POST GRADUATE DIPLOMA IN PUBLIC HEALTH

PUBLIC HEALTH MODULE FOUR ASSIGNMENT

COURSE CODE; PGD 007

NAME OF STUDENT; JOHN MARIAL CHOL

REGISTRATION NUMBER; SN 319/MAY/2019

E-mail address; [banykueimarial@gmail.com](mailto:banykueimarial@gmail.com)

1.**What is mental illness?**

Mental illness refers collectively to all diagnosable mental disorders, health conditions involving significant changes in thinking, emotion/behavior distress or problems functioning in social, work or family activities

**b. Briefly describe the major categories of mental illness and their treatment**

The major categories of mental illness are discussed below;

**Depression**

Depression refers as a serious medical illness that negatively affects how you feel, act and the way you think. It causes feelings of sadness or loss of interest in activities you previously enjoyed. It can lead to a variety of emotional and physical problems and can decrease a person’s ability to function at work and at home. *(Ranna Parekh, M.D., M.P.H.2017)*

Depression represents one of the most prevalent psychiatric disorders, affecting around 340 million people worldwide. In 2002 unipolar depression accounted for 4.5% of all DALYs *(WHO, 2004d).* It is the leading cause of disability in the European region and Africa at large. In South Sudan, depression accounted for 24% DALYs in the year 2018 due to long term fight in the country which broke out in 2013 left almost every one being affected by mental disorders.

According to many sources, depression is expected to become the second-ranked cause of disease burden in 2020, accounting for 5.7% of DALYs, just behind chronic heart disease. This means that depression alone will account for one third of all worldwide disability caused by neuropsychiatric conditions, and thus becomes the most important mental disorder to tackle. The onset of depression and its recurrence is influenced by a wide range of malleable risk and protective factors at different stages of the lifespan from as early as infancy. These include biological, psychological, family, social and societal factors which are unevenly distributed in the population and concentrated in a wide range of populations at risk.

Luckily, depression is among the most treatable amongst all mental disorders and according to American Psychiatric Association which shows that between 80 - 90 percent of people with depression disorders eventually respond well to treatment. Almost all patients gain some relief from their symptoms*.*

**Medication like** brain chemistry may contribute to an individual’s depression and may factor into their treatment. For this reason, antidepressants might be prescribed to help modify one’s brain chemistry. These medications are not sedatives, “uppers” or tranquilizers.

Antidepressants may produce some improvement within the first week or two of use. Full benefits may not be seen for two to three months. If a patient feels little or no improvement after several weeks, his or her psychiatrist can alter the dose of the medication or add or substitute another antidepressant. In some situations, other psychotropic medications may be helpful. It is important to let your doctor know if a medication does not work or if you experience side effects.

Psychiatrists usually recommend that patients continue to take medication for six or more months after symptoms have improved. Longer-term maintenance treatment may be suggested to decrease the risk of future episodes for certain people at high risk.

**Another treatment is use of psychotherapy** or “talk therapy,” for treatment of mild depression; for moderate to severe depression, psychotherapy is often used in along with antidepressant medications.

Another treatment found to be effective in dealing with depression is Cognitive behavioral therapy. It was developed by Aaron Beck during the 1960s. One of the assumptions underlying this form of therapy is that psychological distress is strongly influenced by patterns of thinking, beliefs and behavior.

Depressed patients have patterns of thinking and reasoning that focus on a negative view of the world (including themselves and other people) and what they can expect from it. Psychological distress may be alleviated by altering these thought patterns and behaviors without the need to understand how earlier life events or circumstances may have contributed to how those patterns arose. A key aspect of the therapy is an educative approach, where the patient learns to recognize their negative thinking patterns and how to re-evaluate them. The new approach needs to be practiced outside of the sessions in the form of homework.

