CONCEPTS OF HEALTH $ WELLBEING

Dimensions

P - Absence of illness, disease or injury, also functioning of the body and its systems.
M - Positive self-esteem, low levels of stress and anxiety and state of well being.
E - Express feelings positively, feel emotionally secure and relaxed
S0 - Ability to form meaningful and satisfying relationships
Sp - Concepts of hope, peace, a sense of meaning or value.

Examples

P - Healthy body weight, adequate energy levels, low levels of stress and anxiety, high levels of confidence
M - Have a high level of resilience
S0 - Supportive and well-functioning family
Sp - A sense of belonging, peace and harmony

Dynamic AND Subjective of Health & Wellbeing.

The health and well being experienced by an individual is dynamic, meaning it is constantly changing.

The concept of health and well being is viewed in many different ways and is therefore said to be subjective which means influenced by or based on personal beliefs, feelings or opinions.
IMPORTANCE OF OPTIMAL H + W

INDIVIDUALLY
- Reduces healthcare costs
- Increase quality of life.
- \( \downarrow \) risk of premature death.
- \( \downarrow \) stress and anxiety.
- Live free from pain and concentrate on activities that improve their lives.

NATIONALLY
- Longer, healthier lives.
- Health system saving.
- Fewer people relying on social security.
- Increased productivity.
- Higher average incomes.
- Reduced stress and anxiety in the community.
- Increased social participation.

GLOBALLY
- Reduced risk of disease transmission between countries.
- Assists in promoting peace and stability.
- Promotes economic development.
- Promotes social development.
- Promotes sustainability.
Income

Income increases the ability to afford resources such as healthcare, recreation, transport & education. Income increases the capacity of govt. to provide social services & resources such as public housing, education & health care. These resources & services promote health & equity.

Equity

- Relates to fairness & social justice.
- Equity means that there are minimum levels of income & resources that all people should have access to.
- All people should have access to fundamental resources in the community.

A Stable ecosystem

- An ecosystem is a community that consists of all living & non-living components of a particular area.
- A stable ecosystem is required to produce many resources required for human life such as clean water.

Prerequisites of Health (WHO)

Food

- Adequate food intake is both an essential requirement for life & a basic human right.
- Food security increases the ability of individuals to consume the required nutrients, which is important for the functioning of the human body.

Sustainable resources

- Sustainability is defined as 'meeting the needs of the present without compromising the ability of future generations to meet their own needs.'
- Sustainable resources therefore relate to ensuring that the resources used to promote health & wellbeing in the present are available for future generations so they too can experience a good quality of life.
PEACE
- Defined by the absence of conflict.
- The risk of injury & premature death decreases during times of peace. (PHW/B)
- Reduction in levels of stress and anxiety (M.HTWB)
- Increases the ability for people to move freely around their community.
- A peaceful community increases the capacity of govt. to provide resources and services that promote HTWB.

SHELTER
- Describes a structure that provides protection from the outside environment.
- Shelter is a basic human right.
- Many benefits on HTWB including:
  - Protection from outside elements
  - Privacy
  - Safety & security
  - Reduced risk of disease
  - Reduced risk of stress & anxiety
  - Ability to focus on employment or education
  - More time to pursue a purposeful & meaningful life.

EDUCATION
- Education empowers individuals & increases the ability to earn an income.
- Allows people to understand health promotion messages.
- People who are educated are more likely to exhibit healthy behaviours.
- Education is often key to obtaining meaningful & well-paid employment and promotes economic development.
- Those educated feel more empowered to take control of their own lives.

PREREQUISITES OF HEALTH (WHO)

SOCIAL JUSTICE
- Social Justice means that all people are treated fairly, including women and girls in both their private and public life.
- The Aus. Govt.'s concept of Social Justice reflects understanding defining a socially just Australia as one in which there is:
  - Fair distribution of economic resources
  - Equal access to essential services
  - Equal rights in civil, legal, & industrial affairs
  - Equal opportunity for participation by all in personal development, community life & decision making.
INDICATORS

INCIDENCE
Refers to the number (or rate) of new cases of a disease/condition in a population during a given period.

PREVALENCE
The number or proportion of cases of a particular disease or condition present in a population at a given time.

SELF-ASSESSED HEALTH STATUS
A measure based on a person's own opinion about how they feel about their health and wellbeing, their state of mind and their life in general. It is commonly sourced from population surveys.

B.O.D
Burden of disease is a measure of the impact of disease and injuries. Specifically, it measures the gap between current health status and an ideal situation where everyone lives to an old age free of disease and disability. It is measured in a DALY.

