Name of Unit	**Health Psychology and Behavioural Interventions**
Subject Name	**Healthcare Psychology and Communication Skill**
Course/Subject Code	BP-103T
Class: B. Pharm. Semester	1ST SEM\ 1st YEAR
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Learning Outcome of Module 05

Upon successful completion of this course, the students will be able to:

No.	**CO**
BP103.1	Explain health psychology concepts and their role in patient behaviour and healthcare outcomes.
BP103.2	Analyze the influence of psychological and behavioural factors on physical and mental health.
BP103.3	Apply behavioural intervention strategies to enhance medication adherence and health promotion.
BP103.4	Demonstrate effective psychological first aid and crisis communication in healthcare settings.
BP103.5	Develop communication strategies to promote mental health and reduce stigma in patient care.

LO	**Particular**	**Course Outcome Code**
LO 1	Explain the principles of health psychology and illness behaviour influencing patient health decisions..	**BP103**.1
LO 2	Describe the impact of psychological factors on physical health and psychosomatic illnesses.	**BP103**.2
LO 3	Apply behaviour change theories to improve treatment adherence and healthy lifestyles.	**BP103**.3
LO 4	Demonstrate Psychological First Aid (PFA) and effective crisis communication skills.	**BP103**.4
LO 5	Promote mental health awareness and reduce stigma through patient-centered communication.	**BP103**.5

Content Table

Topic
• **Health Belief Models and Illness Behaviour** • **Psychosomatic Illnesses and the Mind-Body Connection** • **Behaviour Change Theories in Treatment Adherence** • **Psychological First Aid (PFA) and Crisis Communication** • **Mental Health Promotion and Stigma Reduction**

Health Psychology and Behavioural Interventions

1. Health Belief Models and Illness Behaviour

Understanding why patients choose to engage (or not engage) in health-promoting behaviors is essential for designing effective interventions.

The Health Belief Model (HBM)

The HBM predicts health behaviors by focusing on a patient's attitudes and beliefs. It consists of six primary constructs:

- Perceived Susceptibility: The patient's subjective assessment of their risk of developing a health condition (e.g., "Am I at risk for diabetes?").
- Perceived Severity: The patient's feelings regarding the clinical or social seriousness of leaving the condition untreated (e.g., "How bad would it be if I lost my sight to diabetes?").
- Perceived Benefits: The patient's belief in the efficacy of the advised action to reduce the risk or seriousness of the impact (e.g., "Will exercising actually lower my blood sugar?").
- Perceived Barriers: The patient's assessment of the negative aspects or obstacles of the health action (e.g., cost of medication, side effects, lack of time).
- Cues to Action: Internal or external triggers that prompt the behavior (e.g., a doctor's recommendation, a family member falling ill, a reminder app).
- Self-Efficacy: The patient's level of confidence in their own ability to successfully perform the health behavior.

Illness Behaviour

Illness behavior refers to the way individuals perceive, evaluate, and act upon their bodily symptoms (Mechanic, 1962).

It encompasses the decision to ignore symptoms, self-medicate, or seek formal clinical care.

The Sick Role (Parsons): When a patient is formally recognized as ill, society grants them exemptions from normal duties (e.g., work, school). In return, the patient is obligated to view the illness as undesirable and actively cooperate with healthcare professionals to get well.

2. Psychosomatic Illnesses and the Mind-Body Connection

Psychosomatic medicine explores how psychological factors (stress, trauma, anxiety) directly manifest as, or exacerbate, physical, organic diseases.

The Biological Pathway: Chronic psychological stress triggers the Hypothalamic-Pituitary-Adrenal (HPA) axis and the sympathetic nervous system. This causes a prolonged release of cortisol and adrenaline, leading to systemic inflammation, suppressed immune function, and elevated blood pressure.

Common Psychosomatic Manifestations:

- **Cardiovascular System:** Stress-induced hypertension, coronary artery disease, and palpitations.
- **Gastrointestinal System:** Irritable Bowel Syndrome (IBS), peptic ulcers, and stress-induced dyspepsia.
- **Dermatological System:** Stress-triggered flares of eczema, psoriasis, or hives.
- **Clinical Implications:** Treating only the physical symptoms without addressing the underlying psychological stressors leads to poor long-term outcomes and chronic relapses.

