Objectives

- Relate childhood health of today and national-level social and economic success of tomorrow.
- Describe the contributions of school and community nurses toward impacting life course outcomes for children.
- Identify three areas for nursing interventions at the community- or population-based level, impacting measurable outcomes for children.

Money Talks:
Using predictive models to examine costs of future health burdens

- What does poor health cost business?
- Rising rates of chronic conditions, medical costs of family, and costs of absenteeism and presenteeism (worker present but at a suboptimal level of productivity) affect the bottom line!
- Historically, cost predictions were based on retrospective vital statistics data applied to the current generation/birth cohort living in the current period and environment.
- Later, predicted costs based on observed patterns of disease clustering, disease progression rates, scores based on propensity to make lifestyle or behavioral changes, and clinical intervention appropriateness scores (Lord/Humana).

Predictive models to examine future health burdens

- Observed Limitations of predictive models:
  - Applying retrospective disease and death rates to current day populations is not a good fit.
  - Also, assumptions about pre-adult life experiences no longer fit. These are rapidly changing for each birth cohort.
  - These models now are known to not take into account risk factors accumulated by people that lead to earlier onset and a longer course of medical care in the lifetime.

Predictive models to examine future health burdens – obesity example (Reither)

- Born 1926 – 1935
  - 20% obesity threshold age 50 – 59
- Born 1936 – 1945
  - 20% obesity threshold age 40 – 49
- Born 1946 – 1965
  - 20% obesity threshold age 30 – 39
- Born after 1965
  - 20% obesity threshold age 20 – 29

Predictive Models – an Updated Perspective

- Population models now need to take into account age and birth cohort-specific exposures and experiences.
- Example: the degree and duration of obesity has earlier onset and as a result subsequent negative health outcomes are accelerated.
- Such models strengthen the sound economic rationale for supporting health producing trends in children today (Reither).
Rethinking our approach to health care systems

- Health is an important determinant of economic productivity across the lifespan.
- Measured as Cost... or Investment?
  - Strategic planning: will we pay for end of life care, or pay for living well? With investment we aim for future savings and benefits.
- Which is more cost effective?
  - Pay for care after the onset of disease
  - Detect disease early and pay to avoid complications
  - Invest in reducing the probability of disease onset
- Our children are the message we send to the future we will not see: a signal of the deterioration of our social capital?

How Community-based Nursing Practice Helps Save the World

- As nurses working with children and families, we alter our course: from medical care to health development.
- With life course development approaches in mind, we demonstrate that child health issues go well beyond the medical model of an individual doctor treating an individual child.

How Community-based Nursing Practice Helps Save the World

- We shift more focus to the early part of the lifespan
  - When long-term health programming is most intense and higher levels of developmental plasticity enable interventions to exact greater returns on resources invested. (Halfon and Hochstein)
- We promote the well-being of the young
  - Both because of its intrinsic value and because doing so will improve the health of the entire population as people age into adulthood and their reproductive years. (Forrest and Riley)
  - Using family-centered approaches

Where do we achieve life course impacts?

- Medication compliance for chronic and acute conditions (Bauchner)
- Self-management education
- Early identification of complications
- Reduce hospitalizations and ER visits
- Reduce absenteeism
- Contribute to high school graduation

Three areas of significant impact for nurses

Reduce adverse events in childhood and toxic stress


Three areas of significant impact for nurses

Better Health for Better Reproduction

2 Diabetes and obesity in mothers and their children: can we stop the intergenerational cycle?
Herring S, Olsen E.

Reduce High School Drop Out; Improve Outcomes for Students with ADHD


Nurses saving the world, one child at a time

- Lending a voice to children's lives and needs.
- Joining partnerships and coalitions.
- Giving voice to the science and evidence that compels us to improve the lives of children.
- Gathering, analyzing, and reporting accurate, valid data to inform needs, priorities, and progress.
- Promoting healthy choices.
- When you help a child.

"He who helps a child helps humanity with a distinctness, an immediateness, which no other help in any other stage of human life can possibly give.”

Philips Brooks
Taken from Conserving the Health of Colorado's Children: A Handbook for Teachers, produced jointly by the Dept. of Education and the Dept. of Public Health, 1944.

THANK YOU

- Please complete and turn in your evaluations!
- We welcome your comments and suggestions for future events!

Resources

Resources

- Reither, E. et al. New forecasting methodology indicates more disease and earlier mortality ahead for today’s younger Americans. Health Affairs 2011; 30(8). Downloaded from content.healthaffairs.org