Health Psychology

DPSY633

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LOVELY PROFESSIONAL UNIVERSITY

Health Psychology

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Unit 1: Introduction to Health Psychology: Nature, Scope, Its Interdisciplinary and Socio-Cultural Contexts, Need in the Society, Role of Health Psychologist

Objectives

This unit will enable you to:

- Understand the nature of health psychology
- Analyze the socio cultural contexts of health psychology;
- Evaluate the need of health psychologists in society;
- Acknowledge the role of health psychologist.

Introduction to health psychology

Health Psychology is the specialization of psychology that focuses on the interplay between biological, psychological, social, and environmental factors on health, illness, prevention, and health care. The previous notion about health and illness was limited only to incorporating biological factors but recent advances in epidemiological studies reveal that lots of factors comprise together the origin and development of an illness. The biological, psychological, and behavioral determinants of health are the focus of a particular area of psychology called health psychology. Behavioral medicine or medical psychology are appropriate terms for this. Stress, depression, and other psychological conditions are among the contributors. Smoking, exercise, drinking alcohol, and screening for diseases are all behavioral variables. Our health is directly impacted by all of these things.

We can treat many individuals who are suffering from health issues by researching these elements. Instructing other medical professionals can benefit from the expertise of health psychologists. In addition to hospitals, health agencies, and research, these experts work together. Humans' changing behaviors and general well-being are a result of their health. Our health can be negatively impacted by external forces. Two of those instances include having the wrong company and eating poorly.

Health psychology is a branch of psychology that focuses on how biology, psychology, behavior, and social variables affect one's physical health and sickness. It is often referred to as medical psychology or behavioral medicine. In contrast to the straightforward linear model of health, health psychology views sickness as the result of various variables and rejects the idea that humans are helpless victims of outside forces like bacteria or viruses. People are held accountable for their health because they are accountable for the lifestyle choices they make, including things like smoking, eating certain foods, drinking alcohol, and exercising.

Health psychology is an exciting and relatively new field devoted to understanding psychological influences on how people stay healthy, why they become ill, and how they respond when they do get ill. Health psychologists both study such issues and promote interventions to help people stay well or get over illness. Health psychology is a specialty area within psychology. Health psychology has been specifically defined as "the aggregate of the specific educational, scientific, and professional contributions of the discipline of psychology to the promotion and maintenance of health, the prevention and treatment of illness, and the identification of etiologic and diagnostic correlates of health, illness and related dysfunction and to the analysis and improvement of the health care system and health policy formation". (Matarazzo, 1982). This definition has been adopted by the American Psychological Association (APA), the British Psychological Society and other organizations. It serves as health psychologies' 'official' definition.

A recent definition of health psychology has been offered by Brannon and Feist (2000), who state that Health psychology "includes psychology's contributions to the enhancement of health. the prevention and treatment of illness, the identification of health risk factors, the improvement of the health care system, and shaping of public opinion with regard to health" Health psychology is concerned with all aspects of health and illness across the life span. Health psychologists focus on health promotion and maintenance, the etiology and correlates of health, illness, and dysfunction. Etiology refers to the origins or causes of illness, and health psychologists are especially interested in the behavioral and social factors that contribute to health or to illness and dysfunction. Such factors can include health habits such as alcohol consumption, smoking, exercise, the wearing of seat belts, and ways of coping with stress. Health psychologists also study the psychological aspects of the prevention and treatment of illness. Health psychologists analyze and attempt to improve the health care system and the formulation of health policy. They study the impact of health institutions and health professionals on people's behavior and develop recommendations for improving health care.

Health psychology is a specialty area that focuses on how biology, psychology, behavior, and social factors influence health and illness. Other terms including medical psychology and behavioral medicine are sometimes used interchangeably with the term health psychology. Health and illnesses are influenced by a wide variety of factors. While contagious and hereditary illnesses are common, many behavioral and psychological factors can impact overall physical well-being and various medical conditions. The field of health psychology is focused on promoting health as well as the prevention and treatment of disease and illness. Health psychologists also focus on understanding how people react to, cope with, and recover from illness. Some health psychologists work to improve the health care system and the government's approach to health care policy.

1.1 Nature of Health Psychology

According to American Psychological Association (APA), Health Psychology (Division 38) is a subfield of psychology that focuses on

- The examination of the relationships between behavioural, cognitive, psycho physiological, and social and environmental factors and the establishment, maintenance, and detriment of health;
- The integration of psychological and biological research findings in the design of empirically-based interventions for the prevention and treatment of illness; and
- The evaluation of physical and psychological status before, during, and after medical and psychological treatment.
- The sequence of reactions an organism has to a stimulus or event that upsets its balance or is more than it can handle. Stress is the term used to describe the physiological reactions that take place when an organism fails to react to emotional or physical dangers in the proper way.
- Many methods, including mindfulness, cognitive therapy, meditation, yoga, natural remedies, deep breathing music, pets, and nature, aid with stress management.
- Identification of psychological factors such as stress, lifestyle, health-related attitudes, etc. that cause sickness.
- Managing health and sickness requires collaboration between the patient, the doctor, and the caregivers.
- Identification of psychological factors such as stress, lifestyle, health-related attitudes, etc. that cause sickness.
- Managing health and sickness requires collaboration between the patient, the doctor, and the caregivers.
- To comprehend the underlying psychological causes of disease, health psychologists examine the psychological correlates of sickness and their part in starting the sickness.
- The strategies for behavior intervention are made to reward and provide feedback to reinforce good behavior, which is crucial for health.

Health psychology examines the psychological underpinnings of illnesses to understand how the mind and body are connected in terms of healing or illness.Health psychology emphasizes the role of psychological factors in the cause, progression, and consequences of health and illness.

1.2 Scope of Health Psychology

Health psychologists work with individuals, groups, and communities to decrease risk factors, improve overall health, and reduce illness. They conduct research and provide services in areas including:

- Stress reduction: Helps patients reduce stress related to any physical conditions like cancer, HIV, diabetes, etc.
- Weight management: Lifestyle monitoring and helping to tackle sedentary routine to address the issues of overweight and obesity.
- Smoking cessation: Helps in reducing smoking through behavior modification.
- Improving daily nutrition: A health psychologist monitors daily nutrition intake and ensures the health and well-being of clients.
- Reducing risky sexual behaviors: A health psychologist provides proper sex education and reduces risky sexual behaviors among clients and the community.
- Hospice care and grief counselling: This will be provided for the bystanders and caregivers of the patients to deal with the trauma and grief of taking care of a patient with chronic illnesses.
- Preventing illness: Advocating the behaviors that promote health among the community members.

- Understanding the effects of illness: There will be lots of psychological correlates of an illness like diabetes, cancer, cardiac problems, etc. The role of a health psychologist is to understand them and tackle them properly.

Thus the service of a health psychologist is required in general health care setting, community health promotion and prevention sectors, psycho-oncology sector, de-addiction and rehabilitation centers, hospice care settings etc.

1.3 Interdisciplinary context of Health Psychology

Health is affected by five systems that are: individual, family/community, social/physical, environment, health care systems, and health policy. Health psychology even though grounded in psychology, incorporates perspectives from anthropology, biology, economics, environmental studies, medicine, public health, and sociology.

The social-ecological perspective on health psychology creates a depth of understanding of the diverse facets of health. This text also examines health from a global perspective by exploring the impact of infectious and chronic illnesses locally, regionally, and globally.

From an applied perspective, it is equally crucial to take into account culture while studying health and sickness. For instance, if cultural information is removed from the exercise, it will be very hard to construct treatments to promote health through promotional, preventative, therapeutic, or rehabi litative activities.

A better understanding of the cultural roots of such issues will also help us understand and address health disparities, such as those that take the form of prejudice and discrimination in medical settin gs or vast variations in the prevalence rates of specific diseases among different groups in a society.

In addition, some illnesses, including Hikokomori (common in Japan) and anorexia, tend to be cult ure-specific (prevalent in developed western societies).

Cultural knowledge is also necessary to comprehend the underlying causes, preventative measures, and therapies for such disorders.

It is crucial to have both a theoretical and practical knowledge of health and sickness that is sensitive to cultural context. Theoretically, psychological models intended to comprehend health and sickness are often created in western regions of the world and tested on local subjects. By examining the generalizability of models across cultural groups, models may be improved, enlarged, and updated. By strengthening the scientific study of human psychology, this activity enables models to produce and evaluate culturally relevant predictions.

1.4 1.5. Socio-cultural context of Health Psychology

Developing a culturally sensitive and meaningful understanding of health and illness is important for both theoretical and applied reasons. From a theoretical standpoint, psychological models designed to understand health and illness are typically developed in the western parts of the world and tested with local participants. Models can be expanded, modified, and improved by studying their generalizability across cultural groups. This exercise improves the validity of the scientific study of human psychology and thus enables models to develop and test culturally meaningful predictions.

Incorporating culture into the study of health and illness is also important from an applied standpoint. For example, developing interventions to improve health via promotive, preventive, curative, or rehabilitative activities is virtually impossible if this exercise is stripped of cultural knowledge. Further, health disparities, for example in the form of discrimination and prejudice in health care settings or vast differences in prevalence rates of certain diseases between different groups in society, may be understood and tackled by having a better understanding of the cultural bases of such problems.

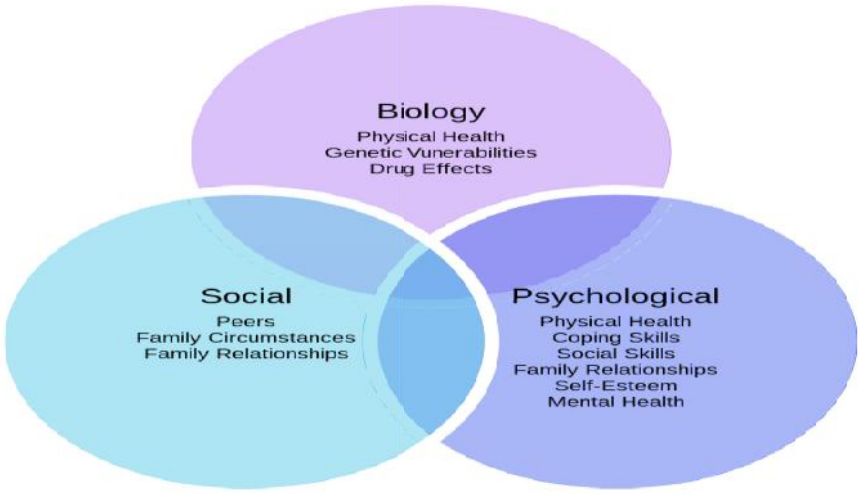
Moreover, some diseases tend to be culture-specific, such as Hikokomori (prevalent in Japan) and anorexia (prevalent in developed western societies). Understanding the underlying reasons, ways of prevention, and treatments for such diseases also necessitates a cultural approach to health and illness.

1.5 Need in the society

Regardless of specialization, the overarching goal of health psychology is to educate and treat a patient's or community's mental and emotional health. There are many factors, both internal and external, that impact health.

Some factors that influence the health includes:

- **Biological:** Genetics and biology, such as age and family health history, impact lifestyle and health choices. Older adults are more likely to contract illnesses or require a longer recovery time span than young people. Inherited diseases, such as sickle-cell anemia and hemophilia, require patients to make lifestyle changes to maintain a healthy state.
- **Social:** Where patients live impacts how they live. Exposure to crime and violence can deter people from spending active time outside, which could result in a sedentary lifestyle. Oppositely, excessive time spent in violent area can increase the likelihood of physical injury.
- **Psychological:** Psychological factors have been known to cause a psychosomatic disorder, or "a physical disease that is thought to be caused, or made worse, by mental factors." There are a wide range of illnesses and diseases that can be affected by mental illnesses, including psoriasis, high blood pressure, and heart problems. It's well-known that chronic stress can trigger physical symptoms, such as headaches and muscle pain. Emotional eating would also fall into the category of psychosomatic disorders as it's a temporary fix for an external aspect, whether that's in response to stress or as a reward for accomplishing a task.



Some others factors also show need of health psychologist in society:

- To assess the impact of behavior plays in sickness. Ex: Smoking, food consumption, and lack of exercise are all linked to coronary heart disease.
- To anticipate harmfulbehaviors. Ex- Beliefs are associated to smoking, drinking, and eating a lot of fat.
- To assess the relationship between physiology and psychology. Ex: The effects of stress on evaluation, coping, and social support.
- To acknowledge the impact of psychology plays in how people perceive disease. For instance, recognizing the psychological effects of disease may assist to reduce discomfort, nausea, vomiting, anxiety, and depressive symptoms.
- To assess psychology's contribution to the management of disease. For example, altering behavior and lowering stress might lower the risk of another heart attack.

Health psychologists study all possible factors to determine a connection between a patient's health and the choices made. Once a connection is determined, psychologists then form a treatment plan, which could include interventions and therapy. Both interventions and therapy involve educating patients about the consequences of their health issues and how psychological factors can influence their health.

1.6 Role of a Health Psychologist

Health psychologists play a major role in understanding how biological, behavioral, and social factors influence health, and illness. They are equipped with training, skills, and knowledge to understand how basic behavioral and cognitive processes (e.g. cognition. emotion, motivation, development, personality, social and cultural interaction) prepare the body to develop dysfunctions. They are trained, on the other hand, to perceive how these behavioral and cognitive functions are altered, the factors that contribute to their alteration, and how these dysfunctions are diagnosed and treated. In dealing with such problems, they are also trained and skilled to use several psychological, psycho-diagnostic and psychotherapeutic techniques which help and affect the abilities of individuals to function in diverse settings and roles. In addition, they help people to modify their behavior and lifestyle so as to prevent and recover from health problems.

The work of a health psychologist has a significant positive impact on the promotion of healthy behavior, illness prevention, and improvement of patients' quality of life. One of the important roles of a health psychologist, who also serves as a practitioner of behavioral health, is having the capacity to understand how biological, behavioral, and social variables impact health and illness. Without the aid of a health psychologist, no ailment can be cured or wiped away.

Due to their training to recognize how underlying behavioral and cognitive processes set the body up for malfunction, they play a significant role in therapeutic settings where they perform behavioral evaluations and clinical interviews. They also provide intervention programmes to help patients stop engaging in negative behaviors including smoking, drinking, stressing out, and eating poorly.

More than a third of Europeans have a mental health disorder.

Summary

- Role of a health psychologist: Health psychologists play a major role in understanding how biological, behavioral, and social factors influence health, and illness.
- They are equipped with training, skills, and knowledge to understand how basic behavioral and cognitive processes (e.g. cognition. emotion, motivation, development, personality, social and cultural interaction) prepare the body to develop dysfunctions.
- The field of health psychology is focused on promoting health as well as the prevention and treatment of disease and illness.
- Stress reduction: Helps patients reduce stress related to any physical conditions like cancer, HIV, diabetes, etc.
- Both interventions and therapy involve educating patients about the consequences of their health issues and how psychological factors can influence their health.
- Smoking, exercise, drinking alcohol, and screening for diseases are all behavioral variables. Our health is directly impacted by all of these things.
- Identification of psychological factors such as stress, lifestyle, health-related attitudes, etc. that cause sickness.
- Managing health and sickness requires collaboration between the patient, the doctor, and the caregivers.
- Health psychologists also provide intervention programmes to help patients stop engaging in negative behaviors including smoking, drinking, stressing out, and eating poorly.

Keywords

Health Psychology: Health Psychology is the specialization of psychology that focuses on the interplay between biological, psychological, social, and environmental factors on health, illness, prevention, and health care.

Nature of health psychology: It defines, examines and assess the healthcare models for general illnesses.

Scope of health psychology: Health psychologists work with individuals, groups, and communities to decrease risk factors, improve overall health, and reduce illness.

Self Assessment

1. Health psychology is another name for clinical psychology-

A. True

B. False

2. Health psychologist's monitors nutrition as well-

A. True

B. False

3. Health psychologists don't deal with smoking and other addictive behaviors-

A. True

B. False

4. Psycho-oncology is an area where a health psychologist's contribution is required-

A. True

B. False

5. Health psychology is not an interdisciplinary science-

A. True

B. False

6. Cultural contexts are an important concern in the research in health psychology-

A. True

B. False

7. Health is affected by different systems that are interrelated in nature-

A. True

B. False

8. Promotion of healthy behaviors is not a concern of health psychologists-

A. True

B. False

9. Geneticalfactors can have a prominent role in determining one's illness-

A. True

B. False

10. Behind psycho somatoform disorders psychological factors play an important role-

A. True

B. False

Answers for Self Assessment

1.	B	2.	A	3.	B	4.	A	5.	B
6.	A	7.	A	8.	B	9.	A	10.	A

Review Questions

1. Explain what is health psychology
2. What is the nature of health psychology?
3. What is the scope of health psychology?
4. Explain interdisciplinary context of health psychology
5. What is the role of a health psychologist?

Further Reading

- Health psychology. Shelly E Taylor 10th edition.
- Ogden, J. (2012). Health Psychology: A Textbook (5th ed.). Maidenhead, UK: Open University Press.

Unit 2: Health Psychology Models

CONTENTS

Objectives

- Understanding the health psychology model
- Understanding the importance of biopsychosocial model
- Analysis the theory of planned behavior
- Apply Lazarus and Folkman transactional model

Introduction

Witnessing various changes from 1970 to 2022, Health psychology has been buzzing word in psychology, from bio-medical approach to gravitation of psychological scientist towards bio-socio-psychological approach towards health, it has explored all aspect of mind-body linkage, that are helping in speedy recovery of sensitive patients.

It questioned (1) cause of sickness (2) how one sick person recovers faster from another sick person and (c) how to promote recovery?

These are the kinds of problems that are often tackled by the field of health psychology, which is the study of how psychological elements like beliefs, values, thoughts, feelings, and attitudes influence health and illness as well as behaviors connected to health. Emerging in the context of a challenge to established biological conceptions of sickness, the field of health psychology is a relatively young academic specialization. In a nutshell, these more traditional models consider sickness to be the result of interactions between a human and factors outside them, such as germs. Both the mental and physical elements of a disease are considered to be wholly distinct from one another. There is no continuity between the two. The decision regarding treatment is entirely up to the physician or other attending medical practitioner. Health psychology, on the other hand, considers mental processes not only to be entangled with physical processes in illness but also to be a potential contributory element to both health and illness. It is believed that the individual plays an active, rather than a passive, part in the development of the illness, as well as in its ultimate conclusion.

This chapter focuses on the four primary models of health psychology that incorporate the key influences on health - related behaviors and have been widely used in the field of health

psychology. These models were chosen for this chapter because they have been the most influential in the field of health psychology.

2.1 Health Psychology model

The traditional view of Western medicine defines health as the absence of disease (Papas,Belar, &Rozensky, 2004). This view conceptualizes disease exclusively as a biological process. The biomedical model considers disease to be a simple, almost mechanistic result of exposure to a specific pathogen, a disease-causing organism. This view spurred the development of drugs and medical technology-orientedfor removing pathogens and curing diseases. In this view, when the pathogen is removed, health is restored. The biomedical model of disease is compatible with infectious diseases that were the leading causes of death 100 years ago.

Throughout the 20thcentury, adherence to the biomedical modal allowed medicine to conquer or control many of the diseases that once ravaged humanity, when chronic illnesses began to replace infectious diseases as leading causes of death, questions began to arise about the adequacy of the biomedical model (stone, 19870). A few physicians, many psychologists, and some sociologists have become dissatisfied with the biomedical model and have begun to question its usefulness in dealing with the current patterns of disease and death and its definition of health.

2.2 Health Belief Model

- The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behaviors.
- It is a methodical tool that researchers or experts often use to determine or forecast human behaviors towards health.
- This is done by focusing on the attitudes and beliefs of individuals.
- Familiarizes theories from behavior disciplines to inspect health complications.
- HBM is based on following assumptions or predictions:
  - An individual desire or wants to evade illness, or inversely get well in case of current illness.
  - An individual believes that an exact health act might avoid, or treat illness. Eventually, a person's opinions or views on the merits and demerits related to health manners will determine the health action taken to cure or prevent illness.

1. Perceived susceptibility**:**

- This refers to a person's personal view of the risk of gaining an illness or disease. It is an individual's perception of her or his risk of contracting a health condition
- There is extensive dissimilarity in a person's emotional state of own susceptibility to an illness or disease.
- The person ask himself/herself the question: How likely an individual think that he/she are about to have a current health issue?

2. Perceived severity:

- It refers to an individual's perception of the seriousness of a health condition if left untreated.
- This reflects to a person's feelings on the urgency of contracting an illness or disease (or leaving the illness or disease untreated).
- There is varied dissimilarity in a person's emotional state of brutality, and frequently a person reflects the health consequences (e.g., death, disability) and social consequences (e.g., family life, social relationships) when estimating the severity.
- The person ask himself/herself the question: How serious is a health problem in the current situation?

- Triggering factors for perceived severity are alarming symptoms, advice from family or friends, messages from the media, disruption of work or play.

3. Perceived benefits:

- It refers to the perceived effectiveness of taking action to improve a health condition
- The path of action plan a person takes in inhibiting (or curing) illness or disease be dependent on reflection and evaluation of mutually perceived susceptibility and perceived benefit, such that an individual would agree on the acclaimed health action if it was observed as beneficial.
- The person ask himself/herself the question: In what manner does the suggested behavior lessen the possibilities related to a present health problem?

4. Perceived barriers:

- It refers to the perceived impediments to taking action to improve a health condition.
- This denotes to a person's frame of mind on the complications of carrying out a suggested health action.
- Extensive variation exists in a person's mental state of obstructions, or disorders, which leads to a cost/benefit analysis.
- The person evaluates the effectiveness of the actions in contradiction of the perceptions that it may possibly be costly, hazardous (e.g., side effects), unpleasant (e.g., painful), time-consuming, or untimely.
- The person ask himself/herself the question: What are the possible adverse aspects of performing currently recommended behavior?

5. Cues to action:

- Cues to action refers to the inducement necessary to generate the decision-making process to admit a recommended health action.
- These reminders can be internal (e.g., chest pains, wheezing, etc.) or external (e.g., advice from others, illness of family member, newspaper article, etc.).
- Internal and external events can activate actions and change in behavior
- These are the factors, which cause an individual to change, or want to change? (Not scientifically considered)

6. Self-efficacy:

- Self-efficacy refers to the self- confidence in one's ability to take action.
- This brings up to the level of a person's confidence in his or her ability to productively implement a behavior.
- It is one's conviction that he/she can successfully execute the behavior required to produce the outcomes.
- This conception was added to the model in recent times in mid-1980.
- Self-efficacy is a paradigm in several behavior theories. For instance, it openly relates to whether a person carries out the preferred behavior.

Application of Health Belief Model (HBM):

Examining the Health Belief Model's adaptability to a variety of contexts is something that can prove to be of great use. Because the development of programmes that encourage individuals to engage in healthy behaviors is an essential aspect of public health, it can be valuable to have a grasp of how this model can be applied to a variety of different scenarios. For instance, specialists could be interested in learning more about how the general population feels about cancer screenings. Examining factors such as people's views of the risk of developing of a heart disease, the benefits of getting screened for cardiac parameters, and the barriers to getting screened for cardiac parameters might assist healthcare professionals seek for strategies to encourage individuals to get examined for cardiac issues. Additionally, the model may be utilized for public health programmes that are

implemented in a variety of contexts. For instance, schools may rely on instructional programmes to assist students in comprehending the difficulties associated with issues pertaining to their health, the use of substances, physical exercise, nutrition, and personal safety. These types of programmes frequently use the Health Belief Model as its foundation and strive to educate participants, provide skill training, lower barriers, and enhance self-efficacy.

Advantages of Health Belief Model (HBM):

- Acknowledges and addresses cognitive model, which lays emphasis on the role of motivations and faith on the individual.
- Publicizes a person's opinions into four kinds: perceived susceptibility, perceived susceptibility, perceived severity, perceived benefits, and perceived barriers.
- This comprehensive methodology scrutinizes a person's beliefs, opinions, and views particularly in respect to health care in a further holistic approach in contrast with other models.
- It familiarizes theories from behavior disciplines to inspect health complications.
- It clarifies and expects health conducts.

Limitations of Health Belief Model (HBM):

- As a psychological model it does not take into consideration other factors, such as environmental or economic factors, that may influence health behaviors.
- It does not explain the behaviors that are routine and consequently may possibly inform the decision-making process to accept an acclaimed action (e.g., smoking).
- The model lacks explanations for a person's attitudes, beliefs, or another individual contributing factor that dictate a person's approval or acceptance of health behavior.
- HBM does not proceed into the interpretation of behaviors that are executed for non-health connected motives such as social acceptability.
- It does not account for environment-friendly or cost-effective factors that may forbid or encourage the suggested action.
- The model does not incorporate the influence of social norms and peer influences on people's decisions regarding their health behaviors.
- Adopts that cue to action are extensively predominant in positive people to act and that "health" actions are the key objective in the decision-making course.
- Lack of clarification on accessibility and economic access to health care. Example: Many people with serious health illnesses lack health insurance due to the pre-existent situations.

