



AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF REHABILITATION MEDICINE
BACHELOR OF SCIENCE IN PHYSIOTHERAPY

END OF TRIMESTER EXAMINATIONS SEPTEMBER TO DECEMBER 2025

UNIT CODE: PHT 218

UNIT NAME: Wellness and Health promotion

DATE: 4th DECEMBER 2025

TIME: 9-11 am

INSTRUCTIONS

- 1. All students will have two (2) hours to complete the examination**
- 2. This is an online exam, Attempt all questions as per the instruction**
- 3. It is the student's responsibility to report any page and number missing in this paper.**
- 4. Check that the paper is complete**
- 5. Total number of pages is 6 including the cover.**
- 6. Read through the paper quickly before you start.**

Section A. Multiple choice questions. Answer all the question (30 Marks)

1. The concept of "Health in All Policies" (HiAP) is central to health promotion. This means policy makers in non-health sectors (like city planning or finance) must be aware of the health consequences of their decisions. Which action below do not demonstrate a City planning department accepting its responsibility for health?
 - A. Requiring all new major residential developments to include direct access to green spaces and public transit stops.
 - B. Deciding on the location of a new major road purely based on minimizing traffic congestion, without consulting the Health ministry
 - C. Allocating a specific percentage of the annual infrastructure budget to pedestrian and cycling network improvements.
 - D. Issuing a public statement acknowledging that urban sprawl and car-centric infrastructure contribute to sedentary lifestyles.
2. A sedentary office worker, with no current health complaints, begins consistently using the stairs instead of the elevator, stating that her primary motivation is to get a brief, energy-boosting physical break, although she acknowledges the long-term cardiovascular benefits. Based on the provided definitions, how is this action most accurately classified?
 - A. Illness Behaviour
 - B. Health-related behavior
 - C. Health-directed behavior
 - D. Preventive Health Behaviour
3. A patient with a history of recurrent patellofemoral pain (PFP), who is currently asymptomatic and pain-free, diligently performs their prescribed quadriceps and hip strengthening exercises twice a week. Their stated reason is to maintain joint stability and prevent a future pain flare-up. In the context of the passage, this sustained, symptom-free activity is an example of which behavioral type?
 - A. Illness behaviour
 - B. Health-related behavior
 - C. Health-directed behavior
 - D. Preventive Health behavior
4. Based on the World Health Organization (WHO) definition, the foundational mechanism by which the health promotion process achieves the ultimate outcome of improved health is by primarily enabling individuals to increase control over:
 - A. Their socioeconomic status and physical activity levels.

- B. Their current medical conditions and access to specialist care.
 - C. Their health and its determinants.
 - D. The conditions in their workplace and place of worship.
5. The Health Belief Model (HBM) evolved to incorporate a predictive component to address a gap in the original framework. According to the passage, the inclusion of self-efficacy successfully predicts which specific outcome?
- A. A person's belief in the costs of performing the advised behavior.
 - B. One's execution of the advised behaviour.
 - C. An individual's belief regarding the likelihood of contracting a disease or getting a condition.
 - D. The consistency of the four primary dimensions in their predictions of health behaviours.
6. A patient is attempting to quit smoking as part of a pre-operative rehabilitation program. They state, "I know smoking is bad for my recovery, and I've read articles about how to quit. I spend a lot of time weighing the money I'd save against the stress of giving up nicotine, but I haven't set a start date." The patient's state of mind is most precisely characterized by which key feature of the Contemplation stage?
- A. The individual is intending to start the healthy behavior within the immediate 30 days
 - B. The individual is primarily focused on Perceived susceptibility and Perceived severity over other concerns.
 - C. The individual feels resolved and has overcome the ambivalence toward changing their behavior.
 - D. The individual is undergoing a thoughtful and practical consideration of the pros and cons of changing the behavior, with equal emphasis placed on both.
7. A physiotherapy patient has successfully maintained a prescribed exercise routine for 9 months and is actively working to prevent relapse, but reports that sustaining the change now feels harder than the initial 6 months. This patient is in the maintenance stage, which is identified as the hardest. Which specific strategy is cited as assisting an individual primarily in this stage?
- A. Reinforcement management, which involves providing rewards for staying consistent with the new behavior.
 - B. Achieving a state of having no desire to return to unhealthy behaviors, ensuring no chance of relapse.
 - C. Counter condition, which involves replacing the problem behavior with a more positive, new healthy behavior.

