Tutorial letter 503/3/2016

Abnormal Behaviour and Mental Health

PYC3702

Semesters 1 & 2

Department of Psychology

IMPORTANT INFORMATION:

One of three tutorial letters, numbered 501, 502 and 503 for this module code.

These tutorial letters are your study guides for this module code.

BAR CODE

Tutorial Letter 503/3/2016
(Third Study Guide for PYC3702)

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Tutorial Letter 501/3/2016

(First Study Guide for PYC3702)

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(Second Study Guide for PYC3702)

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Learning Unit 14:

Schizophrenia Spectrum and Other Psychotic Disorders

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Contents

Overview

The term ‘Schizophrenia Spectrum Disorders’ refers to a set of disorders that encompass what are undoubtedly the most complex and frightening symptoms we will encounter. Individuals who suffer from Schizophrenia Spectrum and other Psychotic Disorders may hear voices, think other people are stealing their thoughts, feel insects crawling under their skin, believe other people want to kill or bewitch them, or speak in a language that makes no sense at all. These symptoms are especially frightening because they are completely outside the experience of most people. Somehow, most of us can visualise or imagine how it might feel to suffer from a Mood Disorder like Major Depression or an Anxiety Disorder, as we have most likely experienced some of the symptoms of these disorders. However, few of us have experienced delusions and hallucinations and thus respond to these symptoms with fear and apprehension.

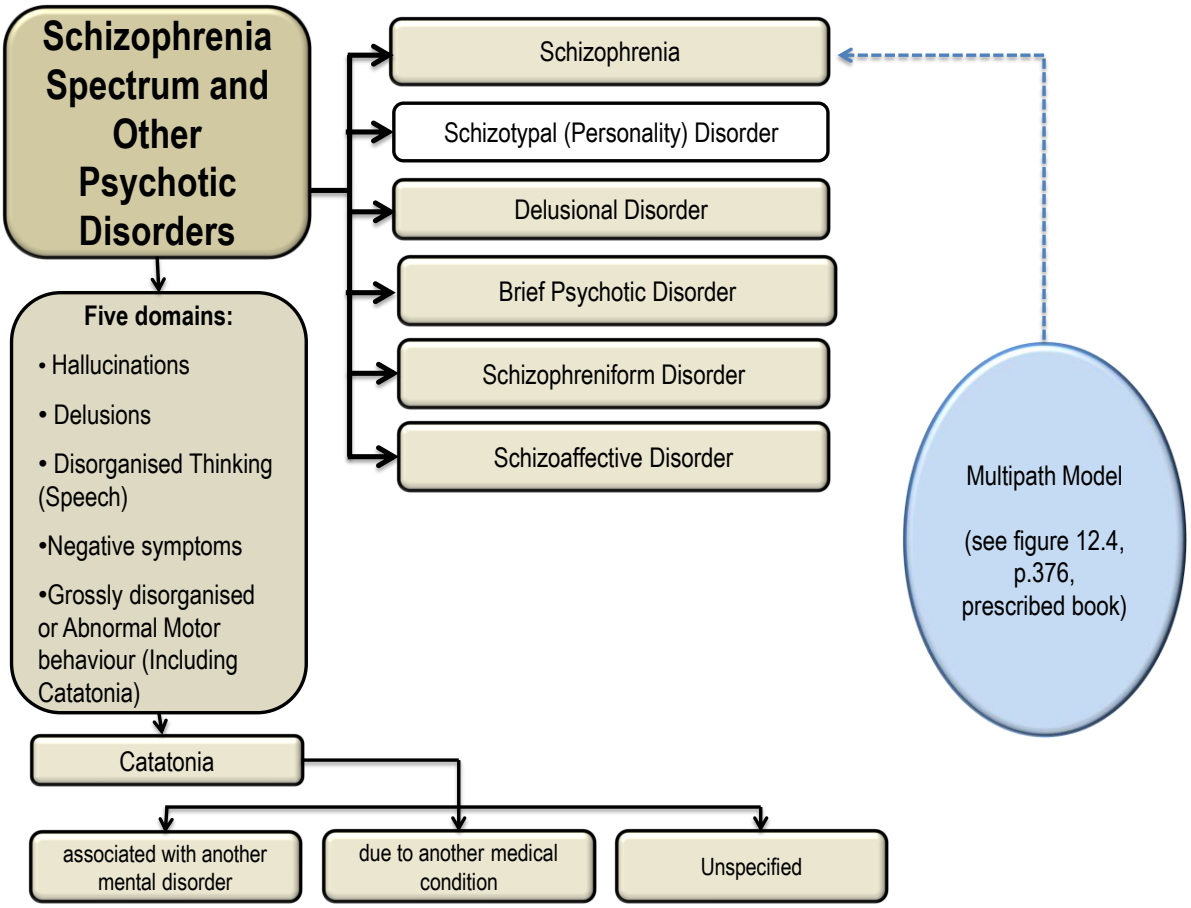
The popular media have also contributed to the ‘mystery’ surrounding Schizophrenia Spectrum and other Psychotic Disorders, as the publicity value of these disorders lies in the strange or bizarre features; consequently, these symptoms have received the most attention. The popular media have furthermore fed the confusion concerning the true nature of Schizophrenia by often describing Schizophrenia as a case of "split personality", implying more than one personality, which is incorrect. The ‘split personality’ is in actual fact Dissociative Identity Disorder, which you will find in Learning Unit 8 (Chapter 7 of your prescribed book), and not Schizophrenia.

A further reason for the uncertainty and negativity surrounding Schizophrenia Spectrum and other Psychotic Disorders are that until recently, these disorders were considered untreatable e.g. previously a diagnosis of Schizophrenia meant a life of misery and ‘madness’ in some or other institution. This is no

longer the case. Modern medicine has progressed (and is still evolving) and there are treatment options available to individuals who suffer from these Psychotic Disorders which enable them to take up their roles as fully functioning individuals in society.

In this Learning Unit you will study the different Schizophrenia Spectrum Disorders and other Psychotic Disorders that make up this category of Disorders according to the DSM-5 classification system. You will also study the causal factors in the development of Schizophrenia by way of the Multipath Model. You will furthermore be challenged to consider how you can become involved in the prevention of Psychotic Disorders in your community.

The following mind map shows an overview of the information that you will study in this Learning Unit:



Activity 14.1

Scan-read chapter 12 in the prescribed book in order to familiarise yourself with the contents of this chapter.

After scan-reading the chapter you will no doubt have become aware that the Schizophrenia Spectrum Disorders are a group of disorders characterised by a diverse array of symptoms such as extreme oddities in perception, thinking, action, sense of self, and manner of relating to others (Butcher, Mineka & Hooley, 2010). According to the DSM-5 classification system Schizophrenia, other Psychotic Disorders (e.g. Delusional Disorder, Brief Psychotic Disorder, Schizopreniform Disorder, Schizoaffective Disorder) and Schizotypal Personality Disorder all fall within this grouping of disorders. Take note that Schizotypal Personality Disorder is considered in this category as well as in the Personality Disorders category of the DSM-5. Although this disorder is a full-blown Personality Disorder it is also considered in the Psychotic Disorders category as it falls in the spectrum of Schizophrenia Spectrum Disorders. The different Schizophrenia Spectrum and other Psychotic Disorders represent a gradient of psychopathology and needs careful consideration, thorough assessment and knowledge on the part of the clinician to make a diagnosis. Disorders in this category of the DSM-5 are defined by abnormalities in one (or more) of the following five domains:

- Delusions
- Hallucinations
- Disorganised Thinking (Speech)
- Grossly disorganised or abnormal motor behaviour (including Catatonia)
- Negative symptoms

14.1 STUDY UNIT: Five domains of abnormalities in Psychotic Disorders

Outcomes
Once you have worked through study unit 14.1, you should be able to:

- Differentiate between the different domains of abnormalities in Psychotic Disorders.
- Provide definitions for the different abnormality types of each of these domains.
- Provide examples of each of these abnormalities.

Study
To be able to do the above you need to study the section on the Symptoms of Schizophrenia on pages 365-372 of your prescribed book as well as the section below in Study Unit 14.1.

Delusions

Delusions are fixed beliefs that are not amenable to change in the light of conflicting evidence. Delusions are termed bizarre if they are clearly implausible and not understandable to same-culture peers and do not derive from ordinary life experiences. The difference between a delusion and a strongly held idea is often difficult to differentiate but in part has to do with the degree of conviction with which the belief is held despite clear or reasonable contradictory evidence (APA, 2013, p.87).

The content of delusions may include a variety of themes. Refer to Table 14.1 below.

Table 14.1: Types of Delusions

Type of Delusion	Content of Delusion
Persecutory	Belief that one is/going to be harmed/harassed etc. by an individual or organization etc.
Grandiose	Believes one has exceptional abilities/wealth/fame.
Erotomanic	False belief that another is in love with him/her.
Nihilistic	Belief that a major catastrophe will occur.
Somatic	Pre-occupation with health and organ function.
Referential	Belief that certain gestures, comments, environmental cues, etc. are directed at you (gossip)

Jealousy	Belief that partner/spouse is unfaithful.
Religious	Belief that one is Jesus/Moses etc.
Loss of Control	Belief of loss of control over mind or body/being manipulated by others, and includes thought withdrawal/insertion/control.

Hallucinations

Hallucinations are perception-like experiences that occur without an external stimulus. They are vivid and clear and is not under voluntary control. Hallucinations can occur in any sensory modality, although auditory hallucinations are the most common in Psychotic Disorders. Auditory hallucinations may involve both familiar and/or unfamiliar voices that are clearly distinct from the individual's own thoughts.

Hallucinations that occur only when falling asleep (hypnagogic) or waking up (hypnopompic) are considered within the range of normal behaviour and not included under this section. Also, hallucinations may furthermore be a normal part in religious experience in certain cultures and therefore care should be taken when making a diagnosis of a disorder based on hallucinations of this type (APA, 2013, pp. 87-88).

There are five types of hallucinations. Refer to your prescribed book on pages 369-370 for a discussion of these different types.

Disorganised Thinking (Speech)

Disorganised thinking (formal thought disorder) is typically inferred from an individual's speech. This disorganisation must be severe enough to cause impairment as mildly disorganised speech is common and not necessarily indicative of a specific disorder.

The level of the impairment of disorganised thinking is difficult to make if the clinician is from a different language group or background than the individual being assessed.

There are mainly three types of disorganised thinking that presents in speech namely:

- Derailment or loose association – when the individual switches from one topic to another.
- Tangentiality – when the answers the individual provides are only somewhat or indirectly related, or completely unrelated to the question they were asked.
- Incoherence or word salad – severe linguistic disorganisation, incomprehensible and bordering on aphasia (inability to speak normally) in its disorganisation (APA, 2013, p.88).

Grossly Disorganised or Abnormal Motor Behaviour (including Catatonia)

Grossly Disorganised or Abnormal Motor Behaviour may manifests in a variety of ways ranging from 'child-like' behaviour (silliness) to unpredictable agitation. Problems may be noted in any form of goal-directed behaviour, leading to difficulty in performing day-to-day activities.

Catatonic behaviour is a marked decrease in reactivity to the environment and may range considerably. Refer to page 371-372 and Figure 12.2 of your prescribed book for the different manifestations of catatonia.

Negative Symptoms

Negative symptoms account for a substantial portion of the morbidity associated with Schizophrenia but are less prominent in other Psychotic Disorders. Mainly two types of negative symptoms are prevalent in Schizophrenia namely diminished emotional expression and avolition (decrease in motivated, self-initiated and purposeful activity).

Other negative symptoms involve alogia (lack of meaningful speech), anhedonia (decreased ability to experience pleasure from positive stimuli or degradation in the recollection of pleasure previously experienced) and asociality (minimal interest in social relationships) (APA, 2013, p. 88).

14.2 STUDY UNIT: Schizophrenia

The symptoms of Schizophrenia can be divided into two broad categories, namely, positive and negative symptoms. The positive symptoms seem to reflect an excess or distortion of normal functions, are present during the active phase of Schizophrenia and tend to respond well to treatment, whereas the negative symptoms seem to reflect loss of or diminished normal functioning, are associated with inferior premorbid functioning and have a poorer prognosis. The positive symptoms are delusions, hallucinations and disorganisation (thinking, speech and motor behaviour); the negative symptoms are flat or restricted affect, alogia, anhedonia, avolition and asociality.

Outcomes
Once you have worked through study unit 14.2, you should be able to:

- define Schizophrenia
- discuss the DSM-5 criteria for Schizophrenia
- comprehensively discuss the different symptoms of Schizophrenia, namely:
    - delusions
    - hallucinations
    - disorganised thinking and speech
    - disorganised motor disturbances
    - thought disturbances
    - flat affect
    - restricted affect (diminished emotional expression)
    - alogia
    - avolition
    - anhedonia
    - asociality
- discuss cognitive symptoms of Schizophrenia
- discuss the role of cultural factors in the manifestation and interpretation of symptoms of Schizophrenia
- discuss the course of Schizophrenia
- discuss the aetiology of Schizophrenia according to the Multipath Model
- contribute to a primary prevention programme aimed at preventing the development of Schizophrenia in your community

Study
To be able to do the above you will need to study the introduction to this Learning Unit and study unit 14.1 and 14.2, and the DSM-5 diagnostic criteria for Schizophrenia in Activity 14.2, the course of Schizophrenia in Activity 14.4 and the aetiology of Schizophrenia in Activity 14.5 in this tutorial letter and the following sections in your prescribed book:

- Introduction, pages 363-364
- “The Symptoms of Schizophrenia”, pages 365-372;
- Figure 12.2, “Prevalence of Symptoms in Thirty Young Patients with Catatonia”, page 371
- The section “Did you Know?” on page 370;
- The section titled “Understanding Schizophrenia”, pages 372-374;
- Figure 12.3, page 373
- The section titled “Etiology of Schizophrenia”, pages 375-386;

- Biological Dimension
- Psychological Dimension
- Social Dimension
- Sociocultural Dimension

- Refer to figure 12.4, page 376.
- Table 12.1, page 381

Activity 14.2

The prescribed book does not include clear diagnostic criteria for a diagnosis of Schizophrenia. Therefore you need to study the DSM-5 diagnostic criteria for Schizophrenia included below.

DSM-5 diagnostic criteria for Schizophrenia

A Two (or more) of the following, each present for a significant portion of time during a 1-month period (or less if successfully treated). At least one of these must be (1), (2), or (3):

1. Delusions.
2. Hallucinations.
3. Disorganised speech (e.g., frequent derailment or incoherence).
4. Grossly disorganised or catatonic behaviour.
5. Negative symptoms (i.e., diminished emotional expression or avolition).

B For a significant portion of the time since the onset of the disturbance, level of functioning in one or more major areas, such as work, interpersonal relations, or self-care, is markedly below the level achieved prior to the onset (or when the onset is in childhood or adolescence, there is failure to achieve expected level of interpersonal, academic, or occupational functioning).

C Continuous signs of the disturbance persist for at least 6 months. This 6-month period must include at least 1 month of symptoms (or less if successfully treated) that meet Criterion A (i.e., active-phase symptoms) and may include periods of prodromal or residual symptoms. During these prodromal or residual periods, the signs of the disturbance may be manifested by only negative symptoms or by two or more symptoms listed in Criterion A present in an attenuated from (e.g., odd beliefs, unusual perceptual experiences).

D Schizoaffective disorder and depressive or bipolar disorder with psychotic features have been ruled out because either 1) no major depressive or manic episode have occurred concurrently with the active-phase symptoms, or 2) if mood episodes have occurred during active-phase symptoms, they have been present for a minority of the total duration of the active and residual periods of the illness.

E The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.

F If there is a history of autism spectrum disorder or a communication disorder of childhood, onset, the additional diagnosis of schizophrenia is made only if prominent delusions or hallucinations, in addition to the other required symptoms of schizophrenia, are also present for at least 1 month (or less if successfully treated).

Specify if:

The following course specifiers are only to be used after a 1-year duration of the disorder and if they are not in contradiction to the diagnostic course criteria.

First episode, currently in acute episode: First manifestation of the disorder meeting the defining diagnostic symptom and time criteria. An *acute episode* is a time period in which the symptom criteria are fulfilled.
First episode, currently in partial remission: *Partial remission* is a period of time during which an improvement after a previous episode is maintained and in which the defining criteria of the disorder are only partially fulfilled.
First episode, currently in full remission: *Full remission* is a period of time after a previous episode during which not disorder-specific symptoms are present.

Multiple episodes, currently in acute episode: Multiple episodes may be determined after a minimum of two episodes (i.e., after a first episode, a remission and a minimum of one relapse).
Multiple episodes, currently in partial remission
Multiple episodes, currently in full remission
Continuous: Symptoms fulfilling the diagnostic symptom criteria of the disorder are remaining for the majority of the illness course, with sub threshold symptom periods being very brief relative to the overall course.
Unspecified

Specify it:

With catatonia (refer to the criteria for catatonia associated with another mental disorder, pp. 119-120, for definition).

Coding note: Use additional code 293.89 (F06.1) catatonia associated with schizophrenia to indicate the presence of the comorbid catatonia.

Specify current severity:

Severity is rated by a quantitative assessment of the primary symptoms of psychosis, including delusions, hallucinations, disorganised speech, abnormal psychomotor behaviour, and negative symptoms. Each of these symptoms may be rated for its current severity (most severe in the last 7 days) on a 5-point scale ranging from 0 (not present) to 4 (present and severe). (See Clinician-Rated Dimensions of Psychosis Symptom Severity in the chapter "Assessment Measures.")

Note: Diagnosis of schizophrenia can be made without using this severity specifier.

(APA, 2013, pp. 99-100)

Activity 14.3

Read the following vignettes of personal accounts of individuals who suffers from Schizophrenia.

"On the way to the store, I had a flat tire. I thought this was planned also. At the petrol pump, the men smiled at me with twinkles in their eyes and I knew they were closing in. I was done for. They would kill me. Suddenly I saw their faces in the skies…"

"I developed a feeling that I smelled bad and that somewhere I had left a tap open and consequently would be responsible for destroying a building, and that if I accidentally struck a match, I would cause mass destruction and kill many people. I was suspicious about everyone …"

"At first, I strained to hear the voices. They were soft and working in the form of a code. I broke the code after a long struggle. Then I could distinctly hear four voices. "The rotten prostitute …" said one. "The Gods will not leave her …" said the second. "I think you should kill yourself and spare God the trouble …" said the third one addressing directly to me …"

(http://www.aarogya.com, accessed on 5 May 2010)

Consider whether these vignettes represent mostly the positive or negative symptoms of Schizophrenia. How many of these symptoms are you able to identify in these vignettes? If you are unclear regarding the various symptoms of Schizophrenia and subsequently find it difficult to identify these symptoms in the vignettes above, you need to refer back to the section on "The Symptoms of Schizophrenia" on pages 365 to 372 of your prescribed book.

The course of Schizophrenia

Psychotic features of Schizophrenia typically emerge between the late teens and mid-thirties. Onset before adolescence is rare. The onset of symptoms of Schizophrenia may be abrupt or insidious although the large majority of individuals develop a slow and gradual development of a variety of clinically significant signs and symptoms. The peak age for the first psychotic episode seem to be in the early to mid- 20s for males and late- 20s for females.

Psychotic symptoms seem to diminish over the course of the lifetime probably due to the natural decline in dopamine activity. Negative symptoms are more closely related to prognosis than positive symptoms and seem to be the most persistent.

The course of Schizophrenia is divided into three phases, namely, (1) the prodromal phase when the symptoms start to develop and build up, (2) the active phase when the symptoms are full-blown, and (3) the residual phase when symptoms are less active or prominent.

Research on the long-term outcome of Schizophrenia is contradictory as the definition of Schizophrenia changes over time as well as developments in the medical treatment of Schizophrenia.

Activity 14.4

Study the section titled, Understanding Schizophrenia on pages 372 to 374of your prescribed book.

The Aetiology of Schizophrenia

It is generally accepted that Schizophrenia, as with the majority of psychological disorders, is most likely caused by the combined influence of a variety of factors such as biological, psychological, social and sociocultural factors. In this chapter, the authors propose that the aetiology of Schizophrenia, and indeed of other psychotic conditions, is best understood by using a Multipath Model that incorporates the above aspects.

In this learning unit we first consider each aetiological factor independently and then consider the Multipath model of Schizophrenia as a model that attempts to integrate all these separate etiological factors into a single explanation for the aetiology of Schizophrenia while considering the interactive relationships between all the individual aetiological factors.

Activity 14.5

Study the section titled Etiology of Schizophrenia on pages 375 to 386 of the prescribed book.

Activity 14.6

Explain the dopamine hypothesis for the development of Schizophrenia.

Refer to the relevant section in your prescribed book under the heading "Biological Dimension: Neurotransmitters". Compare your answer with the information in the prescribed book. If your discussion is incomplete study the relevant section again and then elaborate on your answer.

Activity 14.7

Read the following case study and:

(a) diagnose Tladi's abnormal behaviour according to the DSM-5 classification system.
(b) justify your answer for each diagnosis in question (a).
(c) explain the development of Tladi's abnormal behaviour using the Multipath Model.
(d) discuss how Tladi's behaviour would be explained and interpreted from an African perspective.
(e) Imagine you were a community mental health care worker operating in Tladi's community when he was a child. Discuss how you would have gone about possibly preventing the development of a full-blown disorder in Tladi

Case study

Tladi, a 40-year-old man, was brought to the local hospital after he was found wandering aimlessly in the streets and talking loudly to no-one in particular. He used words and sounds that people around him could not understand. His speech was fragmented and incoherent. His appearance was unkept and dirty. He appeared agitated and became violent without provocation. He ran about wildly, assaulting people and breaking things. Enquiries made by the clinician revealed that his illness had started two years before being admitted to hospital. According to family members, the illness started gradually and the patient deteriorated month after month.

His illness started with symptoms of general listlessness, sleep disturbances and bad dreams, loss of appetite, withdrawal, emotionlessness and unprovoked bouts of anger. He often complained of hearing voices in his stomach, which spoke a different language from his own. The voices told him that his wife did not love him anymore. On one occasion they told him that they had come to kill him as someone else wanted to marry his wife. Whenever he became angry he blamed the voices for causing it. Before the illness started, the patient did not have any physical illness.

