

The Life Course Model and Maternal, Child and Adolescent Health

– An Overview –

What is the Life Course Model?

The Life Course Model suggests that a complex interplay of biological, behavioral, psychological, and social protective and risk factors contributes to health outcomes across the span of a person's life.

For example, disparities in birth outcomes, such as low birth weight and infant mortality, are often explained by the quality and frequency of prenatal care. In contrast, the Life Course Model suggests that these disparities result from differences in protective and risk factors between groups of women over the course of their lives. As a result, the health and socioeconomic status of one generation directly affects the health status of the next one.

The Life Course Model integrates a focus on critical periods and early life events with an emphasis on the wear and tear a person experiences over time. For example, as Figure 1 illustrates for White and African American women, differences in risk factors (downward arrows) and protective factors (upward arrows) over one's life course affect one's health and development and contribute to disparities in birth outcomes.¹ Reproductive potential describes how one's health status at any given age may influence reproductive health and future birth outcomes.

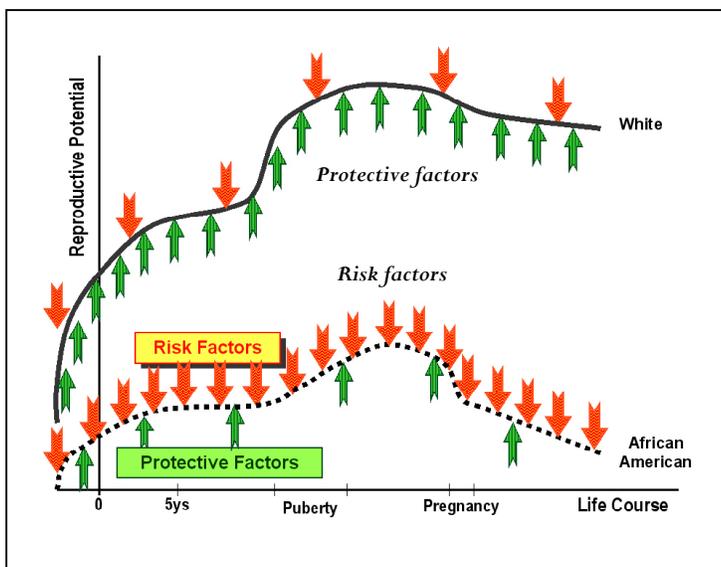


Figure 1.¹

Examples of Protective & Risk Factors

- Socioeconomic status
- Race and racism
- Health care
- Disease status
- Stress
- Nutrition
- Weight status
- Birth weight
- Various health behaviors

What protective and risk factors during the life course affect health outcomes?

Socioeconomic status, race and racism, health care, disease status, stress, nutrition and weight status, birth weight, and a range of behaviors are some of the key factors that may affect health outcomes, including reproductive and birth outcomes. These factors, in both the past and present, may affect women of various ethnic groups differently. For example, high socioeconomic status or prenatal care may not confer the same benefits on African-American women as they do on White women.¹

What are the implications of the Life Course Model?

Understanding the Life Course Model creates opportunities to build upon protective factors and reduce risk factors. In this context, public health programs and interventions need to focus on building environments that support healthy and thriving communities. Our work needs to ensure that the array of biological, behavioral, psychological, and social protective and risk factors are addressed in an integrated, coordinated, and comprehensive manner in order to promote the opportunity for each community resident to have a healthy life. Finally, public policy should include greater investments in children, women's health, community health, and improvement of social conditions for families.

References

1. Lu MC, Halfon N. Racial and ethnic disparities in birth outcomes: a life-course perspective. *Matern Child Health J* 2003;7:13-30.
2. Misra DP, Guyer BD, Allston A. Integrated perinatal health framework: a multiple determinants model with a life span approach. *Am J Prev Med* 2003;25:65-75.
3. Barker DJP. Fetal and infant origins of adult disease. *BMJ* 1990;301:1111.
4. Jensen CD, Block G, Buffler, P, et al. Maternal Dietary Risk Factors in Childhood Acute Lymphoblastic Leukemia (United States). *Cancer Causes Control* 2004;15:559-70.
5. Van den Bergh BRH, Marcoen, A. High antenatal maternal anxiety is related to ADHD symptoms, externalizing problems, and anxiety in 8- and 9-year olds. *Child Dev* 2004;75:1085-97.
6. McEwan BS. Protective and damaging effects of stress mediators. *N Eng J Med* 1998;338:171-9.
7. Geronimus AT. The weathering hypothesis and the health of African-American women and infants: evidence and speculations. *Ethn Dis* 1992;2:207-21.
8. National Clearinghouse on Families and Youth [homepage on the Internet]. Silver Spring MD: U.S. Department of Health and Human Services, Administration for Children and Families; updated August 7, 2003, cited March 15, 2005. Positive Youth Development. Available from: <http://www.ncfy.com/ydfactsh.htm>.