

## APA 1122 Determinants of Health

**Millennium Development Goals (MDGs):** unprecedented level of global agreement made in 2000, aimed at eliminating extreme poverty and improving health and welfare of the world's poorest by 2015. Health is at the core of these quantifiable/ambitious targets.

### **MDG #1: Eradicate extreme poverty and hunger**

- **TARGET 1A:** Halve, between 1990 and 2015, the proportion of people whose income is less than \$1.25/day
  - Extreme poverty has been halved
  - Majority of extreme poor live in a few countries
  - Sport programs and sport equipment production provide jobs and skills development
- **TARGET 1B:** Achieve full and productive employment and decent work for all (including women and young)
  - limited progress in reducing low quality employment
  - still more women engaged in vulnerable work than men
  - Sport can help reduce stigma and increase self-esteem, self-confidence and social skills, leading to increased employability
- **TARGET 1C:** Halve, between 1990 and 2015, the proportion of people who suffer from hunger
  - hunger continues to decline, uneven across regions
  - Sport can help prevent diseases that impede people from working and impose health care costs on individuals and communities

### **MDG #2: Achieve universal primary education**

- **TARGET 2A:** Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling
  - progress in reducing the # of kids out of school has slacked in recent years
  - global # illiterates remains high
  - declines in education aid in the poorest countries
  - School sport programs motivate children to enroll in and attend school and can help improve academic achievement, and sport based community education programs provide alternative for those who cant go to school.

### **MDG #3: Promote gender equality and empower women**

- **TARGET 3A:** Eliminate gender disparity in primary and secondary education, preferably by 2005, and at all levels of education no later than 2015
  - Gender disparities are evident at higher levels of education, in labor market, and in time related underemployment.
  - Women's political participation is increasing but not in higher political jobs.
  - Sport gives women access to leadership opportunities and experience
  - Sport can cause positive shifts in gender norms that afford women greater safety and control over their lives.

### **MDG #4: Reduce child mortality**

- **TARGET 4A:** Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate
  - Substantial progress observed at all country income levels, but still falls short of target.

- Preventable diseases are main cause of these deaths, half of them occur in the first 28 days of life.
- Sport-based vaccination and prevention campaigns help reduce death and disability caused by measles, malaria, and polio
- Increased physical fitness improves children's resistance to some diseases.

#### **MDG #5: Improve maternal health**

- **TARGET 5A:** Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio
  - Despite progress, still falls short.
  - Maternal mortality ratio 14 times higher in developing countries
- **TARGET 5B:** Achieve, by 2015, universal access to reproductive health
  - in rural areas there is still poor access to required resources, but the majority of pregnant women in developing countries see a skilled health provider at least once
  - adolescent childbearing declined; remains high in sub-Saharan Africa, Latin American and Caribbean.
  - Sport for health programs offer women greater access to reproductive health info and services
  - Increased fitness helps speed post natal recovery

#### **MDG #6: Combat HIV/AIDS, malaria and other diseases**

- **TARGET 6A:** Have halted by 2015 and begun to reverse the spread of HIV/AIDS
  - declining # of new HIV cases, however still too many in developing countries to reach target
  - still very high levels of risky sexual behavior and HIV in education among youth
  - sport programs are linked with lower rates of risky health behavior
- **TARGET 6B:** Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it
  - access to therapy increased, on track to having 15 million people on ART by end of 2015
  - sports get celebrities involved in campaigns
- **TARGET 6C:** Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases
  - on track, but many people still lack access to intervention programs
  - # of new cases and deaths from TB is falling, but still not enough treatment
  - sports can be used to increase vaccination rates

#### **MDG #7: Ensure environmental sustainability**

- **TARGET 7A:** Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources
  - greenhouse gases rise, million of hectares of forest lost each year, renewable water becoming scarce, species driven near extinction
  - increased # of protected areas to protect these resources
  - sport based social mobilization initiates active participation in community to improve local environment.
  - Sport based education campaigns can raise awareness of importance of environmental protection and sustainability
- **Target 7B:** Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss

- protected ecosystems cover 14% of land/costal marine areas worldwide
- **TARGET 7C:** Halve by 2015 the proportion of people w/out sustainable access to safe drinking water and sanitation
  - target achieved
  - still many people with unsafe water resources, many still resort to open defecation
  - rural, poor, minority still less access to improved water and sanitation
- **TARGET 7D:** By 2020 to have achieved a significant improvement in the lives of at least 100 million slum dwellers
  - target met, but # of people living in slums in developing countries still increases