He was a hardworking father, married with three children, but his wife left him a year before the illness started. At the time she left him, Tladi was spending a lot of hours at work as he had been promoted and was experiencing a lot of work-related pressure and stress. His wife and their children are now living with her parents. Soon after the illness started Tladi lost his job because of his funny behaviour.

During the clinical interview, the patient reported that he had been bewitched by jealous people in his community who were not happy about his success. He also reported that insects were moving inside his body and that at times he could feel his brain move and heard voices threatening to kill him. His brothers were of the opinion that his illness was caused by a witch or evil spirit sent by his wife who had left him, or by another person.

Tladi grew up as part of a large family in a very poor rural area where violence amongst factions was rife. His father left for the city to work in the mines when Tladi was very young and they hardly ever saw their father while growing up. On many occasions, Tladi and his siblings were sent to live with his father's parents as there were periods during which his mother was hospitalised for what the local community called "bouts of madness". According to Tladi's brothers, their mother would focus her attention on Tladi when she was ill. She would confuse poor Tladi as she would often behave very inconsistently towards him and blame him for their father's departure but would then tell Tladi that he was the only child she loved. Tladi's brothers said that they thought she did this because Tladi was the one child that was a lot like their mother, and that they always thought that he would "turn out" to be just like her and now it seemed they were right.

(a) Schizophrenia
Other problems related to primary support group – Disruption of Family by Separation or Divorce (wife took the children and left to go and stay with her parents).
Occupational problems – Other Problem Related to Employment (Tladi lost his job).

(b) Tladi fulfils all the DSM-5 criteria for making a diagnosis of Schizophrenia. He has hallucinations (he hears voices speaking to him, and feels insects moving inside his body and his brain moving). He has delusions (he believes he was bewitched). His speech is incoherent and does not make sense. He shows violent behaviour, agitation, withdrawal, emotional numbness, sleep disturbance, loss of appetite, etcetera. His personal hygiene is non-existent. He is clearly disorientated and poses a danger to himself and others due to his violent outbursts. These symptoms have been going on for at least six months (for the past year at least) and represent a decline in his previous level of social and occupational functioning.

No information is given about his premorbid functioning but the probability of the presence of a Personality Disorder is limited as Tladi is described as a "hardworking married father of three".
There is also no general medical condition present.
Other problems related to primary support group – Disruption of Family by Separation or Divorce (wife took the children and left to go and stay with her parents).

Occupational problems – Other Problem Related to Employment (Tladi lost his job).
Due to the severity of his psychotic symptoms, the absence of personal hygiene, his incoherent and disorganised behaviour and speech, and the possible danger Tladi poses to himself and others, he is deemed incapable to function on his own and should be admitted to hospital in order to receive adequate treatment.

(c) To explain the development of Tladi's Schizophrenia according to the Multipath Model you need to consider the different dimensions namely: biological, psychological, social and sociocultural and how these dimensions are specifically relevant to Tladi's life. You also need to consider how these aspects interact with each other and how they combine in different ways to result in Tladi's Schizophrenia. How many of the aspects noted in figure 13.4 are specifically relevant to the case of Tladi? Can you provide examples from the case study to support your view?

(d) Questions (a) to (c) concern the diagnosis and description of Tladi's behaviour according to the DSM-5 classification system and an explanation of his behaviour according to the Multipath Model. Note that the DSM-5 classification system is used in the medical or biogenic approach to abnormal behaviour and is the basis for understanding mental disorders in Western medicine. If Tladi had been taken to a traditional healer in his community the approach would have been very different. Please refer to Learning Unit 4 in Tutorial Letter 501 for an explanation of the African perspective.

For a discussion of Tladi's abnormal behaviour according to the African perspective refer to the section "Interpretation from an African perspective" and "Classification of Tladi's abnormal behaviour from an African perspective" in Activity 4.12 in Learning Unit 4 in Tutorial Letter 501.

It is important that you develop sensitivity to the different perspectives according to which abnormal behaviour can be discussed and how these different perspectives approach mental health. In a multicultural country such as South Africa where Western, Eastern and African philosophies coexist and are actively practised by various sub-groupings in the population, it is crucial that mental health workers are aware of and sensitive to the varied ways in which a specific problem can be interpreted and treated. It is humanly impossible to be a practitioner of each of these approaches, but to be an ethical and proficient mental health practitioner in our country requires a special awareness of and sensitivity to these complexities, so that we refrain from making assumptions about the behaviour we see manifested before us and inadvertently force our individual beliefs on our clients through our treatment regimes.

(e) Consider what you know regarding the Multipath Model for Schizophrenia and the factors that you have identified in question (c) above. What type of primary prevention interventions would you have implemented if the child Tladi was part of your caseload? Would you have done parent psycho-education and guidance in an attempt to assist Tladi's mother to behave more congruently towards him? Would you have tried to get financial and other support for the family in an attempt to improve their socio-economic status and relieve the poverty that the community, and Tladi's family specifically, was experiencing? Would you have implemented programmes to curb the substance use in the

community? Reflect on how effective you think these and the other prevention strategies that you would have considered would have been

If you want to find out more about Schizophrenia and need information on where to find help concerning the condition you can contact the: Schizophrenia and Bipolar Disorder Alliance (SABDA)

Tel no: (011) 463 9901
E-mail: info@supportsabda.co.za
Webpage: http://www.supportsabda.co.za

14.3 STUDY UNIT: Other Psychotic Disorders

Schizophrenia is not the only type of Psychotic Disorder classified by the DSM-5. Other Psychotic Disorders include Delusional Disorder, Brief Psychotic Disorder, Schizophreniform Disorder, and Schizoaffective Disorder.

Outcomes
Once you have worked through study unit 14.3 you should be able to:

- define Brief Psychotic Disorder
- define Schizoaffective Disorder
- define Schizophreniform Disorder
- describe the core characteristics of each of these Psychotic Disorders and compare these disorders with Schizophrenia and Delusional Disorder
- discuss the DSM-5 diagnostic criteria of Delusional Disorder

Study
To be able to do the above you will need to study the introduction to this study unit in this Study Guide and the following sections in the prescribed book:

- the section titled "Other Psychotic Disorders" on pages 392-398
- DSM-5 diagnostic criteria for Delusional Disorder in Activity 14.6
- Table 12.4 on page 396
- The section on Schizoaffective Disorder in Activity 14. 8

In Delusional Disorder, the major symptom is the presence of one or more delusions. Individuals suffering from Delusional Disorder do not show the general decline in social and/or occupational functioning that is seen in Schizophrenia. Thus, the presence of an unshakeable, non-bizarre delusion in an individual who otherwise appears normal and functions well is the most striking characteristic of a Delusional Disorder.

Activity 14.6

The DSM-5 diagnostic criteria for Delusional Disorder are discussed very briefly in your prescribed book. Complement this information with the more elaborate diagnostic criteria for Delusional Disorder as proposed by the DSM-5 classification system

DSM-5 diagnostic criteria for Delusional Disorder

A Presence of one (or more) delusions with a duration of 1 month or longer.

B Criterion A for Schizophrenia has never been met.
Note: Hallucinations, if present, are not prominent and are related to the delusional theme (e.g. the sensation of being infested with insects associated with delusions of infestation).

C Apart from the impact of the delusion(s) or its ramifications, functioning is not markedly impaired and behaviour is not obviously odd or bizarre.

D If manic or major depressive episodes have occurred, these have been brief relative to the duration of the delusional periods.

E The disturbance is not attributable to the direct physiological effects of a substance or another medical condition and is not better explained by another mental disorder, such as Body Dysmorphic Disorder or Obsessive-compulsive Disorder.

Specify whether:
Erotomanic Type: This subtype applies when the central theme of the delusion is that another person is in love with the individual.

Grandiose Type: This subtype applies when the central theme of the delusion is the conviction of having some great (but unrecognised) talent or insight or having made some important discovery.

Jealous Type: This subtype applies when the central theme of the delusion is that his or her spouse or lover is unfaithful.

Persecutory Type: This subtype applies when the central theme of the delusion involves individual's belief that he or she is being conspired against, cheated , spied on, followed, poisoned or drugged, maliciously maligned, harassed, or obstructed in the pursuit of long-term goals.

Somatic Type: This subtype applies when the central theme of the delusion is involves bodily functions or sensations.

Mixed Type: This subtype applies when no one theme predominates.

Unspecified Type: This subtype applies when the dominant delusional belief cannot be clearly determined or is not described in the specific types (e.g. referential delusions without a persecutory or grandiose component).

Specify if:
With bizarre content: Delusions are deemed bizarre if they are clearly implausible, not understandable, and not derived from ordinary life experiences (e.g. an individual's belief that a stranger has removed his or her internal organs and replaced them with someone else's organs without leaving any wounds or scars).

(APA, 2013, pp. 90-91)

Activity 14.7

Compare Schizophrenia and Delusional Disorder.

	Schizophrenia	Delusional disorder
Type	A Psychotic Disorder.	A Psychotic Disorder.
Onset	Onset during late teens and mid-30s, onset prior to adolescence rare.	Onset generally from middle to late adult life. However can be from a younger age.
Clinical picture	Speech is disorganised, incoherent and digressive. Symptoms must be present for at least six months with psychotic symptoms (such as for the active phase) present for at least one month. Severe and bizarre hallucinations and delusions are present. Disorganised thinking and behaviour are present, and a lowering in level of functioning occurs.	Speech not affected as in Schizophrenia and Schizotypal Personality Disorder. The delusion must be present for at least one month. Absence of hallucinations. If visual and auditory hallucinations do occur they are not prominent. Except for the delusion the person's behaviour and thoughts are not odd.
Insight	Poor, especially during active psychotic phase.	Poor.

Activity 14. 8

Read the section titled Shizoaffective Disorder on pages 396 to 397 of your prescribed textbook.

Schizoaffective Disorder

Schizoaffective Disorder includes symptoms that meet the criteria for both mood episodes (major depressive or manic) and psychosis. However, to be diagnosed as Schizoaffective Disorder the psychotic symptoms must prevail for at least two weeks in the absence of prominent mood episode symptoms and the mood episode symptoms must be present for a majority of the time of the total duration of the active and residual portion of the illness. Additionally Criterion A for Schizophrenia has been met at some time during the course of the illness. If the mood episodes persist apart from the psychotic symptoms, the diagnosis of a separate Major Depressive or Bipolar Disorder should be considered depending on the nature of the mood episode being manifested (APA, 2013. p. 106).

Activity 14.9

Read the case study below and then answer the following questions:

(a) What would your DSM-5 diagnosis be given George's case study?
(b) Justify your diagnosis in question (a) above.

Case study

George was a very successful executive in a large corporation. He was intelligent, hardworking and quietly competitive. Those were the traits he thought were necessary to keep one step ahead of the competition. George was happily married, the father of two children and well-liked by his friends and colleagues. He had done well, his future was bright and there was no sign of any problems.

One day, George got to the office before his secretary had arrived. At about 9 o'clock, a telephone repairman arrived to install a new phone in George's office. The secretary did not know that George was already in his office and let the repairman into George's office without announcing him. When the door to his office opened and George saw an unknown man carrying a heavy metal case and wearing a jacket with the phone company emblem on it, he reached into his desk drawer, took out a .38 calibre revolver, and shot the repairman at point-blank range. He then ran from the office but was soon caught and arrested.

A psychological examination revealed that for years, George had suffered from a delusion that 'others' were plotting against him, were trying to steal his ideas and would eventually try to eliminate him. George could not explain who the 'others' were, but believed that 'they' got access to his mail and tapped his phone to 'track' his ideas. George was in a competitive business in which there was some corporate espionage but his beliefs were clearly unsubstantiated even at further close examination. The extremity of his delusions was reflected in the fact that he kept vans stocked with cans of food in four parts of the city (north, south, east and west). The vans and the food were to be used to help in his getaway if they tried to 'close in'. When the repairman entered unannounced carrying a black metal case, George thought 'they' were coming for him and he shot in self-defence.

(Adapted from Holmes, 1997)

(a) Delusional Disorder: Persecutory Type (Primary diagnosis)
Target of (Perceived) Adverse Discrimination on Persecution – George manifested persecutory delusions.
Imprisonment or Other Incarceration - George was arrested for shooting another person.

(b) George fulfils the DSM-5 criteria for a diagnosis of Delusional Disorder.
He suffers from delusions that the 'others' were out to get him and steal his ideas. This is in fact a non-bizarre delusion as George worked in a very competitive environment where some corporate espionage was taking place, and in life such things can occur. This belief of his was however a delusion as it was exaggerated and unsubstantiated. His delusions lasted more than a month, in fact, they lasted several years. Apart from these delusions of persecution, and his behaviour relating to these delusions (the vans with food), George was functioning at a high level. He was a successful executive, intelligent, hardworking, happily married with two children and well-liked by his friends and colleagues. He had, furthermore, never previously met the criteria for Schizophrenia and his disturbance was not due to the direct physiological effect of a substance.

Activity 14. 10

The following activities will help you revise and summarise what you have studied in this chapter:

- At the beginning of chapter 12 of the prescribed book there are five "Focus Questions" on page 364 of the prescribed book. Answer questions 1,2,3,5 (not the treatment sections) after you have worked through the chapter. Compare your answers to the answers provided at the end of Chapter 12 in the prescribed book under the heading "Summary". If your answers are not complete, consult your study guide and prescribed book again on these questions or contact one of your lecturers.
- Go back to the beginning of the chapter in the Study Guide to the "Key terms" and reflect on your understanding of each term. Explain the meaning of these terms to a friend or family member in your own words. If you battle to do so, refer back to your prescribed book and Study Guide.

- The learning outcomes of each of the three study units in this Learning Unit were set out clearly in each of the study units. Make sure that you have acquired the necessary knowledge, skills and insights set out in these learning outcomes.

CONCLUDING COMMENTS

In the first part of this Learning Unit, namely study unit 14.1 you studied the key features of the Schizophrenia Spectrum and Other Psychotic Disorders in general. In Study Unit 14.2 you studied Schizophrenia in more detail including the diagnostic features, course and aetiology of Schizophrenia. In Study Unit 14.3 you studied some of the Other Psychotic Disorders such as Brief Psychotic Disorder, Schizophreniform Disorder, Schizoaffective Disorder and Delusional Disorder in more detail.

This information will help you to identify, describe and explain the manifestations of the Schizophrenia Spectrum and Other Psychotic Disorder. You should now also be able to compare Schizophrenia with Delusional Disorder, and distinguish between these different disorders.

You studied the Multipath Model for the development of Schizophrenia. The information will allow you to explain and critically evaluate the different dimensions involved in the development of Schizophrenia. You should now also be able to compare and distinguish between the different aetiologies of Schizophrenia. You furthermore also reflected on possible primary prevention programmes and interventions that you could develop and implement for a community similar to the community in which Tladi grew up, in an attempt to curb the development of full blown Schizophrenia in children exhibiting many of the aetiological factors for the development of this disorder.

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Learning Unit 15:

Neurocognitive Disorders

Louise Henderson

Contents

Please note that the relevant chapter in the prescribed book namely Chapter 13 covers both the Neurocognitive Disorders and the Sleep-wake Disorders. For this module you are only expected to study the Neurocognitive Disorders (pages 401 to 424) and you may therefore omit the sections on Sleep-wake Disorders (pages 424 to 430).

Overview

In the DSM-5 classification system, Neurocognitive Disorders (formerly known as Cognitive Disorders in the DSM-IV-TR or Organic Disorders) are a grouping of disorders in which a clinical deficit in cognitive functioning is the primary symptom. To be diagnosed as a Neurocognitive Disorder this cognitive deficit is acquired instead of developmental in nature. Although cognitive deficits are present in many other Mental Disorders, only those disorders whose core features are cognitive, which were not present at birth or very early life and therefore present a significant decline from a previous level of functioning, are included in this category of disorders.

Neurocognitive Disorders (NCD) are syndromes for which the underlying pathology and therefore often the aetiology, can potentially be determined. The NCD include Delirium and the syndromes of Major NCD and Mild NCD and their aetiological subtypes.

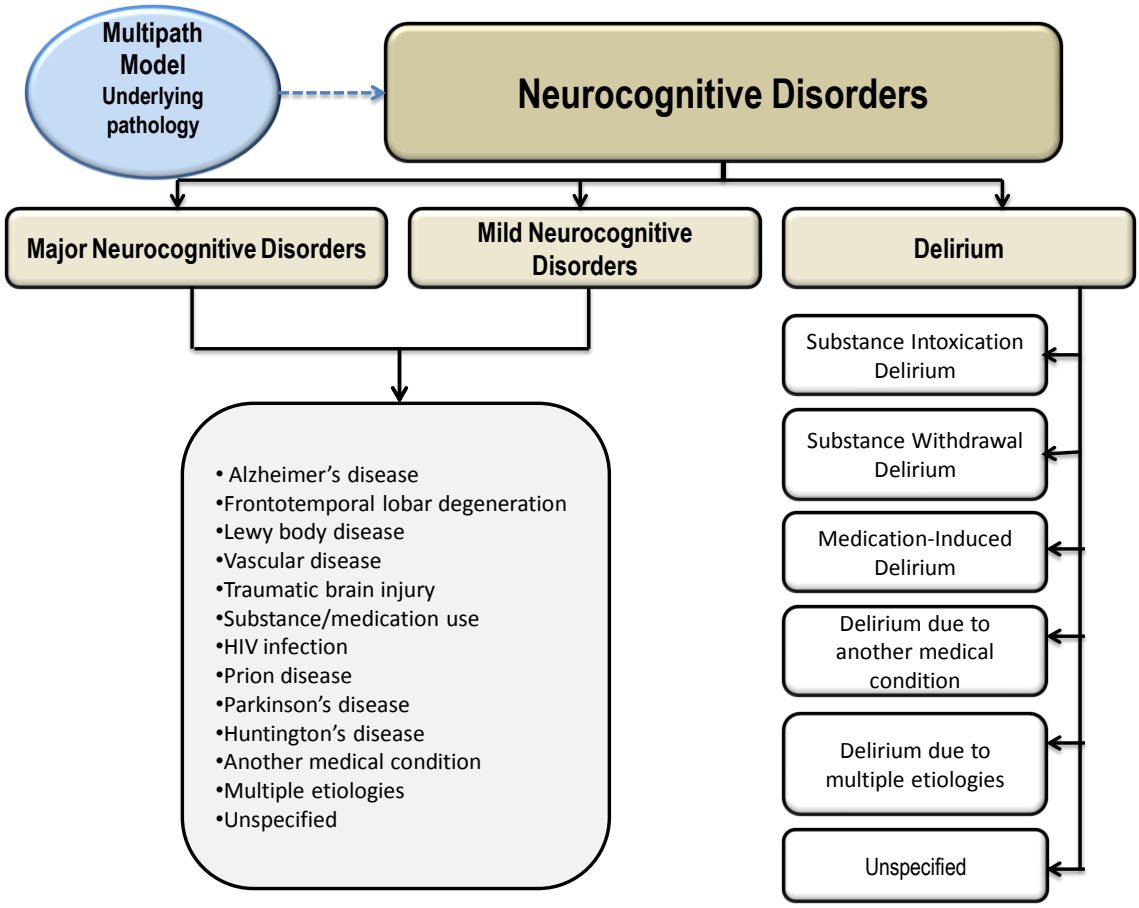
The term Dementia has been retained in the DSM-5 and used in settings where both the doctors and patients are accustomed in using the term, especially in the context of disorders and degenerative dementias that usually affect older adults, while the term NCD is preferred when indicating conditions which affect younger adults such as impairment secondary to traumatic brain injury or HIV. Also, the term Major NCD as used in the DSM-5 has a broader definition than the term dementia, in that an individual with a substantial decline in a single domain (namely cognitive functioning) can receive this diagnosis. For

example, Amnestic Disorder as defined in the DSM-IV-TR is now diagnosed as a Major NCD due to another Medical condition. Here the term dementia will not be used.

The criteria for the NCD are all based on defined cognitive domains, namely complex attention, executive function, learning and memory, language, perceptual-motor and social cognition (Table 15.1 in this Learning Unit).

(APA, 2013)

The following Mindmap illustrates what you will be studying in this Learning Unit:



15.1 STUDY UNIT: Neurocognitive Disorders (NCD)

In contrast to Intellectual Disability (previously termed Mental Retardation) as discussed in Learning Unit 16 of this Tutorial Letter, which is considered to be present from birth, Neurocognitive Disorders are acquired disorders involving cognitive deficits. The underlying pathology which produces the Neurocognitive Disorder also indicates the nature and age of onset of the different subtypes of Neurocognitive Disorders.

The Neurocognitive Disorders involve a significant deficit in cognition that differs from typical functioning. The DSM-5 distinguishes between three major types of Neurocognitive Disorders. They are Delirium, Major Neurocognitive Disorders (NCD) and Mild Neurocognitive Disorders (NCD).

Additionally, Delirium is often seen in both Major and Mild NCD, but can also occur independent of these two disorders. Furthermore, Mild NCD and Major NCD are sometimes the earlier and later stages of the same disorder. "The NCDs are unique among DSM-5 categories in that these are syndromes for which the underlying pathology, and frequently the aetiology as well, can potentially be determined." (APA, 2013, p. 591)

Outcomes
Once you have worked through Learning Unit 15.1, you should be able to:

- define various terms used in this section
- define the different cognitive domains.
- define a Neurocognitive Disorder
- discuss the general characteristics of Neurocognitive Disorders
- discuss the differentiation between a Neurocognitive Disorder and normal aging.

Study
To be able to do the above you will need to study the introduction to this section in this Tutorial Letter, Activity 15.1, 15.2, 15.3 and 15.4 in this tutorial letter and the following sections in the prescribed book:

- The introduction to this chapter (Chapter 13) on pages 401 and 402
- Table 13.1: Neurocognitive Disorders, page 403
- Table 13.4: Neurodegenerative Disorders, page 406
- Table 13.5: Event Causes of Neurocognitive Disorders, page 407
- Table 13.3: Normal Aging or Neurocognitive Disorder?, on page 404

Activity 15.1

Scan-read chapter 13 in the prescribed book (excluding the sections on Sleep-wake Disorders) in order to familiarise yourself with the Neurocognitive Disorders related content of this chapter.