MORBIDITY
Refers to ill-health in an individual and the levels of ill-health in a population or group.
INDICATORS 2

MORTALITY
- Refers to death, particularly at a population level.
- Maternal death of a mother during pregnancy, childbirth, or within 6 weeks of delivery.
- Infant death of infants between births & their first birthday.

HALE (health adjusted life expectancy)
- A measure of burden of disease based on life expectancy at birth but including an adjustment for time spent in poor health. It's the no. of years in full health that a person expect to live, based on current rates of ill health & mortality.

LIFE EXPECTANCY
- An indication of how long a person can expect to live; it's the no. of years of life remaining to a person at a particular age if death rates don't change. (WHO)

DYL (disability adjusted life years)
- A measure of burden of disease.
- 1 DALY = 1 year of healthy life lost due to premature death & time lived with illness, disease & injury.

YLL (years of life lost)
- A measure of how many years of life lost due to premature death.

YLD (years of life lost to disability)
- A measure of how many years of healthy life are lost due to injury or disability.
Environmental factors:
relate to the physical features that surround us. These can be natural features or those built by people. These include:
- Work environment
- Housing
- Climate and climate change.

Factors that affect health status:

Biological factors:
relate to the structure of the cells, tissues and systems of the body and how adequately they function. This includes:
- Genetics
- Body weight
- Blood pressure

Sociocultural factors:
relate to the social and cultural conditions into which people are born, grow, live, work and age. These conditions include:
- Family influences including culture
- Food security
- Early life experiences
- Access to healthcare
INDIGENOUS + NON-INDIGENOUS

- BIOLOGICAL FACTORS
  - Indigenous Australians are more likely to report hypertension
  - Increasing risk of stroke or heart disease
  - Indigenous mothers are more likely to give birth to a baby with low birth weight
    → higher U5MR

- SOCIOCULTURAL FACTORS
  - Indigenous Australians are more likely to be unemployed
  - Increased risk of smoking and alcohol abuse
  - Discrimination and racism have been associated with ill-health
    → mental health disorders e.g. anxiety

- ENVIRONMENTAL FACTORS
  - Indigenous population has lower levels of access to health services
    → increases morbidity and mortality rates

MALES + FEMALES

- BIOLOGICAL FACTORS
  - Males have higher rates of obesity and hypertension
  - Males more likely to experience impaired glucose regulation
    → higher rates of type 2 diabetes

- SOCIOCULTURAL FACTORS
  - Unemployment has a larger effect on males (breadwinners)
    → stress and mental health
    → greater risk of injury or death

- ENVIRONMENTAL FACTORS
  - Males more likely to work in dangerous environments
    → increasing risk of injury or death

VARIATIONS IN HEALTH STATUS
Those living within and outside of Aus's major cities

Biological factors
- higher rates of overweight/obesity
- high blood cholesterol
- impaired glucose regulation
- more low birth weight babies
- higher rates of hypertension

Sociocultural factors
- lower incomes
- less access to education
- more unemployment
- fewer HC professionals
- higher food insecurity
- higher levels of social isolation

Variations in Health Status

High and low SES

Biological factors
- higher obesity rates
- higher rates of hypertension
- higher rates of impaired glucose regulation
- higher rates of low birth weight babies

Sociocultural factors
- lower incomes, education levels and lower status occupations
- lower levels of health literacy
- higher unemployment
- higher social exclusion
- higher food insecurity
- higher rates of maternal smoking
- lower access to HC

Environmental factors
- poorer quality roads
- poorly lit roads
- greater driving distances
- reduced proximity to resources
- more dangerous working environments
- less access to fluoridated water
Factors Influencing Health Status

Smoking
This involves burning a substance to be inhaled & absorbed. This can result in:
- Cancer: as smoking can cause a fault in body cells as they divide, causing tumours.
- Low birth weight: if used during pregnancy, resulting in baby < 2.5kg. This can result in premature death.
- Atherosclerosis: the chemicals from tobacco builds up as plaques on blood vessels, leading to cardiovascular disease.
- Asthma
- Decreased immunity

High BMI
BMI = \frac{\text{Weight (kg)}}{\text{Height (m)}^2}
A high BMI is one over 25, classed as overweight or obese. This can cause:
- Cardiovascular disease: as there is a greater body mass to deliver blood to, strain is put on heart.
- Mental health issues: may cause stress over low body image and low self-esteem.
- Type 2 diabetes: where pancreas doesn’t produce enough insulin, or can’t use insulin effectively.
- Arthritis & osteoporosis: greater pressure on joint, increasing risk.
- Some cancers
- Asthma
- Maternal health issues