- D. Environment or Stimulus control, which modifies the surroundings to support the sustained behavior.
8. Which statement best explains the ultimate cause of widely different illness trajectories among patients with the same physical illness or injury, according to the passage?
- A. The pressure for a patient to find a definitive medical label or explanation for their symptoms.
 - B. The dual goal of the illness model to reduce both symptomatic danger and emotional distress.
 - C. Patients with similar diagnoses always exhibit different inherent personality traits which dictates their coping.
 - D. The constraint imposed by the rudimentary nature of patients' medical knowledge, which limits the accuracy and complexity of the cognitive models they build.
9. The fascinating aspect of illness perceptions is that patients with the same illness have widely different views is fundamentally rooted in the fact that their individual cognitive models are based on:
- A. The complexity and severity of their actual symptoms as confirmed by objective medical testing.
 - B. An innate, predetermined personality characteristic that influences their default coping style.
 - C. A reliance on exclusively scientific, published medical literature regarding their specific diagnosis and prognosis.
 - D. Their own existing medical knowledge combined with vicarious personal experiences from others, such as family members with similar conditions.
10. The Self-Regulatory Model (SRM) is conceptualized as a feedback loop. What critical aspect of long-term rehabilitation adherence and modification does this structure most strongly suggest for a physiotherapist?
- A. Treatment adherence is solely determined by the initial success of the "Coping response," making the first week of therapy the most crucial.
 - B. The patient's continuous Appraisal of their progress and symptoms will continuously modify their internal 'Representation of the Health threat' and, subsequently, influence future 'Coping responses'.
 - C. The Representation stage is a purely one-time, stable event that does not change after the initial assessment and diagnosis.
 - D. The model indicates that a physiotherapist should focus only on improving the physical execution of the 'Coping response' to maximize recovery.

11. A patient undergoing physiotherapy for chronic low back pain develops a new-onset headache, which they immediately attribute to their underlying spinal condition. This scenario is a classic example of which phenomenon related to the 'Representation of the Health Threat'?
- A. Symptom misattribution, where other commonly occurring symptoms are associated with the illness even if no relationship exists.
 - B. The patient's subjective understanding guiding the subsequent stages of coping and appraisal.
 - C. The cognitive and emotional process of receiving and interpreting information about the threat.
 - D. A fundamental discrepancy between the patient's and the medical staff's view of the illness label.
12. Which statement accurately describes the nuanced interrelation between control beliefs and timeline perceptions of an illness?
- A. Patients who perceive a high degree of control over their illness are more likely to shift their illness model from chronic to acute, irrespective of treatment efficacy.
 - B. Higher levels of personal control beliefs are generally associated with a more chronic timeline perception, as the patient believes management will be a long-term effort.
 - C. The belief that an illness is cyclical (e.g., hypertension) is a direct consequence of a patient's low personal control beliefs and chronic timeline perception.
 - D. Higher levels of control beliefs are generally associated with shorter timeline perceptions of the illness.
13. Which statement best reflects the relationship between the patient's perception of consequences and the objective clinical markers of disease severity?
- A. The patient's view of consequences is a reliable and direct indicator of the objective clinical markers, as severity perceptions must be clinically verifiable.
 - B. Consequences primarily relate to lifestyle and finances, which are secondary factors and always bear a direct relationship to the objective severity.
 - C. The patient's view of the consequences reflects the subjectively perceived severity and may have little correlation with the objective clinical markers of the disease.
 - D. Objective clinical markers are what determine the effects on work, family, and lifestyle, which collectively form the consequence beliefs.
14. According to the provided model of illness representation (the table), which one of the following is NOT a core component of how an individual understands their health threat or illness?

