

ADOLESCENT HEALTH & WELL-BEING ISSUES: A GLOBAL PERSPECTIVE

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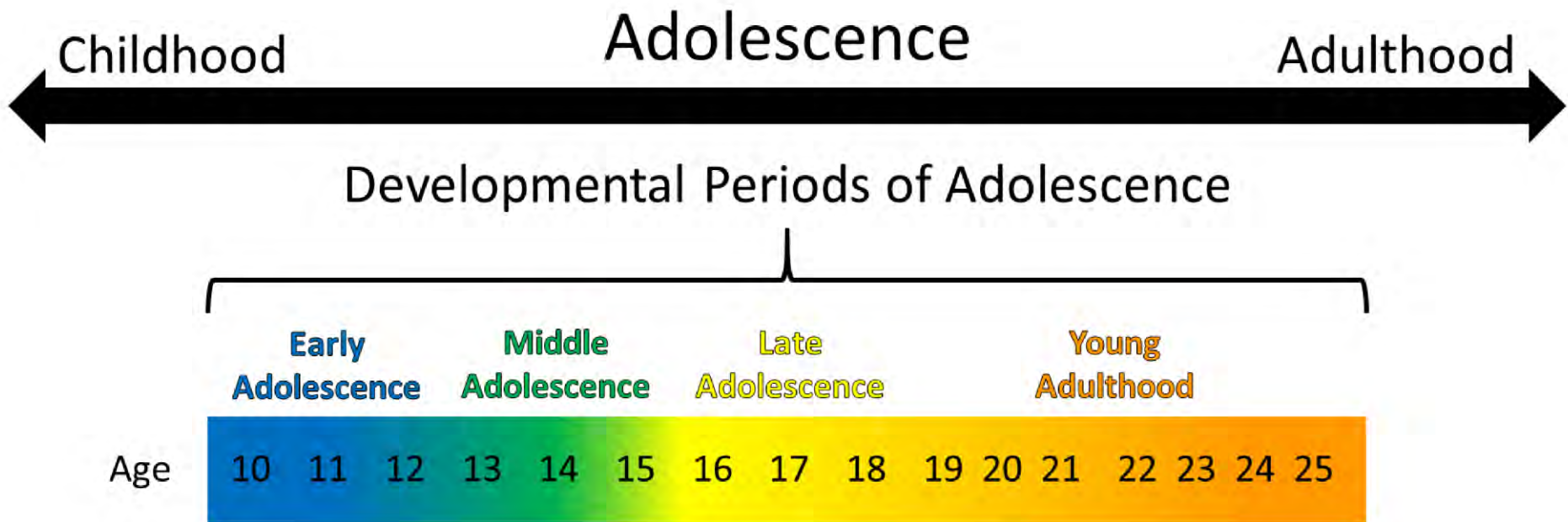
Personal Reflection



Outline of Presentation

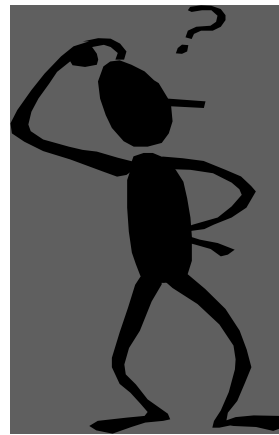
1. Reframing Adolescence: From Risk to Opportunity
2. Changing Demographics
3. Biopsychosocial Development
4. Global Patterns of Health & Well-being
5. Prevention Works
6. The New Science Moves Us Forward

Defining Adolescence



The Opposing Perceptions of Adolescence

**Negative
Transitional Period
in Life Cycle**



**Period of Optimal
Physical Health**

Adolescent Health

Why Adolescence?

- Policies and practices that capitalize on the **promise of adolescence** and **create incentives for discovery and innovation** are needed, rather than those that are **preoccupied with vulnerability and shielding adolescents from harm.**
- The challenge is to take advantage of the **developmental opportunities** afforded by adolescence.

The Lancet Commissions



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Our future: a *Lancet* commission on adolescent health and wellbeing

George C Patton, Susan M Sawyer, John S Santelli, David A Ross, Rima Afifi, Nicholas B Allen, Monika Arora, Peter Azzopardi, Wendy Baldwin, Christopher Bonell, Ritsuko Kakuma, Elissa Kennedy, Jaqueline Mahon, Terry McGovern, Ali H Mokdad, Vikram Patel, Suzanne Petroni, Nicola Reavley, Kikelomo Taiwo, Jane Waldfogel, Dakshitha Wickremarathne, Carmen Barroso, Zulfiqar Bhutta, Adesegun O Fatusi, Amitabh Mattoo, Judith Diers, Jing Fang, Jane Ferguson, Frederick Ssewamala, Russell M Viner

The Lancet Commission Outlined

1. Messages

- Investments matter and bring large dividends
- Adolescents are primed for engagement
- Inequities matter

2. Opportunities

- Prevention is key to success
- Interventions that work are multi-sectorial
- Engagement of young people is critical

The Lancet Commission Outlined

3. Challenges ahead

- Non-communicable diseases dominate their health problems
- Health information systems/training not well developed
- Inequalities in health/well being

The New Science Corrects and Challenges

- The need to move beyond the individual focus: epigenetics stresses the importance of also focusing on the environment
- The need to move beyond trying to prevent risk behaviors: the importance of harm reduction interventions - opportunities for safe risk taking

The New Science Corrects and Challenges

- “You will get cancer in 30 years” type messages not likely to be effective
- Questions the rationale for punishment based interventions: adolescents more motivated by reward (and if their emotions are touched)
- Contributes to discussions about informed consent, mature minors and human rights: need to make sure that we have systems in place that really support the “best interests” of adolescents