2.3 Theory of Planned Behavior

The theory of planned behavior (TPB) is a psychological theory that links beliefs to behavior. The theory maintains that three core components, namely, attitude, subjective norms, and perceived behavioral control, together shape an individual's behavioral intentions. In turn, a tenet of TPB is that behavioral intention is the most proximal determinant of human social behavior.

The theory was elaborated by Icek Ajzen for the purpose of improving the predictive power of the theory of reasoned action (TRA). Ajzen's idea was to include perceived behavioural control in TPB. Perceived behaviourcontrol was not a component of TRA. TPB has been applied to studies of the relations among beliefs, attitudes, behavioral intentions, and behaviors in various human domains. These domains include, but are not limited to, advertising, public relations, advertising campaigns, healthcare, sports management,and sustainability.

The TPB focuses on theoretical constructs concerned with individual motivational factors and capability as determinants of the likelihood of performing a specific behavior. TPB assumes that the best predictor of human behavior is behavioral intention which in turn is determined by attitude towards the behavior, social normative perceptions regarding it and perceived control over performance of the behavior. Interventions based on TPB have been found to be effective in changing health behaviors.

TPB has been found to predict if an individual engages in a wide variety of different health behaviors including exercise, undergoing a health check-up and being screened for breast and colorectal cancers. TPB-based interventions have improved outcomes in diseases like obesity and schizophrenia and health behaviors like fruit and vegetable intake and exercise patterns.

Application of Theory of planned behavior

Theory of planned behavior has practical uses and has been used in the past in efforts to educate people about health. In an effort to shift the perceived norm, anti-drug campaigns frequently disseminate information regarding the percentage of people who engage in harmful behaviors such as smoking or drug usage. For instance, teenagers who smoke are typically members of a peer group that also smokes; as a result, they may believe that smoking is the norm. However, the vast majority of teenagers do not smoke; therefore, exposing them to statistics that show the true extent of smoking should cause a shift in their perception of what constitutes the norm.

2.4 Biopsychosocial Model

The biopsychosocial model is an interdisciplinary model that looks at the interconnection between biology, psychology, and socio-environmental factors. The model specifically examines how these aspects play a role in topics ranging from health and disease to human development. The model was first advocated by George L. Engel in 1977 and has become an alternative to the biomedical dominance of many health care systems.

The biopsychosocial model claims that three factors influence health, healthcare, and disease, which are physiological, psychological, and social. This means that it takes into consideration the smaller picture of any biological problems at an individual level, as well as the bigger picture of psychological issues and the effect society, has on that individual and on his/her situation. Hence, this model takes both the micro as well as macro viewpoints into consideration when analyzing a patient. This helps in administering better treatment, say advocates of the model.

The biopsychosocial model does not consider health to be a deviance from some constant physiological state. Instead, it emphasizes on health and illness being a result of social, psychological as well as biological factors interacting together. Hence, this medical approach does not treat health just from the physiological point of view, but concentrates on having healthy all-round development, cure, and maintenance of all three factors.

Another advantage of the biopsychosocial model is that cure, recovery, and good health are not completely in the hands of medical experts, but are in fact, partly in control of the patients themselves. Along with medical experts taking care of the biological treatment, patients and their families can maintain a demeanor that will result in quick psychological and social recovery, which will ultimately help better and faster physiological recovery. When using this medical approach, patients rarely feel helpless or out of control.The biopsychosocial model advocates for good mental and emotional health in order to maintain a healthy lifestyle. Controlling our mental health as well as the effects society can have on us, is in our hands, and if successful, it can help in disease prevention. Thus, it is cost-effective, as prevention is definitely better than cure in many cases.

2.5 Lazarus and Folkman Transactional Model

The transactional theory of stress and coping, put forth by Folkman and Lazarus (1980; 1984) became a key theory in the area of coping responses. Their theoretical framework proposes a transactional relationship between the person and the environment.

Lazarus and Folkman believe that stress is a relative concept of a complex and dynamic interaction between an individual and the environment. The ways or strategies that a person uses in dealing with stressful situations play an essential role in their physical and mental health, and the individual's vulnerability is associated with understanding stress and its sources The transactional model of Lazarus and Folkman is one of the methods organizing the ways which people adapt to chronic illness.

According to the transactional model of stress when a person is exposed to a stressor, the first stage is the primary appraisal. In this stage, the person internally determines the severity of the stressor. If at this stage the stressors are perceived as threatening, a second appraisal is performed, in which the person evaluates their own resources to deal with stress. Performing appraisals by individuals influences the coping strategies chosen by them. The main premise of the transactional model is that primary appraisal, secondary appraisal, and coping strategies mediate between stressors and

the consequences of stress in individuals so that individuals choose and apply the appropriate coping style based on interaction with others and their living environment.

According to Lazarus and Folkman, there are two types of coping strategies. The problem-focused coping strategy tries to eliminate or alter the source of stress, while the emotional regulation coping strategy is a way to deal with a stressor by focusing on altering the way one thinks or feels about a situation or something. During stressful situations, individuals may mostly use one of these two types of coping styles or even use both strategies at the same time. Note that there is no good or bad coping strategy, and people will use each of the coping methods according to their situation. In coping efforts, there may also be a constructive or non-constructive mode.

Therefore, the use of one style does not necessarily mean that one must use a constructive strategy when faced with stressors in his/her life. In the transactional model, the moderators signify the ability to search for information as well as build and maintain relationships with others, which involves information search and social support. The transactional model of Lazarus and Folkman is well-known as one of the most effective patterns in stress management.

Their constructs and contributions

The constructs of Lazarus and Folkman's transactional model of stress are:

1.Appraisal: Appraisal is a "cognitive process through which an event is evaluated with respect to what is at stake (primary appraisal) and what coping resources and options are available (secondary appraisal)" (Folkman & Lazarus, 1980). They distinguish three types of primary appraisal: irrelevant, benign-positive, and stressful (Lazarus & Folkman, 1984). Irrelevant appraisal occurs when an encounter with the environment has no implications for a person's well-being. If an encounter with the environment preserves or improves a person's well-being, a benign-positive appraisal will occur along with positive emotions such as happiness or peacefulness.

Of most relevance to the concept of coping are stressful appraisals, which comprise three sub-types: harm/loss, threat, and challenge (Lazarus & Folkman, 1984). If a person has been injured or incapacitated in some way, such as a loss of loved one, physical or mental harm or illness, the harm/loss stress appraisal will occur. The threat appraisal, in contrast, occurs when such a loss or harm is not actual but anticipated. This appraisal is characterized by negative emotions such as fear, anxiety, and anger, and invokes anticipatory coping. Such coping involves preparing for expected harm. These emotions differ from those associated with the challenge stress appraisal, which is accompanied by pleasurable emotions such as eagerness, excitement, and exhilaration. Such emotions result from pitting oneself against the odds.

Challenge appraisals arise when a person feels a sense of control over the stressful environment, which reveals the potential for growth should the person succeed. Threat appraisal, rather, arises out of a feeling of lack of control and the potential of further loss. Lazarus and Folkman (1984) advise that challenge and threat appraisals should be considered separate, yet often related concepts; it is common for persons facing stress to report both challenge and threat appraisals. Folkman, Schaefer, and Lazarus (1979) consider appraisal the most important determinant of the coping process, above situational/environmental factors or demographic factors such as gender or age.

2.Coping: Folkman and Lazarus define coping as an attempt to master, tolerate, or reduce internal or external stressors that an individual perceives as exceeding existing resources (Folkman & Lazarus, 1980, 1991). They argue that coping strategies fall into one of two domains: problem-focused and emotion-focused. These categories reflect the dual function of coping overall: "the regulation of distressing emotions [emotion-focused] and doing something to change for the better the problem causing the distress [problem-focused]" Folkman and Lazarus (1985). If a situation is appraised as intractable or impossible to change, a person will employ emotion-focused modes of coping. Problem-focused modes are used when a person appraises a troubling situation as surmountable through action. Problem-focused coping entails an "attempt to solve, reconceptualize, or minimize the effects of a stressful situation," while emotion-focused coping includes "self-preoccupation, fantasy, or other conscious activities related to affect regulation" (Parker &Endler, 1996).

Contributions: The influence of Lazarus and Folkman's (1984) transactional theory of stress and coping is remarkable and remains the cornerstone of psychological stress and coping research across multiple fields.

Summary

- The Health Belief Model (often abbreviated as HBM) is a technique that researchers use to predict people's actions about their health.
- The theory of planned behavior states that greater the intention to engage in an action, the greater is the likelihood that the behavior will actually be performed.
- The use of biological, psychological, and social principles to address human wellness and health is referred to as biopsychosocial.
- Stress is defined by psychologists Richard Lazarus and Susan Folkman in their 1984 book "Stress, Appraisal, and Coping" as the body's internal reaction to any external stimulus that is deemed harmful.

Keywords

Attitude-A well-established mental or emotional stance towards anything

Belief. -An acknowledgment that something does or does not exist or that something is true, especially one made in the absence of proof.

Coping-The thoughts and behaviors used to deal with internal and external stressors.

Health- Health is a complete state of physical, mental, and social well-being, not simply the absence of disease or infirmity.

Stress.-Any type of change that causes physical, emotional, or psychological strain is referred to as stress.

Self Assessment

1. Health belief model address

A. Psychological model of illnesses
B. Beliefs and attitudes related to health
C. Prediction of health and prevention of illness
D. All of the above

2. Lazarus and Folkmans transactional model focuses on stress and coping

A. True
B. False
C. True
D. False

3. The attempt to master and tolerate internal stressors is called as

A. Stress
B. Stressor
C. Coping
D. None of the above

4. The cognitive processes to deal stress with the available coping resources is knows as

A. Primary appraisal
B. Secondary appraisal
C. Both a and c
D. None of the above

5. Coping and appraisal are the main constructs in Lazarus and Folkman's transactional model

A. True
B. False

6. Biopsychosocial model lies emphasis on interconnection between

A. Biology
B. Psychology
C. Socio environment
D. All of the above

7. Health is affected by different systems that are interrelated in nature.

A. True
B. False

8. Theory of planned behavior explains

A. The links to behavior and health
B. Role of health psychology
C. Objectives of health psychology
D. None of the above

9. If an encounter with environment does not create an impact on a person's well-being it is:

A. Stress appraisal
B. Primary appraisal
C. Secondary appraisal
D. Irrelevant appraisal

10. Behind psycho somatoform disorders psychological factors play an important role

A. True
B. False

11. Cognitive processes cannot have a role on health and illnesses

A. True
B. False

12. If a person has control over the environment over the stressors it is

A. Primary appraisal
B. Secondary appraisal
C. Challenge appraisal
D. Irrelevant appraisal

13. Theory of planned behavior is proposed by

A. Lazarus
B. Folkman
C. Ajzen
D. None of the above

14. Health is a by-product of spiritual, mental, physical and social wellbeing

A. True

B. False

15. Hospice care is not a subject matter in health psychology

A. True

B. False

Answers for Self Assessment

1.	D	2.	A	3.	C	4.	B	5.	A
6.	A	7.	A	8.	A	9.	D	10.	A
11.	B	12.	C	13.	C	14.	A	15.	B

Review Questions

1. Explain health belief model
2. What is biopsychosocial model in health psychology?
3. What is the theory of planned behavior?
4. Explain Lazarus and Folkman transactional model
5. Whatare the constructs of Lazarus and Folkman transactional model?

Further Readings

- Health psychology. Shelly E Taylor 10th edition.

Unit 04: Health Behaviors

CONTENTS

Introduction to Health Behaviors,Role of Behavioral Factors in Disease and Disorder, Barriers to Modifying Poor

4.1 Health behaviors

People who engage in health behaviors do so to improve or maintain their health. A healthy habit is a behavior that is well-ingrained and frequently performed spontaneously and unconsciously. These behaviors typically start in early childhood and stabilize around the age of 11 or 12. (Cohen, Brownell, & Felix, 1990). These behaviors include things like using a seatbelt, brushing one's teeth, and maintaining a nutritious diet.

Health behaviors are acts that a person takes that either positively or negatively impact their health. Simple actions like washing your hands can fall within this category, as can more complicated decisions like deciding to live somewhere with severe air pollution. Health behavior in the context of work-related health and safety refers to how an employee acts.

An illustration of the importance of good health habits is provided by a classic study of people living in Alameda County, California, conducted by Belloc and Breslow (1972). These scientists focused on several important health habits:

- Sleeping 7 to 8 hours a night

- not smoking
- eating breakfast each day
- having no more than one or two alcoholic drinkseach day
- Getting regular exercise
- not eating between meals
- being no more than 10 percent overweight

Primary Prevention:

Primary Defense Primary prevention involves establishing healthy habits and eradicating unhealthy ones. This entails adopting preventative steps against disease risk factors before an

illness has a chance to manifest. There are two main primary preventative tactics. The first and most popular tactic is to persuade people to change their unhealthy habits, such using interventions to assist people lose weight. The second, more modern strategy focuses on preventing people from ever adopting bad health practices. Programs to discourage smoking among young adolescents are an illustration of this strategy.

4.2 Role of Behavioral Factors in Disease and Disorder

Major factors lead one person to live a healthy life and another to compromise his or her health, which includes:

Demographic Factors: Younger, more affluent, better-educated people with low levels of stress and high levels of social support typically practice better health habits than people under higher levels of stress with fewer resources (Hanson & Chen, 2007).

Age: Health habits are typically good in childhood, deteriorate in adolescence and young adulthood, but improve again among older people.

Values: Values affect the practice of health habits. For example, exercise for women may be considered desirable in one culture but undesirable in another (Guilamo-Ramos, Jaccard, Pena, & Goldberg, 2005).

Personal Control: People who regard their health as under their personal control practice better health habits than people who regard their health as due to chance. The health locus of control scale (Table 3.2) (Wallston, Wallston, &DeVellis, 1978) measures the degree to which people perceive their health to be under personal control, control by the health practitioner, or chance.

Social Influence: Family, friends, and workplace companions influence health-related behaviors, sometimes in a beneficial direction, other times in an adverse direction (Blumberg, Vahratian, & Blumberg, 2014). For example, peer pressure often leads to smoking in adolescence but may influence people to stop smoking in adulthood.

Personal Goals and Values: Health habits are tied to personal goals. If personal fitness is an important goal, a person is more likely to exercise.

Perceived Symptoms: Some health habits are controlled by perceived symptoms. For example, a smoker who wakes up with a smoker's cough and raspy throat may cut back in the belief that he or she is vulnerable to health problems at that time.

Access to the Health Care Delivery System: Access to the health care delivery system affects health behaviors. For example, obtaining a regular Pap smear, getting mammograms, and receiving immunizations for childhood diseases depend on access to health care. Other behaviors, such as losing weight and stopping smoking, may be indirectly encouraged by the health care system through lifestyle advice.

Knowledge and Intelligence: The practice of health behaviors is tied to cognitive factors, such as knowledge and intelligence (Mõttus et al., 2014). More knowledgeable and smarter people typically take better care of themselves. People who are identified as intelligent in childhood have better health related biological profiles in adulthood, which may be explained by their practice of better health behaviors in early life (Calvin, Batty, Lowe, &Deary, 2011).

TABLE 3.2 | Health Locus of Control

Health locus of control assesses whether you think you control your health or whether you believe it's controlled by health care professionals or by chance. Here are some examples of items that assess health locus of control. For each item, circle the number that represents the extent to which you agree or disagree with that statement.

1 Strongly Disagree (SD)
2 Moderately Disagree (MD)
3 Slightly Disagree (D)
4 Slightly Agree (A)
5 Moderately Agree (MA)
6 Strongly Agree (SA)

	SD	MD	D	A	MA	SA
1. If I get sick, it is my own behavior that determines how soon I get well again.	1	2	3	4	5	6
2. Most things that affect my health happen to me by accident.	1	2	3	4	5	6
3. Whenever I don't feel well, I should consult a medically trained professional.	1	2	3	4	5	6
4. I am in control of my health.	1	2	3	4	5	6
5. Health professionals control my health.	1	2	3	4	5	6
6. My good health is largely a matter of good fortune.	1	2	3	4	5	6
7. If I take the right actions, I can stay healthy.	1	2	3	4	5	6

Source: Wallston, Wallston, & DeVellis, 1978; see http://www.vanderbilt.edu/nursing/kwallston/mhlcscales.htm for the complete scale.

There is often little immediate incentive for practicing good health behaviors, however. Health habits develop during childhood and adolescence when most people are healthy. Smoking, a poor diet, andlack of exercise have no apparent effect on health for years, and few children and adolescents are concerned about what their health will be like when they are 40 or 50 years old (Johnson, McCaul, & Klein, 2002). As a result, bad habits have a chance to make inroads.

Emotional Factors:Unhealthy actions may result from or be sustained by emotions. (Conner, McEachan, Taylor, O'Hara, & Lawton, 2015). Unhealthy habits can be enjoyable, automatic, addictive, and difficult to break. Additionally, intimidating messages intended to alter health behaviors can cause psychological discomfort and trigger defensive reactions, which exaggerate health risks. (Beckjord, Rutten, Arora, Moser, &Hesse, 2008; Good & Abraham, 2007). People may perceive a health threat to be less relevant than it really is, and they may falsely see themselves as less vulnerable than or dissimilar to other people with the same habit (Roberts, Gibbons, Gerrard, & Alert, 2011; Thornton, Gibbons, & Gerrard, 2002). Continuing to practice a risky behavior may itself lead people to minimize their risks and feel a false sense of security (Halpern-Felsher et al., 2001).

Instability of Health Behaviors: Only tangential relationships exist between health behaviors. For instance, hardly everyone who exercises consistently wears a seat belt. As a result, changing one health behavior at a time is frequently necessary. Health behaviors change with time. After giving up smoking for a year, a person could start smoking again under stressful circumstances. Why are health behaviors inconsistent and largely unrelated to one another? First, several factors control various health behaviors. Smoking, for instance, may be linked to stress, whereas exercising greatly depends on accessibility to athletic facilities. Second, for various individuals, the same health behavior may be influenced by various causes.

One person's overeating may be "social," and she may eat primarily in the presence of other people, whereas another person may overeat only when under stress. Third, factors controlling a health behavior may change over the history of the behavior (Costello, Dierker, Jones, & Rose, 2008). For example, although peer group pressure (social factors) is important in initiating smoking, over time, smoking may be maintained because it reduces feelings of stress. Fourth, factors controlling a health behavior may change across a person's lifetime. In childhood, regular exercise is practiced because it is built into the school curriculum, but in adulthood, this behavior must be practiced intentionally.

In summary, health behaviors are elicited and maintained by different factors for different people, and these factors change over the lifetime as well as over the course of the health habit. Consequently, health habit interventions have focused heavily on those who may be helped the most—namely, children and adolescents (Patton et al., 2012).

4.3 Intervening with Children and Adolescents:

Socialization: Health habits are strongly affected by early socialization, especially the influence of parents as both teachers and role models (Morrongiello, Corbett, &Bellissimo, 2008). Parents instill

certain habits in their children (or not) that become automatic, such as brushing teeth regularly and eating breakfast every day. None- the less, in many families, even these basic health habits are not taught. Especially in families in which parents are separated or there is chronic family stress, health habits may slip through the cracks (Menning, 2006).

Moreover, as children move into adolescence, they sometimes ignore the early training they received from their parents. In addition, adolescents are exposed to alcohol consumption, smoking, drug use, and sexual risk taking, particularly if their parents aren't monitoring them very closely and their peers practice these behaviors (Andrews, Tildesley, Hops, & Li, 2002).

The foundations for health promotion develop in early childhood, when children are taught to practice good health behaviors.

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Using the Teachable Moment:

There are periods that are preferable to others for changing health habits. Health promotion initiatives take advantage of these teaching opportunities. Early childhood presents many teaching opportunities. Parents can instill in their kid's fundamental health and safety behaviors such as drinking milk instead of soda with dinner and looking both ways before crossing the street.

The healthcare system also contains additional teaching opportunities. For instance, well-baby care is a common benefit for infants in the United States. Pediatricians can use these visits to impart the fundamentals of accident prevention and home safety to motivated new parent's safety. At the start of the school year, many school systems demand a physical exam and verification of immunizations.

But what can children really learn about healthhabits? Surprisingly, quite a bit. Interventions withchildren indicate that choosing healthy foods, brushingteeth regularly, using car seats and seat belts, participating in exercise, crossing the street safely, and behavingappropriately in real or simulated emergencies (such asearthquake drills) are all within the ability of childrenas young as age 3 or 4, as long as the behaviors are explained concretely and the children know what to do (Maddux, Roberts, Sledden, & Wright, 1986).

Middle school is an important time for learningseveral health-related habits. For example, food choices, snacking, and dieting all crystallize around this time (Cohen et al., 1990). There is also a **window ofvulnerability**for smoking and drug use during middle school, when students are first exposed to these habitsamong their peers (D'Amico &Fromme, 1997). Interventions through the schools may reduce these risks.

Adolescent Health Behaviors and AdultHealth:

An important reason for intervening withadolescents is that precautions taken in adolescencemay affect disease risk after age 45 more than do adulthealth behaviors. The health habits a person practicesas a teenager or college student may determine whichchronic diseases he or she develops and what the person ultimately dies of in adulthood. For adults who make changes in their

lifestyle, it may already be toolate. This is true for sun exposure and skin cancer and for calcium consumption for the prevention of osteoporosis. Risk factors of other disorders such as coronary heart disease may also be strongly affected byhealth habits in childhood and adolescence as well.

Benefits of Focusing on At-Risk People:

Working with at-risk populations can be an efficientand effective use of health promotion dollars. First, disease may be prevented altogether.

Adolescence is a window of vulnerability for many poor health habits. Consequently, intervening to prevent health habits from developing is a high priority for children in late elementary and middle school.

For example, helping men with a family history of heart disease tostop smoking can prevent coronary heart disease.When a risk factor has implications for only some people, it makes sense to target those people for whom therisk factor is relevant. For example, people who havehypertension that implicates salt sensitivity need to beespecially vigilant about controlling their salt intake.

Problems of Focusing on At-Risk People:

Clearly, however, there are difficulties in working with people at risk. People do not always perceive
their risk correctly (Croyle et al., 2006). Most people are unrealistically optimistic and view their poor health behaviors as widely shared but their healthy behaviors as more distinctive. For example, smokersoverestimate the number of other people who smoke.Sometimes testing positive for a risk factor leadspeople into needless worry or hypervigilant behavior (DiLorenzo et al., 2006). People can become defensive, minimize the significance of their risk factor, and avoidusing appropriate services or monitoring their condition.

Health Promotion and Older Adults

Health promotion efforts with older adults focus onseveral behaviors: maintaining a healthy, balanced diet;maintaining a regular exercise regimen; taking steps toreduce accidents; controlling alcohol consumption; eliminating smoking; reducing the inappropriate use ofprescription drugs; obtaining vaccinations against in-fluenza; and remaining socially engaged. Often, olderadults have multiple issues or health habits that needmodification, requiring an integrative biopsychosocial approach to their health care needs (Wild et al., 2014).

Ethnic and Gender Differences in Health Risks and Habits:

Health promotion addresses ethnic and gender differences in vulnerability to health risks. For example, African American and Hispanic women get less exercise than do Anglo women and are more likely to be overweight (Pichon et al., 2007). Anglo and AfricanAmerican women are more likely to smoke than His-panic women. Alcohol consumption is a greater problem among men than

women, and smoking is asomewhat greater problem for Anglo men than forother groups.Health promotion efforts with different ethnicgroups need to take account of culturally different socialnorms. Culturally appropriate interventions include consideration of health practices in the community, informal networks of communication that can makeinterventions more successful, and language (Barrera,Toobert, Strycker, &Osuna, 2012; Toobert et al., 2011).Even efficient low-cost interventions such as text messaging and automated telephone messages can be successfully implemented when the messages are culturallyadapted to the target group (Migneault et al., 2012).

4.4 Summary

- A healthy habit is a behavior that is well-ingrained and frequently performed spontaneously and unconsciously.
- Health habits are tied to personal goals. If personal fitness is an important goal, a person is more likely to exercise.
- Early childhood presents many teaching opportunities. Parents can instill in their kid's fundamental health and safety behaviors such as drinking milk instead of soda with dinner and looking both ways before crossing the street.
- Health promotion addresses ethnic and gender differences in vulnerability to health risks.

4.5 Keywords

Health-The word health refers to a state of complete emotional and physical well-being.

Socialization- Socialization is a continuous and life long process till to the end of life.

Habit-A usual behavior which will be done by an individual.