### **MDG #8: Develop a global partnership for development**

- **Target 8A:** Develop further an open, rule-based, predictable, non-discriminatory trading and financial system
  - majority of imports from developing countries entered developed ones duty free
  - average tariffs have declined
  - Sport for Development and Peace efforts catalyze global partnerships and increase networking among governments, donors, NGOs and sport organizations worldwide
- **Target 8B:** Address the special needs of least developed countries (fourth world)
- **Target 8C:** Address the special needs of landlocked developing countries and small island nations
  - aid shifting from poorest countries, increased focus on medium income that have large populations living in extreme poverty
- **Target 8D:** Deal comprehensively with the debt problems of developing countries
  - debt burden lower than in 2000, not declining further
- **Target 8E:** In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries
  - little improvement
- **Target 8F:** In cooperation with the private sector, make available benefits of new technologies, especially information and communications
  - continues to grow, more than 4 billion people not online
  - high speed internet access is increasing with falling broadband prices

### **Determinants of Health**

- **Individual factors:** - genetic make-up (predisposed to diseases, health problems)
  - sex (different issues for different sexes)
  - Age (different risks for older people)
- **Physical environment:** - factors in natural environment (air/water quality, smog)
  - factors in human built environment (housing, road design, sanitation, wheelchair access)
- **Employment/working conditions:** - safety
  - ability to earn money (kids picking garbage, ability to participate in sport b/c \$)
- **Health behaviors & coping skills:** - preventative behaviors/practices (flu shot, condom)

- food, alcohol, smoking, driving
- **Access to health services:** - sick and cant access health services = negative health (not enough \$, health illiteracy, not healthy hard to sport)
  - health services can promote good health
- **Healthy child development:** - good care of child
  - nourishment (impacts meeting biological potential, enrolling in school/stay there)
  - sport (bad experience, abusive coaches)
- **Social environment:** - socio economic status (living conditions, control over life)
  - education (income, knowledge)
  - social capital
  - culture
  - gender norms (sport, women more likely to do cardio)

**Health status indicators:** life expectancy at birth, maternal/infant mortality ratio, and neonatal/under 5 mortality rate.

Two main indicators used to compare how far countries are from a state of good health are HALE and DALY.

DALYs in low and middle-income countries;

1. Perinatal conditions
2. Lower respiratory infections
3. Ischemic heart disease
4. HIV/AIDS
5. Cerebrovascular disease
6. Diarrheal disease
7. Unipolar depressive disorders
8. Malaria
9. Tuberculosis
10. Chronic obstructive pulmonary disease

DALYs in high-income countries;

1. Ischemic heart disease
2. Cerebrovascular disease
3. Unipolar depressive disorders
4. Alzheimer's and other dementias
5. Trachea, bronchus, and lung cancers
6. Hearing loss, adult onset
7. Chronic obstructive pulmonary disease
8. Diabetes mellitus
9. Alcohol use disorders
10. Osteoarthritis

Higher income countries tend to have a greater burden of non-communicable diseases, while lower income ones have a greater burden of communicable ones (Africa and south Asia are set apart by there burden of these).

In most low and middle-income countries;

- rural people/disadvantaged ethnic/poor/uned minorites will be less healthy
- women will suffer from weak social positions

Population growth;

- majority will occur in low/middle-income countries
- puts pressure on environment (resources)
- creates demand for more infrastructure and services

Population aging;

- world is aging
- implications for burden of disease b/c will be living longer with morbidities and disabilities (lower mortality but higher morbidity)
- healthcare financing will be affected by change in ratio of people working:those over 65 yrs.