CHANGING DEMOGRAPHICS



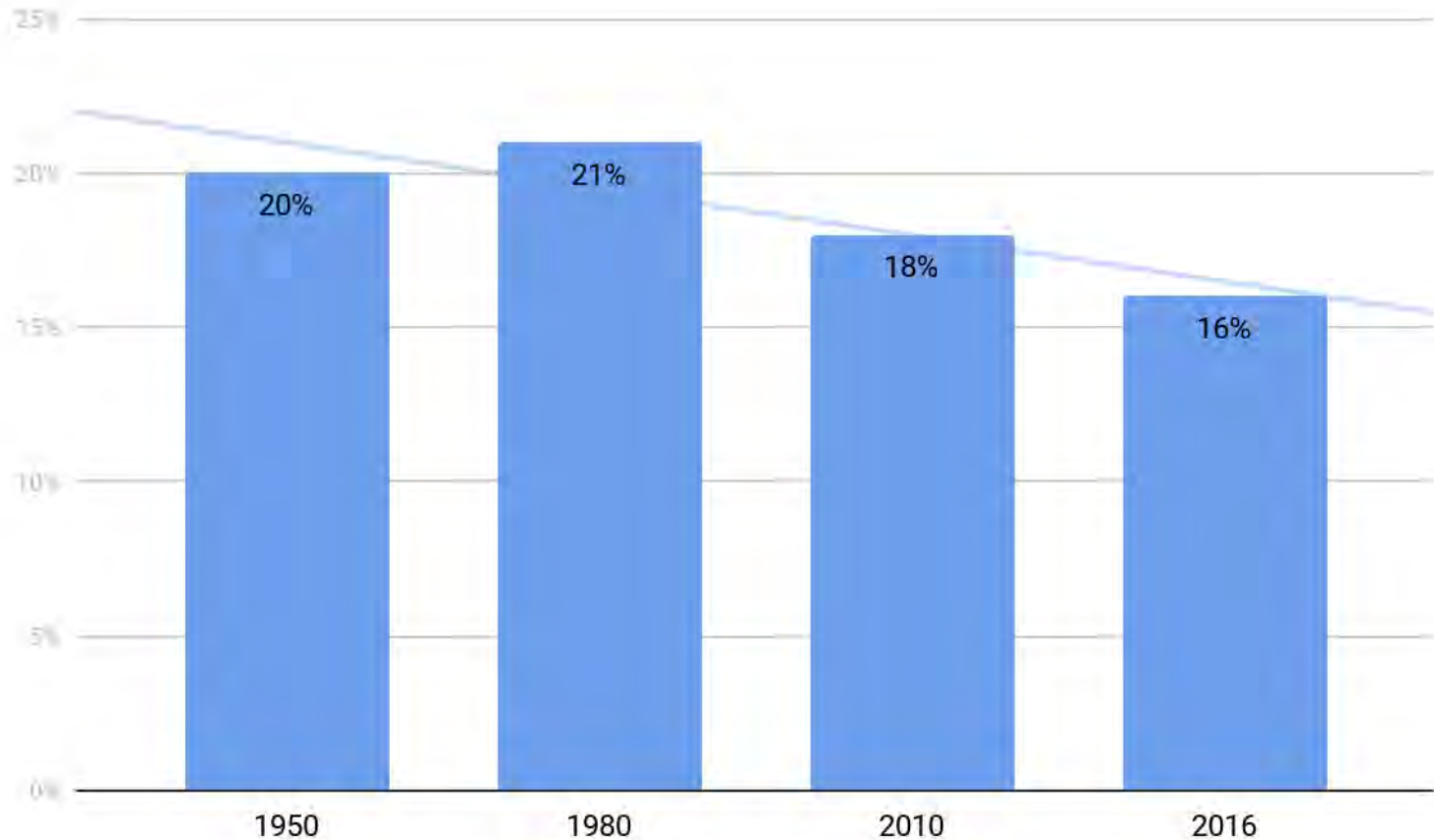
Adolescence

An Age of Opportunity

THE STATE OF THE WORLD'S CHILDREN 2011

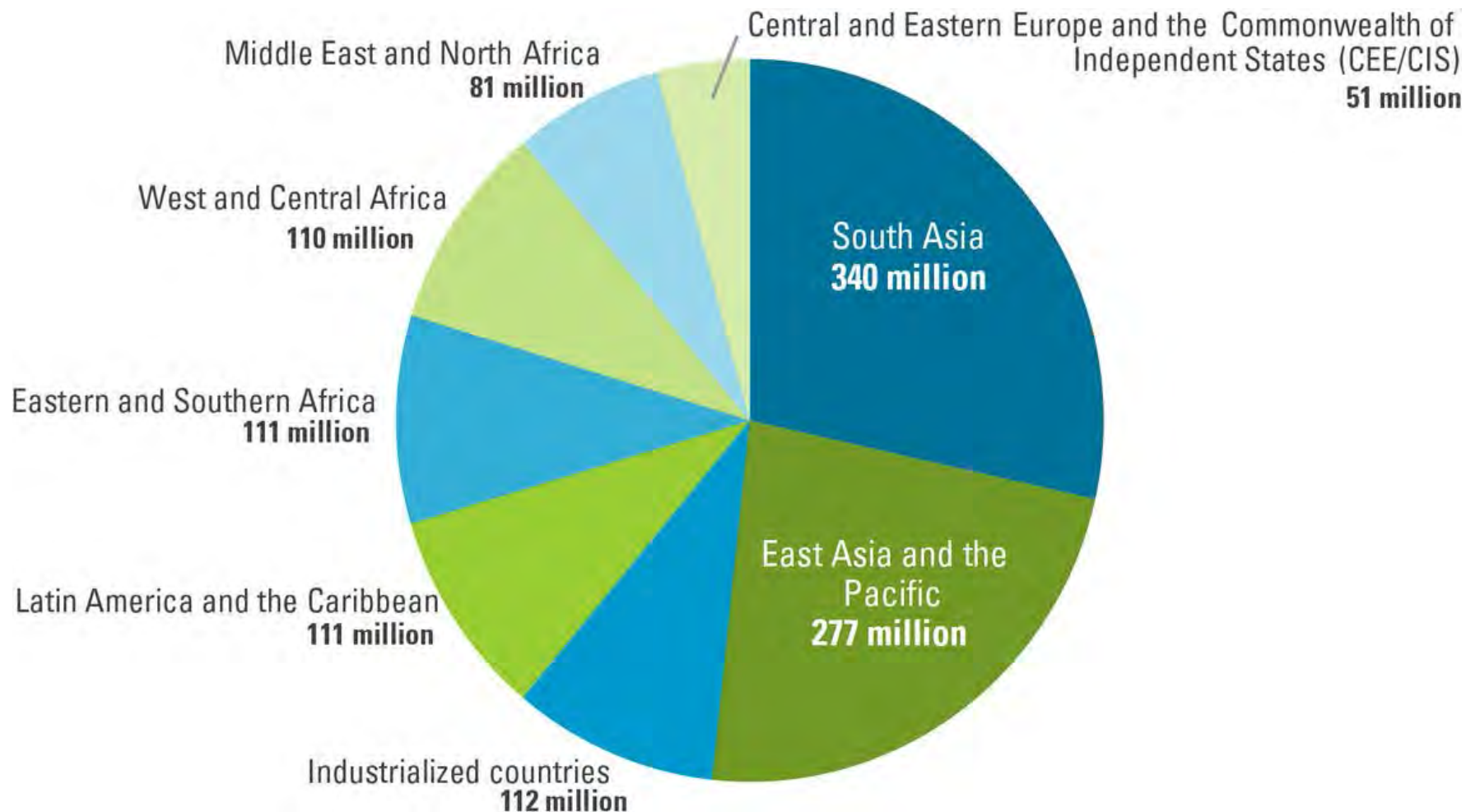
Adolescent Population: 1950 - 2016

Adolescents aged 10-19 as a proportion of the total world population

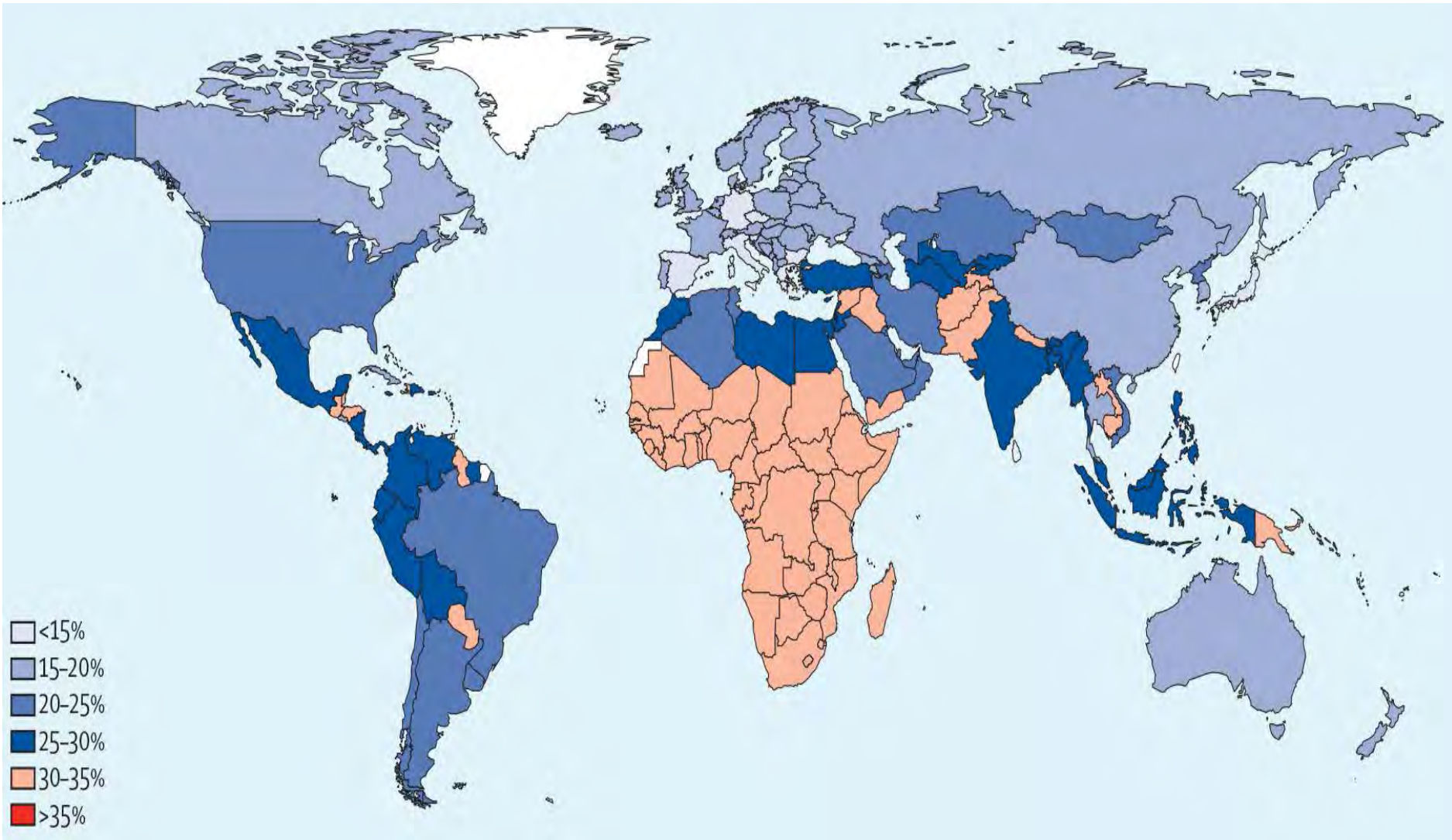


Population of Adolescents by Region

More than half of the world's adolescents live in Asia



Adolescents and Young Adults as a Proportion of Country Population in 2013

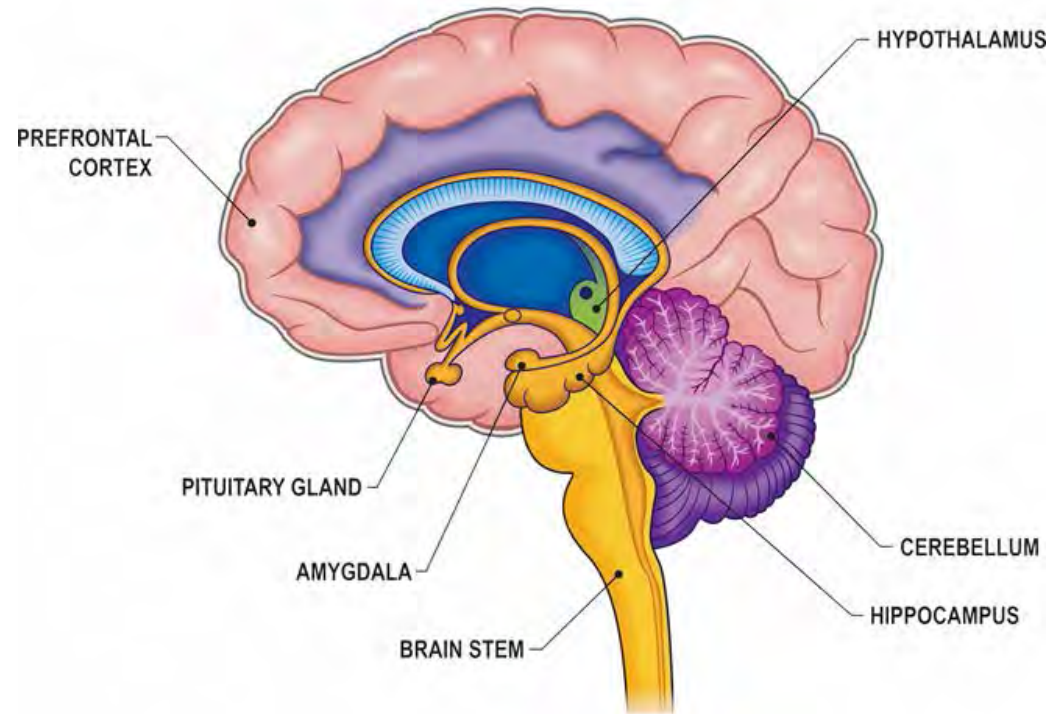


Source: Patton et al., 2016.

BIOPSYCHOSOCIAL DEVELOPMENT

Adolescent Development: Insights from Neuroscience

- Adolescents' brains have evolved to meet the needs of this critical stage
- A unique period of heightened plasticity
 - Opportunity, but also risk
- Heightened curiosity and reward sensitivity
- Strengthening executive functions