Activity 15.2

As the section on Neurocognitive Disorders has a strong medical foundation you might come across different terms that aren't familiar to you. Below we have provided you with a few terms and their definitions. This is by no means a complete list and you need to add to the list as you work through this Learning Unit so that you have a sufficient vocabulary regarding the Neurocognitive Disorders and the pathologies with which they are associated. Follow the definition suggestions provided in Chapter 13 and the Glossary of the prescribed book.

Study (and add to) the following key terms and their definitions:

Term	Definition
Delirium	A state of excitement and mental confusion, often accompanied by hallucinations, caused by high fever, poisoning, brain injury, etc. Violent excitement or emotion; frenzy
Lewy bodies	Abnormal proteins that occur in the nerve cells of the cerebral cortex and the basal ganglia, causing Parkinson's disease and dementia
Anticholinergic	An agent that is antagonistic to the action of parasympathetic or other cholinergic nerve fibres.
Hyperphagia	Pathologically insatiable hunger (especially caused by brain lesions)
Dysphagia	Difficulty in swallowing, caused by obstruction or spasm of the oesophagus

Continued on next page …

Incontinence	Inability or failure to restrain sexual appetite Inability of the body to control the evacuative functions
Myoclonus	Irregular involuntary contraction of a muscle usually resulting from functional disorder of controlling motor neurons; *also***:** a condition characterised by myoclonus.
Polymorphism	The occurrence of something in different forms, in particular. The occurrence of different forms among the members of a population or colony.
Perseveration	Uncontrollable repetition of a particular response, such as a word, phrase, or gesture, despite the absence or cessation of a stimulus, usually caused by brain injury or other organic disorder. The tendency to continue or repeat an act or activity after the cessation of the original stimulus. The act or an instance of persevering; perseverance.
Hyperorality	A condition characterized by insertion of inappropriate objects in the mouth.
Supraneuclear palsy	Progressive supranuclear palsy (PSP; also known as Steele-Richardson-Olszewski syndrome) is a rare disease that gradually destroys nerve cells in the parts of the brain that control eye movements, breathing, and muscle coordination. The loss of nerve cells causes palsy, or paralysis, that slowly gets worse as the disease progresses. The palsy affects ability to move the eyes, losing balance when walking, gradual paralysis of the extra-ocular muscles making upward and down-ward eye movement difficult or impossible, dysarthria and stiffness of the neck and trunk muscles, followed eventually by loss of memory and mild dementia.
Corticobasal degeneration	A rare, progressive disease (considered by some a variant of Parkinson disease) involving both cerebral cortex and extrapyramidal structures; clinically manifest as disturbances of voluntary movements and rigidity; pathologic characteristics include degeneration of the cerebral cortex with balloon neurons and degeneration of the substantia nigra; apraxia, cortical sensory loss, myoclonus, and phantom limb syndrome have been reported.
Ischemic	A decrease in the blood supply to a bodily organ, tissue, or part caused by constriction or obstruction of the blood vessels.
Abulia	Loss or impairment of the ability to make decisions or act independently.
Homocysteine	An amino acid used normally by the body in cellular metabolism and the manufacture of proteins. Elevated concentrations in the blood are thought to increase the risk for heart disease by damaging the lining of blood vessels and enhancing blood clotting.
Angiopathy	Any of several diseases of the blood or lymph vessels.
Aphasia	An impairment of expression or comprehension of language caused by injury or disease in the language centres of the brain. *Continued on next page…*

Agnosia	An impairment of ability to recognise or identify familiar objects, entities, or people usually as a result of a neurological deficit or disorder despite an intact sensory system.
Apraxia	A loss or diminution in ability, caused by neurological impairment to perform purposeful movements or gestures on request despite an intact motor system.
Executive functioning	Higher order brain functions such as planning towards a goal, sequencing, intellectual flexibility, abstract thinking, and to make inferences.

Activity 15.3

Study Tables 13.1, 13.4 and 13.5 on pages 403, 406 and 407 of your prescribed book respectively.

Activity 15.4

The criteria for the various NCDs are all based on defined cognitive domains. Refer to Table 13.2 on page 403 of the prescribed book. This is a summarised table of the cognitive domain and therefore you need to supplement this information in your prescribed book with the information in Table 15.1 below.

Study these six cognitive domains in Table 13.2 (prescribed book) and Table 15.1 provided below.

Table 15.1: Cognitive Domains

Cognitive Domain	Examples of symptoms or observations
Complex Attention *Sustained, selective and divided attention and processing speed.*	Major: difficulty in environments with multiple stimuli, easily distracted. Unable to attend unless input is restricted and simplified. Difficulty holding and recalling new information. Unable to perform mental calculations. Thinking takes longer than usual and components need to be simple to be processed. Mild: normal tasks take longer. Errors are found in routine tasks and work needs to be double checked. Thinking is easier when not competing.
Executive Function *Planning, decision making, working memory, responding to feedback or error correction, overriding habits or inhibition, mental or cognitive flexibility.*	Major: abandons complex projects. Needs to focus on one task at a time. Relies on others to plan instrumental activities of daily living or make decisions. Mild: increased effort is required to complete multistage projects. Difficulty multitasking or resuming an interrupted task. Extra effort is required therefore there is increased fatigue, due to the extra effort required in social gatherings they become more taxing and less enjoyable.
Learning and Memory *Immediate memory span and recent memory.*	Major: constant repetition. Needs frequent reminding and is unable to keep track of daily things In a day. Mild: difficulty recalling recent events and relies on notes and calendars. Needs reminding to keep track of visual entertainment. Constant repetition and loss of track over paying bills. *Continued on next page…*

Language *Expressive language, grammar and syntax, and receptive language*	Major: difficulties with expressive or receptive language. Uses general phrases and pronouns rather than names. Idiosyncratic word usage\, grammatical errors, and spontaneity of output and economy of utterances occur. Stereotypy of speech occurs. Mild: word finding difficulty. Substitute general for specific terms. Avoids using specific names of people. Grammatical errors.
Perceptual-Motor *Visual perception, visuo-constructional, perceptual-motor, praxis and gnosis.*	Major: difficulties with previous familiar activities, navigating in familiar environments, confused at dusk. Mild: relies more on maps for directions. Follows other and uses notes to get to places. Find self lost or having to turn around due to lack of concentration. Less precise in parking. Needs to expend greater efforts for spatial tasks.
Social Cognition *Recognition of emotions and theory of mind.*	Major: behaviour is out of acceptable social range insensitivity to social standards of modesty. Focusses excessively on a topic despite disinterest or direct feedback. Makes decisions without regards to safety. Little insight into changes. Mild: subtle changes in behaviour or attitude.

Adapted from APA (2013, pp. 593-595).

15.2 STUDY UNIT: The Assessment of brain damage

Although we do not expect of you to have extensive medical knowledge regarding the many different assessment techniques for assessing brain damage, you should be aware of the most common techniques used in diagnostic medicine today. This knowledge will become important when you continue your psychology studies as a post-graduate learner with your eye on a psychology degree in clinical or neuropsychology, or if your occupation involves working in a medical setting such as nursing. It may even come in handy for teachers who may be faced with reports from child psychiatrists or neurologists regarding children in their class.

Outcomes
Once you have worked through study unit 15.2, you should be able to:

- explain the procedure clinicians follow in assessing and diagnosing NCDs.
- briefly explain the types of psychological assessment techniques used to assess brain damage
- briefly discuss the different neurological testing tools i.e. EEG, CT, cerebral blood flow measurement, PET, MRI etc. to assess brain damage.

Study
To be able to do the above you will need to study the introduction to this section in this Tutorial Letter, and the following section in the prescribed book:

- The section on The Assessment of Brain Damage and Neurocognitive Functioning, pages 402 and 403 of the prescribed book.
- Specific sections of Chapter 3: Assessment and Classification of Mental Disorders of the prescribed book, namely the sections titled “Tests for Cognitive Impairment” (on pages 86 and 87) and “Neurological Tests” (on pages 87 to 89)Table 3.1: Structural Imaging Techniques on page 87 and Table 3.2: Functional Imaging Techniques on page 88 of the prescribed book.

Activity 15.5

Imagine you are a counsellor or psychologist working in a neurology unit of a hospital and an adult patient is admitted that was involved in a serious motor vehicle accident. You see on the admission notes that the patient was unconscious when the paramedics arrived at the scene of the accident but has since regained consciousness. The emergency doctor states that the patients has most likely sustained traumatic brain damage and refers him to a neurologist who schedules the patient for evaluation and various clinical assessments to determine the extent of the damage. The patient's family arrives and asks the nursing staff on duty what treatment their loved one is receiving and what the prognosis is. The ward sister then calls you to the ward to explain to the family what is going to happen next and to answer any questions they might have.

Explain to the family what the procedures are that the neurologist will follow in order to arrive at a diagnosis, to determine the extent of the damage, and to determine a possible prognosis of their family member's condition. Make sure to explain any medical terms that may be relevant and to use language that will be understood by the family as non-medical professionals.

15.3 STUDY UNIT: Delirium

The essential feature of Delirium is a disturbance of attention or awareness that is accompanied by changes in baseline cognition that cannot be better explained by pre-existing or evolving Neurocognitive Disorders (NCDs). Delirium is often associated with a disturbance in the sleep-wake cycle and can include features such as:

- Daytime sleepiness
- Night time agitation
- Difficulty falling asleep
- Excessive sleepiness throughout the day or
- Wakefulness throughout the night

An individual with delirium may exhibit the following emotional disturbances:

- Anxiety
- Fear
- Depression
- Irritability
- Anger
- Euphoria
- Apathy
- There may be rapid and unpredictable shifts from one emotional state to another.
- The disturbed emotional state may also be evident in calling out, screaming, cursing, muttering, moaning, or making other sounds.
- These behaviours are prevalent at night and under conditions in which stimulation and environmental cues are lacking.

The majority of individuals with delirium has a full recovery with or without treatment and early recognition and intervention shortens the duration of the delirium. Delirium may progress to stupor, coma, seizures, or death, especially if the underlying cause remains untreated.

Outcomes
Once you have worked through study unit 15.3, you should be able to:

- define Delirium,
- know the main characteristics of Delirium
- name the most frequent features associated with Delirium
- discuss the emotional disturbances associated with Delirium
- discuss the DSM-5 diagnostic criteria for Delirium

Study
To be able to do the above you will need to study the introduction to this section and Activity 15.6 and 15.7 in this Tutorial Letter and:

- the Mindmap in the introduction of this Learning Unit
- the section on Delirium on pages 405 to 406 of the prescribed book.

Activity 15.6
Your prescribed book does contain the DSM-5 diagnostic criteria for Delirium, therefore you need to study the criteria as provided below.

DSM-5 diagnostic criteria for Delirium

A A disturbance in attention (i.e. reduced ability to direct, focus, sustain, and shift attention) and awareness (reduced orientation to the environment).

B The disturbance develops over a short period of time (usually hours to a few days), represents a change from baseline attention and awareness, and tends to fluctuate in severity during the course of the day.

C An additional disturbance in cognition (e.g. memory deficit, disorientation, language, visuospatial ability, or perception).

D The disturbance in Criteria A and C are not better explained by another pre-existing, established, or evolving neurocognitive disorder and do not occur in the context of a severely reduced level of arousal such as a coma.

E There is evidence from the history, physical examination, or laboratory findings that the disturbance is a direct physiological consequence of another medical condition, substance intoxication or withdrawal (i.e. due to a dug of abuse or to a medication), or exposure to a toxin, or is due to multiple etiologies.

Specify whether:

Substance Intoxication Delirium: This diagnosis should be made instead of substance intoxication when the symptoms in Criterion A and C predominate in the clinical picture and when they are sufficiently severe to warrant clinical attention.

Substance Withdrawal Delirium: This diagnosis should be made instead of substance withdrawal when the symptoms in Criterion A and C predominate in the clinical picture and when they are sufficiently severe to warrant clinical attention.

Medication-Induced Delirium: This diagnosis should be made instead of substance intoxication when the symptoms in Criterion A and C arise as a side effect of a medication taken as prescribed.

Delirium due to another medical condition: There is evidence from the history, physical examination, or laboratory findings that the disturbance is attributable to the physiological consequences of another medical condition.

Delirium due to multiple etiologies: There is evidence from the history, physical examination, or laboratory findings that the delirium has more than one etiology (e.g. more than one etiological medical condition, another medical condition plus substance intoxication or medication side effect).

Specify if:

Acute: Lasting a few hours or days.
Persistent: Lasting a few weeks or months.

Specify if:

Hyperactive: The individual has a hyperactive level of psychomotor activity that may be accompanied by mood liability, agitation, and/or refusal to cooperate with medical care.

Hypoactive: The individual has a hypoactive level of psychomotor activity that may be accompanied by sluggishness and lethargy that approaches stupor.

Mixed level of activity: The individual has a normal level of psychomotor activity even though attention and awareness are disturbed. Also includes individuals whose activity level rapidly fluctuates.

Activity 15.7

Read the case study below and

(a) classify Jim's abnormal behaviour according to the DSM-5 classification system and justify your answer by referring to examples from the case study.

(b) draw a comparison between Jim's type of Neurocognitive Disorder and Schizophrenia. Make use of the following headings:

Type
Clinical picture
Duration

Case study

Jim, a 67-year-old man, was brought to the emergency room of a local hospital at three o'clock in the morning. His very distressed wife accompanied him. On several previous occasions, Jim had been admitted to the same hospital, where he was treated for obstructions of his bowel. Jim was currently showing the same symptoms. His abdomen was enlarged and he was vomiting and reported extreme pain in his abdomen. This time, however, Jim also showed some additional symptoms, which, according to his wife, had developed over the last day and a half. He was clearly confused and rambled on endlessly accusing his wife, whose name he could not remember, of having sinister intentions towards him. He did not know where he was, how he had got there or what time it was; he was also verbally abusive towards his wife and the emergency room staff. The doctor on call admitted Jim to a ward and ran a few tests, which confirmed an obstruction of the bowel and ordered that Jim be put on an intravenous drip. A catheter was also inserted and Jim was given medication. Throughout this whole process Jim remained confused but abusive and removed both the drip and catheter forcefully soon after the nursing sister had inserted them. His behaviour was so disrupting that he had to be sedated.

The following day, the doctor ran more tests, including a brain scan, but found nothing else wrong with Jim. Jim's wife also reported that Jim was not on any medication previous to this incident. She explained that Jim had become increasingly disoriented over the previous two days. He had difficulty focusing his attention on the tasks she had asked him to do and in the end did not even finish them. She said she was very concerned about this because this was "not like Jim" at all. The doctor explained that Jim's abnormal behaviour could be ascribed to his current medical condition. The bowel obstruction caused an imbalance in Jim's electrolyte concentrations that, in turn, led to Jim's confused state.

Jim's wife reported that Jim had always been a perfectionist, especially in his work. No mistakes slipped past Jim in his position as a clerk in the SARS office. He was extremely attentive to detail and was known as the one person in the office who always stuck to the rules no matter what. His wife said that he had been treated unfairly at work as he was, on more than one occasion, overlooked for a promotion as his colleagues just did not like him and his controlling nature. She said that he had been a good worker and provider for the family even though he had always been a very difficult man to live with. She said that he always had very specific ideas on how things had to be done and described Jim as a very strict and inflexible man, showing little affection even towards their children. She said that she understood why he was the way he was as he had had an unhappy childhood.

Apparently, Jim had always been a perfectionist, a trait enforced by his very strict father. Jim was the second oldest of five boys who grew up in the time of the Great Depression. Their father expected them to work very hard and as soon as the boys reached 16 years of age, their father took them out of school and instructed them to find a job. He always told them that the only way you learnt about life was through hard work. He would wake them at four o'clock in the morning to do chores before they left for school and then kept them busy with chores as soon as they got back from school. Jim's father indirectly made the sons compete with one another by rewarding the son whom he thought had been the "toughest" during the week, by allowing that son to sleep until eight o'clock on a Sunday morning while his brothers had to do his chores. The family was very poor and the son's had to "earn" clothes and shoes and, in their father's words, "the food that was on the table". Jim's father also "disciplined" the boys physically with a sjambok (whip) when they stepped out of line. Their mother was very submissive to her husband and spent all her time doing the household chores, cooking and cleaning chores her husband said were the duties of a mother and wife. Even when the family had no money Jim's father refused to allow his wife to go out and find a job. Jim's mother died when Jim was 24 years old and his father expected Jim and his older brother to help support their younger siblings. It was at this time that Jim met and married his wife.

(a) Delirium due to another medical condition (bowel obstruction resulting in electrolyte imbalance):

Jim's symptoms meet the criteria for Delirium as proposed by the DSM-5 classification system. He experienced a disturbance in consciousness – he did not know where he was, how he got there or what time it was. He was clearly confused and was rambling on 'endlessly'. He experienced cognitive impairment, such as problems focusing his attention on tasks. He also experienced memory problems, for example, not remembering his wife's name, and showed paranoid symptoms, accusing her of sinister intent. He behaved abusively toward the hospital staff as well as his wife and forcefully removed his catheter and drip. These symptoms developed over a short period of time (day and a half) and could not be ascribed to substance use or another medical condition. These symptoms were ascribed to the bowel obstruction that caused imbalances in the electrolyte concentrations. There was no evidence of dementia.

Obsessive-Compulsive Personality Disorder: Jim showed the long-standing symptoms typical of Obsessive-Compulsive Personality Disorder as proposed by the DSM-5 classification system. He was a perfectionist. No mistakes ever slipped past him. He was extremely attentive to detail and always stuck to the rules no matter what, which is an indication of rigidity in thoughts and behaviour. His interpersonal relationships was problematic as he did not get on with his co-workers due to his controlling nature and this caused occupational difficulties as he was overlooked for promotion. His wife described him as a very difficult man to get on with very specific ideas on how things were supposed to be done. His personal interpersonal relationships were also troubled, as he was a very strict and inflexible father showing little affection even towards his children.

Other problems related to employment: (Jim experienced discord with co-workers and was overlooked for promotion that caused further stress).

Unspecified Problem related to social environment: (Jim experienced recurrent health problems for which he was repeatedly hospitalised and which separated him from his wife made significant due to the fact that she was his sole source of support).

(b) For information on Schizophrenia refer to Learning Unit 14 in this tutorial letter and chapter 12 of your prescribed book.

	Delirium due to general medical condition	Schizophrenia
Type	Neurocognitive Disorder	Schizophrenia Spectrum and Other Psychotic Disorder
Clinical Picture	Disturbance in consciousness. Absence of full-blown delusions and hallucinations. Memory problems and impairment of cognitive functioning such as focusing, sustaining and shifting attention. All these symptoms are the direct result of the general medical condition.	Disturbance in consciousness. Presence of delusions and hallucinations. These symptoms cause significant impairment of social/ occupational functioning. The symptoms are not substance- induced or caused by a general medical condition.
Duration	Develops over a short period (hours or days) and dissipates as soon as the general medical condition causing the symptoms is cured.	Symptoms must be present for at least 6 months (of which at least 1 month of active phase symptoms are present.) Symptoms might improve with appropriate medication but are more chronic.

15.4 STUDY UNIT: Major and Mild Neurocognitive Disorders

Major and Mild NCDs involve similar features and the main differentiation between them are mostly due to the severity of the symptoms. The Major and Mild NCDs are sub-typed according to the known or presumed etiological/pathological entity/entities underlying the cognitive decline and is distinguished on the basis of a combination of the time-related course of the symptoms, the characteristics of the cognitive domains affected and associated symptoms.

For certain aetiological subtypes the diagnosis depends on the presence of a potentially causative entity such as a medical condition, such as Parkinson's or Huntington's disease, Traumatic Brain Injury, or a Stroke. For other aetiological subtypes (mainly the neurodegenerative diseases such as Alzheimer's disease, frontotemporal lobar degeneration and Lewy body disease, the diagnosis is based primarily on the cognitive, behavioural, and functional symptoms. These underlying pathologies (e.g. the medical conditions or the neurodegenerative processes) must have a temporal association with the symptoms that allows for a diagnosis of either a Major or Mild NCDs. A further specifier contained in the DSM-5 diagnostic criteria for the neurodegenerative NCDs and relates to the certainty with which the diagnosis relates the NCD to its aetiological condition and are indicated by the terms *possible* or *probable*. Consider the following descriptions of these terms:

Probable [medical disease e.g. Alzheimer's disease] is diagnosed if there is evidence of a causative **[medical disease e.g. Alzheimer's disease]** genetic mutation from either genetic testing or family history.

Possible [medical disease e.g. Alzheimer's disease] is diagnosed if there is no evidence of a causative [**medical disease e.g. Alzheimer's disease]** genetic mutation from either genetic testing or family history, and all three of the following are present:

1. Clear evidence of decline in memory and learning.
2. Steadily progressive, gradual decline in cognition, without extended plateaus.

3. No evidence of mixed etiology (i.e., absence of other neurodegenerative or cerebrovascular disease, or another neurological or systemic disease or condition likely contributing to cognitive decline).
   (Note that the above points are specific to each aetiological condition and you should know the specific requirements for each of the neurodegenerative NCDs that you are requied to study.)

Outcomes
Once you have completed study unit 15.4 you should be able to:

- define Mild and Major NCD,
- know the main characteristics of Mild and Major NCD
- discuss the DSM-5 diagnostic criteria for Mild NCD
- discuss the DSM-5 diagnostic criteria for Major NCD
- differentiate between Mild NCD, Major NCD and Delirium.
- distinguish between the symptoms of Major Depressive Disorder and neurodegenerative Mild and Major NCD (Dementia)

Study
To be able to do the above you will need to study the introduction to this section and Activities 15.7, 15.8, and 15.9 and Learning Unit 12 in this Tutorial Letter and the following:

- the section on Mild NCS on pages 404 to 405
- the section on Major NCS on pages 403 to 404
- the section on Depressive Disorders in Chapter 8 on pages 230 to 232, and 234 to 237 of your prescribed book
- Table 8.1 on page 231, Table 8.2 and 8.3 on page 235 of your prescribed book

Mild Neurocognitive Disorders

In Mild NCD the individual manifests deficits in at least one major cognitive area (refer to Table 15.1 in Activity 15.4 above). Although Mild and Major NCS have similar diagnostic features the severity of the deficit(s) in Mild NCD are less than those seen in Major NCD

Activity 15.7

Your prescribed book does not contain the DSM-5 diagnostic criteria for Mild NCD and therefore you need to **study** the criteria as provided below:

DSM-5 diagnostic criteria for Mild Neurocognitive Disorder

A Evidence of modest cognitive decline from a previous level of performance in one or more cognitive domains (complex attention, executive function, learning and memory, language, perceptual motor, or social cognition) based on:

1. Concern of the individual, a knowledgeable informant, or the clinician that there has been a mild decline in cognitive function; and
2. A modest impairment in cognitive performance, preferably documented by standardised neuropsychological testing or, in its absence, another quantified clinical assessment.