CBT is a discrete, time-limited, structured psychological treatment. The patient and therapist work collaboratively to identify the types of thoughts, beliefs and interpretations and their effects on current symptoms, feeling states and problem areas. The patient then develops the skills to identify, monitor and counteract problematic thoughts, beliefs and interpretations related to the target symptoms. The patient also learns a repertoire of coping skills appropriate to targeting thoughts, beliefs or problem areas. CBT is usually delivered as an individually focused therapy but has also been developed as a group treatment.

**Anxiety disorders**

Anxiety disorders are most prevalent psychiatric disorders in spite of cultural variations in rates. They comprise a wide range of different disorders of which generalized anxiety disorders, social phobia. The annual cost of anxiety disorders in the Juba, South Sudan was estimated for 2013 to be approximately 1 billion South Sudanese pounds because most children which where borne within the year 2013 are said to be affected mostly because they were borne in the year when the country was engaged into inter-wars.

Among children, anxiety disorders represent the most common form of psychopathology with annual prevalence rates ranging from 5.7 to 17.7%, mostly above 10% (Costello & Angold, 1995). Evidence shows that a high proportion of children do not grow out of their anxiety disorders during adolescence and adulthood (Majcher & Pollack, 1996).

Malleable anxiety-specific or generic risk and protective factors for anxiety disorders include traumatizing events, learning processes during childhood (e.g. modelling and over-control by overanxious parents), feelings of lack of control, and low self-efficacy, coping strategies and social support. Early adverse life events create a neurobiological vulnerability that predispose to affective and anxiety disorders in adulthood through long-lived alterations in neurological stress response systems.

**N.B** Anxiety disorders can be treated using the same approach like depression.

2. **Explain how social factors affect the health outcomes of individuals/communities**

The following are some of the factors which affects health outcome of an individual/community;

**Household Composition**

Household composition, which is strongly related to income and education, can influence social factors that in turn influence health.6 For example, children in low-income single-parent households experience higher rates of poverty, food insecurity, unstable housing, and other adverse living conditions (Center on Human Needs, 2012a). Poverty puts strains on families and creates a greater risk of single-parent households (Center on Human Needs, 2012a; DeNavas-Walt et al., 2011).

Low-income households are often the setting for adolescent childbearing, which is more common in the South Sudan than in other high-income countries. Adolescent motherhood affects two generations, children and mothers. Adolescent mothers are less likely than other adolescents to complete their education, and they have more restricted labor market opportunities and more disadvantaged family and household environments (***Ashcraft and Lang, 2006; Hoffman and Maynard, 2008).*** Their children face a greater risk of poor child care, weak maternal attachments, poverty, and other adverse conditions (Baldwin and Cain, 1980; Card, 1981). The female children of adolescent mothers are also at increased risk of becoming adolescent mothers themselves, thus perpetuating adverse conditions over two generations (Kahn and Anderson, 1992).

**Physical environment**

Another factor strongly linked to socioeconomic status is the quality of one’s physical environment (Adler and Newman, 2002; Evans and Kantrowitz, 2002). U.S. data indicate that substandard housing, crowding, elevated noise levels, limited ability to regulate temperature and humidity, and exposure to noxious pollutants and allergens (including lead, smog, particulates, and dust mites) are all common in poor, segregated communities (Been, 1997; Bullard, 1994; Evans and Saegert, 2000; Mohai and Bryant, 1992, 1998; Pearlin et al., 2001). For both adults and children, increased respiratory and other health problems result from residing near hazardous waste sites (Dolk et al., 1998; Goldberg et al., 1999), residential exposure to air pollution (Keeler et al., 2002; Pope et al., 2002; Thurston and Ito, 2001), and deteriorated housing conditions (Peat et al., 1998; Rauh et al., 2002). However, the exact contribution of such environmental conditions to racial and ethnic differences in health status, and the extent to which they add to other socioeconomic effects or possibly explain them, is still unclear.