GLOBAL PATTERNS OF HEALTH & WELL-BEING

Adolescent Health Policy in the UN System



United Nations– September 2011 & 2015

- **2011: UN Declaration**: the most prominent non-communicable diseases (**NCD**) are linked to common risk factors, namely tobacco use, harmful use of alcohol, an unhealthy diet and lack of physical activity.”
- And Where are the Origins of these behaviors:
ADOLESCENCE
- **2015: Global Strategy for Women’s Children and Adolescents’ Health** initiated

Global Burden of Disease in Young People Aged 10-24 Years: A Systematic Analysis

	10-14 years	15-19 years	20-24 years
1	Depressive disorder	Depressive disorder	Depressive disorder
2	Lower RTI	Schizophrenia	RTA
3	RTA	RTA	Violence
4	Asthma	Bipolar disorder	HIV/AIDS
5	Refractive errors	Alcohol use	Schizophrenia
6	Iron deficiency anaemia	Violence	Bipolar disorder
7	Falls	Self-inflicted injuries	Tuberculosis
8	Migraine	Panic disorder	Self-inflicted injury
9	Drownings	Asthma	Alcohol use
10	Diarrhoeal diseases	HIV/AIDS	Abortion

Prevention

RTA = Road Traffic Accident

Adolescent Health

Accidents
& injury

Mental
health &
well
being

Sexual
health

Substance
use

Chronic
illness

Obesity
& eating
disorders

Prevention - early intervention - clinical care

Public Health Goal # 1: Non-Communicable Diseases

Reasons for Being a Global Health Goal	Reasons to Focus on Adolescents
<ul style="list-style-type: none">• 2/3 deaths each year are attributable to NCDs• Age-specific NCD death rates are almost 2x higher in low-income and middle-income than in high-income countries• Tobacco use accounts for one-sixth of all deaths from NCDs	<ul style="list-style-type: none">• Many risk factors for NCDs start in adolescents (e.g., obesity)<ul style="list-style-type: none">□ 70% of overweight adolescents have 1+ risk factors for CVD□ 23% had 3+ risk factors

