Chapter 8

Chronic and Life-Threatening Illnesses

Cancer

- Involves **uncontrolled growth of abnormal cells**, which often form a tumour
  - Metastasized when abnormal cells spread from original site to other parts of the body
- Many forms, with different symptoms
  - Most common types are lung, breast, prostate, and colorectal
- Lifetime probability: 40% (M), 36% (F)
- For more information, www.cancer.ca

Psychological Responses to Cancer

- Cancer diagnosis often brings psychological responses and emotional distress
- Responses influenced by symptoms that are:
  - Constant; may produce discouragement and fear
  - Unpredictable and erratic; may cause anger and frustration
  - Relentlessly progressive; may produce feelings of exhaustion and being overwhelmed

Suffering among Cancer Patients

Suffering may occur in three areas:

1. **Physical** (accounts for ~60%)
   - Fatigue, pain, side effects of treatment
   - Types: illness-caused and treatment-caused
2. **Psychological** (accounts for ~44%)
   - Depression and fear
3. **Social** (accounts for ~13%)
   - Primary problem is withdrawal

Cancer & Physical Distress

- Pain management is a major challenge
  - More than 90% of pain can be controlled by current treatment, but tends to be underused
- Patients' attitudes and behaviour a major influence
  - Fear drug tolerance or addiction, so hesitant to seek treatment
  - Believe pain must be tolerated, so hesitant to report pain

Cancer & Psychological Distress

- Negative consequences of depression
  - Poorer quality of life, reduced compliance, longer hospital stays, higher mortality rates, greater reported pain
- Linked to intrusive memories: unwanted thoughts related to memories of cancer
  - Results in poorer coping due to anxiety, sense of hopelessness, helplessness

Cancer & Coping Style

- Psychological response influenced by coping style
  - **Emotion-focused coping**: focus on reducing the emotional impact of disease, typically through avoidance
  - **Problem-focused coping**: focus on addressing stressors, typically through action (e.g., compliance, increasing knowledge)

Treatment of Cancer

- Typically treatment involves one or a combination of the following:
  - **Surgery**: to remove tumour(s)
  - **Radiation Therapy**: to shrink tumour(s)
  - **Chemotherapy**: to treat metastasized cancer or prevent it from spreading
  - **Hormone Therapy**: to reduce presence to tumour-stimulating hormones

Treatment of Cancer: Responses

- **Radical surgery**: requires removal of considerable amount of normal tissue
  - Can impact appearance and autonomy
  - E.g., radical breast mastectomy
- **Side effects** of chemotherapy and radiation therapy due to harm to healthy cells
  - Fatigue, nausea, vomiting, hair loss, pain, increased risk of infection
  - Anticipatory nausea: onset prior to treatment as a result of conditioning

Conditioned Taste Aversion (CTA) and Cancer

- With cancer comes many unpleasantries.
- One of them is CTA.

What is CTA

- Like other conditioning paradigms it is the pairing of an unconditional (UCS) and a conditional stimulus (CS).
  - In fact this is classical conditioning.
- A UCS is a stimulus that elicits a reliable unconditional response (UCR) because it has a physiological action.
- A CS elicits a conditional response (CR) when it is paired with a UCS.

CTA cont'd

- How does it work?
- Example:
  - A young boy names Robert wanted some ice cream. His mother thought that she would expand Robert's repertoire of flavors and gave him Pistachio flavored ice cream.
  - That evening Robert complained of nausea. Minutes later he began to vomit.
  - It was later discovered that the flu was making its way through the neighbourhood and in fact Robert had been infected with the virus.

CTA cont'd

- Robert completely recovered within one week and was eating normally.
- Some weeks after his recovery, Robert was once again offered Pistachio ice cream.
- Even though he loved it the first time, he quickly rejected it and claimed that the taste made him feel funny in the tummy.

CTA cont'd

- What happened to Robert?
  - He first had a **novel taste meal** followed by an emetic (vomit) response to the flu virus.
  - It did not matter that the ice cream was not responsible for the emetic response.

Some properties of the emetic response.

- CTA works better when a novel taste is involved.
  - This is because is the person has less experience with the CS prior to the CS/illness pairing.
- The conditioning can be reversed if the CS is administered and emesis does not occur.

How does CTA Factor in with Cancer.

- Many chemotherapy drugs are associated with nausea.
- Consequently, patients on occasion will have some new type of food prior to treatment.
- When this happens, the patient can become nauseous just after having injected this new food.
  - When presented with the food at some later date, the patient will refuse it. This can last years.