B The cognitive deficits do not interfere with capacity for independence in everyday activities (i.e., complex instrumental activities of daily living such as paying bills or managing medications are preserved, but greater effort, compensatory strategies, or accommodation may be required).

C The cognitive deficits do not occur exclusively in the context of a delirium.

D The cognitive deficits are not better explained by another mental disorder (e.g., major depressive disorder, schizophrenia).

Specify whether due to:

Alzheimer's disease (pp. 611-614)
Frontotemporal lobar degeneration (pp. 614-618)
Lewy body disease (pp. 618-621)
Vascular disease (pp. 621-624)
Traumatic brain injury (pp. 624-627)
Substance/medication use (pp. 627-632)
HIV infection (pp. 632-634)
Prion disease (pp. 634-636)
Parkinson's disease (pp. 636-638)
Huntington's disease (pp. 638-641)
Another medical condition (pp. 641-642)
Multiple etiologies (pp. 642-643)
Unspecified (p. 643)

Specify:

Without behavioural disturbance: If the cognitive disturbance is not accompanied by any clinically significant behavioural disturbance.

With behavioural disturbance *(specify disturbance)*: If the cognitive disturbance is accompanied by a clinically significant behavioural disturbance (e.g., psychotic symptoms, mood disturbance, agitation, apathy, or other behavioural symptoms).

(APA, 2013, pp. 605-606)

Major Neurocognitive Disorders

In Major NCD the individual manifests deficits in one or more cognitive area (refer to Table 15.1 in Activity 15.4 above) as well as in the ability to independently meet the demands of daily living. Although Mild and Major NCD have similar diagnostic features the severity of the deficit(s) in Major NCD is significantly of greater severity as for Mild NCD.

Activity 15.8

Your prescribed book does not contain the DSM-5 diagnostic criteria for Major NCD and therefore you need to **study** the criteria as provided below:

DSM-5 diagnostic criteria for Major Neurocognitive Disorders

A Evidence of significant cognitive decline from a previous level of performance in one or more cognitive domains (complex attention, executive function, learning and memory, language, perceptual-motor, or social cognition) based on:

1. Concern, of the individual, a knowledgeable informant, or the clinician that there has been a significant decline in cognitive function; and
2. A substantial impairment in cognitive performance, preferably documented by standardised neuropsychological testing or, in its absence, another quantified clinical assessment.

B The cognitive deficits interfere with independence in everyday activities (i.e., at a minimum, requiring assistance with complex instrumental activities of daily living such as paying bills or managing medications).

C The cognitive deficits do not occur exclusively in the context of a delirium.

D The cognitive deficits are not better explained by another mental disorder (e.g., major depressive disorder, schizophrenia).

Specify whether due to:
Alzheimer's disease (pp. 611-614)
Frontotemporal lobor degeneration (pp. 614-618)
Lewy body disease (pp. 618-621)
Vascular disease (621-624)
Traumatic brain injury (pp. 624-627)
Substance/medication use (pp. 627-632)
HIV infection (pp. 632-634)
Prion disease (pp. 634-636)
Parkinson's disease (pp. 636-638
Huntington's disease (pp. 638-641)
Another medical condition (pp. 641-642)
Multiple etiologies (pp. 642-643)
Unspecified (p. 643)

Coding note: Code based on medical or substance etiology. In some cases, there is need for an additional code for the etiological medical condition, which must immediately precede the diagnostic code for major neurocognitive disorder, as follows:

*Etiological subtype***:**
Alzheimer's disease
Frontotemporal lobar degeneration
Lewy body disease
Vascular disease
Traumatic brain injury
Substance/medication induced
HIV infection
Prion disease
Parkinson's disease
Huntington's disease
Due to another medical condition
Due to multiple etiologies
Unspecified neurocognitive disorder

Specify:
Without behavioural disturbance: If the cognitive disturbance is not accompanied by any clinically significant behavioural disturbance.
With behavioural disturbance *(specify disturbance)*: If the cognitive disturbance is accompanied by a clinically significant behavioural disturbance (e.g., psychotic symptoms, mood disturbance, agitation, apathy, or other behavioural symptoms).

Specify current severity:
Mild: Difficulties with instrumental activities of daily living (e.g., housework, managing money).
Moderate: Difficulties with basic activities of daily living (e.g., feeding, dressing).
Severe: Fully dependent.

(APA, 2013, pp.602-605)

Activity 15.9

Distinguish between Major Depressive Disorder and neurodegenerative Mild and Major NCD (Dementia).

Major Depressive Disorder	Dementia
– Uneven progression over weeks	– Even progression over months or years
– Complains of memory loss	– Attempts to hide memory loss
– Often worse in morning, better as the day progresses	– Worse later in day or when fatigued
– Aware of or exaggerates disability	– Unaware of or minimises disability
– May abuse alcohol or other drugs	– Rarely abuses drugs

(Source: Oltmanns & Emery, 1995)

15.5 STUDY UNIT: Aetiology of Neurocognitive Disorders

As discussed in the previous sections, we classify the Neurocognitive Disorders according to what caused them; in other words we classify them according to their aetiology. These aetiologies are considered when making a diagnosis of a Neurocognitive Disorder. Therefore the aetiological discussion of the NCDs are focussed on the underlying causative pathology (e.g. medical condition, substance/medication use, neurological causative events, etc.) instead of discussing it according to the Multipath Model. However you should take notice of Figure 13.1 on page 407 of the prescribed book in which the Multipath Model is applied to the aetiology of the Neurocognitive Disorders.

We should take care to differentiate between the cognitive changes associated with the normal aging process and abnormal cognitive changes resulting from the aforementioned conditions.

Outcomes

Once you have worked through study unit 15.5, you should be able to

- consider the Multipath Model representation of the aetiology of the Neurocognitive Disorders.
- discuss Traumatic Brain Injury as aetiological factor in Neurocognitive Disorders
- discuss the DSM-5 diagnostic criteria for Major or Mild Neurocognitive Disorder Due to Traumatic Brain Injury
- discuss Cognitive Vascular Disorders as aetiological factors in the Neurocognitive Disorders.
- discuss the DSM-5 diagnostic criteria for Major or Mild Vascular Neurocognitive Disorder
- discuss Alzheimer's disease as neurodegenerative disorder involved in the aetiology of NCD.
- discuss the DSM-5 diagnostic criteria for Major or Mild Neurocognitive Disorder Due to Alzheimer's Disease
- discuss NCD due to HIV Infection
- discuss AIDS Dementia Complex as aetiology of Major NCD
- discuss the DSM-5 diagnostic Criteria for Major or Mild Neurocognitive Disorder Due to HIV Infection
- discuss NCD due to Substance Abuse
- discuss the DSM-5 diagnostic criteria for Substance/Medication-Induced Major or Mild NCD
- discuss NCD due to Dementia with Lewy Bodies
- discuss NCD due to Frontotemporal Lobar Degeneration.
- discuss NCD due to Parkinson's Disease.
- Discuss NCD due to Huntington's Disease

- discuss how you would go about preventing the development of Neurocognitive Disorders in your community

Study
To be able to do the above you will need to study the introduction to this section, Activities 15.10, 15.11, 15.12, 15.13, 15.14, 15.15, 15.16 and 15.17 in this Tutorial Letter and the following sections in the prescribed book:

- the section on Etiology of Neurocognitive Disorders on pages 406 to 407
- Figure 13.1 on page 407
- Neurocognitive Disorder due to Traumatic Brain Injury on pages 407 to 412
- Vascular Neurocognitive Disorders on pages 412 to 414
- Neurocognitive Disorder due to Substance Abuse on page 414
- Neurocognitive Disorder due to Alzheimer's Disease on pages 414 to 418
- Neurocognitive Disorder due to Dementia with Lewy Bodies on pages 418 to 419
- Neurocognitive Disorder due to Frontotemporal Lobar Degeneration on page 419
- Neurocognitive Disorder due to Parkinson's Disease on pages 419 to 420
- Neurocognitive Disorder due to Huntington's Disease on page 420
- Neurocognitive Disorder due to HIV Infection on pages 420 to 421
- Table 13.6 on page 413
- Box: Focus on Resilience – Can we prevent brain damage?, on page 415

Activity 15.10

You will notice that the prescribed book does not contain the DSM-5 diagnostic criteria for Mild and Major NCD due to Traumatic Brain Injury. **Study** the DSM-5 diagnostic criteria for Mild and Major NCD due to Traumatic Brain Injury as provided below.

DSM-5 diagnostic criteria for Major or Mild Neurocognitive Disorder Due to Traumatic Brain Injury

A The criteria are met for major or mild neurocognitive disorder.

B There is evidence of a traumatic brain injury – that is, an impact to the head or other mechanisms of rapid movement or displacement of the brain within the skull, with one or more of the following:

1. Loss of consciousness.
2. Posttraumatic amnesia.
3. Disorientation and confusion.
4. Neurological signs (e.g., neuroimaging demonstrating injury; a new onset of seizures; a marked worsening of a pre-existing seizure disorder; visual field cuts; anosmia; hemiparesis).

C The neurocognitive disorder presents immediately after the occurrence of the traumatic brain injury or immediately after recovery of consciousness and persists past the acute post-injury period.

Coding note: For major neurocognitive disorder due to traumatic brain injury, with behavioural disturbance: For ICD-9-CM, first code **907.0** late effect of intracranial injury without skull fracture, followed by **294.11** major neurocognitive disorder due to traumatic brain injury, with behavioural disturbance. For ICD-10-CM, first code **S06.2X9S** diffuse traumatic brain injury with loss of consciousness of unspecified duration, sequel; followed by **F02.81** major neurocognitive disorder due to traumatic brain injury, with behavioural disturbance.

For major neurocognitive disorder due to traumatic brain injury, without behavioural disturbance,: For ICD-9-CM, first code **907.0** late effect of intracranial injury without skull fracture, followed by **294.10** major neurocognitive disorder due to traumatic brain injury, without behavioural disturbance. For ICD-10-CM, first code **S06.2X9C** diffuse traumatic brain injury with loss of consciousness of unspecified duration, sequel; followed by **F02.80** major neurocognitive disorder due to traumatic brain injury, without behavioural disturbance.

For mild neurocognitive disorder due to traumatic brain injury, code **331.83 (G31.84).** (**Note:** *Do not use* the additional code for traumatic brain injury. Behavioural disturbance cannot be coded but should still be indicated in writing.)

(APA, 2013, p. 624)

Activity 15.11

You will notice that the prescribed book does not contain the DSM-5 diagnostic criteria for Mild or Major Vascular NCD. **Study** the DSM-5 diagnostic criteria for Mild and Major Vascular NCD as provided below.

DSM-5 diagnostic criteria for Major or Mild Vascular Neurocognitive Disorder

A The criteria are met for major or mild neurocognitive disorder.

B The clinical features are consistent with a vascular etiology, as suggested by either of the following:

1. Onset of the cognitive deficits is temporally related to one or more cerebrovascular events.
2. Evidence for decline is prominent in complex attention (including processing speed) and frontal-executive function.

C There is evidence of the presence of cerebrovascular disease from history, physical examination, and/or neuroimaging considered sufficient to account for the neurocognitive deficits.

D The symptoms are not better explained by another brain disease or systemic disorder.

Probable vascular neurocognitive disorder is diagnosed if one of the following is present; otherwise **possible vascular neurocognitive disorder** should be diagnosed:

1. Clinical criteria are supported by neuroimaging evidence of significant parenchymal injury attributed to cerebrovascular disease (neuroimaging-supported).
2. The neurocognitive syndrome is temporally related to one or more documented cerebrovascular events.
3. Both clinical and genetic (e.g., cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy) evidence of cerebrovascular disease is present.

Possible Vascular Neurocognitive Disorder is diagnosed if the clinical criteria are met but neuroimaging is not available and the temporal relationship of the neurocognitive syndrome with one or more cerebrovascular events is not established.

Coding note: For Probable Major Vascular Neurocognitive Disorder, with behavioural disturbance, code Probable Major Vascular Neurocognitive Disorder with behavioural disturbance. For probable Major Vascular Neurocognitive Disorder, without behavioural disturbance, code Probable Major Vascular Neurocognitive Disorder without behavioural disturbance. For Possible Major Vascular Neurocognitive Disorder, with or without behavioural disturbance, code Possible Major Vascular Neurocognitive Disorder. (Note: An additional medical code for the cerebrovascular disease is not needed).

For Mild Vascular Neurocognitive Disorder, code Mild Vascular Neurocognitive Disorder (**Note:** *Do not use* an additional code for the vascular disease. Behavioural disturbance cannot be coded but should still be indicated in writing.) .

(APA, 2013, p.621)

Activity 15.12

You will notice that the prescribed book does not contain the DSM-5 diagnostic criteria for Mild and Major NCD due to Alzheimer's Disease. **Study** the DSM-5 diagnostic criteria for Mild and Major NCD due to Alzheimer's disease as provided below.

DSM-5 diagnostic criteria for Major or Mild Neurocognitive Disorder Due to Alzheimer's Disease

A The criteria are met for major or mild neurocognitive disorder.

B There is insidious onset and gradual progression of impairment in one or more cognitive domains (for major neurocognitive disorder, at least two domains must be impaired).

C Criteria are met for either probable or possible Alzheimer's disease as follows:

For major neurocognitive disorder:

Probable Alzheimer's disease is diagnosed if either of the following is present; otherwise, **possible Alzheimer's disease** should be diagnosed.

1. Evidence of a causative Alzheimer's disease genetic mutation from family history or genetic testing.

2. All three of the following are present:
   a. Clear evidence of decline in memory and learning and at least one other cognitive domain (based on detailed history or serial neuropsychological testing).
   b. Steadily progressive, gradual decline in cognition, without extended plateaus.
   c. No evidence of mixed etiology (i.e., absence of other neurodegenerative or cerebrovascular disease, or another neurological, mental, or systemic disease or condition likely contributing to cognitive decline).

For mild neurocognitive disorder:

Probable Alzheimer's disease is diagnosed if there is evidence of a causative Alzheimer's disease genetic mutation from either genetic testing or family history.
Possible Alzheimer's disease is diagnosed if there is no evidence of a causative Alzheimer's disease genetic mutation from either genetic testing or family history, and all three of the following are present:

1. Clear evidence of decline in memory and learning.
2. Steadily progressive, gradual decline in cognition, without extended plateaus.
3. No evidence of mixed etiology (i.e., absence of other neurodegenerative or cerebrovascular disease, or another neurological or systemic disease or condition likely contributing to cognitive decline).

D The disturbance is not better explained by cerebrovascular disease, another neurodegenerative disease, the effects of a substance, or another mental, neurological, or

systemic disorder.

Coding note: For probable Major Neurocognitive Disorder due to Alzheimer's disease, with behavioural disturbance, code Alzheimer's disease first, followed by Major Neurocognitive Disorder due to Alzheimer's disease. For probable Neurocognitive Disorder due to Alzheimer's disease, without behavioural disturbance, code Alzheimer's disease first, followed by Major Neurocognitive Disorder due to Alzheimer's disease, without behavioural disturbance.

For possible Major Neurocognitive Disorder due to Alzheimer's disease, code possible Major Neurocognitive Disorder due to Alzheimer's disease (**Note:** *Do not use* the additional code for Alzheimer's disease. Behavioural disturbance cannot be coded but should still be indicated in writing.)

For Mild Neurocognitive Disorder due to Alzheimer's disease, code Mild Neurocognitive Disorder due to Alzheimer's Disease (**Note**: *Do not* use the additional code for Alzheimer's disease. Behavioural disturbance cannot be coded but should still be indicated in writing.)

(APA, 2013, pp.611-612)

Activity 15.13

You will notice that the prescribed book does not contain the DSM-5 diagnostic criteria for Mild and Major NCD due to HIV Infection. **Study** the DSM-5 diagnostic criteria for Mild and Major NCD due to HIV Infection as provided below:

DSM-5 diagnostic Criteria for Major or Mild Neurocognitive Disorder Due to HIV Infection

A The criteria are met for major or mild neurocognitive disorder.

B There is documented infection with human immunodeficiency virus (HIV).

C The neurocognitive disorder is not better explained by non-HIV conditions, including secondary brain diseases such as progressive multifocal leukoencephalopathy or cryptococcal meningitis.

D The neurocognitive disorder is not attributable to another medical condition and is not better explained by a mental disorder.

Coding note: For Major Neurocognitive Disorder due to HIV infection, with behavioural disturbance, first code HIV infection, followed by Major Neurocognitive Disorder due to HIV infection, with behavioural disturbance. For Major Neurocognitive Disorder due to HIV infection, without behavioural disturbance, first code HIV infection, followed by Major Neurocognitive Disorder due to HIV infection, without behavioural disturbance.

For Mild Neurocognitive Disorder due to HIV infection, code Mild Neurocognitive Disorder due to HIV infection. (**Note:** *Do not* code additionally for HIV infection. Behavioural disturbance cannot be coded but should still be indicated in writing.)

(APA, 2013, p.632)

Activity 15.14

You will notice that the prescribed book does not contain the DSM-5 diagnostic criteria for Substance/Medication-Induced Major or Mild NCD. **Study** the DSM-5 diagnostic criteria for Substance/Medication-Induced Major or Mild NCD as provided below:

DSM-5 diagnostic Criteria for Substance/Medication-Induced Major or Mild Neurocognitive Disorder

A The criteria are met for major or mild neurocognitive disorder.

B The neurocognitive impairments do not occur exclusively during the course of a delirium and persist beyond the usual duration of intoxication and acute withdrawal.

C The involved substance or medication and duration and extent of use are capable of producing the neurocognitive impairment.

D The temporal course of the neurocognitive deficits is consistent with the timing of substance or medication use and abstinence (e.g., the deficits remain stable or improve after a period of abstinence).

E The neurocognitive disorder is not attributable to another medical condition or is not better explained by another mental disorder.

Coding note: The ICD-9-CM and ICD-10-CM codes for the [specific substance/medication]-induced neurocognitive disorders(see list below). Note that the ICD-10-CM code depends on whether or not there is a comorbid substance use disorder present for the same class of substance. If a mild substance use disorder is comorbid with the substance-induced neurocognitive disorder, the 4th position character is "1", and the clinician should record "mild [substance] use disorder" before the substance-induced neurocognitive disorder (e.g., "mild inhalant use disorders with inhalant-induced major neurocognitive disorder"). If moderate or severe substance use disorder is comorbid with the substance-induced neurocognitive disorder, the 4th position character is "2", and the clinician should record "moderate [substance] use disorder" or "severe [substance] use disorder" depending on the severity of the comorbid substance use disorder. If there is no comorbid substance use disorder, then the 4th position character is "9", and the clinician should record only the substance-induced neurocognitive disorder. For some classes of substances (i.e., alcohol, sedatives, hypnotics, anxiolytics), it is not permissible to code a comorbid mild substance with a substance-induced neurocognitive disorder; only a comorbid moderate or severe substance use disorder, or no substance use disorder, can be diagnosed. Behavioral disturbance cannot be coded but should still be indicated in writing.

List of ICD-10-CM coded specific substance/medication:
Alcohol (mild or major neurocognitive disorder)
Inhalant (mild or major neurocognitive disorder)
Sedative, hypnotic, or anxiolytic (mild or major neurocognitive disorder)
Other (or unknown) substance (mild or major neurocognitive disorder)

Specify if:
Persistent: Neurocognitive impairment continues to be significant after an extended period of abstinence.

(Adapted from APA, 2013, pp.627-629)

Activity 15.15

Read the case study below and

(a) classify Mary's abnormal behaviour according to the DSM-5 classification system. Justify your choice of diagnosis by referring to the case study.
(b) distinguish between Mild or Major Vascular NCD and Mild or Major MCD due to the Alzheimer's disease.

Case study

At approximately 68 years of age, Mary, now 73-years-old, noticed that her memory was starting to fail her. These memory problems progressively worsened over time and she found that she had to compensate increasingly by writing things down and making lists and notes of things to do. During this time she also found herself groping for a word she had always known, and noticed that she often lost the thread of a conversation. Though she worried that her mind might be slipping, she did not want to think about getting old and, most importantly, she did not want to be treated as if she were senile. She was still enjoying life and was able to manage on her own.

Mary later got pneumonia and had to be hospitalised. In those strange surroundings, she could no longer compensate for her forgetfulness. People told her where she was, but she forgot. She complained that her daughter-in-law never visited her, though she had been there in the morning. This strange behaviour prompted Mary's physician to order a magnetic resonance imaging (MRI) scan of her brain. The MRI results showed atrophy of the cortical brain tissue. Further examinations and tests eliminated any additional neurological or general medical conditions that could in any way account for Mary's progressive decline in memory and cognitive functioning. The possibility of Mary's symptoms stemming from any medication or substance that she was taking was also eliminated.

Although the fever and infection passed, the illness had focused attention on the seriousness of her condition. Her family realised she could no longer live alone. She moved in with her son's family where she was given a room. Because only some of her possessions were there, she thought that perhaps the rest had been stolen while she was sick even though she had been told many times where her things had been stored. She got lost on walks in the neighbourhood and often could not find her way around her son's house.

Mary's condition continued to deteriorate. Getting dressed became an insurmountable ordeal. Because of her apraxia, she no longer knew how to button buttons or to unzip zippers. Mary gradually lost the ability to interpret what she saw and heard. Words and objects began to lose their meaning. Sometimes she would react with terror and panic, or with anger. Her things were gone, her life seemed in disarray. She could not understand the explanations that were offered or, if she understood, she could not remember them. However, Mary's social skills remained so that when she finally relaxed she was personable and engaging. She also loved music and sang old familiar songs. Music seemed to be embedded in a part of her memory that she retained long after much else was lost.