SelfAssessment

1. Health habits usually develop in which phase:

A. Adolescence
B. Childhood
C. Young age
D. none above

2. Identifythe task of primary prevention:

A. Instilling good health habits and changing poor ones
B. Learn creative things
C. To avoid bad habits only
D. Learn new behavior

3. Recognize which one is true:

A. Health habits are typically deteriorating in childhood, good in adolescence and young adulthood, but improve again among older people.
B. Health habits are typically good in childhood, improve in adolescence and young adulthood, but deteriorate again among older people.
C. Health habits are typically good in childhood, deteriorate in adolescence and young adulthood, but improve again among older people.
D. All above

4. Whichscale measures the degree to which people perceive their health to be under personal control, control by the health practitioner, or chance:

A. locus of control scale
B. Life satisfaction scale
C. Both i& ii
D. Attitude scale

5. An important reason for intervening withadolescents is:

A. Precautions taken in adolescencemay affect disease risk after age 30 more than do adulthealth behaviors.
B. Precautions taken in adolescencemay affect disease risk after age 45 more than do adulthealth behaviors.
C. Precautions taken in adolescencemay affect disease risk after age 55 more than do adulthealth behaviors.
D. All above

6. Major factors lead one person to live a healthy life and another to compromise his or her health, which include:

A. Personal control
B. Social Influence
C. Personal goals and values
D. All of the above

7. Parents can teach their children basic safetybehaviors, such as looking both ways before crossing thestreet, and basic health habits, such as drinking milkinstead of soda with dinner can be best explained

A. Using the Teachable Moment
B. Adolescent Health Behaviors and Adult Health
C. Socialization
D. None of the above

8. An important reason for intervening withadolescents is that

A. Precautions taken in adolescencemay affect disease risk after age 45 more than do adulthealth behaviors.
B. The health habits a person practicesas a teenager or college student may determine whichchronic diseases he or she develops and what the person ultimately dies of in adulthood.
C. Both i& ii
D. None above

9. Window ofvulnerability known as:

A. For smoking and drug use during middle school, when students are first exposed to these habitsamong their peers.
B. For going outside of the school without any permission
C. Making excuses in middle age
D. Improper time management.

10. Scientists focused on several important health habits

A. Sleeping 7 to 8 hours a night

B. eating breakfast each day

C. Getting regular exercise

D. All of the above

Answers for Self Assessment

1.	B	2.	A	3.	C	4.	A	5.	B
6.	D	7.	A	8.	C	9.	A	10.	D

Review Questions

1. Explain what is health behaviors?
2. What do you mean by primary prevention?
3. Discuss role of behavioral factors in disease and disorder?
4. Explain ethnic and gender differences in health risks and habits?
5. Write short note on Benefits of Focusing on At-Risk People?

Further Readings

- Ogden, J. (2012). Health Psychology: A Textbook (5th ed.). Maidenhead, UK: Open University Press.

Unit 5: Disease Prevention Behaviour

CONTENTS

Objectives

- Provide an overview of the concept of disease prevention behaviours
- Provide an overview of how personality is related to ill health
- Introduce diseases related to unhealthy behaviours

Introduction

Health behaviors are behaviorscarried out by people to maintain or improve their health. A health habit is a health behavior that develops over time and is so well established that it may occur automatically without being aware. These habits begin to develop in childhood stabilize at around 11 to 12 years of age. Health habits though are initially carried out for positive outcomes such as reinforcement or parental approval but eventually they become independent of reinforcement. Health habits include behaviors such as wearing a seat belt, brushing your teeth, taking a bath, eating a healthy diet etc.In this unit we will try to get an overview about how personality and behavior plays a role in ill health and try and understand some of the common lifestyle related diseases.

5.1 Personality and Ill Health

Personality traits are known to guide an individual's behaviour and habits and hence have been associated with chronic diseases. Based on personality an individual may or may not indulge in healthy or unhealthy behaviours.

5.2 Cardiovascular Diseases

The cardiovascular system includes the heart, blood vessels, and blood and works as the transport system in our body. Blood is the carrier of oxygen from the lungs to the different tissues of our body. It also carries carbon dioxide from the tissues back to the lungs. Other than this it also acts as

a carrier of nutrients from the digestive system to each cell of the body for its properfunctioning. Waste products are also carried by the bloodfrom the different cells to the kidneys, which in turn helps in excretion in the form of urine.

Disorders of the Cardiovascular System

The cardiovascular system may be affected by a number of disorders, some due to congenital defects present at birth or due to infection. But one of the major factors affecting the cardiovascular system is the lifestyle of an individual including diet, exercise, smoking and stress. Some of the cardiovascular diseases have been discussed below.

- **Atherosclerosis**

Atherosclerosis is a condition where in formation of plaques leads to narrowing of arteries due to deposition of cholesterol and other substances in the arterial walls. This reduces blood flow through the arteries, leading to tissue damage as it interferes with the passage of nutrients to the cells.This may also lead to the formation of blood clots thus causing complete cut off of blood flow.

Clinical Manifestations of the atherosclerosis include:

- **Angina Pectoris**or chest pain- caused due to insufficient supply of oxygen or removal of carbon dioxide from the heart.
- **Myocardial infarction(MI)**or heart attack- caused due to formation of a clot which blocks the flow of blood to the heart.
- **Ischemia-** caused due to lack of oxygen or blood flow to the heart muscle.

Other major disorders of the cardiovascular system include:

- **Arrhythmia**- Irregular heartbeats, in severe cases may lead of loss of consciousness or even death.
- **Congestive heart failure (CHF)-** Occurs when the hearts fails to supply enough oxygen rich blood to meet the needs of the body.
- **Blood Pressure**

  The force that the blood exerts on the walls of blood vessels is called blood pressure. The measurement of blood pressure includestwo pressures namely systole (force on blood vessel is greatest) and diastole (force on blood vessel is lowest). High blood pressure is called hypertension.

5.3 HIV Infection and AIDS

Acquired immune deficiency syndrome(AIDS) was found to be caused due to a high rate of extramarital sex, lack of use of condom, high rate of gonorrhoea (a sexually transmitted disease) with high prevalence in women than men.

The **human immunodeficiency virus**(HIV) following transmission grows rapidly and spreads throughout the body within few weeks. Early symptoms include predominating flu like symptoms with swollen glands. After this the infection becomes less severe followed by a long asymptomatic period since the viral growth is slow. The immune system is severely compromised after the asymptomatic state by killing the helper T cells thus increasing vulnerability to infections and thus leading to the diagnosis of AIDS.**Antiretroviral Therapy** (***HAART***- Highly active antiretroviraltherapy) has helped change AIDS into a chronic disease rather than a fatal disease.

- **Psychosocial impact of HIV infection**

People with low social support diagnosed with AIDS tend to be at a risk of developing depression, particularly those who use avoidant coping. Suicidal thoughts are also common among infected socially isolated people. People diagnosed with AIDS were found to bring about positive changes in their lifestyle after being diagnosed by engaging in regular exercise, healthier diet, reducing or quitting smoking or drug use.

5.4 Diabetes

Diabetes Mellitusor simply diabetes is a metabolic disease which causes high blood sugar.The hormone insulin released by the pancreas carries sugar from the from the blood to the different cells of the body wherein sugar is either used up to produce energy or stored. Diabetes results either from our body's inability to produce enough insulin or inability of the produced insulin to function properly.

Diabetes is classified into:

- **Type I Diabetes**

  Type I diabetes is a severe disorder which arises during late childhood or early adolescence. It is a partly genetic autoimmune disorder precipitated by an earlier viral infection. The immune system falsely identifies cells (Islets of Langerhans in the pancreas that produce insulin as invaders and destroy them, thus inhibiting production of insulin.

- **Type II Diabetes**

  Type II diabetes is a comparatively more common lifestyle disease which occurs after the age of 40. In this case the pancreas might produce insulin but it may not be sufficient to meet the needs of the body. Obesity and stress are most common risk factors among others since type 2 diabetes is heavily a disease of lifestyle.

  Diabetic patients have high rates of coronary heart disease and diabetes is a leading cause of blindness among adults. It may also cause nervous system damage, leading to pain and loss of sensation. Amputation may also be required in certain cases. Patients with diabetes hence tend to have a considerably shortened life expectancy.Intervening with high-risk individuals tomodify a lifestyle can be successful in reducing theincidence of diabetes.

5.5 Cancer

Cancer is a group of 100 or more diseases that have more than one common factor. Cancer is caused due to a dysfunction in **DNA**, the part of the cell which controls cell growth and reproduction. This dysfunction causes rapid and excessive cell growth. Such cells are called tumors. These cells merely deprive the body of resources and provide no other benefits. They are often shaped differently from other healthy cells and spread to different parts of the body despite repeated signaling by the body to stop reproduction. Major risk factors of cancer include smoking, unhealthy diet and environmental factors.

Tumours are mainly of two types:

- **Benign Tumours**- Tumours which do not invade other sites of the body and are non-cancerous.
- **Malignant Tumours-** Tumours which invade other sites of the body and are cancerous. Malignant tumours can be **locally invasive**or **metastatic.**Locally invasive cancers invade surrounding tissues by sending 'fingers' of cancerous cells to normal tissue while metastatic cancers send cells to other tissues of the body which may be distant from the actual tumour.

Types of Cancers

- **Carcinoma-** Cancer found in the epithelial tissues that covers or lines surfaces of organs glands etc.
- **Sarcoma-** Malignant tumours growing from connective tissues such as bones (osteosarcoma), cartilage (chondrosarcoma), tendons, muscles.
- **Lymphoma-** Cancer that grows from the nodes or glands of lymphatic system.
- **Leukaemia-** Alsoknown as blood cancer, is the cancer of the bone marrow which inhibits production of red blood cells, white blood cells and platelets.

Carcinomas account for 80-90% of all cancers.

Summary

Healthbehaviours are largely associated to the personality of an individual and plays an important role in disease prevention. Primary prevention of diseases refers to indulging in health behaviours and avoiding behaviours that may lead to ill health.Diseases such as cardiovascular disorders, cancer, diabetes and HIV are lifestyle diseases which may be caused due to practicing behaviours which are not healthy and further worsen if such behaviours are not changed. Primary prevention plays an important role in these disorders.

Keywords

Primary prevention, Health habits, cardiovascular disorders, diabetes, AIDS, Cancer

Self-Assessment

1. Cancer found in the connective tissues is called

A. Carcinoma
B. Leukaemia
C. Lymphoma
D. Sarcoma

2. Chest pain- caused due to insufficient supply of oxygen is called

A. locally invasive
B. Angina Pectoris
C. Arrhythmia
D. Ischemia

3. Heart attack is caused due to

A. blood clot
B. tumour
C. lack of oxygen
D. removal of carbon dioxide

4. Full form of DNA is

A. Ribonucleic Acid
B. Darmstadtium Acid
C. Deoxyribonucleic acid
D. Dysprosium Acid

5. Insulin is released from_____ cells of the pancreas

A. prolactin cells
B. islets of Langerhans
C. leukocytes
D. erythrocytes

6. Blood Cancer is called
A. Leukaemia
B. Lymphoma
C. Mellitus
D. HAART

7. When the hearts fail to supply enough oxygen rich blood to meet the needs of the body it is called
A. Ischemia
B. Atherosclerosis
C. Congestive heart failure
D. Acquired immune deficiency

8. Type II diabetes is a/an _____ disease.
A. autoimmune
B. fatal
C. lifestyle
D. acute

9. Indulging in health behaviours and avoiding behaviours that may lead to ill health is called ____
A. primary prevention
B. secondary prevention
C. tertiary prevention
D. protection

10. Most prevalent type of cancer is_____
A. Carcinoma
B. Sarcoma
C. Leukaemia
D. Lymphoma

11. Tumours which invade other sites of the body and are cancerous are _____
A. Benign
B. Sarcoma
C. Malignant
D. Mellitus

12. Irregular heartbeats, in severe cases may lead of loss of consciousness or even death is called ___
A. Angina Pectoris
B. Atherosclerosis
C. Ischemia
D. Arrhythmia

13. Hormone released by pancreas is called _____
A. Insulin

B. Prolactin
C. Melanin
D. Melatonin

14. _____ is the carrier of oxygen from the lungs to the different tissues of our body
A. Plasma
B. Sugar
C. Blood
D. Glucose

15. The force that the blood exerts on the walls of blood vessels is called _____
A. Systole
B. Blood Pressure
C. Diastole
D. Hypertension

Answers for Self Assessment

1.	D	2.	B	3.	A	4.	C	5.	B
6.	A	7.	C	8.	C	9.	A	10.	A
11.	C	12.	D	13.	A	14.	C	15.	B

Review Questions

1. Explain health habits.
2. Explain how personality of an individual plays a role in health behaviours.
3. Diabetes affects almost 10 million people every year in India. What is diabetes and how can we reduce chances of being affected?
4. Name and explain the different cardiovascular disorders.
5. What is Cancer? Name and explain the different types of cancer.

Further Readings

- Ogden, J. (2012). Health Psychology: A Textbook (5th ed.). Maidenhead, UK: Open University Press.

Unit 6: Health Promotion Behavior: Diet and Life Style, Exercise, Interventions, Mindfulness, Mediation and Sleep

CONTENTS

Introduction

Health promotion is more relevant today than ever in addressing public health problems. The health scenario is positioned at unique crossroads as the world is facing a 'triple burden of diseases' constituted by the unfinished agenda of communicable diseases, newly emerging and re-emerging diseases as well as the unprecedented rise of non-communicable chronic diseases. The factors which aid progress and development in today's world such as globalization of trade, urbanization, ease of global travel, advanced technologies, etc., act as a double-edged sword as they lead to positive health outcomes on one hand and increase the vulnerability to poor health on the other hand as these contribute to sedentary lifestyles and unhealthy dietary patterns. There is a high prevalence of tobacco use along with increase in unhealthy dietary practices and decrease in physical activity contributing to increase in biological risk factors which in turn leads to increase in non-communicable diseases.

6.1 Diet

Vedic diet and nutrition may help some people to cope with stress by managing their symptoms and promote recovery. Some herbal remedies, vitamin such as vitamin B, C, E may give a boost in your immune systems. Food or supplements that contain antioxidants such as berries, mangos teen, quercetin etc. will help you to fight for the free radicals that generated from your body as a result of stress. Avoid stimulant food such as alcohol, coffee, sugars and high fat foods. If you decide to take a health supplement, here is some guidelines for you to decide the reliability and safety considerations on the health supplements. Madhav Goyal et al. (2014) evidence of any effect of meditation programs on positive mood, attention, substance use, eating habits, sleep, and weight. We found no evidence that meditation programs were better than any active treatment (ie, drugs, exercise, and other behavioral therapies). Balaji Deekshitulu PV (2020) explains that the Food habits are uses self-treatment of different psychiatric disorders. It is reported that Diet are used in treating a broad range of mental health disorders including anxiety, stress, depression, obsessive-compulsive, affective, bipolar maniac-depressive, psychotic, phobic and somatoform disorders etc.

6.2 Life Style

Life style denotes the way people live, reflecting a whole range of social values, attitudes and activities. Lifestyles are learnt through social interaction with parents, peer, groups, friends and siblings and through school and mass media. Life style is composed of cultural and

behavioralpatterns and lifelong personal habits,that have developed through processes of socialization. Many of the health problems are associated with life style changes. Risk for illness and death are related with life styles such as lack of sanitation, poor nutrition, personal hygiene, elementary human habits, customs and cultural patterns. Certain life styles like adequate nutrition, enough sleep, sufficient physical activity to promote health. Achievement of optimum health demands adoption of healthy styles.

6.3 Exercise

Promote increases in physical activity. Exercise provides numerous health benefits and should be promoted to the most sedentary subgroups of the population.3

Promote breastfeeding. Breastfed children have less risk for acute diseases of infancy and early childhood and a reduced risk of developing childhood obesity.8 • Increase fruit and vegetable consumption. Higher consumption of fruits and vegetables is associated with lower incidence of several chronic diseases, including cardiovascular disease and some cancers.4 • Reduce television-viewing time. A reduction in the length of time that children and adolescents watch television may reduce the risk for obesity among

6.4 Physical Activity Strategies

The Guide to Community Preventive Services (www.thecommunityguide.org/pa) recommends five population-based strategies for increasing a population's level of physical activity. These strategies include ways to achieve Healthy People 2010 objectives that deal with moderate and vigorous lifestyle activities for adults and young people.

Community-wide campaigns.

Large-scale, highly visible, multicomponent campaigns with messages promoted to large audiences through diverse media, including television, radio, newspapers, movie theaters, billboards, and mailings.

Individually targeted programs.

Programs tailored to a person's readiness for change or specific interests; these programs help people incorporate physical activity into their daily routines by teaching them behavioral skills such as setting goals, building social support, rewarding themselves for small achievements, solving problems, and avoiding relapse.

School-based physical education (PE)

School curricula and policies that require students to engage in sufficient moderate to vigorous activity while in school PE class. Schools can accomplish this by increasing the amount of time students spend in PE class or by increasing their activity level during PE class.

Interventions that provide social support for physical activity in community settings. Interventions designed to promote physical activity by helping people create, strengthen, and maintain social networks that support their efforts to exercise more; examples include exercise buddy programs and the establishment of exercise contracts or walking groups. Interventions to provide people greater access to places for physical activity. Examples include building walking or biking trails and making exercise facilities available in community centers or workplaces.

Strategies to Increase Fruit and Vegetable Consumption

High fruit and vegetable intake is associated with low dietary fat intake, and dietary fat is associated with both cancer and heart disease The Healthy People 2010 objectives related to fruit and vegetable consumption include recommendations to consume at least three servings of vegetables and two servings of fruit per day.Unfortunately, less than 25% of the world population consumes at least five servings of fruits or vegetables a day.

A Day for Better Health Program.

Resources to help health organizations promote fruit and vegetable consumption can be found.

Strategies to Promote Breastfeeding

The Healthy People objective relating to breastfeeding states: "Increase to 75% the proportion of mothers who breastfeed their babies in the early postpartum period, increase to 50% the proportion of mothers who breastfeed their babies for at least 6 months, and increase to 25% the proportion of mothers who breastfeed their babies Interventions for at least 12 months." Specific strategies to promote breastfeeding.

These strategies include

1) Developing social support resources for breastfeeding women,

2) Training health care professionals to promote breastfeeding among their patients,

3) Establishing maternity care practices and policies that promote breastfeeding, and

4) Establishing workplace programs and policies that promote breastfeeding.

6.5 Mindfulness and Sleep

Mindfulness meditation is a self-regulation practice that has several health benefits when taught in a short-term group program known as mindfulness-based stress reduction. Similar to CBT-I, the mindfulness-based stress reduction program has been found to have long-term benefits that extend beyond the end of treatment. In a three-year follow-up study of individuals diagnosed with anxiety disorders, improvements in symptoms of anxiety and depression achieved at posttreatment were maintained at the three-year follow-up, with 56% of the participants maintaining a meditation practice. Mindfulness-based stress reduction has also been found to have durable effects on symptoms of depression, anxiety, and pain during a three-year follow-up of individuals with fibromyalgia.Mindfulness-based cognitive therapy is a similar mindfulness-based program that is specifically designed to prevent the relapse of depression. Over a 60-week period, mindfulness-based cognitive therapy was found to significantly reduce the risk of relapse compared with treatment as usual among individuals who reported at least three previous episodes of depression.It has been hypothesized that the emphasis on self-regulation and the application of the principles of mindfulness meditation into participants' daily lives might account for the long-term benefits of a mindfulness-based program

The practice of mindfulness meditation has been previously linked to sleep improvements; however, its effects on people seeking treatment for chronic insomnia are not entirely clear. The mindfulness-based stress reduction program has been found to improve sleep among cancer patients and adolescents with substance abuse history.However, Winbush and colleaguesconducted a systematic review of the effects of mindfulness-based stress reduction on sleep disturbances and identified several methodological limitations in the literature that precluded conclusions about the efficacy of mindfulness-based stress reduction for disturbed sleep. It has been found clinically significant improvements in several night time symptoms of insomnia as well as statistically significant reductions in presleep arousal, sleep effort, and dysfunctional sleep-related cognitions. The long-term benefits of mindfulness-based stress reduction on their targeted symptoms suggest that combining the two could potentially improve the long-term management of chronic insomnia by leading to sustained improvements in both sleep and associated daytime distress.

Mediation

Meditation is a yogic tool for mind management; it takes case of both internal and external relaxations because it aims to reach the inner self by going beyond the physical and mental planes. Yoganidra is an approach that links up an individual's conscious awareness with the transcendental body. In fact, Yoga means unison and 'nidra means the purest form of relaxation. Yoganidra is, in this sense, a total relaxation with complete awareness about one's spiritual origin. This complete self-awareness empowers the mind to joyfully face the odds of any work environment and reduces tensions and stresses of the employees. In Yoganidra, the posture is Shavasana, i.e., the posture of sense withdrawal. In this posture one lies on his back with arms little away from the body and with legs slightly apart. The whole body has to be in a relaxed state but one must not sleep. Once the body becomes steady and relaxed the practitioner goes for breath awareness, i.e., the practitioner continuously watches the cyclical movement of the breath between the throat and naval. Next step is to make a "sankalpa", a target to be attained at the end. One should repeat this sankalpa with unchanged words each time one practices Yoganidra.

Summary

- The health scenario is positioned at unique crossroads as the world is facing a 'triple burden of diseases' constituted by the unfinished agenda of communicable diseases, newly emerging and re-emerging diseases as well as the unprecedented rise of non-communicable chronic diseases.
- Vedic diet and nutrition may help some people to cope with stress by managing their symptoms and promote recovery.
- Mindfulness meditation is a self-regulation practice that has several health benefits when taught in a short-term group program known as mindfulness-based stress reduction.

Keywords

Vedic-It is related to Vedas.

Mindfulness -Mindfulness is the basic human ability to be fully present, aware of where we are and what we're doing, and not overly reactive or overwhelmed by what's going on around us.

Chronic-A chronic situation or problem is very severe and unpleasant.

Review Questions

1. What is health promotion behavior?
2. How health effected by diet and nutrition?
3. Write strategies to increase fruit and vegetable consumption?
4. Discuss Mindfulness?
5. Discuss mediation and sleep?

Further Readings

- Ogden, J. (2012). Health Psychology: A Textbook (5th ed.). Maidenhead, UK: Open University Press.

Unit 07: Health Compromising Behaviours

CONTENTS

Objectives

This unit will enable you to:

- Understand the nature of obesity;
- Elucidate the basic meaning of health compromising behavior;
- Evaluate the smoking behavior;
- Identify the substance dependence.

Introduction

People who engage in health-compromising actions jeopardize or endanger their present or future health. It refers to the usage of cigarettes, alcoholic beverages, and illegal narcotics. The influence of these behaviors on preterm births was studied separately and in combination for each drug.

Many health-harming activities are habitual, and others, such as smoking, are addictive, making them difficult to overcome.

On the other hand, with the right treatments, even the most difficult health behavior may be changed. When a person succeeds in altering a bad health habit, he or she is more likely to adopt additional good lifestyle modifications. A health-compromising conduct is one that jeopardizes or affects a person's current or future health. These are the kind of actions that may be "bad for us." Many health-harming activities are habitual, meaning they are performed without much thought or effort, and many are addicting, such as smoking. As a result, despite their negative consequences on our health, these variables may make such health-compromising activities difficult to abandon.

7.1 Obesity

Excessive bodily fat accumulation. - Obesity, defined as an excessive buildup of body fat, is the first health-compromising activity. It is critical to recognize the risks of developing anti-fat sentiments while advocating weight control as a health habit. To suggest that all obese individuals are unwell and all slender people are healthy is to oversimplify the situation. When studying this section of the literature, keep in mind that each person is unique. Obesity is a major cause of avoidable disease and death, and this information is intended to help you understand the impact of your own weight

on you. Each body has a healthy and appropriate weight, which may result in naturally, genetically larger or smaller people.

Obesity is a risk factor for a variety of diseases. It adds to the death rates of all malignancies, as well as those of the colon, rectum, liver, gallbladder, pancreas, kidney, and oesophagus, as well as non-lymphoma Hodgkin's and multiple myeloma. According to estimates, excess weight may responsible for 14% of all cancer deaths in males and 20% of all cancer deaths in women.

Obesity also contributes significantly to cardiovascular disease fatalities and is linked to atherosclerosis, hypertension, Type II diabetes, and heart failure. It raises the hazards of surgery, anesthetic administration, and childbirth.

The Body-Mass Index, or BMI, is a popular statistic used to distinguish between being underweight, normal weight, overweight, obese, and severely obese. The textbook contains a big chart that allows you to calculate your personal BMI, which is calculated by a height-to-weight ratio. This is a useful, generic classification of body sizes, however it is not without flaws. The BMI does not consider the composition of a person's body weight, such as bone density or muscle mass. For example, muscle weighs more than fat, therefore a strong person may weigh more, resulting in a higher BMI, but yet be of a healthy weight and stature.

7.2 Eating

The reasons and processes related with dieting and eating habits are referred to as eating behaviors. The function of neurological and hormonal systems in modulating eating habits and food choices in relation to healthy eating behaviors has been studied. Poor eating habits, on the other hand, have been linked to eating disorders such as anorexia nervosa and diet-related issues such as obesity. The function of neurological and hormonal systems in modulating eating habits and food choices in relation to healthy eating behaviors has been studied. Poor eating habits, on the other hand, have been linked to eating disorders such as anorexia nervosa and diet-related issues such as obesity. According to the notion, we prefer specific meals because past generations in our families did. These tastes were handed on since they were those of the people who survived, i.e. the 'fittest'.