- A. Timeline
 - B. Consequences
 - C. Physiological Mechanism
 - D. Control/Cure
15. The dynamic nature of illness perception is highlighted by a process that leads to changes in a patient's cognitive representations over time. Which initial action, as described in the final sentence of the passage, *directly* drives this modification of the long-term illness representation?
- A. Assimilation of lay information from the social environment
 - B. The patient assigning a fixed meaning to the disease
 - C. Individuals assessing the effects of the illness on themselves over time
 - D. The initial cognitive appraisal and personal understanding of the medical condition.
16. A patient with chronic obstructive pulmonary disease (COPD) begins actively participating in a pulmonary rehabilitation program and meticulously researches breathing techniques and home modifications to improve daily function. This action best exemplifies which of the five general types of coping strategies?
- A. Emotion-focused coping, as the patient is managing the anxiety of breathlessness.
 - B. Meaning making, as the patient is assigning a positive value to their struggle with COPD.
 - C. Religious coping, due to the structured and ritualistic nature of the rehabilitation program.
 - D. Problem-focused coping, as the patient is initiating cognitive and behavioral changes to directly manage the environmental/physical demands of the disease
17. Considering the entire framework of illness perception and coping described, what is the most immediate and likely cognitive event to follow the activation of a well-learned illness schema (e.g., a patient suddenly realizing their chronic knee pain is flaring up)?
- A. A complete shift in the patient's cognitive representation of the disease to a more threatening perception.
 - B. The process of assessing the illness effects on themselves over time, which precedes any behavioral response.

- C. Well-learned coping responses, previously used for that specific illness and appraised as effective, will be brought to mind.
- D. The patient begins the cognitive and behavioral changes associated with developing a new coping strategy.
18. Which of the following is NOT generally considered one of the five main conceptualizations of coping strategies?
- A. Problem-focused coping
 - B. Emotion-focused coping
 - C. Avoidance-based coping
 - D. Social support
19. In the context of a physiotherapy patient managing chronic musculoskeletal pain, which statement is most indicative of the maladaptive meaning-making strategy described as being associated with 'poorer outcomes'?
- A. I am going to use my experience with this condition to help others in my support group.
 - B. My injury has shown me I can overcome anything, and I'm stronger now.
 - C. This pain is a test of my faith, and I must accept it as part of a divine plan.
 - D. Why did this happen to me when I have always maintained a healthy lifestyle?
20. A patient successfully applies a new pain coping strategy learned in physiotherapy, resulting in reduced symptoms and emotional distress. According to the appraisal model, what is the primary long-term outcome of this Positive Appraisal?
- A. The individual's confidence increases, and they temporarily maintain the action for the current symptom flare-up.
 - B. The individual experiences reduced emotional distress, leading to a permanent change in their core illness belief.
 - C. The individual's confidence increases, and they incorporate that successful action into their future health management schema.
 - D. The individual must re-interpret their illness, restarting the entire cycle from the beginning.
21. A physical symptom is defined as:
- A. A direct and always accurate reflection of a change in somatic condition.
 - B. A sensation, feeling, or observation detected by the body's sensory receptors.
 - C. A perception, feeling, or even belief about the state of one's body.
 - D. A subjective interpretation of physical sensations as signs of illness.

22. In the Key stages of symptom perception, the first stage, "Noticing a Change," is fundamentally defined as:
- A. Assigning a potential cause or medical label to the new bodily feeling.
 - B. Paying attention to any unusual or new bodily sensations.
 - C. Ignoring minor fluctuations in comfort to avoid unnecessary worry.
 - D. Paying close attention to all unusual or different feelings in the body.
23. For a patient with chronic pain, what is the unintended negative consequence of recommending a long period of stay in a typically non-stimulating environment at home, according to the competition for cues theory?
- A. The lack of stimulating external input removes the competition, causing an increased internal focus and attention to their condition.
 - B. The less stimulating environment leads to an increase in expectation and negative social modelling of pain behavior.
 - C. Boring and non-stimulating environments increase stress hormones, directly leading to greater symptom amplification.
 - D. Less stimulating environments decrease cognitive load, leading to reduced energy levels and increased attention to their condition.
24. The existence of a strong belief that symptoms will occur directly impacts which of the following patient outcomes?
- A. It changes the location of the reported physical sensations.
 - B. It solely increases the subjective pain rating of a symptom.
 - C. It influences the reporting of physical sensations.
 - D. It influences the interpretation of innocuous physical sensations.
25. What is the specific mechanism by which media coverage acts as a significant driving force in the spread and development of Mass Psychogenic Illness (MPI) symptoms?
- A. It increases awareness of symptoms and concerns about the stimulus, which subsequently directs the individual's attention internally.
 - B. It increases awareness of symptoms and concerns about the stimulus, which subsequently directs the individual's attention externally towards the environment.
 - C. It creates an organic environmental trigger that directly causes the immediate onset of symptoms.
 - D. It is the direct cause of the illness and prevents the symptoms from intensifying or escalating.
26. A patient is hesitant to disclose to their physiotherapist that they are experiencing significant anxiety, worrying that they will be seen as overly sensitive or fragile rather than medically ill. This fear is a manifestation of which barrier?
- A. Knowledge and awareness