The time finally came when the physical and emotional burden of caring for Mary became too much for her family, and she went to live in a nursing home. After the initial days of confusion and panic passed, the reliability of the routine comforted her and gave her a measure of security. Mary needed help bathing, dressing and eating, but was nonetheless concerned about her appearance. She insisted on walking unaided, but requested help in dressing up for visitors.

Four months after her arrival at the nursing home Mary fell on her way to the dining hall and fractured her hip. The orthopaedic surgeon attending to Mary decided that there was too great a risk involved in subjecting Mary to hip replacement surgery and prescribed bed rest and anti-inflammatory medication. Since being practically bedridden, Mary has shown no interest in the daily routine of the home and seems incapable of maintaining any degree of personal hygiene. Where she previously seemed excited at the prospect of family visits, she now seems indifferent to the whole event. Most of the time she does not even seem to recognise her family, let alone remember

their names. It has now come to the stage where Mary needs nearly constant care.

(Adapted from Rosenham & Seligman, 1995)

(a) Alzheimer's Disease
Major NCD due to Probable Alzheimer's disease

Mary shows cognitive deficits that developed over a long period of time. The first time she noticed memory problems was at the age of 68. Her memory problems have progressively worsened over the past five years (she is now 73). She had to start compensating for the gradual failure of her memory by making notes etcetera. She also showed signs of aphasia as she found herself groping for words she knew and often lost the thread of a conversation. In the hospital her memory impairment became more apparent as she could no longer compensate by making notes and by moving around familiar territory. She could not remember where she was, even though people kept telling her (impaired ability to learn new information) and could not remember that her daughter-in-law had visited her in hospital on the same day that the visit took place.

Her brain scan showed brain atrophy not related to any other neurological condition or general medication. Medication was not implicated in causing her symptoms. Through a process of elimination, the doctor diagnosed Alzheimer's disease as the cause of the atrophy.

Her condition did not improve when she moved into her son's home. She kept on thinking that her things had been stolen and could not find her way around the house and neighbourhood (signs of memory impairment and disturbance in executive functioning). She developed apraxia (not being able to button her buttons or zip her zips) and lost the ability to interpret what she heard and saw (symptoms of agnosia). She also seemed unable to understand the explanations given to her (disturbance in executive functioning) and if she did, could not remember them.

These symptoms most definitely impacted on her social and personal functioning as she could no longer live alone and eventually ended up in a nursing home.

We could consider the possibility that the hip fracture acted as a stressor that caused her to develop a Depressive Disorder. This would account for the loss of interest in the daily activities of the nursing home and her neglect of personal hygiene. There is, however, not enough information to make a definite diagnosis of a Major Depressive Disorder.

The doctor diagnosed Alzheimer's disease as her brain scan showed brain atrophy not related to any other neurological condition or systemic condition. No medication was implicated in causing her symptoms.

The fractured hip needs mentioning as this served as stressor and had a great impact on Mary's functioning. It should also be considered in any therapeutic intervention.

Problems related to social environment – adjustment to life cycle transition. Mary experienced problems related to her social environment, as she had to adjust to a life-cycle transition. She had to give up living alone and being independent and entered her son's home and eventually a nursing home. This caused Mary a lot of stress.

(b)

Mild or Major Vascular NCD	Mild or Major NCD due to Alzheimer's Disease
(1) Course is variable and typically progresses in a stepwise fashion.	(1) Course characterised by gradual onset and continuing cognitive decline.
(2) Focal neurological signs and symptoms and/or laboratory evidence of vascular disease.	(2) Cognitive deficits not due to other central nervous system conditions, systemic conditions or substance-induced.

Activity 15.16

Read the case study below and

(a) diagnose Adolf's condition on the DSM-5 classification system.
(b) discuss the three levels of prevention that one could use to eradicate Adolf's condition or any other psychological condition.

Case study

Anna found it impossible to have a conversation with her husband Adolf, since he somehow never remembered the preceding discussion. Since he had turned 50 the previous December, it seemed to have gotten worse almost every month. At first she thought his bad moods had something to do with the promotion that he had lost to a younger colleague, but lately she had begun to wonder whether the reason for his not being promoted had something to do with this annoying condition. His boss was probably not as accommodating and tolerant as she was. If she needed to remind him of all the points that went before in order to get him to focus his attention on the problem at hand, what was it like for his boss and his colleagues? She had engaged in this tedious process time and again, and when she eventually had his attention, after having presented him with all the necessary factual details and points of discussion, she waited for his opinion on the matter. But he would only get a puzzled look on his face, and his answer would be the same every time: "I am too tired now to think, what would you like to do?" or "This is too complicated now, can we talk about this another day?" Anna felt deserted and overburdened. She was eventually forced by his behaviour to make most decisions on her own, without the slightest input from his side.

Adolf could also never remember where he had left his keys, pens, briefcase, notebook, documents, wallet and even the things he had bought at the shops. Time, effort, money and nerves had been wasted many times on locating mislaid items. Adolf would frantically search through Anna's orderly drawers and cupboards, leaving everything ajar and in disarray, neglecting to look amongst the mess in his own car and boot, his piles of unfiled papers on his writing desk, and in his five briefcases which were scattered about the house.

A myriad of diverse little pieces of paper with important information were left everywhere he went. Anna had specially bought a basket into which she deposited all the items that she found in the laundry basket, in the kitchen, in his car, in the bathroom, tool shed and garage. When Adolf was looking for some name, date or number that he could not remember, she would hand him the basket, since this was the only way of escaping emotional abuse.

At times she felt as if her whole life consisted of looking for misplaced items, locating forgotten information, and picking up after her husband.

Adolf is a physically fit man who plays tennis every Saturday. After a good game of tennis and a dozen beers he tends to fall into a deep sleep until Sunday morning. During the week however, he often lies awake at night, which always makes him feel anxious. He therefore resorts to taking sleeping tablets almost every night. This behaviour has been taking place for well over a year. He has had numerous fights with Anna concerning this medication use of his but he nevertheless persists in this behaviour.

He starts off the day with two cups of coffee with milk and sugar, and has several more at work. He says that he needs the coffee to help him think.

(a) Sedative (alcohol and sleeping pills)-Induced Mild NCD

Occupational problems (work pressure and was overlooked for a promotion)

(b) The three levels of prevention have been called primary, secondary and tertiary prevention. The main emphasis in the prevention of psychopathology is on the promotion of mental health, the reduction of the number of new cases, the reduction of the duration of disorders among the afflicted, and the reduction of the disabling effects of disorders.

Primary prevention focuses on the promotion of mental health by adding to and strengthening the resources in a community and by eliminating those features that threaten mental health. Secondary prevention is an attempt to shorten the duration of mental disorders and to reduce their impact on the individual and society. Tertiary prevention focuses on the person's readjustment to the community after having been treated in a hospital for a mental disorder.

Adolf's Sedative Induced Mild Neurocognitive Disorder could be prevented as follows:

Primary prevention could be aimed at strengthening the resources in his family, workplace and community. Resources could also be added in those life areas in which there is a lack. At the same time those features that threaten Adolf's mental health should be eliminated. Examples of primary preventative measures would be teaching Adolf and his family and friends, to provide emotional support, developing his socialisation skills and relaxation techniques, building Adolf's self-esteem, and assisting him with family life and financial and other issues.

Secondary prevention could be aimed at shortening the duration of the amnesia and reducing the impact which withdrawal from the substances that Adolf was using would cause. (Since treatment is not included in this course, you need not give examples. The therapist's orientation will determine the kind of treatment chosen.)

Tertiary prevention, in Adolf's case, should be focused on reversing the negative effects of institutionalisation, ensuring a smooth transition to a productive life at home, his workplace and in the community. This could be achieved by educating the public about the role that each individual plays in the promotion of mental health. Family, friends and business associates should be given the facts about Adolf's condition in order to dispel the fears and stereotypes that arise as a result of ignorance. These measures would help to modify their attitude towards Adolf, and may lead to their gracious acceptance of his condition and his rehabilitation into the community.

Activity 15.17

Considering the knowledge that you have gained in studying this Learning Unit you will no doubt be able to identify individuals in your own family or community who might be experiencing problems similar to the disorders discussed here. At undergraduate level you are not yet allowed to diagnose or classify abnormal behaviour, but we hope that you have nonetheless acquired a sensitivity that will help you recognise potential difficulties relating to mental health and illness. You can use the knowledge that you have acquired to make informed referrals, at the request of the affected individuals, to resources in your community that will be able to support them and provide them with assistance. There are many agencies and organisations working in the field of mental health.

Concerning the Neurocognitive Disorders specifically, you can find further help at the following numbers. Even if these organisations are not in your area they are sure to have further contact details for /and information on services in your area.

Organisation	Contact Details	Services
Alzheimer's and Related Disorders Association (ARDA)	(011) 478–2251 Library Centre 2nd Floor Northcliff, 2195	Provide counselling, education, support and referral.
Epicare	(021) 47–3012/3 235 Lower Main Road Observatory 7925	Support for people with epilepsy and their families.
SA National Epilepsy League (SANEL)	(021) 47–3012 PO Box 73 Observatory, 7935	
South African Parkinsonian Association	(011) 787–8792 Private Bag X36 Bryanston, 2021	

Activity 15.18

The following activities will help you revise and summarise what you have studied in this chapter:

- At the beginning of chapter 13 of the prescribed book there are five Focus Questions on page 402. Answer questions 1 to 3 after you have worked through the Learning Unit. Compare your answers to the answers provided at the end of Chapter 13 in the prescribed book under the heading "Summary". If your answers are not complete, consult your study guide and prescribed book again on these questions or contact one of your lecturers.
- Go back to Activity 15.2 to the key terms and reflect on your understanding of each term. Explain the meaning of these terms to a friend or family member in your own words. If you battle to do so, refer back to your prescribed book and Study Guide.
- The learning outcomes of each of the five study units in this chapter were set out clearly in each of the study units. Make sure that you have acquired the necessary knowledge, skills and insights set out in these learning outcomes.

CONCLUDING COMMENTS

In this Learning Unit you have studied the key features of the different types of Neurocognitive Disorders, namely, Delirium and Mild or Major Neurocognitive Disorders. You also looked at the assessment techniques for assessing brain damage and the varied nature of brain damage. Now that you have studied the various aetiologies for explaining the development of these disorders, you should be able to identify, describe and explain the development of the various Neurocognitive Disorders. You should also be able to compare and distinguish between the different Neurocognitive Disorders and their varied aetiologies. You also considered the differentiation between the cognitive aspects of normal aging and the Neurocognitive Disorders.

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Learning Unit 16:

Disorders of Childhood and Adolescence

Ms Christine Laidlaw & Mrs Banti Mokgatlhe

Contents

Overview

This Learning Unit looks at the most commonly diagnosed disorders in infancy, childhood and adolescence. Many childhood problems are usually identified when a child enters school. Although these problems may have existed earlier, they may have been tolerated or not seen as "problems" in the home or when the child was younger. It is important to note that what could be socially acceptable behaviour at an earlier age could be socially unacceptable or inappropriate at a later stage when a child is older.

Child psychopathology is a recent field of study. Prior to the 17th century, children were thought of as little adults without personalities of their own. No fixed beginning can be established for the emergence of the field of child psychopathology, although many divergent forces and variables appearing in the late 19th century and early 20th century were influential in the field's development. A study of child psychopathology examines only part of the broader phenomenon of child mental health.

Between 12 and 15 per cent of children in Western countries are estimated to suffer from some kind of childhood psychopathology. In the South African context, clear structural causes (e.g. poverty and political variables) and circumstances resulting from interpersonal contexts (family, eco-cultural contexts, physical

conditions) contribute to the development of psychopathological conditions in children. Many children are at risk of sexual or physical abuse, experiencing the stress of divorce or living with parental illness, alcoholism, drug abuse, unemployment and violence.

According to the Policy Guidelines: Child and Adolescent Mental Health (Retrieved from *www.info.gov.za/view/DownloadFileAction?id=94167*(, mental health professionals in South Africa "address mental health in the prenatal period (conception to birth), childhood (birth to 9 years) and adolescence (12 to 18 years). They adopt a broad definition of child and adolescent mental health: *Child and adolescent mental health is the capacity to achieve and maintain optimal psychological functioning and well-being. It is directly related to the degree of age-appropriate bio-psychosocial development achieved using available resources.* Child and adolescents mental health includes a sense of identity and self-worth; sound family and peer relationships; an ability to be productive; a capacity to use developmental changes and cultural resources to maximise development" (p. 5).

It is important to remember that there are many causes and reasons for the development of psychopathology in children. Developmental processes and changes within the child play a major role in the development of psychopathology in children -in fact, the field is often referred to as developmental psychopathology.

Children do not live in isolation and the context (environment) which constitutes part of their lives should, therefore, be taken into account when describing their individual behaviour and the severity of the disorder. Some pathological conditions are transient, (e.g. Anxiety Disorders), while others (e.g. Intellectual Disability) are of a permanent nature. It is also important to establish whether the behaviour in question is appropriate for the child's age. Temper tantrums, for example, or eating inedible objects might be regarded as abnormal for a 10-year-old, while they are quite normal for a two-year-old.

It has been argued that emotional, behavioural and cognitive functioning is socially and culturally constructed, and that the expression and recognition of a disorder cannot be studied outside the socio-cultural context and the social relation and structures which give it meaning (Swartz, 1986). The socio-cultural context includes the family, peers, the school, social class and culture. It is also important to bear in mind that the description of symptoms differs from culture to culture. Aggressive behaviour may be acceptable in one culture (e.g. United States of America), which views such behaviour as assertive, while unacceptable in others (e.g. Thailand).

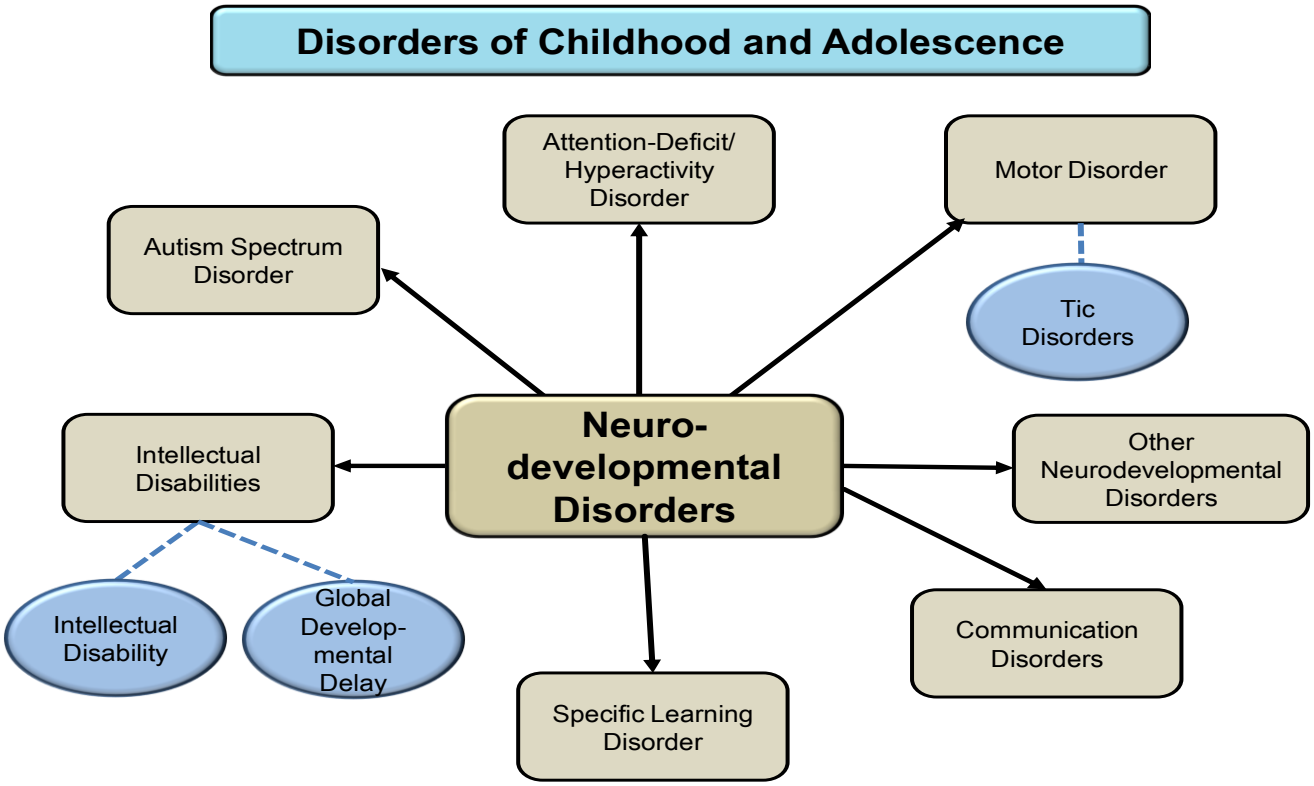
Children may suffer from different types of abnormal behaviour patterns at various ages. Some of these abnormalities are transient in nature (e.g. Enuresis Disorder or bed-wetting), while other disorders are more permanent.

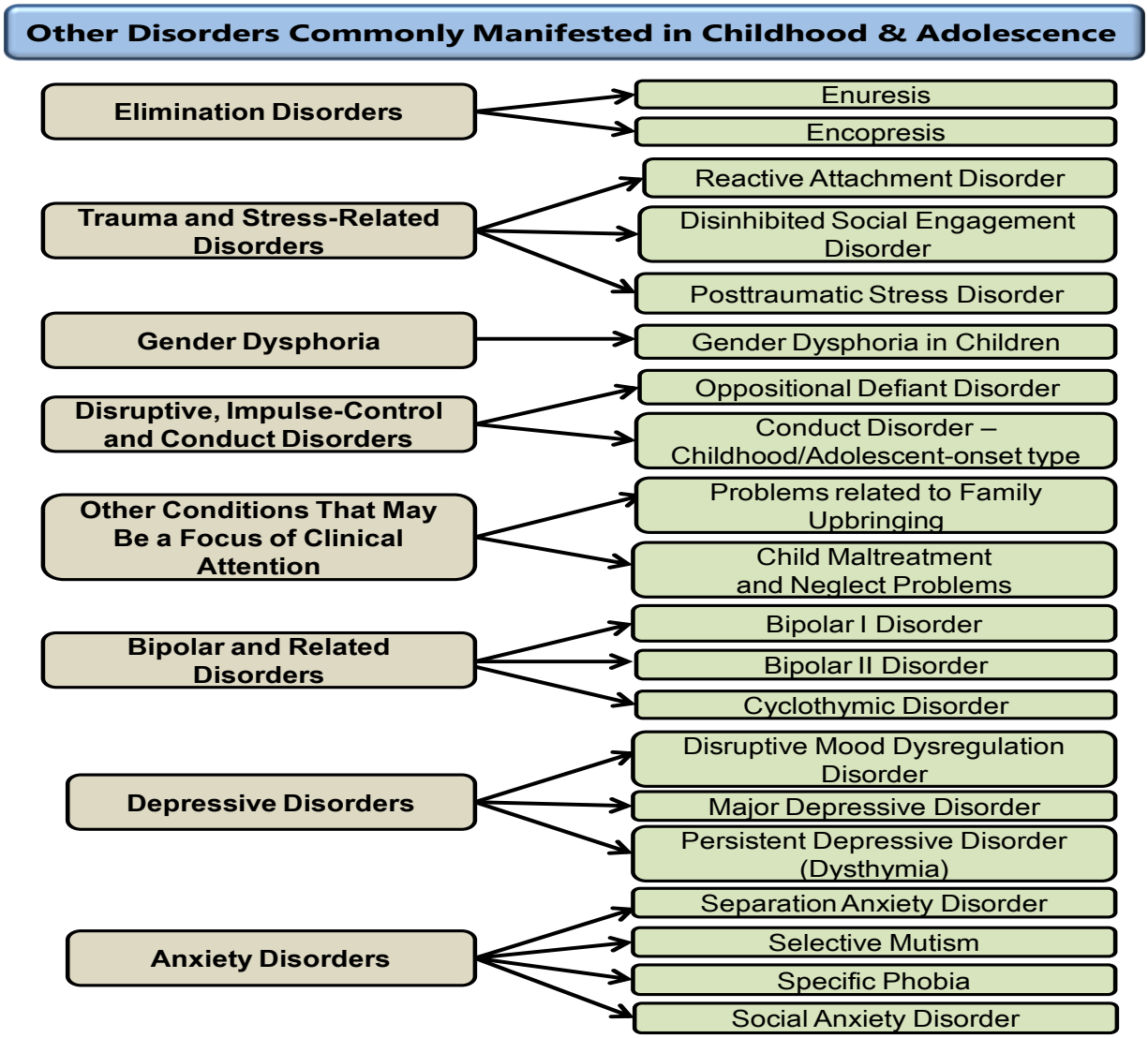
Many factors contribute to the development of childhood pathology. Risk factors in the development of childhood psychopathology include:

- hereditary influences: genetic abnormalities
- prenatal influences
- birth defects, complications, premature birth
- postnatal disease and damage, especially to the nervous system
- inadequate nutrition
- poverty
- detrimental early social experiences
- family psychopathology, stress, negative interactions
- child abuse, neglect
- poor peer relationships
- poor peer relationships behavioural/psychological patterns (e.g. low self-esteem, depressive thinking, difficult temperament)
- specific stress (e.g. loss of a parent)

Studying childhood disorders (psychopathology) will enable you to identify some of the disorders. Referral to helping professions is vital as you will then be playing a key part in primary prevention and the enhancement of mental health in children.

- Look at the following visual maps of the mental disorders that commonly occur in infancy, childhood and adolescence. Remember to continue to integrate your knowledge from your previous Learning Units so that you can identify disorders across categories:





Activity 16.1

Scan-read chapter 14 in the prescribed book (pp. 406-441), in order to familiarise yourself with the contents of the chapter and this Learning Unit.