The behavioral approach is the third technique to eating behavior. This method posits that the environment of the individual impacts the psychology of eating behavior. So, rather than ancestry or culture influencing someone's relationship with food, what and who they surround themselves with do. Some eating behavior behavioral theories include:

Individuals may form connections between various meals and specific reactions via classical conditioning. You are oblivious of the associations you are creating through classical conditioning. We are often trained to feel hungry when we smell food or to salivate when we view good food.

Positive reinforcement- After parents positively praise their children when they consume something, the probability that they will eat it again increases.

For example, if your mother allows you to watch TV provided you eat your veggies, you will gradually link vegetables with positive sensations.

Social learning theory states that an individual may emulate the reactions of others, such as a peer's reaction to a certain food, which can either prevent or enhance the possibility of eating that exact item again. Social learning theory may be applied to people outside of our immediate group, such as those we see on social media and in the media. Consider the folks you're exposed to who are favorable food influences. You can maintain a healthy relationship with food if you expose yourself to individuals like that. However, interacting with accounts, websites, or friends who have eating disorders or unrealistic body standards may have a substantial detrimental influence on your eating behavior.

7.3 Smoking

Smoking is the leading avoidable cause of death. It is still the leading cause of mortality in industrialized nations, both alone and in combination with other risk factors. Cancer, particularly lung cancer, is responsible for the majority of these deaths.

Women who smoke have a fourfold increased chance of developing breast cancer after menopause. Smoking also raises the risk of chronic bronchitis, emphysema, respiratory illnesses, fire and accident damage and injuries, reduced birth weight in offspring, and foetal development retardation. Stress and smoking can also have hazardous interactions. Nicotine can enhance men's

heart rate responsiveness to stress. Smoking can lower heart rate but raise blood pressure reactions to stress in women. Smoking has a synergistic effect with poor socioeconomic status: Smoking does more harm to underprivileged people than to more advantaged groups.

Smoking and obesity can both increase mortality. When compared to average-weight smokers, slim cigarette smokers have a higher risk of death. Thinness is not connected with an increased risk of death among those who have never smoked or in former smokers. Smokers engage in less physical activity than non-smokers, implying that smoking contributes to poor health indirectly.

Smokers are more prone to display a number of symptoms indicating the harm produced by smoking. A persistent morning cough might be an indication of a cigarette addiction. Shortness of breath, wheezing, and recurrent episodes of respiratory disease, such as bronchitis, are further symptoms. Smoking also causes exhaustion and impairs one's senses of smell and taste. Smokers are more prone to develop circulatory problems, such as chilly hands and feet, as well as premature wrinkles.

Smoking-related ailments might strike without notice at times. For example, coronary artery disease may present with minimal or no symptoms. At times, there will be warning indications, such as bloody discharge from a woman's vagina, which is a symptom of cervical cancer. A hacking cough is another red flag.

When attempting to quit smoking, a smoker may experience one or more of the following withdrawal symptoms: nausea, constipation or diarrhoea, sleepiness, loss of focus, insomnia, headache, nausea, and irritability.

7.4 Substance Dependence

Substance dependency, also known as drug dependency or physical reliance, occurs when a person requires one or more substances to function. Stopping the drug abruptly may result in physical withdrawal symptoms. Physical dependency is defined as being physically reliant on a substance but not fitting the requirements for addiction. A person receiving pain medicine during cancer treatment, for example, may be dependent on the drug, but this does not imply that they are addicted to it.

Physical dependency is defined as a person's reliance on a substance to assist them get through the day. It is also known as withdrawal syndrome, dependency syndrome, or abstinence syndrome, and it happens when symptoms of withdrawal arise when a person abruptly ceases taking a drug. Physical reliance, however, does not imply addiction. Physical dependency on prescription opioids, antidepressants, anti-epileptics, or benzodiazepines can occur without addiction.

Addiction is synonymous with Substance dependency, and physical dependency comes within the Substance dependency umbrella. Although some individuals use the phrases interchangeably, physical dependency and addiction are not the same thing. Substance dependency refers to long-term behavioral, social, and physical alterations, whereas dependence relates to the physical symptoms of withdrawal and tolerance. It is possible for a person to be dependent without having Substance dependency. This is common when a person needs long-term pain drugs for chronic pain. These people may grow dependent on pain drugs to function, but they do not necessarily have a pain medication addiction.

Physical dependency does not always necessitate therapy. For example, if a person requires opioids for an extended period of time, physicians will not prescribe therapy for opioid dependency. In reality, most persons can manage their physical dependence in an outpatient environment with a simple, gradual taper of that substance rather than suddenly discontinuing it. When someone has SUD, they can, however, undergo therapy. Depending on the substance, detoxification may be required as the initial stage in the individual's treatment strategy. Medications to reduce cravings and withdrawal symptoms may be prescribed as part of SUD therapy. However, it might also entail things like going to psychosocial treatment. A person may require emergency care before receiving therapy for withdrawal, drunkenness, or overdose in severe circumstances.

Summary

- Many health-harming activities are habitual, and others, such as smoking, are addictive, making them difficult to overcome.

- Obesity is a major cause of avoidable disease and death, and this information is intended to help you understand the impact of your own weight on you.
- Women who smoke have a fourfold increased chance of developing breast cancer after menopause.
- Addiction is synonymous with Substance dependency, and physical dependency comes within the Substance dependency umbrella.

Keywords

Obesity- Excessive bodily fat accumulation.

Smoking- The act of inhaling and exhaling the fumes of burning plant material.

Substance- Ultimate reality that underlies all outward manifestations and change.

Self Assessment

1. Health compromising behavior-

A. good to health
B. harmful to health
C. mediate health
D. none of above

2. Wheezing is caused by-

A. alcohol
B. smoking
C. drug abuse
D. all of the above

3. Is anorexia an eating disorder?

A. true
B. false

4. Is BMI a popular statistic used to distinguish between being underweight, normal weight, overweight, obese, and severely obese?

A. true
B. false

5. Health Psychology is linked to

A. Behavioral science
B. Clinical psychology
C. Behavioral medicine
D. All of the above

6. _____is the leading avoidable cause of death.

A. Eating
B. Smoking
C. Substance abuse
D. None of the above

7. Behavioral practices that harm current or future health are collectively called

A. Health determining behavior
B. Health enhancing behavior
C. Health compromising behavior
D. Health habits

8. A condition produced by repeated consumption of a natural or synthetic psychoactive substance, in which the person has become physically and psychologically dependent on the substance.

A. Addiction
B. Withdrawal
C. Physical dependence
D. Psychological dependence

9. Smoking, drinking and over-eating are examples of

A. Health compromising behavior
B. Health enhancing behavior
C. Health conscious behavior
D. Health promoting behavior

10. If the Body Mass Index (BMI) equals or exceeds 30, People are categorized as

A. Underweight
B. Normal weight
C. Overweight
D. Obese

Answers for Self Assessment

1. B	2. B	3. A	4. A	5. D
6. B	7. C	8. A	9. A	10. D

Review Questions

1. What is health compromising behavior?
2. Discuss about obesity?
3. Describe effects of smoking on health?
4. Write a note on eating behavior?
5. Describe about substance dependency?

Further Readings

- Health psychology. Shelly E Taylor 10th edition.

Unit8: Stress and Health

CONTENTS

Objectives

This unit will enable you to:

- Understand the nature and types of stress;
- Understanding the causes of stress;
- Analyze to manage stress;
- Evaluate the role of social support.

Introduction

The terminology stress has been taken from 'stringere', it is a latin word that means 'to draw tight' (Cox, 1978). It is now a widely used phrase in many contexts, including school, the workplace, and everyday life. We regularly come across folks who remark that they are anxious or feeling stress in their life. It is something that we frequently encounter. Tension is like salt and pepper, and a life without it would be devoid of drive, since stress frequently encourages us to go in a given direction. Thus, stress is not totally bad and does offer several perks. However, if it exceeds an individual's ideal level to the point that the individual finds it extremely difficult to cope with it, it can be harmful.

Baum et al. (1981)have defined stress as a "process in which environmental events or forces, called, stressors, threatens an organism's existence and wellbeing".

Lazarus and Folkman (1984) define stress as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his/ her resources and endangering his/ her wellbeing".

Stress may sometimes be mistaken for anxiety, and enduring a considerable quantity of stress can lead to feelings of worry. Anxiety can make it harder to manage with stress and may lead to other health concerns such as increased sadness, susceptibility to sickness, and digestive disorders. Anxiety and stress are factors in uneasiness, poor sleep, high blood pressure, muscular tension, and excessive concern. Stress is usually produced by external events, whereas anxiety is created by your internal reaction to stress. Anxiety may remain long after the initial stressor has been removed, but stress may disappear after the threat or situation has been resolved.

8.1 Types of Stress

Acute stressis a relatively short-term sort of stress that may either be positive or more stressful; this is the type of stress we most typically face in day-to-day living.

Chronic stressis defined as stress that appears to be unending and unavoidable, such as the stress of a terrible marriage or an exceedingly demanding profession; chronic stress can also result from traumatic events and childhood trauma.

Episodic acute stressis acute stress that appears to be prevalent and a way of life, resulting in a life of continual anguish.

Eustress is that Stress may also be positive stress, which is referred to as 'Eustress'. Eustress can be defined as "pleasant stress, induced by a positive response to a desired stressor, such as a wedding event a new job"

Acute stress is often brief, chronic stress is persistent, and episodic acute stress is brief but recurrent. Positive stress, also known as Eustress, may be enjoyable and thrilling, but it can also be detrimental.

8.2 Causes and consequences of stress

There are several things in life that might induce stress. Work, income, relationships, children, and day-to-day hassles are all common sources of stress. Stress can set off the body's fight-or-flight reaction in response to a perceived threat or danger. Adrenaline and Cortisol are produced during this response. This increases heart rate, slows digestion, shunts blood supply to main muscle groups, and alters several other autonomic nerve activities, providing the body with a burst of energy and power. Stress may be caused by a variety of circumstances, and each person has unique stress triggers. Work-related stress is one of the leading causes of stress, according to study.

When the apparent threat has passed, systems are programmed to resume regular operation via the relaxation reaction. However, with chronic stress, the relaxation reaction is seldom, and being in a near-constant state of fight-or-flight can be harmful to the body. Stress can also lead to harmful habits that harm your health. Many people, for example, react with stress by eating excessively or smoking. These bad behaviors harm the body and lead to worse difficulties in the long run.

Other sources of stress are:

Problems in marriage

Unemployment

Health concerns

Workplace stress

a lack of assistance

Accidents or traumatic situations

Emotional distress/poor mental health

Financial obligations

Dangerous working conditions

Working hours that are excessive

8.3 Consequences of Stress

Physiological Consequences

The human body suffers as a result of stress. According to research, students who are stressed about their examinations are more prone to colds and other ailments. As you are aware, many people suffer from tension or headaches as a result of stress. Others get muscular ache and back pain. These physiological problems are caused by muscular spasms that occur when people are stressed.

Psychological Consequences

Stress has a variety of psychological repercussions, including job dissatisfaction, moodiness, and depression. Another psychological effect of stress is emotional tiredness, often known as work burnout.

Burnout is the process of emotional depletion, depersonalization, and decreased personal accomplishment caused by chronic stress exposure. The phrase "work burnout" did not exist 50 years ago, yet it is today a widely discussed topic. Job burnout is a multifaceted process that encompasses stress dynamics, coping techniques, and stress repercussions. Excessive demands placed on persons who serve or engage with others induce burnout. Burnout is caused by interpersonal and role-related pressures.

Job burnout consists of three components. The first is emotional tiredness, which is a major factor in the burnout process. It is distinguished by a lack of energy and a sense that your emotional resources have been depleted. Emotional tiredness is also known as compassion fatigue since the employee no longer feels capable of providing the same level of assistance and care to clients.

The second is depersonalization, which is characterized by seeing others as things rather than individuals. Employees that suffer from burnout become emotionally distant from their clients and cynical about their employer. This detachment extends well beyond the amount of detachment generally necessary in job performance, particularly in the service industry. Depersonalization occurs when staff carefully adhere to rules and regulations rather than attempting to understand the client's demands and seek a mutually acceptable solution.

Personal success is the third component of job burnout. It refers to a loss of skill and success. In other words, the individual's self-efficacy decreases. Employees acquire a sense of learned helplessness in these situations because they no longer believe they can make an impact.

Behavioral Consequences

When stress turns into anxiety, job performance suffers and workplace accidents rise. High levels of stress impede your capacity to recall information, make sound judgements, and take appropriate action. You've undoubtedly felt this way throughout an exam. You are prone to forgetting critical facts and making blunders.

8.4 Stress Management

Stress management refers to the approaches, strategies, and therapies that are used to assist people control their stress. This can involve reducing acute stress, but it is usually targeted at reducing chronic stress in order to promote health, happiness, and general well-being.

Recognize what you can't alter. Accepting that you cannot change certain circumstances encourages you to let go and avoid becoming unhappy. You cannot, for example, change the fact that you must drive during rush hour. However, you may find ways to relax during your commute, such as listening to a podcast or reading a book.

Avoid high-stress situations. Remove yourself from the cause of stress whenever possible. For example, if your family is fighting around the holidays, take a break and go for a walk or drive.

Getting some physical movement every day is one of the simplest and most effective strategies to deal with stress. When you work out, your brain releases feel-good hormones. It can also assist you in releasing pent-up energy or frustration. Find something you like doing for at least 30 minutes per day, whether it's walking, cycling, softball, swimming, or dancing. Attempt to cultivate a more optimistic attitude regarding obstacles. This is accomplished by replacing negative ideas with more optimistic ones.

Do not allow worry prevent you from being social. Spending time with family and friends might make you feel better and allow you to forget about your stress. Confiding in a buddy may also assist you in resolving your issues.

Get adequate rest. Sleeping well might help you think more clearly and have more energy. This will make dealing with any difficulties that arise easier. Aim for 7 to 9 hours of sleep every night.

Maintain a nutritious diet. Eating nutritious meals provides fuel for both your body and mind. Instead of high-sugar snacks, eat more vegetables, fruits, healthy grains, low-fat or nonfat dairy, and lean meats.

8.5 Role of Social Support

Social support has been extensively researched as a component that reduces the impacts of stress, and the findings are rather surprising. Not only can social support make individuals feel less stressed, but it can also enhance your health and lower your chance of death.

Affirmations of one's value care for one's feelings, and the sharing of positive esteem are all examples of Emotional Social Support. This includes listening to and validating sentiments, as well as letting people know they are appreciated and giving a shoulder to weep on.

The giving of advice or knowledge that can aid someone who is enduring a stressor or issue that they don't know how to handle is referred to as informational social support. This includes providing good information, directing individuals to specialists who can provide guidance, and sharing experiences.

Sharing resources, whether material or financial, is one example of tangible social support. This might obviously include loans or monetary presents, but it can also include promises to share childcare chores, assist a friend with a move, or simply send a casserole to a mourning family.

Belonging Social Support entails giving social leisure and a sense of belonging. This entails including friends in the group and spending time with those who require assistance and may feel alone.

National Stress Awareness Day on the first Wednesday in November aims to identify and reduce the stress factors in your life.

Summary

- Stress is usually produced by external events, whereas anxiety is created by your internal reaction to stress.
- Acute stress is often brief, chronic stress is persistent, and episodic acute stress is brief but recurrent. Positive stress, also known as Eustress, may be enjoyable and thrilling, but it can also be detrimental.
- Stress can also lead to harmful habits that harm your health.
- Burnout is the process of emotional depletion, depersonalization, and decreased personal accomplishment caused by chronic stress exposure.
- Stress management refers to the approaches, strategies, and therapies that are used to assist people control their stress.
- Belonging Social Support entails giving social leisure and a sense of belonging. This entails including friends in the group and spending time with those who require assistance and may feel alone.

Keywords

Stress- The terminology stress has been taken from 'stringere', it is a latin word that means 'to draw tight.'

Burnout- It is the stage of exhaustion of physical or emotional strength or motivation usually as a result of prolonged stress or frustration.

Physiological-It is the characteristic of or appropriate to an organism's healthy or normal functioning.

SelfAssessment

1. _____is acute stress that appears to be prevalent and a way of life, resulting in a life of continual anguish.

A. Episodic acute stress
B. Acute stress
C. Eustress
D. Chronic stress

2. Is Burnout the process of emotional depletion, depersonalization, and decreased personal accomplishment caused by chronic stress exposure?

A. True
B. False

3. Deep breathing, yoga and exercise would all be _____ stress management techniques.

A. religious
B. cognitive
C. physical
D. social

4. Which factors improve coping?

A. Social support
B. Optimism
C. Perceived control
D. All of the above

5. Which of the following is a symptom of short term stress?

A. Rapid breathing
B. Digestive problems
C. Excessive tiredness
D. Mood changes

Answers for Self Assessment

1. A 2. A 3. C 4. D 5. A

Review Questions

1. What is stress?
2. Discuss the types of stress?
3. Write about physiological consequence?
4. Explain about stress management?
5. Describe the role of social support in stress management?

Further Readings

- Ogden, J. (2012). Health Psychology: A Textbook (5th ed.). Maidenhead, UK: Open University Press.

Unit 9: Management of Stress: Diaphragmatic Breathing, Progressive Muscular Relaxation, Biofeedback, Music Therapy, Nutrition and Stress, Physical Exercise &Stress

CONTENTS

Objectives

This unit will enable you to:

- Understand the nature of stress
- Analyze the role of diaphragmatic breathing to control stress;
- Evaluate the need of biofeedback & music therapy in an individual's life;
- Acknowledge the role of nutrition and physical exercise to prevent in stress.

Introduction to Stress

Stress is a state of physical, emotional or psychological tension. It might be triggered by any occurrence or idea that induces to feel annoyed, furious, or anxious. Stress is our reaction of the body to a difficulty or pressure. In short spurts, stress may be beneficial, for instance when it assists you escape danger or achieve a deadline. However, chronic stress can be harmful to your health. Stress is described as an adaptive reaction to an external condition that causes physical, psychological, and/or behavioral abnormalities in organizational members. Stress is a dynamic state in which an individual is presented with an opportunity, limitation, or demand connected to what he or she wishes, and the outcome is thought to be both unclear and significant.

According to Ivancevich and Matterson, "Stress is the interaction of the individual with the environment. It is an adaptive response, mediated by individual differences and/or psychological process; that is a consequence of any external (environmental) action, situation or event that places excessive psychological and/or physical demands upon a person"

According to Beehr and Newman, "Job stress is a condition arising from the interaction of the people and their jobs, and characterized by changes within people that force them to deviate from their normal functioning."

Stress is a NaturalEmotion. There are Two Sorts of Stress:

Acute stress:This is a temporary tension that will pass fast. You may feel it when you slam on the brakes, quarrel with your spouse, or ski down a steep hill. It assists you in dealing with potentially hazardous circumstances. It also happens when you accomplish something novel or intriguing. At some point in their lives, everyone experiences intense stress.

Chronic stress:This is prolonged tension. If you have money troubles, an unsatisfactory marriage, or problems at work, you may suffer from chronic stress. Chronic stress is any sort of stress that lasts for weeks or months. Chronic stress might become so habitual that you are unaware of it.

Stress Management

Stress management is defined as the tools, strategies, or techniques that reduce stress and reduce the negative impacts stress has on your mental or physical well-being. A variety of techniques can be used to manage stress. These include mental, emotional, and behavioral strategies. When stress management is used regularly and in response to stressful life events, we can optimize our well-being.

9.1 Diaphragmatic breathing

The diaphragm is a big muscle at the bottom of the lungs. When someone breathes in, their diaphragm relaxes and flattens, and their chest cavity expands. This contraction produces a vacuum that draws air into the lungs. Exhales cause the diaphragm to relax and return to its natural form, forcing air from the lungs. Diaphragmatic breathing, sometimes known as "belly breathing," involves the diaphragm, intercostal muscles, abdominal muscles, and pelvic floor muscles. Diaphragmatic breathing is a breathing workout that strengthens your diaphragm, a key muscle in breathing. Diaphragmatic breathing is a technique for focusing on your diaphragm, a muscle in your abdomen. It's also known as abdominal breathing or belly breathing. You may assist your body breathe more effectively by "training" your diaphragm to open your lungs. Diaphragmatic breathing has several advantages that can help the entire body. It's the foundation for many meditation and relaxation practices that help reduce stress, decrease blood pressure, and control other vital biological functions.

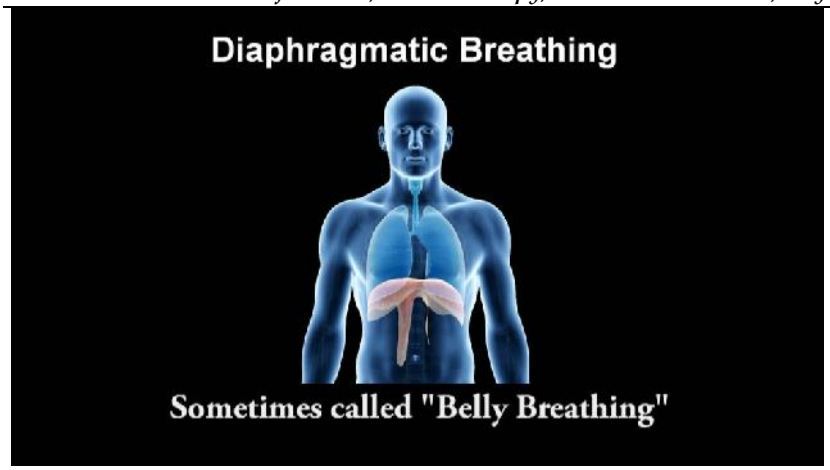
Here are some basic procedures which for performing diaphragmatic breathing exercise-

1.Sit or lie down on a level, comfortable surface.

2.Relax your shoulders and move them away from your ears.

3.Place one hand on chest and one on stomach.

4.Breathe in through nostrils until can't take in any more air without straining or pushing.



5.Feel the air entering into belly through nose, extending stomach and sides of the waist.

6.Purse lips as though you were drinking from a straw.

7.Feel stomach softly contract as you exhale slowly through your lips for 4 seconds.

For optimal results, repeat these instructions many times.

9.2 Progressive Muscular Relaxation

PMR is a relaxation method that includes tensing and relaxing certain muscles in sequence. Typically, a person begins at the feet and works their way up the body, taking deep, calm breaths throughout the exercise. A person might become more focused on the current moment by concentrating on tensing and releasing muscles separately. If their concentration wanders, they can refocus on how their body feels as they progress through the activity. This fosters attentiveness. The activity is also known as a "body scan" meditation.

Edmund Jacobson described progressive muscle relaxation in the 1930s, and it is founded on his thesis that mental tranquility is a natural by-product of physical relaxation. Progressive muscle relaxation is simple to learn and practice, requiring only 10 to 20 minutes each day.

The purpose of PMR is to induce a relaxation response. The relaxation response causes the body to shift from an alert, active state to a more restful one. It causes physiological changes such as:

Slower breathing

Slower heart rate

Decrease blood pressure

Decrease cortisol levels

People can use the relaxation response to reduce stress or anxiety, fall asleep, or relax stiff muscles. Some individuals utilize PMR towards the end of a yoga practice or as a type of meditation.

The fundamental advantage of PMR is that it relieves both mental and physical stress. When someone is anxious, the body's stress reaction is triggered. This causes an increase in respiration, heart rate, and the production of stress chemicals such as adrenaline and cortisol. These modifications are not detrimental in the short term and can assist someone who is in a risky or frightening circumstance.

9.3 Biofeedback

Biofeedback is a sort of therapy that measures important bodily functions using sensors linked to your body. Biofeedback is designed to teach you more about how your body operates. This knowledge may assist you in gaining better control over specific bodily processes and addressing health difficulties. The principle of "thought over matter" underpins biofeedback. The concept is that by being aware of how your body reacts to stresses and other stimuli, you can modify your health.

Chronic stress may have a significant impact on your health. This can involve high blood pressure, a rise in body temperature, and a disturbance in brain function. Biofeedback seeks to help you manage bodily processes by creating a more effective mental and physical response to stress. The benefits of biofeedback technique to encourage stress-response relaxation, increase awareness of mind and body, reduce stress, pain, anxiety and sadness and also enhance sleep and overall wellness.

Biofeedback employs relaxation strategies to counteract stress. To counteract your body's response to stressful events, you intentionally manage your breathing, heart rate, and other normally "involuntary" activities. Biofeedback tends to be most helpful in settings impacted substantially by stress. Learning difficulties, eating disorders, bedwetting, and muscular spasms are a few examples.

9.4 Music Therapy

Music therapy is the clinical use of musical treatments to enhance a client's quality of life based on scientific evidence. Music therapists use both active and receptive music experiences to help clients improve their health in cognitive, motor, emotional, communicative, social, sensory, and educational domains by utilizing music and its many facets, which include physical, emotional, mental, social, aesthetic, and spiritual domains. Nowadays, stress is more prevalent among all individuals all over the world, and people are more conscious of it than ever before. This chapter may help the general public obtain a comprehensive grasp of the function of music therapy in stress management and supporting individuals in self-recovery.