- B. Attitudes and beliefs
 - C. Cultural factors
 - D. Accessibility and affordability
27. Which of the following strategies is specifically intended to normalize mental health concerns and encourage individuals to seek help without fear of judgment, utilizing public education campaigns and anti-stigma initiatives?
- A. Expanding telehealth options
 - B. Reducing stigma
 - C. Community outreach programs
 - D. Normalizing mental health
28. Psychoneuroimmunology (PNI) is defined by the interactions between the Central Nervous System (CNS), the immune system, and which other critical system?
- A. The Peripheral Nervous System (PNS)
 - B. The Endocrine System
 - C. The Exocrine System
 - D. The Somatic Nervous System (SNS)
29. Employment provides income, structure, and a sense of identity, and its loss through unemployment is associated with poorer health outcomes. Which pair of consequences are specifically described as outcomes of unemployment leading to a decline in health?
- A. Material and social deprivation
 - B. Unsafe working environments
 - C. Psychological stress and a compromised sense of identity
 - D. Health-threatening coping behaviours
30. Which of the following two adverse health outcomes are associated with individuals who have lower levels of education?
- A. Increased incidence of chronic non-communicable diseases and higher rates of childhood obesity.
 - B. Reduced life expectancy and higher rates of infant mortality.
 - C. A shorter average lifespan and increased prevalence of obstetric complications.
 - D. Higher rates of non-compliance with medical advice and poor management of co-morbidities.

Section B; Short structured question (20 Marks)

31. List five key categories that constitute the Social Determinants of Health (5 Marks).
32. Explain the key differences between the concepts of equity and equality, providing an illustrative example (5 Marks).
33. Discuss the key conflicts or 'injury' that occurs during Erikson's Identity vs. Role Confusion stage during the developmental stage of a young teenager? (5 Marks)

34. Explain the ultimate purpose of applying intersectionality in healthcare intervention design (5 Marks)

Section C. Long structured question. Attempt any of the two. (20 Marks)

35. Discuss the five theoretical models for behavioral change (20 marks)
36. Mr. Elias is a 55-year-old self-employed carpenter referred to your physiotherapy clinic for chronic low back pain (CLBP) of 18 months duration. He reports constant, dull aching pain (Numeric Rating Scale: 5/10) with frequent, sharp flare-ups (8/10).

During your subjective assessment, he makes the following statements:

- "My back pain is here to stay. My father had a bad back, and now I do. It's genetic and there's nothing that can be done."
- "I tried to lift a bag of cement last week and had a huge flare-up. Now I barely move and avoid anything that involves bending or twisting to protect my spine."
- "My business is failing because I can't work a full day. The pain makes me angry, and I worry constantly that one wrong move will put me in a wheelchair."
- "The pain always gets worse when I'm stressed about money, but then I worry about money because of the pain, so it's a vicious circle."
- "I mostly just take over-the-counter painkillers and wait for the flare-ups to pass. Nothing else seems to help."

Using Leventhal's Self-Regulatory Model of Illness (SRM), critically analyze Mr. Elias's case and formulate an evidence-based physiotherapy intervention plan.

- a) Analysis of Illness Representations (10 Marks)
- b) Develop a brief management plan for Mr. Elias (10 Marks)