3**. Explain how psychosocial factors affect health behavior**

**Depression**

Depression is one of the commonest psychosocial factor which affect health behavior in many ways, The National Institute for Health and Clinical Excellence (NICE) estimates that 9.8% of 16 to 65 year olds in the UK are suffering from mixed depression and anxiety. One in five people affected by depression will not recover fully from a first episode, and in 70–80% of those achieving remission, depression will recur at least once. The long-term recurring nature of depression magnifies its wider economic burden.

People with depression can find it difficult to engage in social activities, including family life and work. In addition to high healthcare costs, the disability associated with depression can limit the activities and productivity of affected individuals and is greater than that reported with other chronic physical illnesses.

The impact of depression on work has been measured in terms of absence from work and lost productivity. Research in the mid-1990s which examined the impact of illness in the workplace found that the average number of days of work lost per year was greater with depression than with chronic illnesses like diabetes, high blood pressure, back pain, and heart disease.

The economic burden of depression: the costs of healthcare Most research into the economic burden of depression has focused on the increased costs of healthcare. Not surprisingly, the healthcare costs associated with depression are significant, with increases in the use of all sectors of healthcare provision.

Research in the USA showed that depression is associated with much higher costs in every aspect of healthcare, and are not simply because of the use of specialist mental health services, nor the additional costs of antidepressant medicines. Similar findings were made in a community based study in Sweden, where people who were prescribed antidepressants consumed health resources disproportionately: although only 4% were prescribed an antidepressant, they accounted for 13% of all GP visits, 14% of all hospital beds occupied, and 24% of all medicines prescribed.

In the UK it is surprising how little research into the social and economic burden of depression has been conducted. NICE accepts that the indirect costs of lost productivity due to depression far outweigh the health service costs. The most recent economic review put the total cost of depression to the UK economy in the year 2000 at over £9 billion: only £370 million was allocated to direct NHS costs, the rest was made up of indirect costs including 109.7 million working days lost and 2,615 deaths due to depression.10

**Stress**

Psychological distress that arises from any of the above social factors, including from social rejection or exclusion associated with racial or ethnic identification, may lead to worse health through physiologic mechanisms involved in stress (Matthews et al., 2010; McEwen and Gianaros, 2010). Stress leads to social withdrawal and sometime can one insight violent in the social which can lead him/her to jail. Stress effects are thought to induce end organ damage and cardiovascular disease (Barker, 1998; McEwen and Gianaros, 2010). While life-long stress leads to accumulated damage, early exposure to stress can affect sensitive biological processes, such as brain development, and thereby permanently disrupt stress responses later in life (Gluckman and Hanson, 2006; Shonkoff et al., 2009).

Stress symptoms can affect your body, your thoughts and feelings, and your behavior Stress and when left unchecked can contribute to many health problems, such as high blood pressure, heart disease, obesity and diabetes and can affectsone’s body, mood and behaviour are summarized in the table below;

| **Common effects of stress are listed below basing on the part it affects;** | | |
| --- | --- | --- |
| **On your body** | **On your mood** | **On your behavior** |
| Headache | Anxiety | Overeating or undereating |
| Muscle tension or pain | Restlessness | Angry outbursts |
| Chest pain | Lack of motivation or focus | Drug or alcohol misuse |
| Fatigue | Feeling overwhelmed | Tobacco use |
| Change in sex drive | Irritability or anger | Social withdrawal |
| Stomach upset | Sadness or depression | Exercising less often |

Ways of preventing stress

* Getting regular physical activity
* Practicing relaxation techniques, such as deep breathing, meditation, yoga, tai chi or massage
* Keeping a sense of humor
* Spending time with family and friends
* Setting aside time for hobbies, such as reading a book or listening to music
* And be sure to get plenty of sleep and eat a healthy, balanced diet. Avoid tobacco use, excess caffeine and alcohol, and the use of illegal substances.