Music therapy makes use of music's remarkable ability to enhance a person's well-being. It is a different sort of therapy than counselling or cognitive behavioral therapy (CBT).

Music therapists employ a person's emotional responses and connections to music to promote beneficial changes in mood and general mental thinking. Music therapy can entail both listening to music and making music using various instruments. It might also include singing and dancing to music. It can boost confidence, communication skills, independence, self-knowledge and awareness of others, as well as focus and attentiveness.

Music has been used for therapy and healing since Ancient Greece Trusted Source, but its therapeutic application now began in the twentieth century, when World War II ended. The term "music therapy" first appears in a 1789 piece titled "Music physiologically considered."

9.5 Nutrition and Stress

Good eating is a key stress-reduction strategy. When our bodies are undernourished, stress has an even bigger impact on our health. Stress and nutrition are inextricably related. A healthy immune system and the restoration of damaged cells can be supported by a well-balanced diet. It gives the extra energy which need to get through tough situations. According to preliminary study, polyunsaturated fats, notably omega-3 fats, and vegetables may assist to manage cortisol levels. If persons usually rely on fast food because they are too tired or too busy to cook meals at home, try meal planning, which may help save time in the long term, assure more balanced healthier meals, and avoid weight gain.

When human eat rapidly and without thinking about what or how much we're eating it seems they are in stress and they eat like this, which can contribute to weight gain. Mindful eating habits

reduce stress by promoting deep breaths, mindful food selections, focusing attention on the meal, and digesting food slowly and completely. This boosts meal satisfaction and digestion. Mindful eating can also help us recognize when we are eating not for physiological hunger but for psychological turbulence, which may encourage us to eat more as a coping tactic.

9.6 Physical Exercise &Stress

Any physical exercise enhances your body's ability to utilize oxygen and leads to improved blood flow. More importantly, each of these items have a direct positive impact on the brain. Exercise stimulates the generation of endorphins in the brain. The endorphins are the neurotransmitters that are responsible for the "feel good" sensation you feel and they also supply you with the much-desired "runners-high". In basic terms, it is the feeling of pleasure or well-being that people experience after completing the exercise.

Aerobic exercise and mind-body exercises such as yoga or Tai Chi have been shown to be effective in reducing stress, whereas resistance exercises lack evidence. Despite the lack of evidence linking resistance exercise to stress management, resistance exercise can be used as a stress-relieving activity. When prescribing exercises, specific and important considerations should be taken into account. Because of the health consequences of stress, high-stress clients are more likely to suffer from cardiovascular disease and cardiovascular events while exercising. As a result, following the American College of Sports Medicine's pre-exercise screening procedures is critical. In addition, when developing an exercise prescription, common exercise barriers and stress-related health issues should be considered.

Physical activity may aid in the creation of endorphins, the brain's feel-good chemicals. Although this function is commonly referred to as a runner's high, any aerobic exercise, such as a rollicking game of tennis or a nature trek, can provide the same sensation. Exercise may offer stress reduction for your body by simulating the impacts of stress, such as the flight or fight reaction, and allowing your body and its systems to practice functioning together through those effects. This can also have a favorable effect on your health, particularly your cardiovascular, digestive, and immunological systems, by helping to shield your body from the detrimental effects of stress.

Regular exercise can boost your self-esteem, enhance your mood, help you relax, and alleviate minor depression and anxiety symptoms. Exercise can also help you sleep better, which is frequently hampered by stress, sadness, and worry. All of these workout advantages can reduce stress and offer you more control over your body and life.

Women appear more prone to ***stress*** than men.

Summary

- Stress management is defined as the tools, strategies, or techniques that reduce stress and reduce the negative impacts stress has on your mental or physical well-being.
- Diaphragmatic breathing is a technique for focusing on your diaphragm, a muscle in your abdomen. It's also known as abdominal breathing or belly breathing.
- PMR is a relaxation method that includes tensing and relaxing certain muscles in sequence.
- Music therapy is the clinical use of musical treatments to enhance a client's quality of life based on scientific evidence.

Keywords

Stress Management: The way to reduce stress.

Diaphragmatic: It helps to strengthen.

Biofeedback- Biofeedback is a technique which involved visual and auditory feedback to recognize the symptoms of stress.

Self Assessment

1. Stress management is about learning-

A. How to avoid the pressures of life?

B. How to develop skills that would enhance our body's adjustment when we are subjected to the pressures of life

C. Both '1' & '2' are true

D. None of the above

2. Which stress type is known as temporary stress?

A. Chronic stress

B. Acute stress

C. Positive stress

D. Negative stress

3. Which technique is used to manage stress for human being?

A. Biofeedback

B. PMR

C. All are correct

D. Exercise

4. _____is the clinical use of musical treatments to enhance a client's quality of life based on scientific evidence.

A. Biofeedback

B. Exercise

C. Music therapy

D. PMR

5. Which of the following are true in relation to Relaxation Response?

A. It is a physical state of deep rest

B. Eliciting this reduces your metabolism

C. Eliciting this reduces your blood pressure

D. All of the above

6. Which of the following Mindfulness meditation techniques can help relieve stress?

A. Body Scan

B. Walking Meditation

C. Mindful Eating

D. All of the above

7. Which of the following are stress busters?

A. Trying to find something funny in a difficult situation

B. Developing a support network

C. Taking a mindful walk

D. All of the above

Answers for Self Assessment

1. B 2. A 3. C 4. C 5. D

6. D 7. D

Review Questions

1. Explain what is Stress management?
2. How Diaphragmatic technique is useful to manage stress?
3. What is the role of PMR in stress management?
4. Explain role of physical exercise in the stress management?
5. What is the role of biofeedback?

Further Reading

- Health psychology. Shelly E Taylor 10th edition.
- Ogden, J. (2012). Health Psychology: A Textbook (5th ed.). Maidenhead, UK: Open University Press.

Unit 10: Indian Perspectives of Stress Management: Meditation, Yoga, Buddhist way of Stress Management, Healing Power of Spirituality

CONTENTS

Introduction

Stress is a product of busyness of modern life. Tim Newton (1995) refers to stress as "an epidemic plaguing modernity". It has assumed grave dimensions ever since the emergence of industrialism. From being a subject, which was barely a reference a century ago, it has become so prevalent that for most people in the capitalist world, it is unavoidable. Our concern in this Unit is with how this has come about, and with the ways in which employees are said to feel and cope with stress. It is important to monitor stress levels, analyses coping strategies and learn how to become stress–fit through a range of stress management techniques. Stress is an additive phenomenon. It builds up overtime. Stress is quintessentially a problem that must be borne by management and those in senior positions, whether captains of industry or leaders of government

Meaning of Stress

Stress is a "dynamic condition in which an individual is confronted with an opportunity, constraint or demand related to what he or she desires and for which the outcome is perceived to be both uncertain and important" (Robbins, 2001). According to Winfield, Bishop and Poter "stress is essentially a psychological condition induced by external conditions that release or restrict certain chemicals in the brain; this in turn can lead to psychological change in the individual resulting in change of behavior.

For Seyle (1945), there are three stages in the experience of stress:

(i) Alarm: The individual has lowered resistance when he or she is in a state of psychological disequilibrium, which does not permit the individual to co-exist conformably within the environment.

(ii) Resistance: The individual adapts to the stimulus, which permits him or her to eventually return to a state of psychological equilibrium.

(iii) Exhaustion: It results when the willingness and ability to adapt to the stimulus collapses. This will result in 'giving up' or resigning oneself to the inevitable and lead to damage psychological and physical health.

It may be mentioned here that stress is not necessarily bad in itself; it has positive value. It offers an opportunity for potential gain. Stress in a positive context induces employees to rise to the occasion and perform at their best.

10.1 Managing Stress: Ancient Indian Approaches

Psychologists have shown keen interest in the age-old techniques prescribed in the ancient Indian scriptures. Hindu psychology lays stress on the development of will, and on the

individual'spotential power of bringing out his inner strength. The Hindu psychological technique essentially has two aspects: one is the realization of the supreme goal of life, and the other, is the cultivation of detachment. According to the Bhagavadgita "the mind is restless and difficult to control"; but through practicing 'Karmayoga' one can cleanse the mind of its accumulated stress. When the Karmayog relinquishes attachment both to action and its fruit, he ceases to have likes, dislikes, and is therefore no longer swayed by the feelings of stress and frustration. It is through the constant practice of maintaining evenness of mind with reference to action one may perform, every moment of life, and under every circumstance are becomes a Karmayogi (Radhakrishna, 1990). Tensions result when the mind suffers from indecisiveness in relation to varying and conflicting emotions. Therefore, one should work with a perfect serenity indifferent to the results

'Yoganidra' (Meditation)

In most cases, standard management prescriptions cannot bring about mental relaxation, primarily because individuals have worries at the back of their minds even when they attempt to relax, physically. An employee may lie down on bed or take rest apparently quite for couple of hours but he may have a racing heart. Even during sleep, his mind may remain in an unconscious state. It is the three-fourth of the mind that remains in the unconscious form. The unconscious mind is the storehouse of many contradictions. Therefore, it is important to find a solution to this problem. Indian yogis have recommended a few dynamic and strategic techniques for reducing stress. Yoganidra or 'meditation' is a yogic tool for mind management; it takes case of both internal and external relaxations because it aims to reach the inner self by going beyond the physical and mental planes. Yoganidra is an approach that links up an individual's conscious awareness with the transcendental body. In fact, Yoga means unison and 'nidra means the purest form of relaxation. Yoganidra is, in this sense, a total relaxation with complete awareness about one's spiritual origin. This complete self-awareness empowers the mind to joyfully face the odds of any work environment and reduces tensions and stresses of the employees. In yoganidra, the posture is Shavasana, i.e., the posture of sense withdrawal.

In this posture one lies on his back with arms little away from the body and with legs slightly apart. The whole body has to be in a relaxed state but one must not sleep. Once the body becomes steady and relaxed the practitioner goes for breath awareness, i.e., the practitioner continuously watches the cyclical movement of the breath between the throat and naval. Next step is to make a "sankalpa", a target to be attained at the end. One should repeat this sankalpa with unchanged words each time one practices Yoganidra. Once sankalpa is made practitioner visualizes different parts of his body in a systematic fashion- from fingers to toes, from right hand side to left hand side. By doing, so one slowly becomes aware of the life force moving within so that the physical relaxation becomes a completely harmonized one. The practice ends with a mental repetition of the words of the starting sankalpa.

The practitioner sits up and breathes deeply. The best time for doing Yoganidra is just before going to bed or in the morning. Thus the strength of Yoganidra lies in its unification of physical relaxation with mental relaxation. The posture of 'shavasana' is to help physical relaxation. When the mind is directed to feel different parts of the body and to watch the normal breathing from navel to nostril, it helps the body to relax without disturbing the awareness. During Yoganidra, the heart rate slows down a little, the breathing rate goes down, the muscle tension is reduced and the blood levels of locate and cortical which are associated with anxiety and stress decrease.

Practice of 'Rajyoga'

'Rajyoga' is another technique for reducing mental stress. It is an eight-tier system of practice developed by Indian yogis. In the first part of Rajayoga, the purification of mind is stressed. This is to be achieved by abstaining from forceful possession and pleasure, by following the path of truth and nonviolence and by solemnly rejecting any gift. For example, if we do not accept any gift and follow the path of honesty, business ethics will get intermingled with work culture in a spontaneous and natural way. Thus, the first step of Rajyoga, if practiced with sincerity and zeal, cannot only purify the minds of individuals but also clean the collective mind of an organization. The second part of Rajyoga is the regular practice of internal and external cleanliness, mental happiness and worship (niyama). In fact, external cleanliness can also help in cleaning the internal dirt. For example, if we can keep the workplace neat and clean we are sure to get a positive response from all the individuals. These positive interactions can be beneficial for both organization and its employees. Yogic posture and controlled breathing 'asana' 'pranayama' are the third and fourth parts of Rajyoga. Importance of these two is clear from the fact that our body is the store house of energy and the purpose of breathing is to intake this energy from the environment. A controlled and systematic breathing can help us in generating more energy and vitality which can be channeled in multiple directions for more creative works. These also help in reducing mental

stresses. The practice of withdrawal of mind from external stimulators (pratyabhara) is the fifth part of Rajyoga. It equips the mind to be delinked from the stressor so that the very cause of stress can be removed. The sixth part of Rajyoga is the practice of conceptualization. By this is meant the act of concentrating waves of thought on a particular issue. In conceptualization, basic objective is to concentrate on a single idea disallowing multitudes of waves that break up on the shore of the mind. If this objective is achieved, the mind works with complete awareness, perfection and attachment. Continuation of this act of conceptualization for at least one hundred and forty-four seconds is known as concentration or meditation (dhyan). When one realizes this stage, this becomes the seventh part of Rajayoga. At this state the mind becomes free from stresses and strains, free from mental dirt, free from the reactions of the past happenings. This free mind is what we call as the purified mind, the mind that can establish creative link between conscious and unconscious states. Of course, there is another stage in rajyoga which is aimed at realising the oneness in the universe. Yama and Niyama, the first two steps of Rajayoga are purificatory processes for higher mental development. "Non-violence, truthfulness, non-stealing, continence, internal and external purification, contentment, and self-control constitute 'yama' and 'niyama'; 'asana', the practice of posture of relaxation or non-tension; and 'pranayama', the breathing exercises, aim at releasing the neuro-muscular system and pacifying the restlessness of the mind; 'dharana', the practice of concentration, and 'dhyana', the practice of meditation, aim at the development of will-power; 'dhyana' strengthens the conviction that man is basically divine, and develops the perception to realize the self" (Dhan, 1998) Moderately strenuous exercises, yogas reduce mental tensions and stress. Factors like eating and drinking habits, social relationships and the pattern of work interact with one another to determine the level of health.

Patanjali's Yoga-Sutra adds a New Dimension to the Discussion on Stress by Classifying the Klesas,

which are really innumerable, into five sequential phrase arranged in two levels [15]. The fundamental cognitive failure, called avidya or non-cognition, constitutes the first of the levels: it is the ground for the other level comprising four types of klesas. We may pass over the former, as its significance is essentially metaphysical; it may be looked upon as phenomenological stress. Of interest to us here are the four types of klesas at the other (viz, transactional) level. They are termed asmita, raga, dvesha and abhinivesa. They are technical words borrowed from the Samkhya thought, and have rather stylized connotations. Asmita is literally "I-am-ness' (ego-involvement) and is defined in the text as the assumption of uni-formity (ekatmata) between the potency of being the apprehended (drk-sakti) and the ability to apprehend (darsana-sakti) [16]. The commentarial explanations make it clear that the expression signifies precisely self-appraisal of an aroused organism. In the conceptual model provided in the Yoga-text, this intra-individual stressor indicates personal involvement in the situation. Rightly does an annotation, Mani-prabha, describe this factor as the knot of the heart' (hrdayagranthi), or the core crisis implying evaluation of one's own ability to intend effectively in the situation. The philosophical considerations, however, tend to describe this self-evaluation as laden with ignorance and error (bhranti) and herein lies the crisis. The consequent phase of self-appraisal is intentionaltiy (raga, literally 'attachment', or 'approach'), defined in the text as anticipation of satisfaction (sukhanusayi) [17]. The commentarial explanations emphasize the positive priming of the individual (sukhabhijna), the facilitation of memory traces (sukhanusmrti), and the need-dominance (gardha) [18]. It is a klesa or stressor in as much as it involves the evaluation of the environmental details, and tends to press on the individual to make approach responses. Intentionality (raga) defines the situation for the individual, and necessitates a fresh evaluation of one's own needs and abilities apropos the situation; it provides the direction for behaviour. It is worth reminding here the finding of R H Rahe that a stressor need not necessarily be unpleasant or noxious but any event requiring adjustment and accommodation may be a potent stressor [19]. The next phase in the sequence is called in the text dvesha, which literally means 'aversion' The commentary of Vyasa emphasizes the area of correspondence between raga and dvesha: both involve priming of the individual (one positively, and the other negatively), facilitation of the memory traces (pleasurable in the former case, and painful in the latter), and the need dominance (the need to obtain in the former and the need to avoid or eliminate in the latter). Vyasa provides suggestive synonyms for dvesha: intense repulsion involving the tendency to strike (prati-gha), alarm or anxiety when confronted with inimical objects (manyu), urgency to remove (jighamsa) and anger (krodha). It is obvious that at this stage the individual perceives threat either to one's own integrity (or self-esteem, asmi-ta) or to one's need-dominance (raga). This involves not only reevaluation of one's own ability and the extenuating conditions in the situation on hand, but the role of emotions appropriate in conflict, competition, or antagonism. It may be seen that it is this phase which broadly corresponds with the stage of initial shock (or alarm) in Hans Selye's model. It will be conceded that the analysis in the Yoga-sutra takes into account the psychodynamics that

precedes this stage. The conceptual model provided by the Indian text thus becomes more meaningful. The final phase in the Yoga-sutra series is called abhinivesa, literally 'devoting oneself entirely to something' (abhi +ni+vis). The literally employment of the word has meanings of 'urgency to action' firm resolve, 'application of mind'. In the Yoga-context it is the ever-present urge in all living beings to survive as individuals (atmasih). Patanjali describes it as 'constitutional and natural' (sva-rasa.vahi); the annotator (Bhoja) explains that it is constitutional or natural in the sense that no provocation is required for its operation (nimittamantarena) . More specifically, the Yoga manuals take the expression abhnivesa to signify fear off death (marana-trasa), defensive reactions. The modern student of stress may be tempted to find in this phase a correspondence with Hans Selye's third stage, viz., exhaustion. But this phase of abhinivesa does not indicate a collapse of the adaptive mechanism as the stage of exhaustion implies, but marks the beginning of the behavioral response pattern or what the stress analysts would call coping behavior. The three earlier phases are all sequential cognitive appraisals: asmita is self-appraisal, raga is object appraisal, and dvesha is threat-appraisal. They represent the increasing relevance of transactional cognitive processes to life-situations, and also the increasing role of energy-dynamics. In self-appraisal, it is more or less purely cognitiv; in object-appraisal, intentionality is more cognitive than energetics; but in threat-appraisal the alarm is more energetic than cognitive, and involves emotions and organic changes. All these three phases help in what may be called the arousal mechanism and reality-testing, but they are only preparations for deliberate adaptive behavior. It is true, however, that some behavioral response is involved in each of these phases, but it is only in the fourth phase that behavior can be described as 'coping activity'. It is to be noted that the final phase, viz., abhinivesa, lacks the specificity that we find in the three earlier phases: self-specificity in asmita, object-specificity in raga, and threat-specificity in dvesha. Abhinivesa (which literally means arousal) is general adaptational activity. It is not an attempt to suggest here a correspondence between this and Hans Selye's general adaptation syndrome (GAS). The two are entirely divergent in their implications, expressions, and frames of reference. The non-specificity of abhinivesa is mentioned only to emphasize that the fundamental klesa, avidya is also non-specific. Avidya (literally 'non-cognition') is the opposite of the correct appraisal of self and its encounter with the object. In the absence of such correct appraisal (samyag-jnana), ego-involvement (asmita) emerges as a specific subjective factor (the opposite of discriminative knowledge of self as distinct from the body-complex, viveka-khyati); and from this, the object-appraisal (dvesha) emerge as specific transactional factors (the opposites of indifference or neutrality; inhibiting positive or negative orientation, madhyastha). The consequent abhinivesa reverts to the original non-specificity, although discrete behavioral activities are specific with regard to the self, object and threat. Although avidya is a klesa, it is outside the transactional plane, and hence not subject to the variant modes of specific occurrence as the other four phases are. The modes mentioned in the Yoga-sutra (2, 4) are four: 'dormant' (prasupta), 'tenuous' (tanu), 'intercepted' (vicchinna) and 'operative' (udara). The dormancy of the klesa as a stressor consists in its being a mere potency. It is compared to the condition of a seed which has the potentiality to grow into a tree, given the facilitating circumstances. Any mental process has the possibility of emerging as a stressor, but not in the absence of conditions which induce stress and favor such emergence. Some mental processes, however, have strong predispositions to operate as stressors as soon as conditions become favorable. This predisposition is referred to by the expression 'dormancy'. It becomes operative in the normal course of events, given time and the conditions. 'Tenous' or 'thin' (tanu) stressors are those mental processes which are no longer dormant but which have been held in check by other and more powerful stressors. They operate, but lack intensity or urgency. Their demand character is weak; the load or press is light. 'Intercepted' (vichinna) stressors are those that lack continuity, owing to conflict with other stressors. The subjective demands and the situational demands alternate in their pressure, and the mental processes with strong predispositions to become stressors sometimes operate and sometimes lie dormant, depending upon other mental processes that facilitate or overpower, and upon the varying need dominance. They cease to be actual stressors when they lie dormant, but they do not lose their demand character. 'Operative' (udara) stressors are so called because they have risen 'above constraints' (ut+ara). They are stresses in the sense of response-patterns which are calculated to achieve the intentions and eliminate threats. They presuppose not only need dominance but favorable conditions (such as strong predisposition, absence of other and competitive stressors, and conflicting need applications). The demand character of the stressors here finds their fullest expression in overt behavioral modes. The conceptual model of stress provided by the Yoga-sutra is thus broad-based; and it comprehends the cognitive structuring, emotional state, and adaptive reactions. It also presents the outlines of the strategy called 'kriya-yoga' which is calculated to reduce the number and intensity of the stressors (klesa-tanukarana) and to facilitate relaxed conservation of mental energy devoid of tension (samadhi-bhavana)

Meditation:

The Indian Rishis attributed great importance to culture and stressed on the need for the development of the inner faculties of a human being. They discovered various methods of feeding, resting and revitalizing the body. After countless years of experience and experiments they developed special systems of exercises for increasing the strength, purity and power of all the faculties of man.

The rishis also preach that for sublimation and evolution, every person must meditate on God at least three times a day. They associate these times with the three times of the Sun. When one gets up from sleep, he must pay homage to his deity or the rising Sun to prepare for the day's chores. He must respect the mid-day Sun when he prepares to eat meals for his sustenance and the setting Sun to express his gratitude to his Creator for the successful completion of his day's work. They also proclaim that the most auspicious time for meditation is 3 am every day, because during this time, Mother Nature is the most serene.

Samadosasamagniscasamadhatumalakriya/ Prasannatmendriya mana swasthaityabhidiyate// Susruta Samhita Sutra 15/48.

Drawing/ painting/writing/Exercise:

Exercise releases endorphins, the body's 'feel good hormones' and 20 minutes a day, can change your entire outlook on life. like temple pradakshinams, yoga etc… Lisa Rusczyk (2013) asked that 50 simple tips are any person who would like to know while having stress in their home and work lives. This also includes a list of positive words and 16 ways for Mom's to Distress. Balaji Deekshitulu P V. (2016) reviewed that the Stress full life is neither Possible to overcome safe lives on different simple steps. These steps are increasing in Physical and mental health, stress is an important stimulus of human growth and creativity as well an inevitable part of life.

Music:

Soothing or listening devotional music can help you to relax and feel good. Choose the music that has good vibration that would make you feel good and happy. Do not choose the music that make you feel sad. Heather Kennedy, etal. (2014), Balaji Deekshitulu P.V(2015) explain that the Madhyamavati, Kafi Rag, Darbari, Kharahara Priya, Natabhairav, Dwijavanthi, Shanmukhapriya, Hameerkalyan etc. ragas very help full pece of mind ad stress control. And various ragas in Hindustani and Karnataka treating persons with special needs in mental and physical health, Ogba, Francisca N etal. (2019) suggest that the efficacy of music therapy with relaxation technique for improving the students' stress management can be consistent at follow-up. Hence, music therapists, counsellors and psychotherapists should continue to investigate the beneficial effects of music therapy.

Classical Dance:

Dance is a performing of art; Dance is the movement of the body in a rhythmic way, usually to music and within a given space, for the purpose of expressing an idea or emotion, releasing energy, or simply taking delight in the movement itself. Dance is combine performance of Yoga, Mudras and Music. In Bharata Natyam, the Classical Dance of India, approximately fifty-five root mudras (hand/finger gestures), 24 types of AsamyutaHastas in Kuchipudi, 28 types of mudras in Kathak, 470 mudras of kathakali, 24 of mohiniattam are used to clearly communicate specific ideas, events, actions, or creatures in which thirty-two require only one hand, and are classified as `Asamyukta Hasta' along with twenty-three other primary mudras ... Dancing can be a way to stay fit for people of all ages, shapes and sizes. It has a wide range of physical and mental benefits. Balaji Deekshitulu P V (2019) explained that the positive effects for physical health as well as mental and emotional wellbeing. Dance therapy is based on the idea that body and mind are co-relational.

Yoga:

Yoga is an ancient art that is defined as the union of the soul with God. The practice is at least 3000 years, it is "a path of personal spiritual development that utilizes meditation to bring enlightenment, self-realization, and, ultimately, the attainment of God and bliss". Originally, the ultimate goal of yoga was called Samadhi, or self-realization.