Alcohol
- Been a part of human life for years
- Binge drinking: 7 or more (males), 5 or more (female) drinks in one sitting
- Alcoholism: can’t stop drinking once started, with constant desire to drink
- Weight gain: as alcohol is energy dense at 24kJ/gram, leading to weight gain, obesity, CVD, & cancer
- Liver disease / cirrhosis: as alcohol is filtered through the liver it eventually puts a large strain, causing damage & reducing functioning
- Behaviour change: this can put a strain on relationships & increase risk taking
- Pregnancy complications
High intake of:

- **Fat**
  - 4 types
  - Saturated: bad
  - Polyunsaturated: healthy
  - Trans: bad
  - Main difference in impact on cholesterol
  - LDL: bad
  - HDL: good
  - Can ↓ LDL: ↓ risk of CVD
  - ↓ HDL: ↑ risk of disease

- **Salt**
  - Linked with high levels of sodium which draws excess fluid into blood
  - ↑ risk of heart disease

- **Sugar**
  - Type of carb: excess stored as fat
  - Contributes to high body mass & the effects on CVD & health issues
  - Major cause of morbidity & mortality

Low intake of:

- **Iron**
  - Essential part of blood
  - Weakness & fatigue
  - Hair loss, anemia
  - Struggle to regenerate body enough energy for body tasks
  - Sources of iron: beans, red meat, nuts, eggs

- **Dairy**
  - Deficiency in calcium can cause osteoporosis - women are more likely to experience
  - Optimal intake = ↓ risk of coronary heart disease
  - Optimal intake = strong bones & teeth = ↓ dental caries

- **Fibre**
  - Type of carbohydrate
  - Promotes fullness
  - Low intake = risk of coronary heart disease & lowered cancer
  - Low intake = high body mass from overeating

- **Vegetables**
  - Low in energy: ↓ risk of high BMI
  - High in vitamins & minerals
  - High in antioxidants
  - Helps promote fasting and immune system: low intake = ↑ mortality & morbidity of diseases
  - Low intake depletes elimination of free radicals = ↑ risk of CVD & cancer

- **Fruit**
  - Low in energy: ↓ risk of high BMI
  - High in vitamins & minerals
  - High in antioxidants
  - Low intake = ↑ risk of disease
  - Low intake = ↓ risk of CVD & cancer

Dietary Risks: Dietary intake of these substances can lead to various health risks, including heart disease, high blood pressure, and other chronic conditions.
IMPROVEMENTS IN AUSTRALIA HEALTH STATUS:

LIFE EXPECTANCY:
- Males 00.9 in 2015
- 53.8 years in 1900
- Females 84.8 in 2015
- 57.5 years in 1900
- Increase at 400 in 1900-2015
- Reason decline in mortality of children aged 0-4 infants under one year.

PATTERNS OF MORTALITY:
- 1961-1972 males decrease 67.9 to 64.8
- females 44.2 to 44.5
- CVD reached highest level and cancer more prevalent.

INFECTIOUS AND PARASITIC DISEASES:
- In 1900, 13% of all deaths were I&P diseases.
- Leading to the outbreak of diarrhoea cholera, smallpox and whooping cough, diphtheria diseases.
- TB measles whooping cough, diarrhoea diseases.

CARDIOVASCULAR DISEASES:
- Since 1900, these diseases have been one of the major cause of death.
- Death rate from I & P increased and reached their peak in the mid 1960s.

INJURY AND POISONING:
- Death rate from motor vehicle crashes were at the highest in 1970 at 49 deaths for males per 100,000 population and 18 per 100,000 for females.
- Death rates fell to 14 and 6 per 100,000 for males and females respectively by 2000.

MAMMOGRAPHY:
- Women at 50 years and above.

Cancer (neoplasia):
- Cancer increase a peak in the mid 1980s before falling gradually between 2000 and 2013.
- This was due to an increase in I & P and cancer uptake in smoking in the 1920s.
- Stomach cancer was the largest cause of cancer death in the 1970s and this decreased for both males and females.

RESPIRATORY DISEASES:
- Death rate from respiratory diseases fell dramatically across the century and by 2000 were 1350 then 1090 and 1901 level.
- Pneumonia deaths also fell considerably since 1900.
NEW PUBLIC HEALTH
SOCIAL MODEL OF HEALTH

Social Model of Health looks at the role factors such as SES, access to health care play in improving health status.

SM of H has 5 key principles:

1. Addresses the Broader Determinants (or factors) of Health.
2. Acts to Reduce social inequities
3. Empowers individuals and communities.
4. Acts to enable access to healthcare.
5. Involves intersectoral collaboration.

A. R. E. A. S - acronym

OTTAWA CHARTER
for Health Promotion.

3 strategies - Advocate/Enable/Mediate.
5 Actions areas - (Bad) Cats (Sick) Food (Rats)

B. - wild healthy public policy
C. - create supportive environments
S. - strengthen community action
D. - develop personal skills
R. - orient health services.