Social Support

- Includes companionship, practical help (e.g., drive to medical appointment)
- **Help-intended communication**: attempts to alleviate emotional distress
- **Support groups**: members can provide empathy, knowledge from shared experiences
- Survivors may report **posttraumatic growth**: positive outcomes attributed to benefit finding

Psychotropic Medications & Psychotherapy

- Antidepressants: possible interactions with other cancer-related treatment(s)
- Psychotherapy: can be used to help patient adopt a problem-focused approach to coping with cancer
  - Has been found useful as a method of pain management
  - Helpful for family caregivers who also experience emotional and physical distress

Diabetes

- Affects over 1.1 million Canadians
- Pancreas produces **too little insulin**
  - Type I ("insulin dependent"): little to no insulin produced; ~10% of cases
  - Type II: insulin insufficiently produced or used, ~90% of cases
  - Gestational Diabetes: Temporary condition, affects 2% to 4% of pregnant women
- Treatment may include insulin injections, controlled diet, blood sugar monitoring

Diabetes & Psychological Distress

- Fear and depression most prevalent psychological problems
- Fears may relate to
  - possible long-term consequences of disease (amputation, blindness, stroke)
  - self-testing and self-injection
- May lead to decreased self-efficacy, affecting disease management

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Diabetes & Psychological Distress

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- Depression twice as common among diabetics than non-diabetics
  - May cause difficulty in communicating about emotions and accepting help
- Depression and blood sugar linked bidirectionally
  - Low blood sugar worsens depression
  - Depression impacts on disease management

Coping with Diabetes

- Interrelated goals of diabetic education programs:
  - Ensure compliance with regimen
  - Treat psychological distress
- Support for diabetics may include
  - Cognitive behaviour therapy (CBT)
  - Education and support groups
  - Support from social network (family, friends)

Cardiovascular Diseases

- One in every 3 deaths in Canada has cardiovascular disease as the underlying cause.

- Health psychologists focus on:
  - Myocardial infarction (heart attack)
  - Coronary artery bypass graft (bypass surgery)
  - Angioplasty (surgery to open a blocked artery)

Cardiovascular Disease & Psychological Distress

- Anxiety and fear of future attacks
- Leads to cardiac invalidism: limit activity more than is necessary
  - Negatively impacts quality of life
  - Unhealthy sedentary lifestyle
- Depression extremely common
  - Increases risk for future cardiac problems and death
  - Worse for women and people over 65

Coping with Cardiovascular Disease

- Support from social network
- Rehabilitation programs
  - Holistic: addressing all aspects of life, from diet and exercise to mental health
- Psychotherapy
  - Cognitive reappraisal and restructuring to promote healthy anger management
- Antidepressants sometimes used

HIV and AIDS

- **Human immunodeficiency virus** (HIV)
  - Gradually breaks down immune system
  - Prolonged HIV infection results in **acquired immune deficiency syndrome** (AIDS)
- Certain populations at greater risk
  - Men who have sex with men
  - Injection drug users
  - People receiving blood and blood products
  - Aboriginal persons

Psychological Distress & HIV/AIDS

- Important differences from other illnesses: no cure, attached social stigma, myths about infectivity
- Unique psychological challenges that negatively impact self-esteem and quality of life
  - Personal responsibility or guilt about illness
  - Rejection and alienation by others
  - Anxiety about uncertain future

Coping with HIV/AIDS

- Unique challenges in coping
  - Social support often lacking due to stigma and alienation
  - Antidepressants may worsen HIV/AIDS symptoms
- Medications available to prolong life
  - Antiretrovirals and protease inhibitors
- Group therapy found to be effective

Quality of Life

- Impact of symptoms and treatment on physical, social, cognitive and emotional functioning
  - Treatments that alleviate medical symptoms may negatively impact other areas of life
- Tradeoff between duration and quality of life must be recognized
- A subjective phenomenon, so patient must be involved in all decision-making

Death and Dying

- A dying person may experience some or all of these symptoms:
  - Denial: refuse to acknowledge seriousness
  - Anger: feelings of unfairness, may be directed at various targets
  - Bargaining: trying to “buy more time”
  - Depression: feelings of hopelessness and helplessness
  - Acceptance: being at peace with one’s situation

Bereavement and Grief

- Friends and family must cope with bereavement
  - Grief: psychological response to bereavement
- Bereaved are a high-risk group
  - Higher suicide and death rates
  - Higher incidence of depression and substance abuse
  - More medical problems
- May attend grief therapy