Patanjal defined: YogasCittaVrttiNirodhah, "Yoga is the restraint of the agitation of thoughts" (Iyangar 2001). Patanjali is father of yoga around the sixth century B.C. appeared in the massive epic The Mahabharata written by sage Vyasa and containing The Bhagavad Gita. Krishna explains to Arjuna about the essence of Yoga as practiced in daily lives ('Song of the Lord'), uses the term "yoga" extensively in a variety of ways. , it introduces three prominent types of yoga:

- Karma yoga: The yoga of action
- Bhakti yoga: The yoga of devotion, note Krishna had also specified devotion itself was action similar to above.
- Jnana yoga: The yoga of knowledge.

Patanjali introduced -Ashtanga or Power yoga - a more demanding workout where you constantly move from one posture to another ("flow"). Sasidharan K Rajeshet al (2014), studied that the successfully managed stress.

The dimensions of yoga are

- Pranayama (breathing)
- Asana (postures)
- Yama (restraint)
- Niyama (healthy observances)
- Pratyahara (sensory withdrawal)
- Dharana (concentration)
- Dhyana (meditation)
- Samadhi (higher consciousness)

Mudras:

Mudras are helps active and flexibly of body and mind to healthy they are Gyana mudra, kesepana mudra, musti mudra (sri acharya kesava dev, Kuladeepsingh (2015), Balaji P.V Deekshitulu (2015) and Balaji Deekshitulu (2019) reviwed that the Mantra therapy can be control of stress, depression, anxiety, fear and promotion of mental health and happiness. Studies have shown that Mantras can have beneficial effects on the health of the body as well as positive results in Mental and Physical levels.

Mantras:

Vedic Mantra Treatment is based on chanting these mantras and awakens the body's natural healing mechanisms. Mantras inspire positive and penetrating thoughts and enlighten the emotional and deeper levels of consciousness. 'Mananat- trayateitiMantrah' - By the Manana (constant thinking or recollection), Vedas, Agamas and Upanishads are explaining various mantras and slokas like Dhakshinamurthyslokam, Saraswathyslokam, Ganapathy slokam, Hyagreevaslokam etc… and

"Ohm" – 7.83Hz

Gam – 14hz

Hleem – 20Hz

Hreem – 26Hz

Kleem – 33Hz

Krowm – 39Hz

Sreem – 45Hz

Mental Power - Om hrimmannaschetnayee phat

Om NamahNarayane Aye

Om NamahBhagwateVasdevayeNamaha

Om NamahShivāyā

Conclusion

Cultural heritage of India is very rich and have its constant impact on every feature of the society including lifestyle. Presentation, diagnosis, management, course and outcome of mental illnesses are influenced by cultural factors. one should be aware of lifestyle aspects as well as familiar with ancient Indian perspective in addition to clinical abilities. Traditional beliefs and values are still transferred by one generation to other generation; which affect the clinical presentation of mental illnesses and their management.The Indian model of the society has excellent concepts

regardingthe all-round development of an individual with proper stress on the importance of caring for the ageing members of the family.

10.2 Buddhist Way of Stress Management

Buddhist view of existence is based on the doctrine of DO which gives an explanation describing the evolution of the World and cycle of life, from birth to the death of all living beings. There is not possible to say, which factor is the "first cause" in this cycle. This kind of interpretation equates the Buddha's teaching to religions paradigm, which contains a "first reason", for example all-creator god as primary reason and source for living and the nonliving manifestations. This kind of understanding contradicts the doctrine of dependent origination (DO), which offers an objective version of causality, whereby all conditioned phenomena are interrelated and interdependent. There are many researches about the effects of stress, confi rm the damaging and deadly effects of it. According to studies, the stress has been called "the silent killer" which can lead to heart disease, high blood pressure, chest pain, and an irregular heartbeat (Chilnick 2008). It is linked as well to the six leading causes of death: heart disease, cancer, lung ailments, accidents, liver cirrhosis, and suicide (Ashworth 2019). Chronic stress floods the brain with powerful hormones that are meant for short-term emergency situations. Chronic exposure can damage, shrink, and even kill brain cells (Wallenstein 2003).

Dependent Origination Doctrine about the cycle of DO has given in various suttas, like Paṭiccasamuppādasutta, Vibhaṅgasutta, Vipassisutta, Kaccānagottasutta, Upanisasutta and Cetanāsutta, which all belong to the same Nidānavagga — The Book of Casuation. DO have also been explained in the Sammādiṭṭhisutta, which contains a thorough analysis of each of the twelve factors (dvāsasaṅga) and applies the four noble truth (cattāriariyasaccāni) context. All this suttas deals in different ways with movement of the consciousness to a new existence. In the MajjhimaNikāya, like the Vibhaṅgasutta, the Mahātaṇhāsaṅkhayasutta, too, presents dependent arising in its order of arising and in its order of ceasing. This formula is an example of dependent arising in a synchronic cycle, that is, in the course of an individual's life. The Bahudhātukasutta presents the formula by first making a statement of the general principle of specific conditionality (idappaccayatā), followed by both sequences together. The sutta that follows the Vibhaṅgasutta in the Book of Causality (Nidānavagga) of the SaṁyuttaNikāya is the Paṭipadāsutta, where the forward formula (dependent arising) is called "the wrong way" (micchāpaṭipadā) and the reverse formula (dependent ending) "the right way" (sammāpaṭipadā) (Tan, 2019). The seven suttas that follow the Paṭipadāsutta describe the awakening of the six past Buddhas, wiz: Vipassī (Vipassisutta), Sikhī (Sikhīsutta), Vessabhū (Vessabhu-sutta), Kaku-sandha (Kakusandhasutta), Konāgamana (Konāgamanasutta), Kassapa (Kassapasutta) and Gotama (Gotamasutta), as the discovery of dependent arising and its ending. 1 The Pali term dukkha encompasses

In the Analysis of Dependent Origination (Paṭiccasamuppādasutta) Buddha has explained, what is the meaning of DO as follow: "And what, bhikkhus, is dependent origination? With ignorance as condition, volitional formations [come to be]; with volitional formations as condition, consciousness; with consciousness as condition, name-and-form; with name-andform as condition, the six sense bases; with the six sense bases as condition, contact; with contact as condition, feeling; with feeling as condition, craving; with craving as condition, clinging; with clinging as condition, existence; with existence as condition, birth; with birth as condition, aging-and-death, sorrow, lamentation, pain, displeasure, and despair come to be. Such is the origin of this whole mass of suffering. This, bhikkhus, is called dependent origination" (Bodhi 2000, 533). The whole formula meets today's modern logic, which says: "This being, that exists; that through the arising of this arises. This not being, that does not exist; that through the ceasing of this ceases." This structural principle underlies almost every aspect of the Buddha's teaching.

According to Bhikkhu Bodhi explanation, DO formula works as follows: Because of

The 1st factor of DO is ignorance (avijjā) of dukkha, of the origin of dukkha, cessation of dukkha and of the right path leading to the cessation of dukkha. 2 This kind on lack of direct knowledge of the Four Noble Truths leads a person in volitional (cetanā) activities of body (kāya-kamma), speech (vacī-kamma), and mind (mano-kamma). According to the Abhidhamma, avijjā includes ignorance of the past, of the future, the past and future (pubbanta, aparanta, pubbantāparanta) and of DO (Caroline, Davids 1900, 195-6). Dukkhasutta lists three kinds of dukkha: (1) the suffering due to pain, (2) the suffering due to formation and (3) the suffering due to change (Bodhi 2000, 259). Right view regarding the kamma (kammassakatāsammā-diṭṭhi) means, that only two things, wholesome (kusala) and unwholesome (akusala) actions performed by all beings, are their own properties that

always accompany them wherever they may wander in many existences (Ledi, 1). Volitional activities also called kamma-formations. These postulate the kammic cause for new appearance (bhava), thereby extending the cycle of birth (jāti) and aging-and-death (jarāmaraṇa) or saṃsāra. Because of ignorance of kamma and its results, people perform all sorts of unwholesome activities for immediate self-benefit. Because of delusion thinking that sensual pleasures and jhānic ecstasy are real forms of happiness, people perform dāna, sīla and bhāvanā so that they can attain such happiness in this life or in future lives through rebirth as men, devas or brahmas. Thus, people accumulate both moral and immoral kamma (sankhāra) as a result of ignorance (San 2006, 71)

The 2nd factor of DO is volitional formations (sankhārā), which covers bodily volition, verbal volition and mental volition. According to the Abhidhamma, sankhārā also contains a meritorious formations or good karma (puññābhisankhāra), de-meritorious formations or bad karma (apuññābhisankhāra) and fi xed formations or special meritorious karma (āneñjābhisankhāra). Sankhāra is the same as kammabhava in the sense that both condition the process of new coming or manifestation of kamma. The 3rd factor of DO is consciousness (viññāṇa). There is 6 kind of consciousness: (1) eye-consciousness, (2) ear-consciousness, (3) nose-consciousness, (4) tongueconsciousness, (5) body-consciousness, and (6) mind-consciousness.

The 4th factor of DO is mind-body (nama-rūpa) - that, what we call the personality, "where in contrast with nāma (as abstract, logical, invisible or mind-factor), rūpa represents the visible (material) factor, resembling kāya." Therefore, it can be said, that a man is made up of nāma and rūpa.

The 5th factor of DO is the six sense bases or organs of sense (saḷāyatana) (and the six objects) viz.: eye, ear, nose, tongue, body, and mind; or as objects: forms, sounds, odouis, tastes, tangible things, ideas.

The 6th factor of DO is contact (phassa) as sense or sense-impression. Phassa furnishes the contact between the sense object, the sense organ and the citta (consciousness). For example, the contact between visual object, visual organ (eye) and eye-consciousness (cakkhu-viññāṇa) is accomplished by phassa (Mon 1995, 67).

The 7th factor of DO is feeling (vedanā) or sensation. Feelings of pleasure (sukhā), pain (dukkhā) and indifference or neither-painful-nor-pleasant (adukkhama-sukhā) arising from impingement on eye, ear, nose, tongue, body and mind. Feeling can be divided also into fi ve kinds: sukhaṃ, dukkhaṃ, somanassaṃ, domanassaṃ and upekkhā (Buddhaghosa 2010, 461).

The 8th factor of DO is craving (taṇhā). Taṇhā arises when the sense organs come into contact with the outside world there follow sensation and feeling, and these (if, there is no mastery over them) result in taṇhā. There is different kind of taṇhā divisions. The best known is threefold division viz., craving for sensuous pleasure, for rebirth (anywhere, but especially in heaven), or for no rebirth. Another group of 3 aims of taṇhā is given as kāma-taṇhā, rūpa-taṇhā and arūpa-taṇhā and yet another as rūpa-taṇhā, arūpa-taṇhā and nirodha-taṇhā. Sixfold taṇhāclassifi cation are founded relating to the 6 objects of sense or sensations (bāhirāniāyatanāni), viz. craving for forms, sounds, smells, tastes, bodily sensations and for mind objects.

Taṇhā binds a man to the chain of saṃsāra, of being reborn and dying again and again until Arahantship or nibbāna is attained, taṇhā destroyed, and the cause alike of sorrow and of future births removed.

The 9th factor of DO is grasping (upādanā) or clinging. Upādāna lit. means substratum by means of which an active process is kept alive or going (PED, 360). Four kind of clinging's are (1) clinging to sense objects (kāmupādanā), that is, sights, sounds, smells, tastes and bodily sensations; (2) clinging to views (diṭṭhupādanā); (3) clinging to rules and observances, believing that in themselves these rules and observances lead to purity (sīlabbatupādanā); and (4) clinging to the concept of "I" or "self" (attaupādanā), creating a false idea of self (atta) and then clinging to this idea.

The 10th factor of DO is becoming (bhava), and the three spheres of existence are the sense-sphere (kāma-bhava), the fi ne-material sphere (rūpa-bhava) and the immaterial sphere (arūpa-bhava). The 11th factor of DO is birth (jāti) or "future life" as disposition to be born again, "former life" as cause of this life. Jāti is a condition precedent of age, sickness and death, and is fraught with sorrow, pain and disappointment. It is itself the fi nal outcome of a kamma, resting on avijjā, performed in anterior births (PED, 647). Essentially, this means (re-) appearance or birth of the five aggregates or so-called personality (pancupādānakkhandhā) the factors of the fi vefold clinging to existence.

The 12th factor of DO is aging and death (jarāmaraṇa). Jarā: the aging process, the fading of the faculties; and maraṇa: the breaking up of the khandhas, the dissolution of the life principle or life faculty (jīvitindriya), death. Alternatively, the degeneration and dissolution of specific

phenomena(Payutto 2011, 32). After a being is born, ageing and death will follow as inevitable consequence. This is because every ultimate reality has the characteristics of arising or coming into existence, birth (uppāda), existing or duration (ṭhiti) and dissolving (bhanga). So, aging and death must unavoidably follow bhava. They are the primary effects of bhava, as a consequence of bhava, sorrow (soka), lamentation (parideva), pain (dukkha), grief (domanassa) and trouble, turbulence (upāyāsa) may also arise (Bodhi 2000, 388). These five kinds of dukkhas are inescapable consequences of bhava. In this chain of events, we see one incident depends on one prior to it and gives rise to one after it. Everything that we find in this world can be brought in a chain of dependence like this. Nothing can originate without depending on something else previous to it, and no originated thing can be conceived of, which does not give rise to something else in its turn (San 2006, 64).

Summary

- Stress is a "dynamic condition in which an individual is confronted with an opportunity, constraint or demand related to what he or she desires and for which the outcome is perceived to be both uncertain and important.
- Soothing or listening devotional music can help you to relax and feel good. Choose the music that has good vibration that would make you feel good and happy.
- Buddhist view of existence is based on the doctrine of DO which gives an explanation describing the evolution of the World and cycle of life, from birth to the death of all living beings.

Keywords

Mind: The organized conscious and unconscious adaptive mental activity of an organism

Stress:constraining force or influence

Review Questions

1. What do you mean by stress?
2. Discuss role of meditation to decrease stress level in perspective buddhism?
3. Explain buddhist way to manage stress level?
4. Discuss the stages in experience of stress according to Selye?
5. What is dependent originates?

Further Readings

- Ogden, J. (2012). Health Psychology: A Textbook (5th ed.). Maidenhead, UK: Open University Press.

Unit 11: Resources Promoting and Maintaining Health

NTENTS

Objectives

This chapter will acquaint the learner with understanding the component and importance of resources promoting and maintaining health.

Introduction

Health and mental illness are determined by multiple and interacting social, psychological, and biological factors, just as health and illness in general. The clearest evidence relates to the risks of mental illnesses, which in the developed and developing world are associated with indicators of poverty, including low levels of education. The association between poverty and mental disorders appears to be universal, occurring in all societies irrespective of their levels of development. Factors such as insecurity and hopelessness, rapid social change, and the risks of violence and physical ill-health may explain the greater vulnerability of poor people in any country to mental illnesses. The findings from a recent natural experiment in poverty reduction with the opening of a casino on an American Indian reservation go a long way in demonstrating the reality of social causation for disturbed childhood behaviour, for example. After introduction of the casino, the rates of such behaviour reduced. Mental, social, and behavioural health problems may interact to intensify each other's effects on behaviour and well-being. Substance abuse, violence, and abuses of women and children on the one hand, and health problems such as heart disease, depression, and anxiety on the other, are more prevalent and more difficult to cope with in conditions of high unemployment, low income, limited education, stressful work conditions, gender discrimination, unhealthy lifestyle, and human rights violation

Health and Health Promotion

"Health" can refer both to absent and present states. It is often used to mean the absence of disease or disability, but, just as often, health may refer to a state of fitness and ability, or to a reservoir of personal resources that can be called on when needed (Naidoo & Wills 2000). People with different backgrounds and cultures may hold different conceptions of health. When lay people describe what it means to be healthy, their responses reflect often the particular circumstances of their lives. Under some circumstances, they equate health with freedom from disease; in others, they equate health with autonomy or with vitality. Older people, for example, tend to define health as inner strength and the ability to cope with life's challenges; younger people tend to emphasize the importance of fitness, energy, and strength. People with comfortable living conditions tend to think

of health in the context of enjoying life; people not so well-off tend to connect health with managing the essentials of daily.

Determinants of health

Any intervention is undertaken to meet a wide variety of purposes. Some purposes are more focused and specialized, such as sports psychology, executive coaching, or forensic contexts. Others are more comprehensive and general, as in many outpatient clinics. A biopsychosocial approach to professional psychology has distinct implications for conceptualizing the intervention process across all types of psychological practice. Many of these issues also apply in nonclinical contexts, but the discussion here focuses on the behavioural health care treatment process.

11.1 Biological Oriented Interventions

There is no conscious mind without biology, nor mental illness without biological correlates and pathophysiology. Similarly, psychotherapeutic interventions are effective in both addressing societal adversity and adapting to and surviving disease affecting biological functions, for example, in psychiatric research about the treatment of addictions, brain imaging studies, and studies on the treatment of cardiac disease and cancers. Scientific endeavours are now revealing more complex models of disease that reflect staged life-course adversity interacting with individual and group-level cumulative genetic and biological vulnerabilities, ultimately manifesting as illness experiences that relate to both dysfunction and social maladies. For example, social environment, including deprivation, social support and protections against violence all shape future risk trajectories. The interventions we offer should be cognisant of the patient's priorities and the range of concerns they bring, rather than only seeking round hole (disease) specialists and treatments for round hole diseases and square hole specialists for square hole diseases'. The intersectional and interactive nature of the causes of and remedies for mental illnesses demand a rethink. Knowledge silos prevent us from harnessing the evidence base, and overlook the shared essential ingredients of a therapeutic alliance including trust, confidence, competence, and commitment to shared goals. To break down the silos, specialists will need to become generalists, and marshal a wider array of interventions, so breaking down disciplinary territorial, geographical and attitudinal boundaries. Scientific journals play an important role in connecting people across disciplines, countries and traditions of intervention.

11.2 Socio-Cultural Oriented Interventions

Sociocultural treatments consider an individual's family and cultural background when determining the most appropriate treatments for psychological disorders. Learn about sociocultural treatments, including the types of therapy used in these treatments. Explore community treatment, group therapy, and family therapy. The sociocultural view of abnormal psychology focuses on the social and cultural causes and treatments of abnormality. As with other views of psychological disorders, there are specific ways to treat psychological disorders from a sociocultural perspective.

Community Treatment

Traditionally, treatment for psychological disorders involved being committed to a psychiatric facility, like an asylum. In this case, the treatment focused completely on the individual. Since many of the patients would never leave the asylum, there was no need to worry about society's impact on the patients, or the patients' ability to live in society at large. But in the middle of the 20th century, a movement towards deinstitutionalization, or treating patients outside of psychiatric facilities, became widespread. Instead of committing people with psychological problems to treatment facilities, psychologists began to see patients only a few hours a week. The rest of the time, the patients lived and worked in the community. Though in general, this was a good move, deinstitutionalization did lead to some problems. Whereas before the focus in treatment was only on the patient and their unique issues, now psychologists had to view the patient in the context of society. They had to ask how society affected the patients' issues and what could be done to help the patient and make them more productive members of society. Two types of treatment that came out of this age group therapy and family therapy.

11.3 Psychological-oriented interventions

Psychological interventions are actions performed to bring about change in people. A wide range of intervention strategies exist and they are directed towards various types of issues. Most generally, it means any activities used to modify behaviour, emotional state, or feelings Psychological interventions can also be used to promote good health in order to prevent health-related issues. These interventions are not tailored towards treating a condition but are designed to foster healthy emotions, attitudes and habits. Such interventions can improve quality of life even when mental illness is not present.

Interventions can be diverse and can be tailored specifically to the individual or group receiving treatment depending on their needs. This versatility adds to their effectiveness in addressing any kind of situation.

Cognitive–behavioural therapies:

- cognitive–behavioural therapy (CBT)
- behavioural therapies
- modelling and skills training
- trauma-focused CBT (TF-CBT)
- eye movement desensitization and reprocessing (EMDR).

Relationship-based interventions (RBIs):

- attachment-orientated interventions
- Attachment and Bio behavioural Catch-up (ABC)
- Parent-child interaction therapy (PCIT)
- parenting interventions
- dyadic developmental psychotherapy (DDP).

Systemic interventions:

- systemic family therapy (FT)
- transtheoretical intervention
- multisystemic FT
- multigroup FT
- family-based programme.

Psychoeducation

Group work with children

Psychotherapy (unspecified)

Counselling

Peer mentoring

Intensive service models:

- Treatment foster care
- Therapeutic residential/daycare
- Coordinated care.

Activity-based therapies

- Arts therapy
- Play/activity interventions

- Animal therapy.

Summary

- Health and mental illness are determined by multiple and interacting social, psychological, and biological factors, just as health and illness in general.
- Younger people tend to emphasize the importance of fitness, energy, and strength. People with comfortable living conditions tend to think of health in the context of enjoying life; people not so well-off tend to connect health with managing the essentials of daily.
- Interventions can be diverse and can be tailored specifically to the individual or group receiving treatment depending on their needs.
- The intersectional and interactive nature of the causes of and remedies for mental illnesses demand a rethink.
- Psychological interventions are actions performed to bring about change in people.

Self Assessment

1. Which one of these is NOT an approach to psychological interventions?

A. Motivational interviewing
B. Humanistic therapy
C. Cognitive behavioural therapy
D. Group therapy

2. Which of the following is NOT an aim of cognitive behavioural therapy?

A. learning not to have intrusive thoughts
B. to develop rational thinking and ways of behaving to reduce psychological distress
C. aiding clients in solving real-life problems
D. to use cognitive, behavioural and emotional regulation to modify distressing affect

3. What are the four conditions relating to person-centred therapy?

A. organismic valuing processes, the effects of others and the environment, conditions of worth, the locus of evaluation
B. the locus of evaluation, unconditional positive regard, conditions of worth, organismic valuing processes
C. the locus of evaluation, unconditional positive regard, conditions of worth, the effects of others and the environment
D. organismic valuing processes, the effects of others and the environment, conditions of worth, unconditional positive regard

4. What is the central assumption of Cognitive Behavioural Therapy (CBT)?

A. False beliefs lead to negative consequences
B. Thoughts, feelings and behaviour have a reciprocal influence on one another
C. Behaviour results from the unconscious intrapsychic motives
D. Emotions are the driving force of behaviour

5. What techniques would a CBT therapist likely use to help clients identify and recognize their cognitive distortions?

A. Socratic questioning
B. A collaborative empiricist approach
C. Having the client generate evidence for and against their beliefs
D. All of the above

6. Why do slot machines have buttons to stop the reels on a video screen?
A. To give gamblers a chance to increase the odds of winnings
B. To test gamblers' reaction times
C. To create an illusion of control
D. All of the above

7. What is NOT a strategy the CBT therapist uses to enhance clients' relapse prevention skills?
A. Developing an awareness of psychological defence mechanisms
B. Preventing a slip from developing into a full-blown relapse
C. Identifying early warning signals (urge, thoughts about gambling)
D. Joining support groups (e.g., Gamblers Anonymous)

Answers for Self Assessment

1. A 2. C 3. B 4. C 5. B
6. D 7. A

Review Questions

1. How an individual can maintain their health?
2. Discuss biological oriented intervention?
3. Describe Psychological oriented intervention?
4. Write name of cognitive behavioural therapies?
5. Define health promotion behaviour?

Further Reading

- Singh, A. K. (2008). ManovigyanKaksha Xi Psychology Class Xi. MotilalBanarsidassPublishe.
- Sharma, S. Bridging the Learning-Assessment Divide: A Commentary on NCERT Class V EVS Textbook. Jamia Journal of, 93.

Unit 13: Psychology of Pain

CONTENTS

Objectives

This unit will enable you to psychology of pain:

- Learn the theories psychology of pain
- Describe how a person's brain perceives pain
- Identify health problems that cause pain

Introduction

Pain is an all-too-familiar problem and the most common reason that people see a physician. Unfortunately, alleviating pain isn't always straightforward. At least 100 million adults in the United States suffer from chronic pain, according to the Institute of Medicine. The American Academy of Pain Medicine reports that chronic pain affects more Americans than diabetes, heart disease and cancer combined.

Pain serves an important purpose by alerting you to injuries such as a sprained ankle or burned hand. Chronic pain, however, is often more complex. People often think of pain as a purely physical sensation. However, pain has biological, psychological and emotional factors. Furthermore, chronic pain can cause feelings such as anger, hopelessness, sadness and anxiety. To treat pain effectively, you must address the physical, emotional and psychological aspects.

Medical treatments, including medication, surgery, rehabilitation and physical therapy, may be helpful for treating chronic pain. Psychological treatments are also an important part of pain management. Understanding and managing the thoughts, emotions and behaviors that accompany the discomfort can help you cope more effectively with your pain—and can actually reduce the intensity of your pain.

Psychologists are experts in helping people cope with the thoughts, feelings and behaviors that accompany chronic pain. They may work with individuals and families through an independent private practice or as part of a health care team in a clinical setting. Patients with chronic pain may be referred to psychologists by other health care providers. Psychologists may collaborate with other health care professionals to address both the physical and emotional aspects of the patient's pain.

