1: Intro

What is health psychology?

the aggregate of the specific educational, scientific and professional contributions of the discipline of psychology to understanding the socio-enviro-nmental, behavioural , cognitive and emotional factors that influence: - Maintenance of optimal health - Development and course of illness and disease - Response to illness and disease – by patient, family, community, health care providers

What is health?

Not being ill, an absence of symptoms, but also (1) physical fitness and vitality (2) health enhancing behaviour (3) psychosocial well-being (4) function (5) having a positive resource

WHO definition of health: A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (World Health Organisation, 1948)

Biopsychosocial model

the interaction between biolog-ical, psychological and social factors is a prime determinant of an individual's health status

bio = genetic predisposition + physiological functioning

1: Intro (cont)

psycho = cognition + motivation + emotion + personality

social = culture +legislation + community + accessibility

(1) health is a continuum (2) patient centred (3) coping is the best possible outcome if there is no cure

Common measures of health status

life expectancy = # of years of life, on average, remaining to an individual at a particular age if death rates do not change. Most commonly used measure is life expectancy at birth.

mortality = # of deaths in a population at a given period

morbidity = # cases of a disease that exist at some point of time --> measured by incidence (new cases) and prevalence (total # of existing cases)

burden of disease = the impact of a disease or injury on an individual or a population --> quantifies gap between a population's actual health and ideal level of health --> measures burden of living with ill health + dying prematurely using DALY

1: Intro (cont)

Disability-Adjusted Life Years (DALY) = # of years of healthy life lost due to (1) premature death: cancer, cardiovascular disease, injuries or (2) living with ill health: mental and substance abuse, musculoskeletal disorders

Health status of australians

Average life expectancy was 80.4 years for males, 84.6 for females. Death rates continue to fall, despite increases in absolute # of deaths

2013 premature deaths (<75 years) = (1) coronary heart disease (2) lung cancer (3) suicide

Leading causes of death are most valuable when making comparisons over time or between population groups

5 risk factos for potentially avoidable deaths (1) tobacco use (2) high body mass (3) high alcohol use (4) physical inactivity (5) high blood pressure

potentially avoidable deaths = deaths that could have been avoided given timely and effective health care -> represents underlying population health and access-ibility / effectiveness of health syste

Health inequalities: Aboriginal and Torres Strait Islander people; Low SES; Rural and remote populations; People with disability; LGBT and intersex people; Veterans; Prisoners

1: Intro (cont)

Chronic diseases AKA non-communicable diseases

are long lasting, persistent and need LT management --> responsible for greatest amount of illness, death and DALY.

Eight major chronic diseases (1) arthritis (2) asthma (3) back pain and problems (4) cancer (5) cardiovascular disease (6) chronic obstructive pulmonary disease (7) diabetes (8) mental health conditions

dementia characterised by the gradual impairment of brain function + affects memory, cognition and personality + irreversible and progressive -> not caused by age, primarily affects older people >65

diabetes (1) autoimmune, childhood onset inability to produce insulin, (2) genetic + environment, not being able to use insulin effectively -> increases rapidly with age

Levels of prevention

primary = preventing the occurence of the disease, e.g. childhood obesity

secondary = preventing / slowing progress of a disease before it causes significant negative health consequences, e.g. smoking

1: Intro (cont)

tertiary = treating / managing a disease to reduce its impact, e.g. diabetes

health psychology in practice

clinical health psychologists = illness assessment, treatment and rehabilitation, mainly secondary and tertiary

population health psychologists = health promotion, illness prevention, primary

10. Dementia

What is dementia?