3. Behaviour Change Theories in Treatment Adherence

Promoting strict medication adherence and lifestyle shifts requires structured behavioral interventions.

Cognitive Behavioural Therapy (CBT)

CBT aims to identify and modify cognitive distortions (irrational thoughts) and maladaptive behaviors that negatively impact health.

Application in Adherence: If a patient thinks, "Missing one dose doesn't matter, I feel fine today" (maladaptive thought), CBT helps reframe it to, "Taking this medication daily keeps my organs safe even if I don't feel symptoms" (adaptive thought).

Techniques: Behavioral activation, cognitive restructuring, self-monitoring (keeping diaries), and systematic desensitization (for needle/medical phobias).

The Transtheoretical Model (TTM) / Stages of Change

This model posits that behavioral change is a non-linear process that occurs across five distinct stages:

- **Precontemplation:** The patient has no intention of changing their behavior in the foreseeable future (often unaware of the problem).
- **Contemplation:** The patient is aware that a problem exists and is seriously thinking about overcoming it, but has not yet made a commitment to act (weighing pros vs. cons).
- **Preparation:** The patient intends to take action in the immediate future and starts making small behavioral steps (e.g., buying a pill organizer, researching a gym).
- **Action:** The patient actively modifies their behavior, experiences, or environment to overcome their problem (e.g., consistently taking medications, quitting smoking).
- **Maintenance:** The patient works to sustain the behavioral change and prevent relapse.

4. Psychological First Aid (PFA) and Crisis Communication

Healthcare professionals are often on the front lines during medical emergencies, natural disasters, or traumatic incidents.

Psychological First Aid (PFA)

PFA is an evidence-informed modular approach designed to reduce the initial distress caused by traumatic events and to foster short- and long-term adaptive functioning.

Core Principles (The "Look, Listen, Link" Action Principles):

- **Look:** Check for safety, urgent basic needs, and individuals experiencing severe distress reactions.
- **Listen:** Approach people who may need support, ask about their needs/concerns, and listen actively to help them feel calm.
- **Link:** Help people address basic needs, access information, connect with loved ones, and access formal medical/psychological services.

Note: PFA is not professional psychiatric counseling or detailed therapy; it is immediate, practical, compassionate care.

Crisis Communication

During clinical crises (e.g., a severe medical error, sudden patient death, or infectious outbreak), communication must be structured carefully:

- **Be Clear and Transparent:** Provide factual, verified information without medical jargon.
- **Express Genuine Empathy:** Acknowledge distress and pain immediately.
- **Provide Actionable Steps:** Give clear instructions on what needs to be done next to minimize chaos

and panic.

5. Mental Health Promotion and Stigma Reduction

Pharmacists and healthcare workers play an active role in breaking down societal biases surrounding psychiatric care.

Stigma Types in Healthcare

- **Public Stigma:** Reaction of the general public towards individuals with mental illness (leads to discrimination, stereotyping, and social isolation).
- **Self-Stigma (Internalized Stigma):** When a patient internalizes public stereotypes, leading to low self-esteem, shame, and a refusal to seek medical help.
- **Institutional Stigma:** Systemic barriers, such as lower funding for mental healthcare or biased treatment protocols in medical facilities.

Stigma Reduction Strategies through Communication

- **Person-First Language:** Always separate the individual from their diagnosis. Say "A person living with schizophrenia" rather than "A schizophrenic."
- **Normalizing Mental Health:** Treat psychiatric conditions with the same clinical gravity and neutrality as physical illnesses (e.g., comparing depression to diabetes—both are biochemical imbalances requiring therapy).
- **Patient Education**: Demystifying psychotropic medications (antidepressants, anxiolytics) by explaining their mechanisms clearly to patients, lowering their anxiety regarding dependency or judgment

Section A: MCQ Based questions

1. The Health Belief Model (HBM) mainly predicts:

A. Drug interactions
B. Health behaviors based on beliefs and attitudes
C. Disease diagnosis
D. Genetic disorders

Answer: B

2. Which HBM construct refers to a person's belief about their risk of disease?

A. Perceived Benefits
B. Perceived Severity
C. Perceived Susceptibility
D. Self-efficacy

Answer: C

3. "How serious would diabetes complications be?" represents:

A. Perceived Benefits
B. Perceived Severity
C. Cue to Action
D. Self-efficacy

Answer: B

4. Believing that exercise lowers blood sugar is an example of:

A. Perceived Benefits
B. Perceived Barriers
C. Perceived Susceptibility
D. Illness Behavior

Answer: A

5. Cost of medication is an example of:

A. Cue to Action
B. Self-efficacy
C. Perceived Barrier
D. Perceived Severity

Answer: C

6. A doctor's recommendation to quit smoking is a:

A. Perceived Barrier
B. Cue to Action
C. Illness Behavior
D. Self-stigma

Answer: B

7. Confidence in one's ability to exercise regularly is:

A. Self-efficacy
B. Severity
C. Susceptibility
D. Public stigma

Answer: A

8. Illness behavior refers to:

A. Laboratory diagnosis
B. Drug metabolism
C. How people perceive and respond to symptoms
D. Immune response

Answer: C

9. Who introduced the concept of illness behavior?

A. Parsons
B. Freud

C. Mechanic
D. Bandura

Answer: C

10. According to Parsons' Sick Role, patients should:

A. Ignore treatment
B. Cooperate with healthcare professionals
C. Continue all normal duties
D. Avoid hospitals

Answer: B

11. Society grants exemptions from normal duties under:

A. CBT
B. Sick Role
C. PFA
D. HBM

Answer: B

12. Psychosomatic medicine studies:

A. Drug interactions
B. Mind-body relationship
C. Genetics
D. Nutrition only

Answer: B

13. Chronic stress activates the:

A. Renin-Angiotensin System
B. HPA Axis
C. Digestive System
D. Lymphatic System

Answer: B

14. The major stress hormone released by the HPA axis is:

A. Insulin
B. Cortisol
C. Thyroxine
D. Estrogen

Answer: B

15. Which hormone is released during sympathetic activation?

A. Adrenaline
B. Glucagon
C. Melatonin
D. Growth Hormone

Answer: A

16. Chronic stress can suppress:

A. Digestion only
B. Immune function
C. Vision only
D. Bone growth only

Answer: B

17. Which is a cardiovascular psychosomatic disorder?

A. Asthma
B. Hypertension
C. Arthritis
D. Cataract

Answer: B

18. Irritable Bowel Syndrome (IBS) is associated with:

A. Liver disease
B. Psychosomatic illness
C. Kidney stones
D. Tuberculosis

Answer: B

19. Stress commonly worsens:

A. Psoriasis
B. Myopia
C. Fractures
D. Appendicitis

Answer: A

20. Treating only physical symptoms without managing stress often results in:

A. Permanent cure
B. Chronic relapse
C. Faster recovery
D. No change

Answer: B

21. CBT stands for:

A. Clinical Behavioral Therapy
B. Cognitive Behavioural Therapy
C. Cognitive Biological Treatment
D. Community Behavioral Therapy

Answer: B

22. CBT primarily focuses on:

A. Surgery
B. Changing irrational thoughts and behaviors
C. Blood tests
D. Drug synthesis

Answer: B

23. Which CBT technique involves identifying irrational thoughts?

A. Cognitive restructuring
B. Vaccination
C. Sedation
D. Isolation

Answer: A

24. Keeping health diaries is called:

A. Self-monitoring
B. Counseling
C. Observation
D. Motivation

Answer: A

25. Systematic desensitization is useful for:

A. Needle phobia
B. Diabetes
C. Hypertension
D. Arthritis

Answer: A

26. The Transtheoretical Model is also called:

A. Health Belief Model
B. Stages of Change Model
C. Social Learning Theory
D. Health Promotion Model

Answer: B

27. In which stage has the patient no intention to change?

A. Preparation
B. Action
C. Precontemplation
D. Maintenance

Answer: C

28. Thinking about change but not acting is:

A. Action
B. Contemplation
C. Maintenance
D. Preparation

Answer: B

29. Buying a pill organizer represents:

A. Preparation
B. Action
C. Maintenance
D. Precontemplation

Answer: A

30. Regularly taking medicines as prescribed is:

A. Contemplation
B. Action
C. Maintenance
D. Susceptibility

Answer: B

31. Preventing relapse occurs during:

A. Maintenance
B. Preparation
C. Action
D. Precontemplation

Answer: A

32. Psychological First Aid (PFA) aims to:

A. Diagnose psychiatric illness
B. Reduce immediate distress after trauma
C. Replace psychotherapy
D. Prescribe medicines