When working with a psychologist, you can expect to discuss your physical and emotional health. The psychologist will ask about the pain you experience, where and when it occurs, and what

factors may affect it. In addition, he or she will likely ask you to discuss any worries or stresses, including those related to your pain. You also may be asked to complete a questionnaire that allows you to record your own thoughts and feelings about your pain.Having a comprehensive understanding of your concerns will help the psychologist begin to develop a treatment plan.For patients dealing with chronic pain, treatment plans are designed for that particular patient. The plan often involves teaching relaxation techniques, changing old beliefs about pain, building new coping skills and addressing any anxiety or depression that may accompany your pain.

One way to do this is by helping you learn to challenge any unhelpful thoughts you have about pain. A psychologist can help you develop new ways to think about problems and to find solutions. In some cases, distracting yourself from pain is helpful. In other cases, a psychologist can help you develop new ways to think about your pain. Studies have found that some psychotherapy can be as effective as surgery for relieving chronic pain because psychological treatments for pain can alter how your brain processes pain sensations.

A psychologist can also help you make lifestyle changes that will allow you to continue participating in work and recreational activities. And because pain often contributes to insomnia, a psychologist may also help you learn new ways to sleep better.

Most patients find they can better manage their pain after just a few sessions with a psychologist. Those who are experiencing depression or dealing with a long-term degenerative medical condition may benefit from a longer course of treatment. Together with your psychologist, you will determine how long treatment should last. The goal is to help you develop skills to cope with your pain and live a full life.Having a painful condition is stressful. Unfortunately, stress can contribute to a range of health problems, including high blood pressure, heart disease, obesity, diabetes, depression and anxiety. In addition, stress can trigger muscle tension or muscle spasms that may increase pain. Managing your emotions can directly affect the intensity of your pain.Psychologists can help you manage the stresses in your life related to your chronic pain.

Psychologists can help you learn relaxation techniques, such as meditation or breathing exercises to keep stress levels under control. Some psychologists and other health care providers use an approach called biofeedback, which teaches you how to control certain body functions.In biofeedback, sensors attached to your skin measure your stress response by tracking processes like heart rate, blood pressure and even brain waves. As you learn strategies to relax your muscles and your mind, you can watch on a computer screen as your body's stress response decreases. In this way, you can determine which relaxation strategies are most effective, and practice using them to control your body's response to tension.Stress is an unavoidable part of life, but managing your stress will help your body and your mind and lessen your pain.

Consider the following steps that can be helpful in changing habits and improving your sleep:

Stay active. Pain—or the fear of pain—can lead people to stop doing the things they enjoy. It's important not to let pain take over your life.

Know your limits. Continue to be active in a way that acknowledges your physical limitations. Make a plan about how to manage your pain, and don't push yourself to do more than you can handle.

Exercise. Stay healthy with low-impact exercise such as stretching, yoga, walking and swimming.

Make social connections. Call a family member, invite a friend to lunch or make a date for coffee with a pal you haven't seen in a while. Research shows that people with greater social support are more resilient and experience less depression and anxiety. Ask for help when you need it.

13.1 Definitions: Qualities and Dimensions of Pain

Based on the works of Woolf, this is a useful way of classifying pain:

- *Nociceptive pain*. This kind of pain is concerned with the sensing of noxious stimuli. It is a signal of impending or actual tissue damage and is a high-threshold pain only activated in the presence of intense stimuli. It has a protective role requiring immediate attention and responses (i.e. withdrawal reflex). For example, touching something too hot, cold or sharp
- *Inflammatory pain*. This second kind of pain is important to promote healing and protection of injured tissues. It increases sensory sensitivity through pain hypersensitivity and tenderness. Thus normally innocuous stimuli now elicit pain. It creates an environment which suggests

avoidance of movement, contact and stress of the injured body parts. This, in turn, assists in the healing of the injured body part. Inflammatory pain is caused by activation of the immune system that causes inflammation after tissue injury or infection. This type of pain can be seen as a protective mechanism, However, it still needs to be reduced in patients with ongoing inflammation, as with rheumatoid arthritis or in cases of severe or extensive injury.

- *Pathological pain*. This type of pain is not protective, but rather maladaptive. It is not connected to tissue damage but results from abnormal functioning of the nervous system. To note, this is a low-threshold pain. Pathological pain can occur after damage to the nervous system or even when there is no damage or inflammation, It is largely the consequence of amplified sensory signals in the central nervous system. Conditions that cause this type of pain include fibromyalgia, irritable bowel syndrome, tension-type headache, temporomandibular joint disease etc. Usually, the pain is substantial without any noxious stimulus and minimal or even no peripheral inflammation.

Acute pain is caused by noxious stimuli and is mediated by nociception. It has an early onset and serves to prevent tissue damage. This is why this type of pain is defined as adaptive, it helps to survive and to heal.

Chronic pain is pain continuing beyond 3 months or after healing is complete. It may arise as a consequence of tissue damage or inflammation or have no identified cause. Chronic pain is a complex condition embracing physical, social and psychological factors, consequently leading to disability, loss of independence and poor quality of life.

13.2 Biopsychosocial Aspects of Pain

In the past, psychological and physiological (or pathophysiological) factors were considered as separate components in a dualistic point of view. Later, the recognition that psychosocial factors, such as emotional stress and fear, could impact the reporting of symptoms, medical disorders, and response to treatment lead to the development of the biopsychosocial model of pain

The *bio* part represents the pathophysiology of the disease or the mechanism of injury, and the relative nociception processes, it considers the physiological aspects of the pain experience.

The *psychosocial*part involves both emotion (the more immediate reaction to nociception and is more midbrain based) and cognition (which attach meaning to the emotional experience). These could trigger additional emotional reactions and thereby amplify the experience of pain, thus perpetuating a vicious circle of nociception, pain, distress, and disability.

It could be said that psychological factors, such as fear and anxiety, play an important role in the development of chronic pain.

Anxiety

Health anxious individuals form dysfunctional assumptions and beliefs about pain and other symptoms. This can be disease based and based on past experiences. They will have a tendency to misinterpret somatic information as catastrophic and personally threatening. Some studies report an increase in pain correlated with increased levels of anxiety. Clinically, anxiety can compromise treatments as practitioners can expect to see catastrophization play a big role in these patients' report and they could report greater pain during activities. Thus, there is a need to target attentional focus and interpretation of sensations among health anxious clients.

Depression

There is strong evidence of established comorbidity of pain and depression. Furthermore, when patients with pain have comorbid depression, they could experience greater pain, have a worse prognosis, and more functional disability. Pain and depression are linked by neurobiological, cognitive, affective and behavioral factors. Thus, the optimal treatment approach for comorbid pain and depression should simultaneously address both physical and psychological symptoms.

Expectation

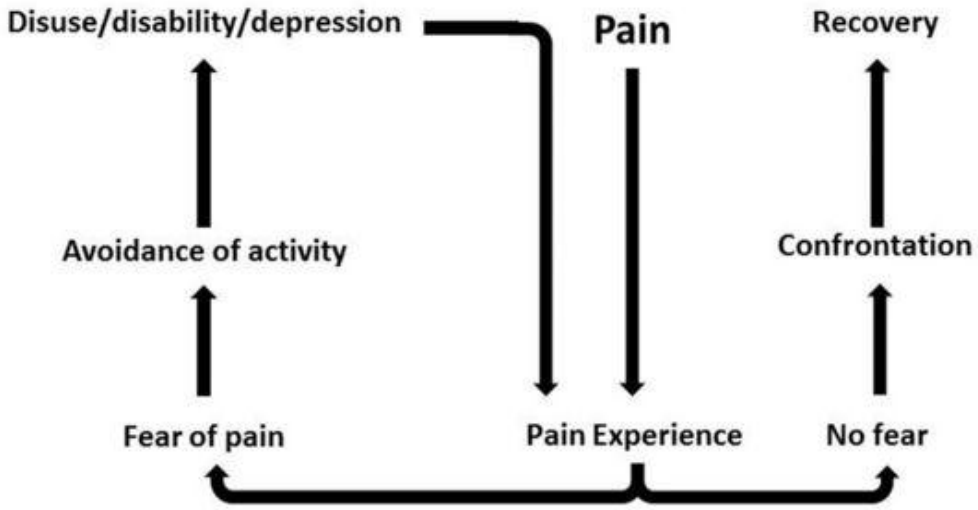
When an individual expects to experience pain, the perceived pain may vary based upon the types of cues received (i.e. a cue may indicate a more intense or damaging stimulus, then more intense pain is perceived and vice versa). Cues of an impending treatment could also decrease pain, for example, the process of taking an analgesic, usually decreases pain. Thus, expectation is thought to play a big role in the placebo effect.

Attention and Distraction

There is strong evidence that attention (and distraction) is highly effective in modulating the pain experience and demonstrate how cognitive processes can interfere with pain perception. When a person is distracted with a cognitive task pain is perceived as less intense, even in chronic pain patients. On the other hand, pain increases when it is the focus of attention. Functional brain imaging and neurophysiological studies have shown that attention and cognitive distraction-related modulations of nociceptive driven activations take place in various pain-sensitive cortical and subcortical brain regions, accompanied by concordant changes in pain perception.

Fear

Pain-related fearis a general term to describe several forms of fear with respect to pain. Fear of pain can be directed toward the occurrence or continuation of pain, toward physical activity, or toward (re)-injury or physical harm. Fear toward physical activity is also known as kinesiophobia. It can be defined as "an excessive, irrational, and debilitating fear of physical movement and activity resulting from a feeling of vulnerability to painful injury or re-injury". If pain, possibly caused by an injury, is interpreted as threatening, pain-related fear will lead to avoidance behaviors and hypervigilance to bodily sensations. This, in turn, will lead to disability, disuse and depression. This will maintain the pain experience, thereby fueling the vicious circle of increasing fear and avoidance.



Social and Cultural Factors in Pain

Culturally-specific attitudes and beliefs about pain can influence the manner in which individuals view and respond both to their own pain and to the pain of others. Cultural factors related to the pain experience include pain expression, pain language, lay remedies for pain, social roles, expectations and perceptions of the medical care system.

Another psychosocial factor that may influence differences in pain responses is the gender role. Individuals who considered themselves more masculine and less sensitive to pain have been shown to have higher pain thresholds and tolerances.

Socioeconomic factors (e.g. lower levels of education and income) seem to correlate with a higher incidence of chronic pain diagnosis and pain perception level.

Clinical Implications

There is a direct relationship between physiological, psychological, and social factors in any individual's pain experience. This can perpetuate or may even worsen the clinical presentation.

- There is a need for sound knowledge of how these factors interact. Clinicians must have the knowledge of not only anatomy, biomechanics and pathophysiology etc., but also of

diagnostic tools, outcome measures, tissue healing, peripheral and central sensitization, and any psychological and social factors that could influence the patient's perception of pain.

- Patients should be helped and taught to base their reasoning about their condition and their pain on similar information as mentioned in the previous point. It is important to teach patients about more modern pain neuroscience in a way that they could understand. This could help them to change their attitudes and beliefs about pain and decrease chronic pain and disability.
- Targeting psychosocial factors should be a key component of any pain intervention. Treatment programs must be individually-tailored in order to specifically address the patients' attitudes and beliefs to improve treatment adherence and outcome. Treatments should also be targeted at the different pain mechanisms responsible.

Distract yourself. When pain flares, find ways to distract your mind from it. Watch a movie, take a walk, engage in a hobby or visit a museum. Pleasant experiences can help you cope with pain.

Don't lose hope. With the right kind of psychological treatments, many people learn to manage their pain and think of it in a different way.

Follow prescriptions carefully. If medications are part of your treatment plan, be sure to use them as prescribed by your doctor to avoid possible dangerous side effects. In addition to helping you develop better ways to cope with and manage pain, psychologists can help you develop a routine to stay on track with your treatment.

A Model of Analgesic Problem-Solving

Just over a decade ago, an exploratory model of analgesic problem-solving was proposed. This model helps to capture how normal pain operates to interrupt attention and promote problem-solving behaviors, which range from impassive and persevering to highly dramatic and panic-stricken. The process begins when pain interrupts the person's attention and forces them into an unwanted and unwelcome focus on their body. The pain is then appraised as a threat, which makes them more vigilant and drives them toward problem- solving behaviors.

Often, patients have no tools, techniques, or methods at their disposal to achieve escape once this process begins. Whichever solution the person does choose to follow will prove to be effective or ineffective. If their method is effective, they return to a pre-interruption state; if it is ineffective, they can become static in the perseverance loop. In other words, they may be actively and repeatedly engaged in effortful attempts to solve the wrong problem. For example, a patient may persist with medication consumption despite the lack of any effect because they are from an analgesic culture that avoids pain and distress. [6] These attempts will then fail because pain falls outside of the individual's expectations, lasts too long, does not respond to treatment, and/or impairs their social function.

The Perception of Pain

The experience of pain is known to have two distinct neural pathways. In the first pathway, the pain signal comes from any part of the body and activates the anterior cingulate cortex of the brain, which is associated with the perception of pain. People react differently to this stimulation because the feeling is determined by the activation of the second pathway involving the medial prefrontal cortex and nucleus acumens, which are associated with motivation and emotion. Further, there are non-physiological factors that contribute to the perception of pain, such as personality, cognitions, beliefs, sociocultural variables, learning, and emotional reactivity.

Personality

The perception of pain may be determined by the attachment style of the patient, whether anxious or avoidant. Individuals with an anxious attachment style crave close and intimate relationships but tend to sacrifice their needs to keep their partner happy. Individuals with this attachment style tend to feel more pain in the presence of a person who does not empathize with their condition. Individuals with an avoidant attachment style tend to value independence and self-sufficiency more than intimacy. People with this attachment style also report less pain when alone than when in the presence of another person. These two attachment styles are related to a wide variety of close relationship processes and outcomes, specifically, personality constructs.

Over the past few decades, several theories have been proposed about personality in the chronic pain population. With the advent of the biopsychosocial approach in the 1980s, the diathesis- stress model dominates the field. The model accentuates the interplay between an individual's biological predisposition and the impact of the environment to explain the different responses to chronic pain. Overall, patients with chronic pain are characterized by prevailing harm avoidance and lower self-directedness.

Cognitions

The study of cognitive processes underlying all patterns of behavior can be broken down into two categories: its form and/or structure and the contents of thoughts. The cognitive structures organize and carry out the direction of the pain experience through attention, memory, decision-making, and other self-regulatory processes. One particular response to pain that may be predictive of its severity is catastrophic thinking. Catastrophic thinking is defined as "an exaggerated negative mental set brought to bear during actual or anticipated pain experiences. "Current conceptualizations of catastrophic thinking describe it as an appraisal or a set of maladaptive beliefs. Maladaptive thinking falls into four broad categories, or types of cognitive distortions, including: overgeneralization, mental filter, jumping to conclusions, and emotional reasoning.

Beliefs

There are other principles that have an impact on how much pain patients feel, including self-efficacy, locus of control, and involvement in the sick role, and the placebo/nocebo effect. Self-efficacy is a personal judgment of the patient on how well they can execute a course of action required to deal with a prospective situation. Locus of control is the degree to which a patient believes that they have control over the outcome of events in their lives, as opposed to external forces beyond their control. A patient is considered to be involved in the sick role when they adhere to the specifically patterned social role of being sick. The placebo response occurs when a non-specific treatment proves to be effective as an analgesic when administered by an enthusiastic, credible proponent of their efficacy. If the patient's beliefs inadvertently increase their anxiety and expectations of pain, it is assumed they have had a nocebo effect.

Sociocultural Variables

Early theories of the psychology of pain assessed global factors, such as gender, age, and culture.In most studies, women generally report experiencing more recurrent, severe, and longer-lasting pain than men. Past research has also shown that pain thresholds increase with age. It was once believed that we differed culturally in some way that affected how we experienced pain. For example, there was a notion in the 19th century that racial groups varied in their physiological experiences to pain, which was later found to be unsubstantiated. However, we now understand that there are differences within cultural groups that may affect their pain experience, including generation, acculturation, socioeconomic status, ties to mother country, primary language, degree of isolation, and residence in ethnic neighborhoods. These factors may mediate the relationship between culture and pain.

Learning

Pain can be a conditioned response, or learned behavior, rather than only a physical problem. The behavior begins purely in response to the presence of an injury, and then it is reinforced and becomes a conditioned response. Pain behaviors, such as guarding, bracing, rubbing, grimacing, and sighing may lead patients to perceive that they have more pain if reinforced. In a similar fashion, inactivity may relieve pain in some patients, but leads to a vicious cycle of de-conditioning and further worsening of pain. Pain can result from these conditioned fear reactions, or avoidance behaviors, that persist even after the resolution of pain.

Emotional Reactivity

Relative to other negative emotions, such as fear, sadness, guilt, self-denigration, and shame, anger is the most prominent emotion in patients with chronic pain. Anger refers to an emotional experience which can be a current mood state or a general predisposition toward feeling angry. People with significant anger problems may have trouble with empathy; however, it is a skill that can be developed and cultivated over time. Research has shown that human beings tend to be more empathic toward their friends while stress may deter people's ability to empathize.

Interventions

Interventions aimed at enabling patients to break out of the perseverance loop aforementioned and change their perception of pain may be more effective than interventions that appear to endorse the patient's view of the problem as one that can only be solved by pain relief.Psychotherapy, for

example, can produce long-term changes in behavior through learning, which generates changes in gene expression that alter the anatomical pattern of interconnections between nerve cells of the brain. The regulation of gene expression by psychosocial factors makes all bodily functions, including the brain, susceptible to psychosocial influences.

The Biopsychosocial Approach

The biopsychosocial model has led to the development of the most therapeutic and cost-effective interdisciplinary pain management programs and makes it far more likely for the chronic pain patient to regain function and experience vast improvements in quality of life.Given that pain affects approximately 50 million Americans, and the costs associated with both the treatment of pain and lost productivity range from $70 to $100 billion annually, the pursuit for understanding the underlying mechanisms of pain and identifying the best possible treatment options has prevailed because of these staggering costs. Indeed, in a study released by the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics, one in four U.S. adults reported a pain experience that lasted a full day during the previous month, and 1 in 10 reported an experience of pain lasting a year or more. The study also revealed that one-fifth of adults over the age of 65 reported pain that lasted more than 24 hours, with three-fifths of these older adults reporting that their pain had lasted for more than one year.

Although pain research has traditionally focused on the sensory modalities and the neurological transmissions identified solely on a biological level, more recent theories (integrating the body, mind, and society) have been developed. The most heuristic perspective is known as the biopsychosocial model, with pain viewed as a dynamic interaction among and within the biological, psychological, and social factors unique to each individual. Pain is not purely a perceptual phenomenon in that the initial injury that has caused the pain also disrupts the body's homeostatic systems which, in turn, produce stress and the initiation of complex programs to restore homeostasis In this paper, we will also examine the following: the evolution of the biopsychosocial perspective from earlier pain theories; the fundamental attributes associated with chronic pain conditions; and the biopsychosocial approach to the assessment and management of pain.

Evolution of the Biopsychosocial Model of Pain

The earliest theories of pain had focused primarily on the understanding of the biological or pathophysiological component of pain. Cartesian Dualism, or separation of the mind and the body, dates back to the 17th century when Rene Descartes conceptualized pain as an exclusive process within the sensory nervous system.At that time, diseases and illnesses were described purely as mechanistic biological processes. Even without empirical evidence, it was conceived that the experience of pain was conveyed directly to the brain from the skin, without any psychosocial interplay. Termed biomedical reductionism, this point of view remained constant through the late 19th century. During the late 1800s, two additional theories arose, providing a clearer conceptualization of the biological view of pain. The specificity theory of pain, put forth by Maximilian von Frey in 1894, proposed that there were subcutaneous receptors unique to the different types of sensory input. The distinctions between these receptors varied with respect to their functionality, such that they were designed explicitly to allow for the interpretation of sensations such as touch, temperature, pressure, or pain.

The pattern theory of pain, presented by Goldschneider in 1894, differed from von Frey's theory by stating that, not only were all subcutaneous receptors alike, but the unique patterns of stimulation at the nerve endings were what distinguished the variability in the interpretations of the sensory signals. It was assumed that the central nervous system was responsible for coding these nerve impulse patterns that resulted in the pain experience. Although this theory helped to explain incidences of phantom limb pain, which is described as experiencing pain after the termination of the input, the pattern theory of pain disregards receptor and fiber evidence which has come to fruition in recent developments.

Today, there is much more known about the different types and functions of receptors, such that mechanoreceptors respond to touch and pressure, while thermoreceptors activate in response to changes in temperature. Nociceptors are associated with pain perception and, depending on the specific fiber (A, d or C) of the nociceptor type (mechanical, thermo-mechanical, or polymodal) that is stimulated; the perception of pain can range from sharp and prickly, to burning or freezing.

Although the specificity and pattern theories of pain were fundamental in the development of the understanding of biological modalities, the detachment from this dualistic view corresponded with the lack of integration of mind-body phenomena. The lack of adequate explanations for pain and

suffering spurred the next advance in our understanding of nociception and the individual experience of pain. In the 1960s, Melzack and Wall postulated a more integrative model—The Gate Control Theory of Pain. Although the underlying mechanisms of this proposed theory are often debated, the implications that there is an interaction between the psychosocial and physiological processes have been widely accepted.

The gate control theory of pain emphasized the significant role that psychosocial factors potentially play in the perception of pain. The term 'gate control' refers to the proposed mechanism of the substantia gelatinosa located in the dorsal horn of the spinal cord. Melzack and Wall claimed that this gate-like function modulated the amount of afferent impulses from the periphery to the transmission cells (T-cells) of the dorsal horn through inhibitory processes at the neuronal level, and thereby controlling the quantity and intensity of the signals to the central nervous system. Furthermore, it was posited that higher cortical functions contribute to this gating mechanism. This allows for psychological phenomena to directly affect the subjective experience of pain.

From a clinical perspective, Gatchel suggests that the psychosocial component in the gate control theory contributes a great deal in treating patients with pain. Negative states of mind—such as helplessness, hopelessness and anger—tend to amplify the intensity of the sensory input, while strategies focusing on coping and stress reduction help to "close" the gate. Also, behaviors found to facilitate keeping this gate "open" include poor eating habits, smoking, inadequate sleep, and lack of exercise. By promoting positive health behaviors, proactive choices can be factors in lessening the perception of pain.

Compared to the earlier dualistic approaches to understanding pain, the gate control theory can be viewed as the first mind-body perspective to introduce the integration of the central nervous system with cognitive processes. An extension to this theory, termed the Neuromatrix Model of Pain, was proposed by Melzack in 1999. The neuromatrix theory incorporates the stress component into the pain equation. Based on the original work put forth by Selye, stress serves as a mechanism of adaptation, such that the body will respond to challenging or dangerous situations in an attempt to lessen any problematic consequences. The two neuroendocrine systems, the sympathetic-adrenomedullary system and the hypothalamic-pituitary-adrenocortical axis (HPA), serve to activate this fight or flight system. However, hyperactivity of the HPA system can be seen to intensify the pain condition. When dealing with chronic pain, individuals experiencing elevated levels of stress may actually exacerbate the pain experience. As stress intensifies pain, the increased level of pain, in turn, inevitably becomes a stressor that continues to threaten homeostasis. Based on the theory provided by Melzack, each individual's distinct neuromatrix—comprised from genetics, sensory modalities and memory—determines the overall interpretation of the experience of pain.

The Biopsychosocial Perspective of Pain

As the gate control and neuromatrix theories provided the opportunity to explore how the mind-body relationship relates to the pain experience, the biopsychosocial perspective has become the most heuristic approach to truly understanding the concept of pain. This approach views a physical disorder as the result of an intricate and dynamic interaction among biological, psychological, and social factors that can often antagonize the pain condition. Individuals tend to express variability in their pain experiences due to the range and interaction of these factors that modulate the interpretation of symptoms.

The biopsychosocial model was first introduced in medicine by Engel when he highlighted the fact that, as a medical illness became more chronic in nature, then psychosocial "layers" (e.g., distress, illness behavior, and the sick role) emerged to complicate assessment and treatment. Subsequently, Loser, applied this model to pain. From this perspective, there were four dimensions related to the idea of pain: nociception, pain, suffering, and pain behavior.

Nociception refers to the physiological components associated with sensory input—such as nerve receptors and fibers—while pain is described as a subjective perception resulting from sensory input. While nociception and pain provide methods of communication to the central nervous system, suffering and pain behavior, on the other hand, are described as reactions to those signals that can be influenced by both previous experiences and anticipation of potential consequences. Suffering can be seen as a negative affective response to nociception or pain. Oftentimes, individuals who experience a painful encounter will exhibit various emotional responses such as depression, anxiety, and fear. Pain behavior is described in one's actions while suffering from pain. For example, fear of recurrence of injury often leads to inactivity which, in turn, can delay the progression of recovery.