*Adapted from Table 2

Public Health Goal # 2: Intentional / Unintentional Injury

Reasons for Being a Global Health Goal	Reasons to Focus on Adolescents
<ul style="list-style-type: none">• 20-50 million non-fatal injuries per year• People from poor economic settings are disproportionately affected by road traffic accidents, even in high-income countries• The cost to governments of road traffic injuries is more than is received as financial aid to promote development	<ul style="list-style-type: none">• Road traffic accidents are the leading cause of death in people ages 10-24• Road traffic accidents, suicide and homicide, violence and war, drownings, and fire-related incidents account for about 40% of all deaths of people ages 10-24

*Adapted from Table 2

Public Health Goal # 3: Tobacco, Alcohol and Drugs

Reasons for Being a Global Health Goal	Reasons to Focus on Adolescents
<ul style="list-style-type: none">• Tobacco is the second leading cause of death worldwide• It is expected to cause at least 10 millions deaths in 2020 (2x rate in 2005)• 70% of tobacco-related deaths are in developing countries	<ul style="list-style-type: none">• 17% of children aged 13-15 use tobacco• 11% use tobacco other than cigarettes• 90% of adult smokers are estimated to have started smoking before age 20

*Adapted from Table 2

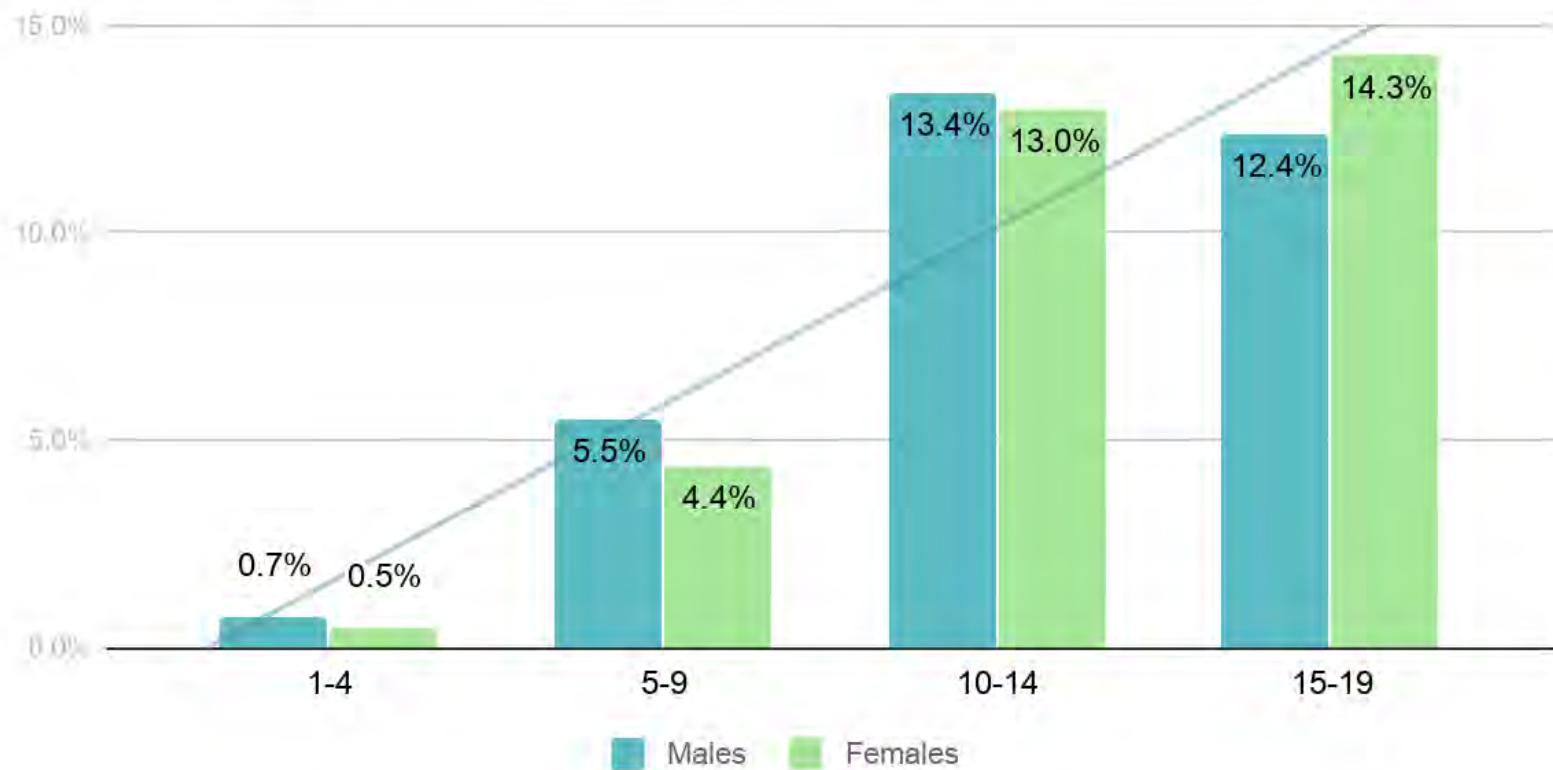
Public Health Goal # 4: Mental Health

Reasons for Being a Global Health Goal	Reasons to Focus on Adolescents
<ul style="list-style-type: none">About 50% of the worldwide population meets the criteria for one or more mental disorders in their lifetime	<ul style="list-style-type: none">75% of mental disorders present before age 24, and 50% before age 14Neuropsychiatric disorders are the leading cause of disability in ages 10-24Self-inflicted injury is the 2nd leading cause of death in people ages 10-24