Demographic divide;

<b>Highest income countries</b>	<b>Lowest income countries</b>
<b>Low fertility</b>	<b>Relatively high fertility</b>
<b>Declining populations</b>	<b>Growing populations</b>
<b>Aging populations</b>	

Demographic transition;

- shift from pattern of high fertility and high mortality to low fertility and low mortality
- mortality decrease due to better hygiene and nutrition
- population grows with younger share of population increasing
- fertility declines
- population growth slows and older share of population increases

Epidemiological transition;

- shift of the burden of disease dominated by communicable ones to non communicable ones
- most low-income countries are in ongoing transition so have large burdens of both

Progress in health status;

- improvements in raising life expectancy and improving health not the same across countries
- life expectancy lags in sub-Saharan Africa and south asia
- Life expectancy in Europe and Central Asia changed little due to break-up of Soviet Union
- Life expectancy in East Asia has increased dramatically due to rapid economic growth

Projecting the burden of disease

- substantial changes from 2004 to 2030
- Low- and lower-middle-income countries will shift away from communicable disease
- Causes associated with aging will increase in importance
- Mental health issues will increase in importance

Health system: component parts;

- agencies that plan, fund, regulate health care
- money that finances it
- those who provide preventative/ clinical health services and specialized inputs into health care (education of healthcare professionals, production of drugs and medical devices)
- Functions; GOALS: good health, responsiveness to public expectations, fairness of financial contribution. FUNCTIONS: provide good health services, resource generation, financing, stewardship.

Categorizing health services;

- approach of each type of health system is to provide basic package of health services as a RIGHT

- manner in which insurance is operated (OHIP) and financed (taxpayers)
- most low income countries have fragmented health systems that include private and public providers
- many middle income have a system organized around national insurance scheme
- almost all high-income have national health insurance system
- levels of care: primary, secondary, tertiary

Roles of sectors;

- **Public:** stewardship of system, raising and allocation of funds (taxes), establishing approaches to health insurance, managing key public health functions.
- **Private, for profit:** provision of services including nonlicensed medical practitioners, operation of health clinics/hospitals/services/laboratories, may partner/work under contract with public sector
- **NGO, private not for profit:** community based efforts to promote better health through education/improved water/sanitation, carry out health services, can partner/work under contract to the public sector.

Key sector issues;

- in general, health systems in high income countries perform better than in low/middle income ones

**Canada Health Act:** Tommy Douglas, introduced universal public healthcare to Canada, adopted in 1984. Doesn't say how long health care should be delivered, so long as criteria and conditions are met.

#### **Criteria 1: public administration**

- **intent:** provincial and territorial health care insurance plans are operated on a non profit basis
- Operated by a public authority, accountable to Provincial and Territorial gov'ts
- Records publicly audited.

#### **Criteria 2: comprehensiveness**

- Must ensure all insured health services provided by hospital, doctors, and dentists (surgical dentists) or similar services given by other health care providers (e.g., nurse practitioners)

#### **Criteria 3: universality**

- all residents must be covered, new Canadians may have to wait 3 months

#### **Criteria 4: portability**

- Can move from P/T to P/T and receive emergency services (billed to home province)
- Need permission for non-emergency visits

#### **Criteria 5: Accessibility**

- Need reasonable access
- Not impeded by fees or discrimination
- Must provide compensation to doctors, dentists, and hospitals

#### **Conditions**

- **i) Information:** gov'ts must give info to federal Ministry of Health in relation to health care services
- **ii) Recognition:** gov'ts must recognize federal financial contributions to health care services

#### **Importance of non-communicable diseases;**

- growing worldwide importance
- burden greater than that of communicable diseases in all countries
- Cardiovascular disease, diabetes, cancer, and mental disorders are most important in low- and middle-income countries
- Often prevented at low cost but expensive to treat