Similar to the distinction between nociception and pain, Turk and Monarch identify the differences between disease and illness in chronic pain patients. The term disease describes an altered

condition resulting from the disruption of normal physiological systems and is considered to be an "objective, biological event." Illness, on the other hand, refers to the "subjective experience" associated with the disease state and represented by a unique interaction among biological, psychological and social factors. Chronic pain is viewed as an illness which cannot be cured, but only managed. Therefore, the biopsychosocial perspective is directed at the illness, rather than the disease, and this approach focuses on the diversity and the individual differences in the overall pain experience. Thus, a management—rather than a merely curative—approach is taken. Indeed, most chronic illnesses, such as diabetes mellitus, asthma, essential hypertension, etc. cannot be cured, but only managed.

Knowing that not all individuals who experience an injury develop a chronic pain condition, it is important to recognize how an acute situation transitions to a chronic pain state. Acute pain is generally viewed as an indicator of tissue damage and is interpreted through noxious sensations. In general, as the level of nociception decreases, the acute pain state diminishes. While the individual experiencing acute pain may report an increased level of anxiety, it is typically temporary. Anxiety, fear, and worry in acute pain situations are often viewed as being adaptive in that the negative emotions influence proactive recovery behaviors, such as seeking medical care and attending to the injury.

An intermittent stage occurs following the acute phase, such that the pain condition is seen to last for two to four months' post injury. During this stage, the patient is described as experiencing more psychological and behavioral distress, such as anger, somatization, and learned helplessness. [15] Chronic pain typically lasts for at least six months past the injury, which surpasses the time for which general musculoskeletal disorders heal sufficiently. Syndromes producing long-term pain conditions are often associated with depression and resentment. Chronic pain patients frequently develop a "physical deconditioning syndrome" for which atrophy—reflected by a decrease in strength, flexibility and stamina—is the product of neglect of the injured area. Along with the physical deconditioning component, chronic pain patients can also be characterized with a "mental deconditioning" dilemma. As their emotional well-being is compromised, these chronic pain patients often become avoidant and lose touch with their daily responsibilities so that others in their social group need to not only "pick up the slack" but also, by doing so, reinforce the avoidant behaviors. In this type of situation, chronic pain patients are seen to lose motivation, specifically with their family, in their physical activities and within their careers. When the lack of motivation interferes with their occupation, the chronic pain patient may also experience a significant financial burden, which can exacerbate the affective state as well.

The interwoven affiliation of the biological, psychological, and social elements unique to each chronic pain patient must be attended to for a full understanding of the patient's condition. Standard treatment protocols are found to be deficient if any one of these components is ignored because patients with the same diagnosis can respond differently to a standard treatment protocol, the goal in the biopsychosocial approach to assessment and management is to tailor the treatment to the specific needs of the individual.

The Biopsychosocial Approach to Pain Assessment

The biopsychosocial approach to understanding pain has been identified as the most successful model to date, in that it encapsulates the broader issues embedded in the interactions among the biological, psychological, and social components unique to each individual. Thus said, the concept of pain cannot be broken down into discrete physical or psychosocial elements. Rather, the complexity of pain manifests not only within the range of psychological, social, and physical attributes, but also with respect to chronicity, such that these intertwined components are seen to modulate the patient's perception of pain and disability. The biopsychosocial model, therefore, uses physical, psychological, social, cognitive, affective and behavioral measures—along with their interactions—to best assess the individual's unique pain condition.

A recent enhancement of this model is reflected in the better understanding of how the neuroendocrine system affects the chronic pain condition. In addition to the impact of general emotional distress, elevations of stress hormones produced by the hypothalamic-pituitary-adrenocortical (HPA) system, such as cortisol, have been found to exacerbate pain conditions. Earlier, McEwen had highlighted the importance of evaluating cortisol dysregulation as a result of stress-induced allosteric load increases. Underlying mechanisms related to the HPA axis may therefore help to explain individual differences in stress and pain, as well as other medical conditions such as fibromyalgia. Indeed, several recent studies have associated HPA dysfunction with chronic pain conditions, such as fibromyalgia, chronic fatigue syndrome, chronic pelvic pain,temporomandibular pain disorder (TMD), rheumatoid arthritis, and multiple sclerosis.

Furthermore, growing technologies have allowed for a better understanding of the pain experience through various modalities, such as functional magnetic resonance imaging (fMRI) and positron emission tomography (PET). These types of imaging techniques focus on the displacement of blood flow within specified regions of the brain. Although there is some controversy regarding the implications derived from imaging procedures, these non-invasive technologies have provided knowledge about the anatomy and pathways related to the central nervous system. In addition to the brain imaging techniques, other developments in pain research have been found in areas of genetics, electrophysiology, molecular biology, and pharmacology. The unification of disciplines focused on pain provides the most effective methods to understanding pain because it gives a comprehensive view of how the nervous system perceives, deciphers, and responds to pain.

When attempting to assess an individual's pain condition, there are two essential confounds or "traps" to avoid. First, although there are numerous pain assessments available, the practitioner cannot assume that any one assessment will have more validity or reliability than another measure. Secondly, while physical measures of pain are more objective than self-report instruments, both must be taken under consideration in the evaluation of the pain condition. Regardless of the level of accuracy in an objective analysis of pain, interpretation on the part of the health care professional must be considered for an adequate diagnosis to be made. Furthermore, the individual's psychological state can influence the performance on a physical assessment, such that fear of re-injury and lack of motivation may affect outcome measures.

When considering the types of assessments to use, the measure is only valid if it is aligned with the purpose at hand. Assessments used in chronic pain populations that focus solely on biological and physiological aspects may not be valid in predicting impairment or disability.It is important to consider not only which measures are to be used but also to be able to identify how the various tools assimilate into a complete analysis of the individual's pain condition. A step-wise approach to assessment has been advised, beginning with a general evaluation of the factors under consideration and leading up to a more definitive diagnosis. By taking this multidimensional view, the biopsychosocial approach to assessment will lead not only to a better understanding of the patient's pain condition but, ultimately, will lead to a comprehensive treatment protocol customized to the individual's unique situation.

13.3 The Biopsychosocial Approach to Pain Management

As noted earlier, similar to other chronic illnesses, such as diabetes or asthma, a chronic pain condition cannot be cured but must be managed instead. Due to the heterogeneity with respect to the biological and psychosocial elements within a chronic pain population, not only is greater diversification of treatment options necessary, it is essential to properly match the treatment to the patient. Because two patients with the same diagnosis differ in physical, social, and psychological compositions, "lumping" these patients into the same treatment program will not likely produce the best outcomes compared to a tailored treatment regimen.

The overall outcome goal when treating patients with chronic pain conditions is improving functional capacity, which correlates with better physical strength and mobility, together with an improved affective state and self-esteem. Depending on the circumstances and duration of the injury, there are different levels of care—specifically primary, secondary, and tertiary care—for patients experiencing pain. The focus of primary care is to relieve the symptoms associated with the acute pain condition while increasing movement and functionality in the affected area. In general, the psychological factors addressed in primary care settings correspond to alleviating any anxiety or fear associated with the occurrence of pain. At this phase, it is important to educate the patient about medication compliance and following the prescribed exercise protocol in order to expedite the healing process.

Most patients who incur an injury recover well following the primary care treatment. When psychological factors and social issues merge with the physiological impairment, though, a more integrated rehabilitation process is necessary to help the patient avoid entering into a full chronic pain condition. Commonly, a subset of the injured population finds recuperation to be difficult at the level of primary care, and will therefore require an expanded treatment program for their injury, which is termed secondary care. At this level, an interdisciplinary team works together to help the patient avoid physical de-conditioning and reduce psychological barriers that interfere with recovery. Most patients for whom primary care is not sufficient experience positive outcomes following secondary care.

Some patients do not respond well to either primary or secondary care for reasons relating to poor physical and psychological recovery, or other factors such as legal and work-related issues that may

contribute to more pronounced emotional distress. Functional restoration, which is a form of tertiary care, has been developed for this chronic pain population. The focus of functional restoration is to avert permanent disability by utilizing a biopsychosocial approach. Within the scope of this treatment, the patient receives assistance from an interdisciplinary team of health care professionals, often including, but not limited to, a primary care physician, a psychiatrist or psychologist, a physical therapist, an occupational therapist, and a disability case manager. Together, this team develops a comprehensive plan to help the patient not only regain mobility and function, but also to teach the patient stress management techniques and coping skills necessary for dealing with any lifestyle or work issues that develop as a result of the pain and impairment. Oftentimes, chronic pain patients admitted to a tertiary care program are found to be reliant on their pain medications. Although relief from pain symptoms is an appropriate course of action in the primary and secondary care programs, substance use, specifically opioid dependency, is far too common. In most functional restoration programs, detoxification is found to be an essential part of treatment which is found to produce positive lifetime outcomes.

Following sufficient assessment measures and the resultant tailored treatment regimen, it is necessary to routinely evaluate the progress of the patient and amend or modify the program when deemed appropriate. The interdisciplinary team should meet together on a regular basis to discuss each patient's progress. It is through effective communication—not only within the medical team, but also with the patient—that the biopsychosocial approach to pain management is successful.

Functional restoration programs have repeatedly been shown to produce positive outcomes within the chronic pain population. It is through this biopsychosocial approach to pain management that patients experiencing chronic pain are able to regain mobility and function, improve psychological conditions such as depression and anxiety, and allows a return to normal life activities. Besides decreasing self-reported pain and disability, as well as increasing physical functioning, this functional restoration approach (first developed by Mayer & Gatchel) has also produced substantive improvement in various important socioeconomic outcome measures (e.g., return-to-work and resolution of outstanding medical issues). For example, in patients who were chronically disabled with spinal disorders, Mayer, Gatchel et al. found that 87% of the functional restoration group was actively working two years after treatment, as compared with only 41% of a non-treatment comparison group. Moreover, about twice as many of the comparison group patients had both additional spine surgery and unsettled workers' compensation legal cases, relative to the treatment group. The comparison group continued with an approximately five-times-higher rate of patient visits to health care professionals and higher rates of recurrence or re-injury. Thus, these results displayed the striking impact that a functional restoration program can have on these important measures in a chronic pain group consisting primarily of workers' compensation patients (traditionally the most difficult cases to treat successfully).It is through this biopsychosocial approach to pain management that patients experiencing chronic pain are able to regain mobility and function, improve psychological conditions such as depression and anxiety, and allows a return to normal life activities.

Summary

- Pain is a signal in your nervous system that something may be wrong. It is an unpleasant feeling, such as a prick, tingle, sting, burn, or ache.
- Pain may be sharp or dull. It may come and go, or it may be constant. You may feel pain in one area of your body, such as your back, abdomen, chest, pelvis, or you may feel pain all over.
- Pain can be helpful in diagnosing a problem. If you never felt pain, you might seriously hurt yourself without knowing it, or you might not realize you have a medical problem that needs treatment.
- There are two types of pain: acute and chronic. Acute pain usually comes on suddenly, because of a disease, injury, or inflammation. It can often be diagnosed and treated. It usually goes away, though sometimes it can turn into chronic pain. Chronic pain lasts for a long time, and can cause severe problems.

- Pain is not always curable, but there are many ways to treat it. Treatment depends on the cause and type of pain. There are drug treatments, including pain relievers. There are also non-drug treatments, such as acupuncture, physical therapy, and sometimes surgery.

Keywords

Pain- Pain is a signal in your nervous system that something may be wrong. It is an unpleasant feeling, such as a prick, tingle, sting, burn, or ache.

Diet- Diet is the sum of food consumed by a person or other organism.

Perception-The quality of being aware of things through the physical senses.

SelfAssessment

1. There are various types of pain: acute and chronic. How long does pain have to remain for it to be considered chronic?

A. More than 6 to 12 months
B. More than 3 to 6 months
C. More than 1 to 3 months
D. More than 2 to 4 months

2. Who in the population are most likely to report pain?

A. People who are divorced or separated
B. People with high levels of physical strain in their jobs
C. The elderly
D. All of the above

3. Bokan, Ries and Katon (1981) identified three kinds of gain associated with pain. These were ___ gain.

A. primary (intrapersonal)
B. intermittent
C. emotional
D. behavioral

4. Select the answer that correctly fills in the blank below.Evidence suggests that there is a _____ relationship between mood and pain.

A. uni-directional
B. bi-directional
C. reciprocal
D. Both the second and the third options

5. Verdugo and Ocha (1994) examined the placebo response in patients with neuropathic pain. Patients were injected with saline water close to the site of pain and _____ of the patients reported at least a 50% reduction in pain.

A. one half
B. two thirds
C. three quarters
D. None of the above

6. The gate control theory of pain (Melzack and Wall, 1965) is a:

A. psychological model of pain.
B. psychobiological model of pain.
C. biomedical model of pain.
D. sociological model of pain.

7. Phantom limb pain:

A. is experienced by up to 70 per cent of amputees.
B. can be experienced for many years.
C. occurs more frequently in lower limb amputees.
D. All of the above

8. Which theory of pain emphasized the significant role that psychosocial factors potentially play in the perception of pain?

A. Pattern theory of pain
B. Neuromatrix theory
C. Gate control theory
D. All of above

Answers for Self Assessment

1.	B	2.	D	3.	D	4.	B	5.	B
6.	B	7.	D	8.	C				

Review Questions

1. Discuss pain?
2. Discuss the classifications of pain?
3. Describe biopsychosocial perspective of pain?
4. How an individual can manage psychological pain?
5. Discuss the perception of pain?

FurtherReadings

Web Links

- *https://cintabukumedis.files.wordpress.com/2014/04/handbook-of-pain-management.pdf*
- https://www.apa.org/topics/pain/management
- https://www.webmd.com/pain-management/guide/pain-management-treatment-care

Unit 14: Health Services

CONTENTS

Objectives

- Understand the meaning and nature of health
- Understand the meaning and nature of health services
- Understand the meaning of dimensions of health services

Introduction

Gary didn't realize how many health services options have been around him. He usually uses his primary care physician, who is a medical doctor, for his medical needs. He's a young and healthy man, so he hasn't had to deal with other, more involved health services. However, he does have a grandmother in a long-term care facility that he visits every couple of weeks. The guidance counselor continues explaining the different types of health services that are available.Types of ServicesHealth services cover many different types of medical issues. Many people think of primary care, outpatient care, and emergency care when they need an illness managed or is generally not feeling well. However, there are more health services that are dedicated to certain illnesses or issues. These health services include: Mental health care Dental careLaboratory and diagnostic care.

14.1 Types of Health Services

1. Substance abuse treatment
2. Preventative care
3. Physical and occupational therapy
4. Nutritional support
5. Pharmaceutical care
6. Transportation
7. Prenatal care

Health services offer a range of options. Health services offer a range of options and can be collaborative

Not everyone will need each health service, while others will need several in order to have their health care need met. Gary begins thinking about what services he has used in the past. He uses his primary care physician, has been to an outpatient urgent care walk-in center, the emergency room, and the dentist. He understands why the other health care services are also important. Now Gary is really interested to see what he can do in the health services field. He asks his counselor what type of training college can offer him.

Patient-practitioner relationship

The hospital

"I was astounded when four technicians from four different departments took four separate and substantial blood samples on the same day. That the hospital didn't take the trouble to coordinate the tests, using one blood specimen, seemed to me inexplicable and irresponsible. When the technicians came the second day to fill their containers with blood for processing in separate laboratories, I turned them away and had a sign posted on my door saying that I would give just one specimen every three days and that I expected the different departments to draw from it for their individual needs." (Cousins, 1985, pp. 55-56)

"I had a fast-growing conviction that a hospital was no place for a person who was seriously ill." (Cousins, 1985)

History

Until 20th century, hospitals had well-deserved bad reputation for miserable care, ministering exclusively to poor, who often died of infections they didn't have when they entered.

Middle and upper classes treated at home

End of 19th century, revolution in medicine

In 1873, 178 hospitals in US, in 1909, over 4300, 7X the population growth

Hospitals gained reputation for good care, treated all classes

1995, about 31 million people treated as inpatients

Infections still problem, about 5% (2 million) will contract nosocomial (hospital) infections, of which at least 15,000 die

Data show physicians less likely to follow sterile procedures and Infection Control Nurse less likely to challenge physician (see Patients fight back against the superbugs)

Since 1980, marked decrease in number of admits/discharges and in length of stay

More outpatient procedures (day surgery, single day tests)

More efficient procedures (microscopic orthopedic surgery, laparoscopy, better and faster diagnostic tests) Patients released at earlier point in recover Many changes due to changes in health care financing -- Managed care, DRGs

Hospital patient role

Nonperson treatment – depersonalization (Goffman, 1961)

"Recently when I was being given emergency treatment for an eye laceration, the resident surgeon abruptly terminated his conversation with me as soon as I lay down on the operating table. Although I had no sedative or anesthesia, he acted as if I was no longer conscious, directing all his questions to a friend of mine – What's his name? What's his occupation? As I lay there, these two men were speaking about me as if I was not there at all. The moment I got off the table and was no longer a cut to be stitched, the surgeon resumed his conversation with me, and existence was conferred on me again." (Zimbardo, 1970, p. 298)

1. Hip fracture in 202B
2. Comments ignored, not wanted or solicited
3. Not spoken to directly, conversations occur as if not present
4. Expected to cooperate, to be passive
5. Emotional needs often not assessed, noticed or met
6. Reasons for depersonalization
7. Hectic, unpredictable days, often with risks (contagion, exposure to dangerous chemicals)

8. Protection from emotional pain when patients die or get worse
9. Under high, prolonged stress à burnout
10. Emotional exhaustion
11. Depersonalization
12. Feelings of professional inadequacy

14.2 Using and misusing health services

Lack of information

Patients often do not possess critical knowledge of diagnosis, tests, procedures, treatments, prognosis

Lack of knowledge often leads to anxiety and stress

Part of problem, poor communication, non-reciprocal communication

Physicians may inform only partially, indirectly or with jargon, often in attempt to protect patient form alarm or misunderstanding (McKinlay, 1975)

Without direct communication, patients may seek alternate info sources (look at chart, ask other patients)

Information may be misleading or not fully understood

Loss of control

Loss of normal control over body (when, how, what to eat, when, how to toilet, dressing, what to wear, what medicines you put into your body)

Loss of control over activities (recreation, leisure, work)

Loss of control over future – predict what will happen

Problems associated with loss of control

Stressful

Increased discomfort

Heightened physiological responses

Patients may respond with reactance (Brehm, 1966) à bad patients

Petty acts of mutiny (drinking/smoking in room, off diet foods, not taking medicines)

Angry, complaining, questioning (which may indeed be good)

Attempts to re-establish control, however, maybe self-defeating (noncompliance)

Good patients

Patient, passive, compliant, non-complaining

May be disguised learned helplessness secondary to perceived loss of control

Learned helplessness also may lead to depression à immunosuppression

Also may be passive-aggressive – way to get even by withholding info, making less effort to help doctor–patient relationship (DPR) is considered to be the core element in the ethical principles of medicine. DPR is usually developed when a physician tends to a patient's medical needs via check-up, diagnosis, and treatment in an agreeable manner. Due to the relationship, the doctor owes a responsibility to the patient to proceed toward the ailment or conclude the relationship successfully. In particular, it is essential that primary care physicians develop a satisfactory DPR in order to deliver prime health care to patients.Fundamentals for Dynamic DPRSeveral medical reviews have covered ways to form a relationship between a physician and a patient. Some essential features are important for maintaining a healthy DPR are covered in more detail below: Communication:

Good communication skills are essential to establish DPR. Studies have revealed that effective communication between physician and patient has resulted in multiple impacts on various aspects of health consequences such as: improved medical, functional, and emotional condition of patients;

better patient compliance with medical treatment; enhanced fulfillment of patient toward healthcare services; lesserrisks of medical misconduct. Doctor empathy: Empathy is vital to ensure the quality of DPR. This enables the physician to understand the symptomatic experiences and needs of individual patients. Studies have suggested that physician empathy improves the therapeutic effect and the patient's quality of life. Trust: Trust in doctors allows patients to effectively discuss their health issues. Development of trust enables the patient to comply with the doctor's guidance, which consequently results in improvement of health. Informed consent: This is based on the moral and legal arguments of the patient's autonomy (independence in decision making). In relation to trust, the physician needs to be honest with the patient and his family to provide a genuine assessment of favorable and unfavorable outcome probabilities, along with the suggested therapy.

Professional boundaries: This deals with any behavior on the part of the doctor that transgresses the limits of the professional relationship, or boundary violations. For example, the following behaviors should be avoided to respect professional boundaries between the doctor and patient:

1. Observing the patient in unorthodox settings at the convenience of the physician;
2. Burdening the patient with personal information.

Patients, in turn, need to avoid frequent phone calls and unscheduled visits to their doctors, as a sign of respect for their time.

14.3 Role of NGOs

NGOs are non-governmental organizations that function free from the control of the Government. They are non-profit bodies that work for the Welfare of the society. They act as a middle organization between the Government and the society. People who cannot see the suffering of other individuals and want to make a better place for everybody, usually participate in these organizations. When various issues cannot reach the Government in power or when some issues are looked down upon by the Government then NGOs take up these issues and tackle them with utmost priority. Anyone can become a member of these organizations and can also quit whenever they want to. NGOs have their own set of rules and procedures for selection as well. That is why these bodies are also known as voluntary functioning bodies. They are identified on the basis of their work and according to the level on which they operate. On the basis of their work, they are classified as.

1. Service-Oriented NGOs,
2. Charity Oriented NGOs,
3. Empowerment Oriented NGOs and
4. Participation Oriented NGOs.

On the basis of the level of operation, they are classified as

1. Community Based Organizations,
2. City Level Organizations,
3. National Level NGOs, and
4. International Level NGOs.

Functions of NGO

Role and Functions of NGOs in the Indian context:

NGOs have brought various social changes for the promotion and development of society. These organizations work for serving humanity and other good cause. Let's discuss some of the major roles played by the various NGOs:

1) Improving Government performance: It is one of the important works of the NGOs to ensure that the Government should be responsive and solve the problems of the citizens thereby making the Government more accountable. NGOs also help in providing suggestions and their expertise in matters related to policy-making of Government by providing research teams. Many path-breaking laws in the country like Environmental Protection Act 1986, Right to Education Act 2009, Right to Information Act 2005, etc. have been formulated with the initiatives of the NGOs.

2) Acting as a social mediator: People in India are influenced a lot by faith, superstitions, belief, and customs. NGOs act as social mediators at various different levels of society so as to bring the required change in social and behavioral attitudes prevailing within the social environment. They create awareness among people and become the voice of the poor and needy person or group.

3) Facilitating communication: NGOs work at two different levels in order to facilitate communication. One is at the upward level whereby NGOs inform the Government about the needs, abilities, and activities of the people in their local area. On the other hand, they work at the downward level where people are informed and educated about the policies and programs of the Government.

4) Acting as a pressure group: They also act as a pressure group and mobilize public opinion against various Governmental policies and activities. They also help poor people, Farmers, STs, SCs etc. in availing quality services by making the Government accountable.

5) Building Community Participation: NGOs encourage and facilitate the participation of disadvantaged communities and help in preserving the culture of diverse communities.

6) Women Empowerment: The role of NGOs in women empowerment cannot be denied. They have been constantly fighting against social evils like Sati, dowry, cruelty, and other causes like employment, lessening of female foeticide, etc. Various NGOs like the Agrani foundation, Eklavya, Sewa, etc. have been trying to achieve gender equality as far as possible.

7) Mobilizing Local Resources: Over utilization of natural resources lead to natural calamities and environmental threats. NGOs keep an eye on this particular domain so that the destruction of natural resources does not take place.

8) Providing Education, Training, and Technical Assistance: NGOs provide education, training, and technical assistance to the people in need, volunteers, and to other NGOs. Later on, the trained NGOs provide their services to assist the Government.

9) Bridging the gap: NGOs reach out to those sections of people who are often left untouched by the State projects. For example, during the Covid-19 crisis, aid was provided to migrant workers. Apart from this, NGOs are also engaged in activities like education, human and labor rights, legal aid, gender issues, healthcare, and even research.

Summary

- Many people think of primary care, outpatient care, and emergency care when they need an illness managed or is generally not feeling well.
- NGOs are non-governmental organizations that function free from the control of the Government.
- NGOs act as social mediators at various different levels of society so as to bring the required change in social and behavioral attitudes prevailing within the social environment.

Keywords

Prognosis- The chance of recovery or recurrence.

NGO– NON-Governmental Organization

SelfAssessment

1. Providing Education, Training, and Technical Assistance is the role of NGOs?

A. True

B. False

2. Pain is not always curable

A. True

B. False

3. Treatment depends on the cause and type of pain
A. True
B. False

4. Women Empowerment is the job of NGOs
A. True
B. False

5. Bridging the gap is done by NGOs
A. True
B. False

Answers for Self Assessment

1. A 2. A 3. A 4. A 5. A

Review Questions

1. Discuss role of NGOs
2. Why NGOs are important?
3. Discuss types of health services.

Further Readings

Web Links

- https://static.america.gov/uploads/sites/8/2016/05/The-NGO-Handbook_Handbook-Series_English_508.pdf
- https://www.geeksforgeeks.org/role-and-functions-of-ngos/
- https://learning.candid.org/resources/knowledge-base/ngo-definition-and-role/

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