Answer: B

33. The first principle of PFA is:

A. Listen
B. Link
C. Look
D. Learn

Answer: C

34. Which is NOT a core PFA principle?

A. Look
B. Listen
C. Link
D. Diagnose

Answer: D

35. In PFA, "Listen" means:

A. Ignore emotions
B. Actively hear concerns
C. Diagnose disease
D. Prescribe medicines

Answer: B

36. Linking patients to healthcare services belongs to:

A. Look
B. Listen
C. Link
D. Diagnose

Answer: C

37. PFA is:

A. Long-term psychotherapy
B. Immediate compassionate support
C. Surgery
D. Drug therapy

Answer: B

38. Crisis communication should be:

A. Confusing
B. Secretive
C. Clear and transparent
D. Emotional only

Answer: C

39. During a crisis, healthcare workers should first:

A. Spread rumors
B. Express empathy
C. Ignore patients
D. Delay communication

Answer: B

40. Providing clear instructions after a crisis helps:

A. Increase panic
B. Minimize chaos
C. Delay treatment
D. Reduce staffing

Answer: B

41. Public stigma refers to:

A. Patient's own beliefs
B. Society's negative attitudes toward mental illness
C. Hospital funding
D. Genetic disease

Answer: B

42. Self-stigma results in:

A. Increased confidence
B. Higher self-esteem
C. Shame and avoidance of treatment
D. Better adherence

Answer: C

43. Institutional stigma refers to:

A. Personal beliefs
B. Systemic barriers in healthcare
C. Family support
D. Exercise habits

Answer: B

44. Which phrase demonstrates person-first language?

A. A schizophrenic
B. A mentally ill person
C. A person living with schizophrenia
D. Crazy patient

Answer: C

45. Person-first language helps:

A. Increase discrimination
B. Reduce stigma
C. Delay diagnosis
D. Increase costs

Answer: B

46. Comparing depression with diabetes aims to:

A. Increase fear
B. Normalize mental illness
C. Discourage treatment
D. Reduce medication use

Answer: B

47. Educating patients about antidepressants mainly:

A. Increases stigma
B. Reduces anxiety and misconceptions
C. Stops treatment
D. Causes dependency

Answer: B

48. Which HBM construct is most closely related to confidence?

A. Self-efficacy
B. Severity
C. Benefits
D. Barriers

Answer: A

49. Which model describes behavior change as a non-linear process?

A. Sick Role Model
B. Transtheoretical Model
C. HPA Model
D. Biomedical Model

Answer: B

50. Which combination correctly represents the core principles of Psychological First Aid?

A. Observe–Treat–Discharge
B. Look–Listen–Link
C. Assess–Operate–Review
D. Identify–Prescribe–Monitor

Answer: B

Section B: 2 marks questions

1. Define the Health Belief Model (HBM).
2. List the six constructs of the Health Belief Model.
3. What is perceived susceptibility?
4. Define perceived severity.
5. What are perceived benefits in HBM?
6. What are perceived barriers? Give one example.
7. What are cues to action?
8. Define self-efficacy.
9. Define illness behaviour.
10. Who introduced the concept of illness behaviour?
11. What is the Sick Role according to Parsons?
12. State any two obligations of a patient under the Sick Role.
13. Define psychosomatic illness.
14. What is the mind-body connection?
15. Expand HPA axis.
16. Name two stress hormones released during chronic stress.
17. Mention any two psychosomatic disorders affecting the cardiovascular system.
18. Name two gastrointestinal psychosomatic disorders.
19. Mention two skin disorders associated with stress.
20. State two effects of chronic stress on the body.