Activity 16.2

While working through this Learning Unit, look out for the following **Key terms**. Follow the definition suggestions provided in Chapter 14 and the Glossary in the prescribed book. Add to the definitions as you encounter more information about the terms. Illustrate your understanding of the definitions with appropriate examples. Ensure that after you have completed this Learning Unit you know what these terms refer to:

- Neurodevelopmental Disorders
- Autistic Spectrum Disorder (ASD)
- Attention Deficit/Hyperactivity Disorder (ADHD)
- Intellectual Disability, Intellectual Developmental Disorder (IDD)
- Down Syndrome (DS)
- Fetal Alcohol Syndrome (FAS)
- Intellectual Disability, mild
- Intellectual Disability, moderate
- Intellectual Disability, severe
- Intellectual Disability, profound

- Elimination Disorders
- Enuresis
- Encopresis

NEURODEVELOPMENTAL DISORDERS

Introduction

Neurodevelopmental Disorders are disorders involving severe childhood impairments in areas such as reciprocal social interaction skills, communication skills and the display of stereotyped interests and behaviours.

Neurodevelopmental Disorders includes Autism Spectrum Disorder, Attention-Deficit/Hyperactivity Disorder, Intellectual Disabilities, Specific Learning Disorder, Communication Disorders, Motor Disorders, Tic Disorders, Other Neurodevelopmental Disorders and Unspecified Neurodevelopmental Disorders. For the purposes of this module we will be focusing on the following **three** Neurodevelopmental Disorders only:

Autism Spectrum Disorder, Attention-Deficit/Hyperactivity Disorder, and Intellectual Disability (Intellectual Developmental Disorder). Refer to pages 518 to 537 in your prescribed book).

16.1 STUDY UNIT: Autistic Spectrum Disorder

Autism Spectrum Disorder (ASD) in the DSM-5 incorporates four disorders from the previous diagnostic manual: Autistic disorder, Asperger's disorder, Childhood Disintegrative Disorder, and the catch-all diagnosis of Pervasive Developmental Disorder Not Otherwise Specified. Researchers found that those four diagnoses, rather than distinct disorders, actually represented symptoms and behaviours along a severity continuum. ASD reflects that continuum and is a more accurate and medically and scientifically useful approach. The new Autism Spectrum Disorder encompasses the DSM-IV autistic disorder, Asperger's disorder, and childhood disintegrative disorders. Based on a theory that Asperger's is a mild form of autism, diagnosis requires deficits in social communication and repetitive behavioural patterns rated along a dimension of severity (refer to the block on page 527 of your prescribed book).

Autistic Spectrum Disorder (ASD) is a lifelong, complex and severe childhood disorder which results in disordered brain development and function, altering the child's quality of development in areas such as communication and social interaction as well as stereotyped patterns of behaviours, interests and activities and imagination skills.

Although the cause of ASD is unknown, it is found equally amongst all population groups, affecting 4 times more boys than girls. International statistics put the incidence of ASD at 1 per 168 births regardless of race, ethnic or socio-economic background.

ASD in a family may be devastating to all concerned as most often parents may feel helpless not knowing how to effectively deal with their child's perceived problematic behaviour. Such children need constant supervision, are in some instances hyperactive, destructive, not showing love towards family members and are often shunned by their peers. They have difficulty communicating with others in a meaningful way. Their speech may be delayed, absent, or inappropriate and facial expressions appear to be meaningless to them. They may spend time doing unusual, repetitive activities which are markedly different from those of normal children. They appear aloof and always play alone. They may appear happiest living in the world of their own, using others only to fulfill their needs. The first signs that may cause concern for parents of such children could be an uncuddly baby who shows signs of speech delay, appears as if deaf, prefers to play alone, has unusual play patterns and acts undisciplined and naughty.

Although 70% of children with ASD usually have accompanying learning difficulties, there is 30% of those who may have abilities that are outstanding in relation to their overall functioning, e.g an exceptional memory in a specific field of interest. Raymond in the movie "Rain man", the young man with an encyclopedic memory and amazing maths skills portrayed by Dustin Hoffman is a good example of such individuals.

Although ASD cannot be cured to date, much can be done to improve the child with ASD's quality of life (by maximising his/her independence) and to also empower the child's family with adequate coping skills in dealing effectively with his/her disorder.

Outcomes
Once you have worked through this section on Autistic Spectrum Disorder you should be able to:

- Define Neurodevelopmental Disorders
- Define Autistic Spectrum Disorder
- Describe the DSM-5 criteria for Autistic Spectrum Disorder
- Discuss the aetiology of Autistic Spectrum Disorder

Study
To be able to do the above you will need to study the introduction to this section as well as Activity 16.3 in the study guide and the following sections in the prescribed book:

- The section on "Neurodevelopmental Disorders" on page 518;
- The section on "Autistic Spectrum Disorder" on pages 523-531;
- Table 14.6. Continuum of Symptoms Associated with Autism Spectrum Disorders" on page 525;
- "Etiology", "Autistic Disorder", pages 526-529;
- Biological dimension, pages 526-529;
- Psychological dimension, page 529;

Activity 16.3

The prescribed book contains insufficient information on the DSM-5 diagnostic criteria for Autism Spectrum Disorder. Ensure that you know these criteria below well.

DSM-5 Diagnostic Criteria for Autism Spectrum Disorder

A Persistent deficits in social communication and social interaction across multiple contexts as manifested by the following, currently or by history:

1. Deficits in social-emotional reciprocity; ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or response to social interactions.

2. Deficits in nonverbal communicative behaviours used for social interaction; ranging for example, from poorly integrated verbal and nonverbal communication, to abnormalities in eye contact and body language, or deficits in understanding and use of gestures, to a total lack of facial expressions and nonverbal communication.

3. Deficits in developing, maintaining relationships and understanding relationships ranging for example, from difficulties adjusting behavior to suit different social contexts, to difficulties in sharing imaginative play or in making friends, to absence of interest in peers.

Specify current severity: **Severity is based on social communication impairments and restricted, repetitive patterns of behaviour.**

B Restricted, repetitive patterns of behavior, interests, or activities as manifested by at least two of the following currently or by history:

1. Stereotyped or repetitive motor movements, use of objects; or speech (simple motor stereotypies, lining up of toys or flipping objects, echolalia, idiosyncratic phrases).

2. Insistence on sameness, inflexible adherence to routines, or ritualized patterns of verbal or nonverbal behaviour, (extreme distress at small changes; difficulties with transitions, rigid thinking patterns, greeting rituals, need to take same route or eat same food every day).

3. Highly restricted, fixated interests that are abnormal in intensity or focus (e.g., strong attachment to or preoccupation with unusual objects, excessively circumscribed or perseverative interests).

4. Hyper-or hypo-reactivity to sensory input or unusual interest in sensory aspects of the environment; (e.g., apparent indifference to pain/temperature, adverse response to specific sounds or textures, excessive smelling or touching of objects, visual fascination with lights or movement).

Specify current severity: **Severity is based on social communication impairments and restricted, repetitive patterns of behaviour.**

C Symptoms must be present in early developmental period (but may not become fully manifest until social demands exceed limited capacities, or may be masked by learned strategies in later life)

D Symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning.

E These disturbances are not better explained by Intellectual Disability or Global Developmental Delay. To make comorbid diagnoses of ASD and Intellectual Disability, social communication should be below that expected for general developmental level.

Specify if:
With or without accompanying intellectual impairment
With or without accompanying language impairment
Associated with a known medical or genetic condition or environmental factor
Associated with another neurodevelopmental, mental, or behavioural disorder
With catatonia

(Adapted from APA, 2013, p. 50-51)

Activity 16.4

Read the case study below carefully and classify Tsidi's abnormal behaviour according to the DSM-5 classification system. Use a highlighter as you read through the case study to pick up key features. Briefly justify your choice of the diagnosis drawing on features in the case study.

Case Study

Tsidi, an 11-year-old, was referred to a psychologist as her parents had become worried about her aggressive behaviour and social isolation both at home and school.

Tsidi was born as a result of a full-term pregnancy without complications. At the age of seven weeks she developed a high fever and was hospitalised, at which point she was tested for meningitis. Results of the test were negative, and it was determined that there was no obvious explanation for Tsidi's fever. Her parents reported that, during infancy, Tsidi's behavior appeared to be normal, however, on further contemplation, they realised that she rarely smiled, never babbled, and had difficulty falling asleep.

At age two years, Tsidi was able to produce single words and a limited number of two-word utterances. As she grew older her language abilities failed to progress, which led her parents to become concerned about her development. At age three years, Tsidi began to speak less frequently and continued to be limited to short verbal phrases. Furthermore her parents noticed that, socially, she demonstrated limited interest in other children and would often isolate herself. In terms of other developmental milestones, her parents reported no delays in her eating, walking, or toilet training.

Between the ages of three and five years Tsidi's speech was limited to repeating phrases from her favourite movies. In addition, Tsidi began to have difficulty using and understanding nonverbal gestures such as pointing or nodding to communicate. She also reversed the pronouns, *you* and *I*. Socially, Tsidi demonstrated poor eye contact and was limited in her use of facial expressions. She rarely attempted to interact with others and seemed only interested in members of her immediate family.

In the interview with the psychologist, Tsidi was able to communicate her basic wants and needs. However, she reportedly had difficulty communicating her emotions and rarely took part in reciprocal conversation. In addition she engaged in verbal rituals, which consisted of repeating a statement until the other person responded with a specific word or phrase. In addition, her responses to other people's phrases were often 'off topic'. She would select a single word and relate it to something not involved in the conversation topic. She also had difficulty controlling voice volume.

Socially, her parents reported that Tsidi had few friends and experienced difficulty playing with groups of children. They also reported that Tsidi preferred to be around adults rather than children. Tsidi's parents described her displaying aggressive behaviours such as screaming, hitting, slapping, head butting, pinching, biting, and kicking others. In addition, she would occasionally hit herself in the head or bang her head against a wall, particularly when attempting to get her mother's attention.

Tsidi also would become upset in reaction to noises such as the loudspeaker at school, fire alarms, toilets flushing, and vacuum cleaners. In addition, she often made high-pitched noises, flapped her hands, and paced back and forth.

Her parents stated that Tsidi had difficulty with changes in their family schedule and had experienced difficulty in adjusting to new environments when they went on holiday away from home. Tsidi also had a particular interest in stuffed animals. She referred to the stuffed animals as "her friends" and carried them with her wherever she went. According to her parents, Tsidi arranged the animals in a specific set way. She became upset if their order or placement was disrupted. Other interests of Tsidi's reported by her parents were Tsidi working on a computer and typing short stories.

(Adapted from Matson, LoVullo, Boisjoli, & Gonzalez, 2008)

You should have diagnosed Tsidi's abnormal behaviour as follows:

Autistic Spectrum Disorder, without accompanying intellectual impairment, with accompanying language impairment (Principal Diagnosis)

Tsidi has significant impairments in the core areas associated with Autism Spectrum Disorder, social and communication deficits for example, as infant she did not babble, as well as stereotyped behaviours. In terms of social skills, Tsidi demonstrates a limited use of nonverbal behaviours such as smiling or using facial expressions to communicate. She has inappropriate social responses, few peer relationships, and exhibits limitations in shared enjoyment with others, she thus has a lack of engagement with her peers. Although, Tsidi is able to communicate with others, much of her speech is in the form of echolalia and tangential. She often engages in verbal rituals with others. In addition, Tsidi has limited use of nonverbal communication and reciprocal conversation skills.

Tsidi's interests are highly focused on computers and typing and she confines herself to these interests. Her repetitive movements include arm-flapping and head-banging. Tsidi also insists on routines and becomes highly distressed when there is a change in environment for example family holidays are impossible. She insists on sameness for example arranging her toys in a specific way. She shows a hyper-reactivity to sensory input in terms of an aversion to loud noises common in daily life.

Her symptoms stem from when she was a toddler and cause significant distress especially when accompanied with aggression.

Activity 16.5

Read the case study below carefully and,

(a) classify Cedric's abnormal behaviour according to the DSM-5 classification system. Use a highlighter as you read through the case study to pick up key features. Briefly justify your choice of the diagnosis drawing on features in the case study.

(b) explain the aetiology of Cedric's abnormal behaviour in terms of the biogenic model

Case Study

Three-year old Cedric was referred by his family doctor to a pediatrician because he displayed some unusual behaviours and lacked a number of others, particularly social and verbal skills. During the previous two years the doctor had seen Cedric only when he had been ill.

Cedric was the second child of parents in their twenties, Mr and Mrs Benn. Cedric was conceived five months after the birth of their first child as Mrs Benn thought she could not fall pregnant while breast-feeding. She consulted her doctor because she could not menstruate. She then received an injection to help her menstruate. Neither she nor her doctor were, at that time, aware that she was pregnant because a pregnancy test was negative. According to Mrs Benn, for a week after the injection, she had felt extremely ill and nauseous, vomited and was dizzy. During this time she had to stay in bed.

The pregnancy progressed uneventfully and birth was normal. Cedric weighed a little over 2, 5 kg. Mrs Benn reported that she had had some difficulty in caring for two infants but that Cedric had been a very good baby who gave little trouble except during feeding. Because feeding him was difficult Mrs Benn explained that Cedric appeared to be happier when left alone and she recalled how as a young infant he did not smile nor did he seem to recognise her.

During his first year, Cedric's motor development appeared to be somewhat advanced. At nine months he learned to walk and from the start his motor skills were especially competent, he never fell nor hurt himself. He developed into an attractive, overactive child.

Mr and Mrs Benn first became concerned about Cedric's development during his second year when he did not begin to talk. He did, however, appear to love music. At that time Mr and Mrs Benn were told that Cedric was probably a late developer and that perhaps he did not need to talk as they were anticipating his needs. Their concern, however, increased when they realised that he was not responding when they spoke to him and he seldom made eye contact. They insisted on a hearing test which revealed no hearing loss.

Furthermore, he was obsessed with food. Instead of playing with his toys in a conventional way he would rather turn the wheels of his toy car and would often put it into his mouth. He also rocked his body back and forth for long periods and banged his head against the wall. Otherwise he showed little emotional reaction. Cedric's obsession with food and his other unusual behaviours together with the continued difficulty in communication and lack of response occasionally warranted a visit to the pediatrician.

Cedric's parents, both university graduates, were deeply concerned about their son and were prepared to go to lengths to help him by obtaining appropriate treatment. The family appeared to be stable and there was no family history of psychiatric problems

(a) You should have diagnosed Cedric's abnormal behaviour as follows:

Autistic Spectrum Disorder, without accompanying intellectual impairment, with accompanying language impairment

Associated with an injection during mother's pregnancy

Autistic Spectrum Disorder is a severe childhood disorder characterised by significant impairment in social interaction and communication skills and by restricted, stereotyped patterns of behaviours, interests and activities. The disturbance must be manifested by delays or abnormal functioning in across multiple contexts. Cedric displays the following symptoms:

Impairment in social interaction:

- Lack of social and emotional reciprocity: Cedric did not smile or seem to recognise his mother as a young infant. He did not respond when his parents spoke to him. He did not seek physical contact with his parents. Cedric also showed very little emotional reaction.
- Marked impairment in the use of multiple non-verbal behaviours such as eye-to eye gaze: Cedric seldom made eye-contact.
- A lack of spontaneous sharing of enjoyment or interests with other peers: Cedric appeared to be happier when left alone.

Impairment in communication:

- Total lack of the development of spoken language: fifty percent of all autistic children do not develop normal speech, as was the case with Cedric

Restricted repetitive and stereotyped patterns of behaviour, interests and activities:

- Stereotyped and repetitive motor mannerisms: Cedric rocked his body backwards and forwards for long periods and often banged his head against the wall.
- Persistent pre-occupation with parts of objects: Instead of playing with his toys in a conventional way, Cedric would rather turn the wheels of his toy car and would put it into his mouth.
- Cedric was obsessed with food.
- The impairment in social interaction and communication and restricted, stereotyped interest and activities, and abnormal functioning have been present in the early developmental period

Exposure to a medical factor (injection given to Cedric's mother during early pregnancy)

(b) All the following variables may have possibly contributed to the development of Cedric's abnormal behaviour according to the biogenic perspective.

- Prenatal influences, it is possible to assume that Cedric's fetus was affected by the injection administered by Mrs Benn's physician during early pregnancy (neurodevelopment).
- Genetic influences, the possibility of a genetic cause should also not be ruled out (fragile x chromosome). Some researchers believe that genetic factors influence the amount of certain substances found at specific sites of the brain. It is possible that there is a history of Autistic Spectrum Disorder in Cedric's family.
- Biochemical imbalances (adrenalin and dopamine imbalances) in the brain are transmitted from nerve cell to nerve cell. It is possible that biochemical imbalances can be responsible for Cedric' Autistic Spectrum Disorder.
- Brain Impairment, although there is no known biological marker for autism, several brain abnormalities have been identified as consistent with early neural development disturbance before birth. It is possible that Cedric's Autistic Spectrum Disorder can be due to brain impairment.

Activity 16.5

Mention the five criteria required for a diagnosis of Autistic Spectrum Disorder according to the DSM-5. In answering this question make sure you include the following:

- Persistent deficits in social communication **and** social interaction
- Restricted, stereotyped interest and activities
- Delays or abnormal functioning in one of the above major areas during the early developmental period (seen as generally before the age of three)
- Symptoms cause impairment in functioning
- Not better explained by Intellectual Disability or Global Developmental Delay.

Activity 16.6

Imagine you have been invited at your local community centre to address parents on the early warning signs of Autistic Spectrum Disorder. What can you include in your talk?

Make sure you include the following as early warning signs of Autistic Spectrum Disorder. Encourage the parents that if their child displays any of these signs, to bring it to the attention of their doctor.

- No babbling by 12 months
- No pointing, waving and other gesturing by 12 months
- No two-word spontaneous (not echoed) phrases by 24 months
- Any loss of language or social skills at any age
- Inability to make or hold eye contact
- Inability to respond to one's name being called
- Inability to look where someone points
- Lack of interest in pretend play by 18 months
- Arches back to avoid touch
- A lack of warm, joyful expressions while gazing at parent/caregiver
- Rocks or bangs head
- Makes hardly any attempt to communicate

(Adapted from Barlow & Durand, Instructor's manual, 2009).

Activity 16.7

Familiarise yourself with these organisations which can be contacted should you have a family member with ASD. Autism South Africa is a national body for children and adults with ASD.

- Autism South Africa, PO Box 84209, Greenside, 2034, E-mail: autismsa@iafrica.com Cape Town

Gauteng

The Key School. PO Box 84611, Greenside, 2034, E-mail:keyschool@iafrica.com
The Child Clinic at Tara Hospital
Association for Autism, PO Box 35833, Menlo Park, 0102, E-mail: afautism@iafrica.com
UNICA School, PO Box 35182, Menlo Park, 0102, E-mail: autism@mweb.co.za

Kwazulu-Natal

Parents of Autistic Children Kwazulu-Natal (PACK), PO Box 116, • Pinetown, 2600

Eastern Cape

Eastern Cape Association for Autism (ECAA)
Quest School, PO Box 2948, Riebeeckhoogte, Uitenhage, 6231, E-mail: quest3@absamail.co.za

Western Cape

Autism Western Cape. PO Box 60375, Flamingo square, 7439, E-mail: big.g@meb.co.za
Vera School, P/bag X 4, Clareinch, 7440, E-mail: vera@vera.wcapeschool.za
Alpha School, PO Box 48, Woodstock, 7915, E-mail: alphasch@xsinet.co.za
Hurdy Gurdy House (Private Residential Centre for adults with autism). 70 De Hulk Road, Penhill, Cape Town, 7100, E-mail: mwrlc@ mweb.co.za

A few international contacts:

National Autistic Society, United Kingdom E-mail nas@nas.org.uk
Autism Society of America Website: http://www.autism-society.org/

16.2 STUDY UNIT: Attention Deficit/Hyperactivity Disorder

Introduction

In this study unit we introduce you to Attention Deficit/Hyperactivity Disorder. The primary characteristics of Attention Deficit/Hyperactivity Disorders are inattention, hyperactivity and impulsivity. These characteristic symptoms may contribute to secondary problems such as poor school performance, low self-esteem and poor relationships with peers.

ADHD is characterised by a pattern of behaviour, present in multiple settings (e.g., school and home), that can result in performance issues in social, educational, or work settings. In the DSM-5, symptoms are divided into two categories of inattention and hyperactivity and impulsivity that include behaviours like failure to pay close attention to details, difficulty organising tasks and activities, excessive talking, fidgeting, or an inability to remain seated in appropriate situations.

Children must have at least six symptoms from either (or both) the inattention group of criteria and the hyperactivity and impulsivity criteria, while older adolescents and adults (over age 17 years) must present with five. ADHD criteria and examples have been altered to allow for the growing diagnosis of ADHD in adulthood. Onset of symptoms must now occur by age 12 rather than seven.

ADHD criteria have no exclusion criteria for people with Autism Spectrum Disorder, since symptoms of both disorders co-occur. However, ADHD symptoms must not occur exclusively during the course of Schizophrenia or another psychotic disorder and must not be better explained by another mental disorder, such as a depressive or bipolar disorder, anxiety disorder, dissociative disorder, personality disorder, or substance intoxication or withdrawal.

Activity 16.8.

The prescribed book contains insufficient information on the DSM-5 Diagnostic criteria for Attention Deficit Hyperactivity Disorder. Ensure that you know the information in the introduction of this study unit and the criteria below:

DSM-5 Diagnostic Criteria for Attention Deficit/Hyperactivity Disorder (ADHD)

A A persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development as characterized by (1) and/or (2):

1. **Inattention:** Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with the developmental level and that negatively impacts directly on social and academic/occupational activities.

Note: The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or failure to understand tasks or instructions. For older adolescents and adults (age 17 and older) at least five symptoms are required:

(a) Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or with other activities.
(b) Often has trouble holding attention on tasks or play activities.
(c) Often does not seem to listen when spoken to directly.
(d) Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., loses focus, side-tracked).
(e) Often has difficulty organizing tasks and activities.
(f) Often avoids, dislikes, or is reluctant to do tasks that require mental effort over a long period of time (such as schoolwork or homework).
(g) Often loses things necessary for tasks and activities (e.g. school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).
(h) Is often easily distracted by extraneous stimuli (for older adolescents and adults, may

include unrelated thoughts).

(i) Is often forgetful in daily activities.