Disease	Info
<b>Cardiovascular disease</b>	<ul style="list-style-type: none"> <li>- Cause about 30% of deaths worldwide</li> <li>- Leading cause of death in low and middle income</li> <li>- 80% of its burden due to ischemic heart disease, stroke, congestive &lt;3 failure</li> <li>- Study found that men in LMIC die 56% more at the same age of CVD than men in high-income countries and women die 86% more at the same age of CVD than women in high-income countries</li> </ul>
<b>Diabetes</b>	<ul style="list-style-type: none"> <li>- 200 million people worldwide suffer from it</li> <li>- Loss of 20 million DALYs per year</li> <li>- Prevalence is rapidly increasing due to obesity</li> <li>- Costly complications including blindness, kidney failure, amputation of lower extremities, stroke</li> <li>- 2/3 of people with diabetes have a disability compared to less than 1/3 of the people without</li> <li>- Cost of treating diabetes varies between 2.5% and 15% of health expenditures in different countries (very costly to treat)</li> <li>- Latin America and the Caribbean have highest expenditures, sub-Saharan Africa has the lowest</li> <li>- indirect costs are probably high because many people do not receive proper treatment</li> </ul>
<b>Mental disorders</b>	<ul style="list-style-type: none"> <li>• Includes neurological disorders like epilepsy, drug and alcohol abuse, and mental disorders</li> <li>• Responsible for 10% of DALYs lost in low/middle-income countries</li> <li>• Start at relatively young ages, go on for a long time, often cannot be cured, and produce large amounts of disability, (also heavily stigmatized)</li> <li>• Little data from low/middle-income countries indicative of unappreciated costs of mental illness</li> <li>• Study done in the United States indicated that direct and indirect costs of mental illness were equal to 2.5% of GNP (gross national product)</li> <li>• Significant losses in worker productivity</li> </ul>
<b>Vision &amp; hearing loss</b>	<ul style="list-style-type: none"> <li>• Aging globally and improved life expectancy increase importance</li> <li>• Vision loss responsible for 3.3% of the burden of disease</li> <li>• Hearing loss responsible for 1.7% of the burden of disease</li> <li>• Projected to be in top 10 causes of the burden of disease in 2030</li> <li>• Very little data available on costs &amp; consequences</li> <li>• Associated costs could include constraints to the education of children, school days missed by children with disabilities, cost of additional medical visits, high cost of education for students with hearing loss, difficulties for adults with finding employment, lower income levels</li> </ul>
<b>Tobacco use</b>	<ul style="list-style-type: none"> <li>• 5 million deaths annually associated with tobacco use, half in low/middle-income countries</li> <li>• Most common tobacco-related deaths are CVD, diseases of the respiratory system, cancer</li> <li>• Rates of smoking vary according to sex, age, socioeconomic status, and other factors (in Canada young women)</li> <li>• Usage increasing in men in low/middle-income countries and women</li> </ul>

	<ul style="list-style-type: none"> <li>in all regions</li> <li>Estimates from high-income economies suggest that costs of smoking range from 0.1% to 1.1% of GDP</li> <li>Economic costs are increasing in low/middle-income countries</li> <li>Disproportionate impact on relatively poor people because they tend to smoke at higher rates</li> </ul>
<b>Alcohol abuse</b>	<ul style="list-style-type: none"> <li>Responsible for 4% of burden of disease</li> <li>Increases risk for hypertension, liver damage, heart disease, and other problems, Intoxication associated with injuries and high-risk sexual encounters</li> <li>varies by region with men in Europe and Central Asia having the highest rates</li> <li>Very few countries have made coherent efforts to reduce alcohol consumption</li> <li>Limiting hours when alcohol can be bought/sold/checking sobriety of drivers has showed some success</li> <li>Taxing limit but could lead to smuggling/consumption of illicit alcohol</li> <li>Individual counseling shows some success, but would be difficult for countries with limited resources</li> </ul>

**Importance of communicable diseases;**

- 36% of total deaths (highest burden in south Asia and sub Saharan Africa), 40% of total DALYs lost annually in low/middle-income countries
- disproportionately affect the poor, relative importance compared to non-communicable diseases and injuries varies by region
- huge economic consequences
- MDGs
- Burden is unnecessary, may be prevented/treated

**Cost and consequences;**

- Constrain health/development of children, having an effect on education and productivity
- Strong stigma and discrimination associated with HIV, TB, and others
- Limit productivity of adult workers
- Costs of treatment burden families
- High rates reduce investment in a country's development (don't do business in a place where everyone is sick and can't work)

Disease	About	Cost and consequences	Addressing the burden	Critical Challenges
<b>HIV/AIDS</b>	<ul style="list-style-type: none"> <li>- spread via unprotected sex/breastfeeding/birth/blood</li> <li>- attacks immune system, leaving body susceptible to infections</li> <li>- highest rates in central and southern Africa</li> </ul>	<ul style="list-style-type: none"> <li>- a person with full blown AIDS can't work and is dependent on others for care</li> <li>- creates lots of orphans</li> <li>- stigmatized</li> <li>- high cost of treatment for poor countries</li> </ul>	<ul style="list-style-type: none"> <li>- focus on preventing new infections</li> <li>- successful efforts have strong political leadership/open communication</li> <li>- approach to prevention must vary with nature of epidemic</li> <li>- need to combine</li> </ul>	<ul style="list-style-type: none"> <li>- developing vaccine to prevent the 2.6 million new infections a year</li> <li>- universal treatment for all eligible</li> <li>- management of TB and HIV</li> </ul>