Section C: 5 marks questions

1. Explain the Health Belief Model (HBM) with its six constructs and suitable examples.
2. Define illness behaviour. Explain the concept of the Sick Role proposed by Parsons.
3. Describe psychosomatic illnesses and explain the biological pathway linking stress and physical disease through the HPA axis.
4. Discuss the effects of chronic psychological stress on the cardiovascular, gastrointestinal, and dermatological systems.
5. Explain Cognitive Behavioural Therapy (CBT). Describe its principles, techniques, and role in improving treatment adherence.
6. Describe the Transtheoretical Model (Stages of Change). Explain all five stages with suitable examples.
7. Explain the importance of behavioural change theories in promoting medication adherence and healthy lifestyle modifications.
8. Define Psychological First Aid (PFA). Explain its objectives and the "Look–Listen–Link" action principles.
9. Discuss the principles of effective crisis communication in healthcare settings with suitable examples.
10. Explain different types of mental health stigma (public stigma, self-stigma, and institutional stigma) and their impact on patient care.
11. Discuss the strategies used for mental health promotion and stigma reduction in healthcare practice.
12. Explain the role of pharmacists and other healthcare professionals in promoting mental health and reducing stigma.
13. Discuss the concept of the mind-body connection and explain how psychological factors contribute to psychosomatic disorders.
14. Explain the importance of self-efficacy, perceived benefits, perceived barriers, and cues to action in influencing health behaviour according to the Health Belief Model.

Section D: 10 marks questions

1. Explain the Health Belief Model (HBM) in detail. Discuss its six constructs with suitable examples and explain its applications in healthcare.
2. Define illness behaviour. Explain the concept of illness behaviour and discuss Parsons' Sick Role theory with its rights and obligations.
3. Describe psychosomatic illnesses. Explain the biological mechanisms (HPA axis and sympathetic nervous system) involved in the mind-body connection.
4. Discuss the effects of chronic psychological stress on different body systems. Explain psychosomatic disorders affecting the cardiovascular, gastrointestinal, and dermatological systems.
5. Explain Cognitive Behavioural Therapy (CBT) in detail. Discuss its principles, techniques, and role in improving treatment adherence.
6. Describe the Transtheoretical Model (Stages of Change). Explain all five stages with suitable examples and discuss its significance in behaviour modification.
7. Discuss the importance of behavioural change theories in promoting medication adherence and healthy lifestyle modifications.
8. Define Psychological First Aid (PFA). Explain its objectives, principles, and the 'Look–Listen–Link' approach with suitable examples.
9. Discuss the principles of effective crisis communication in healthcare. Explain the importance of empathy, transparency, and clear communication during emergencies.
10. Explain mental health promotion. Discuss various types of mental health stigma and strategies for stigma reduction in healthcare settings.
11. Discuss the role of pharmacists and other healthcare professionals in promoting mental health and reducing stigma through patient education and counselling.
12. Explain the concept of the mind-body connection. Discuss how stress, anxiety, and trauma contribute to psychosomatic disorders and their management.
13. Compare the Health Belief Model (HBM) and the Transtheoretical Model (TTM). Discuss their applications in changing health-related behaviours.
14. Explain the role of Cognitive Behavioural Therapy (CBT) and the Transtheoretical Model (TTM) in improving treatment adherence and patient outcomes.

Case Based Learning Question (10 Marks)

Mr. Sharma, a 52-year-old man with type 2 diabetes, has been prescribed metformin and advised to exercise regularly. He skips medication because he does not feel sick and believes diabetes is not serious. He also says he is too busy to exercise.

Questions

1. Explain the patient's behavior using the Health Belief Model (HBM).
2. Identify the barriers to treatment adherence.
3. Suggest appropriate pharmacist interventions.

Model Answer

1. Explain the patient's behavior using the Health Belief Model (HBM).

The patient's behavior can be explained using the six constructs of the **Health Belief Model (HBM):**

- **Perceived Susceptibility:** The patient has **low perceived susceptibility** because he does not believe he is at significant risk of developing diabetes-related complications.
- **Perceived Severity:** He has **low perceived severity**, as he believes diabetes is not a serious condition since he has no symptoms.
- **Perceived Benefits:** He has **low perceived benefits** because he doubts that taking medication and exercising will provide meaningful health improvements.
- **Perceived Barriers:** He perceives **lack of time** for exercise and may view daily medication as inconvenient.
- **Cues to Action:** He lacks effective reminders or motivation from healthcare professionals, family members, or reminder systems to encourage healthy behavior.
- **Self-Efficacy:** His **self-efficacy is low**, as he lacks confidence in his ability to maintain regular medication use and lifestyle changes.