> not the name of a specific disease; rather, it describes a syndrome characterised by the gradual impairment of brain function. affects memory, cognition and personality

What does the current service system look like

> (1) assessment service and referral pathway (2) community services (3) royal comission

My Aged Care

> inbound referral > assessment > referral > service planning and delivery

Royal Commission into Aged Care Quality and Safety

> Government funded aged care before death

10. Dementia (cont)

Government programs

> (1) respite care (2) national dementia support program (3) dementia education and training for carers (4) dementia training program

Aged Care Quality Standards

> (1) Personal and clinical care (2) services and supports for daily living (3) organisation's service environment (4) feedback and complaints (5) human resources (6) organisational governance (7) ongoing assessment and planning with consumers (9) MOST IMPORTANT consumer dignity and choice

Approaches / models for care

> (1) butterfly model (2) eden alternative (3) greenhouse model (4) household model of care

butterfly model

> the belief that for people experiencing dementia, feelings matter most, that emotional intelligence is the core competency and that "people living with a dementia can thrive well in a nurturing environment where those living and working together know how to "be" person centred together

10. Dementia (cont)

eden alternative

> focuses on partnering with nursing homes to help them change their culture, environment and approach to care to "create a habitat for human beings rather than facilities for the frail and elderly"

greenhouse model

> focuses on helping companies and individuals build or convert residential homes that can provide high levels of care for individuals who do not wish to be in a nursing home setting

household model

> residents have a significant say in their daily lives, their care, and their living environment.

What is person-centred care?

> views the person with dementia as a whole: unique, complex, enabled, personhood, value of others, empowerment

Essential elements of person centred care

> establishing a therapeutic relationship > shared power and responsibility > getting to know the person > empowering the person > trust and respect

10. Dementia (cont)

Overcoming stiga (Ageism)

> bias towards older individuals, fear of dependency > us vs them > myths and stereotypes > denial of ageing

Language should be

> accurate, respectful, inclusive, empowering and non-stigmatising

2: Theory in Practice

What is a theory?

> a systematic way of understanding events or situations (1) a set of concepts that explain or predict events by illustrating the r/s between variables (2) applicable to a broad variety of situations (3) abstract, until filled with practicality

Types of theories and examples

> (1) explanatory, describes the reasons a problem exists. e.g. **health belief model + theory of planned behaviour** (2) change: guides development of health interventions. e.g. **Diffusion of innovations + implementation theory** not mutually exclusive

Role of theory

> Foundation for program planning, implementation of evidence-based interventions --> use a planning model, e.g. **precede-proceed + theoretical domains framework**

2: Theory in Practice (cont)

9 criteria to assess theory quality

(1) clarity of constructs (2) clarity of r/s between constructs (3) measurability / methodology (4) testability (5) being explanatory, statistical or observatory (6) describing causality (7) parsimonious (8) generalisability across behaviours, populations and contexts (9) evidence-based

Ecological approach

emphasises the interaction between and across all levels of a health problem. levels of influence (1) individual, intrapersonal, cognitive behavioural (2) interpersonal (3) community, insitutional

individual key concepts

most basic level: what we know and think affects our actions, e.g **health belief model + stages of change (transtheoretical) + theory of planned behaviour + precaution adoption process**

interpersonal key concepts

assumes individuals exist within and are influenced by a social environment, e.g. **social cognitive theory + theory of reasoned action + theory of planned behaviour**

2: Theory in Practice (cont)

community key concepts

how social systems function and change, e.g. **diffusion of innovations theory + communication theory + community organisation**

What is a self-report?

cheap, easy and common, especially useful for measuring sexual behaviours, attitudes, opinions and beliefs BUT consistently underestimates the proportion of individuals at risk

Consequences of inaccuracy

(1) under/over estimation of risk and inappropriate interventions and resource allocation (2) misclassification of risk status by the individual (3) obscuring possible causal relationships between risk and disease (4) erroneous conclusions about effectiveness of intervention strategies

Assessing accuracy of self-report

(1) true positive / negative: screening = diagnosis (2) false positive: screened but no actual disease (3) false negative: not screened but has disease

2: Theory in Practice (cont)

Sensitivity

proportion of people with diagnosis who score positive on screening instrument = people who are at risk for a health behaviour who accurately report that they are a smoke (a/(a+c))

Specificity

proportion of people without the diagnosis who score negative on the screening instrument = proportion of people who are not smokers who accurately report that they are not smokers (d/(b+d))

What factors impact accuracy?