*Adapted from Table 2

Global Burden of Child and Adolescent Mental and Substance Use Disorders

Global Burden of Mental Disorders, Children & Adolescents 2017
(% of DALYs)

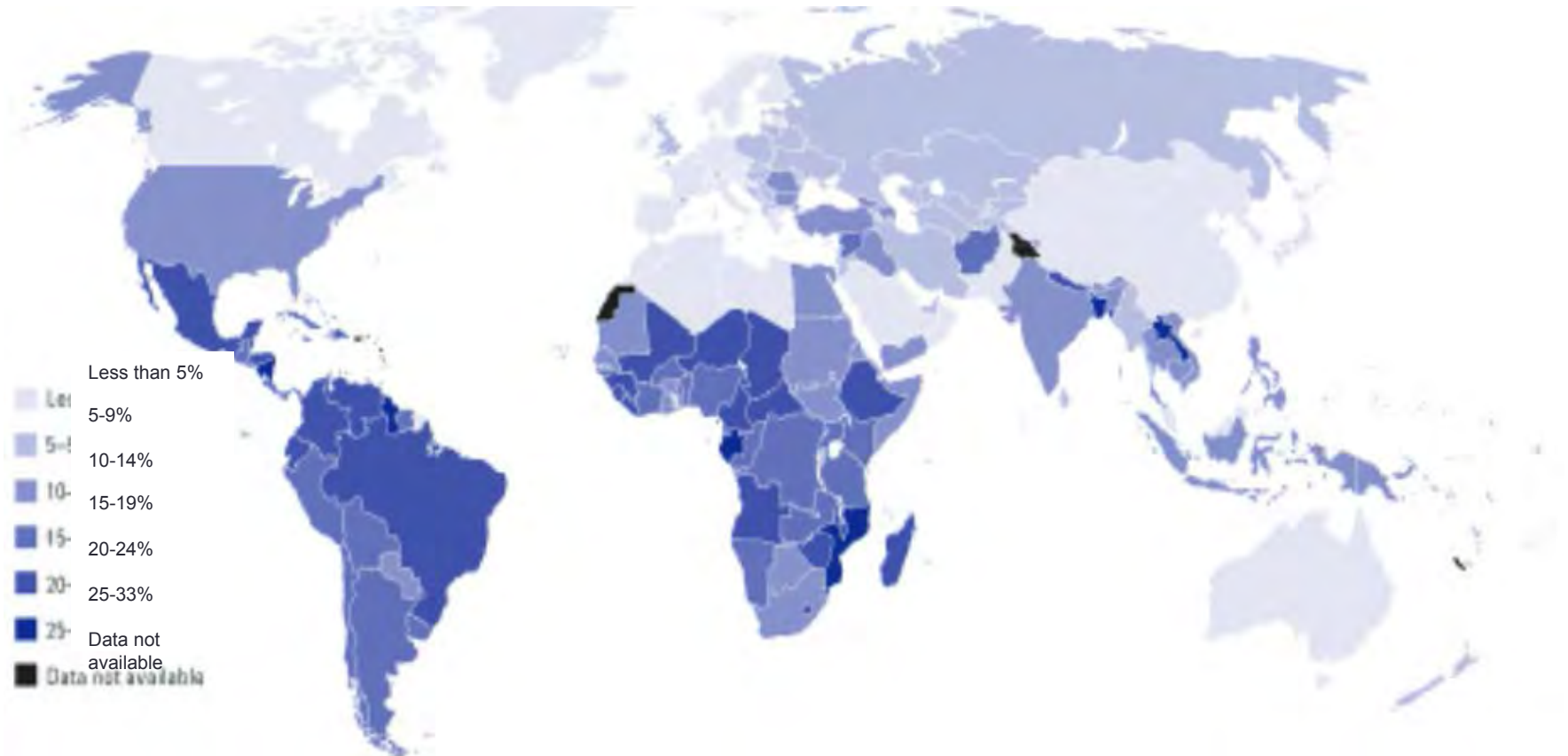


Public Health Goal # 5: Maternal Health

Reasons for Being a Global Health Goal	Reasons to Focus on Adolescents
<ul style="list-style-type: none">• Only 23 countries are on track to achieve 75% reducing in maternal mortality by 2015• Satisfying unmet need for contraception would cut maternal deaths by a third• Nearly 21 million induced abortions per year are unsafe• Complications from induced abortions account for 13% of maternal deaths	<ul style="list-style-type: none">• About 1/8 births in developing countries are to girls aged 15-19• 44% of married girls aged 15-19 in developing countries want to avoid pregnancy, but less than 1/3 of them use effective contraception• In sub-Saharan Africa, girls aged 15-19 account for 25% of all unsafe abortions

*Adapted from Table 2

Births among Adolescent Girls Ages 15-19 as a Percentage of Total Births, 2000-2010