			behavioral change/bio-medical/structural approaches	coinfection
<b>Tuberculosis</b>	<ul style="list-style-type: none"> <li>-8<sup>th</sup> most important cause of death worldwide</li> <li>-spread through aerosol droplets</li> <li>-risks include crowded living/undernutrition/bad health care</li> <li>- increase in drug resistant cases</li> <li>- leading cause of death in adults who are HIV positive and not on antiretroviral therapy</li> </ul>	<ul style="list-style-type: none"> <li>-high cost</li> <li>-lots of people sick, long illness</li> <li>-stigma</li> </ul>	<ul style="list-style-type: none"> <li>- directly observed therapy, short course (DOTS)</li> <li>- access to sputum spears and microscopy</li> <li>-regular supply of TB drugs</li> <li>- monitoring and evaluation program supervision</li> </ul>	<ul style="list-style-type: none"> <li>- need for more effective vaccines, drug therapy that will shorten treatment</li> </ul>
<b>Malaria</b>	<ul style="list-style-type: none"> <li>- 2.9% global DALYs lost annually</li> <li>- 9<sup>th</sup> leading cause of death in low/middle income</li> <li>-sub-saharan African children are 98% of global burden</li> <li>- caused by parasites carried from p to p by anopheles mosquito</li> <li>- prego women and fetuses are at high risk of anemia and death from it</li> </ul>	<ul style="list-style-type: none"> <li>- people can have it up to 5 times a year</li> <li>- indirect costs greater than direct of treatment b/c of work days lost</li> </ul>	<ul style="list-style-type: none"> <li>- prompt treatment</li> <li>-intermittent preventative treatment for prego</li> <li>-long lasting bed nets treated with insecticide for people in malaria zones</li> <li>- spraying of homes</li> <li>-artemisinin, new drug into use to delay advent of resistance</li> </ul>	<ul style="list-style-type: none"> <li>- 100% coverage for people at risk with bed nets, spraying, intermittant therapy.</li> <li>- use nets proper</li> <li>- develop safe effective affordable vaccine</li> <li>- new drugs to keep up with drug resistance</li> </ul>
<b>Diarrheal disease</b>	<ul style="list-style-type: none"> <li>- responsible for 1.5 million deaths per year, 20% childhood deaths</li> <li>- decline over past 30 yrs due to better nutrition/disease recognition/hydration</li> <li>- impacts the poor b/c of poor housing/lack of fridge/bad hygiene</li> </ul>		<ul style="list-style-type: none"> <li>- promotion of exclusive breastfeeding first 6 months, after complementray feeding</li> <li>-retrovirus/measles immunization</li> <li>-access to clean water and sanitation</li> <li>-oral rehydration therapy</li> <li>- zinc supplement</li> <li>-antibiotics</li> </ul>	

<b>Neglected tropical diseases</b>	<ul style="list-style-type: none"> <li>- more than 1 billion people infected with one or more</li> <li>- poorest- impedes child development/harm prego/cause long term debilitating illness</li> </ul>	<ul style="list-style-type: none"> <li>- impact on health: blindness/anemia/growth retardation/disability.</li> <li>- decrease immune system</li> <li>- stigma</li> <li>-decrease productivity</li> </ul>	<ul style="list-style-type: none"> <li>-Rapid-impact package of drugs for the seven most common NTDs</li> <li>- Guinea worm: teaching people to filter water</li> <li>- Trachoma (infectious eye disease) SAFE strategy: Surgery, antibiotics, Facial cleanliness, environmental change</li> <li>-Lymphatic filariasis: annual administration of donated drugs</li> <li>-Periodic deworming of young children</li> </ul>	
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**Future Challenges;**

- Continued cooperation in/ among countries to combat infectious diseases
- Strengthening health systems in low/ middle-income countries
- Sustained political and financial support
- Strengthening surveillance at local, national and global levels
- Adequately trained/ appropriately deployed human resources
- Reaching a balance between prevention and treatment
- Technical challenges including new vaccines, treatment and diagnostics