(1) recall difficulty (2) lack of knowledge (3) poor survey design (4) lack of motivation to answer (5) demand characteristics, e.g. social desirability (6) differences between instruments, measures and modes of data collection (7) imperfect gold standard

2: Theory in Practice (cont)

How can we optimise accuracy?

(1) reduce response cost, minimise response biases (2) maximize rewards for responding optimally. using recall-aiding strategies and clear, exhaustive, mutually exclusive questions (3) bogus pipeline techniques (4) level and significance of measurement error, triangulation, validation sub-studies

Gold standard

Screening measure	Gold standard diagnosis	
	+	–
+	True positive (a)	False positive (b)
–	False negative (c)	True negative (d)

7: HIV

What is HIV?

a virus that attacks the body's immune system, transmitted by bodily fluids including blood and semen. currently no cure or vaccine, untreated can lead to AIDs. People don't die from HIV, but other serious illnesses they are vulnerable to.

What is AIDS?

Acquired Immune Deficiency Syndrome, when a person's immune system has been severely damaged by the HIV virus. Person will be vulnerable to infections and illnesses that their immune system would normally be able to fight of.

7: HIV (cont)

4Es pre-requisites for transmission

- (1) exist (2) exit (3) enter (4) enough (viral load)

4 main ways of transmission

- blood, semen, vaginal fluids and breast milk

What are the current trends in HIV infection?

- decreasing incidence of HIV but increasing prevalence: more people are surviving with HIV related illnesses.

Stigma and discrimination

- Stigma, discrimination, and social exclusion from employment and education can increase the risk of HIV

Preventing transmission through sexual activity

- test often, treat early, stay safe (1) condoms (2) Pre-exposure prophylaxis (anti-viral drug, like the birth control pill) (3) Undetectable viral load (undetectable = untransmissable)

At risk groups

- (1) ATSI, (2) Culturally and linguistically diverse MSM, (3) Trans and gender diverse people

11. Trauma and Aboriginal Health

What is trauma?

- involves threats to life or bodily integrity, or a close personal encounter with violence or death

What is intergenerational trauma?

- transmission of experiences:Memories, emotions and lived experiences are passed on unconsciously to subsequent generations within families. especially when parents have been abused or neglected as children

What is collective trauma?

- Blow to the basic tissues of social life that damages the bonds attaching people together and impairs the prevailing sense of community. also includes intergenerational trauma

How does it cause individual to feel and behave?

- feeling powerless, helpless and paralysed > tends to be sudden and overwhelming, potentially life-threatening

11. Trauma and Aboriginal Health (cont)

What kinds of trauma related behaviours might we see?

- (1) mental health behaviours, e.g. PTSD, survivors guilt (2) homelessness psychosomatic illness (3) A&OD misuse (4) poverty (5) lack of self-regulation (6) distorted body image (7) cutting and self harm (8) fractured relationships (9) disregard for safety (10) hoarding (11) poor educational achievements

Toxic stress

- when a child experiences strong, frequent, and/or prolonged adversity—such as physical or emotional abuse, chronic neglect, caregiver substance abuse or mental illness, exposure to violence, and/or the accumulated burdens of family economic hardship—-without adequate adult support.

Assimilation policy

- Stolen generation

Recovery from trauma

- public acknowledgement and community action

INDIVIDUAL THEORIES

Health Belief model

INDIVIDUAL THEORIES (cont)

theorizes that people's beliefs about whether or not they are at risk for a disease or health problem, and their **perceptions of the benefits of taking action to avoid it, influence their readiness to take action** --> most-often applied for health concerns that are prevention-related and asymptomatic, such as early cancer detection and hypertension screening – where beliefs are at least as important as overt symptoms.

