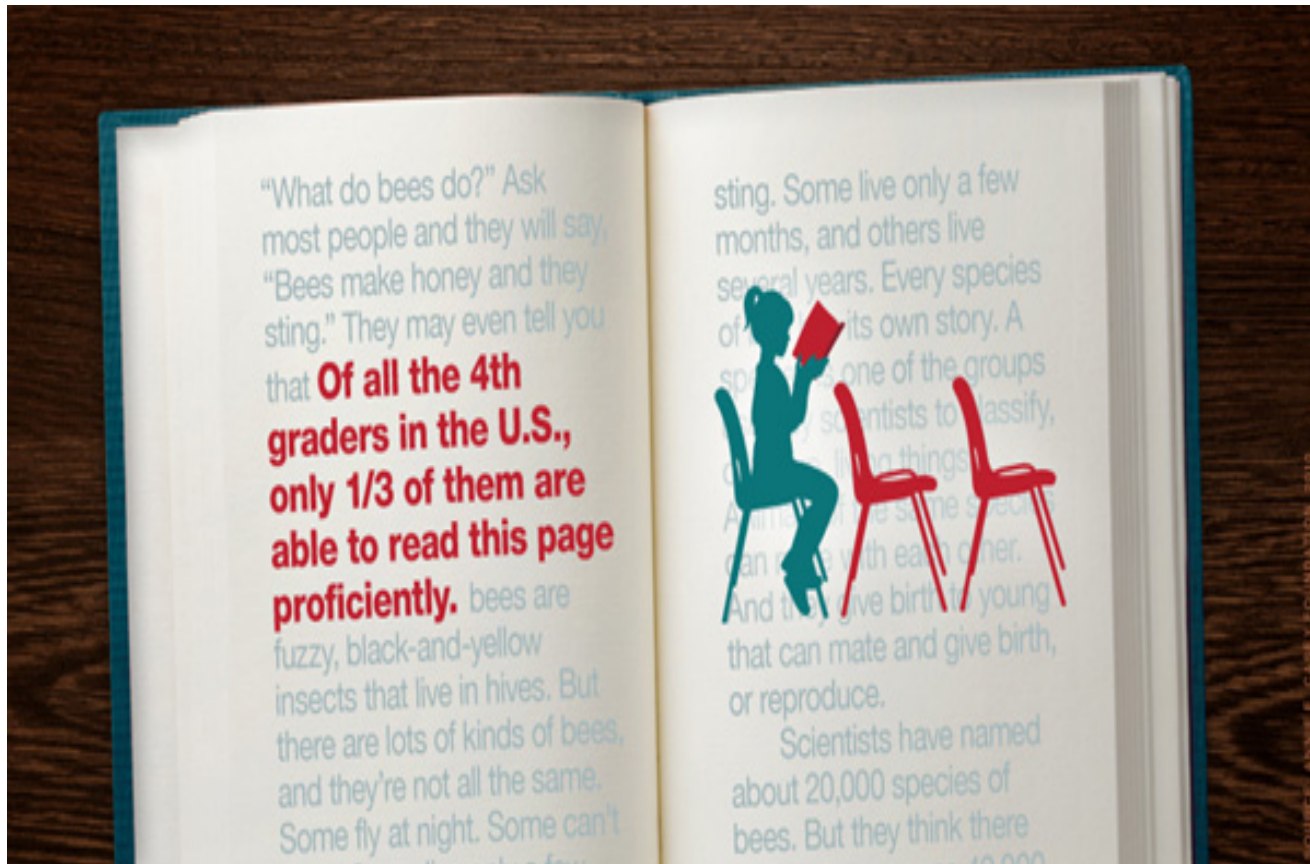


Education

- **The higher the education level, the higher the income**
 - People with professional degrees earned 6x as much as people who do not graduate from high school
 - A higher percentage of adults without a high school diploma live in poverty



Education





Education...

■ Georgia

- 4th graders (2011)
 - **32% read at proficient or better**
 - Significantly lower in Low income and minority students
- 8th graders (2011)
 - **28% read @ proficient or better**



A Solution...

- **Leverage health to improve the academic achievement for students.**

Health and Educational Achievement

- **How does health affect the educational achievement of our children?**





Former Surgeon General Dr. Antonia Novello

“Health and education go hand in hand: one cannot exist without the other. To believe any differently is to hamper progress. Just as our children have a right to receive the best education available, they have a right to be healthy. As parents, legislators, and educators, it is up to us to see that this becomes a reality.”

- Healthy Children Ready to Learn: An Essential Collaboration Between Health and Education, 1992



Health and Education

- Association between health and academic success
 - Students learn best when they are healthy
 - Students learn best when they are present
 - Students learn best when they are connected to the school emotionally and socially
 - Students learn best when there is hope



American Cancer Society

“[Children] ...who face violence, hunger, substance abuse, unintended pregnancy, and despair cannot possibly focus on academic excellence. There is no curriculum brilliant enough to compensate for a hungry stomach or a distracted mind.”