4. **Identify and explain three major threats to public health**

**Air pollution and climate change**

Air pollution is responsible for an estimated 7 million deaths annually, or one in eight premature deaths every year. This makes it the world’s largest environmental health risk, and among the largest global health risks – comparable with “traditional” health risks such as smoking, high cholesterol, high blood sugar and obesity. Some 4.3 million air pollution-related deaths are due to household air pollution and 3.7 million deaths are due to outdoor air pollution. Most air pollution-related deaths are from heart disease and stroke, followed by chronic obstructive pulmonary disease, acute and chronic respiratory conditions and cancers. The air pollutant linked most closely to excess death and disease is PM2.5 (particulate matter less than 2.5 micrometres in diameter), heavily emitted by both diesel vehicles and the combustion of biomass, coal and kerosene. Ozone is another pollutant that causes significant respiratory illness, including chronic asthma. There is growing evidence that oxides of nitrogen (NOx), a major contributor to ozone and heavily emitted by diesel vehicles, is also linked to significant health risks.

Black Carbon is a “short-lived climate pollutant” (SLCP) that is a major component of health-harmful PM2.5 air pollution – particularly from diesel vehicles, diesel engines, coal and biomass stoves and waste incineration. Since black carbon persists for only a short time in the atmosphere, reducing black carbon emissions can have significant near-term climate and health benefits.

**Non-communicable diseases**

NCDs are defined as diseases of “long duration, generally with slow progression”. The leading NCDs are generally considered to be cardiovascular diseases, diabetes, cancer, and chronic respiratory diseases. Whilst these diseases are the main NCDs affecting world health, they do not cover all disease entities, with notable omissions being mental health disorders, vision and hearing impairments, and musculoskeletal diseases. Musculoskeletal diseases alone “can severely diminish one’s capacity to undertake manual labor, such as farming, which is the dominant productive activity in rural settings that are home to 50% of the world’s population”. Further, the term “noncommunicable disease” may be regarded as somewhat of a misnomer, given that a proportion of NCDs can be transmitted from human to human, an example of this being human papillomavirus

Overall, chronic NCDs were responsible for around 68% of the 56 million deaths recorded across the globe in 2012. World Health Organization (WHO) classified the four main NCDs, ie, cardiovascular diseases, chronic lung diseases, cancer, and diabetes, in terms of causes of death in 2012.

In that same year, cardiovascular disease alone was responsible for around 7.4 million deaths, respiratory cancers for 1.6 million (2.7%) deaths, and diabetes for 1.5 million (2.7%) deaths.

The same WHO statistics show that approximately 75% of deaths attributable to NCDs occurred in low-income or middle-income countries. However, in relation to the percentage of deaths per country, ie, compared with the size of population, the most developed countries actually had the highest incidence (87%) of all deaths from NCDs, followed by upper middle-income countries (81%).

The impact of NCDs is steadily increasing, and is affecting people of all ages in both developed and developing countries. According to WHO projections, deaths attributable to NCDs have increased globally by 7 million between 2000 and 2012.

From a standard of living perspective, NCDs tend to result in further impairments to the individual over time. The absolute numbers vary from study to study, but for diabetes it is estimated that between 13% to 65% will develop neuropathy, leading to chronic ulcerations and amputations in 1% to 17% of them; 10% to 47% of persons living with diabetes will develop a retinopathy leading to visual impairment.

These numbers become even more alarming when it is considered that the same research found that in 2004, there were 30.7 millions of people in the world living with impairments due to stroke, one of the conditions caused by cardiovascular risk factors”. In broader terms, the effects on these individuals are far reaching, and they may be considered to have a disability when social, economic, political or other barriers hinder their full and effective participation in society.

According to the Global Health Estimates study, NCDs are among the top ten causes of disability-adjusted life years. In relation to the global view of NCDs, heart disease ranked first in the list (6.0%) in terms of disability-adjusted life years, followed by COPD (3.4%), depressive disorders (2.8%), and respiratory cancer (1.4%).