(1) perceived susceptibility (2) perceived severity (3) perceived benefits (4) perceived barriers (5) cues to action (6) self-effiacacy

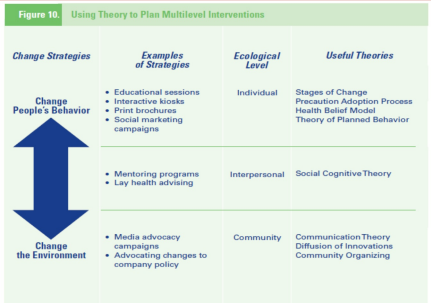
States of change (transtheoretical) model

(1) precontemplation (2) contemplation (3) preparation (4) action (5) maintenance

Two other models - theory of planned behaviour & precaution adoption process model

Change Strategies

Change Strategies



3: Evidence-based Practice

What is evidence based practice?

- an approach to health care that promotes the collection, interpretation and integration of best research evidence in making decisions about patient care (Straub, 201)

Levels of evidence

- levels reflect how confident we can be about the findings (1) most confident: systematic reviews / meta-analysis, e.g. (2) randomised controlled trials, control group (3) other types of empirical studies, e.g. *e.g.* pre-post trial + interrupted time series + multiple baseline design (4) no planned data collection, e.g. expert opinions

What constitutes high quality evidence?

What sets a systematic review apart from others?

- Systematic reviews have predetermined criteria with explicit methods of appraisal and synthesis. It is replicable, resolves controversy between conflicting trials, reduces biases and identifies opportunities for research

3: Evidence-based Practice (cont)

What is bias?

- introduction of systematic error into sampling, encouraging an outcome over another

How to minimise bias?

- (1) objective measures (2) blinding / random allocation of participants and investigators (3) process measures

What causes bias in effectiveness trials?

- (1) social approval bias (2) knowing group allocation (3) treatment diffusion / contamination (4) non-standardised intervention delivery (5) non-randomised recruitment (6) funding bias

Consort statement

- an evidence-based, minimum set of recommendations for reporting randomized trials.

Cochrane collaboration

- International non-profit that maintains and disseminates systematic reviews of health care interventions to assist professionals in making informed decisions about health care by preparing and regularly maintaining systematic reviews. i.e. peer reviewed gold standards focusing on intervention effectiveness updated < 22 years

5. Substance use

How are substances characterised?

- Based on their chemical composition, legality and effect in intoxication: stimulant, depressant or hallucinogen

Stimulants

- increase neurochemical activity, energy, heart rate. e.g. coffee, nicotine, amphetamine, ecstasy, cocaine

Depressants

- depress brain function, alertness and lowers inhibitions. e.g. alcohol, opioids, benzodiazepines, GHB, inhalants, marijuana

Hallucinogens

- distort perception, may be stimulants or depressant. (1) psychedelics, e.g. LSD, mescaline, DMT, magic mushrooms (2) dissociatives, e.g. ketamine, PCP, nitrous oxide (3) delirients, e.g. datura, atropine

What are the most commonly used substances in Australia?

- tobacco - alcohol - cannabis - ecstasy - methamphetamine - cocaine - heroine

Models / approaches to treatment

- (1) motivational interviewing (2) stress vulnerability model

5. Substance use (cont)

(MI) Fundamental processes

- engaging, focusing, evoking and planning

(SV) strategies

- talking therapy, meaningful activities and supportive relationships, healthy lifestyles

What underpins our approaches to treatment?