2. **Hyperactivity and Impulsivity:** Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with the developmental level and that negatively impacts directly on social and academic/occupational activities.

Note: The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or failure to understand tasks or instructions. For older adolescents and adults (age 17 and older) at least five symptoms are required:

(a) Often fidgets with or taps hands or feet, or squirms in seat.
(b) Often leaves seat in situations when remaining seated is expected.
(c) Often runs about or climbs in situations where it is not appropriate (**Note**: In adolescents or adults may be limited to feeling restless).
(d) Often unable to play or take part in leisure activities quietly.
(e) Is often "on the go" acting as if "driven by a motor".
(f) Often talks excessively.
(g) Often blurts out an answer before a question has been completed.
(h) Often has trouble waiting his/her turn.
(i) Often interrupts or intrudes on others (e.g., butts into conversations or games or activities; may start using other people's things without asking or receiving permission; for adolescents and adults, may intrude into or take over what others are doing).

In addition, the following conditions must be met:

B Several inattentive or hyperactive-impulsive symptoms were present before age 12 years.

C Several symptoms are present in two or more settings, (e.g., at home, school or work; with friends or relatives; in other activities).

D There is clear evidence that the symptoms interfere with, or reduce the quality of, social, school, or work functioning.

E The symptoms do not happen only during the course of schizophrenia or another psychotic disorder. The symptoms are not better explained by another mental disorder (e.g. mood disorder, anxiety disorder, dissociative disorder, or a personality disorder, substance intoxication or withdrawal).

Specify whether:

Combined presentation: if both Criterion A1 (inattention) and Criterion A2 (hyperactivity-impulsivity) are met for the past 6 months

Predominantly inattentive presentation: if Criterion A1 (inattention) is met but Criterion A2 (hyperactivity-impulsivity) is not met for the past six months

Predominantly hyperactive-impulsive presentation: if Criterion A2 (hyperactivity-impulsivity) is and Criterion A1 (inattention) is not met for the past six months
Specify if:

In partial remission: When full criteria were previously met, fewer than full criteria have been met for the past 6 months, and the symptoms still result in impairment in social, academic, or occupational functioning.
Specify current severity:

Mild: Few, if any, symptoms in excess of those required to make the diagnosis are present, and

symptoms result in no more than minor impairments in social or occupational functioning.

Moderate: Symptoms or functional impairment between "mild" and "severe" are present.

Severe: Many symptoms in excess of those required to make the diagnosis, or several symptoms that are particularly severe, are present, or symptoms result in marked impairment in social or occupational functioning

(Adapted from APA, 2013, p. 59-61)

Outcomes
Once you have worked through study unit 16.2, you should be able to

- discuss the DSM-5 criteria for ADHD
- distinguish between the various subtypes of ADHD
- discuss the aetiology of ADHD
- describe the main characteristics of ADHD, Conduct Disorder (CD) and Oppositional Defiant Disorder (ODD).

Study
To be able to do the above you will need to revise CD and ODD by referring back to Learning Unit 7 in Tutorial Letter 501 (Study Guide) and for ADHD the following sections in the prescribed book:

- "Attention Deficit/Hyperactivity Disorder", pages 519-523;
- "Etiology", pages 521–522

Activity 16.9

Carefully read the following case study and,

(a) classify Amy's abnormal behaviour using the DSM- 5 classification system and briefly justify your choice of diagnosis(es)

Case study

Amy, a 17-year-old young woman, decided to consult a clinical psychologist for an evaluation at her parents' urging after she had failed all her modules at the end of her first semester of university. She presented as a shy, young woman who appeared younger than her stated age, both in her facial expressions and the way that she dressed. Amy was friendly and cooperative throughout the evaluation, though her eye contact was minimal, primarily directed to the floor.

Amy relayed that she was the only child of her parents who were both accomplished professionals who had busy work schedules that necessitated frequent trips away from home. Amy's difficulties at university especially troubled her parents, who had questions about her ability to maintain the "self-discipline" needed to handle university requirements.

She had embarked on her first semester full of excitement to be starting her adult life. However, her experience soon became "horrendous" after classes started. She reported feeling overwhelmed by the "million things" she had to keep up with and the density of information presented in each class. Following the flow of lectures was difficult and she noticed herself frequently checking the notes of the students around her to get information she had missed. Amy also reported difficulty managing the volume of required reading in her classes. She reserved large blocks of study time for reading but had difficulty focusing her attention on the material and would eventually stop studying altogether.

Other areas of her life also suffered because of her disorganisation. She spent excessive amounts of time locating her textbooks and notes, mismanaged her bank account, and found that she was eating unhealthy foods often and not sleeping enough.

Amy wondered whether these difficulties were just her adjusting to her first year at university in terms of time mismanagement, "wrong choices," and too much socialising, too little sleep, procrastination. Her self-initiated efforts to "buckle down," work harder, and cut out excessive going out did not produce her desired results. She continued to have difficulties even after reducing social commitments to focus on her studies. Feeling unmotivated, Amy stopped attending lectures altogether.

On an encouraging note, Amy formed solid friendships in her residence and through her involvement in campus clubs. After she stopped attending classes, her friendships and club activities soon became her only reasons for leaving her room and were, according to Amy, her only relief from distress. By the end of the semester, she was hopelessly behind in her work. Subsequently, her parents were surprised when they learned that she had failed all her modules.

Amy's mother, who at Amy's request accompanied her to the initial appointment to the psychologist, described Amy as having been shy and cautious as a child. Reportedly, she did not exhibit any major problematic behaviour and was considered "sensitive and warm." She had a tendency to be "sloppy," was "immature", and she experienced difficulties getting along with other children despite her generally likeable personality. In particular, her mother recalled Amy becoming extremely upset by minor frustrations such as disagreements over a board game.

Amy was quick to learn things in school but had difficulty making use of them. For example, she learned to read earlier than other children did, but both Amy herself and her mother characterised her as a "slow reader." Her mother remembered that teachers regularly commented that Amy was a pleasant learner but she often seemed to be daydreaming and would not complete assignments that were well within her capabilities. Reading continued to be difficult for Amy throughout primary and high school, because of her inability to sustain attention on the page rather than from any difficulty with comprehension. She also described having difficulty with paying attention during class presentations and with following class discussions. Amy said her typical first response on being called on in class was, "Wait . . . what?" She earned decent school marks but relied on "cramming" because she was "scared of getting in trouble," and extensions on her assignments from her teachers. Her parents also actively monitored her progress during school and made sure that she kept up with her schoolwork. Nonetheless, Amy sometimes misplaced completed assignments or forgot them at home.

Although being described as sensitive and friendly, she had difficulty getting along with certain children when she was younger and she socialised with only a few close friends. Her mother recalled that teachers said Amy was occasionally teased by peers for immature behaviour or for becoming emotional over what was considered a relatively minor matter (e.g., bursting into tears over a dispute on the playground). By the time she became a teenager, she had a small circle of close friends. Amy, encouraged by her friend, joined the drama group at her school. As her confidence grew, so did her social network and her extramural activities. Amy experienced a leap in social acceptance and grew more accepting of herself. In turn, she found more satisfaction in her relationships with her peers and teachers. By this time, Amy began to set her sights on improving her school marks and expanding her extramural activities to apply to different universities. She gained acceptance to a well-resourced university in a different city to her hometown and now six months later she is experiencing problems.

(Adapted from Ramsay & Rostain, 2005)

You should have diagnosed Amy's abnormal behaviour as follows:

Attention Deficit/Hyperactivity Disorder, Inattention Type, severe (Principal Diagnosis). Educational problems (Academic Problem: failure)

As she is 17-years-old, Amy, need only display five or more symptoms. Amy displays the following inattention symptoms:

- often has difficulty sustaining attention in tasks (difficulty in remaining focused during lectures and lengthy reading
- fails to finish academic work (starts studying but quickly loses focuses and is easily sidetracked)
- often has difficulty organising tasks (difficulty keeping materials and belongings in order, disorganised work, has poor time management, fails to meet deadlines)
- often reluctant to engage in tasks that require sustained mental effort (preparing for exams)
- often forgetful in daily activities (paying her accounts)
- often loses things necessary for tasks or activities (learning materials, books)
- is often easily distracted by extraneous stimuli (she easily finds herself daydreaming instead of staying focused in lectures)
- Other Problems That May Be a Focus of Clinical Attention: Educational problems (Academic Problem: failure). Amy has failed her first semester of university.

Though her parents are concerned this has not currently led to significant conflict in their relationship with their older adolescent and therefore there is no need to diagnose Parent-Child Relational Problem.

Amy's symptoms are severe as they are in excess of the required five symptoms and the symptoms has led to significant impairment in her daily functioning in that she is failing academically and the symptoms may lead to problems in her relationship with her parents if not addressed soon. Furthermore, her symptoms have led her to mismanage her bank account which could jeopardise her financial well-being.

Keep in mind that Amy displayed:
No signs of Intellectual Disability, as she has a history of obtaining good marks during high school and met the admission requirements for her University course
No Personality Disorder (A Personality Disorder can only generally be diagnosed after the age of 18.)
No medical condition

Activity 16.10.

Carefully read the following case study and

(a) classify Ken's abnormal behaviour on the five axes of the DSM-5 classification system and briefly justify your choice of diagnosis.

(b) provide a concise description of the aetiological factors that may have contributed to Ken's abnormal behaviour.

Case study

Ken, a nine-year-old boy, is currently repeating Grade Two. As a result of continuous academic and scholastic problems, and scholastic problems, as well as an unsympathetic elderly teacher during his first year of school, his parents moved him to another school in the same neighbourhood.

Since the beginning of his school career, Ken's behaviour has been disruptive in class. He cannot sit still and often leaves his desk during class. On hearing the sound of oncoming cars, he runs to the window and watches them pass by. During class, he constantly fidgets and shouts out the answers even before the teacher has finished formulating questions. He talks incessantly. He is forever searching for his pencil when he needs it and seldom completes tasks. He has a short attention span and his teacher constantly has to repeat instructions. Although he has an average IQ and is repeating Grade Two, his academic progress is poor and far below the class average. Efforts to discipline him have proved unsuccessful.

Ken regularly throws books and toys at his classmates and will hit any person close to him with the slightest provocation. He consequently has no friends. The children do not want to play games with him as he does

not obey the rules and constantly disrupts organised games. The parents of children in the neighbourhood have barred him from their homes because he plays with everything, messes up everything, scatters things and refuses to tidy up.

According to his parents, Ken, their only child, has experienced adjustment problems from a very young age. Ken's misbehaviour has made it impossible to go out as a family for meals. There have been many arguments between his parents as a result of his behaviour. Ken's father's patience has run out, and he has decided that a good hiding is the only remedy. He often beats Ken excessively. Ken has become very fearful of his father and when he sees him, Ken's behaviour becomes even more uncontrollable. Ken's behaviour has caused such friction between his parents that his mother recently filed for a divorce. Neither of the parties, however, feels capable of dealing with Ken alone. As a last resort, Ken's mother took him to a psychologist.

(a) You should have diagnosed Ken's abnormal behaviour as follows:

Attention Deficit/Hyperactivity Disorder, Combined Type, severe (Principal Diagnosis).

Ken displays the following symptoms:
- impulsive and hyperactive
- fidgets, has difficulty keeping still
- is easily distracted
- has difficulty taking turns
- seldom completes tasks
- talks excessively
- often blurts out answers before questions have been completed
- often loses articles necessary for tasks

Ken's symptoms are severe as they are in excess of the required six symptoms and the symptoms has led to significant impairment in his daily functioning in that he is performing poorly academically and the symptoms have led to problems in his relationship with his parents to such an extent that it has also put such strain on his parents' marriage that his mother has filed for divorce. His parents find they cannot control his behaviour, and that his father has resorted to physical punishment. Importantly, unrestrained physical punishment could put Ken at risk for Child Abuse. Furthermore, he has become isolated form any social contact from his peers, even when adult supervision is possible. He also is a danger to his peers as he hits them and throws things at them.

Other Problems That May Be a Focus of Clinical Attention:
- Parent Child Relational Problem (Problems with parents)
- Disruption of Family by Divorce (Ken's mother filed for divorce)
- Educational problems (discord with teacher, academic problems)
- Social Rejection (purposefully excluded from the activities of peers in his social environment)

Keep in mind that Ken displayed:
No signs of Intellectual Disability, since he has an average IQ
No Personality Disorder (A Personality Disorder can generally only be diagnosed after the age of 18.)
No medical condition

(b) All the following variables may possibly have contributed in one way or another to the diagnosis of ADHD:

- academic/scholastic factors (poor school progress, repeating grade, change of schools)
- possible neurological factors (hyperactivity, poor motor control)
- psychosocial factors (teacher-learner relationship, home environment)
- the influence of certain nutritional factors

STUDY UNIT 16.3: Intellectual Disability (Intellectual Developmental Disorder)

Introduction

In this study unit you are going to look at the phenomenon of Intellectual Disability (Intellectual Developmental Disorder) which is also classified in the category of Neurodevelopmental Disorders in the DSM-5. You will learn how to classify and identify features of Intellectual Disability (Intellectual Developmental Disorder) which in previous diagnostic manuals was named Mental Retardation. You will also have the opportunity to study the diverse aetiological factors of Intellectual Disability (Intellectual Developmental Disorder)

In Intellectual Disability (Intellectual Developmental Disorder) there are deficits in cognitive capacity beginning in the developmental period. Thus Intellectual Disability (Intellectual Developmental Disorder) is a disorder present from childhood and is characterised by significantly below-average intellectual and adaptive functioning. The diagnosis of Intellectual Disability (formerly Mental Retardation) now emphasises level of adaptive functioning as opposed to an exact IQ score. The individual experiences difficulties with day-to-day activities and these difficulties are a result of the combined influence of the degree of his or her intellectual impairment and the daily context in which they are expected to function. Intellectual Disability (Intellectual Developmental Disorder) is an extremely varied phenomenon – firstly concerning the degree and severity of the impairments and secondly concerning the Aetiology of these impairments. Complete reversal of Intellectual Disability (Intellectual Developmental Disorder) is impossible. Intellectual Disability (Intellectual Developmental Disorder) is long-standing, chronic and less amenable to treatment than other mental disorders.

Outcomes
Once you have worked through Study Unit 16.3 you should be able to:

- Describe the DSM-5 criteria for Intellectual Disability (Intellectual Developmental Disorder).
- Discuss the different levels of Intellectual Disability (Intellectual Developmental Disorder).
- Discuss environmental factors as aetiology of Intellectual Disability (Intellectual Developmental Disorder)
- Discuss the genetic factors as aetiology of Intellectual Disability (Intellectual Developmental Disorder)
- Discuss the non-genetic biological factors as aetiology of Intellectual Disability (Intellectual Developmental Disorder)

Study
To be able to do the above you will need to study the introduction to this section in this study guide and the following sections in the prescribed book:

- “Intellectual Disabilities”, page 531-535;
- Levels of Intellectual Disabilities, pages 531-532;
- “Etiology of Intellectual Disabilities”, pages 532-535:
- Psychological, Social and Social cultural Dimensions (Factors), pp 534-535
- Genetic Factors, pp 532-533
- Non-genetic biological factors, pp 533-534

Activity 16.12

The DSM-5 diagnostic criteria for Intellectual Disability (Intellectual Developmental Disorder) are discussed very briefly in your prescribed book. Add to this information from the more elaborate diagnostic criteria for Intellectual Disability (Intellectual Developmental Disorder) as proposed by the DSM-5 classification system (APA, 2013).

Note that an individual cannot be diagnosed with IDD unless a registered psychologist has conducted an individualised consultation where an intellectual assessment (IQ test) and adaptive functioning

assessment (for example the Vineland Adaptive Behavior Scale (VABS) has been conducted. Study the DSM-5 diagnostic criteria below for Intellectual Disability (Intellectual Developmental Disorder):

DSM-5 Diagnostic Criteria for Intellectual Disability (Intellectual Developmental Disorder)

Intellectual Disability (Intellectual Developmental Disorder) is a disorder with onset during the developmental period that includes both intellectual and adaptive functioning deficits in conceptual, social, and practical domains. The following three criteria must be met:

A Deficits in intellectual functions such as reasoning, problem-solving, planning, abstract thinking, judgment, academic learning and learning from experience confirmed by both clinical assessment and individualised, standardized intelligence testing.

B Deficits in adaptive functioning that result in failure to meet developmental and sociocultural standards for personal independence and social responsibility. Without ongoing support, the adaptive deficits limit functioning in one or more activities of daily life, such as communication, social participation, and independent living, across multiple environments, such as home, school, work, and community.

C Onset of intellectual and adaptive deficits during the developmental period.

Specify current severity (based on adaptive functioning)

Mild
Moderate
Severe
Profound

(Adapted from APA, 2013, p. 33)

As we have mentioned in the overview of this Study Unit, there are diverse possible causes of IDD. Possible causes can roughly be divided into the following categories:

- unexplained (the largest category as a specific Aetiological factor is not identified or remains undiagnosed in the majority of cases of IDD)
- trauma (such as intracranial haemorrhage, hypoxic injuries before and during birth, severe head injury etc)
- infections (both congenital and postnatal, including rubella, meningitis, etc)
- chromosomal abnormalities (such as Down's Syndrome, Klinefelter's Syndrome etc)
- genetic abnormalities and inherited metabolic disorders (such as Tay-Sachs Disease, Rett's Disorder, phenylketonuria etc)
- metabolic (such as congenital hypothyroidism, hypoglycaemia etc)
- toxic (such as intra-uterine exposure to alcohol and drugs or lead poisoning etc)
- nutritional (such as Kwashiorkor, malnutrition etc)
- environmental (factors such as poverty and low socio-economic status).

(Adapted from the Excite Health Webpage at http://adam.excite.com/ info/?id=001523,2 November 2000)

Activity 16.13

Read the case study below and,

(a) diagnose James's abnormal behaviour using the DSM-5 classification system. Justify your diagnosis by highlighting key features from the case study. You may need to use the table below, "Levels of Intellectual Disability" and the Table 16.7 on page 532 of your prescribed book to identify the severity level of his disorder. Also study these two tables for future case studies

(b) discuss how genetic factors can contribute to James' disorder by referring to the case study

Levels of Intellectual Disability				
Level	Intelligence Quotient (IQ) Range	Ability at Preschool Age (Birth to 6 Years)	Ability at School Age (6 to 20 Years)	Ability at Adult Age (21 Years and Older)
Mild	50-69	Can develop social and communication skills; motor coordination is slightly impaired; often not diagnosed until later age	Can learn up to about Grade 6 by late adolescence; can be expected to learn appropriate social skills	Can usually achieve sufficient social and vocational skills for self-support; may need guidance and assistance during times of unusual social or economic stress, can establish long-term intimate relationships and raise children
Moderate	35-49	Can talk or learn to communicate; social awareness is poor; motor coordination is fair; can profit from training in self-help	Can learn some social and occupational skills; can progress to junior primary school level in schoolwork; may learn to travel alone in familiar places	May achieve self-support by performing unskilled or semi-skilled work within sheltered workshops; needs supervision and guidance when under mild social or economic stress
Severe	20-34	Can say a few words; able to learn some self-help skills; has limited speech skills; motor coordination is poor	Can talk or learn to communicate; can learn simple health habits; benefits from habit training	May contribute partially to self-care under complete supervision; can develop some useful self-protection skills in controlled environment
Profound	19 or below	Extreme cognitive limitation; little motor coordination; may need nursing care	Some motor coordination; limited communication skills	May achieve very limited self-care; usually needs nursing care

Case Study

James, a 17-year-old high school pupil, was brought to the psychologist by his mother because of his disruptive behaviour at school as well as at home. He was increasingly getting into fights with his older brothers as well as with his mother. James had Down's Syndrome and was described as being very likeable and at times mischievous. He enjoyed roller-blading, bike-riding and all the other activities popular amongst teenage boys. In fact, his desire to take part in all these activities was the source of conflict between him and his mother. He wanted to go for his driver's license but his mother felt he would be discouraged if he failed the test. James also had a girlfriend whom he wanted to date and this caused his mother further concern.

The school teachers had complained about James. They said that he did not participate in school activities and in the "work-programme course" (part of the special education of his school), was very sullen and often got in fights with the instructors and his classmates. It had become so serious that they were considering moving James to another programme with more supervision and less independence.

James was the youngest of three children. His mother became pregnant with him when she was in her 40s, not planning for a child at her age but eagerly anticipating his birth nonetheless. It was apparent at birth that James had Down's syndrome, initially because of the characteristic facial features and later through formal assessment. He was born with a congenital heart defect, a hole in his heart, that required several surgical operations, and he today wears a pacemaker. At the time he was born (the mid-1970s) doctors tried to be supportive, and suggested that his mother might want to consider placing him with a local institution that would care for him. His mother recalls that, although she was in shock after the birth, she quickly felt the same love and affection for the infant that she did for her other two children. She decided he would come home and be part of the family.

Because James's mother was a single parent – his father left the family shortly after his birth – and had continuing financial difficulties, the family moved frequently during his youth. They experienced striking differences in the way each community they lived in responded to James's intellectual difficulties. During his school years, some schools immediately placed him in classes with other children his age and provided his teachers with additional assistance and consultation to help them adapt to James's needs. Others just as quickly recommended placements separate from the mainstream classroom. Sometimes the school had a special classroom in the school for children who, like James, had intellectual difficulties. Other had specific programmes that they expected James to follow and this meant that James would at times have to travel an hour to and from school each day to get to these programmes. Every time he was assessed by a psychologist in a new school, the evaluation was similar to earlier ones. He would receive scores on his IQ tests in the range of 40 to 50.

Each school raised the same concerns. The teachers and other professionals were competent and caring individuals who wanted the best for James and his mother. Yet what differed was their attitude towards children like James. Some believed that James needed a separate place where he would learn skills in a programme with specialised staff. Others felt they could provide a comparable education for children like James in a regular classroom, and that an added benefit would be for him to have peers without disabilities to model, for children with learning problems, but he would participate in some classes such as gym with students who did not have the same difficulties. His current difficulties in gym – not participating – and in the classroom – being oppositional – were jeopardising his placement in both programmes.