**Ebola**

The Ebola epidemic that was first recognized in 2014 and ravaged the West Africa countries of Liberia, Sierra Leone, and Guinea was a stark illustration of the risks that emerging pathogens and epidemic-prone diseases pose to local and global health security in settings that had limited public health capacity. More than 28,000 Ebola cases were reported from the 3 countries during the epidemic, and >11,000 persons died (1). These countries are among the least developed in the world (2), and their weak infrastructures and underfunded health systems were further compromised by the epidemic. During the initial months of the Ebola epidemic, limited capacity to rapidly identify suspected cases, confirm diagnoses, and implement preventive measures contributed to widespread transmission

**5. What are some of the psychosocial interventions for mental health and substance use disorders in your country**

**Cognitive behavioral therapy**

CBT for depression was developed by Aaron Beck during the 1960s. One of the assumptions underlying this form of therapy is that psychological distress is strongly influenced by patterns of thinking, beliefs and behaviour. Depressed patients have patterns of thinking and reasoning that focus on a negative view of the world (including themselves and other people) and what they can expect from it. Psychological distress may be alleviated by altering these thought patterns and behaviours without the need to understand how earlier life events or circumstances may have contributed to how those patterns arose. A key aspect of the therapy is an educative approach, where the patient learns to recognize their negative thinking patterns and how to re-evaluate them. The new approach needs to be practiced outside of the sessions in the form of homework.

CBT is a discrete, time-limited, structured psychological treatment. The patient and therapist work collaboratively to identify the types of thoughts, beliefs and interpretations and their effects on current symptoms, feeling states and problem areas. The patient then develops the skills to identify, monitor and counteract problematic thoughts, beliefs and interpretations related to the target symptoms. The patient also learns a repertoire of coping skills appropriate to targeting thoughts, beliefs or problem areas. CBT is usually delivered as an individually focused therapy but has also been developed as a group treatment. Common antenatal and postnatal modifications include delivery in the home of the mother or mother-to-be.

**Co-parenting intervention**

This intervention is based on the assumption that the postnatal period may be a time of increased stress not just in terms of the transition to motherhood but also in terms of marital adjustment as women attempt to handle both maternal and marital roles. The intervention involves partners in therapy sessions, and positive interaction and communication between the couple is encouraged by discussing strategies for child care and housework.

**Directive counseling**

This intervention incorporated elements of supportive listening and history taking in common with listening visits (non-directive counselling) but also included more directive techniques of problem clarification, goal formation, problem solving and partner sessions. This intervention can be delivered individually or in a group format.

6**.Describe two psychological models of health behavior**

**The Theory of Planned Behavior**

The Theory of Planned Behavior (TPB) started as the Theory of Reasoned Action in 1980 to predict an individual's intention to engage in a behavior at a specific time and place. The theory was intended to explain all behaviors over which people have the ability to exert self-control. The key component to this model is behavioral intent; behavioral intentions are influenced by the attitude about the likelihood that the behavior will have the expected outcome and the subjective evaluation of the risks and benefits of that outcome.

The TPB has been used successfully to predict and explain a wide range of health behaviors and intentions including smoking, drinking, health services utilization, breastfeeding, and substance use, among others. The TPB states that behavioral achievement depends on both motivation (intention) and ability (behavioral control). It distinguishes between three types of beliefs - behavioral, normative, and control. The TPB is comprised of six constructs that collectively represent a person's actual control over the behavior.

**Attitudes** - This refers to the degree to which a person has a favorable or unfavorable evaluation of the behavior of interest. It entails a consideration of the outcomes of performing the behavior.

**Behavioral intention** - This refers to the motivational factors that influence a given behavior where the stronger the intention to perform the behavior, the more likely the behavior will be performed.

**Subjective norms** - This refers to the belief about whether most people approve or disapprove of the behavior. It relates to a person's beliefs about whether peers and people of importance to the person think he or she should engage in the behavior.

**Social norms** - This refers to the customary codes of behavior in a group or people or larger cultural context. Social norms are considered normative, or standard, in a group of people.