2. Identify the barriers to treatment adherence.

- Belief that diabetes is not serious because there are no symptoms.

- Lack of awareness about long-term complications such as kidney disease, blindness, nerve damage, and heart disease.
- Busy work schedule leading to insufficient time for exercise.
- Low motivation to follow lifestyle modifications.
- Lack of reminders or family support.
- Low confidence in maintaining healthy habits over the long term.

3. Suggest appropriate pharmacist interventions.

- Educate the patient about diabetes and explain that complications can occur even when no symptoms are present.
- Explain the benefits of regular medication and exercise in preventing complications.
- Address perceived barriers by suggesting simple home-based exercises or short daily walks that fit into a busy schedule.
- Improve self-efficacy by setting realistic and achievable health goals and providing positive encouragement.
- Provide cues to action by recommending pill organizers, medication reminder apps, or alarms.
- Encourage regular blood glucose monitoring and routine follow-up visits.
- Involve family members to provide motivation and support.
- Counsel the patient on maintaining a healthy diet, regular physical activity, and adherence to prescribed medications.

Problem Based Learning Questions (10 Marks)

Mr. Singh, a **55-year-old man** with **type 2 diabetes and hypertension**, has been prescribed oral antidiabetic drugs, antihypertensive medication, and lifestyle modifications. During a follow-up visit, the pharmacist finds that his blood glucose and blood pressure remain uncontrolled. Mr. Singh admits that he frequently skips his medications because he feels healthy and believes they are unnecessary. He also reports experiencing **high work-related stress**, poor sleep, and a lack of time for exercise. Additionally, he is reluctant to seek counseling because he worries that others may judge him for having mental health problems.

Questions

1. Explain Mr. Singh's behavior using the **Health Belief Model (HBM)**
2. Describe how chronic stress can contribute to his physical health problems.
3. Identify the stage of change according to the **Transtheoretical Model (TTM)** if he says, *"I know I should change, but I'm not ready to start yet."*
4. Identify the type of stigma shown in this case and explain its impact.
5. As a pharmacist, prepare a counseling and intervention plan to improve his treatment adherence.

Answer

1. Health Belief Model (HBM)

Mr. Singh's behavior can be explained using the six constructs of the Health Belief Model:

- **Perceived Susceptibility:** Low—he does not believe he is at high risk of complications.
- **Perceived Severity:** Low—he thinks diabetes and hypertension are not serious because he has no symptoms.
- **Perceived Benefits:** Low—he doubts the benefits of taking medicines regularly.
- **Perceived Barriers:** Work stress, lack of time for exercise, and inconvenience of daily medication.

- **Cues to Action:** Few reminders or motivational triggers to follow treatment.
- **Self-Efficacy:** Low confidence in maintaining long-term lifestyle changes.

2. **Describe how chronic stress can contribute to his physical health problems.**

Chronic stress activates the **Hypothalamic–Pituitary–Adrenal (HPA) axis** and the **sympathetic nervous system**, increasing the release of **cortisol and adrenaline**. This leads to:

- Increased blood pressure.
- Elevated blood glucose levels.
- Systemic inflammation.
- Increased risk of cardiovascular disease.
- Poor sleep and reduced treatment adherence.

3. dentify the stage of change according to the Transtheoretical Model (TTM) **if he says, *"I know I should change, but I'm not ready to start yet."***

Mr. Singh is in the **Contemplation Stage** because he recognizes the need for change but has not yet committed to taking action.

4. **Identify the type of stigma shown in this case and explain its impact.**

The patient is experiencing **Public Stigma** because he fears that others will judge him for seeking mental health support.

Impact:

- Delays seeking counseling.
- Increases stress.
- Reduces treatment adherence.
- Worsens physical and mental health outcomes.

5. Pharmacist Counseling and Intervention Plan

- Educate the patient about the long-term complications of uncontrolled diabetes and hypertension.
- Explain the benefits of regular medication and lifestyle modification.

- Address barriers by suggesting simple home exercises and medication reminder apps or pill organizers.
- Encourage stress-management techniques such as relaxation exercises, meditation, and adequate sleep.
- Reduce stigma by reassuring the patient that seeking mental health support is a normal part of healthcare.
- Arrange regular follow-up visits and involve family members for additional support.