When the psychologist spoke to James's mother, she expressed frustration that the work programme was "beneath him" and that he was asked to do boring, repetitious work such as folding paper. James expressed a similar frustration, saying that they treated him like a baby. He could communicate fairly well when he wanted to, although he sometimes would get confused about what he wanted to say and it was difficult to understand everything he was trying to articulate.

On observing him at school and at work, and after speaking to his teachers, the psychologist realised that a common situation had developed. The teachers would give James work to do and he would resist if he thought it was too easy. His teachers interpreted his resistance to mean that the work was too hard for him

and they would give him even simpler tasks. He would resist or protest more vigorously, and they would respond with even more supervision and structure. This vicious circle was escalating to the point that James was now becoming very difficult and started aggressively refusing to co-operate.

(Adapted from Barlow & Durand, 1995)

(a) You should have diagnosed James' abnormal behaviour as follows:

Intellectual Disability (Intellectual Developmental Disorder), Moderate (Principal Diagnosis)

Other Problems That May Be a Focus of Clinical Attention:
Parent Child Relational Problem (Problems with mother)
Sibling Relational Problem (fighting with his older brothers)
Educational problems (discord with teacher, peers, academic problems: inconsistent academic programme to meet his needs)
Low income (his single mother has financial difficulties, many job changes)
Social Rejection (purposefully excluded from the activities of peers in his social environment)

James' intellectual ability falls within a range between 40 and 50, a below-average IQ score, and he shows deficits in adaptive behaviour all of which first occurred in the developmental period. Furthermore, the genetic aetiology of his principal diagnosis is traced to Down Syndrome

Other Problems That May Be a Focus of Clinical Attention:

- Problems with primary support group: James is experiencing problems in his relationships with his older brothers and his mother. He is increasingly getting into fights with them. Thus you can identify both a Parent Child Relational Problem and a Sibling Relational Problem
- Educational problems: James is experiencing difficulties at school. He is experiencing discord with his teachers and classmates.

Economic Problems: his single mother has financial difficulties, many job changes
Other Problems Related to the Social Environment: Social Rejection: Purposefully excluded from the activities of peers in his community

(b) Refer to pages 434-435 in the prescribed book to the section entitled "Genetic Factors" under the heading "Etiology of Intellectual Disability". The section on "Down's Syndrome" is especially important as James has Down's syndrome and this is the primary cause of his IDD. This condition influences the individual's life in more ways than one. Apart from the actual direct biological and genetic influence that this syndrome has on the individual's cognitive functioning, it also impacts indirectly on the individual's life. Consider for example the physical appearance of individuals who have Down's syndrome and the response these individuals consequently often receive from others. Other people often assume that an individual whom they can visually identify as having Down's syndrome is seriously cognitively impaired. Even though individuals who have Down's syndrome are often not impaired to the extent that others assume them to be, they do not necessarily have the communication abilities to accurately express this and often then "act out" their dismay at these assumptions. As a result the situation is not rectified and in fact becomes increasingly misconstrued. This is exactly what happened to James in the work programme. Elaborate on your answer using the information in the sections of the prescribed book which are relevant to the case study of James.

Activity 16.14

Read the case study below and,

(a) diagnose Mark's abnormal behaviour using the DSM-5 classification system. Justify your diagnosis by highlighting key features from the case study.

Case Study

Mark, was a 10-year-old boy in the fourth grade. At the time of referral, he was struggling with schoolwork since Grade 1. He had also previously repeated a year of pre-school. Mark's current teachers reported that he was overactive and excitable and continued to act out in class. For example, his English teacher had reported a recent incident when he had become excited and, subsequently, had thrown chairs and desks. In addition, when he felt that someone was looking at him, he typically became upset and pushed the person away. Mark, an only child, was living at home with his parents.

Mark's mother was 46 years old at the time of referral and a full-time housewife. His mother reported having speech and learning problems herself as a child and, as a result, she had a history of special educational services throughout her development. She was not hyperactive as a child although she believed her husband may have been. Her husband had also received special education services as a child.

During the interview, Mark's mother indicated that Mark was born following a normal pregnancy and delivery at 38 weeks. However, some of Mark's developmental milestones were delayed: He did not walk until 18 months of age and he was not fully toilet-trained until four years of age. Speech delay was also present; for example, his first words were not spoken until 17 or 18 months of age. Mark's mother her son as being overactive as a toddler as well as having difficulty remaining focused for any period of time.

Mark was assessed by a speech therapist at age three and seen six to eight times privately. His developmental level for language and communication was delayed by approximately one year. Mark was enrolled in a language group at a tertiary level hospital when he was four years old. He was also evaluated at that time by an occupational therapist and his functioning was reported as being delayed by one to two years. His fine motor skills were found to be weaker than his perceptual and gross motor abilities.

As a result of these assessments, Mark and his mother were enrolled in an early childhood intervention programme offered at the hospital, with treatment lasting for 12 months; attendance was twice per month for both Mark and his mother. In addition to appointments with the occupational therapist and speech therapist, Mark's mother was taught how to stimulate Mark's language, problem-solving, and social interactions and she also learned strategies for behavioural management.

Mark had also been assessed at age 4 years 4 months for developmental delays, and there were reported problems in attention and overactivity by a previous psychologist. Overall, Mark was estimated to be functioning one to two years below his age level. Mark's paediatrician commented that he had been slow in all areas of his development, although doctors had been unable to identify any specific underlying neurological disorder. Subsequent to the interview in terms of the intellectual assessment conducted by the psychologist, Mark scored a Full Scale IQ score of 61 with his performance being closer to a 6- to 7½-year-old child than his chronological age of 10 years old.

During a visit to Mark's school, his teachers and principal expressed a great deal of concern over his behavioural problems. Mark was described as often seeking negative attention and disrupting the classroom. He was described as not having adequate social skills and, therefore, having minimal interaction with children of his own age. When a visit was made to observe Mark in his classroom, he became very distracted and put a book in front of his face. He also would not settle down and was intent on going out to play on the school playground. When given materials to draw he quickly lost interest and took out his marbles. After two minutes he became disinterested and started to disrupt the lesson and needed to be taken out of the classroom.

When at home, Mark also ran around the TV room constantly moving his focus to the next toy of his or TV programme. His mother voiced that he was a "spinning top" that seemed to be on the move constantly. He battled to even stay at the dinner table to eat his meal and even when he did manage to sit down he fidgeted non-stop.

(Adapted from Taube-Schiff & Serbin, 2006)

(a) You should have diagnosed Mark's abnormal behaviour as follows:
Intellectual Disability: (Intellectual Developmental Disorder), Mild (Principal Diagnosis)
Attention Deficit Hyperactivity Disorder, Predominantly hyperactive-impulsive presentation, severe

Other Problems That May Be a Focus of Clinical Attention:
Educational problems (discord with teacher, peers, academic problems)
Social Rejection (purposefully excluded from the activities of peers in his social environment)

Intellectual Disability and ADHD can be diagnosed co-morbidly but it's difficult to often tease out what behaviours are symptoms of inattention and what symptoms are indicative of Intellectual Developmental Disorder. Therefore it is important that ADHD symptoms are present when the individual is engaged in non-academic tasks. A diagnosis of ADHD is made only if the child with IDD displays ADHD symptoms that are excessive in relation to the child's mental (intellectual/cognitive) age.

Mark is displaying severe symptoms of hyperactivity and inattention even when not engaged in schoolwork or at school where academic demands are made.

ELIMINATION DISORDERS

Introduction

In this study unit the focus will be on two types of Elimination Disorders, Enuresis and Encopresis. Elimination Disorders are basically problems of impaired control over urination (Enuresis) and bowel movement (Encopresis) that cannot be accounted by organic causes. It is a well-known fact that infants eliminate waste products reflexively. However through toilet training children develop the ability to inhibit the natural reflexes that controls urination and bowel movements. However, there are cases of some children who have already reached an age at which they are expected to control these bodily functions, yet they experience problems with control elimination in the form of enuresis and encopresis and their symptoms are not caused by physical illness. Although, Elimination Disorders cause considerable stress to the child they usually abate with increasing age.

STUDY UNIT 16.4: Enuresis and Encopresis

Enuresis

An Elimination Disorder in which a child who is at least five years old experiences repeated involuntary bedwetting or wetting of his/her clothes. It usually occurs at night during sleep but may also occur during the day for at least twice weekly for three months. Enuresis may be triggered by stressful life events, such as family problems, hospitalisation, entrance into school or any emotional distress that a child might experience in his environment. Many children with Enuresis experience significant distress or impairment in their social, academic, or other areas of functioning.

Encopresis

An Elimination Disorder in which a child who is at least four years old repeatedly defecates in his or her clothes, in inappropriate places such as in one's clothing or on the floor at least once a month for three months. Although less common than Enuresis, it important that the incidents are not due to the use of laxatives. Intense social problems can arise through shame, embarrassment, and attempts to conceal the disorder. Ostracism by peers, anger on the part of caregivers, and rejection can aggravate the problem. Also add the following information below on the DSM-5 criteria of Elimination Disorders to the information in this Learning Unit.

Outcomes
Once you have worked through the section on Elimination Disorders in Study Unit 16.3, you should be able to:

- Define Elimination Disorders;
- Describe the DSM-5 criteria for Enuresis and Encopresis.

Study
To be able to do the above you will need to study the introduction to this section in the study guide, as well as Activities 16.15 and 16.16, and the following sections in the prescribed book:

- "Elimination Disorders", pages 517-518;

Activity 16.15

Add the following diagnostic criteria for Elimination Disorders to the information in your prescribed book.

DSM-5 Diagnostic Criteria for Enuresis

A Repeated void of urine into bed or clothes, whether involuntary or intentional.

B The behavior is clinically significant as manifested by either a frequency of twice a week for at least 3 consecutive months or the presence of clinically significant distress or impairment in social, academic (occupational), or other important areas of functioning.

C Chronological age is at least 5 years (or equivalent developmental level).D. The behavior is not due exclusively to the physiological effects of a substance (e.g., a diuretic, an antipsychotic medication) or another medical condition (e.g., diabetes, spina bifida, a seizure disorder).

Specify whether:

Nocturnal only: Passage of urine only during nighttime sleep
Dinurnal only: Passage of urine during waking hours
Nocturnal and Diurnal: A combination of the two subtypes above

(APA, 2013, p. 355)

DSM-5 Diagnostic Criteria for Encopresis

A Repeated passage of feces into inappropriate places (e.g., clothing or floor) whether involuntary or intentional.

B At least one such event occurs each month for at least 3 months.

C Chronological age is at least 4 years (or equivalent developmental level).

D The behavior is not attributable to the physiological effects of a substance (e.g., laxatives) or another medical condition except through a mechanism involving constipation.

Specify whether:

With Constipation and Overflow Incontinence: There is evidence of constipation on physical examination or by history.

Without Constipation and Overflow Incontinence: There is no evidence of constipation on physical examination or by history.

(APA, 2013, p. 358)

Activity 16.16.

Carefully read the following case study and,

(a) classify Sbu's abnormal behaviour using the DSM-5 classification system and briefly justify your choice of diagnosis.

Case study

Sbu, a healthy and thriving boy aged eightyears, has never been able to achieve complete dryness during the night time since being potty trained at age three years by his mother. During consultation with the psychologist, Sbu's mother mentioned that she occasionally recalled Sbu experiencing a dry night or two, but it had not been sequential or predictable.

During the consultation, Sbu voiced that he was excited about visiting his grandmother and cousins in the Eastern Cape for the entire holidays, and thus was highly motivated to stop wetting his bed before his trip. Sbu's mother relayed to the psychologist, that she has stopped giving Sbu beverages after suppertime. She also reported that Sbu hardly drinks beverages during the daytime, with the majority of his fluid intake occurring right after he arrives home from school at 16:00 p.m.

Sbu, confirmed going to the bathroom only once a day during school hours. He also voiced that, "making a poo is very sore". Sbu, tended to experience pain when having two painful bowel movements per week and became constipated.

(Adapted from Weber, 2013)

(b) You should have identified Sbu's abnormal behaviour as follows:

Enuresis, Nocturnal only (Principal Diagnosis).

Sbu, meets the criteria for Enuresis that occurs in the nighttime. No soiling of his clothes is mentioned in the case study therefore insufficient evidence is supplied whether he also meets the criteria for Encopresis but it should be investigated as he complains of Constipation which can be a key feature of Encopresis

Activity 16.17

Carefully read the following case study and,

(a) classify Reggie's abnormal behaviour on the five axes of the DSM-5 classification system and briefly justify your choice of diagnosis.

Case Study

Reggie, the youngest of three sons, was a neat, well-mannered, and quiet, seven-year-old boy. His parents were separated and his mother worked to support the family. Reggie was referred to a psychologist by the principal of the school for the problem of fecal soiling in his pants during school.

Reggie's teacher confirmed this and reported that within the preceding 6-month period Reggie had to be sent home on three separate occasions because of noticeably soiled clothing. Reggie was repeating Grade One.

In the interview with the psychologist, Reggie's mother indicated that during the preceding year Reggie had never gone an entire week without soiling himself at least two to three times. Before this year of soiling he was toilet-trained since 3 years old.

When now Reggie soiled himself, he would come home, take a bath, rinse out his clothing, change clothes and then continue with his daily activities, generally outdoor play. On days when the mother worked and did not arrive home until early evening, she was made aware that Reggie had soiled himself by the fact that he was not wearing the same clothing that he had put on in the morning. Reggie's mother reported that she had attempted to deal with this problem by repeatedly urging Reggie to remember to use a toilet.

(Adapted from Allyon, Simon & Wildman, 1975)

(a) You should have identified Reggie's abnormal behaviour as follows:

Encopresis, Without Constipation and Overflow Incontinence (Principal Diagnosis)

Educational problems: (Academic problems having to miss school)

DEPRESSIVE DISORDERS

16.5 STUDY UNIT: Childhood Depression

Introduction

The 11th Edition of the prescribed book does not contain sufficient information on Depression occurring in childhood (see p. 509 of prescribed book), however it is an important study unit and as such needs to be studied very well. Do you ever find yourself wishing you could recapture the carefree days of childhood? A lot of us tend to think that children have absolutely nothing to worry about, No bills to pay, bosses to answer to, or obligations to keep. They have none of the everyday stresses that we adults have. In fact a common reaction to hearing that a child is depressed is "what does she have to be depressed about?" When children experience disappointment, disapproval, or other inevitable negative experiences in their lives, their sadness, anger and frustration are expected to be short-lived. But, is childhood really a time of bliss? The truth is, childhood is far from being without stress.

Most children are often faced with many difficulties that they are ill-equipped to handle emotionally: divorce, poverty, learning disabilities, abuse, and neglect just to name a few. Children by nature feel powerless against these situations and the effects can remain with them well into adulthood. But, what if your child does not fall into any of these categories? Does this guarantee a child free from depression? The answer is no.

A very important factor in Childhood Depression is that it may be a biologically-based illness. Children with an inherited tendency for depression will be highly susceptible to the strains caused by the need for peer acceptance. Because it is caused by an imbalance in brain chemistry, it may appear to you that there is nothing so severely wrong in your child's life that would merit being depressed. Just as with adult depression, a child's perception of the world may be distorted. He may feel that he is unlovable, "stupid", or "bad" even though these things may not be true.

Further complicating matters is the fact that young children do not have labels for these feelings and cannot vocalise what it is that's happening to them. What can you as a parent, teacher, or other concerned adult do to help? The most important thing you can do is to realize that children can become depressed just like adults and you should promptly seek out help if you see the signs of depression in a child.

Childhood Depression is however manifested differently in adults. Most often many young people seldom express their feelings of sadness but would rather express their depression through irritable mood. Perhaps you know a child who is constantly sad, shows little enthusiasm for anything, is moody or worst thinks that life is not worth living. That child may be having Childhood Depression. For many young people it is pervasive, disabling, long-lasting and life threatening as suicidal behaviour among teens is frequently associated with depression.

Childhood Depression manifests with extreme, persistent, or poorly regulated emotional states for example, excessive happiness, or swings in mood from deep sadness to high elation. Unlike most children who bounce back quickly when they are sad, children who are depressed cannot simply "snap out of it" as their sadness interferes with their overall functioning, notably their social relationships, school performance, and family relationships. The same DSM-5 diagnostic criteria for Major Depressive Disorder can be used for children, with the addition of possible irritability as well. Refer to Chapter 9, Study Unit 11.2 regarding the DSM-5 criteria for Major Depressive Disorder.

The warning signs of Childhood Depression fall basically into four different categories: emotional signs, cognitive signs (those signs involving thinking), physical complaints, and behavioural changes. It is however significant to note that not every child who is depressed experiences every symptom.

Emotional Signs

Typical moods or emotions experienced by children suffering from depression include:

- Sadness – The child may feel despondent and hopeless. They may cry easily. Some children will hide their tears by becoming withdrawn.
- Loss of pleasure or interest – A child who has always enjoyed playing sports, for example, may suddenly decide to not try out for the team this year. They may complain of feeling "bored" or reject an offer to participate in an activity, which they had always enjoyed in the past.
- Anxiety – The child may become anxious, tense, and panicky. The source of their anxiety may well give you a clue to what is causing their depression.
- Turmoil – The child may feel worried and irritable. They may brood or lash out in anger as a result of the distress they are feeling.

Cognitive Signs

A depressive mood can bring on negative, self-defeating thoughts. These skewed thought processes may help perpetuate the problem because they make the child resistant to words of encouragement or advice. Once the depression lifts, the child will be much more receptive to help. The signs to look for are:

- Difficulty organising thoughts – People with depression often have problems concentrating or remembering. In children, this may be evidenced by problems in school or an inability to complete tasks.
- Negative view – People with depression may become pessimistic, perceiving themselves, their life, and their world in a very negative light.
- Worthlessness and guilt – Depressed children may obsess over their perceived faults and failures, feel tremendous guilt, and declare themselves worthless.
- Helplessness and hopelessness – Depressed children often believe that there is nothing they can do to relieve their feelings of depression. In particular, a child with dysthymia may perceive that this is "just the way it is" because this is their only experience.
- Feelings of isolation – A child who has been picked on frequently may become very sensitive to slights from his peers.

- Suicidal Thoughts – Thoughts of death are not limited to adults. Children may also wish that they were dead and express these thoughts.

Physical Signs

Depression is not just an illness of the mind. It causes changes in us physically as well.

- Changes in appetite or weight – Many people with depression find that their appetite either decreases or increases. Children who usually have a healthy appetite may suddenly lose interest in eating. Children may also respond in the opposite way, by eating too much to self-medicate their feelings.
- Sleep disturbances – Children with depression may have difficulty falling asleep and staying asleep once they do. They may wake too early or oversleep. They may have trouble staying awake during the day at school.
- Sluggishness – Children with depression often talk, react, and walk slower. They may be less active and playful than usual.
- Agitation – Depressed children may show signs of agitation by fidgeting or not being able to sit still.

Behavioural Signs

These signs will be the most obvious and easy for your detect.

- Avoidance and withdrawal – Children with depression may avoid everyday or enjoyable activities and responsibilities. They may withdraw from friends and family. The bedroom can become a favourite place to escape and find solitude.
- Clinging and demanding – The depressed child may become more dependent on some relationships and behave with an exaggerated sense of insecurity.
- Activities in excess – A depressed child may appear to be out of control in regard to certain activities. He or she may spend long hours playing a video game or overeat.
- Restlessness – The restlessness brought on by depression may lead to such behaviours as fidgeting, acting up in class, or reckless behaviour
- Self-Harm – Depressed individuals may cause themselves physical pain or take excessive risks. Self-injury is one example of such behaviour.

If you suspect that a child is depressed, the next step is seeking professional help in obtaining a diagnosis and treatment.

Outcomes
Once you have worked through this section on Depression in children, you should be able to:

- Define Childhood Depression
- Describe the DSM-5 criteria for Major Depressive Disorder

Study
To be able to do the above you will need to study the section on childhood Depression as well as Learning Unit 12 on Depressive Disorders in Tutorial Letter 502

Activity 16.18

Add to the information in the prescribed book on Childhood Depression by making use of the DSM-5 diagnostic criteria for Major Depressive Disorder. (Refer to Chapter 8 of the prescribed book and Learning Unit 12 of Tutorial Letter 502 (Study Guide)

It is important to highlight the fact that children and adolescents may suffer from either Major Depressive Disorder or Dysthymic Disorder.

Activity 16.19.

Go to http://kidsandmeds.umwblogs.org/dsm5/ and for interest read about the history of mental illness in childhood.

Activity 16.20

The following activities will help you to revise and summarise what you have studied in this chapter:

(1) At the beginning of Chapter 16 in your prescribed book there are four "focus questions" on page 508 of the prescribed book. Answer questions 1 to 4 after you have worked through the chapter. Compare your answers to the answers provided at the end of Chapter 16 in the prescribed book under the heading "summary" (p. 538). If your answers are not complete, consult your Tutorial Letters 501, 502 and 503 (Study Guide) and prescribed book again on these questions or contact one of your lecturers.

(2) Go back to the beginning of this Learning Unit to the **"Key terms"** and reflect on your understanding of each term. Explain the meaning of these terms to a friend or family member in your own words. If you struggle to do so, refer back to your prescribed book and Tutorial Letters 501, 502 and 503 (Study Guide).

(3) The learning outcomes of each of the study units in this Learning unit were set out clearly in each of the study units. Make sure that you have acquired the necessary knowledge, skills and insights set out in these learning outcomes.

(4) Go to the following internet resources and read more on disorders that begin or often occur during infancy, childhood or adolescence:
http://www.mentalhealth.com/p20-grp.html
http://www.mentalhelp.net/poc/center_index.php?id=37http://webspace.ship.edu/cgboer/childdisorders.html
http://www.childhooddisorders.com/

CONCLUSION

This Learning unit introduced you to childhood psychopathology which is a real and individual phenomenon, and definitions of pathological states should not be unreservedly generalised across communities, countries and continents. Available data on the nature and prevalence of psychopathology in South African children, or on differences between children from different backgrounds who have been exposed to very different life experiences, need to be updated. The documentation of the nature and prevalence of psychopathology cannot be divorced from a study of the dynamic aetiological interrelationship between risk and protective factors. The complexity of a South African childhood is both daunting and challenging, and there is a pressing need for data to inform preventive and curative services.

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