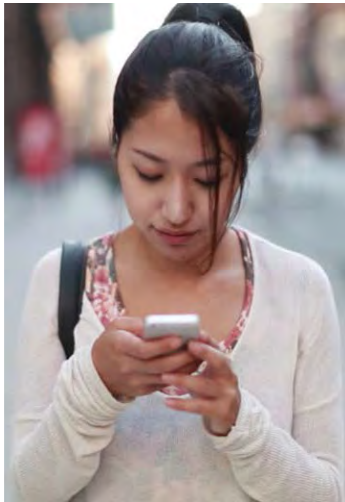


*Adapted from Figure 5.3

Public Health Goal # 6: HIV

Reasons for Being a Global Health Goal	Reasons to Focus on Adolescents
<ul style="list-style-type: none">• 36.9 million people were living with HIV/AIDS worldwide in 2017• 4th leading cause of death in low-income countries• 70% live in Africa, and about 10% live in South-East Asia	<ul style="list-style-type: none">• Over 30% of all new HIV infections occur in youth aged 15-25• 15-25 year olds make up about 14% of people living with HIV• Early marriage is a risk factor for HIV/AIDS in sub-Saharan Africa

Role of Social Media: U.S. and India



U.S. Adolescents (Ages 13-17)

95% have or have access to a smartphone

29% have basic cell phone

Indian Adolescents (Ages 15-19)

72% (ages 11-24)

53% of male adolescents have a smartphone

47% of females have a smartphone

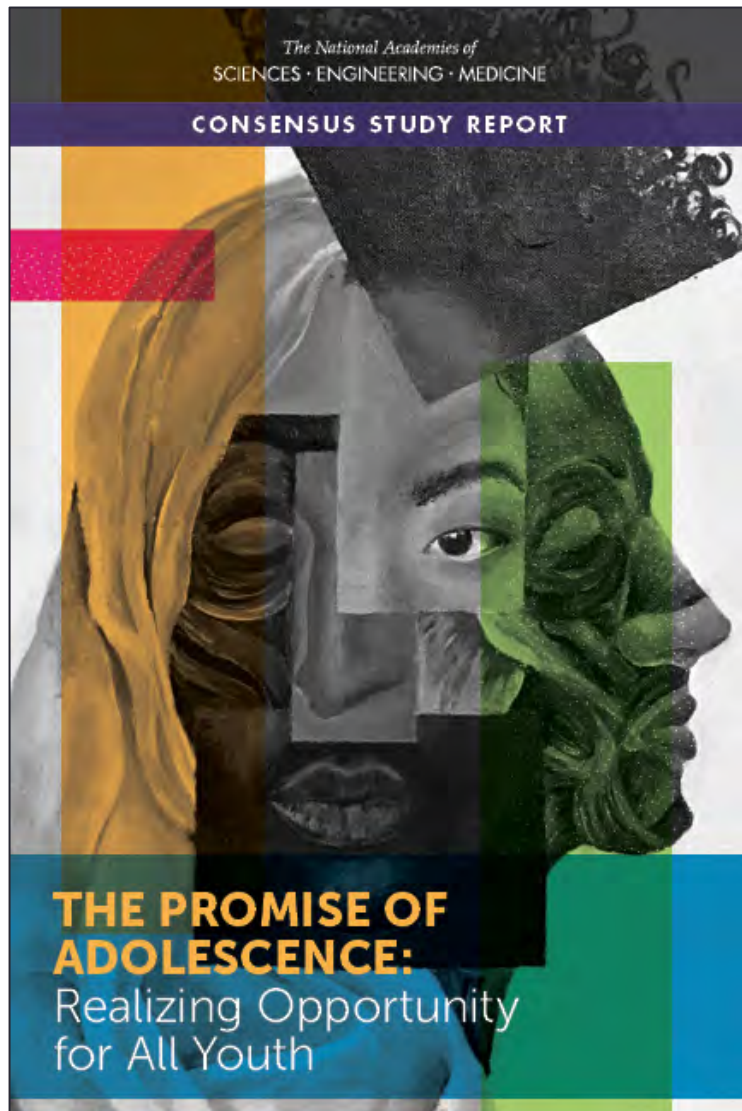
[Assessment of Smartphone Addiction in Indian Adolescents: A Mixed Method Study by Systematic-review and Meta-analysis Approach](#) Sanjeev Davey, Anuradha Davey. Int J Prev Med. 2014 Dec; 5(12): 1500–1511.

PREVENTION WORKS

Relevant Risks and Developmental Period for Illustrative Preventive Interventions by Age Group

	Pre-Adolescence	Early Adolescence (11-13 years)	Late Adolescence (14-24 years)
Prevention policies			
Address structural risks	--	Access to contraceptives and increased tax on alcohol	Graduated driving and legal drinking age: 21 years
Prevention programs			
Address intermediate and individual risks			
Family and individual	Nurse Family Partnership (0-2 years), early childhood education (3-5 years), New Beginnings (9-12 years)	Functional Family Therapy, Strengthening Families Program (10-14 years)	Functional Family Therapy, Nurse Family Partnership (adolescent mother impact)
School and individual	Seattle Social Development Project (6-11 years)	Gatehouse Project	Conditional cash-transfer programs
Peer and individual	Computer-based intervention (10-12 years)	Unplugged, Life Skills Training, Positive Training Through Holistic Social Programs	Stepping Stones and Sistering, Informing, Healing, Loving and Empowering
*Adapted from Table 1			

WHAT DOES THE NEW SCIENCE OFFER FOR MOVING FORWARD



To read or download a copy of the report, please visit:

[www.nationalacademies.org/
adolescentdevelopment](http://www.nationalacademies.org/adolescentdevelopment)

For more information about the study or dissemination activities, please contact:

Emily Backes, Study Director, ebackes@nas.edu

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The New Research: Support for Advocacy

- The importance of the language that we use (adolescents: *risk-takers* or *a time to take risks?*)
- 10-25 year olds are a VERY diverse group, and age is a proxy for defining *adolescence/young adulthood!*
- Need to think along the life-course