**Child health:**

UN international children’s emergency fund. Protection of child rights. Advanced healthcare/education/equality/protection. Funded by voluntary contributions

**Importance;**

- 8.8 million children under the age of 5 die each year
- Many of these deaths are preventable
- Children are a particularly vulnerable population (poverty)
- Insufficient progress has been made in certain parts of the world

Children under 5;

- 99% of childhood deaths are in low/ middle-income countries
- Half of these deaths occur in India, Nigeria, Democratic Republic of the Congo, Pakistan, and China
- 41% of under-5 child deaths occur among neonates
- Rates and causes vary across and within countries
- General trend is decline, but rates of decline also vary considerably by region

Disease	Info
<b>Acute respiratory infections</b>	<ul style="list-style-type: none"> <li>• Leading cause of death in low/middle income countries</li> <li>• More severe and cause higher rates of death here</li> <li>• Upper respiratory infections include the common cold and ear infections,</li> </ul>

	lower respiratory infections include bronchiolitis and pneumonia
<b>Diarrhea</b>	<ul style="list-style-type: none"> <li>• Caused by bacteria/viruses, protozoa/helminths (worms)</li> <li>• Causes dehydration/loss of nutrition or wasting/damage to the intestines</li> <li>• Infants 6-11 months vulnerable b/c they have been introduced to unsafe water and foods (no longer breastfeeding)</li> </ul>
<b>Malaria</b>	<ul style="list-style-type: none"> <li>• 750,000 children die each year</li> <li>• A child in sub-Saharan Africa is likely to have a case every 40 days</li> <li>• Associated with premature birth and intrauterine growth retardation, which reduce chances of survival</li> </ul>
<b>HIV/AIDS</b>	<ul style="list-style-type: none"> <li>• Can be transmitted from mother to child during birth or breastfeeding</li> <li>• Number of HIV-infected children has grown, particularly in sub-Saharan Africa</li> </ul>
<b>Measles</b>	<ul style="list-style-type: none"> <li>• Acute respiratory infection with complications including pneumonia/diarrhea/encephalitis/blindness</li> <li>• Children who are vitamin a deficient or infected with HIV are more at risk of death</li> <li>• Extremely contagious if a population is not vaccinated</li> </ul>

#### Neonatal mortality;

- 41% of children under 5 who die annually actually die in the first month
- Little progress in reducing death rate
- Every day that a child lives increases the likelihood that it will stay alive
- To reduce death rates, the world needs to focus more precisely on when the deaths occur

Child death risks: nutrition status, household income, education of mother, access to health care provider for birth and private counseling, water quality and sanitation.

#### Gender & Health;

- focus more on women, as there is greater marginalization, use equally for research
- Gender; masculine/feminine, socially/culturally constructed, not biologically given
- Sex; male or female, biologically given
- Men die sooner (die 1 – 7 years earlier), kill themselves more often, more likely to binge drink and take illegal drugs, more likely to smoke, less likely to see a doctor – (where you are on the social hierarchy)
- masculinity; seen as binary to femininity, behavioral practices linked to lower levels of social support; less help seeking for psych problems; lower levels of same-sex intimacy & higher rates of homophobia; increased drug & alcohol use; less consistent use of condoms; increased cardiovascular stressors; more sexual partners; belief that relations between men and women are inherently adversarial

#### Women:

- Higher life expectancy (alzheimer's, osteoarthritis, cerebrovascular/cardiovascular disease, age-related vision disorders)
- Conditions that disproportionately affect females (maternal conditions, female cancers, discrimination)
- Key health issues especially important for women (iron, sex-selective abortion[India and china], STI, female genital cutting, violence) being born female is dangerous (biological/social conditions)
- Poor health of women negative impact on family and children
- Key interventions: family planning (only 8% sterilizations world-wide are male), safer sex practices, reduce partner violence, enhance ability to deal with unsafe abortion. Reduce three delays to cut maternal death:

- (1) Delay in identifying complications and seeking care
- (2) Delay in transporting women to hospital
- (3) Delay in emergency obstetric care in hospital

### **Three ways health and education are connected:**

1. Intergenerational links: health & ed of parents affects H & Ed of their children
2. Malnutrition and disease: affect cognitive development & school performance
3. Prevention of illness: child's mother's education predictor of child's health, ability to prevent illness (knowledge of immunizations, etc)