Biomedical Model of Health
"Fix it" approach looks at Diagnosis, Treatment + Cure.

Advantages
- creates advances in technology
- common problems effectively treated
- extends life expectancy

Disadvantages
- costly
- doesn't always promote health
- not every condition can be treated.

Social Model of Health

Advantages
- prevents disease
- relatively inexpensive
- education passed on from generation to generation

Disadvantages
- not every condition can be prevented
- Messages may be ignored or not understood.
For a community to be healthy, both biomedical and social model need to be in place to improve overall health and wellbeing.

**Relationship Between The Biomedical And Social Model Of Health.**

The social model of health takes into account the significant role that factors such as socioeconomic role, access to healthcare and social connectedness play in improving health status.

Biomedical approach to health focuses on the physical or biological aspects of disease or illness.

The biomedical approach is an individual approach helping a person return to pre-illness state of health and wellbeing. The social model of health approach is a community developed approach.
AUSTRALIA'S HEALTH ...SYSTEM...

**Medicare**
- Is Australia's "Universal Health Insurance Scheme". It gives all Australians access to healthcare that is subsidised by the government.

**What Does it Cover?**
- Some fees relating to essential healthcare, e.g., tests/examinations, doctor consultation visits, some dental procedures, X-rays
- In-hospital expenses, e.g., accommodation and treatments

**What is NOT Covered?**
- Most costs associated with private hospital care
- Most dental treatments
- Ambulance services
- Nursing home care

Medicare is funded through general taxation.

Promotes health in Aus by providing everyone with accessible, equitable healthcare.

**PHI (Private Health Insurance)**
- A type of insurance which members pay a fee in return for payment towards health-related costs not covered by Medicare purchased in addition to Medicare.
- Fees vary on which treatment cover chosen, e.g., dentist cover but not chiropractic.
- People with PHI generally have greater choice in terms of hospitals and doctors.

In order to encourage people to purchase PHI, the government introduced 3 main incentives:
- Private Health Insurance Rebate
- Lifetime Health Cover
- Medicare Levy Surcharge

PHI promotes health in Australia by providing people with wider choice, and assisting in funding of the health system.
PHARMACEUTICAL BENEFIT SCHEME (PBS)

- The aim was to provide essential medicines to people who needed them, regardless of their ability to pay. About 5000 essential medicines are subsidised under the PBS.
- The purpose remains the same today, but instead of being free, medicines are now subsidised and consumers must make a patient co-payment.
- PBS is a key component of the federal government contribution to the Australian health system.

NATIONAL DISABILITY INSURANCE SCHEME (NDIS)

- The NDIS is a national insurance scheme that provides services and support from people with permanent, significant disabilities and their families and carers.
- Established by the federal government.
- A person must be aged under 65 and meet both the residency and disability requirements to be eligible for the NDIS.
- The NDIS assists people with permanent disabilities to lead an ordinary life.
SUSTAINABILITY

The sustainability of the Australian health system relates to its capacity to provide a workforce and infrastructure such as facilities and equipment, and to be innovative and responsive to emerging needs through interventions such as research and monitoring. The system must be equipped so it can evolve to ensure that a high quality of care is continually available for anyone in need.

PROMOTION OF HEALTH (SAFE)

FUNDING

Funding the Australian health system assisting in the promotion of health by:

- healthcare infrastructure
- subsidised health services
- personnel
- essential medicines
- medical supplies
- support and assistive technology
- increased access to private health services
- advances in knowledge and technology through research.

ACCESS

- An accessible health system is one that can provide all people with timely access to quality health services based on their needs, not their ability to pay, regardless of where they live in a country.
- Interventions put in place to increase access to healthcare:
  - Fee-free treatment in public hospitals
  - Subsidised medication through the pharmaceutical benefits scheme
  - Subsidised health insurance through the private rebate
  - Support via National Disability Insurance Scheme.

EQUITY

- An equitable health system must recognise and respond to those with special needs.
- Interventions to increase access to equitable access healthcare:
  - Introduction of NDIS
  - Medicare safety net
  - PBS safety net
  - Public dental health
  - Continuity between healthcare providers.
Smoking kills an estimated 15,000 Australians each year, and costs Australia $31.5 billion in social and economic costs each year. Smoking is a preventable risk factor, so all smoking-related conditions and diseases are considered to be completely avoidable.

Positively effective: 86% said it was helpful, 17% had quit after 6 months.

**Smoke**: Quit Victoria is a program of the cancer council Victoria, which is funded by the Victorian Government and VicHealth, and this is an example of creating a supportive environment. The quitline is a clinical service, staffed by trained professionals, that develops personal skills by providing advice and practical strategies for quitting.