- National Action Plan for Comprehensive School Health Education. 1992

How do we improve the academic achievement of students by improving their health?





The National Governors' Association

“Policymakers need to focus on eliminating the barriers that affect these lower-performing students’ readiness to learn. Among these barriers are physical and mental health conditions that impact students’ school attendance and their ability to pay attention in class, control their anger, and restrain self-destructive impulses.”

- Improving Academic Performance by Meeting Student Health Needs, 2000



Health and Education...

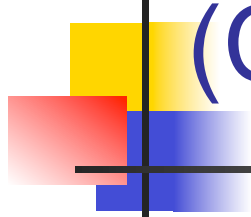
- What we know...
 - School health programs and policies can be an efficient way to prevent or reduce risky health behaviors and avoid serious health problems among students.
 - They may also help close the educational achievement gap between disparate socioeconomic groups of students.

Coordinated school health programs



- Recommended by CDC as a strategy to improve the health and academic performance of students
- It is a coordinated approach to school health that creates a system of care that addresses the needs of the whole child by connecting health with education
- Creates a school environment that promotes and supports healthy lifestyles for students, teachers and staff

Coordinated School Health (CSH)



Health Education

Physical Education

Family/Community
Involvement

Health Services

Health Promotion
for Staff

Nutrition Services

Healthy School
Environment

Counseling,
Psychological, &
Social Services





Coordinated school health programs

- Benefits:
 - Engages parents, teachers, students, families, and communities
 - Helps keep students healthy
 - Supports learning and success in school
 - Reinforces positive behaviors
 - Helps students develop knowledge and skills to make smart choices

Coordinated school health programs...



School based health centers exemplify the basic tenets of a coordinated school health program

School Based Health Centers (SBHCs)



Definition:

Comprehensive school based health clinics are primary care medical centers that blend **medical care** with **preventive and psychosocial services** as well as **organize** broader school-based and community-based **health promotion efforts**.



SBHC'S...

Common Features of School-Based Health Centers:

- They are located in schools or in close proximity (school-linked).
- The health center works cooperatively within the school to become an integral part of the school.
- The health center provides a comprehensive range of services that meet the specific physical and behavioral health needs of the young people in the community as well as providing for the more traditional medical care needs.
- A multidisciplinary team of providers care for the students: nurse practitioners, registered nurses, physician assistants, social workers, physicians, alcohol and drug counselors, and other health professionals.



SBHC'S...

Common Features...

- The clinical services within the health center are provided through a qualified health provider such as a hospital, health department, or medical practice.
- Parents sign written consents for their children to enroll in the health center.
- The health center has an advisory board consisting of community representatives, parents, youth and family organizations, to provide planning and oversight.



SBHCs...

- Research has demonstrated that SBHCs significantly impact the social determinants of health
 - Increases access to quality healthcare by reducing barriers
 - Transportation
 - Cost
 - Hours of Operation
 - Lack of knowledge regarding when and how to access the system
 - Improves health outcomes
 - Improves school attendance and academic performance

Whitefoord Elementary and Sammye E. Coan Middle School Based Clinics

- Pediatric and adolescent primary care health clinics providing comprehensive health services for the students, their siblings, and other children within the community
- Initiated by the Dept of Pediatrics at Emory University Nov. 1994
- Removed the provision of health care from the institution and placed it into the community



Whitefoord & Coan....

- Goal : Increasing access to quality health care and improving the academic achievement of students
- Address the physical, mental and emotional health of the child
- ‘Care for the child in the context of family, home and community’
 - Developed the Whitefoord Community Program, a community-based support program for families of children enrolled in the clinic



Impact on the Social Determinants

- Increased access to physical, mental and dental health care for thousands of children
- Improved school attendance/performance (students with ADHD)
- Every child in school received health education instruction on drug and substance abuse, violence prevention, safety, general



Impact...

- Improved health outcomes for children with chronic illnesses (e.g. asthma, diabetes)
- Improved risk factors for overweight/obese students
 - Reduced BMI's
 - Reduced cholesterol levels
 - Reduced insulin resistance
- Reduced cost to the state's Medicaid program
 - Reduced ER use and hospitalization of students with





Impact...

- Facilitated the recovery of many emotionally troubled children.
 - Pre-K program
 - School aged children and adolescents
- Improved the academic achievements for children with ADHD and Learning Disorders.
 - Reduced the referrals of children with ADHD into Special Education programs.
- Increased parental involvement
 - Witnessed several challenged families assume proper responsibility for their children

Summary of findings...

- Increased access to quality healthcare
- Improved health outcomes (physical, mental and oral)
- Improved school attendance and academic performance
- Decreased healthcare costs



Health

- 'He who has health has hope and he who has hope has everything.'

An Arabian
Proverb