- demand reduction, supply reduction, harm reduction. National Drug Strategy, 2017

Assumptions

- (1) drug use is universal, almost everyone uses drugs (3) use of mind altering drugs is normal (4) illicit drugs do not inherently differ from other drugs

5. Substance use (cont)

Substance use disorder (DSM-5) >2

- (1) failure to fulfil major role obligations (2) physically hazardous (3) recurrent social or interpersonal problems (4) tolerance (5) withdrawal (6) using more or over a longer period than intended (7) persistent desire / unsuccessful efforts to control substance abuse (8) excessive time spent obtaining, using and recovering (9) reduced social, occupational or recreational activities (10) continued use despite physical or psychological problems (11) cravings

9. Psycho-oncology

What is psycho-oncology?

- concerned with the effects of cancer on a person's psychological health, as well as the social and behavioural factors that may affect the disease experience.

What factors influence the development of cancer?

- (1) genetic predisposition (2) compromised immune systems (3) other social determinants of health, e.g. allostatic load, racism (4) environmental exposure to carcinogens. e.g. radiation, sun, smoking

9. Psycho-oncology (cont)

What are the aims of treatment?

- (1) managing / treating mental illness (2) fostering post traumatic growth (3) increasing patient's ability to complete cancer treatment (4) managing transition to survivorship

What approaches are used?

- CBT, Acceptance and commitment therapy (ACT), exercise, medication,

Distress

- Take note of burnout in clinicians - if caregivers are distress, patients find it harder to adjust, caregiver's QoL decreases, patient is more likely to have poor treatment outcomes

What are some ways clinicians in this field can look after themselves?

- vary workload; set boundaries; collaborate with treating physicians; manage expectations

How surgery impacts people psychologically

- threat to personal security and control; distress from separation; anxiety regarding death

9. Psycho-oncology (cont)

Common psychosocial challenges

- (1) loss of personal security and control (2) poor physical health, fatigue, disfigurement (3) cognitive impact (4) strained relationships, differences in coping styles (5) spirituality and existential issues (6) changes in world view

Greater risk of distress if

- pre-existing mental illness, homelessness or financial stress; bad prognosis at time of diagnosis; poor overall quality of health through treatment

INTERPERSONAL THEORIES

Social cognitive theory
BANDURA

Health behavioural change is the result of reciprocal relationships among the environment, personal factors and attributes of the behaviour itself.

(1) Self efficacy is the confidence in one's abilities to take action and overcome barriers

(2) Reciprocal determinism = dynamic interaction of person, behaviour and environment in promoting behavioural change

(3) behavioural capability = knowledge and skill to perform a given behaviour

INTERPERSONAL THEORIES (cont)

(4) expectations = anticipated outcomes of a behaviour

(5) observational learning = imitating

4. Obesity prevention

How do we measure obesity?

- Definition not a judgement. BMI = kg/m^2 > 29.9

Trends in obesity

- Greater prevalence of obesity, especially in regional Australia

Problems associated with obesity

- (1) sleep apnea (2) cardiovascular disease (3) Type 2 diabetes (4) renal dysfunction (5) cognitive impairment and depression (6) cancer (7) non-alcoholic fatty liver disease (8) osteoarthritis (9) discrimination (10) academic performance due to absences

What are some contributing factors to obesity?

- multi-factorial (1) international development, advertising (2) national urbanization, education, transport, media, F&N (3) community / individual lifestyle

4. Obesity prevention (cont)

Lifestyle factors contributing to obesity

> (1) low-cost, high calorie foods (2) larger portion sizes (3) greater purchasing power (4) misleading nutritional labels (5) health marketing (6) sedentary work (7) smoking cessation (8) reward eating / feeding (9) perceived consequences

Obesogenic environment

> (1) advertising (2) infrastructure - indoors, easily accessible (3) technology = labour saving devices

Biological factors contributing to obesity

> (1) leptin deficiency (2) genetics (3) maternal obesity and gestational imprinting (4) underactive thyroid (5) post menopause and increasing age

Why is childhood obesity a concern?