### **Ideal sanitation facilities include those that;**

1. Promote safe treatment of human waste for health and environment
  2. Limit human exposure to fecal matter, provide safe/secure spaces for men/women/children that meet their specific needs
  3. Encourage hygiene practices
- exposure to human waste increases chances of contracting certain diseases (oral-fecal route), trachoma, diarrhea, intestinal parasites
  - contamination of food and water sources
  - 3.2% of deaths in middle/low-income countries and 3.7% DALYs
  - improved sanitation leads to more than 30% decrease in child mortality and 37% in morbidity
  - nearly 1.2 billion people (1 in 5) open defecate
  - only 60% have access to private sanitation facilities, 2.5 billion lack toilets
  - organizations involved; world toilet organization, water aid, Water Supply & Sanitation Collaborative Council, Sanitation & Water for All, UN-water

### **Recommendations**

1. Sanitation needs to be considered with other MDGs & addressed in broader context of global equity
2. Sanitation should be considered with water management & access to safe water
3. Sanitation needs to be holistic, community based & community-driven
4. Sanitation investments need to be coordinated, long-term, & focus on both "hardware" & "software"
5. Understand sanitation within context of gender, economic realities, & environmental constraints
6. Change targets to 100% coverage by 2025
7. National NGOs need to coordinate & enhance communication
8. Develop new business models to develop markets
9. Take sanitation out of the shadows & commit more funds

### **Universal declaration of human rights**

- 30 articles: right to education, to own property, to be free, not subjected to arbitrary arrest, peaceful assembly, right to rest and leisure, standard of living adequate for health, etc.
- Supported by the Canadian Charter of Rights and Freedoms: Fundamental freedoms, equality rights, mobility rights, legal rights, language rights, minority education rights

Women's rights: Title IX (US ONLY!) – education policy in that said resources need to be split equally between men and women. Hurdles, marathon, boxing, etc. Vancouver 2010: ski jumping. Few women ski jump: “dilute” the value of medals

### **Divides amongst feminists:**

1. Anti-prostitution approach: prostitution is degrading, objectifies women, reduces women to commodities, manifestation of patriarchy, reinforces women's inferior social position. It is thus sexual exploitation
2. conservative approach: prostitution is immoral, inappropriate expression of women's sexuality, sex should be reserved for heterosexual marriage. It is problematic because it does not follow religious beliefs and norms of patriarchal sexuality
3. Prostitution is sex work: women should be allowed to control their bodies, there are many other forms of work where “sex sells,” so sex work should not be seen as any more inappropriate as others

### **Trafficking prevalence;**

- 600-800 women & children trafficked into Canada each year
- 700,000 – 2 million internationally
- Prevalence of aboriginal women and children high in sex trafficking in Canada
- Trafficked (highest to lowest) from asia, former USSR, Africa, Eastern Europe, Latin America
- Trafficked (highest to lowest) to italy, US, Germany, Netherlands
- Very difficult to have accurate numbers

It is mostly women and children from unstable countries, economically disadvantaged, innumerate, illiterate

### **How are they trafficked?**

1. False-front agencies: modeling, marriage, or employment agencies promising better life abroad, enter debt bondage (traffickers pay cost of transportation, which women will “repay” out of future earnings), don't know it's prostitution (internet)
2. Local sex industries: women already in prostitution, promised more money elsewhere, know the work but not the conditions, debt bondage used
3. Abduction: may already work in the sex industry but are unwilling to work abroad, people who lack social ties
4. Families living in poverty: Traffickers purchase girls or young women, money used to help family members, promise that daughter will have better life – not really the case

### **Help?**

- Canada: Victims can receive temporary resident permit
- Eligible for health-care benefits and trauma counselling, may also apply for a work permit
- Victims of trafficking are not required to testify against their trafficker to gain temporary or permanent resident status; no fee for an initial TRP or a work permit for victims of trafficking.
- US: Victims of Trafficking and Violence Act
- Laws: higher penalties for trafficking narcotics and weapons than humans
- International policy that reduces push factors

**Movies:** born into brothels (india, photographer takes pictures of kids, gets attached, tries to help them by setting up education, falls through) Sex Slaves (Odessa Ukraine)