The New Research: Support for Advocacy

- Interventions in the first decade will not ensure healthy transitions to adulthood during the second/third decades.
- For many adolescents/young adults the second & third decades may be a time for second chances
- Essential to focus on individual adolescents *and* their environment
- The new research confirms, corrects and challenges current policies and programs

The New Science Confirms
















- Adolescents take risks: they are hard wired to take risk, and societies want young people to take risks!
- Adolescents are influenced by their peers and in some ways they are programmed to want to be part of “the group” Yet, they still welcome information and support from authoritative adults.
- Its not just about information: the importance of life skills and executive functions

The New Science Confirms

- Limit access to highly rewarding substances
- Support for *scaffolding approaches* that respond to the changes taking place (e.g., graduated drivers licenses; reducing access to harmful substances)
- Support for more integrated programming: need to focus on a range of problems that are often inter-related and in which similar pathways in the brain are activated

Common Determinants for different behaviors

(risk  and protective  factors)

Risk & Protective factors for adolescents	Early Sex	Substance Use	Depression
A positive relationship with parents			
Conflict in the family			
A positive school environment			
Friends who are negative role models			
A positive relationship with adults in the community			
Having spiritual beliefs			
Engaging in other risky behaviours			

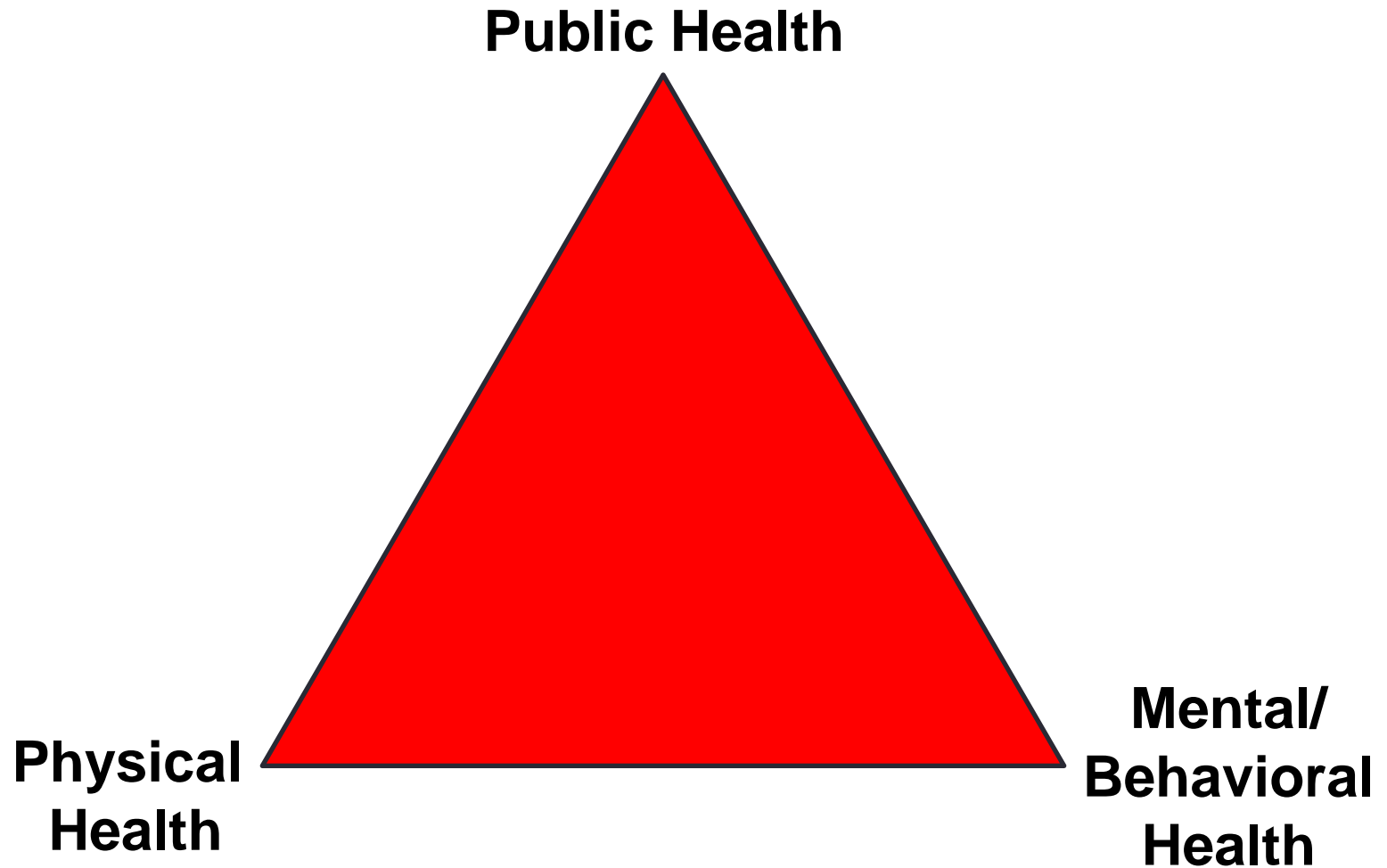
Moving Forward – An Agenda for Adolescent Health

- Viewing adolescence as an opportunity not a risk
- Beyond Mortality: growing a clearer picture of adolescent health
- Adapting & Testing Interventions in low, middle, and high income countries
- Growing our research capacity and communicating our findings

Moving Forward – An Agenda for Adolescent Health

- Building global processes through our collective organizations
- Training health professionals from a broad range of disciplines
- Recognition that health care as currently defined will not solve the issues: need to break down barriers between physical health, public health and mental health systems

Health Care Systems





Questions? Thoughts?
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