> childhood obesity often leads to adult obesity

Good for Kids, Good for Life programme targeted behaviours

> (1) sweet drink consumption (2) less energy dense food, more fruits and veg (3) more physical activity (4) less small screen recreation

4. Obesity prevention (cont)

Good for Kids, Good for Life programme key characteristics

> empirical, whole of population, sustainable

Good for Kids, Good for Life programme trials

> (1) canteen picnic (2) physical activity scheduling (3) good sports junior trial

process-settings based change

> (1) review current practice (2) identify barriers and facilitators (3) develop a context-specific intervention (4) Identify appropriate implementation strategies > repeat

theoretical domains framework:

- Knowledge –
- Skills
- Social/professional role and identity
- Beliefs about capabilities
- Optimism
- Beliefs about consequences
- Reinforcement
- Intentions
- Goals
- Memory, attention and decision processes
- Environmental context and resources
- Social influences
- Emotion
- Behavioural regulation

6: Smoking Cessation

Smoking related morbidity and mortality

> 21,000 people die each year due to smoking related disease, generates high health care costs > tobacco smoking is the leading preventable cause of morbidity and premature mortality

At risk groups

> substance abusers, juvenile delinquents, homeless people, people with psychosis,ATSI,

Why is quitting harder for some?

> addiction : physically and psychologically dependance on the substance.

Two main approaches

> (1) Public health / legislative (2) Clinical

Public health and legislative approaches

> (1) smoke free policies (2) tobacco tax (3) advertising (4) providing quitline services (5) advertising

Clinical prevention

> (1) professional advice, CBT (2) Nicotine Replacement Therapies (3) Varenicline (4) anti-depressants

6: Smoking Cessation (cont)

(Clinical) Behavioural therapies

> self-management therapies, motivational interviewing, reduction vs cold turkey, relapse prevention strategies

What works best?

> (1) combine interventions - let the smoker decide (2) be consistent (3) better funding (4) longer interventions

8: Alcohol Related Harm

How does alcohol cause harm?

> (1) intoxication: acute harm through CNS impairment (2) toxicity: chronic harm due to LT consumption (3) addiction: chronic harm through neuro--adaptation of the brain's reward mechanism

Alcohol is

> carcinogenic (esophageal, liver and breast cancers), teratogenic (fetal malformation), hepatotoxic (liver cirhosis) and poison

Acute vs chronic harm

> increased quantity of alcohol consumed = increased risk of alcohol related harm over the short term (acute) and long term (chronic)

Australian guidelines

> <2 standard drinks / day; <4 standard drinks / single occassion; 0 drinks for youths <18 and pregnant women

8: Alcohol Related Harm (cont)

Approaches to prevention (Barbor, 2010)

> (1) taxation and pricing (2) supply regulation (3) modifying the drinking environment (4) drink driving counter-measures (5) education and persuasion (6) treatment and early intervention

Most effective

> alcohol taxes, ban on sales, blood alcohol concentration testing, early intervention

Least effective

> education campaigns, social marketing, warning labels

Underpinnings of the current national policy approach

> (1) demand reduction: delay onset (2) supply reduction: regulate availability of alcohol (3) harm reduction: social, economic and health consequences to individual / others

1 standard drink = 10g of alcohol

COMMUNITY THEORIES

Diffusion of Innovations Theory
Rogers

Important to consider program reach, adoption, implementation and maintenance – innovative programs are worthless unless disseminated widely

COMMUNITY THEORIES (cont)

Addresses how ideas, products, and social practices that are perceived as 'new' spread throughout a society or community (or from one to another)

By considering the benefits of an innovation, it can be positioned effectively, thereby maximising its appeal and affecting the speed and extent of its diffusion

Key attributes affecting speed and extent of an innovation's diffusion

(1) relative advantage = is the innovation better than what it will replace?

(2) compatibility = does the innovation fit with the intended audience?

(3) complexity = is the innovation easy to use

(4) trialability = can the innovation be tried before making a decision to adopt?

(5) observability = are the results easily observable and measurable?