**Perceived power** - This refers to the perceived presence of factors that may facilitate or impede performance of a behavior. Perceived power contributes to a person's perceived behavioral control over each of those factors.

Perceived behavioral control - This refers to a person's perception of the ease or difficulty of performing the behavior of interest. Perceived behavioral control varies across situations and actions, which results in a person having varying perceptions of behavioral control depending on the situation. This construct of the theory was added later, and created the shift from the Theory of Reasoned Action to the Theory of Planned Behavior.

**The Health Belief Model**

The Health Belief Model (HBM) has the longest history of all the theories reviewed. It was originally conceived by social psychologists in the public health arena as a way of predicting who would utilize screening tests and/or vaccinations.3,5\_9 According to the HBM, the likelihood that someone will take action to prevent illness depends upon the individual's perception that: • they are personally vulnerable to the condition; • the consequences of the condition would be serious; • the precautionary behavior effectively prevents the condition; and • the benefits of reducing the threat of the condition exceed the costs of taking action.9 These four factors, which are influenced by mediating variables, indirectly influence the probability of performing protective health behaviors by influencing the perceived threat of the illness and expectations about outcome. The HBM has been used for intervening with health screening, illness, sick role, and precautionary behaviors.5,8\_12 The model has undergone some modifications since its original formulation. Table 1 shows the four-construct model that is the most commonly described form of the HBM. The model's four key components are conceptualized as perceived: 1) susceptibility, 2) severity, 3) effectiveness, and 4) cost. Perceived susceptibility refers to the probability that an individual assigns to personal vulnerability in developing the condition. The concept of perceived susceptibility has been found to be predictive of a number of health-protective behaviors. From an HBM perspective, the likelihood individuals will engage in precautionary behaviors to prevent cancer (e.g., quit smoking, eat a diet low in fat and high in fiber, exercise, get a mammogram or prostate exam) depends on how much they believe they are vulnerable to or at risk for cancer. In general, it has been found that people tend to underestimate their own susceptibility to disease.

**References**

1. *Mental health: A state of well-being. (2014, August 2014)  
   who.int/features/factfiles/mental\_health/en/*
2. *Mental health by the numbers. (n.d.). National Alliance on Mental Illness  
   nami.org/Learn-More/Mental-Health-By-the-Numbers*
3. *Serous mental illness (SMA) among U.S. adults. (2016). National Institute of MentalHealth  
   nimh.nih.gov/health/statistics/prevalence/serious-mental-illness-smi-among-us-adults.shtml*
4. *U.S. leading categorties of diseases/disorders. (2013). National Institute of Mental Health  
   nimh.nih.gov/health/statistics/disability/us-leading-categories-of-diseases-disorders.shtml*
5. *American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders (DSM-5), Fifth edition. 2013.*
6. *World Health Organization. Prevention of mental disorders: effective interventions and policy options: summary report / a report of the World Health Organization Dept. of Mental Health and Substance Abuse; in collaboration with the Prevention Research Centre of the Universities of Nijmegen and Maastricht.*
7. *How stress affects your health. American Psychological Association. https://www.apa.org/helpcenter/stress. Accessed March 5, 2019.*
8. *Stress and your health. U.S. Department of Health and Human Services. https://www.womenshealth.gov/mental-health/good-mental-health/stress-and-your-health. Accessed March 5, 2019.*
9. *Seaward BL. Essentials of Managing Stress. 4th ed. Burlington, Mass.: Jones & Bartlett Learning; 2017.*
10. *Seaward BL. Managing Stress: Principles and Strategies for Health and Well-Being. 9th ed. Burlington, Mass.: Jones & Bartlett Learning; 2018.*
11. *Warning signs of a heart attack. American Heart Association. https://www.heart.org/en/health-topics/heart-attack/warning-signs-of-a-heart-attack#.VsZCDtj2bIU. Accessed March 5, 2019.*